Bournemouth, Dorset and Poole – Mineral Sites Plan

Pre-Submission Consultation Draft

Sustainability Appraisal

November 2017

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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[1].' 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)[2].

> *"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[3] 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 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:

[1] 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

[2] National Planning Policy Framework: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf

[3] Planning and Compulsory Purchase Act 2004: http://www.legislation.gov.uk/ukpga/2004/5/contents

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[4].

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.

[4] 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	**A – Scoping**	**Setting the context and objectives, establishing the baseline and deciding on the scope.**
	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**	**Developing and refining options and assessing effects**
	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
	C	**Preparing the SA Report**
	D	**Consulting on the Draft Plan and SA Report**
	D1	Public participation on the draft Plan and SA Report
	D2 (i)	Appraise significant changes
Submission and Examination	D2 (ii)	Appraise significant changes resulting from representations
Adoption and Monitoring	D3	Make decisions and provide information
	E	**Monitoring the significant effects of implementing the Plan**
	E1	Finalise aims and methods for monitoring
	E2	Respond to adverse effects

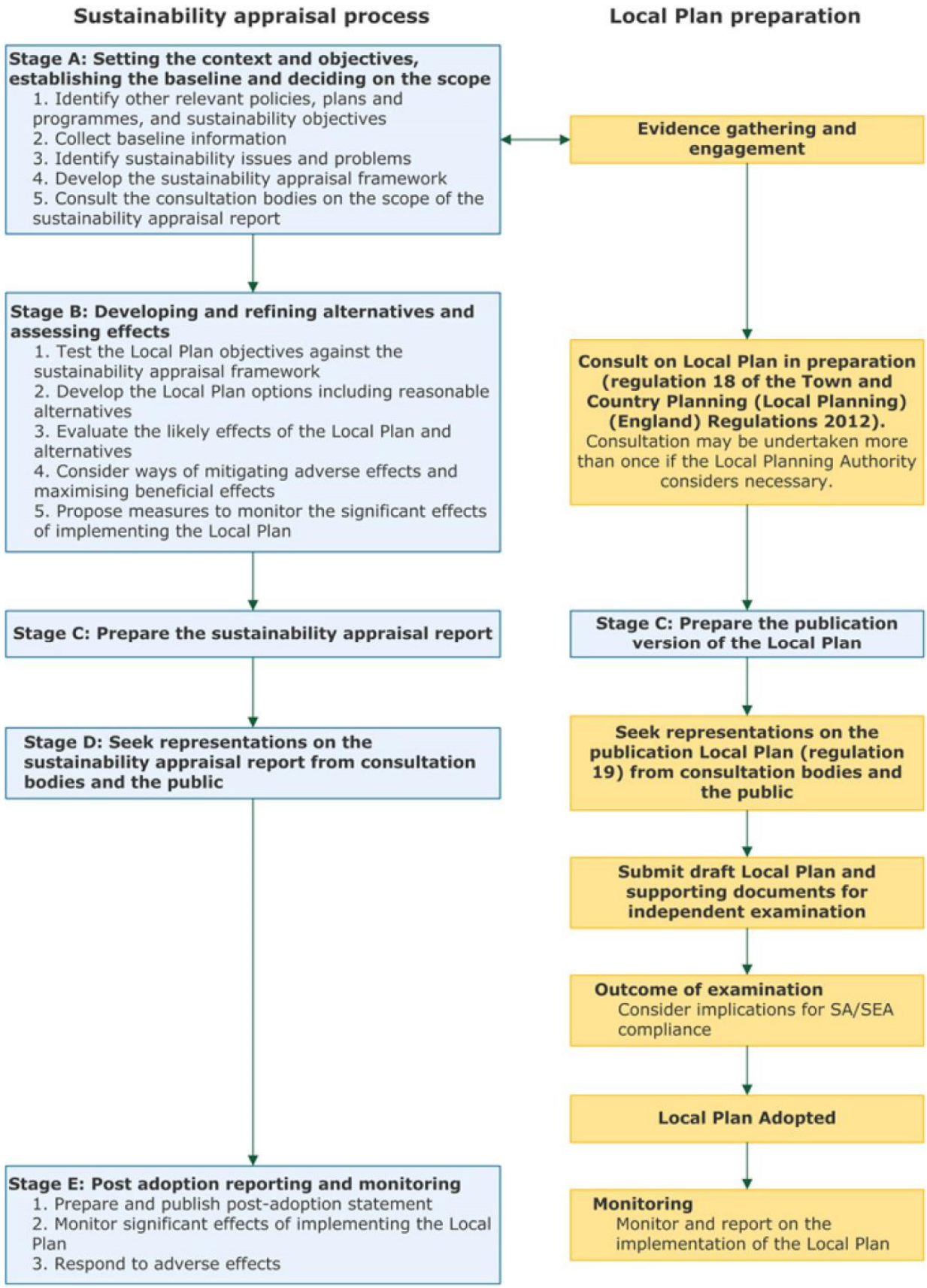
3.4. The first stage (Stage A) is the production of the Scoping Report This is where the scope and overall

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	• 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). • Some ball clay reserves are located within the international designated areas. • Sterilisation of mineral resources by other forms of development. • 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. • Selection of sites and formulation of policy to minimise or remove all negative impacts. • The need to safeguard mineral resources, including through increased use of secondary and recycled materials. • 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.

Table 3: Key Sustainability Issues/Messages	
	• The need to integrate minerals and waste planning (including waste infrastructure) to promote more sustainable development. • Protection and, where possible, enhancement of the environment both during mineral working and through high quality restoration and after-care. • Address past impacts of mineral operations. • Promote more sustainable transportation of minerals by rail and water and reduced mileage. • Encourage movement of aggregates by rail and/or water.
Climate Change	• Hotter drier summers and drought, increasing demand for water potentially effecting availability for minerals operations, also affecting building temperatures and demand for cooling. • 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. • Increased windiness, potential affecting waste management on exposed landfill sites or changes to dust and pollution control within some minerals operations. • 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. • Extreme events increasing disruption to supply chains, infrastructure and transport
Biodiversity and Geodiversity	• 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. • 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. • 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. • 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. • 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. • 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. • Net biodiversity gains should be sought through the restoration of waste sites, where appropriate, positive management and the creation of new habitats. • Conservation of geodiversity should be given significant weight and its interconnection with the biodiversity conservation taken into account. • 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

Table 3: Key Sustainability Issues/Messages	
	taken place. • Geodiversity gains should be sought through the creation of geological exposures and the positive management and afteruse of minerals and waste sites where appropriate. • Dorset has a rich geological resource, recognised by a range of designations, which should be protected and, where possible, enhanced. • The significance of the World Heritage Site should be respected. • The Waste Plan and Mineral Sites Plan should promote the geodiversity objectives of the World Heritage Site Management Plan and Local Geodiversity Action Plan.
Water	• Run-off water from sites may pollute water courses and soil. • 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. • 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. • 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. • 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. • 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. • 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. • 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. • 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.
Historic Environment	• An appropriate level of protection must be provided to designated historic assets, including those which are locally distinctive, valued and important. • The contribution of historic and cultural heritage (including minerals heritage) to the distinctiveness of Dorset's landscapes must be recognised. • 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. • Heritage should be taken into account in the siting, design, management and restoration, where relevant, of waste and minerals sites. • Access to and enjoyment and understanding of the historic environment should be facilitated where possible. • 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

Table 3: Key Sustainability Issues/Messages	
	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. • 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. • 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. • The management of change in the historic landscape and the recording of its dynamic nature is important. • In addition, waste development or mineral extraction can fund additional (or directly carry out through restoration) works to benefit historic landscapes and features
Landscape	• 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. • 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. • The use of quarries as landfill (inert fill) sites lengthens the time for restoration and therefore increases landscape impacts. • 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. • 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. • Increasingly, priority is placed on landscape protection and enhancement that is underpinned by analysis of local character and distinctiveness (physical, ecological, cultural and aesthetic). • There is increased recognition of the value of the wider countryside and coastal landscape, in addition to designated landscapes. • Landscape restoration and management opportunities should be maximised in relation to minerals/landfill operations and after-use. • Planning for good quality and inclusive site design and layout in new waste facilities and improvements to existing facilities. • 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 • The interrelationship between landscape, biodiversity and cultural heritage needs to be recognised and taken into account • Development should be informed by the existing and ongoing assessment of Dorset's landscape character.

Table 3: Key Sustainability Issues/Messages	
	• Historic mining activity can be an important part of landscape character and historic mining landscapes should be safeguarded. • 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. • Cumulative impacts on protected landscape where important mineral deposits occur, particularly in relation to ball clay and Purbeck Stone working. • 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
Air Quality and Noise	• 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. • 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. • Consider the impact of dust from minerals extraction, processing and waste sites and transportation as an air quality issue. • Consider noise as an issue in terms of health, environmental quality and local amenity. • 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. • Air quality in Dorset is generally good, but specific areas face problems (principally traffic-related). • The distribution (number and location) of waste facilities throughout Dorset - significance of impacts can depend on location • Give consideration to decreasing the number and journey length of movements of waste and the use of sustainable transportation (rail, water etc) • 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. • The impact of moving waste management up the waste hierarchy - diverting waste away from landfill
Transport	• 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. • Waste and mineral sites located near to leisure trails can discourage their use due to air quality issues. • Localised congestion and delay can affect journey time reliability of bus services affecting patronage and thus financial viability. • Localised congestion and delay near to rail stations can affect people's decision to use this mode by increasing overall travel time. • Any increase in transportation movements related to waste using the Sandbanks Chain Ferry will exacerbate existing severe summertime delay. • Minerals and waste development may lead to changes in local travel patterns that may

Table 3: Key Sustainability Issues/Messages	
	intensify existing issues such as congestion or road safety. Changes to travel patterns must be estimated and potential impacts mitigated. • 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.
Economic Development and Employment	• Sufficient provision of waste management facilities in the county will be required to support economic growth and the envisaged population expansion. • 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. • 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. • 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. • The creation of jobs by mineral companies is limited and may be temporary. • An adequate supply of minerals will be required to support economic growth in key sectors and population expansion planned for. • The need to support minerals operations in Dorset as an important component of a sustainable Dorset economy, particularly in rural areas. • 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. • 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. • Mineral working provides a limited, yet significant, contribution to the county's economic performance, particularly in specific rural areas where it is located.
Soil and Land	• 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 issue. • Soils can contain valuable seedbanks - these are particularly useful for the restoration of

Table 3: Key Sustainability Issues/Messages	
	heathland. • 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. • The highest quality agricultural land should be safeguarded where possible. • Loss of soil and high quality land • 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. • Regard should be given to land instability during mining operations and reclamation. • The production and use of products from waste treatment for use on land • Additional landfill increases the chance of conflict with land of high value and soils
Population and Human Health	• 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. • Provision of waste management facilities to move up the waste hierarchy would be in the public interest. • 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. • 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. • 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. • 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. • 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. • 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.

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[5].

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, cumulative and synergistic effects, on issues such as a) biodiversity; (b) population; (c) human

[5] See: https://www.dorsetforyou.com/354652

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)[6].

Table 4 - SA Framework - Environmental Objectives/Indicators

Table 4 - SA Framework - Environmental Objectives/Indicators		
Sustainability Appraisal Objectives	**Indicators** ***To what extent does the strategy or policy...***	**Related SEA Directive Topics**
1. To move waste management up the waste hierarchy and promote net self-sufficiency	• Assist in driving waste up the waste hierarchy? • Make provision for waste management facilities commensurate with the waste hierarchy? • Enable waste to be diverted from landfill? • Enable increased recycling or treatment of organic waste? • Enable waste to be managed locally, particularly within the local authority boundary	Human health; Population; Social Considerations
2. To maintain, conserve and enhance biodiversity	• Conserve, enhance or create natural and semi-natural habitats of recognised ecological value and/or the green corridors that link them? • Directly or indirectly affect internationally or nationally designated or recognised sites or UK BAP habitats? • Conserve or enhance species diversity and avoid harm to internationally and nationally protected, scarce and rare species (including UK BAP species)? • Provide for positive management of existing habitats? • Assist species to adapt to the anticipated effects of climate change (i.e. through connecting habitats and/or providing greenspace)? • Reflect the South West Nature Map? • Expand the spatial extent of BAP priority habitat within Dorset? • Contribute to an adverse cumulative impact of development on biodiversity?	Biodiversity; Fauna; Flora; Soil
3. To maintain, conserve and enhance geodiversity.	• Conserve or enhance the World Heritage Site and its setting? • Conserve or enhance geological SSSIs? • Create, extend or enhance Local Geological	Material Assets;

[6] 2004 No. 1633 Environmental Protection The Environmental Assessment of Plans and Programmes Regulations 2004

Table 4 - SA Framework - Environmental Objectives/Indicators		
Sustainability Appraisal Objectives	**Indicators** ***To what extent does the strategy or policy...***	**Related SEA Directive Topics**
	Sites? • Allow access to geodiversity resources for study?	
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	• Protect or enhance the quantity and quality of ground, surface and sea waters? • Avoid adverse effects on existing patterns of groundwater flow and/or surface water flow? • Maintain water consumption within local carrying limits?	Water; Human Health; Biodiversity; Climatic Factors
5. To reduce flood risk and improve flood management.	• Minimise the risks and impacts of flooding having taken into account climate change? • Minimise the numbers of people and property at risk from flooding?	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).	• Cause a loss of, or harm to, the character and/or setting of historic assets? • Cause harm to the historic landscape? • Provide for the maintenance of the historic environment? • archaeological sites, historic buildings, • Provide new information on the historic environment, or improve education about and/or interpretation of the historic environment?	Cultural Heritage (Architectural and Archaeological Heritage)
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	• 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? • Minimise the landscape and visual intrusion of waste facilities on sensitive and/or distinctive landscapes? • Contribute to an adverse cumulative impact of development on protected landscapes? • Encourage development of land which is not sympathetic to the identified landscape character of that location?	Landscape;

Table 4 - SA Framework - Environmental Objectives/Indicators		
Sustainability Appraisal Objectives	**Indicators** ***To what extent does the strategy or policy...***	**Related SEA Directive Topics**
	• Provide for the restoration of land to an appropriate after-use and landscape character through Landscape Restoration Strategies. • Protect the open character of the South East Dorset Green Belt from inappropriate development	
8. To protect and improve air quality and reduce the impacts of noise	• Adversely affect air quality, including through transportation, particularly in Air Quality Management Areas? • Increase the likelihood of higher levels of dust in the air? • Increase the likelihood of higher levels of noise and vibration and impact on sensitive receptors? • Increase the likelihood of higher levels of odour on sensitive receptors?	Air; Human Health; Biodiversity; Flora; Fauna.
9. To maintain, conserve and enhance soil quality	• Reduce the quantity or quality of the best and most versatile agricultural land? • Encourage the de-contamination and/or re-use of soils? • Conserve or enhance soil quality? • Reduce the capacity of the soil to hold carbon? • Increase land contamination?	Soil; Flora; Fauna; Biodiversity;

Table 5 - SA Framework - Economic Objectives/Indicators

Table 5 - SA Framework - Economic Objectives/Indicators		
Sustainability Appraisal Objectives	**Indicators** ***To what extent does the strategy or policy...***	**Related SEA Directive Topics**
10. To conserve and safeguard mineral resources.	• Safeguard mineral resources from loss by permanent sterilisation? • Encourage/promote the most efficient use of mineral resources?	Material Assets;
11. To promote the use of alternative materials.	• Encourage/promote the production and/or use of recycled or secondary aggregates?	Material Assets;
12. To provide an	• Contribute, in a sustainable way, to the supply of	Material Assets;

Table 5 - SA Framework - Economic Objectives/Indicators		
Sustainability Appraisal Objectives	**Indicators** ***To what extent does the strategy or policy...***	**Related SEA Directive Topics**
adequate supply of minerals to meet society's needs.	materials for new built development, or repair of existing built development, or to meet other needs for the mineral concerned? • Contribute to the provision of a sustainable supply of minerals?	Social Considerations; Human Health
13. To encourage sustainable economic growth.	• Provide for waste management facilities in the county at an acceptable cost? • Maintain or increase employment? • Maintain and enhance skills levels, particularly through the provision of highly skilled jobs? • Ensure that waste facilities and mineral sites, including the transportation of materials, do not prejudice the development of the local economy in Dorset?	Social Considerations; Human Health;

Table 6 - SA Framework - Social Objectives and Indicators

Table 6 - SA Framework - Social Objectives and Indicators		
Sustainability Appraisal Objectives	**Indicators** ***To what extent does the strategy or policy...***	**Related SEA Directive Topics**
14. To adapt to and mitigate the impacts of climate change.	• Ensure new development minimises vulnerability and provides resilience to climate change? • Minimise emissions of greenhouse gases from operations, ensuring the efficient use of energy, and maximising opportunities for the generation of renewable energy?	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.	• Reduce the negative impacts associated with minerals and waste transportation on the transport network as a whole? • Reduce the impact of road traffic, in particular HGV trips, on local communities? • Reduce the vehicle kilometres travelled for the transportation of minerals and waste? • Support and encourage the use of sustainable modes of transport? • Support and encourage the use of low emission vehicles for the transportation of waste and minerals?	Climatic Factors; Human Health; Social Considerations.

Table 6 - SA Framework - Social Objectives and Indicators		
Sustainability Appraisal Objectives	**Indicators** *To what extent does the strategy or policy...*	**Related SEA Directive Topics**
	• Support the carbon reduction targets set at the international, national and local level? • Support the road casualty reduction indicators set at the international, national and local level?	
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	• Facilitate the use of rail or waterborne freight for the purpose of transporting waste and minerals? • Accommodate the efficient movement of people, goods and services thus supporting sustainable economic growth in the Bournemouth, Poole and Dorset area?	Population; Material Assets; Human Health; Climatic Factors; Air
17. To sustain the health and quality of life of the population	• Contribute to quality of life through the provision of a network of accessible facilities to move waste up the hierarchy? • Ensure access for all to public facilities? • Impact on the quality of life of local communities (including through factors such as noise, artificial light, odour and vermin)? • Cause a cumulative impact on certain communities (i.e. through permitting further development in an area, or extending the life of an existing permission)?	Human Health;
18. To enable safe access to countryside and open spaces.	• Promote linkages between open spaces, and enable/improve access to the countryside ? • Provide an opportunity for Suitable Alternative Natural Greenspace? • Reduce impacts on recreational and open spaces, Green Infrastructure and other land take issues including through the use of previously developed land?	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

Table 7 - Site Selection Criteria and relationship to SEA Directive Issues	
Relevant SEA Directive Issues	**Site Selection Criteria**
• Biodiversity/Geodiversity • Fauna • Flora	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?
• Landscape • Cultural heritage, including architectural and archaeological heritage	Site Selection Criterion C7: Does the proposal have any impact on designated landscapes?
	Site Selection Criterion C8: What is the landscape capacity to accommodate the site?

Table 7 - Site Selection Criteria and relationship to SEA Directive Issues	
Relevant SEA Directive Issues	**Site Selection Criteria**
	Site Selection Criterion C9: Does the proposal have any impact on historic landscapes?
• Cultural heritage, including architectural and archaeological heritage	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?
• Water • Human Health • Biodiversity, Fauna, Flora	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?
• Air • Climatic Factors • Human Health	Site Selection Criterion C16: Does the proposal have any impact on Air Quality Management Areas (AQMAs)?
• Material Assets	Site Selection Criterion C17: What are the relevant economic considerations?
• Human Health • Population	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?
• *All*	Site Selection Criterion C21: Does the proposal have any effect on cumulative impacts?
• Air • Climatic Factors • Human Health/Population • Biodiversity	Site Selection Criterion C22: Does the proposal have any impact on carbon emissions?
	Site Selection Criterion C23:

Table 7 - Site Selection Criteria and relationship to SEA Directive Issues	
Relevant SEA Directive Issues	**Site Selection Criteria**
• Human Health • Population • Biodiversity • Air/Climatic Factors	Does the proposal have any impact on recreational land?
	Site Selection Criterion C24: Does the proposal have any impact on public rights of way?
	Site Selection Criterion C25: Are the access proposals acceptable?

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[7] ➔		**➔ Sustainability Appraisal Objectives[8]➔**	**➔ Site Assessment Criteria** "Does the proposal have any impact on…"
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?'
	Biodiversity; Flora; Fauna	SA2: To maintain, conserve and enhance biodiversity.	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

[7] From SI 2004 No. 1633 The Environmental Assessment of Plans and Programmes Regulations 2004

[8] 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[7] ➔		**➔ Sustainability Appraisal Objectives[8]➔**	**➔ Site Assessment Criteria** "Does the proposal have any impact on…"
	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
	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

Table 8 - Relationship between SEA Directive Issues, Sustainability Appraisal Objectives and Site Selection Criteria			
SEA Directive Issues[7] ➔		**➔ Sustainability Appraisal Objectives[8]➔**	**➔ Site Assessment Criteria** "Does the proposal have any impact on…"
	Air.	SA8: To protect and improve air quality and reduce the impacts of noise	C16 - Air Quality Management Areas (AQMAs) C21 - Cumulative Impacts
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.	C6 - Geodiversity C17 - Economic Development
		SA13: To encourage sustainable economic growth.	C17 - Economic Development
		SA14: To adapt to and mitigate the impacts of climate change	C16 - Air Quality Management Areas (AQMAs) C21 - Cumulative Impacts C22 - Carbon Emissions
SOCIAL	Social Considerations.	SA15: To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any residual impacts.	C25 - 'Are access proposals acceptable?'

Table 8 - Relationship between SEA Directive Issues, Sustainability Appraisal Objectives and Site Selection Criteria			
SEA Directive Issues[7] ➔		**➔ Sustainability Appraisal Objectives[8]➔**	**➔ 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. Only one site allocation has been put forward for crushed rock. Given its location in an Area of Outstanding Natural Beauty, it's possible inclusion in the Plan will require detailed justification. There is no need to carry out any assessment of options, apart from assessment of the site itself (see Appendix A).

6.14. 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.

6.15. 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.

Purbeck Stone

6.16. 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.

6.17. 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.

6.18. 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

6.19. 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.

6.20. 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 9 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.

6.21. 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.

6.22. 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.

6.23. Including an over-provision in the Mineral Sites Plan is also considered beneficial on the

Establishing Aggregate Demand

6.24. 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.

6.25. 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.

6.26. 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

6.27. 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.

6.28. 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.

6.29. 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.

6.30. 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.

6.31. 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.

6.32. 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

6.33. 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

6.34. 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.

6.35. 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.

Table 9 - 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 9 - 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	• 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.	–	• 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.	+
	• Identifying more sites will reduce the risk that the Plan will be found unsound for inadequate provision for aggregates.	+	• Identifying less sites will increase the risk that the Plan will be found unsound for inadequate provision for aggregates.	–
3. To maintain, conserve and enhance geodiversity.	• Sand and gravel sites are not expected to have any particular impacts, either positive or negative, on geodiversity.			
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the	• 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.	–	• 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.	+

Table 9 - 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**	
consumption of water in a sustainable way.	• Identifying more sites will reduce the risk that the Plan will be found unsound for inadequate provision for aggregates.	+	• Identifying less sites will increase the risk that the Plan will be found unsound for inadequate provision for aggregates.	–
5. To reduce flood risk and improve flood management.	• 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.	+	• Identifying less sites will increase the risk that the Plan will be found unsound for inadequate provision for aggregates.	–
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).	• The greater the number of sites identified, the greater the likelihood that there will be some impacts across the Plan area.	–	• The less the number of sites identified, the less the likelihood that there will be some impacts across the Plan area.	+
	• The greater the number of sites identified, the less the risk that the Plan will be found unsound for inadequate provision for aggregates.	+	• The lower the number of sites identified, the greater the risk that the Plan will be found unsound for inadequate provision for aggregates.	–

Table 9 - 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**	
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	• 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.	–	• 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.	+
	• 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.	+	• Identifying les sites than might actually be needed could increase the risk that the Plan will be found unsound in not providing for adequate aggregates provision.	–
8. To protect and improve air quality and reduce the impacts of noise.	• Quarrying aggregates is likely to have some impacts on air quality, and will result in some noise. • The greater the number of sites identified, the greater the level of expected impact across the Plan area.	–	• Quarrying aggregates is likely to have some impacts on air quality, and will result in some noise. • The less the number of sites identified, the less the level of expected impact across the Plan area.	+
	• 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.	+	• 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.	–

Table 9 - 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**	
9. To maintain, conserve and enhance soil quality.	• 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. • The greater the number of quarries identified and developed, the greater the impacts on soils/soil quality.	−	• The less the number of quarries identified and developed, the less the likely impacts on soils/soil quality across the Plan area.	+
	• 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.	+	• Identifying fewer site increases the risks that the Plan will be found unsound on grounds of inadequate provision for aggregates supply.	−
10. To conserve and safeguard mineral resources.	• Identifying and allocating more sites will ensure the protection and safeguarding of more mineral. • 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. • 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.	+	• Identifying less sites will secure/protect less mineral. • Identifying fewer site increases the risks that the Plan will be found unsound on grounds of inadequate provision for aggregates supply.	−
	• However the more sites that are developed, the greater the level of impacts which could be experienced across the Plan area.	−	• The fewer the number of sites identified, the less the level of impacts that could be experienced across the Plan area.	+

Table 9 - 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**	
11. To promote the use of alternative materials.	• Greater numbers of sand and gravel sites could have a negative impact on production of alternatives to land-won sand and gravel.			–
12. To provide an adequate supply of minerals to meet society's needs.	• Identifying a higher number of sites will contribute to ensuring an adequate supply of minerals. • It will also reduce the risk that the Plan will be found unsound on grounds of inadequate provision for aggregates supply.	+	• Identifying a fewer number of sites could make the adequate supply of minerals less certain. • It would also increase the risks that the Plan will be found unsound on grounds of inadequate provision for aggregates supply.	–
	• However the more sites that are developed, the greater the level of impacts which could be experienced across the Plan area.	–	• The fewer the number of sites identified, the less the level of impacts that could be experienced across the Plan area.	+
13. To encourage sustainable economic growth	• It is expected that identifying more aggregates sites will benefit the economy, encouraging sustainable economic growth. • 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.	+	• A lower supply of aggregate could have a constraining effect on economic growth, but it is unlikely that production would be so low as to significantly limit the economy – this would trigger a review of the Minerals Strategy. • The less the number of sites identified, the less the level of expected impact across the Plan area.	+

Table 9 - 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**	
	• However, the greater the number of aggregates sites developed, the greater the impact on environment and amenity.	–	• However, having less sites identified in the Plan could possibly make it less responsive to sudden increases in demand. • Identifying fewer site increases the risks that the Plan will be found unsound on grounds of inadequate provision for aggregates supply.	–
14. To adapt to and mitigate the impacts of climate change.	• Identifying more sites could cumulatively increase production of greenhouse gases, although the levels would be relatively small. • The greater the number of aggregates sites developed, the greater the impact on environment and amenity.	–	• Identifying less sites could reduce production of greenhouse gases, although the levels would be relatively small. • The less the number of sites identified, the less the level of expected impact across the Plan area.	+
	• 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.	+	• Identifying fewer site increases the risks that the Plan will be found unsound on grounds of inadequate provision for aggregates supply.	–
15. To minimise the negative impacts of waste and minerals development on the transport network, mitigating any residual impacts.	• 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. • The greater the number of aggregates sites developed, the greater the impact on environment and amenity.	–	• Identifying fewer sites is likely to have the effect of reducing impacts on the transport network. • The fewer the number of aggregates sites developed, the less the impact on environment and amenity.	+

Table 9 - 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**	
	• 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.	+	• Identifying fewer site increases the risks that the Plan will be found unsound on grounds of inadequate provision for aggregates supply.	–
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	• Identifying greater or less numbers of sites is not expected to encourage or discourage the use of sustainable transport modes.			?
17. To sustain the health and quality of life of the population.	• A higher number of sites is likely to have greater impacts on local communities and the environment, and impacts on health.	–	• Identifying/developing fewer sites is likely to have less impact on local communities and the environment.	+
	• 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.	+	• Identifying fewer site increases the risks that the Plan will be found unsound on grounds of inadequate provision for aggregates supply.	–
18. To enable safe access to countryside and open spaces.	• The development of aggregate sites, particularly when worked and restored, has the potential to improve access to the countryside. • The greater the number of sites developed, potentially the greater the benefits that may be received. • Identifying potentially more sites that might actually be needed is expected to reduce the risk that the Plan	+	• Developing fewer sites could result in less benefits being realised. • Identifying fewer site increases the risks that the Plan will be found unsound on grounds of inadequate provision for aggregates supply.	–

Table 9 - 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**	
	will be found unsound on grounds of inadequate provision for aggregates supply.			
	• However, greater numbers of sites can lead to greater impacts on communities and the environment, while sites are being worked and restored.	–		

Conclusions	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. 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. 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. The Area of Search designation policy contains criteria to control when unallocated sites from the Area of Search might be approved. 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.

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.

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**
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**
14. To adapt to and mitigate the impacts of climate change.	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.	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.	Neutral – this policy not specifically relevant to this Objective.
15. To minimise the negative impacts of waste and minerals development on the transport network, mitigating any residual impacts.	Negative – this policy facilitates new sand and gravel sites and these will have impacts on the transport network.	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.	Neutral – this policy not specifically relevant to this Objective.
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	Neutral – this policy not specifically relevant to this Objective.	Neutral - it is unlikely that this policy will affect transport arrangements associated with site development.	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**
17. To sustain the health and quality of life of the population.	Positive – although not specifically focussed on this Objective, locating new quarries in areas of less visual impacts will contribute to quality of life.	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.	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.
18. To enable safe access to countryside and open spaces.	Positive – site development and restoration can improve access to the countryside. The more sites developed, potentially the greater the benefits resulting	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.	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.
Conclusion:	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 be predominantly positive or neutral	This policy is expected to provide a range of benefits during site development and restoration. No changes are considered necessary.	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.

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**
	(assuming that impacts of new sites are satisfactorily mitigated at planning application stage). No changes are considered necessary.		

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

Criterion C7 – Impact on designated landscapes.	***B***
Significant adverse impact Dorset County Council 23 October 2013	
Criterion C8 – What is landscape capacity to accommodate proposed development.	***A***
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. Dorset County Council 26.11.2012	
Criterion C9 – Impact on historic landscapes.	**C**
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. Dorset County Council 4/11/2013	

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: …[9]. The results of the Stage 2 assessments are presented separately in Appendix A (for sites being taken

[9] The 2013/14 site assessments can be seen at:
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

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	• dust, emissions, noise, vibration and traffic-related impacts in conjunction with other workings in the vicinity (see secondary impacts below); • 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; • lowering of groundwater particularly in the vicinity of sensitive natural receptors as a result of simultaneously working a cluster of several sites 'dry'.
Secondary	• use of active sites for temporary flood storage while they are active (for this reason it is considered to be secondary rather than synergistic) • 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)
Synergistic	• 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); • 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.

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 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

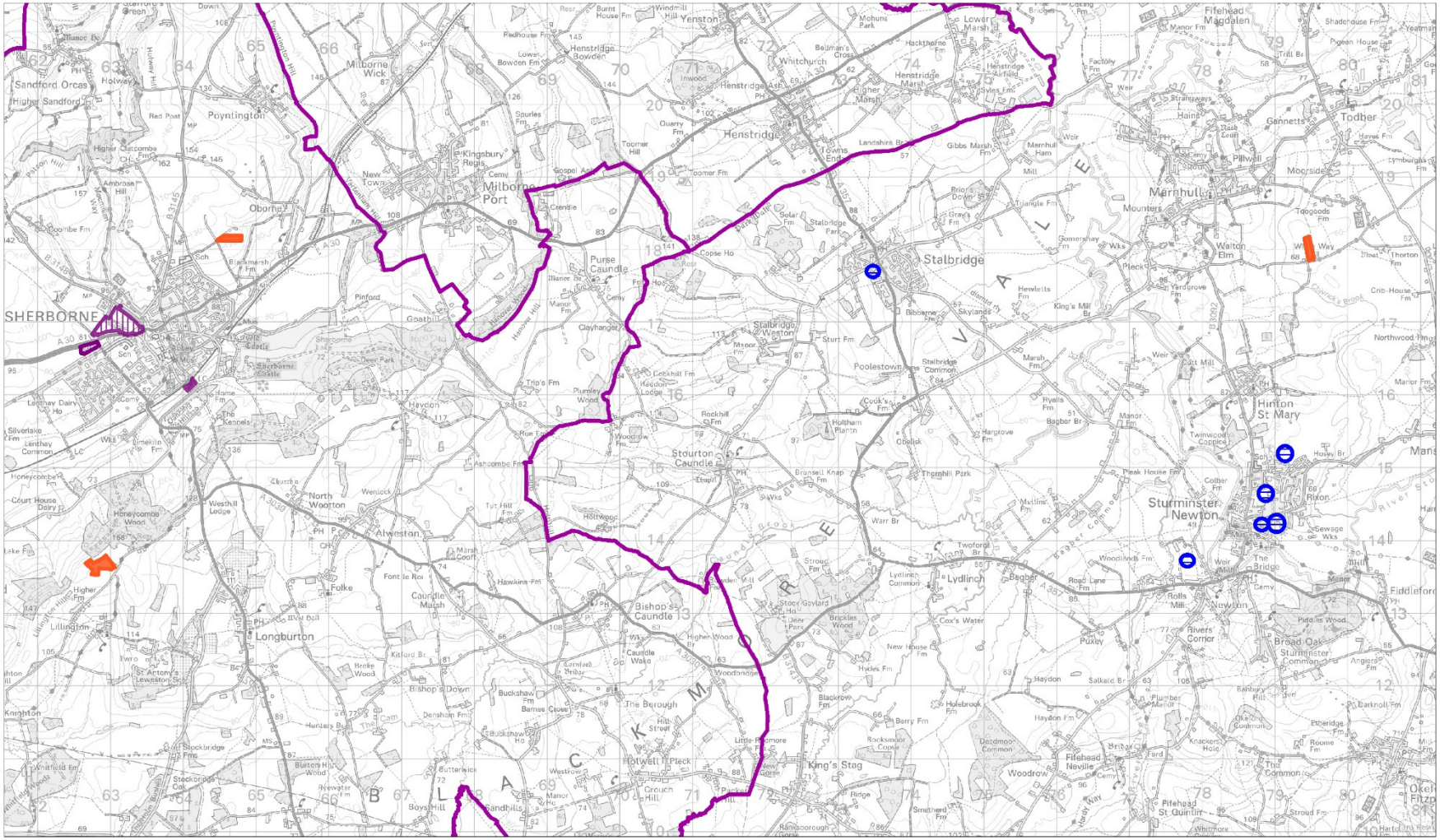
8.12. Minerals can only be worked where they are found, which limits spatial options for development of new sites and can make it more likely that mineral sites will be identified in clusters/discrete areas. This is more likely to result in cumulative impacts.

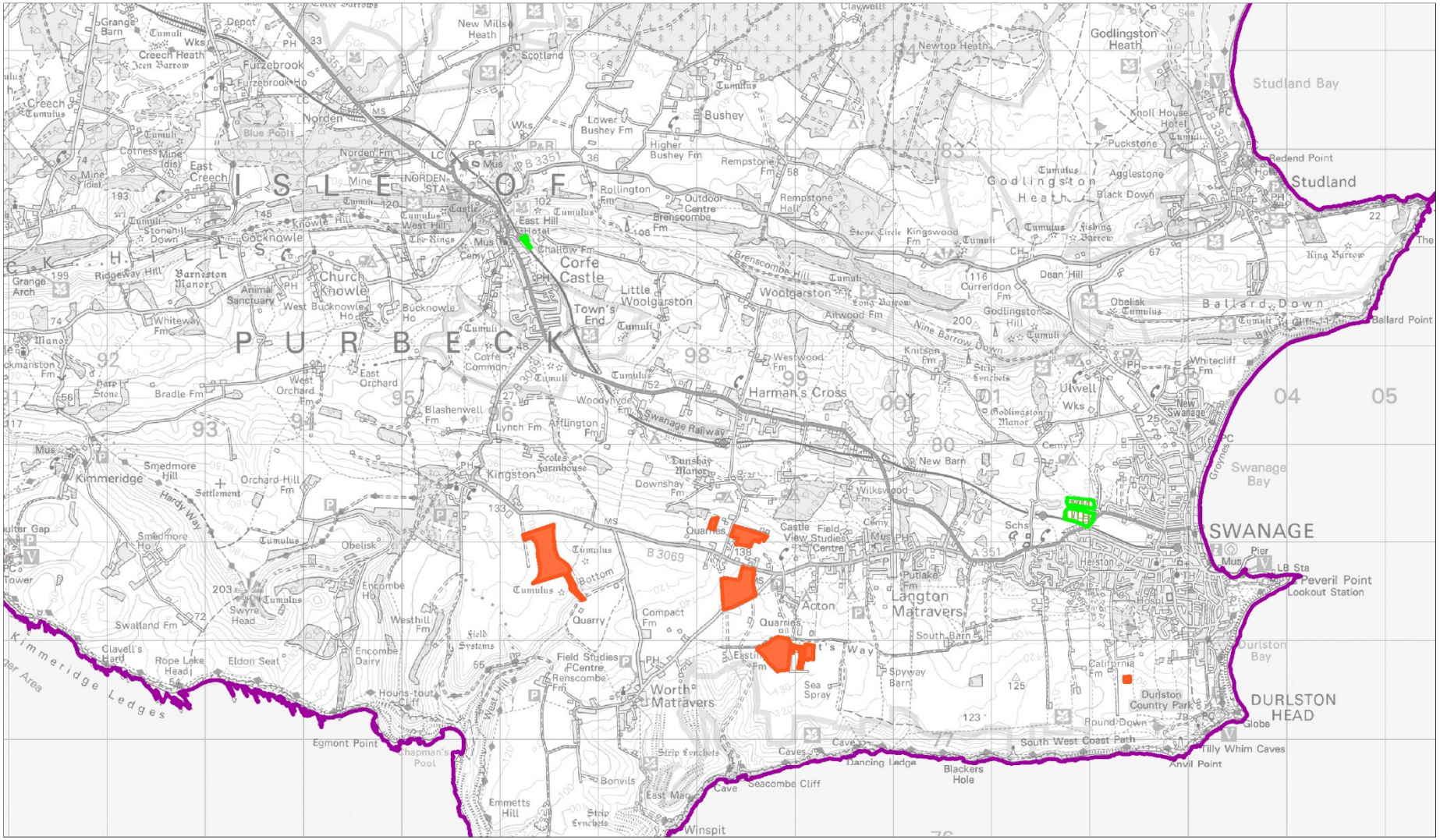
8.13. Cumulative/secondary impacts are not restricted to just other minerals or waste development, but also non-minerals development, such as housing and associated infrastructure. This has been

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





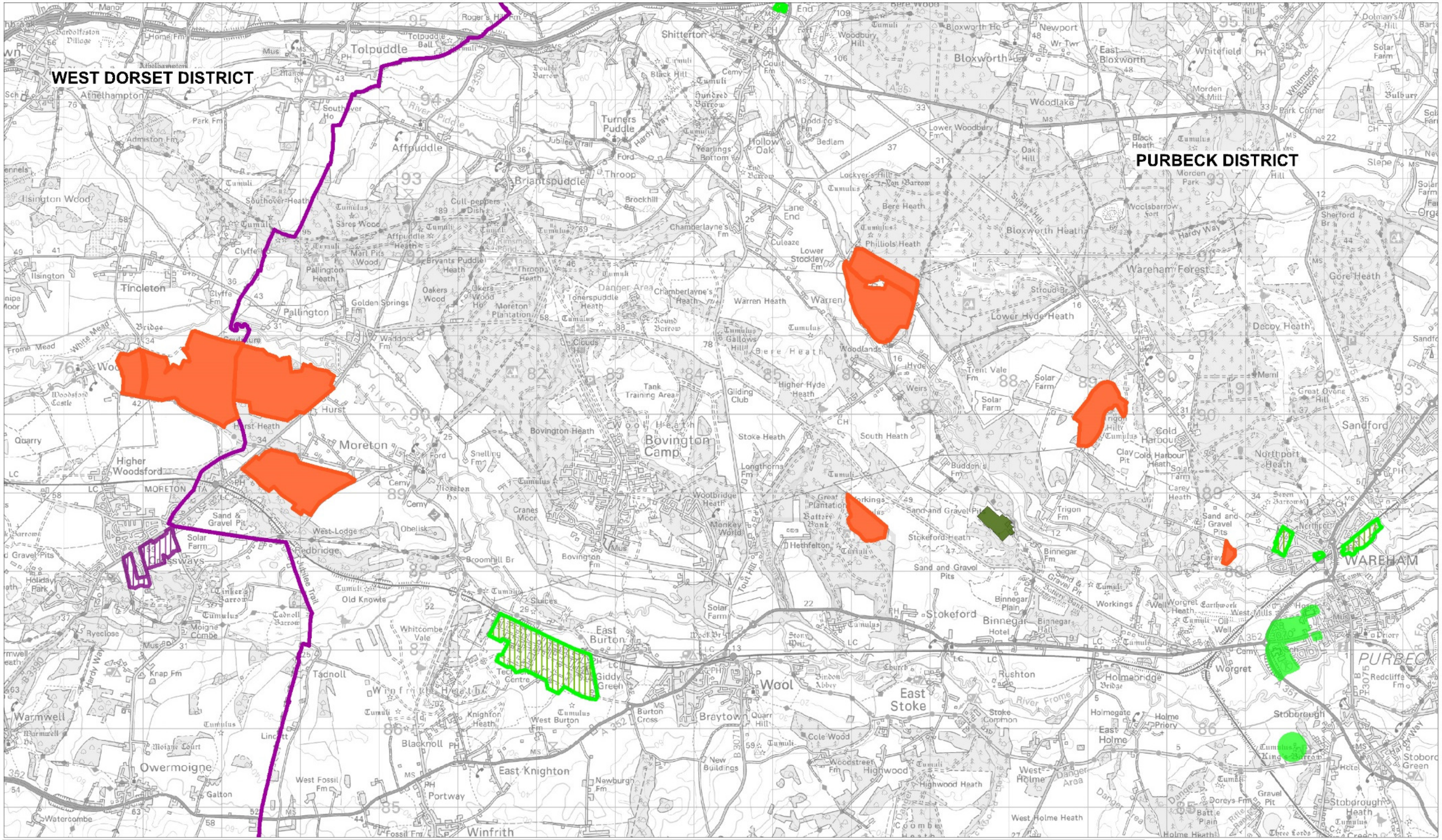
Map 2 - Purbeck council areas - Cumulative Impacts for sites allocated in Mineral Sites Plan

Employment allocations - Purbeck adopted Plan

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

GEOGRAPHICAL INFORMATION SYSTEMS

Dorset County Council



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

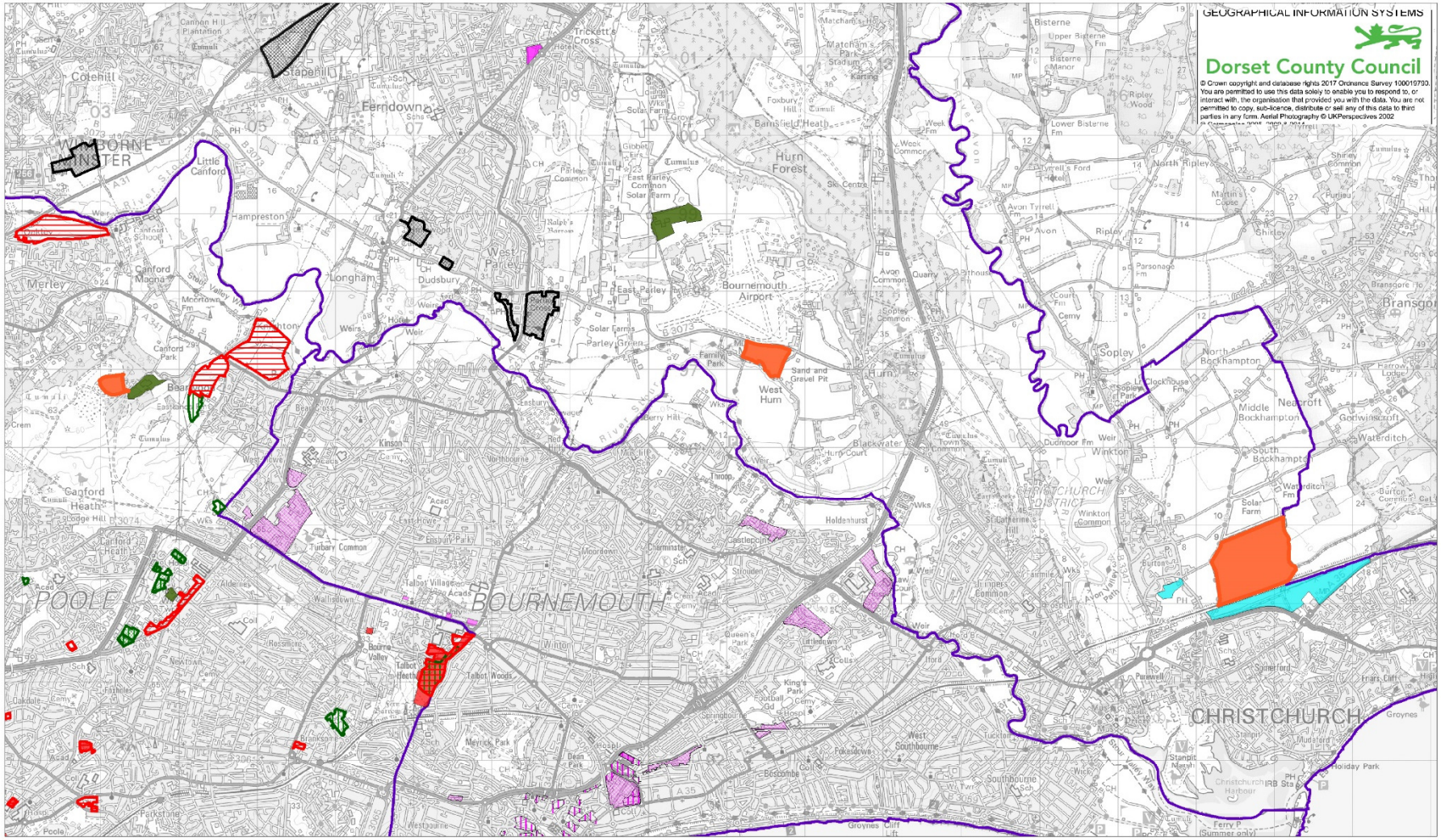
Administrative boundary

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

Mineral sites allocated in Bournemouth, Dorset and Poole Waste Plan

GEOGRAPHICAL INFORMATION SYSTEMS

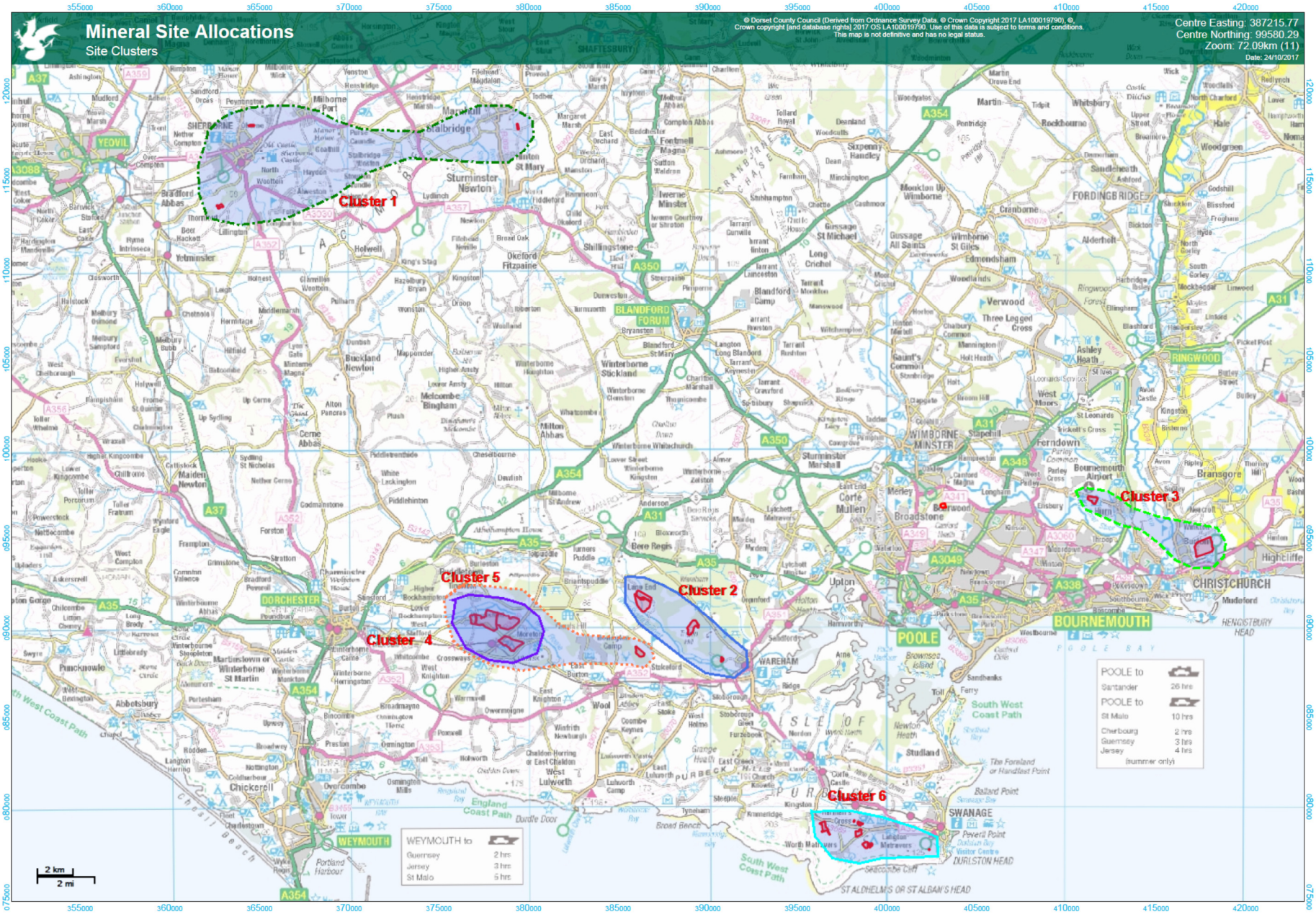
Dorset County Council



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

- Residential allocations - Poole adopted Plan
- Employment allocations - Poole adopted Plan
- Employment allocations - Poole draft Plan
- 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
- Mineral sites allocated in Bournemouth, Dorset and Poole Mineral Sites Plan
- Mineral sites allocated in Bournemouth, Dorset and Poole Waste Plan
- Administrative Authority boundaries

Figure 4: Mineral Site Clusters



Cluster 1 – Other building stone sites

8.15. The three 'Other Building Stone' allocations in the north of the county, BS02, BS04 and BS05 (see Figure 3 above, shown in green das-dot line), form a loose cluster, particularly the two around Sherborne. The District Excerpts Map 1 (above) indicates employment or housing allocations around Sherborne and Sturminster Newton. However, all three of these Building Stone sites are small-scale and low impact, and all are proposed extensions of existing sites, not expected to be worked simultaneously with the existing sites. It is not expected that they will lead to cumulative or other similar impacts during their development.

Cluster 2 – C7 Wareham to A35 – Ball Clay and Aggregates

8.16. There are three site allocations served by this road – AS12 Phillio̊l's Farm, BC04 Trigon Hill Extension and AS15 Tatchell's (Figure 3, solid blue line). The ball clay site, BC04, is an extension of an existing site. AS15 Tatchell's is an extension of an existing site, but it has not been operational for years, so if AS15 is developed it will seem like a new site. AS12 Phillio̊l's Farm is a new site. In addition, housing and employment allocations are identified at Wareham.

8.17. These sites are not close to each other and not expected to be inter-visible. It is expected that the main cumulative impact will be traffic related, through the C7 carrying additional traffic. Most of the aggregate quarry traffic will move to and from the A35, and traffic heading south-eastward towards Wareham would be mostly carrying out deliveries. For BC04 Trigon Hill Extension, traffic will head towards Wareham to access the Furzeyground ball clay processing site south of Wareham.

8.18. Trigon Hill Extension is an extension of an existing operation, and it is expected that it will not be worked simultaneously with existing site – although the existing ball clay site will likely be in the process of restoration while the extension is worked. No sand and gravel is proposed to be extracted and removed with the ball clay. It is therefore expected that the traffic movements identified for Trigon Hill Extension will represent a reduction in traffic movements, from what has at times been generated from the Trigon Hill site.

8.19. The aggregate sites, Phillio̊l's Farm and Tatchell's are essentially new sites, as there has been no extraction from Tatchell's for some time. Tatchell's is relatively small, and will be worked quickly. Both sites will be subject to a detailed transport assessment at the planning application stage, identifying impacts and appropriate mitigation. Options such as restricting quarry traffic in rush hour are possible.

Table 11 – Traffic Movements along the C7

Site	HGV movements	North (two-way)	South (two-way)
Tatchell's	40	30 (75%)	10 (25%)
Phillio̊l's Farm	80	65 (c.80%)	15 (c. 20%)
Trigon Hill Extension	c. 40 – Ball Clay only	5 (c.12%)	35 (c.88%)
	Total	**100**	**75**

8.20. There are several camping and caravan sites along the C7 all of which have suitable entrances. Towards the south of the C7 there are a significant number of dwelling houses but these are within the 30 mph zone and, as described above, there are no existing accident problems.

8.21. The junction between the C7 and A35 at the northern end of Sugar Hill has no existing accident or

capacity problem. The proposed minerals extraction sites along Sugar Hill could potentially add 100 movements (50 in each direction) through this junction over the course of a typical day. This is in the order of up to 12 movements per hour. Whether the junction can handle this loading will be tested at planning application stage.

8.22. The Mineral Sites Plan Development Guidelines for Tatchell's and Philliol's Farm site allocations could specify that the two sites will not be worked simultaneously unless it can be clearly demonstrated that the highway network can safely accommodate this increased level of traffic movements.

8.23. A proportion of traffic travelling south on the C7 will continue to travel north on the A351 towards the Bakers Arms roundabout. Trips from Trigon to Furzebrook would turn south down the A351 but the processed product would in turn be transport further afield on the northern section of the A351.

8.24. This route already carries high levels of traffic, with peak hour congestion. However there should be no increase in ball clay traffic, and as noted above Philliol's Farm and Tatchell will not be worked together unless it can be demonstrated that the highway system can accommodate the traffic generated. There is also the option of preventing quarry traffic during peak traffic times.

8.25. It is therefore expected that the allocation of these sites could lead to cumulative impacts, depending on the timing of when the sites are worked. However it is expected that appropriate mitigation could be put place to offset the impacts, and the potential impacts are not significant enough to prevent the allocation of these sites.

Cluster 3 – Hurn Court Farm and Roeshot – Aggregates

8.26. These two sites, AS09 and AS13 respectively, are located north and east of Christchurch, enclosed by a green broken line on Figure 3 above. Both sites would primarily serve the Bournemouth/Poole/Christchurch urban area. AS09 Hurn Court Farm would be an extension of an existing site. AS13 Roeshot is the western part of a larger site, the eastern part of which is in Hampshire and is currently the subject of a planning application, expected to be determined this year. If permitted, the Dorset part of Roeshot would be extension of the Hampshire part.

8.27. The key cumulative issue for both sites is traffic, as traffic levels are already high in both areas. Housing allocations are proposed in Christchurch and in West Parley. The Christchurch Urban Extension south of Roeshot is particularly relevant.

8.28. The A35 is one of the busiest roads in Dorset. The expectation is that the site could generate 100 two-way HGV movements per day meaning that an additional 80 HGVs could be expected on the A35 corridor. This constitutes an 11% increase in HGV traffic.

8.29. This route already operates at capacity in peak periods. It would therefore be necessary to ensure that vehicles do not enter and exit the site at peak hours as far as possible. Given that that this mineral extraction will generate a substantial increase in HGV movements on the westbound A35 through Christchurch, Dorset County Council will seek contributions from quarry operators for the implementation of measures to mitigate the effects of HGVs on the Dorset network.

8.30. However, as both sites are expected to be extensions of existing proposals should they be developed, it is expected that issues such as traffic impacts mitigation will already have been addressed and therefore unlikely to completely prevent these allocations being developed themselves. Further mitigation may be identified.

8.31. Other issues such as restoration of already worked areas and mitigation of amenity would be dealt with at the planning application stage.

Cluster 4 – Station Road, Hurst Farm and Woodsford – Aggregates

8.32. Cumulative impacts for these sites – indicated on Figure 3 with a solid purple outline – include traffic, with impacts primarily on the B3390 and amenity. Cumulative impacts, particularly for traffic, are exacerbated with proposals for built development around Crossways and at Moreton Station.

8.33. There are two potentially sensitive sites on the highway network that need to be considered. These are the Hurst Bridges and the junction between the C80 and B3390 at Waddock Cross. Hurst Bridges

are two narrow bridges on the B3390 just to the north of the Hurst Farm site. There has previously been an accident problem at this location and some concern has been raised over the impact of proposed minerals sites. The bridges are within a de-restricted (60mph) speed limit and there are vertical and horizontal alignment issues on the approaches. The Waddock Cross junction is at the top of a small rise and there was some concern with visibility problems due to the vertical alignment of the carriageway.

8.34. A Transport Assessment with modelling has been carried out for the local network, taking into account both existing and proposed built and minerals development - proposed by Dorset County Council as Mineral Planning Authority and Purbeck District Council and West Dorset District Council as Local Planning Authorities. The study concluded that there was capacity for all the proposed development, both for minerals and for housing. This report can be seen at: .....

8.35. In terms of amenity, this primarily includes visual impacts from the amount of land being quarried at any one time and noise from more than one site being worked simultaneously. It is more relevant to AS26 Hurst Farm and AS19 Woodsford Extension – AS25 Station Road is spatially removed and largely screened by trees. Apart from the cumulative traffic impacts already mentioned, it will contribute relatively little cumulative impact.

8.36. The signage and lining at Hurst Bridges has been improved in the last five years. Advice from Traffic Management suggests that there is ample advanced warning to motorists of the narrow bridges and that there is no further suitable action that can be taken at this location.

8.37. Visibility at the Waddock Cross junction has been accurately measured from the point of view of an HGV driver, whose eye level is considerably higher than a driver in a car or van. The results showed that there was ample visibility for vehicles turning into or out of the C80. Accidents at this location were mainly as a result of cars ignoring or not noticing the give way with only one citing visibility as an issue. The proposed increase in traffic here is therefore not thought to present a problem in highway safety or capacity.

8.38. It is accepted that Hurst Farm and Woodsford Extension have the potential to give rise to cumulative impacts on amenity, depending on the timing of their working. This is exacerbated by the fact that the two sites are in different ownerships. This issue will be flagged up in the Development Guidelines to be addressed at the planning application stage. It is expected that protection offered through local and national planning policy will satisfactorily address the impacts.

8.39. There are secondary benefits to be realised from the development of both Woodsford Extension and Hurst Farm. Post mineral working, the creation of multi-functional green infrastructure links across and along the valley, linking to adjacent centres of population, will be important. This could include grazing pasture and/or a large scale wetland restoration scheme with significant recreational opportunities, which would contribute to flood alleviation, contribute towards overall reduction in phosphate, nitrogen and sediment load in the lower reaches of the River Frome and Poole Harbour and create habitat for the conservation of protected species such as otter and water vole as well as many species of wetland bird.

8.40. There are synergistic effects between two of these proposed sites, Hurst Farm and Station Road. Both sites are in the same ownership, and it is proposed that a single processing plant will be located at Hurst Farm and used to process the mineral from both sites. The two sites will essentially be worked as one, which will minimise impacts e.g. there will be no need for two processing plants, and only one site will be worked at any one time. If for any reason one or both of the sites are reduced in size, there is still potential for both to be worked as they will essentially comprise one site, providing enough mineral to justify their development.

Cluster 5 – Cluster 4 Plus AS06 Great Plantation on the C80 Puddletown Road

8.41. Cluster 5 is a combination of Cluster 3, as described above, along with the AS06 Great Plantation site on Puddletown Road (C80). It is shown in Figure 4, outlined in an orange dotted line. The Great Plantation site, if ultimately developed, would be a follow-on site/extension after Hyde Pit, a current aggregates quarry. There would be no intensification of traffic.

8.42. These sites are all considered together since it is expected that some of the traffic generated by

Cluster 4 will head north along the B3390 to Waddock Crossroads, then eastwards along the C80 then northwards towards Bere Regis on the C6. The C6 would also carry traffic from Great Plantation and from other sites on the Puddletown Road and additional traffic from Wareham allocations through part of Bere Regis, to access the A35/A31. Bere Regis could therefore experience cumulative impacts from increased traffic.

8.43. There is an existing first school on the east side of the C6 Rye Hill in Bere Regis. It should be noted that there is a possibility that the existing first school will be moved to a new site and enlarged to form a primary school (Purbeck Local Plan – Part 1 November 2012). This would potentially remove the school from the route taken by HGV's to the A31/A35.

8.44. The school is within the 30mph zone. There are advanced warning signs, including flashing lights, and 'slow' markings on the road as well as a zebra crossing serving the school.

8.45. While an increase of Heavy Goods Vehicles may impact upon amenity, there is no reason to suggest that it could not be safely accommodated on the existing highway network or that it would impact on the capacity of the network. The Highways Agency is responsible for these roads and will be consulted on the potential impact.

Cluster 6 – Purbeck Stone sites

8.46. Seven Purbeck Stone site allocations have been proposed, all on the Purbeck Plateau and most around Worth Matravers/Acton. One lies to the south of Swanage. All, with the exception of PK-16 Swanworth Quarry Extension, are relatively small and produce Purbeck Stone for building/roofing/walling uses. All, with the exception of Gallows Gore, are extension sites, following on sites from existing quarries.

8.47. Cumulative traffic impacts are expected to be minimal, since all sites follow on from existing operations. The exception is Gallows Gore, and this is not expected to be a problem either, as the stone would be extracted in time-limited campaigns and taken to a nearby service area to be processed and sold. Output from the service area would remain relatively constant.

8.48. Cumulative visual impacts, both locally and with wider impacts on the AONB, are also relevant. These will be identified in the Development Guidelines for the relevant sites and the visual impacts will need to be addressed at the planning application stage if not before. The site allocations, with the exception of part of Swanworth Quarry (which is not being treated as a Purbeck Stone dimension stone quarry) are all within the Purbeck Stone Area of Search identified in Policy PK-2 of the 2014 Minerals Strategy.

Recycled aggregate

8.49. The recycled aggregate site, RA01 at Canford in Poole, is already implemented through an existing, temporary permission. It did not involve any new development or a new site, and no intensification is proposed. It does not sit readily in any clusters.

9. Health Impact Assessment

Introduction

9.1. Health Impact Assessment (HIA) helps to shape emerging plans by predicting the health consequences of a proposal or policy being implemented. Mineral extraction, processing and transportation can have implications on the public health and wellbeing and HIA seeks to anticipate health impacts, for which mitigation can be identified and implemented. As with Sustainability Appraisal, HIA also helps to identify potential benefits that may arise e.g. benefits of specific site restoration.

Appraisal

9.2. HIA has been integrated into the SA/SEA process in two ways. The two stage assessment process that has been followed to assess each site is described above in paragraphs 8.2 to 8.8. Both Stage 1 and Stage 2 have specific criteria or objectives which consider human health.

9.3. For Stage 1, the most relevant site assessment criteria are: *Site Selection Criterion C18: Does the proposal have any impact on Sensitive Human Receptors?* and *Site Selection Criterion C19: Does the proposal have any impact on existing settlements?*. There are other criteria also relevant, including countryside recreation and access, air quality, water/flooding. Each site nomination has been assessed against all criteria, so health impacts and issues have been identified at an early stage.

9.4. For Stage 2 application, the 2015 Sustainability Appraisal Scoping report contained eighteen sustainability objectives, two of which are directly relevant to the assessment of health impacts; SA Objective 17 'To sustain the health and quality of life of the population' and SA Objective 8 'To protect and improve air quality'. Other objectives are also relevant to the assessment of health impacts including; SA objective 13 'To encourage sustainable economic growth' and SA objective 18 'To enable safe access to countryside and open spaces'. Draft Sustainability Appraisal reports were prepared for the 2015 and 2016 consultations, so again health impacts have been identified and addressed at an early stage.

Consultation

9.5. Public consultation on the Mineral Sites Plan has raised various issues concerning health, including noise, dust and traffic, for a number of the proposed site allocations. In plan preparation, such impacts are addressed through the development of vision/objectives that take into consideration the need to address health impacts. The vision/objectives of the 2014 Minerals Strategy, which are also the vision/objectives of the Mineral Sites Plan, do make reference to protecting local communities. These are fixed, and will not be revised through the preparation of the Mineral Sites Plan.

9.6. The various elements of the vision and objectives are delivered through the choice of policies, and wording of the policies, for the plan. The 2014 Minerals Strategy includes a number of development management policies which will protect local communities, including Policy DM1 - Key Criteria for Sustainable Minerals Development, Policy DM2 - Managing Impacts on Amenity (the key policy), Policy DM3 - Managing the Impact on Surface Water and Ground Water Resources and Policy DM8 - Transport and Minerals Development. Other policies, such as RS1 requiring timely restoration of sites, are also relevant. At planning application, these policies will be applied to ensure the health of communities and individuals is protected.

9.7. Although the Mineral Sites Plan does not contain further policies to specifically address the health of communities, all the development management and other policies of the 2014 Minerals Strategy will apply to the proposed site allocations, and in this way will address any potential health impacts.

9.8. The individual site appraisals (Appendices A, B and C) each include separate consideration of health issues, identifying the relevant impacts and stating how these will be addressed. Health issues are not specifically mentioned in the Development Guidelines of each proposed site allocation – it is taken that all the proposals, if received as planning applications, will include Environmental Impact Assessment which will include health issues, with appropriate mitigation as required by 2014

Minerals Strategy and National Planning Policy Framework policy.

10. Equalities Impact Assessment

Introduction

10.1. When adopted, the Mineral Sites Plan will support and complement the 2014 Minerals Strategy by identifying the areas/sites required to provide for ongoing mineral provision. It will provide for improved restoration and long-term management in the Puddletown Road area, and also for improved safeguarding of existing mineral sites.

10.2. When adopted, it will supersede the last remaining extant policies of the 1999 Minerals and Waste Plan, thereby replacing that Plan.

Who will it impact upon?

10.3. Virtually everyone in Bournemouth, Dorset and Poole uses minerals in some way, but it is not always obvious how they are being used. Minerals are relevant to most residents/businesses, but the actual impacts of mineral working can be more focused. National policy, and development management policies of the 2014 Minerals Strategy, are intended to ensure residents and businesses are protected from the potentially harmful effects of mineral working.

10.4. Minerals can only be worked where they are found. This does mean that residents/communities living in areas where minerals are found are likely to experience impacts that that residents on non-mineral areas do not. This is unavoidable, and the Mineral Planning Authority will use conditions attached to a planning permission to mitigate these impacts.

10.5. Sites proposed for allocation for new mineral development have been selected from across the Plan area, on the basis that they are in an area where mineral is found and they are considered suitable for mineral working. To be suitable, the Mineral Planning Authority will have to be satisfied that impacts of mineral working on nearby residents/communities can be satisfactorily mitigated. This is done at the planning application stage, applying national policies and local policy, primarily from the 2014 Minerals Strategy.

10.6. During implementation of the Plan, and development of the allocations, the Mineral Planning Authority as noted will usually require detailed assessment of possible impacts, and apply conditions necessary to mitigate these impacts to an acceptable level.

Potential Impacts

10.7. Tables 13 and 14 below consider possible impacts on identified characteristics, that the Mineral Sites Plan could affect.

Table 12: Does or could the service, strategy, policy, project or change have an impact upon the following:

Protected characteristic	Positive impact	Negative	No Impact	Unclear
Age				
Disability				
Gender Reassignment				
Pregnancy and Maternity				
Race and Ethnicity				
Religion and Belief				
Sex				

Protected characteristic	Positive impact	Negative	No Impact	Unclear
Sexual Orientation				
Other socially excluded groups (carers, rural isolation, low income, military status)				

Table 13: Does this have any impact on the workforce in relation to the following:

Protected characteristic	Positive impact	Negative	No Impact	Unclear
Age				
Disability				
Gender Reassignment				
Pregnancy and Maternity				
Race and Ethnicity				
Religion and Belief				
Sex				
Sexual Orientation				
Other socially excluded groups (carers, rural isolation, low income, military status)				

Comment

10.8. The Pre-Submission Draft of the Mineral Sites Plan proposes the allocation of 21 sites for future mineral working. It also proposes an aggregates Area of Search, the Puddletown Road Policy Area and improved safeguarding of existing mineral sites. The proposals and policies in the Plan apply to the community as a whole, but since minerals can only be worked where they are found, residences/communities in mineral bearing parts of Bournemouth, Dorset and Poole are more likely than the rest of the area to experience the impacts of mineral working.

10.9. However, within and around mineral bearing areas there is no evidence to suggest that the Plan, either in preparation or implementation, is likely to impact on specific equality groups any differently from the impact on the general population.

10.10. All potential sites nominated for inclusion in the Plan are thoroughly assessed to identify the ones expected to cause the least impacts on communities and the wider environment. No new mineral development takes place directly as a result of the Plan; before new mineral development takes place an operator must submit a planning application to the Mineral Planning Authority for assessment and determination. An Environmental Impact Assessment will be carried out on the process of determining planning applications for mineral development. At plan implementation, identified impacts are mitigated to acceptable levels by thorough assessment and application of controls such as planning conditions.

10.11. The plan preparation process, including consultation, is intended to be as inclusive as possible. Various draft versions of the plan will have been through up to five separate public consultations. The Mineral Planning Authority have a statutory duty to consult widely, and the Mineral Planning Authority has made the preparation process as inclusive as possible, as described in the

Consultation Statement (see our website for more detail) and also below.

Consultation

10.12. The preparation of the Mineral Sites Plan has included a number of stages of consultation. During each consultation the Mineral Planning Authority has gathered the views of the local community and other relevant stakeholders. A key outcome therefore is a plan which reflects the views of the local community and aims to minimise adverse impacts on them.

10.13. Specific consultation bodies, general consultation bodies and other consultation bodies are detailed in the Town and Country Planning (Local Planning (England) Regulations 2012) and in Dorset County Council's adopted Statement of Community Involvement (2013). The general consultation bodies specifically include:

- Bodies which represent the interests of different racial, ethnic or national groups
- Bodies which represent the interests of different religious groups
- Bodies which represent the interests of disabled persons

10.14. A wide range of groups and individuals across the gender, age, belief/faith, Disability and race strands have been consulted throughout the preparation of the Mineral Sites Plan.

10.15. A variety of methods of consultation have been used during each consultation period and documents have been made as widely available as possible, within budget restrictions. Where possible, the contribution of different geographical groups has been monitored. Copies of the consultation documents have been made available in District/Borough Council Offices, as well as the Mineral Planning Authorities and in libraries. These buildings are intended to be fully accessible., if anyone has difficulties access the documents elsewhere.

10.16. The following statement has been included on the reverse cover of the consultation Mineral Sites Plan *'All documents can be made available in audio tape, large print and Braille or alternative languages on request.'* Officers try to be as helpful as possible in dealing with requests for assistance, including copying sections of the planning documents for people who cannot access them otherwise.

10.17. Responses to the consultation have been considered fully with additional information sought where appropriate to address issues raised through representations.

Access to Plan Sites

10.18. The general public does not normally have a need to access mineral workings, so there is not normally a need to ensure that allocated sites are publicly accessible. The exception is where some quarries sell mineral directly to the public – this is a commercial undertaking and not a statutory requirement, and the Mineral Planning Authority is not required to ensure such access.

10.19. In the case of commercial supply of mineral, equality groups could have improved employment opportunities through access to quarries. However, such opportunities are again limited to locations where mineral is found, and quarries have been permitted.

Conclusion

10.20. The Mineral Sites Plan is a strategic level document that is concerned with minerals planning policies and the identification of sites based on a rigorous site selection exercise and planning merit; as such it is unlikely to impact people within the equality groups any differently than from the impact on the general population of Bournemouth, Dorset and Poole – apart from the fact a noted that mineral bearing areas will experience the effects of mineral working to a greater extent than other non-mineral bearing areas.

10.21. To date none of the responses received during consultations have highlighted evidence which indicates that there is an apparent impact on any of the protected characteristics identified in Tables 13 and 14.

11. Mitigation

11.1. All of the assessed sites are proposed for sand and gravel extraction in rural areas and are likely to have common ancillary effects. Some impacts may not arise due to local circumstances but, where present, they are likely to be as summarised below.

Mitigation Proposals

11.2. Minerals extraction gives rise to similar generic impacts. The resulting generic mitigation proposals are listed below. Note that these are **examples** of what will be required, and implemented, for the sites to be developed – this does not mean that every one of these mitigation measures will be implemented in each case. Every site is assessed, including at planning application stage, on its merits.

- Buffer zones along edges of the site bordering or close to sensitive human or natural receptors – aim is to directly reduce impacts (e.g. increased distance to dissipate noise) or the risk of them occurring (e.g. increased distance reducing risk material could be blown into nearby field drains);
- Bunding along edges of the site bordering or close to sensitive human or natural receptors to again increase separation while also providing a physical barrier to deflect noise and screening to reduce visual impacts;
- Vegetation screening along edges of the site bordering sensitive human receptors to reduce visual impacts with reduced loss of the workable area of the site; screens can also reduce impacts of dust blown off-site;
- Dust suppression measures including watering of internal haul roads during periods of dry weather and wheel-washing facilities for on-site plant and lorries taking material off-site;
- Discharge controls on the quantity and quality of water pumped from a site that is being dewatered to limit impacts of the adjacent water environment, particularly if this is sensitive;
- Routeing agreements to prevent or limit lorry movements through nearby villages or those along the route to the strategic road network to limit a range of amenity impacts on all properties whether or not they are designated;
- Controls on working hours to limit noise and other impacts – these are likely to apply only where working is extremely close to human receptors;
- Noise limits and emissions controls on compressors and similar machinery on the site;
- Limits on simultaneous working of sites within a cluster to reduce the risks of a range of cumulative effects on air and water quality, traffic levels and other impacts affecting local amenity. In practice operators will tend to work sites in sequence to maintain the required landbank over a long period but this does not preclude some simultaneous working.

12. Monitoring

12.1. The SEA Directive (European Directive 2001/42/EC "The assessment of the effects of certain plans and programmes on the Environment") requires that the significant environmental effects of implementing a plan of programme should be monitored in order to identify at an early stage any unforeseen adverse effects, and to be able to undertake appropriate remedial action. SA monitoring will cover significant sustainability effects as well as the environmental effects.

12.2. Monitoring already plays an important role in the performance management of the minerals planning process in Bournemouth, Dorset and Poole. Between April 2004 and March 2012 monitoring was presented in the form of Annual Monitoring Reports (AMRs). These reports were required under the Planning and Compulsory Purchase Act 2004. AMRs assessed progress on the preparation of development plan documents and numbers of applications considered by the Minerals and Waste Planning Authority. They also contained data on waste arisings and management. The county council produced seven Annual Monitoring Reports since 2004 and these can be found on our website.

12.3. The 2014 Bournemouth, Dorset and Poole Minerals Strategy included a monitoring framework, with indicators. This includes monitoring of the policies for minerals provision and environmental and amenity protection, key aims of the Mineral Sites Plan. The 2014 Minerals Strategy policy monitoring, as it becomes established, is recorded in the AMRs for 2015, 2016 and 2017, and will be directly relevant to the implementation and monitoring of the Mineral Sites Plan.

12.4. In addition to this, the Mineral Sites Plan has its own monitoring framework, and the key indicators to be monitored and relevant conclusions will be included in the Annual Monitoring Reports. The monitoring framework is set out in section 7 of the Draft Mineral Sites Plan and contains more detail on the monitoring indicators and how they will be measured.

13. Sites – Assessed, Permitted and Withdrawn

Table 14: Stage 2 Appraisals for Sites Proposed for Allocation – see Appendix A

Aggregates

AS06 – Great Plantation
AS09 – Hurn Court Farm
AS12 – Philliol's Farm
AS13 – Roeshot
AS15 – Tatchell's
AS19 – Woodsford Extension
AS25 – Station Road
AS26 – Hurst Farm

Crushed Rock

PK-16 – Swanworth Quarry Extension

Ball Clay

BC04 – Trigon Hill Extension (Trigon West)

Recycled Aggregates

RA01 – White's Pit

Other Building Stone

BS02 – Marnhull (Whiteways Lane) Quarry Extension
BS04 – Frogden Quarry Extension
BS05 – Whithill Quarry Extension

Purbeck Stone

PK02 – Blacklands Quarry Extension
PK10 – Southard Quarry
PK15 – Downs Quarry Extension
PK17 – Home Field
PK18 – Extension to Quarry 4
PK19 – Broadmead Field
PK21 – Gallows Gore

Table 15: Stage 2 Appraisals for Sites Not Proposed for Allocation but not Withdrawn or Permitted – see Appendix B

Aggregates

AS08 – Horton Heath (including AS27 Clump Hill)

Purbeck Stone

PK08 – Quarr Farm

Table 16: Sites Withdrawn (or not being promoted) or Permitted – see Appendix C

Aggregates

AS01 – Binnegar (permitted)
AS02 – Cannon Hill (withdrawn/no longer promoted)
AS03 – Crossways (withdrawn/no longer promoted)
AS05 - East Parley Residual Reserve (withdrawn/no longer promoted)
AS10 – Moreton Plantation (withdrawn/no longer promoted)
AS11 – Parley Court (withdrawn/no longer promoted)
AS14 – Sturminster Marshall (including George Land) (withdrawn/no longer promoted)
AS17 – Uddens (withdrawn/no longer promoted)
AS18 – Wimborne (withdrawn/no longer promoted)
AS20 – Came Home Farm (withdrawn/no longer promoted)
AS22 – Trigon Hill Extension (aggregates) – (withdrawn/no longer promoted)
AS23 – Gore Heath (withdrawn/no longer promoted)
AS24 – Purple Haze (South) (withdrawn/no longer promoted)
AS28 A&B – Gallows' Hill A&B

Ball Clay

BC01 – Carrot Bank (withdrawn/no longer promoted)
BC05 – Dorey's – Holme Heath (permitted)
BC06 – Woolsbarrow (withdrawn/no longer promoted)

Other Building Stone

BS01 – Manor Farm, Melbury Abbas (withdrawn/no longer promoted)
BS03 – Sloe's Hill, Symondsbury (withdrawn/no longer promoted)

Portland Stone

PS01 – Bowers Mine Extension
PS02 – Perryfield Quarry Extension (withdrawn/no longer promoted)

Purbeck Stone

PK03 – California Quarry (withdrawn/no longer promoted)
PK11 – St Aldhelm's Quarry Extension (permitted)
PK12 – Kingston Hill (withdrawn/no longer promoted)
PK20 – Crack Lane (withdrawn/no longer promoted)

14. Appendix A – Proposed Site Allocations

Assessing the Sites

The following appendices (A, B and C) present the Sustainability Appraisal assessments for the various sites that have been considered through the preparation of the Draft Mineral Sites Plan.

Appendix A comprises the sites that are proposed as allocations in the Draft Mineral Sites Plan.

Appendix B comprises the sites that are not proposed as allocations, but neither have they been withdrawn or permitted.

Appendix C comprises the sites that have been considered but were withdrawn from consideration, or permitted, and in both cases are no longer under consideration.

Each site assessment uses the following scoring (below) from strong negative to strong positive, with categories for 'no effect' or 'uncertain'.

Impact Assessment Scoring

- -	Strong Negative Impact	**-**	Minor Negative Impact	**+**	Minor Positive Impact	**++**	Strong Positive Impact	**0**	Negligible or No Effect	**?**	Uncertain

An attempt has been made to take into consideration timescales as well, setting out expected/potential impacts while the site is being prepared and worked (column headed 'Effects – P/W') and also the expected effects/benefits after working (column headed 'Effects – R/A) for Restoration and Afteruse.

Each colour and letter 'score' is meant to represent impacts **without** mitigation. A red or orange score does not mean that mitigation is impossible, it is usually possible.

Aggregates: AS06 Great Plantation

Site Name/Location: **AS06 Great Plantation** Mineral Type: Sand/Gravel		Nominee/Agent: SLR Consulting for Hanson UK Local Authority: Purbeck District Council
Site Area: c. 15 ha	Production: c. 200,000 tpa	Reserve: c. 2 million tonnes

Impact Assessment Scoring

- -	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain

N.B. In response to previous assessments on an earlier and larger area, which indicated significant impacts from working, the site area has been reduced. This assessment is based on this reduced area.

Timescales for effects:

P/W: Preparation and Working **R/A**: Restoration and Afteruse

Sustainability Objectives	Effects P/W	Effects R/A	Commentary	Mitigation
1. To move waste management up the waste hierarchy	N/A	N/A	• This Objective is not relevant to this site nomination	• N/A
2. To maintain, conserve and enhance biodiversity	–	0	**European/International Designations** • Mineral extraction from within the proposed area may lead to effects on European/international designations from proximity and displacement of recreation. • There may also be effects on species typical of European sites (including smooth snake, sand lizard, Dartford warbler, nightjar and woodlark). • The revised site boundary will undoubtedly lead to smaller potential effects but these still cannot be discounted • Area is used as recreation site contributing to the network of areas which help to reduce human recreational pressure on designated heathlands, although the contribution of Great Plantation is probably small given	• Further assessment under the Habs Regs, including ecological surveys and hydrological reports, will be required when at planning application stage, with appropriate mitigation identified. • Heathland restoration and public access to be created. • Nature conservation designations to be removed from proposed development area, with appropriate boundary established.
	– –	+		

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			its relative isolation from Wool and Wareham. • Working this area could lead to significant risk of adverse effects on European sites. • Restoration to heathland/forestry with open access has the potential to restore these benefits.	
	–	0	**Annex 1 Bird Species** • Area supports Annex 1 birds as part of the existing forestry crop rotation. Clearance of trees would result in heathland regeneration and the open habitat would rapidly become suitable for more Annex 1 birds. • The site has the potential to be included in a revision to the Heathland SPA boundary.	• Ecological surveys and hydrological reports required, with appropriate mitigation. • Heathland restoration and public access to be created. • Provision of an offsite heathland support area will compensate for effects on Annex 1 birds. • Restoration to heathland (rather than forestry plantation) will also ensure potential benefits to Annex 1 birds are realised after mineral extraction is complete.
	?	+		
	–	0	**National Designations** • Area likely to support rich invertebrate assemblage in existing rides contributing to maintenance of species within SSSI. • Restoration should include appropriate habitats to support invertebrates.	• Ecological assessment (Phase 2 invertebrate surveys) will be needed to fully assess the impacts of mineral extraction to ensure the proposals do not lead to unacceptable impacts. Restoration to include creation of invertebrate habitat. • Restoration to heathland rather than forestry plantation will be key in mitigating effects on species linked to the SSSI. If the overall area of open heathland is increased there is potential to increase key invertebrate populations.
	– –	+		
	–	0	**Protected species** • The revised site boundary will reduce impacts on protected species, but impacts are still likely.	• Full assessment of effects on all these species will be needed to ensure proposed mitigation is adequate Ecological surveys

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	– –		• These species include EPS reptiles, Annex 1 birds, and many NERC priority species/UK protected species of bird, reptile and invertebrate. .	required, with appropriate mitigation identified. • Restoration to heathland rather than forestry plantation will be key in mitigating effects on protected species, but may not be enough to fully mitigate effects on European species
	-/?	0	**Local recognitions/designations, including ancient woodland and veteran trees** • There are possible adverse implications for the Stokeford Heaths SNCI to the north of the proposed area, although through assessment it should be possible to avoid adverse effects on the SNCI.	• Ecological surveys required, with appropriate mitigation identified. • Restoration to include consideration of possible benefits for the SNCI.
3. To maintain, conserve and enhance geodiversity.	+	0	• Exposures resulting from working may be of interest. Benefits are only expected during working, and are likely to be obscured or covered as part of restoration.	• Operator to be asked to permit visits to view exposures as required.
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	–	0	**Groundwater** • Watercourse rises/runs within 50m of proposed development area. • Assessment required to determine possible impacts on hydrogeology and effects on the stream. Impacts to be appropriately mitigated. • No impacts on Source Protection Zones. • Site overlies secondary aquifer.	• Hydrological assessment required to determine possible impacts, on ground and surface waters, with appropriate mitigation to be implemented. • Further assessment on possible impacts on water supplies and appropriate mitigation if potential impacts identified. • Where necessary mitigating measures should be installed to maintain groundwater levels and/or monitor private water supplies. • Alternative arrangements should be in place in case of a reduction in supply.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	–	**0**	**Surface Water** • Watercourse rises/runs within 50m of proposed development area.	• Appropriate arrangements should be put in place to ensure that the water leaving the site and entering the rivers/watercourses is of an acceptable quality. • Any fuel on site should be properly stored to avoid contamination in case of spillage. • Appropriate arrangements should be installed for surface water and silt collection and fuel storage to prevent contamination of groundwater resources. • Land Drainage Consent to be obtained from Dorset County Council is works may affect flow of an ordinary watercourse.
5. To reduce flood risk and improve flood management.	**0**	**0**	**Flooding/Coastal Stability** • The site is in Flood Risk Zone 1 and working is not considered to constitute, or exacerbate an existing, a flood risk. • Negligible/No impact, during working and restoration.	• Flood Risk Assessment (FRA) will be required.
6. To maintain, conserve and enhance the historic environment (including archaeological sites, historic buildings, conservation areas, historic parks and gardens and	–	0	**Archaeology** • Two scheduled monuments (SM28379, a bowl barrow and SM28382, a section of Battery Bank) lie in the vicinity of the boundary of the proposed site, with two others (SM28380, a bowl barrow)and SM28381, another bowl barrow) further away. They are located approximately in a line that is oriented north to south. • The three barrows are set on the ridge that runs to the east of Baker's Well Valley. It is assumed that they would have been deliberately placed in these	• Archaeological survey to assess Monuments and establish their settings and how these can best be protected during working. • Archaeological survey to assess possible presence and significance of non-designated remains. • Adequate provision to be made for preservation, excavation or recording, as appropriate.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
other locally distinctive features and their settings).	– –	+	prominent positions at a time when the land cover would have been heathland rather than woodland. • The barrows would have been clearly visible from the valley as well as other vantage points in the wider landscape. There is also a water course that runs through the valley and it is likely that the barrows would have been deliberately placed overlooking this. To the east of the barrows, the land is level with no clear edge to the ridge. • Since a major part of the setting of the barrows essentially comprises the ridge and the valley to the west, it is important to preserve these landscape elements • A section of Battery Bank is also present within the valley. Whilst the section to the east of the track appears well-preserved, the section to the west appears to have been lost. Battery Bank is thought to have consisted of sections historically to act as markers separating the Frome Valley from land to the north. It is unclear whether this section of Battery Bank was placed alongside the barrows deliberately or not. • The level of protection afforded to the Scheduled Monuments and their setting could lead to parts of the site being excluded from quarrying. • Serious consideration needs to be given to how the proposed site might be developed, through assessment and evaluation that considers the Scheduled Monuments and their settings and also the impact on other below-ground archaeology. Continuing dialogue with English Heritage is also important. It may be possible to come to a compromise that allows quarrying on part of the site. • Restoration to open heathland could improve the settings of the Monuments.	• Settings of the Monuments to be established prior to working and not to be compromised during working.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	– – – –	+ 0	**Historic Landscapes** • 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 on the site. • 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. **Historic Buildings** • The nearest listed building which may have views of part of the site across fields is Heath View • Maintenance/build-up of vegetation around the edge of the site will increase screening and restrict views in. • If views into the site are still possible, restoration of the site should restore landscape texture and qualities thus the impact is time limited on this building.	• Archaeological survey to assess Monuments and establish their settings and how these can best be protected during working. • Restoration to heathland to benefit Monuments and their settings. • Strengthen screening of the site where possible. • Restoration to open space/heathland will improve views into site area.
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	– – – –	0	**Landscape Capacity** • The site is spread across a south facing slope, with a total variation of approximately 20m. The scale of excavations, in combination with the orientation of the slope, mean that operations will be visible from elevated locations, such as the Purbeck Hills. From here the development may have adverse effects, when considered individually, as well as cumulative adverse effects in combination and sequence with existing sites. However, the reduced scale of the allocation and proposed landscape buffer along the southern boundary are considered to reduce the potential landscape and visual impacts to an acceptable level. • If the developer can provide modified proposals that do not cause significant	• Landscape and visual impact assessment to identify impacts; adequate mitigation of such impacts before and during working. If mitigation is not possible, a view will have to be taken as to whether a time-limited impact would be acceptable. • Appropriate restoration proposals in line with Landscape Management Guidelines referred to in Minerals Strategy. • Maintain screening woodland around edges of site. • Restoration to enhance landscape for views into site.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			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.	
	– / – –	0	**Designated Landscapes** • Potential for significant adverse impact during working, through views into the site from the Purbeck Hills.	
8. To protect and improve air quality and reduce the impacts of noise.	0	0	• Impacts on air quality expected to be negligible. • No AQMAs will be affected by the working of this site proposal. Any dust resulting from working will be controlled through normal dust-suppression measures. • Noise mitigation will be addressed at the planning application stage, with appropriate mitigation to be included in the development of the site.	• Environmental protection measures to reduce dust and ensure noise is appropriately mitigated.
9. To maintain, conserve and enhance soil quality.	–	0	• The site comprises primarily heathland, grassland and woodland cover. The area is a former heathland area and so would be expected to have relatively poor, acidic soils. • Site preparation/working would require stripping and storage of the soils, with some impacts on them. • If the site is worked and restored to heathland this will require reinstatement/retention of acidic soils.	• Soil is poor quality in agricultural terms but valuable in terms of potential for heathland restoration. • Soils to be stored/protected during preparation and working and properly reinstated during restoration.
10. To conserve and safeguard mineral resources.	+ / + +	0	• In terms of encouraging the most efficient use of resources, this site is considered to provide a mild/strong positive impact as it constitutes an extension of an existing working and would make an important contribution to aggregate supply in Bournemouth, Dorset and Poole.	• No specific action required; site development to take into consideration and mitigate where appropriate relevant impacts.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
11. To promote the use of alternative materials.	0	0	• This proposal does not at present promote the use of alternative materials.	• No action required.
12. To provide an adequate and affordable supply of minerals to meet society's needs.	+ +	0	• Development of this site will provide a strong benefit in terms of contributing to the provision of a supply of minerals to meet society's needs. • Ensuring a sustainable supply will depend on the development and management of the site. Providing site development takes into account relevant principles of sustainable development it is expected this will contribute to complying with this objective.	• Ensure principles of sustainable development are incorporated into the development of this site.
13. To promote and encourage sustainable economic growth	+	0/?	• This site proposal is expected to contribute to economic development on two levels – directly through the provision of employment at the site to be developed and indirectly through the provision of aggregate minerals required for the maintenance of built environment and for new built development. Both levels are expected to maintain employment, skilled and unskilled. • Minerals development can have negative impacts on other economic development, both locally and further away – through noise, dust, traffic and so on. • It is considered that this proposal will provide a strong benefit during site working. • Restoration to forestry could provide on-going economic benefits; however, restoration to open access heathland is considered preferable in biodiversity terms and could provide limited economic benefits.	• Assessment od potential impacts will be required, to identify possible impacts and ensure these are satisfactorily mitigated. • Some combination of forestry and heathland may be achievable.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
14. To adapt to and mitigate the impacts of climate change.	_	0	• Developing land as a quarry is expected to have some negative impacts regarding climate change, due primarily to machinery used and transportation of mineral away from site. However, these will in relative terms be negligible. • The Bournemouth, Dorset and Poole Minerals Strategy seeks to address and minimise such impacts through Policy CC1 which requires operators to take into consideration climate change impacts and their possible mitigation for any proposed minerals development. • The development management policies, e.g. DM 1, also address and seek to minimise the issue of sustainable development and climate change. • Restoration to some form of vegetated environment will offer benefits in the form of climate change mitigation, including provision of habitat for wildlife, but again these will be relatively small.	• Use energy efficient plant and machinery. • Implement restoration which provides appropriate habitats to help to increase resilience of flora/fauna.
15. To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any residual impacts.	_	0	• This proposal is for a large extension to an existing operation south of Puddletown Road. It is expected that an existing access would be used although it may be possible to provide a new access as long as it met the required visibility, geometry and surfacing requirements. • Although the proposal is adjacent to and will comprise an extension of an existing quarry, that quarry is not currently operational. This proposal will therefore result in an increase in the number of vehicles on the Puddletown Road, gaining access to the strategic network via the C6 and Bere Regis to the west or via the A352 and A351 to the East. • If the proposed site comes into operation after other works cease, there would be a 'Less Significant Adverse Impact' impact. However, should the site come forward in parallel with current operations, there will be 'Significant Adverse' impact. When the	• Transport Assessment to be carried out, identifying opportunities for reducing impacts on the transport network.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			site comes forward, detailed traffic information will need to include vehicle routing and a consideration of impact along those routes. • Policies DM1 and DM 8 of the Minerals Strategy actively address this issue of minimising impacts on the transportation network.	
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	–	0	• The proposed extension can only realistically be accessed by means of road transport, resulting in a negative impact under this Objective during development and working. • As far as reasonably possible negative impacts resulting from access and transport will be mitigated, as required by Policies DM1 and DM8 of the Minerals Strategy.	• Mitigate impacts where identified and appropriate.
17. To sustain the health and quality of life of the population	0	0	**Impact on Sensitive Human Receptors** • Closest residences are approximately 200m to the west, others within 250-500 m buffers around site, including Hethfelton House. • Site is relatively isolated from residences and has the potential to be well screened. With further mitigation (noise attenuation and visual screening bunds) impacts on surroundings are expected to be minimal. • Dust should not be an issue, and lorry traffic will not have any particular impact on these properties.	• Retain screening vegetation where appropriate and provide other mitigation as required, such as noise attenuation bunds.
	–			
	0	0	**Impact on Existing Settlements** • Stokeford lies within approximately 400m of the site, while Wool and Bovington Camp are over 1km distant. The site is unlikely to have any impact on any of these sites. • Lorries would travel northwards to the A35 and in so doing may have some impact on Bere Regis.	• Transport Assessment to be carried out, identifying opportunities for reducing impacts on the transport network.
	–			
	0	0	**Impact on Airport Safety** • No impacts expected.	• No action required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
18. To enable safe access to countryside and open spaces.	– –	0/?	**Impact on Recreational Land** • Although there are no formal rights of way or formal recreational uses on the site, as Forestry Commission land the site is available for public access. • This would change during working but after restoration the site could be open to public access again.	• Alternative access routes/options to be identified and provided before working begins or the land is closed to public access. • Restoration to open space with public access should be considered for its benefits, but could conflict with nature conservation aspirations.
	– –	0	**Impact on Public Rights of Way** • There are no public rights of way over or adjacent to the site, but site is open access land. • Although there are no statutory rights of way, there is public access which serves to reduce pressure on areas of European designated heathland. This will be lost during preparation/working. • Restoration allowing public access will restore this function of the land.	• Restoration to open access land following working.

Preliminary Hydrological Risk Assessment

Controlled Waters	Issues/Risks	Mitigation	Further information/approval required
• Watercourses • Ponds/lakes, including wet habitats • Groundwater	• The River Basin Management Plan South West River Basin District identifies the Frome as being of 'poor' environmental quality. Potential for contamination from runoff from site. • Potential for contamination of controlled waters through spillage or seepage of pollutants such as fuel, or silt in water.	• Appropriate arrangements to be made for ensuring that runoff from the site does not enter the Frome or groundwater unless any silt has first been removed. • Fuel stored on site to be appropriately bunded and sealed to prevent any spillage from entering ground or surface waters. • On-going monitoring during	• Full hydrogeological risk assessment will be required as part of a planning application. • Flood Risk Assessment • Water Framework Assessment • Further assessment of potential impacts on water quality and levels, particularly for groundwater, is required prior to development. • Assessment of the feasibility of relocating surface water features and

	• Contamination of water supplies or reduction in amount of water available for licensed supplies. • Reduction in amount of ground water supplying the stream that rises in Bakers Well Valley.	development and working of the site. • Ensure no impacts on stream in Bakers Well Valley.	associated habitats and species. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.

Flood Risk Commentary

Site has been reduced in size, and remains entirely within Flood Zone 1.

Some theoretical risk of flooding from surface water. Flood Risk Assessment would be required at planning application stage, with a site specific strategy for surface water management that does not increase rates of runoff or generate off site worsening

Sand and gravel extraction is water compatible, so suitable in flood risk terms for allocation in Draft Mineral Sites Plan provided the appropriate hydrological assessment is carried out and a Flood Risk Assessment prepared and land within Flood Risk Zone 1 is available for location of processing facilities and stockpiles.

Suitable in flood risk terms for allocation in Draft Mineral Sites Plan.

Cumulative Impacts

This proposal would be a follow-on development after completion of current working at Hines/Hyde Pits.

There would be no cumulative traffic impacts, provided there was no simultaneous working with existing sites.

There could be cumulative visual/landscape impacts, depending on how much of previous working at Hines/Hyde have been effectively restored when Great Plantation begun working. This should be addressed at the stage of the planning application. Full visual impact assessment will be required, to identify impacts and mitigation.

Developing the Great Plantation site, which would reduce the amount of public access land available, could lead to increased impacts on surrounding areas.

The proposal is within 5Km (by road) of a site allocated in the Purbeck Local Plan Part 1 (adopted Nov 2012) (Policy CEN) for development of 200 dwellings and community facilities, off Worgret Road, Wareham. Traffic arising from the new residential development will add to general traffic levels in Wareham and on the A352.

Viability

As an extension to an existing operational site, viability is accepted. Great Plantation will use existing processing facilities, road access and serve existing markets, and therefore these do not have to be provided. The site is considered viable, for allocation in the Plan.

Heritage Impacts

There are a number of scheduled monuments in the vicinity, including one, a barrow, within 130m of the proposed extension. There are other barrows in the vicinity, which must be considered (along with their settings) in combination with each other. The impact the development of the site would have on the setting of these assets, and the considerable weight to be given to any harm to the setting of these assets, must be carefully considered against the public and other benefits of aggregate production.

Policy/Legislative Background

The Historic England website notes:

When making a decision on all listed building consent applications or any decision on a planning application for development that affects a listed building or its setting, a local planning authority must have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it

possesses. Preservation in this context means not harming the interest in the building, as opposed to keeping it utterly unchanged.

This obligation, found in sections 16 and 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990, applies to all decisions concerning listed buildings.

The recent Court of Appeal decision in the case of Barnwell vs East Northamptonshire DC 2014(2) made it clear that in enacting section 66(1) of the Planning (Listed Buildings and Conservation Areas) Act 1990 (1) Parliament's intention was that ***'decision makers should give "considerable importance and weight" to the desirability of preserving the setting of listed buildings' when carrying out the balancing exercise'.***

Section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990 (" the 1990 Act ") provides:

"(1) In considering whether to grant planning permission for development which affects a listed building or its setting, the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses."

Section 72 of the 1990 Act provides:

"(1) In the exercise, with respect to any buildings or other land in a conservation area, of any of the provisions mentioned in sub-section (2), special attention shall be paid to the desirability of preserving or enhancing the character or appearance of that area.

(2) The provisions referred to in sub-section (1) are the planning Acts …"

A finding of harm to the setting of a listed building is a consideration to which the decision-maker must give "considerable importance and weight" (The Bath Society v Secretary of State for the Environment [1991] 1 W.L.R. 1303, per Glidewell LJ at 1319; and see East Northamptonshire District Council v Secretary of State for Communities and Local Government [2015] 1 W.L.R. 45 , per Sullivan LJ at [22]–[23] and [29]).

The relevant policies of the National Planning Policy Framework are paragraphs 128–135, the material parts of which provide:

"128. In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance… 129. Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise…

131. In determining planning applications, local planning authorities should take account of:

"• the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation; …"

132. When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation. The more important the asset, the greater the weight should be. …

133. Where a proposed development will lead to substantial harm to or total loss of significance of a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or loss is necessary to achieve substantial public benefits that outweigh that harm or loss, or all of the following apply: …

134. Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal, including securing its optimum viable use.

135. The effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that affect directly or indirectly non-designated heritage

assets, a balanced judgment will be required having regard to the scale of any harm or loss and the significance of the heritage asset."

The National Planning Policy Framework (paragraph 144) also states:

When determining planning applications, local planning authorities should:

- *give **great weight** to the benefits of the mineral extraction, including to the economy;*

Commentary

In considering the potential development of the Great Plantation site, with acknowledged impacts on a designated heritage asset, the following points have been taken into consideration.

- There is "a strong presumption against harm to designated assets" (Barnwell [2014] EWCA Civ 137; Forge Field [2014] EWHC 1895 (Admin))
- "Considerable weight" must be given to harm to designated assets, however slight, if more than de minimis (Barnwell; Forge Field; Jones [2015] EWCA Civ 1243)
- *Mordue v Secretary of State for Communities and Local Government and others* [2015] EWCA Civ 1243. Heritage assets have statutory protection, unlike other material considerations; and the NPPF has a complex template for their consideration. Both must be considered in an assessment.
- Failure to assess alternative sites on appropriate public interest criteria (Forge Field; ENV4)
- The policy presumption in favour of sustainable development does not apply to cases of harm to designated assets (Gladman [2016] EWHC 421 (Admin))
- Cumulative effects must be considered (PPG)
- All recognised harm must be included in the recommended Planning balance (Barnwell)
- Undue weight should not be given to the temporary nature of development (National Wind Power [1999] N.P.C. 128)

Development of the site would not cause substantial harm to the scheduled monuments, but would have an impact on its setting. Development of the site would result in temporary harm to the setting of the heritage assets - this would be 'less than substantial' harm, for a temporary period. This harm has been given great and considerable weight in this assessment.

A range of sites nominated for allocation in the Mineral Sites Plan for sand and gravel quarries have been assessed on heritage grounds and on a range of other grounds. A number have been rejected for reasons other than heritage issues. The remaining sites have been included in the Draft Mineral Sites Plan.

The proposal is for a temporary period, after which the site will be restored and the impact on the heritage asset setting will be removed.

The Heritage Impact Assessment that would be carried out as part of any planning application would identify the setting of the heritage asset and would identify appropriate mitigation to offset the harm to the setting resulting from development of the site to a level that would allow the development to go ahead.

It is expected that the mitigation would be a combination of screening (an earth bund) and a standoff/buffer.

If mitigation is not possible, or if the necessary standoff was such that it made the site uneconomic to develop, then the development would not go ahead.

In considering potential impacts and mitigation, it must be remembered that this is not a planning application, but a nomination for allocation of a site in the Mineral Sites Plan. The evidence required and level of assessment carried out **at this stage** are considered to be proportionate and appropriate. At the planning application stage a detailed Heritage Impact Assessment on the assets and their settings will be carried out, as part of an Environmental Impact Assessment, and the appropriate mitigation identified and applied.

At the current stage, the Mineral Planning Authority is considering whether the proposed nomination can reasonably be allocated through the Mineral Sites Plan, on the understanding that appropriately detailed assessment work will be carried out at a later date, and appropriate mitigation applied.

Although inclusion in an adopted plan gives a site allocation greater weight and likelihood of development, it is **not** deemed planning permission. Any allocation in an adopted plan still needs to go through the full planning

application process, including Environmental Impact Assessment, and if impacts are identified that cannot be satisfactorily mitigated, the proposal will not receive permission.

It is considered, taking into account:

- the less than substantial harm to the setting of the scheduled monuments;
- the great and considerable weight given to such harm, and the strong presumption against such harm;
- the temporary nature of the harm
- the great weight to be given to the provision of mineral
- the fact that minerals must be worked where they are found
- the fact that this is an extension site, and the processing plant and other infrastructure is already available
- the fact that the proposed development will be subject to planning application including Environmental Impact Assessment, and impacts on the setting will be assessed in detail and appropriate mitigation identified

that the public benefit to be received from this proposed development, and the nature and duration of the development causing harm, together with the scope for mitigating this harm, are such that the site should be allocated in the Mineral Sites Plan.

Summary.

Potential Benefits	Potential Impacts
• Restoration to heathland would provide habitat for protected species and improve linkages between other heathland in the area. • Provision of aggregates required for maintenance and construction. • Restoration to heathland could benefit Scheduled Monuments and their settings and provide a link to the historic landscape that would have previously characterised the area around this site. • The site is relatively remote and well screened visually by existing vegetation. With mitigation such as noise attenuation bunds and visual screening along the southern boundary of the site particularly the impacts during preparation and working will be reduced.	• Site preparation and working will have potentially very significant impacts on the Scheduled Monuments and their settings. Mitigation to be identified and implemented. • There will also be potentially very significant be impacts on the heathland habitats on the site and on the reptiles and Annex 1 birds supported. • Visual impacts on designated landscapes to the south. • Temporary loss of open access land and possible recreational displacement to designated sites.

Overall Recommendation:

Originally, a relatively large area was nominated for consideration. It had high biodiversity and landscape importance, and potentially significant impacts could result from its working. It is open access land and removal of this access opportunity could lead to impacts on other designations in the area.

There would also have been significant impact on heritage assets – scheduled monuments - in the area.

The site has the potential to make a contribution to the supply of aggregates in Bournemouth, Dorset and Poole. It is largely relatively well screened site which would be a follow-on from an area that has been previously worked. It is expected that processing plant will be located on the site.

The importance in terms of biodiversity and access opportunity, archaeological and landscape impacts indicates that the development of the whole site, even in phases, would be unacceptable. Although the principle of some working on the site is accepted, the area to be worked needs to be significantly reduced in area, to leave an area in the northern part of the site adjacent to previous workings that would be acceptable. If the site is reduced in area and the remaining area justified, it should be possible to see some aggregate working on this site.

Following previous assessments and the above findings/conclusions, the site nominee has significantly reduced the site area in scale to a size that could be worked satisfactorily, provided full assessments were carried out in advance, impacts and potential impacts identified and appropriate mitigation identified.

It is recognised that further reductions in size may be necessary to adequately offset the impact on the heritage assets. However, restoration to heathland will in the long term provide a benefit, in terms of restoration of the wider setting in which they would once have sat.

Landscape/visual assessment, and Appropriate Assessment, will be required. Mitigation should include an offsite heathland support area to provide compensatory habitat for Annex 1 birds which may be functionally linked to the Dorset Heathlands SPA. Restoration will also be key and the emphasis should lie on creation of heathland rather than replanting for forestry.

It is considered that the proposed site has been reduced in size, and mitigation such as alternative access areas provided, such that the current site proposal is considered appropriate for allocation in the Bournemouth, Dorset and Poole Mineral Sites Plan.

Aggregates: AS09 Hurn Court Farm

Site Name/Location: **AS09 Hurn Court Farm Extension** Mineral Type: Sand and gravel		Nominee/Agent: New Milton Sand & Ballast Local Authority: Christchurch District Council
Site Area: approximately 15 ha	Production: approximately 150,000 tpa	Reserve: approximately 600,000 t

Impact Assessment Scoring

- -	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain

Timescales for effects:

P/W: Preparation and Working **R/A**: Restoration and Afteruse

Sustainability Objectives	Effects P/W	Effects R/A	Commentary	Mitigation
1. To move waste management up the waste hierarchy and promote net self-sufficiency	**N/A**	**N/A**	• This Objective is not relevant to this site nomination	• N/A
2. To maintain, conserve and enhance biodiversity	**0**	**0**	**European/International Designations** • Not relevant to this site nomination.	• No action required.
	0	**0**	**Annex 1 Bird Species** • Not relevant to this site nomination.	• No action required.
	0	**0**	**National Designations** • Not relevant to this site nomination.	• No action required.
	0	**0**	**Protected species** • It is possible that common protected reptiles are present in the margins of the proposed area. • If this is the case, mitigation would not be expected to be a problem.	• Ecological surveys required, with appropriate mitigation identified.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	0	0	**Local recognitions/designations, including ancient woodland and veteran trees** • Not relevant to this site nomination.	• No action required.
3. To maintain, conserve and enhance geodiversity.	+	0	• Exposures resulting from working may be of interest. Benefits are only expected during working, and are likely to be obscured or covered as part of restoration.	• Operator to be asked to permit visits to view exposures as required.
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	–	0	**Groundwater** • Site overlies a secondary aquifer. • There are water features – pond, watercourse - within 100m of site boundary which could be impacted by development of the site. • Assessment required to determine possible impacts on hydrogeology. Impacts to be appropriately mitigated.	• Hydrological assessment required to determine possible impacts, on ground and surface waters, with appropriate mitigation to be implemented. • Where necessary mitigating measures should be installed to maintain groundwater levels. • Appropriate arrangements should be put in place to ensure that the water leaving the site and entering the rivers/watercourses is of an acceptable quality. • Any fuel on site should be properly stored to avoid contamination in case of spillage. • Appropriate arrangements should be installed for surface water and silt collection and fuel storage to prevent contamination of groundwater resources. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.
	?			
	–	0	**Surface Water** • Watercourse/pond within 100m of site boundary. • Site drains to Leaden Stour and on into Stour. • Assessment required to determine possible impacts on hydrogeology. Impacts to be appropriately mitigated.	
	?			
5. To reduce flood risk and improve flood management.	0	0	**Flooding/Coastal Stability** • Site is located entirely within FZ1, although it is adjacent to FZ2/3. It is an extension to an aggregate site, and will utilise exist plant located within FZ1. • Working is not considered to constitute, or exacerbate an existing, a flood risk	• Flood Risk Assessment (FRA) will be required, identifying possible risks and all necessary mitigation.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			provided all necessary mitigation is implemented.	
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).	?	0	**Archaeology** • As previous archaeological work has demonstrated, sites on the Stour valley gravels have archaeological potential in general, particularly for prehistoric material. There is also the potential for the presence of earthworks and structures associated with previous water management. • Archaeological assessment and evaluation will be required. When these have been undertaken archaeological impacts, if any, will be better understood.	• Survey to assess possible presence and significance of non-designated remains. • Adequate provision to be made for preservation, excavation or recording, as appropriate.
	?	0	**Historic Landscapes** • The site lies in the Stour valley, and archaeological investigation of gravel sites within the valley has shown that the rich resources of the valley were exploited throughout prehistory. • Further evaluation will be required. When this has been undertaken possible impacts, if any, will be better understood.	
	–	0	**Historic Buildings** • The proposed site forms an extension to the existing Hurn Court Farm quarry. The southern boundary of the site as identified abuts the boundary of the garden of the Grade II listed building known as Dales House. If the proposed site does not have a sufficiently broad buffer zone, Dales House and its setting will be adversely impacted by the extraction. • However, if a buffer zone of sufficient breadth is planned into the final scheme, then it is considered that the impact would be reduced. • It is expected that the proposed extraction would take place in phases throughout the area, with quick restoration at a lower level behind each phase. Any impact on the setting	• Full assessment of possible impacts required. • Detailed Heritage Assessment will be required, to identify the setting of the Listed Buildings and the mitigation required to appropriately protect the setting, taking into account the harm to the setting and the weight given to the importance of the Listed Buildings • Appropriate and adequate mitigation,
	– –			

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			of the listed building would therefore be temporary. • Two other listed buildings, the Farmhouse and Barn at Merritown Farm to the west of the proposed site are not considered to be at risk of substantial harm. • However, there will be an impact to the setting of the heritage assets, causing less than substantial harm, and this has to be given great and considerable weight.	such as screening, to be identified and implemented prior to working. • If the proposed development cannot be satisfactorily mitigated it will not proceed.
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	–	+	**Landscape Capacity** • Site is enclosed • Important to maintain and enhance existing hedgerows around site and to control heights of storage tips. • Opportunities to increase informal recreation/public open space in the Stour Valley and to create links to existing public rights of way (The Green Infrastructure initiative) should be explored on restoration.	• Assessment of potential visual impacts required. • Restoration to include increasing public access/informal recreation in the Stour Valley.
	0	**0**	**Designated Landscapes** • No impacts expected.	• No action required.
8. To protect and improve air quality and reduce the impacts of noise.	**0**	**0**	• Impacts on air quality expected to be negligible. • No AQMAs will be affected by the working of this site proposal. Any dust resulting from working will be controlled through normal dust-suppression measures. • Noise mitigation will be addressed at the planning application stage, with appropriate mitigation to be included in the development of the site.	• Environmental protection measures to reduce dust and ensure noise is appropriately mitigated.
9. To maintain, conserve and enhance soil quality.	–	**0**	• Site contains/comprises very good quality agricultural land. Working the site will have impacts on this soil. • Restoration is expected to return the land to, or near to, original ground levels, and to restore the quality of the land.	• Soil to be properly stripped and stored prior to working; protected during working; and re-spread on site after working. • Restoration to include high quality agricultural land.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
10. To conserve and safeguard mineral resources.	+ / ++	0	• In terms of encouraging the most efficient use of resources, this site is considered to provide a mild/strong positive impact as it constitutes an extension of an existing working. • Impacts of developing this extension are expected to be relatively limited with no intensification.	• No specific action required; site development to take into consideration and mitigate where appropriate relevant impacts.
11. To promote the use of alternative materials.	+ +	0	• In order to achieve desired restoration levels it may be necessary to install an inert waste material recycling facility. • If this is done then this will provide a strong positive benefit during working. • It is expected that the recycling facility would finish when or soon after the quarry is completed and restored, giving a negligible effect during afteruse.	• Impacts of a recycling facility to be assessed, and appropriate mitigation put in place.
12. To provide an adequate and affordable supply of minerals to meet society's needs.	+	0	• Development of this site will provide a benefit in terms of contributing to the provision of a supply of minerals to meet society's needs. • Ensuring a sustainable supply will depend on the development and management of the site. Providing site development takes into account relevant principles of sustainable development it is expected this will contribute to complying with this objective.	• Ensure principles of sustainable development are incorporated into the development of this site.
13. To promote and encourage sustainable economic growth	+	0	• This site proposal is expected to contribute to economic development on two levels – directly through the provision of employment at the site to be developed and indirectly through the provision of aggregate minerals required for the maintenance of built environment and for new built development. Both levels are expected	• Careful assessment of potential negative impacts required, with appropriate mitigation – this could include buffering/screening and holding back quarry traffic during peak traffic times.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	–	+	to maintain employment, skilled and unskilled. However given the expected size of the reserve this is likely to be a limited benefit. • There is potential for negative economic impacts, such as dust, noise and increased traffic, which could affect other businesses in the vicinity or even further away. • Restoration to agriculture with some element of public access will, if achieved, offer some economic benefits through both the agriculture and the recreational attraction and use in the wider area (i.e. riding, walking).	• Further assessment required to form a view as to what the most appropriate restoration could be.
14. To adapt to and mitigate the impacts of climate change.	–	**0**	• Developing land as a quarry is expected to have some negative impacts regarding climate change, due primarily to machinery used and transportation of mineral away from site. However, these will in relative terms be negligible. • The Bournemouth, Dorset and Poole Minerals Strategy seeks to address and minimise such impacts through Policy CC1 which requires operators to take into consideration climate change impacts and their possible mitigation for any proposed minerals development. • The development management policies, e.g. DM 1, also address and seek to minimise the issue of sustainable development and climate change. • Restoration to some form of vegetated environment will offer benefits in the form of climate change mitigation, including provision of habitat for wildlife, but again these will be relatively small.	• Use energy efficient plant and machinery. • Implement restoration which provides appropriate habitats to help to increase resilience of flora/fauna.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
15. To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any residual impacts.	0 –	0	• This proposal is to extend an existing operation on the south side of the B3073 Parley Lane. The traffic generation of this site has been estimated at around 60 trips per day for a period of 4 years. Access is gained via an existing signalised junction that also serves as the main access to Bournemouth Airport. Access to the strategic network is approximately 2 km to the east at the junction with the A338 Bournemouth Spur Road. • The B3073 Parley Lane is subject to high levels of congestion at certain times of the day and there are significant other housing and business site allocations that will impact upon it. Overall, with mitigation towards improvements to Parley Lane, there are good connections with the strategic network and potentially little impact on existing settlements. The proposed extension will extend the life of the existing development. • Impacts directly resulting from this proposal are expected to be minimal. • Policies DM1 and DM 8 actively address this issue of minimising impacts on the transportation network.	• Transport Assessment to be carried out, identifying opportunities for reducing impacts on the transport network. • This could include selected vehicle routing, avoiding trips through residential areas of Ferndown to the west of the site where possible.
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	–	0	• The proposed extension can only realistically be accessed by means of road transport, resulting in a negative impact under this Objective during development and working. • As far as reasonably possible negative impacts resulting from access and transport will be mitigated, as required by Policies DM1 and DM8 of the Minerals Strategy.	• Mitigate impacts where identified and appropriate.
17. To sustain the health and quality of life	–	0	**Impact on Sensitive Human Receptors** • Site is immediately adjacent to residential properties, with other	• Provision of appropriate mitigation, following assessment of likely impacts.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
of the population	_ _		residences and businesses within 100m. Development would involve mitigation (visual and noise attenuation bunding, standoffs) to limit impacts to appropriate levels.	
	_	0	**Impact on Existing Settlements** • The nearest settlements are Throop/Muscliffe to the south (>1km distant) and East Parley at over 1km to the north-west and Hurn to the south-east. • No visual or noise impacts will affect these settlements, nor will there be an intensification of traffic along the B3073. However existing traffic levels generated by the current operation will continue for a longer period of time.	• Transport Assessment to be carried out, identifying possible impacts and opportunities for reducing impacts on the transport network.
	0	0	**Impact on Airport Safety** • Site is immediately adjacent to airport, but is an extension of a site that is worked satisfactorily without any negative impacts on aircraft safety. • The extension would be worked the same way, and restored dry.	• Airport to be consulted on all aspects of the site development and restoration. • All necessary mitigation required to rmove bird strike risk to be implemented.
18. To enable safe access to countryside and open spaces.	0	+	**Impact on Recreational Land** • Most of the site is in agricultural use. The western end is used as parking for the adjacent theme park. Development for minerals will impact on this use, although this will only be temporary. • No formal/informal recreation on the site.	• No action required for working. • If restoration included some public access, there would be an overall improvement.
	?	0	**Impact on Public Rights of Way** • There are no rights of way across the site, although one passes close to the western tip of the site. Screening would be required, although the impact would be relatively small.	• Assessment of impacts, with appropriate mitigation identified. • Restoration to improve public access in the area.

Preliminary Hydrological Risk Assessment

Controlled Waters	Issues/Risks	Mitigation	Further information/approval required
• Watercourses • Ponds/lakes, including wet habitats • Groundwater	• The River Basin Management Plan South West River Basin District identifies the Stour, the closest main river, as being of 'poor' environmental quality. Potential for contamination from runoff from site. • Potential for contamination of controlled waters through spillage or seepage of pollutants such as fuel, or silt in water. • Contamination of water supplies or reduction in amount of water available for licensed supplies.	• Appropriate arrangements to be made for ensuring that runoff from the site does not enter the Leaden Stour and Stour or groundwater unless any silt has first been removed. • Fuel stored on site to be appropriately bunded and sealed to prevent any spillage from entering ground or surface waters. • On-going monitoring during development and working of the site. • Relocation of surface water features, provided this is feasible.	• Full hydrogeological risk assessment will be required as part of a planning application. • Flood Risk Assessment • Water Framework Assessment • Further assessment of potential impacts on water quality and levels, particularly for groundwater, is required prior to development. • Assessment of the feasibility of relocating surface water features and associated habitats and species. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.

Flood Risk Commentary

Site is within Flood Zone 1, but close to Flood Zones 2 & 3.

Some theoretical risk of flooding from surface water. Flood Risk Assessment would be required at planning application stage, with a site specific strategy for surface water management that does not increase rates of runoff or generate off site worsening

Sand and gravel extraction is water compatible, so suitable in flood risk terms for allocation in Draft Mineral Sites Plan provided the appropriate hydrological assessment is carried out and a Flood Risk Assessment prepared.

Climate Change predictions may result in flood outlines greater than existing Flood Zone 2. Processing plant/storage/stockpiles should preferably be located in Flood Zone 1, and should be located as far from Flood Zones 2 & 3 as reasonably possible.

Viability

As an extension to an existing operational site, viability is accepted. Hurn Court Farm will use existing processing facilities, road access and serve existing markets, and therefore these do not have to be provided. Mineral has been proven. The site is considered viable, for allocation in the Plan.

Heritage Impacts

The southern boundary of the site as identified abuts the boundary of the garden of the Grade II listed building known as Dales House.

Two other listed buildings, the Farmhouse and Barn at Merritown Farm to the west of the proposed site are not considered to be at risk of any detrimental impact.

The proximity to Dales House, and the impact the development of the site would have on the setting of this heritage asset must be carefully considered against the public and other benefits of aggregate production.

Policy/Legislative Background

The Historic England website notes:

When making a decision on all listed building consent applications or any decision on a planning application for development that affects a listed building or its setting, a local planning authority must have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses. Preservation in this context means not harming the interest in the building, as opposed to keeping it utterly unchanged.

This obligation, found in sections 16 and 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990, applies to all decisions concerning listed buildings.

The recent Court of Appeal decision in the case of Barnwell vs East Northamptonshire DC 2014(2) made it clear that in enacting section 66(1) of the Planning (Listed Buildings and Conservation Areas) Act 1990 (1) Parliament's intention was that ***'decision makers should give "considerable importance and weight" to the desirability of preserving the setting of listed buildings' when carrying out the balancing exercise'.***

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"(1) In considering whether to grant planning permission for development which affects a listed building or its setting, the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses."

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"(1) In the exercise, with respect to any buildings or other land in a conservation area, of any of the provisions mentioned in sub-section (2), special attention shall be paid to the desirability of preserving or enhancing the character or appearance of that area.

(2) The provisions referred to in sub-section (1) are the planning Acts …"

A finding of harm to the setting of a listed building is a consideration to which the decision-maker must give "considerable importance and weight" (The Bath Society v Secretary of State for the Environment [1991] 1 W.L.R. 1303, per Glidewell LJ at 1319; and see East Northamptonshire District Council v Secretary of State for Communities and Local Government [2015] 1 W.L.R. 45 , per Sullivan LJ at [22]–[23] and [29]).

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"128. In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance… 129. Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise…

131. In determining planning applications, local planning authorities should take account of:

"• the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation; …"

132. When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation. The more important the asset, the greater the weight should be. …

133. Where a proposed development will lead to substantial harm to or total loss of significance of a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or loss is necessary to achieve substantial public benefits that outweigh that harm or loss, or all of the following apply: …

134. Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal, including securing its optimum viable use.

135. The effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that affect directly or indirectly non-designated heritage assets, a balanced judgment will be required having regard to the scale of any harm or loss and the significance of the heritage asset."

The National Planning Policy Framework (paragraph 144) also states:

When determining planning applications, local planning authorities should:

- *give **great weight** to the benefits of the mineral extraction, including to the economy;*

Commentary

In considering the potential development of the Hurn Court Farm Extension site, with acknowledged impacts on a designated heritage asset, the following points have been taken into consideration.

- There is "a strong presumption against harm to designated assets" (Barnwell [2014] EWCA Civ 137; Forge Field [2014] EWHC 1895 (Admin))
- "Considerable weight" must be given to harm to designated assets, however slight, if more than de minimis (Barnwell; Forge Field; Jones [2015] EWCA Civ 1243)
- *Mordue v Secretary of State for Communities and Local Government and others* [2015] EWCA Civ 1243. Heritage assets have statutory protection, unlike other material considerations; and the NPPF has a complex template for their consideration. Both must be considered in an assessment.
- Failure to assess alternative sites on appropriate public interest criteria (Forge Field; ENV4)
- The policy presumption in favour of sustainable development does not apply to cases of harm to designated assets (Gladman [2016] EWHC 421 (Admin))
- Cumulative effects must be considered (PPG)
- All recognised harm must be included in the recommended Planning balance (Barnwell)
- Undue weight should not be given to the temporary nature of development (National Wind Power [1999] N.P.C. 128)

Development of the site would not cause substantial harm to Dales House itself, but would have an impact on its setting. Development of the site would result in temporary harm to the setting of Dales House – this would be 'less than substantial' harm, for a temporary period. This harm has been given great and considerable weight in this assessment.

A range of sites nominated for allocation in the Mineral Sites Plan for sand and gravel quarries have been assessed on heritage grounds and on a range of other grounds. A number have been rejected for reasons other than heritage issues. The remaining sites have been included in the Draft Mineral Sites Plan.

The proposal is for a temporary period, after which the site will be restored and the impact on the heritage asset setting will be removed.

The Heritage Impact Assessment that would be carried out as part of any planning application would identify the setting of the heritage asset and would identify appropriate mitigation to offset the harm to the setting resulting from development of the site to a level that would allow the development to go ahead.

It is expected that the mitigation would be a combination of screening (an earth bund) and a standoff/buffer.

If mitigation is not possible, or if the necessary standoff was such that it made the site uneconomic to develop, then the development would not go ahead.

In considering potential impacts and mitigation, it must be remembered that this is not a planning application, but a nomination for allocation of a site in the Mineral Sites Plan. The evidence required and level of assessment carried out **at this stage** are considered to be proportionate and appropriate. At the planning application stage[10] a detailed Heritage Impact Assessment on the assets and their settings will be carried out, as part of an Environmental Impact Assessment, and the appropriate mitigation identified and applied.

At the current stage, the Mineral Planning Authority is considering whether the proposed nomination can reasonably be allocated through the Mineral Sites Plan, on the understanding that appropriately detailed assessment work will be carried out at a later date, and appropriate mitigation applied.

Although inclusion in an adopted plan gives a site allocation greater weight and likelihood of development, it is **not** deemed planning permission. Any allocation in an adopted plan still needs to go through the full planning application process, including Environmental Impact Assessment, and if impacts are identified that cannot be satisfactorily mitigated, the proposal will not receive permission.

It is considered, taking into account:

- the less than substantial harm to the setting of Dales House;
- the great and considerable weight given to such harm, and the strong presumption against such harm;
- the temporary nature of the harm
- the great weight to be given to the provision of mineral
- the fact that minerals must be worked where they are found
- the fact that this is an extension site, and the processing plant and other infrastructure is already available
- the fact that the proposed development will be subject to planning application including Environmental Impact Assessment, and impacts on the setting will be assessed in detail and appropriate mitigation identified

that the public benefit to be received from this proposed development, and the nature and duration of the development causing harm, together with the scope for mitigating this harm, are such that the site should be allocated in the Mineral Sites Plan.

Cumulative Impacts

Proposed site is an extension to an existing site – no traffic intensification is required. Although there is no other mineral working in the vicinity currently, there are aggregate deposits in the area and proposals for future working. There are existing waste management facilities in the area and the potential for future development at the Airport.

If the site comes into operation in parallel with the existing extraction here, and thus increases the overall impact on Parley Lane, the Highway Authority will seek to secure contributions towards a package of schemes proposed to ease existing and expected congestion. However, no intensification of operation is expected and cumulative impacts are expected to be minimal or non-existent and no specific mitigation is required.

Quarry related traffic impacts can be mitigated by holding back quarry traffic during peak times.

There is potential for cumulative visual impacts if the proposed extension is worked while the current site is still in restoration. This would be a time limited impact, and should be addressed at the planning application stage.

[10] Dorset County Council is currently considering an application for the development of the Hurn Court Farm Extension

The proposal lies within 5km of a site allocated for development in the Christchurch and East Dorset Consolidated Plan[11] May 2013, Policy BA2 Bournemouth Airport – Northern Business Parks – 60 Ha employment land. Traffic from this development will add to traffic levels on the B3073.

Summary.

Key impacts and benefits are expected to include, but are not necessarily limited to, the following.

Potential Benefits	Potential Impacts
• Provision of aggregates required for maintenance and construction of the built environment, with accompanying benefits to the economy. • Provision of employment, to the benefit of local economy. • If inert waste is imported and processed on-site to assist in restoration, this will contribute to supply of recycled aggregate. • Improved public access may be possible as a part of site restoration. This could lead to reduced visitor pressure on designated heathland sites in the vicinity. • Nature conservation benefits may be achieved as part of restoration. • The proposed development is an extension to an existing quarry and as such is not expected to lead to an intensifications of development.	• Time-limited impacts on adjacent properties, particularly a listed building south of the site. Impacts to be fully assessed and appropriately mitigated. • Heritage asset impacts. • Potential impacts on hydrology/flooding, requiring further assessment. • Potential impact on adjacent airport, through bird-strike risk. Proposed development to be designed, worked and restored in a way that will not cause unacceptable impacts. • Site is high quality agricultural land, and development will have an impact on this use. It is expected that the site can be restored to an agricultural use. • Parley Lane has high traffic levels. However, the proposed site would be worked as an extension and no intensification is expected. A Transport Assessment would be carried out, identifying opportunities to reduce traffic impacts.

Overall Recommendation:

Site is currently in intensive agriculture with no public access. It would be operated as an extension of an existing, adjacent quarry with mineral taken to existing plant to be processed. Current site is well run and no intensification of working is expected.

Key impacts are expected to be on the airport operation (risk of bird-strike) and adjacent properties (residences and businesses), which include a listed building. The proposed development will cause less than substantial harm to the setting of the Listed Building but this harm is expected to be capable of mitigation.

[11] The Consolidated Plan is an amalgamation of the Christchurch and East Dorset Core Strategy Pre submission draft April 2012 and the Christchurch and East Dorset Schedule of Proposed Changes November 2012.

Full assessment of possible impacts will be required, including heritage impact assessment. It is expected that these can be overcome through appropriate mitigation, but this could lead to the sterilisation of a significant part of the proposed extension, for provision of a buffer.

As an extension, development of the site is not expected to lead to intensification of impacts, but the time period of the impacts will be extended.

Opportunities for improved public access and nature conservation benefits are to be considered as part of restoration of the site.

On balance, it appears reasonable on the basis of evidence available that the impacts identified in this sustainability appraisal are capable of satisfactory mitigation to the extent that the site nomination can reasonably be included as an allocation in the Draft Bournemouth, Dorset and Poole Mineral Sites Plan.

Aggregates: AS12 Philliol's Farm

Site Name/Location: AS12 Philliol's Farm **Mineral Type:** Sand and gravel	**Nominee:** Drax Estate and another. **Local Authority:** Purbeck District Council	**Site Area:** approximately 67 ha **Production:** c. 200,000 tpa **Reserve**: approximately 1.5 mt

Impact Assessment Scoring

- -	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain

Timescales for effects:

P/W: Preparation and Working **R/A**: Restoration and Afteruse

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
1. To move waste management up the waste hierarchy	N/A	N/A	• This Objective is not relevant to this site nomination	• N/A
2. To maintain, conserve and enhance biodiversity	– – –	0	**European/International Designations** • There are possible indirect effects on European heathland sites as the extraction area lies adjacent along part of the northern boundary, the mineral haul route is currently unspecified but likely to be through Wareham Forest so could pass close to the designated areas. • Displacement of recreation due to the haul route must be taken into consideration, and mitigated against. • The haul route is likely to pass through forestry areas which support Annex 1 birds which may be functionally linked to Dorset Heathlands SPA and the plantation is well used as recreation site contributing to the network of areas which help to reduce human recreational pressure on designated heathlands.	• Ecological surveys, visitor surveys and hydrological reports required, with appropriate mitigation to be identified and implemented.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
			• Without the detail of proposed working there is a risk of adverse effects on European sites but this risk could almost certainly be removed through careful planning.	
	– –	0	**Annex 1 Bird Species** • Area through which the haul route is likely to pass supports Annex 1 birds as part of the existing forestry crop rotation. Clearance of trees would result in heathland regeneration and the open habitat would rapidly become suitable for more Annex 1 birds. The site has the potential to be included in a revision to the heathland SPA boundary. • Risk based approach essential here. Without the detail of proposed working there is a risk of adverse effects to Annex 1 birds but this risk could almost certainly be removed through careful planning.	• Ecological surveys, visitor surveys and hydrological reports required, with appropriate mitigation to be identified and implemented.
	?			
	– –	0	**National Designations** • The Morden Bog and Hyde Heath SSSI lies adjacent to the proposed area, and the mineral haul route may run close to the SSSI. The possibility of indirect effects exists. • Without the detail of proposed working there is a risk of adverse effects to the SSSI but this risk could almost certainly be removed through careful planning.	• Ecological surveys and hydrological reports required, with appropriate mitigation to be identified and implemented.
	?			

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
	– –	0	**Protected species** • Existing rides support significant populations of European protected species, Sand Lizard and Smooth Snake, and common protected reptiles. Depending on the alignment of the haul route, mitigation for effects on reptiles may be necessary. If so, it seems likely NE would be able to issue a disturbance licence if required. • There are records of Fairy Shrimp from a pond at Phillliol's Farm; this is a fully protected species under the Wildlife & Countryside Act and assessment of the implications of the development for this species will need to be fully assessed, especially as the species is known to flourish in temporary pools and mineral extraction would be likely to affect local hydrology. • It is possible Dormouse lives in the hedgerows within the proposed area; mitigation should be possible.	• Protected species to be protected during working and their habitats enhanced during restoration where possible. • Ecological surveys required, with appropriate mitigation identified. • Restoration to include appropriate habitats for these species. • Hydrological study required to demonstrate that Fairy Shrimp and its habitat will not to be affected by the development.
	?			
	?	+	**Local recognitions/designations, including ancient woodland and veteran trees** • There are a number of old boundary trees, mainly oak, within the proposed area and the implications for the biodiversity and longevity of these trees must be assessed. • Trees to be protected during working and their habitats enhanced during restoration where possible.	• Ecological surveys required, with appropriate mitigation identified.
3. To maintain, conserve and enhance geodiversity.	+	0	• Exposures resulting from working may be of interest. Benefits are only expected during working, and are likely to be obscured or covered as part of restoration.	• Operator to be asked to permit visits to view exposures as required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	–	0	**Groundwater** • Ditches in proximity to site, which are presumably groundwater fed. No Source Protection Zones are affected by the site. • Site overlies secondary aquifer. • Environment Agency concerns over effects of extraction on groundwater feeding ephemeral pond supporting Fairy Shrimp.	• Further assessment on possible impacts on water supplies and appropriate mitigation if potential impacts identified. • Where necessary mitigating measures should be installed to maintain groundwater levels and/or monitor private water supplies. • Alternative arrangements should be in place in case of a reduction in supply. • Hydrological assessment required to determine possible impacts, on ground and surface waters, with appropriate mitigation to be implemented. • Appropriate arrangements should be put in place to ensure that the water leaving the site and entering the rivers/watercourses is of an acceptable quality. • Any fuel on site should be properly stored to avoid contamination in case of spillage. • Appropriate arrangements should be installed for surface water and silt collection and fuel storage to prevent contamination of groundwater resources. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.
	?			
	–	0	**Surface Water** • Ditches in proximity to site, which are presumably groundwater fed. • Site is adjacent to Bere Stream and close to River Piddle. • Ponds on site.	
	?			
5. To reduce flood risk and improve flood management.	0	0	**Flooding/Coastal Stability** • Site is FRZ 1 but is adjacent to FRZ 2 and 3. Site is sand and gravel site, with extraction allowed within functional floodplain. • Flood Risk Assessment to be carried out and any necessary mitigation implemented.	• Flood Risk Assessment (FRA) will be required. • All necessary mitigation to be implemented.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
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).	?	0	**Archaeology** • An archaeological evaluation consisting of the excavation of trial trenches was undertaken on parts of this site in 2005 by Thames Valley Archaeological Services. Little was found in many of the trenches, but evidence of Roman settlement was found in the southernmost part of the site. • Thus, unless the area of Roman remains is excluded from quarrying, the development is likely to have a significant impact on archaeological remains. • The fields that were not included in the 2005 evaluation still need to be evaluated before a fully-informed planning decision can be made, and the results could possibly show further very significant archaeological impacts. • The impact on the setting of nearby barrows that are protected as Scheduled Monuments also needs to be assessed.	• Full archaeological survey of the area required to assess possible presence and significance of non-designated remains and to assess Monuments and establish their settings and how these can best be protected during working. • All necessary mitigation, including actions such as restoration of hedgerows, to be implemented. • Adequate provision to be made for preservation, excavation or recording, as appropriate. • Settings of the Monuments to be established prior to working and not to be compromised during working.
	– –			
	–	0	**Historic Landscapes** • The site is currently under agriculture, and its restoration to the same use could have a neutral impact if properly mitigated through restoration of hedgerows and the like.	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
	–	+	**Historic Buildings** • There are two Grade II listed buildings located within the centre of the proposed site at Philliol's Farm. The first is a 1748 brick built barn with later attached out-buildings, a corrugated iron roof with coped gables and a projecting hipped cart porch on the south side. The second is a detached two-storey granary dating from the 18th century having a tiled roof with stone eaves courses and moulded coped gables which was formerly listed as a pigeon house at Philliol's Farm. The buildings are set within a farmstead (although the original farmhouse doesn't survive) within a flat farmed landscape. • Both buildings, although most notably the granary, are in some state of disrepair. • The proposed extraction would take place in phases around the central farm, with restoration to agriculture at a lower level behind each phase. There would be no processing of materials on site. • There is no significant visual or noise impacts on the listed buildings because they are not inhabited by people. However, there will be an impact to the setting of the heritage assets, causing less than substantial harm, and this has to be given great and considerable weight. • On completion the whole farmstead will sit on an island of raised ground however this would not compromise the setting of the buildings. • There is an opportunity for improving the condition of both listed buildings through repair and stabilisation of the structure by means of planning conditions.	• Further assessment of the buildings prior to working to ensure they will not be damaged by changing ground conditions. • Detailed Heritage Assessment will be required, to identify the setting of the Listed Buildings and the mitigation required to appropriately protect the setting, taking into account the harm to the setting and the weight given to the importance of the Listed Buildings. • Restoration to include improvement of the listed buildings. • If the proposed development cannot be satisfactorily mitigated, it will not proceed.
	– –			

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	–	?	**Landscape Capacity** • This is considered to be an intimate and sensitive part of the Heath Forest Mosaic. • Development would affect the existing rural character and views from close proximity sensitive visual receptors (residential and bridleway). It would introduce a new obtrusive use into this landscape. • The capacity to 'absorb' this proposed development is low without mitigation and medium/low with mitigation.	• Landscape and visual impact assessment to identify impacts; adequate mitigation of such impacts before and during working. • If mitigation is not possible, a view will have to be taken as to whether a time-limited impact would be acceptable. • Appropriate restoration proposals in line with Landscape Management Guidelines referred to in Minerals Strategy. • Maintain screening woodland around edges of site.
	– –			
	0	**0**	**Designated Landscapes** • No impacts expected.	
8. To protect and improve air quality and reduce the impacts of noise.	**0**	**0**	• Impacts on air quality expected to be negligible. • No AQMAs will be affected by the working of this site proposal. Any dust resulting from working will be controlled through normal dust-suppression measures. • Noise mitigation will be addressed at the planning application stage, with appropriate mitigation to be included in the development of the site.	• Environmental protection measures to reduce dust and ensure noise is appropriately mitigated.
9. To maintain, conserve and enhance soil quality.	–	**0**	• Some 75% of the site is identified as 'Best and Most Versatile' (BMV) agricultural land. Working the site will have impacts on this soil. • Soils will be protected during working and restoration could bring BMV land back into agricultural production. • Alternatively, or in conjunction with this, areas of the site could be restored to a nature conservation use possibly with some public access.	• Soil to be properly stripped and stored prior to working; protected during working; and re-spread on site after working. • Restoration to include high quality agricultural land, possibly with other uses as well.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
10. To conserve and safeguard mineral resources.	+	0	• The site would make an important contribution to aggregate supply in Bournemouth, Dorset and Poole. • However there are a number of issues to be addressed in the working of the site.	• No specific action required; site development to take into consideration and mitigate where appropriate relevant impacts.
11. To promote the use of alternative materials.	0	0	• This proposal does not at present promote the use of alternative materials. • It is possible that treated inert waste will be used in restoration of the site, but this will not directly promote the use of alternative materials.	• No action required.
12. To provide an adequate and affordable supply of minerals to meet society's needs.	+	0	• Development of this site will provide a benefit in terms of contributing to the provision of a supply of minerals to meet society's needs. • Ensuring a sustainable supply will depend on the development and management of the site. Providing site development takes into account relevant principles of sustainable development it is expected this will contribute to complying with this objective.	• Ensure principles of sustainable development are incorporated into the development of this site.
13. To promote and encourage sustainable economic growth	+	0	• This site proposal is expected to contribute to economic development on two levels – directly through the provision of employment at the site to be developed and indirectly through the provision of aggregate minerals required for the maintenance of built environment and for new built development. Both levels are expected to maintain employment, skilled and unskilled. However given the expected size of the reserve this is likely to be a limited benefit.	• Identification of potential impacts on local businesses, with appropriate mitigation. • Further assessment required to form a view as to what the most appropriate restoration could be.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
	?		• The development and associated traffic could have negative impacts on local businesses, e.g. through dust/noise/traffic. These should be taken into consideration and mitigated against. • Restoration to agriculture with some element of public access will, if achieved, offer some economic benefits through both the agriculture and the recreational attraction and use in the wider area (i.e. riding, walking).	
14. To adapt to and mitigate the impacts of climate change.	_	0	• Developing land as a quarry is expected to have some negative impacts regarding climate change, due primarily to machinery used and transportation of mineral away from site. However, these will in relative terms be negligible. • The Bournemouth, Dorset and Poole Minerals Strategy seeks to address and minimise such impacts through Policy CC1 which requires operators to take into consideration climate change impacts and their possible mitigation for any proposed minerals development. • The development management policies, e.g. DM 1, also address and seek to minimise the issue of sustainable development and climate change. • Inclusion of some form of vegetated environment in the final restoration will offer benefits in the form of climate change mitigation, including provision of habitat for wildlife, but again these will be relatively small.	• Use energy efficient plant and machinery. • Implement restoration which includes appropriate habitats to help to increase resilience of flora/fauna.
15. To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any residual impacts.	_	0	• This is a large, new, sand and gravel extraction site. Estimated trip rates have been given at about 100 per day. The local road network to the south and west of the site is unable to cater for this level of heavy traffic. The proposed use of these roads would be objected to by the Highway Authority. • Instead, access is proposed across Phillio l's Heath, using existing forestry tracks, to the C7 at Sugar Hill. It should be possible to upgrade an existing access or provide a new access onto	• Any proposal for this site will need to be accompanied by a Transport Assessment which will need to provide access details and consider vehicle routing. The TA should be scoped with the Transport Development Management Team. • Transport Assessment to be carried out, identifying opportunities for reducing impacts on the transport network.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
			Sugar Hill that meets with the requirements for visibility and geometry necessary to serve this proposal. Once vehicles are on the C7 they can access the strategic network via the A35 to the north at Woodbury Cross. • Policies DM1 and DM 8 of the Minerals Strategy actively address this issue of minimising impacts on the transportation network.	
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	–	0	• The proposed extension can only realistically be accessed by means of road transport, resulting in a negative impact under this Objective during development and working. • As far as reasonably possible negative impacts resulting from access and transport will be mitigated, as required by Policies DM1 and DM8 of the Minerals Strategy.	• Mitigate impacts where identified and appropriate.
17. To sustain the health and quality of life of the population	– –	0	**Impact on Sensitive Human Receptors** • Residences adjacent to/within 50m of the site; other residences in vicinity of site. • Development would involve appropriate mitigation (such as visual and noise attenuation bunding, standoffs) to limit impacts.	• Provision of appropriate mitigation, following assessment of likely impacts. • Restoration to improve landscape of site where possible; and to seek to increase public access. • Screening/bunding/standoffs will mitigate impacts to some extent. • Transport Assessment to be carried out, identifying possible impacts and opportunities for reducing impacts on the transport network.
	–	0	**Impact on Existing Settlements** • Nearest settlement is Bere Regis, approximately 2.7 km away. No visual or noise impacts will affect these settlements, but there may be transport related impacts.	
	0	0	**Impact on Airport Safety** • Site is approximately 25 km from Hurn Airport, with possibly some wet/wetland restoration.	• No impacts expected.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
18. To enable safe access to countryside and open spaces.	0	+	**Impact on Recreational Land** • Site is in agricultural use, with no formal/informal recreation on the site. • The proposed haul road to the public highway will run through land used for recreation, and could have recreational displacement effects which must be addressed and mitigated.	• No action required at the site itself; haul route to be carefully selected to ensure no recreational displacement. • Restoration to include some aspect of public access.
	– –			
	–	0	**Impact on Public Rights of Way** • There are no rights of way across the site, although a bridleway runs adjacent to section of site boundary and will require screening. • Impact likely to be relatively small.	• Assessment of impacts, with appropriate mitigation identified. • Restoration to improve public access in the area.

Preliminary Hydrological Risk Assessment

Controlled Waters	Issues/Risks	Mitigation	Further information/approval required
• Watercourses • Ponds/lakes, including wet habitats • Groundwater	• Site is adjacent to River Piddle and Bere Stream. The River Basin Management Plan South West River Basin District identifies the Piddle as being of 'poor' environmental quality. • Potential for contamination from runoff from site. Reduced agricultural runoff for a temporary period is a benefit. • Potential for contamination of controlled waters through spillage or seepage of pollutants such as fuel, or silt in water. • Contamination of water supplies or reduction in amount of water available for licensed supplies. • Impacts on or removal of surface water features, particularly with ecological implications.	• Appropriate arrangements to be made for ensuring that runoff from the site does not enter the Piddle or groundwater unless any silt has first been removed. • Fuel stored on site to be appropriately bunded and sealed to prevent any spillage from entering ground or surface waters. • On-going monitoring during development and working of the site.	• Full hydrogeological risk assessment • Flood Risk Assessment • Water Framework Assessment • Further assessment of potential impacts on water quality and levels, particularly for groundwater, is required prior to development. • Assessment of the feasibility of relocating ponds and associated habitats and species. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.

Flood Risk Commentary

Site is within Flood Zone 1, but close to Flood Zones 2 & 3.

Some theoretical risk of flooding from surface water. Flood Risk Assessment would be required at planning application stage, with a site specific strategy for surface water management that does not increase rates of runoff or generate off site worsening

Sand and gravel extraction is water compatible, so suitable in flood risk terms for allocation in Draft Mineral Sites Plan provided the appropriate hydrological assessment is carried out and a Flood Risk Assessment prepared.

Climate Change predictions may result in flood outlines greater than existing Flood Zone 2. Processing plant/storage/stockpiles should preferably be located in Flood Zone 1, and should be located as far from Flood Zones 2 & 3 as reasonably possible.

Viability

As a new, previously unworked, quarry site, viability does have to be considered. No specific assessment has been done by the Mineral Planning Authority, but it is considered that as the site has been strongly promoted for development in the past, this indicates that it has economic viability. It is expected that this economic viability remains.

Mineral has been proven. The site is considered viable, for allocation in the Plan.

Achieving a satisfactory access to/from the public road will be a key issue, bit it is expected that this can be achieved, with input from Natural England.

Heritage Impacts

There are two Grade II listed buildings located within the centre of the proposed site at Philliol's Farm. The first is a 1748 brick built barn with later attached out-buildings, a corrugated iron roof with coped gables and a projecting hipped cart porch on the south side. The second is a detached two-storey granary dating from the 18th century having a tiled roof with stone eaves courses and moulded coped gables which was formerly listed as a pigeon house at Philliol's Farm. The buildings are set within a farmstead (although the original farmhouse doesn't survive) within a flat farmed landscape. Both buildings, although most notably the granary, are in some state of disrepair.

The proposed extraction would take place in phases around the central farm, with quick restoration to agriculture at a slightly lower level behind each phase. There would be no processing of materials on site.

There is no significant visual or noise impacts on the listed buildings because they are not inhabited by people.

On completion the whole farmstead will sit on an island of raised ground however this would not compromise the setting of the buildings.

There is an opportunity for improving the condition of both listed buildings through repair and stabilisation of the structure by means of planning conditions – this needs to be discussed with site promoter.

Policy/Legislative Background

The Historic England website notes:

When making a decision on all listed building consent applications or any decision on a planning application for development that affects a listed building or its setting, a local planning authority must have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses. Preservation in this context means not harming the interest in the building, as opposed to keeping it utterly unchanged.

This obligation, found in sections 16 and 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990, applies to all decisions concerning listed buildings.

The recent Court of Appeal decision in the case of Barnwell vs East Northamptonshire DC 2014(2) made it clear that in enacting section 66(1) of the Planning (Listed Buildings and Conservation Areas) Act 1990 (1) Parliament's intention was that ***'decision makers should give "considerable importance and weight" to the desirability of preserving the setting of listed buildings' when carrying out the balancing exercise'.***

Section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990 (" the 1990 Act ") provides:

"(1) In considering whether to grant planning permission for development which affects a listed building or its setting, the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses."

Section 72 of the 1990 Act provides:

"(1) In the exercise, with respect to any buildings or other land in a conservation area, of any of the provisions mentioned in sub-section (2), special attention shall be paid to the desirability of preserving or enhancing the character or appearance of that area.

(2) The provisions referred to in sub-section (1) are the planning Acts …"

A finding of harm to the setting of a listed building is a consideration to which the decision-maker must give "considerable importance and weight" (The Bath Society v Secretary of State for the Environment [1991] 1 W.L.R. 1303, per Glidewell LJ at 1319; and see East Northamptonshire District Council v Secretary of State for Communities and Local Government [2015] 1 W.L.R. 45 , per Sullivan LJ at [22]–[23] and [29]).

The relevant policies of the National Planning Policy Framework are paragraphs 128–135, the material parts of which provide:

"128. In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance… 129. Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise…

131. In determining planning applications, local planning authorities should take account of:

"• the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation; …"

132. When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation. The more important the asset, the greater the weight should be. …

133. Where a proposed development will lead to substantial harm to or total loss of significance of a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or loss is necessary to achieve substantial public benefits that outweigh that harm or loss, or all of the following apply: …

134. Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal, including securing its optimum viable use.

135. The effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that affect directly or indirectly non-designated heritage assets, a balanced judgment will be required having regard to the scale of any harm or loss and the significance of the heritage asset."

The National Planning Policy Framework (paragraph 144) also states:

When determining planning applications, local planning authorities should:

- *give **great weight** to the benefits of the mineral extraction, including to the economy;*

Commentary

In considering the potential development of the Philliol's Farm site, with acknowledged impacts on a designated heritage asset, the following points have been taken into consideration.

- There is "a strong presumption against harm to designated assets" (Barnwell [2014] EWCA Civ 137; Forge Field [2014] EWHC 1895 (Admin))
- "Considerable weight" must be given to harm to designated assets, however slight, if more than de minimis (Barnwell; Forge Field; Jones [2015] EWCA Civ 1243)

- *Mordue v Secretary of State for Communities and Local Government and others* [2015] EWCA Civ 1243. Heritage assets have statutory protection, unlike other material considerations; and the NPPF has a complex template for their consideration. Both must be considered in an assessment.
- Failure to assess alternative sites on appropriate public interest criteria (Forge Field; ENV4)
- The policy presumption in favour of sustainable development does not apply to cases of harm to designated assets (Gladman [2016] EWHC 421 (Admin))
- Cumulative effects must be considered (PPG)
- All recognised harm must be included in the recommended Planning balance (Barnwell)
- Undue weight should not be given to the temporary nature of development (National Wind Power [1999] N.P.C. 128)

Development of the site would not cause substantial harm to the Listed Buildings themselves, but would have an impact on their setting. Development of the site would result in temporary harm to the setting of the Philliol's Farm buildings – this would be 'less than substantial' harm, for a temporary period. This harm has been given great and considerable weight in this assessment.

A range of sites nominated for allocation in the Mineral Sites Plan for sand and gravel quarries have been assessed on heritage grounds and on a range of other grounds. A number have been rejected for reasons other than heritage issues. The remaining sites have been included in the Draft Mineral Sites Plan.

The proposal is for a temporary period, after which the site will be restored and the impact on the heritage asset setting will be removed.

The Heritage Impact Assessment that would be carried out as part of any planning application would identify the setting of the heritage asset and would identify appropriate mitigation to offset the harm to the setting resulting from development of the site to a level that would allow the development to go ahead.

It is expected that the mitigation would be a combination of screening (an earth bund) and a standoff/buffer.

If mitigation is not possible, or if the necessary standoff was such that it made the site uneconomic to develop, then the development would not go ahead.

In considering potential impacts and mitigation, it must be remembered that this is not a planning application, but a nomination for allocation of a site in the Mineral Sites Plan. The evidence required and level of assessment carried out **at this stage** are considered to be proportionate and appropriate. At the planning application stage a detailed Heritage Impact Assessment on the assets and their settings will be carried out, as part of an Environmental Impact Assessment, and the appropriate mitigation identified and applied.

At the current stage, the Mineral Planning Authority is considering whether the proposed nomination can reasonably be allocated through the Mineral Sites Plan, on the understanding that appropriately detailed assessment work will be carried out at a later date, and appropriate mitigation applied.

Although inclusion in an adopted plan gives a site allocation greater weight and likelihood of development, it is **not** deemed planning permission. Any allocation in an adopted plan still needs to go through the full planning application process, including Environmental Impact Assessment, and if impacts are identified that cannot be satisfactorily mitigated, the proposal will not receive permission.

It is considered, taking into account:

- the less than substantial harm to the setting of the Philliol's Farm farm buildings;
- the great and considerable weight given to such harm, and the strong presumption against such harm;
- the temporary nature of the harm
- the great weight to be given to the provision of mineral
- the fact that minerals must be worked where they are found
- the fact that this is an extension site, and the processing plant and other infrastructure is already available
- the fact that the proposed development will be subject to planning application including Environmental Impact Assessment, and impacts on the setting will be assessed in detail and appropriate mitigation identified

that the public benefit to be received from this proposed development, and the nature and duration of the development causing harm, together with the scope for mitigating this harm, are such that the site should be allocated in the Mineral Sites Plan.

Cumulative Impacts

There are both existing and proposed mineral workings in the locality. This is a new, greenfield site proposal and would represent an intensification of development in this part of Dorset, depending on its start date.

The proposal is within 5Km of Bere Regis, a "Key Service Centre" where new development of 50 dwellings is allocated in the Purbeck Local Plan Part 1 (Adopted Nov 2013) (Policy NW). Traffic development from the residential development will have a minor impact on surrounding roads.

It is in relatively close proximity to another site nomination, AS15 Tatchell's Extension. Although the sites would be accessed differently, they would have cumulative traffic impacts if both worked simultaneously. In addition, at one stage it was proposed that Phillliol's Farm mineral would be processed at Tatchell's. Again this could lead to cumulative impacts, depending on timing of working and methods. Such impacts should be identified and mitigated.

Traffic travelling north-west to access the trunk road system at Bere Regis or southwards to access at Wareham will both have some impact on the road system.

Summary.

Potential Benefits	Potential Impacts
• Restoration could include some increased public access. • Provision of aggregates required for maintenance and construction of the built environment. • Restoration could include benefits for nature conservation. • Restoration and improvements for the historic buildings at Phillliol's Farm	• Impacts on biodiversity, particularly through construction/use of the haul road through the forest – including possible impacts on European designations and Annex 1 birds. • Hydrogeological impacts, including on water levels in the ephemeral ponds supporting the Fairy Shrimp. • Noise/visual/amenity impacts on properties in the vicinity. • Heritage impacts on the settings of the Phillliol's Farm farm buildings. • Potential archaeological impacts – details not known until further assessment carried out. • Impacts on landscape carrying capacity. • Impacts on Best and Most Versatile agricultural land. • Possible cumulative transport impacts – further assessment required.

Overall Recommendation:

This is a new site which would be worked and the mineral transported through Phillliol's Heath to the C7 road to be processed at Tatchell's, near Wareham. It offers the benefits of contributing to the aggregate supply for Bournemouth, Dorset and Poole but there are a number of potential impacts associated with the development of this site. These include biodiversity (particularly the haul road and possible impacts on European Designations in Wareham Forest), heritage impacts, hydrology/hydrogeology, archaeology, landscape capacity, loss of BMV land, amenity (impacts on residences in the vicinity) and transport issues. It is expected that these impacts are capable of mitigation.

The proposed development will cause less than substantial harm to the setting of the Listed Building but this harm is expected to be capable of mitigation.

On balance, it appears reasonable on the basis of evidence available that the impacts identified in this sustainability appraisal are capable of satisfactory mitigation to the extent that the site nomination can reasonably be included as an allocation in the Draft Bournemouth, Dorset and Poole Mineral Sites Plan.

Aggregates: AS13 Roeshot

Site Name/Location: **AS13 Roeshot** Mineral Type: Sand and gravel		Nominee/Agent: Meyrick Estate/D K Symes Local Authority: Christchurch Borough Council
Site Area: approximately 74 ha	Production: 150,000 to 200,000 tpa	Reserve: approximately 3.5 mt

Impact Assessment Scoring

- -	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain

Timescales for effects:

P/W: Preparation and Working **R/A**: Restoration and Afteruse

Sustainability Objectives	Effects P/W	Effects R/A	Commentary	Mitigation
1. To move waste management up the waste hierarchy	**N/A**	**N/A**	• This Objective is not relevant to this site nomination.	• N/A
2. To maintain, conserve and enhance biodiversity	**?**	**+**	**European/International Designations** • Extraction from this site could facilitate restoration to open ground including public open space for informal recreation to mitigate against effects of human pressures on the heaths. • There are records of Southern Damselfly from the Mude River on the eastern boundary of the site and the effects of extraction on this rare species would need to be fully understood and mitigated. • It is expected that any effects should be avoided through providing for a suitable stand-off from the river.	• Ensure that part of the site is designated as a SANG • Any possible impacts on Damselfly and their habitat to be fully assessed, and all necessary mitigation implemented. • Ecological surveys required, with appropriate mitigation identified. • Restoration to include appropriate habitats for these species. • Appropriate buffer around Mude to be left to protect Damselfly habitat.
	-			
	0	**0**	**Annex 1 Bird Species** • No impacts expected.	• No action required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	0	0	**National Designations** • No impacts expected.	• No action required.
	0	+	**Protected species** • It is possible that there are common protected reptile populations around the existing field margins. Mitigation would likely be straightforward.	• Ecological surveys required, with appropriate mitigation identified. • Restoration to include appropriate habitats for these species.
	0	0	**Local recognitions/designations, including ancient woodland and veteran trees** • None expected.	• No action required.
3. To maintain, conserve and enhance geodiversity.	+	0	• Exposures resulting from working may be of interest. Benefits are only expected during working, and are likely to be obscured or covered as part of restoration.	• Operator to be asked to permit visits to view exposures as required.
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	– / – –	0	**Groundwater** • EA designated main river adjacent to site and presumably receives groundwater discharge derived from the site. • Site overlies secondary aquifers. Not within any Source Protection Zone designation. • Licensed extraction within 500m. • Assessment required to determine possible impacts on hydrogeology. Impacts to be appropriately mitigated.	• Further assessment on possible impacts on water supplies and appropriate mitigation if potential impacts identified. • Where necessary mitigating measures should be installed to maintain groundwater levels and/or monitor private water supplies. • Alternative arrangements should be in place in case of a reduction in supply. • Hydrological assessment required to determine possible impacts, on ground and surface waters, with appropriate mitigation to be implemented.

	– – –	0	**Surface Water** • River Mude is a Main River and forms eastern boundary of the site. • Drains flow over site into river. • Assessment required to determine possible impacts on hydrogeology. Impacts to be appropriately mitigated.	• River Corridor Buffer Zone to be required. • Appropriate arrangements should be put in place to ensure that the water leaving the site and entering the rivers/watercourses is of an acceptable quality. • Any fuel on site should be properly stored to avoid contamination in case of spillage. • Appropriate arrangements should be installed for surface water and silt collection and fuel storage to prevent contamination of groundwater resources. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.
5. To reduce flood risk and improve flood management.	**0**	**0**	**Flooding/Coastal Stability** • FRZ 2 and 3 on part of site, majority within FRZ 1. Site is sand and gravel site, with extraction allowed within functional floodplain.	• Flood Risk Assessment (FRA) will be required. • All necessary mitigation to be implemented.
6. To maintain, conserve and enhance the historic environment (including archaeologic al sites, historic buildings, conservation areas, historic parks and gardens and other locally distinctive features and their settings).	**??** **??**	**0**	**Archaeology** • Staple Cross (Dorset M828) lies to the south of the proposed site. This is a roadside cross that is thought to be of post-Medieval date, although many of the type date from the Middle Ages. The railway line running on an embankment shields the site from this Monument therefore its setting is not affected by the proposal. • There is likely to be high archaeological potential at this site. Archaeological assessment and evaluation would be required before an informed planning decision could be made. Only when these have been undertaken would the archaeological impact be understood – at present it could be anywhere from Very Significant to No Significant impact • Archaeological assessment and evaluation will be required. When these have been undertaken archaeological impacts, if any, will be better understood.	• Full archaeological survey of the area required to assess possible presence and significance of non-designated remains and how these should be protected/treated during working. • All necessary mitigation, including actions such as restoration of hedgerows, to be implemented. • Adequate provision to be made for preservation, excavation or recording, as appropriate.
	?	**0**	**Historic Landscapes** • The site lies within the broad flat agricultural landscape between the river Avon on the west and the somewhat higher ground of the New Forest to the east. There are distant views to St. Catherine's Hill,	

			while views towards the historic centre of Christchurch are impeded by the railway line. • Impacts could range between Significant to Less Significant. Further evaluation will be required. When this has been undertaken possible impacts, if any, will be better understood.	
	0	**0**	**Historic Buildings** • The extraction of mineral at this site would have no significant impact on any of the nearby listed buildings because the lie of the land and the size of the hedgerows screens it from them.	• No action required.
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	–	+	**Landscape Capacity** • The site is not directly overlooked by any properties but there are more distant views from the edge of Burton Village and from adjacent lanes. • Retention and management of existing hedgerows, appropriate new planting and bund screening is recommended to reduce any residual impacts. • Potential visual impacts also exist on the railway line and from users of the area for recreational purposes.	• Assessment of potential visual impacts required. • All appropriate mitigation to be included. • Restoration to include increasing public access/informal recreation, through provision of SANG. • Restoration to include nature conservation interests.
	?	**0**	**Designated Landscapes** • Potential visual impacts also exist on the New Forest National Park, but it is expected these can be mitigated.	• No action required.
8. To protect and improve air quality and reduce the impacts of noise.	**0**	**0**	• Impacts on air quality expected to be negligible. • No AQMAs will be affected by the working of this site proposal. Any dust resulting from working will be controlled through normal dust-suppression measures. • Noise mitigation will be addressed at the planning application stage, with appropriate mitigation to be included in the development of the site.	• Environmental protection measures to reduce dust and ensure noise is appropriately mitigated.
9. To maintain, conserve and enhance soil quality.	–	**0**	• Site is very good agricultural land and working the site will have impacts on this soil. • Proposed restoration is to part agricultural part nature conservation.	• Soil to be properly stripped and stored prior to working; protected during working; and re-spread on site after working. • Restoration to include high quality agricultural land.

			• Soils can be protected and used to restore at least part of the site to its agricultural use .	
10. To conserve and safeguard mineral resources.	+ / ++	0	• The site would make an important contribution to aggregate supply in Bournemouth, Dorset and Poole.	• No specific action required; site development to take into consideration relevant impacts and mitigate where appropriate.
11. To promote the use of alternative materials.	+ +	0	• In order to achieve desired restoration levels it may be necessary to install an inert waste material recycling facility. • If this is done then this will provide a strong positive benefit during working. It is expected that the recycling facility would finish when or soon after the quarry is completed and restored, giving a negligible impact during afteruse.	• Developing an inert waste recycling facility will promote the use of alternative materials on-site and elsewhere.
12. To provide an adequate and affordable supply of minerals to meet society's needs.	+ / + +	0	• Development of this site will provide a benefit in terms of contributing to the provision of a supply of minerals to meet society's needs. • Ensuring a sustainable supply will depend on the development and management of the site. Providing site development takes into account relevant principles of sustainable development it is expected this will contribute to complying with this objective.	• Ensure principles of sustainable development are incorporated into the development of this site.
13. To promote and encourage sustainable economic growth	+ –	0	• This site proposal is expected to contribute to economic development on two levels – directly through the provision of employment at the site to be developed and indirectly through the provision of aggregate minerals required for the maintenance of built environment and for new built development. Both levels are expected to maintain employment, skilled and unskilled. However given the expected size of the reserve this is likely to be a limited benefit. • The development and associated traffic could have negative impacts on local businesses, e.g. through dust/noise/traffic. These should be taken into consideration and mitigated against. • Restoration to agriculture with some element of public access will, if achieved, offer some economic benefits through both the agriculture and the recreational attraction and use in the wider area (i.e. riding, walking).	• Identification of potential impacts on local businesses, with appropriate mitigation. • Further assessment required to form a view as to what the most appropriate restoration could be.

14. To adapt to and mitigate the impacts of climate change.	_	**0**	• Developing land as a quarry is expected to have some negative impacts regarding climate change, due primarily to machinery used and transportation of mineral away from site. However, these will in relative terms be negligible. • The Bournemouth, Dorset and Poole Minerals Strategy seeks to address and minimise such impacts through Policy CC1 which requires operators to take into consideration climate change impacts and their possible mitigation for any proposed minerals development. • The development management policies, e.g. DM 1, also address and seek to minimise the issue of sustainable development and climate change. • Restoration to some form of vegetated environment will offer benefits in the form of climate change mitigation, including provision of habitat for wildlife, but again these will be relatively small.	• Use energy efficient plant and machinery. • Implement restoration which provides appropriate habitats to help to increase resilience of flora/fauna.
15. To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any residual impacts.	_	**0**	• While this large site is within Dorset, it is expected that the traffic from it will access the highway network on the A35 Lyndhurst Road from within Hampshire. A portion of the traffic will turn south from that access and enter Dorset on the A35 which will need to be assessed as part of any Transport Assessment. • Roads to the west of the site are narrow, residential and unsuitable for the high level of traffic that this site would generate. In the case of Hawthorne Road and Summers Lane they may also be undergoing significant change as part of the urban extension site at Roeshot Hill being proposed within the Christchurch and East Dorset Local Plan. • Provided that the site has a suitable access onto the A35 Lyndhurst Road (to be determined by Hampshire County Council), the site has direct access to the strategic network and is considered to have negligible or no significant impacts. • Policies DM1 and DM 8 of the Minerals Strategy actively address this issue of minimising impacts on the transportation network.	• Any proposal for this site will need to be accompanied by a Transport Assessment which will need to provide access details and consider vehicle routing. The TA should be scoped with the Transport Development Management Team. • Transport Assessment to be carried out, identifying opportunities for reducing impacts on the transport network. • Site to use access to highway network on the Hampshire side of the site. Hampshire and Dorset sides of the site shouldn't be worked simultaneously, to avoid traffic and visual impact intensification.

16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	–	**0**	• The proposed extension can only realistically be accessed by means of road transport, resulting in a negative impact during development and working. • As far as reasonably possible negative impacts resulting from access and transport will be mitigated, as required by Policies DM1 and DM8 of the Minerals Strategy.	• Mitigate impacts where identified and appropriate.
17. To sustain the health and quality of life of the population	–	**0**	**Impact on Sensitive Human Receptors** • Waterditch Farm to north and Burton Village to west, both with 300m; properties to the south screened by railway embankment. • Appropriate mitigation (such as visual and noise attenuation bunding, standoffs) would limit impacts.	• Provision of appropriate mitigation, following assessment of likely impacts. • Restoration to improve landscape of site where possible; and to seek to increase public access. • Screening/bunding/standoffs will mitigate impacts. • Transport Assessment to be carried out, identifying possible impacts and opportunities for reducing impacts on the transport network.
	–	**0**	**Impact on Existing Settlements** • Burton Village to west; properties (include Urban Extension) to the south screened by railway embankment. Noise attenuation and visual screening expected to mitigate impacts. • Appropriate mitigation (such as visual and noise attenuation bunding, standoffs) would limit impacts.	
	0	**0**	**Impact on Airport Safety** • Site is some 6km from airport and may feature wetland restoration. • It will be developed, worked and restored in a way that will avoid any birdstrike or other hazards.	• Airport to be consulted on all aspects of the site development and restoration. • All necessary mitigation to be implemented.
18. To enable safe access to countryside and open spaces.	**0**	**+**	**Impact on Recreational Land** • Site is agricultural land and has no formal or informal recreation use. • Part of the site expected to be used as Suitable Alternative Natural Greenspace to provide public access to countryside, primarily for the benefit of the housing proposed to the south.	• No action required.

	–	??	**Impact on Public Rights of Way** • Footpath runs along eastern edge of site - this may need to be diverted during working of the site. • Screening likely to be required, although the impact would be relatively small. • Potential for improved access following working.	• Assessment of impacts, with appropriate mitigation identified.

Preliminary Hydrological Risk Assessment

Controlled Waters	Issues/Risks	Mitigation	Further information/approval required
• Watercourses • Ponds/lakes, including wet habitats • Groundwater	• The River Basin Management Plan South West River Basin District identifies the River Mude as being of 'Moderate' environmental quality. Potential exists for contamination of river from runoff from site. • Potential for contamination of controlled waters through spillage or seepage of pollutants such as fuel, or silt in water. • Contamination of water supplies or reduction in amount of water available for licenses supplies. • Impacts on or removal of surface water features.	• Appropriate arrangements to be made for ensuring that runoff from the site does not enter the Mude or groundwater unless any silt has first been removed. • Fuel stored on site to be appropriately bunded and sealed to prevent any spillage from entering ground or surface waters. • On-going monitoring during development and working of the site. • Relocation of surface water features, provided this is feasible.	• Full hydrogeological risk assessment will be required as part of a planning application. • Flood Risk Assessment • Water Framework Assessment • Further assessment of potential impacts on water quality and levels, particularly for groundwater, is required prior to development. • Assessment of the feasibility of relocating or re-creating surface water features and associated habitats and species. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.

Flood Risk Commentary

Site is largely within Zone 1, but part of it is within Zones 2 and 3, part of the floodplain of the River Mude.

Site is proposed for sand and gravel working which is compatible with fluvial floodplains. This will be taken into consideration at the planning application stage, in the design of the quarry working area and hydrology/hydrogeology – and also restoration

Flood Risk Assessment would be required at planning application stage, with a site specific strategy for surface water management that does not increase rates of runoff or generate off site worsening

Sand and gravel extraction is water compatible, so suitable in flood risk terms for allocation in Draft Mineral Sites Plan provided the appropriate hydrological assessment is carried out and a Flood Risk Assessment prepared.

Climate Change predictions may result in flood outlines greater than existing Flood Zone 2. Processing plant/storage/stockpiles should preferably be located in Flood Zone 1, and should be located as far from Flood Zones 2 & 3 as reasonably possible.

Viability

As an extension to what will be an existing operational site, viability is not considered to be an issue. Existing processing facilities and road access will be used, and the site will serve existing markets, and therefore these do not have to be provided. . Mineral has been proven. The site is considered viable, for allocation in the Plan.

Cumulative Impacts

Site is immediately adjacent to and will comprise an extension of a sand and gravel site in Hampshire. There are other sand and gravel sites in south Hampshire, south of the New Forest, that generate lorry travel into Dorset.

Traffic impacts can be mitigated in various ways, including by holding back quarry traffic during peak times.

It is adjacent to, although separated by a railway embankment, the site allocated for development in the Christchurch and East Dorset Consolidated Plan[12] May 2013, Policy CN1 Christchurch Urban Extension – 950 dwellings. Traffic from this development will add to traffic levels on the A35 and B3347.

It is expected that the Dorset part of the site will be developed as an extension to the Hampshire side, after the Hampshire side is partly or fully worked, so in this sense it will not be a cumulative impact in terms of traffic levels.

Depending on rates of restoration in Hampshire there could be visual cumulative impacts – this issue would be addressed at the planning application stage.

Summary.

Potential Benefits	Potential Impacts
• Restoration will include increased and improved public access through provision of land for SANG. • This also provides benefits to other nature conservation designations by absorbing recreational pressures. • Provision of aggregates required for maintenance and construction of the built environment. May include production of recycled aggregates	• Site is primarily agricultural land and its development will have minimal impact on nature conservation interests. • Nature conservation impacts – possible impacts on Southern Damselfly along Mude. To be assessed and should be capable of mitigation, through various means including leaving a river corridor untouched. • Possible impacts on ground/surface water – including downstream on the Mude - to be fully assessed, expected to be mitigable.

[12] The Consolidated Plan is an amalgamation of the Christchurch and East Dorset Core Strategy Pre submission draft April 2012 and the Christchurch and East Dorset Schedule of Proposed Changes November 2012.

• Restoration will include benefits for nature conservation, through restoration to combination of agricultural and nature conservation.	• Possible impacts on archaeology – to be fully assessed and not expected to restrict development. All necessary mitigation to be implemented. • Burton Conservation Area lies to the west, but the lie of the land is such that the working is expected o be screened effectively. • Possible impacts on airport to be considered and site to be developed and restored in a way that does not have any impact on airport. • Transport impacts to be assessed, but any impacts expected to be mitigable. • Site is large enough that visual impacts on surrounding properties are expected to be capable of mitigation.

Overall Recommendation:

Site is currently in intensive agriculture with limited access. It would be operated as an extension of an existing, adjacent quarry with mineral taken to existing plant to be processed. Mineral processing and site access will be carried out on the Hampshire side of the site. No intensification of working is expected.

Full assessment of possible impacts will be required. It is expected that these can be overcome through appropriate mitigation.

As an extension, development of the site is not expected to lead to intensification of impacts, but the time period of the impacts will be extended.

Opportunities for improved public access and nature conservation benefits are to be considered as part of restoration of the site.

On balance, it appears reasonable on the basis of evidence available that the impacts identified in this sustainability appraisal are capable of satisfactory mitigation and the site nomination can reasonably be included in the Draft Bournemouth, Dorset and Poole Mineral Sites Plan.

Aggregates: AS15 Tatchell's

Site Name/Location: **AS15 Tatchell's** Mineral Type: Sand and gravel		Nominee/Agent: Aggregate Industries Local Authority: Purbeck District Council
Site Area: 2.5 ha	Production: approximately 100,000 tpa;	Reserve: approximately 330,000 tonnes

Impact Assessment Scoring

- -	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain

Timescales for effects:

P/W: Preparation and Working **R/A**: Restoration and Afteruse

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
1. To move waste management up the waste hierarchy	**N/A**	**N/A**	• This Objective is not relevant to this site nomination	• N/A
2. To maintain, conserve and enhance biodiversity	**0**	**0**	**European/International Designations** • Not relevant to this site nomination.	• No action required.
	0	**0**	**Annex 1 Bird Species** • Not relevant to this site nomination.	• No action required.
	0	**0**	**National Designations** • Not relevant to this site nomination.	• No action required.
	0	**0**	**Protected species** • It is possible that there are common protected reptile populations around the existing field margins. • If any of these populations would be affected, mitigation would likely be straightforward.	• Ecological surveys required, with appropriate mitigation identified. • Restoration to include appropriate habitats for these species.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	0	**0**	**Local recognitions/designations, including ancient woodland and veteran trees** • Not relevant to this site nomination.	• No action required.
3. To maintain, conserve and enhance geodiversity.	**+**	**0**	• Exposures resulting from working may be of interest. Benefits are only expected during working, and are likely to be obscured or covered as part of restoration.	• Operator to be asked to permit visits to view exposures as required.
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	**0**	**0**	**Groundwater** • Site overlies secondary aquifer. Not within any Source Protection Zone designation. • Licensed extraction within 500m. • Assessment required to determine possible impacts on hydrogeology. Impacts to be appropriately mitigated.	• Further assessment on possible impacts on water supplies and appropriate mitigation if potential impacts identified. • Where necessary mitigating measures should be installed to maintain groundwater levels and/or monitor private water supplies. • Alternative arrangements should be in place in case of a reduction in supply. • Hydrological assessment required to determine possible impacts, on ground and surface waters, with appropriate mitigation to be implemented. • Detailed pollution prevention management plan detailing best practices to minimise pollution incidents, as well as measures that will be taken should a pollution event occur. • Appropriate arrangements should be put in place to ensure that the water leaving the site and entering the rivers/watercourses is of an acceptable quality. • Any fuel on site should be properly stored to avoid contamination in case of spillage. • Appropriate arrangements should be installed for surface water and silt collection and fuel storage to prevent contamination of groundwater resources. • Land Drainage Consent to be obtained from Dorset County
	?	**0**	**Surface Water** • Pond within 50m of site in existing quarry to west of site. • River Piddle within 250m of the site boundary. • Assessment required to determine possible impacts on hydrogeology. Impacts to be appropriately mitigated.	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
				Council if works may affect flow of an ordinary watercourse.
5. To reduce flood risk and improve flood management.	0	0	**Flooding/Coastal Stability** • Entire site is within Flood Risk Zone 1, no expected risk of flooding or contributing to flooding.	• Flood Risk Assessment (FRA) will be required. • All necessary mitigation to be implemented.
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).	?	0	**Archaeology** • Assuming the site was heathland until relatively recently, its archaeological potential is likely to be low. • However, the Dorset Historic Environment Record records the presence of 19th century quarries on and around the site, so it would be appropriate for an assessment to check whether there are any remains of industrial archaeological significance of or associated with this quarrying on the site. • If such remains were present, then provided that appropriate recording took place before development, this would be a 'Less Significant' impact. • Archaeological assessment and evaluation will be required. When these have been undertaken archaeological impacts, if any, will be better understood.	• Archaeological survey of the area required to assess possible presence and significance of non-designated remains and to assess whether/how these should be protected during working. • All necessary mitigation to be implemented. • Adequate provision to be made for preservation, excavation or recording, as appropriate. • Further consideration to be given to restoration proposals, in terms of historic landscapes.
	?	0	**Historic Landscapes** • The site is currently under agriculture, and historically it was presumably heathland. There is map evidence of quarrying here (undoubtedly on a much smaller scale) from the 19th century.	
	0	0	**Historic Buildings** • The nearest listed building, Carey House, is hidden from the site by wooded areas so there is no significant effect on the listed building. • No significant impact.	• No action required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	0	0	**Landscape Capacity** • The site is considered unlikely to be visually intrusive being screened from the residential areas of Wareham and Northport by a ridge of high land. • Appropriate mitigation will be required along the boundaries of the site.	• Landscape and visual impact assessment to identify impacts; adequate mitigation of such impacts before and during working. • Appropriate restoration proposals in line with Landscape Management Guidelines referred to in Minerals Strategy.
	0	0	**Designated Landscapes** • No significant impact/negligible.	
8. To protect and improve air quality and reduce the impacts of noise.	0	0	• Impacts on air quality expected to be negligible. • No AQMAs will be affected by the working of this site proposal. Any dust resulting from working will be controlled through normal dust-suppression measures. • Noise mitigation will be addressed at the planning application stage, with appropriate mitigation to be included in the development of the site.	• Environmental protection measures to reduce dust and ensure noise is appropriately mitigated.
9. To maintain, conserve and enhance soil quality.	0	0	• Site is poor quality agricultural land. • Site preparation/working would require stripping and storage of the soils, with some impacts on them.	• Soils to be stored/protected during preparation and working and properly reinstated during restoration.
10. To conserve and safeguard mineral resources.	+	0	• The site would make an important contribution to aggregate supply in Bournemouth, Dorset and Poole.	• No specific action required; site development to take into consideration relevant impacts and mitigate where appropriate.
11. To promote the use of alternative materials.	0	0	• This proposal does not propose the use of alternative materials.	• No action required.
12. To provide an adequate and affordable supply of minerals to	+	0	• Development of this site would provide a benefit in terms of contributing to the provision of a supply of minerals to meet society's needs.	• Ensure principles of sustainable development are incorporated into the

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
meet society's needs.			• Ensuring a sustainable supply will depend on the development and management of the site. • Providing site development takes into account relevant principles of sustainable development it is expected this will contribute to complying with this objective.	development of this site.
13. To promote and encourage sustainable economic growth	+	0	• This site proposal is expected to contribute to economic development on two levels – directly through the provision of employment at the site to be developed and indirectly through the provision of aggregate minerals required for the maintenance of built environment and for new built development. • Both levels are expected to maintain employment, skilled and unskilled. However given the expected size of the reserve this is likely to be a limited benefit. • Restoration to agriculture will, if achieved, offer some on-going economic benefits.	• Further assessment required to form a view as to what the most appropriate restoration could be.
14. To adapt to and mitigate the impacts of climate change.	–	0	• Developing land as a quarry is expected to have some negative impacts regarding climate change, due primarily to machinery used and transportation of mineral away from site. However, these will in relative terms be negligible. • The Bournemouth, Dorset and Poole Minerals Strategy seeks to address and minimise such impacts through Policy CC1 which requires operators to take into consideration climate change impacts and their possible mitigation for any proposed minerals development. • The development management policies, e.g. DM 1, also address and seek to minimise the issue of sustainable development and climate change. • Restoration to some form of vegetated environment will offer benefits in the form of climate change mitigation, including provision of habitat for wildlife, but again these will be relatively small.	• Use energy efficient plant and machinery. • Implement restoration which provides appropriate habitats to help to increase resilience of flora/fauna.
15. To minimise the negative impacts of waste and minerals transport on the transport network,	–	0	• This proposal is for an extension to existing extraction at Tatchell's Quarry. This is an established site with a good access onto Wareham Forest Road. Access from here to the strategic network is gained via the A35 to the north and the A351 to the east. The extension site could be expected to generate 40 trips per day although it is thought that the site would follow	• Transport Assessment to be carried out, identifying opportunities for reducing impacts on the transport network.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
mitigating any residual impacts.			the cessation of other extraction at Tatchell's rather than operating in parallel to it. The site has therefore been given a 'Less Significant Adverse Impact' rating. • Should the site intensify movements to Tatchell's any Transport Statement should consider vehicle routing and any impact on the A351 to the east which experiences high levels of congestion. • Policies DM1 and DM 8 actively address this issue of minimising impacts on the transportation network.	
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	–	**0**	• The proposed extension can only realistically be accessed by means of road transport, resulting in a negative impact under this Objective during development and working. • As far as reasonably possible negative impacts resulting from access and transport will be mitigated, as required by Policies DM1 and DM8 of the Minerals Strategy.	• Mitigate impacts where identified and appropriate.
17. To sustain the health and quality of life of the population	–	**0**	**Impact on Sensitive Human Receptors** • Residences within 300m. • Development would likely require appropriate mitigation (such as visual and noise attenuation bunding, standoffs) to limit impacts.	• Provision of appropriate mitigation, following assessment of likely impacts. • Restoration to improve landscape of site where possible; and to seek to facilitate public access. • Screening, bunding, standoffs will mitigate impacts.
	–	**0**	**Impact on Existing Settlements** • Wareham is the closest settlement, to the east of the site and approximately 450m at its closest. • Screening (visual and noise attenuation bunding) would significantly limit the impact of the site working.	
	0	**0**	**Impact on Airport Safety** • Site is approximately 22 km from airport and proposed for dry working and restoration. • No impacts expected	• No action required.
18. To enable safe access to countryside	**0**	**+**	**Impact on Recreational Land** • Site is currently agricultural land and does not contain any recreational use, either formal or informal.	• No action required prior to working. • Possible impacts to be assessed, with

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
and open spaces.			• No impacts expected	appropriate mitigation identified. • Restoration has potential to improve public access in the area, possibly through allowing the footpath to be moved to the other side of the hedge, out of the road.
	–	+	**Impact on Public Rights of Way** • Footpath runs adjacent to the northern edge of the site. It runs in the road, hedge offers some screening. • Further mitigation may be required.	

Preliminary Hydrological Risk Assessment

Controlled Waters	Issues/Risks	Mitigation	Further information/approval required
• Watercourses • Ponds/lakes, including wet habitats • Groundwater	• The River Basin Management Plan South West River Basin District identifies the Piddle as being of 'Poor' environmental quality. Potential for contamination from runoff from site. • Potential for contamination of controlled waters through spillage or seepage of pollutants such as fuel, or silt in water. • Contamination of water supplies or reduction in amount of water available for licenses supplies. • Impacts on or removal of surface water features.	• Appropriate arrangements to be made for ensuring that runoff from the site does not enter the Piddle or groundwater unless any silt has first been removed. • Fuel stored on site to be appropriately bunded and sealed to prevent any spillage from entering ground or surface waters. • On-going monitoring during development and working of the site. • Relocation of surface water features, provided this is feasible.	• Full hydrogeological risk assessment will be required as part of a planning application. • Flood Risk Assessment • Water Framework Assessment • Further assessment of potential impacts on water quality and levels, particularly for groundwater, is required prior to development. • Assessment of the feasibility of relocating surface water features and associated habitats and species. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.

Flood Risk Commentary

Site is relatively small and lies entirely within Flood Zone 1.

The site falls entirely within Flood Zone 1 (low risk – fluvial flooding) according to the Environment Agency's relevant flood modelling, and is not shown to be at any significant risk of surface water flooding by relevant mapping, other than very isolated ponding during severe rainfall events (1:100/1000yr).

Surface water runoff is likely to gravitate to the south and floodplain / tributaries of the River Piddle Main River. In accordance with the recommendations of the NPPF, a site specific strategy of surface water management should be requested to demonstrate that runoff rates are not to increase, and that no off site worsening or increased risk of flooding will result.

Sand and gravel extraction is water compatible, so suitable in flood risk terms for allocation in Draft Mineral Sites Plan provided the appropriate hydrological assessment is carried out and a Flood Risk Assessment prepared and land within Flood Risk Zone 1 is available for location of processing facilities and stockpiles.

Suitable in flood risk terms for allocation in Draft Mineral Sites Plan.

Cumulative Impacts

There is other mineral working in the vicinity, both existing and proposed as well as waste management. The proposed site is an extension to existing mineral working/waste disposal.

The proposal is within 5Km (by road) of a site allocated in the Purbeck Local Plan Part 1 (adopted Nov 2012) (Policy CEN) for development of 200 dwellings and community facilities, off Worgret Road, Wareham. Traffic arising from the new residential development will also add to general traffic levels in / around Wareham.

As Tatchell's is not currently operational, developing this site would result in new traffic generation and cumulative impacts. It is expected that these can be satisfactorily mitigated.

If Phillliol's Farm is operational simultaneously with Tatchell's, and particularly if both sites were using the same processing facilities at Tatchell's, this could lead to transport impacts, including cumulative impacts. Is this situation were likely to arise, carful assessment would be needed to demonstrate that the road could carry the potential traffic loading. The site at Trigon Hill (BC04) would also have to be taken into consideration, along with any new development in and around Wareham.

Viability

As an extension to an existing operational site, even if not operational, viability is not considered to be an issue. The necessary access exists, and processing facilities be brought in. It is expected that markets exist, provided the appropriate sand quality exists. The mineral has been assessed and proven. The site is considered viable, in terms of inclusion in the Draft Plan.

Summary.

Key impacts and benefits are expected to include, but are not necessarily limited to, the following.

Potential Benefits	Potential Impacts
• Provision of aggregates required for maintenance and construction of the built environment, with accompanying benefits to the economy. • Provision of employment, to the benefit of local economy. • Improved public access may be possible as a part of site restoration. This could lead to reduced visitor pressure on designated heathland sites in the vicinity. • Nature conservation benefits may be achieved as part of restoration. • Restoration has the potential to improve public access, moving the existing footpath adjacent to the site out of the road and onto the site.	• Possible impacts on archaeology – to be fully assessed and not expected to restrict development. All necessary mitigation to be implemented. • The site will be accessed by road. A transport assessment will be required. • Cumulative traffic impacts, with AS15 Tatchell's and BC04 Trigon Hill, are possible and must be assessed. • Site is agricultural land, and development will have an impact on this use. It is expected that the site can be restored to an agricultural use.

Overall Recommendation:

This is a small and relatively uncontentious site with limited impacts, which are expected to be capable of mitigation.

Particular care must be taken regarding potential cumulative traffic impacts, taking into consideration whether Phillliol's Farm and Trigon Hill might be in operation.

Further assessment will be required to gain a better understanding of what the impacts might be and how best to mitigate. Should this site ultimately be developed, it is expected that detailed assessment of impacts and required mitigation will be covered through the required Environmental Impact Assessment.

On balance, it appears reasonable on the basis of evidence available that the impacts identified in this sustainability appraisal are capable of satisfactory mitigation and the site nomination can reasonably be included in the Draft Bournemouth, Dorset and Poole Mineral Sites Plan.

Aggregates: AS19 Woodsford NE Extension

Site Name/Location: **AS19 Woodsford NE Extension** Mineral Type: Sand and gravel		Nominee/Agent: Woodsford Farms / D K Symes Local Authority: West Dorset District Council
Site Area: approximately 90 ha	Production: 200,000 – 250,000 tpa;	Reserve: approximately 2.1 mt

Impact Assessment Scoring

- -	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain

Timescales for effects:

P/W: Preparation and Working **R/A**: Restoration and Afteruse

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
1. To move waste management up the waste hierarchy	**N/A**	**N/A**	• This Objective is not relevant to this site nomination	• N/A
2. To maintain, conserve and enhance biodiversity	**+ +**	**+**	**European/International Designations** • The permanent change of at least part of the site area from intensive agriculture to mineral extraction restored to extensive grassland and water bodies would be likely to result in a reduction in nitrate levels in receiving waters of the R. Frome, groundwater and Poole Harbour (SPA and Ramsar). If this can be secured there would be strategic nature conservation gain. • In addition, reduction in intensive agricultural management of the fields between the proposed extraction area and the R. Frome would be an additional significant gain, preventing more direct runoff of fertiliser into the river and onward to Poole Harbour.	• Minimise the area returned to intensive agriculture after working and maintain an area of land between the proposed site and the Frome as non-agricultural use land.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			• These benefits will be realised from the time that the fields are taken out of agricultural production.	
	0	0	**Annex 1 Bird Species** • No impacts expected.	• No action required.
	+ +	+	**National Designations** • Comments made under European/International designations (above) apply to national designations as well	• Minimise the area returned to intensive agriculture after working and maintain the fields between site and Frome as non-agricultural use land.
	–	0	**Protected species** • Water voles and other protected species (including otter) may be present in watercourses contained within the proposed site. • If they are present, mitigation should not be difficult.	• Ecological surveys required, with appropriate mitigation identified.
	0	0	**Local recognitions/designations, including ancient woodland and veteran trees** • No impacts expected	• No action required.
3. To maintain, conserve and enhance geodiversity.	+	0	• Exposures resulting from working may be of interest. Benefits are only expected during working, and are likely to be obscured or covered as part of restoration.	• Operator to be asked to permit visits to view exposures as required.
4. To maintain, conserve and enhance the quality of ground, surface and	+ +	+	**Groundwater** • Site is within 250 m of licensed water supplies. • Overlies secondary aquifer, but does not affect any Source Protection Zone.	• Hydrological assessment required to determine possible impacts, on ground and surface waters, with appropriate mitigation to be implemented.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
sea waters and manage the consumption of water in a sustainable way.			• Assessment required to determine possible impacts on hydrogeology. Impacts to be appropriately mitigated. • Proposal will reduce nitrate contamination of groundwater from agricultural fertiliser.	• Where necessary mitigating measures should be installed to maintain groundwater levels. • Appropriate arrangements should be put in place to ensure that the water leaving the site and entering the rivers/watercourses is of an acceptable quality. • Any fuel on site should be properly stored to avoid contamination in case of spillage. • Appropriate arrangements should be installed for surface water and silt collection and fuel storage to prevent contamination of groundwater resources. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.
	+ +	+	**Surface Water** • River Frome runs north of the site boundary, and there are many other watercourses within and near the site. • Restoration proposals should incorporate gain of wetland features which will contribute to the aspirations of the England Biodiversity Strategy. Ensure no impacts from this development and no increased sedimentation. • Proposal will reduce nitrate contamination of surface water from agricultural fertiliser.	
5. To reduce flood risk and improve flood management.	0	0	**Flooding/Coastal Stability** • Small area of northern part of the site is within FRZ 2/3, most of site within FRZ 1. • Site is proposed for sand and gravel extraction, which is permitted within the functional floodplain. • Processing plant far removed and on FRZ 1.	• Flood Risk Assessment (FRA) will be required. • All necessary mitigation to be implemented.
6. To maintain, conserve and enhance the historic environment (including archaeological sites, historic buildings, conservation areas, historic parks and	– / – –	0	**Archaeology** • Significant prehistoric and Roman material has been found on the western part of the site. Possible medieval/prehistoric settlement in western part of site. • Frome Bridge, which is protected as a Scheduled Monument, lies to the north-west. There is potential for surviving earthworks and structures associated with the management of watermeadow systems.	• Full archaeological survey of the area required to assess possible presence and significance of non-designated remains and to assess whether/how these should be protected during working.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
gardens and other locally distinctive features and their settings).	?		• The presence (or not) of features associated with the watermeadow systems needs to be determined, then the impact on them, and on the setting of Frome Bridge and other historic features and on below-ground archaeology needs to be assessed and evaluated before an informed planning decision could be made • Only when these have been undertaken would the archaeological impact be understood – at present it could be anywhere from Very Significant to No Significant impact.	• All necessary mitigation to be implemented. • Adequate provision to be made for preservation, excavation or recording, as appropriate. • Further consideration to be given to restoration proposals, in terms of historic landscapes.
	?	0	**Historic Landscapes** • The site lies in the broad lower section of the valley of the river Frome. Historically some of the land here was heathland, other parts being wooded and under arable cultivation. On the flat lands close to the river itself, extensive systems of watermeadows were constructed from the 18th century onwards. • The impact on the watermeadow systems in particular needs to be assessed and evaluated, as noted above. Only when this has happened would the impact on the historic landscape be understood. • The Hardy associations of this landscape are discussed below.	
	0	0	**Historic Buildings** • A cluster of listed buildings, all Grade II, are located to the west of the proposed site. However it is considered that the field located between the historic buildings and the site will create a buffer sufficient that there will be no impact from site to the buildings. • The restoration proposals are sufficient to conform with the literary associations of this part of Dorset, in particular the Valley of the Dairies character created by Thomas Hardy. • If the management of the water meadow land alongside the river can be appropriately managed and enhanced this will enhance the historic environment of this proposal.	• A full assessment required to be carried out, with appropriate mitigation implemented as required.
7. To maintain, conserve and enhance the landscape,	–	0	**Landscape Capacity** • The landscape is open and agricultural in character and development has the	• Assessment of potential visual impacts required and all appropriate mitigation to be included.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
including townscape, seascape and the coast.			potential to impact on the openness of this landscape. • Existing and new hedgerows and blocks of woodland provide an element of natural screening which would assist in the mitigation of any quarry development.	• Restoration could include increasing public access/informal recreation and including appropriate nature conservation interests. • Advance planting to be carried out to prepare site for working.
	0	**0**	**Designated Landscapes** • No significant impact expected.	• No action required.
8. To protect and improve air quality and reduce the impacts of noise.	**0**	**0**	• Impacts on air quality expected to be negligible. • No AQMAs will be affected by the working of this site proposal. Any dust resulting from working will be controlled through normal dust-suppression measures. • Noise mitigation will be addressed at the planning application stage, with appropriate mitigation to be included in the development of the site.	• Environmental protection measures to reduce dust and ensure noise is appropriately mitigated.
9. To maintain, conserve and enhance soil quality.	–	**0**	• Site contains/comprises very good quality agricultural land. Working the site will have impacts on this soil. • Restoration will return the land to original ground levels, and will restore the quality of the land.	• Soil to be properly stripped and stored prior to working; protected during working; and re-spread on site after working. • Restoration to include high quality agricultural land.
10. To conserve and safeguard mineral resources.	**+ +**	**0**	• The site would make an important contribution to aggregate supply in Bournemouth, Dorset and Poole.	• No specific action required; site development to take into consideration relevant impacts and mitigate where appropriate.
11. To promote the use of alternative materials.	–	**0**	• This proposal does not at present promote the use of alternative materials. • It is possible that treated inert waste will be used in restoration of the site, but this will not directly promote the use of alternative materials.	• No action required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
12. To provide an adequate and affordable supply of minerals to meet society's needs.	+	0	• Development of this site would provide a benefit in terms of contributing to the provision of a supply of minerals to meet society's needs. • Ensuring a sustainable supply will depend on the development and management of the site. Providing site development takes into account relevant principles of sustainable development it is expected this will contribute to complying with this objective.	• Ensure principles of sustainable development are incorporated into the development of this site.
13. To promote and encourage sustainable economic growth	+	0	• This site proposal is expected to contribute to economic development on two levels – directly through the provision of employment at the site to be developed and indirectly through the provision of aggregate minerals required for the maintenance of built environment and for new built development. Both levels are expected to maintain employment, skilled and unskilled. However given the expected size of the reserve this is likely to be a limited benefit. • There is potential for negative economic impacts, such as dust, noise and increased traffic, which could affect other businesses in the vicinity or even further away. • Restoration to agriculture with some element of public access will, if achieved, offer some economic benefits through both the agriculture and the recreational attraction and use in the wider area (i.e. riding, walking).	• Careful assessment of potential negative impacts required, with appropriate mitigation – this could include buffering/screening and holding back quarry traffic during peak traffic times. • Further assessment required to form a view as to what the most appropriate restoration could be.
	–	+		
14. To adapt to and mitigate the impacts of climate change.	–	0	• Developing the site as a quarry is expected to have some negative impacts regarding climate change, due primarily to machinery used and transportation of mineral away from site. However, these will in relative terms be negligible. • The Bournemouth, Dorset and Poole Minerals Strategy seeks to address and minimise such impacts through Policy CC1 which requires operators to take into consideration climate change impacts and their possible mitigation for any proposed minerals development.	• Use energy efficient plant and machinery. • Implement restoration which provides appropriate habitats to help to increase resilience of flora/fauna.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			• The development management policies, e.g. DM 1, also address and seek to minimise the issue of sustainable development and climate change. • Restoration to some form of vegetated environment will offer benefits in the form of climate change mitigation, including provision of habitat for wildlife, but again these will be relatively small.	
15. To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any residual impacts.	**0**	**0**	• This is a large site of approximately 90 hectares located to the north of the C33 road through Woodsford. While no estimation of vehicular trips were given, the estimated annual output of 200,000 to 250,000 tonnes could reasonably generate 100 trips or more per day. • The surrounding highway network is narrow and torturous in nature with few passing areas and limited forward visibility. There would be likely to be a strong highway objection to this scheme if it proposed to use any of these local roads. • However, mineral extracted will be conveyed to the existing Hills' site, with access immediately west of the level crossing on the D21322. • This site would require a full Transport Assessment were it to be submitted as a planning application. Any TA should initially be scoped with the Transport Development Management Team. It would also need to consider the Highways Agency concerns with regards to movements to the A35T. • Policies DM1 and DM 8 actively address this issue of minimising impacts on the transportation network.	• Transport Assessment to be carried out, identifying opportunities for reducing impacts on the transport network. • Mineral to be conveyed by internal haul routes or conveyors to existing Hills plant site for processing and export.
16. To support and encourage the use of sustainable transport modes,	–	**0**	• The proposed extension can only realistically be accessed by means of road transport, resulting in a negative impact during development and working. • However, the site will utilise internal conveyors to transport mineral for processing.	• Mitigate impacts where identified and appropriate.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
imposing no unmitigated negative impacts on them.	+		• As far as reasonably possible negative impacts resulting from access and transport will be mitigated, as required by Policies DM1 and DM8 of the Minerals Strategy.	
17. To sustain the health and quality of life of the population	–	0	**Impact on Sensitive Human Receptors** • Residences and businesses within 250-500m. The site is large enough that it should be possible to screen these residences satisfactorily. • Development would likely require appropriate mitigation (such as visual and noise attenuation bunding, standoffs) to limit impacts.	• Provision of appropriate mitigation, following assessment of likely impacts. • Restoration to improve landscape of site where possible; and to seek to increase public access. • Screening, bunding, standoffs will mitigate impacts to some extent. • Cumulative impacts on surroundings of working along with the adjacent Hurst Farm proposed site to be taken into consideration and mitigated against.
	0	0	**Impact on Existing Settlements** • Crossways is approximately 1.3km to the south and Higher Woodsford some 900m. East Woodsford is within 500m to the east, Tincleton some 700m to the north. • Site is well screened by existing hedges/trees. The site is large enough that where necessary it should be possible to screen any negative impacts satisfactorily, using mitigation such as visual and noise attenuation bunds. • Site is relatively isolated and unlikely to impact any of these sites visually or through increased traffic.	
	0	0	**Impact on Airport Safety** • The site is some 35 km from the airport and not considered to be a threat.	• No action required.
18. To enable safe access to countryside and open spaces.	0	0 +	**Impact on Recreational Land** • Site is agricultural land – it does not include any formal/informal recreational land, apart from footpath crossing it. • Restoration could include some aspect of improved public access.	• No action required for working. • Consider including some aspect of public access as part of restoration.
	–	0	**Impact on Public Rights of Way**	• Assessment of impacts, with

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
		+	• Footpath crosses the site and will need temporary/permanent diversion. • Opportunities for increased public access following restoration, to be considered.	appropriate mitigation identified. • Restoration to improve public access in the area.

Preliminary Hydrological Risk Assessment

Controlled Waters	Issues/Risks	Mitigation	Further information/approval required
• Watercourses • Ponds/lakes, including wet habitats • Groundwater	• The River Basin Management Plan South West River Basin District identifies the Frome as being of 'Poor' environmental quality in this area. Potential for contamination from runoff from site. • Potential for contamination of controlled waters through spillage or seepage of pollutants such as fuel, or silt in water. • Contamination of water supplies or reduction in amount of water available for licenses supplies. • Impacts on or removal of surface water features.	• Appropriate arrangements to be made for ensuring that runoff from the site does not enter the Frome or groundwater unless any silt has first been removed. • Fuel stored on site to be appropriately bunded and sealed to prevent any spillage from entering ground or surface waters. • On-going monitoring during development and working of the site. • Relocation of surface water features, provided this is feasible. • Need to consider compliance to the Restoration Plan for the River Frome and its floodplain.	• Full hydrogeological risk assessment will be required as part of a planning application. • Flood Risk Assessment • Water Framework Assessment • Further assessment of potential impacts on water quality and levels, particularly for groundwater, is required prior to development. • Assessment of the feasibility of relocating or re-creating surface water features and associated habitats and species. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.

Flood Risk Commentary

The site falls entirely within Flood Zone 1 (low risk – fluvial flooding) according to the Environment Agency's relevant flood modelling, but is in close proximity to the floodplain of the Main River Frome, and associated extent of Flood Zones 2 & 3 (medium & high risk) immediately to the north.

This proximity is likely to maintain / elevate ground water levels throughout the site. In addition, there is some theoretical risk of surface water flooding, shown by relevant mapping which indicates isolated ponding during severe rainfall events (1:100/1000yr). A site specific strategy of surface water management should be requested to ensure that the proposal does not increase rates of runoff or generate off site worsening. As such the proposed activity should comply with the recommendations of the NPPF. Prior Land Drainage

Consent may be required from DCC as relevant LLFA, for any works offering an obstruction to flow within a channel or ditch with the status of Ordinary Watercourse.

Sand and gravel extraction is water compatible, so suitable in flood risk terms for allocation in Draft Mineral Sites Plan provided the appropriate hydrological assessment is carried out and a Flood Risk Assessment prepared and land within Flood Risk Zone 1 is available for location of processing facilities and stockpiles.

Suitable in flood risk terms for allocation in Draft Mineral Sites Plan.

Cumulative Impacts

The site is an extension to a current aggregates quarry, in an area where there is other aggregate working both existing and proposed. As an extension, no intensification leading to cumulative impacts for traffic is expected.

There could be cumulative visual/landscape impacts, depending on how much of previous working of other parts of the site have been effectively restored when the North East Extension is applied for. This should be addressed at the stage of the planning application. Full visual impact assessment will be required, to identify impacts and mitigation.

The proposal is within 5Km of a site to the south of Crossways village allocated in the Pre -Submission draft West Dorset, Weymouth and Portland Local Plan (June 2012) as amended by Proposed Modifications (June 2013), (Policy CRS1) for residential (500 dwellings) and employment (3.5Ha) development. Traffic arising from this new development will add to general traffic levels on the B3390.

This site is immediately adjacent to (west of) another sand and gravel site nomination, AS25 Hurst Farm, Moreton. In terms of access there are unlikely to be cumulative impacts as the two sites would be accessed via different roads. Hurst Farm would add some additional traffic onto the B3390.

The main cumulative impact would occur if this site proposal was to be worked simultaneously with the proposed Woodsford Extension, immediately to the west. This could lead to disturbance to properties on the north side of the Frome. The working of these sites will be phased to ensure that they do not work in adjacent areas simultaneously. The northern boundary of the site has been pulled back to provide a greater buffer.

The existing Warmwell Quarry, to the west of Crossways, has finished production, which as led to a reduction in lorry traffic on local roads.

Viability

As an extension to an existing operational site, viability is accepted. The site will use existing processing facilities, road access and serve existing markets, and therefore these do not have to be provided. Mineral has been proven. The site is considered viable, for allocation in the Plan.

Summary.

Potential Benefits	Potential Impacts
• Provision of aggregates required for maintenance and construction of the built environment.	• There are expected to be heritage/archaeological impacts but it is expected that these impacts can be addressed.

- Restoration could include some increased and improved public access.
- Working the site will provide hydrology benefits to nature conservation, ground and surface water and European and national nature conservation designations, through removing then limiting the flow of nitrates into ground and surface waters.
- Restoration could include nature conservation benefits through management of the northern part of the site as wetland and reducing the land under intensive agriculture.

- Possible impacts on the carrying capacity of the landscape, advanced planting should address this issue.
- The land is good quality agricultural land. Working the site for minerals will impact on this use and on the soil on the site. However the soils can be adequately protected and together with the agricultural use, restored or partly restored after working.
- Although relatively remote and mostly visually screened, working this site could have visual and noise impacts for properties/businesses to the north of the site, on the other side of the river. All appropriate mitigation to be put in place to minimise such impacts.
- A relatively small section of footpath crosses the western part of the site – this can be either temporarily or permanently diverted or screened and avoided.
- As an extension, site is not expected to cause intensification of impacts but will increase the time period that impacts are experienced e.g. transport impacts.

Overall Recommendation:

This site is an extension of an existing quarry. No intensification of working is expected and any likely impacts are expected to be capable of mitigation. Site access and mineral processing will be via the existing operation. The proposal offers the strong benefit of reducing the flow of agricultural fertilisers into the groundwater, the Frome and ultimately into Poole Harbour. Depending on the final restoration of the site, nitrate flow could be reduced permanently.

Although well screened, it is possible that when the northern part of this site is worked there could be impacts on the amenity of residences/businesses across the river. To avoid this, mitigation will be required, including pulling the northern boundary of the site back. In addition, phasing of the working of this site and of the proposed site to the east, AS26 Hurst Farm, will be arranged in such a way that the northern sections of the two sites are not being worked adjacently and simultaneously.

The issue of cumulative impact must be carefully addressed. The proposed site is immediately adjacent to the proposed Hurst Farm site and adjacent areas of these two sites should not be worked simultaneously, particularly in the northern parts of each site, to minimise impacts on residences and businesses across the river.

Pulling the northern boundary back and leaving an area of unworked land to be managed as wetland will both assist in reducing nitrate flows to the river and reducing impacts on surrounding receptors.

On balance, it appears reasonable on the basis of evidence available that the impacts identified in this sustainability appraisal are capable of satisfactory mitigation and the site nomination can reasonably be included in the Draft Bournemouth, Dorset and Poole Mineral Sites Plan.

Aggregates: AS25 Station Road, Moreton

Site Name/Location: **AS25 Station Road, Moreton** Mineral Type: Sand and gravel		Nominee/Agent: Moreton Estate / Halletec Environmental Local Authority: Purbeck District Council
Site Area: approximately 60 ha	Production: approximately 200,000 tpa	Reserve: approximately 3.1 million tonnes

Impact Assessment Scoring

- -	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain

Timescales for effects:

P/W: Preparation and Working **R/A**: Restoration and Afteruse

Sustainability Objectives	Effects P/W	Effects R/A	Commentary	Mitigation
1. To move waste management up the waste hierarchy	**N/A**	**N/A**	• This Objective is not relevant to this site nomination	• N/A
2. To maintain, conserve and enhance biodiversity	**+**	**+**	**European/International Designations** • No impacts expected • Site working and restoration has the potential to reduce the flow of nitrates into the groundwater, the Frome and ultimately Poole Harbour	• No action required for working. • Consider restoration that will include some areas for nature conservation and not to be used for agriculture.
	0	**0**	**Annex 1 Bird Species** • No impacts expected.	• No action required.
	+	**+**	**National Designations** • No impacts expected during working. • Site working and restoration has the potential to reduce flow of nitrates into the groundwater, the Frome and ultimately Poole Harbour	• No action required for working. • Consider restoration that will include some areas for nature conservation and not to be used for agriculture.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	0	0	**Protected species** • No impacts expected	• No action required.
	0	0	**Local recognitions/designations, including ancient woodland and veteran trees** • No impacts expected	• No action required.
3. To maintain, conserve and enhance geodiversity.	+	0	• The extraction of tertiary deposits and created exposures are of on-going interest to Tertiary and Quaternary geo-scientists as potential, if not active, research sites. • Benefits are only expected during working, and are likely to be obscured or covered as part of restoration.	• Operator to be asked to permit visits to view exposures as required.
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	–	0	**Groundwater** • Licensed abstraction within 500 m. Does not affect any Source Protection Zones. Overlies Secondary aquifer. • Proposals would need to be supported with a hydrogeological risk assessment. • Site working and restoration has the potential to reduce flow of nitrates into the groundwater, the Frome and ultimately Poole Harbour	• Hydrological assessment required **at planning application stage** to determine possible impacts on ground and surface waters, with appropriate mitigation to be implemented. • Where necessary mitigating measures should be installed to maintain groundwater levels. • Appropriate arrangements should be put in place to ensure that the water leaving the site and entering the rivers/watercourses is of an acceptable quality. • Any fuel on site should be properly stored to avoid contamination in case of spillage. • Appropriate arrangements should be installed for surface water and silt collection and fuel storage to prevent contamination of groundwater resources.
	+			
	–	0	**Surface Water** • The proposed site shows watercourses running within it. It will need to be proved that the extraction proposals will not have an adverse effect on the natural hydrology and water quality at the site allocation phase. • Applicants or developers should be aware of their responsibilities to ensure that the operations do not	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	+		interfere with riparian owners' common law rights to receive water undiminished in quantity or quality.	• Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse. • Consider restoration that will include some areas for nature conservation and not to be used for agriculture.
5. To reduce flood risk and improve flood management.	0	0	**Flooding/Coastal Stability** • No Environment Agency objection with regard to flood risk issues for this site. Site is entirely within Flood Risk Zone 1. • As the site is greater than 1 hectare, a site specific Flood Risk Assessment (FRA) will be required in support of any future planning application.	• Flood Risk Assessment (FRA) will be required. • All necessary mitigation to be implemented.
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).	?	0	**Archaeology** • The size of the site and the presence of known historic features in the vicinity (notably those in and around the village of Moreton) indicate that the site has a high archaeological potential. • The potential impact on below-ground archaeological remains needs to be assessed and evaluated before an informed planning decision can be made. • Only when these have been undertaken would the archaeological impact be understood – at present it could be anywhere from Very Significant Impact to No Significant/Negligible Impact.	• Archaeological survey of the area will be required to assess possible presence and significance of non-designated remains and to assess whether/how these should be protected during working. • All necessary mitigation to be implemented. • Adequate provision to be made for preservation, excavation or recording, as appropriate. • Assessment to include consideration of current land use and field pattern. • Further consideration to be given to restoration proposals, in terms of historic landscapes.
	?	0 +	**Historic Landscapes** • The site lies in the broad lower section of the valley of the River Frome. Historically some of the land here was heathland, other parts being wooded and under arable cultivation. • Assessment of the age and importance of the present land use and field pattern would be needed for an informed planning decision to be made. • Impact could be anywhere between Significant Adverse and No Significant /Negligible, depending on the results of this assessment and the development's working and restoration methods.	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	– –	0	**Historic Buildings** • Station Road is lined on both sides with an informal avenue of trees and shrubs. The two closest listed buildings are sited to face along the road rather than across it at the site. The avenue of trees will limit impacts on these buildings and their settings. • The presence of these heritage assets constitutes a constraint that has been given considerable weight and importance.	• Full heritage assessment required to be carried out, with appropriate mitigation identified and implemented as required. • If the impacts cannot be mitigated satisfactorily the site will not be developed.
	0			
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	–	0	**Landscape Capacity** • Less significant landscape impact. Landscape capacity to accommodate the site is medium. The main impacts for the site will be from the B3390, Station Rd and Redbridge Rd as there are no rights of way through or near the site. • Development will create a medium adverse impact on the openness of the river valley pasture landscape and a significant adverse impact on the pattern of field boundary hedgerows/trees and copses.	• Assessment of potential visual impacts required and all appropriate mitigation to be included. • Restoration could include increasing public access/informal recreation and including appropriate nature conservation interests. • Advance planting to be carried out to prepare site for working.
		+		
	0	0	**Designated Landscapes** • No impact on designated landscapes or their setting.	
8. To protect and improve air quality and reduce the impacts of noise.	0	0	• Impacts on air quality expected to be negligible. • No AQMAs will be affected by the working of this site proposal. Any dust resulting from working will be controlled through normal dust-suppression measures. • Noise mitigation will be addressed at the planning application stage, with appropriate mitigation to be included in the development of the site.	• Environmental protection measures to reduce dust and ensure noise is appropriately mitigated.
9. To maintain, conserve and enhance soil quality.	–	0	• Site contains/comprises good to moderate quality agricultural land. Working the site will have impacts on this soil. • Soils will be stripped and removed to be stored and.	• Soil to be properly stripped and stored prior to working; protected during working; and returned as part of restoration.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			• It is expected that restoration will return at least part of the land to original ground levels, and will restore the quality of the land.	• Restoration to include high quality agricultural land.
10. To conserve and safeguard mineral resources.	+ +	0	• The site would make an important contribution to aggregate supply in Bournemouth, Dorset and Poole.	• No specific action required. • Site development to take into consideration relevant impacts and mitigate where appropriate.
11. To promote the use of alternative materials.	0	0	• This proposal does not at present promote the use of alternative materials. • It is possible that treated inert waste will be used in restoration of the site, but this will not directly promote the use of alternative materials.	• No action required.
12. To provide an adequate and affordable supply of minerals to meet society's needs.	+	0	• Development of this site would provide a benefit in terms of contributing to the provision of a supply of minerals to meet society's needs. • Ensuring a sustainable supply will depend on the development and management of the site. Providing site development takes into account relevant principles of sustainable development it is expected this will contribute to complying with this objective.	• Ensure principles of sustainable development are incorporated into the development of this site.
13. To promote and encourage sustainable economic growth	+ –	0 +	• This site proposal is expected to contribute to economic development on two levels – directly through the provision of employment at the site to be developed and indirectly through the provision of aggregate minerals required for the maintenance of built environment and for new built development. Both levels are expected to maintain employment, skilled and unskilled. • Restoration to agriculture with some element of public access will, if achieved, offer some economic benefits through both the agriculture and the recreational attraction and use in the wider area (i.e. riding, walking). • There is potential for negative economic impacts, such as dust, noise and increased traffic, which could affect other businesses in the vicinity or even further away.	• Careful assessment of potential negative impacts required, with appropriate mitigation – this could include buffering/screening and holding back quarry traffic during peak traffic times. • Further assessment required to form a view as to what the most appropriate restoration could be.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
14. To adapt to and mitigate the impacts of climate change.	–	**0**	• Developing the site as a quarry is expected to have some negative impacts regarding climate change, due primarily to machinery used and transportation of mineral away from site. However, these will in relative terms be negligible. • The Bournemouth, Dorset and Poole Minerals Strategy seeks to address and minimise such impacts through Policy CC1 which requires operators to take into consideration climate change impacts and their possible mitigation for any proposed minerals development. • The development management policies, e.g. DM 1, also address and seek to minimise the issue of sustainable development and climate change. • Restoration to some form of vegetated environment will offer benefits in the form of climate change mitigation, including provision of habitat for wildlife, but again these will be relatively small.	• Use energy efficient plant and machinery. • Implement restoration which provides appropriate habitats to help to increase resilience of flora/fauna.
15. To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any residual impacts.	–	**0**	• This site has an estimated 200,000 tonnes annual output and approximately 80 vehicle trips per day (40 in and 40 out). Access to the site is proposed from the B3390. This is a straight road at this point with hedgerows on either side and some large trees along the roadside edge. It should be possible to find a suitable access point along the site frontage, avoiding significant trees. • Visibility splays suitable for 60 mph will be needed for this access and some hedgerow loss or relocation may be necessary to achieve this. Access should not be via the C33, Station Road that runs along the northern boundary of the site and forms part of National Cycle Network route 2 (NCN2). • This site would require a full Transport Assessment were it to be submitted as a planning application. Any TA should initially be scoped with the Transport Development Management Team. It may also need to consider Highways Agency concerns with regards to movements to the A35T. • Due to the direct access from this site onto the B3390, and the reasonable possibility of an acceptable access provision, this site has been	• Transport Assessment to be carried out, identifying opportunities for reducing impacts on the transport network.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			given a D (No Significant/Negligible Impact) rating. • Policies DM1 and DM 8 of the 2014 Minerals Plan actively address this issue of minimising impacts on the transportation network.	
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	–	0	• The proposed extension can only realistically be accessed by means of road transport, resulting in a negative impact during development and working. • As far as reasonably possible negative impacts resulting from access and transport will be mitigated, as required by Policies DM1 and DM8 of the Minerals Strategy.	• Mitigate impacts where identified and appropriate.
17. To sustain the health and quality of life of the population	–	0 +	**Impact on Sensitive Human Receptors** • Residential properties adjacent to site and in vicinity of site. Site is large enough to include appropriate mitigation to adequately screen surrounding properties from visual/noise impacts. • Impact will be somewhere between 'Significant' and 'Less Significant', given size of site and levels of screening existing and to be created. • Development is likely to require appropriate mitigation (such as visual and noise attenuation bunding, standoffs) to limit impacts.	• Provision of appropriate mitigation, following assessment of likely impacts. • Restoration to improve landscape of site where possible; and to seek to increase public access. • Screening, bunding, standoffs will mitigate impacts to some extent.
	–	0 +	**Impact on Existing Settlements** • Moreton village itself is adjacent to the eastern end of the proposed site. Again, the size of the site and the level of existing tree screening should make it possible to effectively screen the workings from the village. No quarry traffic would enter the village. Crossways is approximately 1 km away but completely screened. • Villages along the B3390 may be affected by site traffic, depending on where the site is accessed. • Transport issues/impacts are addressed separately. • Site is well screened by existing hedges/trees. The site is large enough that where necessary it	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			should be possible to screen any negative impacts satisfactorily, using mitigation such as visual and noise attenuation bunds. • Site is relatively isolated and unlikely to impact any of these sites visually or through increased traffic. Impact will be somewhere between 'Significant' and 'Less Significant', given size of site and levels of screening existing and to be created.	
	0	**0**	**Impact on Airport Safety** • The site is some 35 km from the airport and not considered to be a threat.	• No action required.
18. To enable safe access to countryside and open spaces.	**0**	**+/?**	**Impact on Recreational Land** • Site is agricultural land and does not appear to include any formal or informal recreational facilities. • Restoration could include some element of public access.	• No action required for working. • Consider including some aspect of public access as part of restoration.
	0	**+/?**	**Impact on Public Rights of Way** • Site is agricultural land and there are no public rights of way on, adjacent to or visible from the land. • Opportunities for increased public access following restoration to be considered.	• Consideration to be given to opportunities for improving public access in the area through restoration.

Preliminary Hydrological Risk Assessment

Controlled Waters	Issues/Risks	Mitigation	Further information/approval required
• Watercourses • Ponds/lakes, including wet habitats • Groundwater	• The River Basin Management Plan South West River Basin District identifies the Frome as being of 'Poor' environmental quality in this area. Potential for contamination from runoff from site. • Potential for contamination of controlled waters through spillage or seepage of pollutants such as fuel, or silt in water. • Contamination of water supplies or reduction in amount of water available for licenses supplies. • Impacts on or removal of surface water features.	• Appropriate arrangements to be made for ensuring that runoff from the site does not enter the Frome or groundwater unless any silt has first been removed. • Fuel stored on site to be appropriately bunded and sealed to prevent any spillage from entering ground or surface waters. • On-going monitoring during development and working of the site. • Relocation of surface water features, provided this is feasible. • Need to consider compliance to the Restoration Plan for the River Frome and its floodplain.	• Full hydrogeological risk assessment will be required as part of a planning application. • Flood Risk Assessment • Water Framework Assessment • Further assessment of potential impacts on water quality and levels, particularly for groundwater, is required prior to development. • Assessment of the feasibility of relocating surface water features and associated habitats and species. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.

Flood Risk Commentary

Site is entirely within Flood Zone 1.

Some risk of flooding from surface water. Flood Risk Assessment would be required at planning application stage, with a site specific strategy for surface water management that does not increase rates of runoff or generate off site worsening

Sand and gravel extraction is water compatible, so suitable in flood risk terms for allocation in Draft Mineral Sites Plan provided the appropriate hydrological assessment is carried out and a Flood Risk Assessment prepared.

Climate Change predictions may result in flood outlines greater than existing Flood Zone 2. Processing plant/storage/stockpiles should preferably be located in Flood Zone 1, and should be located as far from Flood Zones 2 & 3 as reasonably possible.

Viability

This is a new site proposal. The mineral on the site has been proven, and issues such as site access seem achievable. If part of the site was sterilised through creation of a buffer against the Conservation Area to the north, this could affect viability. However, this site is being worked in sequence with the AS26 Hurst Farm site and together it is felt they provide a viable quantum of mineral, even if the Station Road site is reduced in size.

Heritage Impacts

The northern boundary of the site as identified is close to the boundary of the Moreton Conservation Area, including Listed Buildings. There is already an 80m buffer proposed, between Station Road and the edge of the proposed allocation.

This proximity, and the impact the development of the site would have on the setting of these heritage assets must be carefully considered against the public and other benefits of aggregate production.

Policy/Legislative Background

The Historic England website notes:

When making a decision on all listed building consent applications or any decision on a planning application for development that affects a listed building or its setting, a local planning authority must have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses. Preservation in this context means not harming the interest in the building, as opposed to keeping it utterly unchanged.

This obligation, found in sections 16 and 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990, applies to all decisions concerning listed buildings.

The recent Court of Appeal decision in the case of Barnwell vs East Northamptonshire DC 2014(2) made it clear that in enacting section 66(1) of the Planning (Listed Buildings and Conservation Areas) Act 1990 (1) Parliament's intention was that ***'decision makers should give "considerable importance and weight" to the desirability of preserving the setting of listed buildings' when carrying out the balancing exercise'.***

Section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990 (" the 1990 Act ") provides:

"(1) In considering whether to grant planning permission for development which affects a listed building or its setting, the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses."

Section 72 of the 1990 Act provides:

"(1) In the exercise, with respect to any buildings or other land in a conservation area, of any of the provisions mentioned in sub-section (2), special attention shall be paid to the desirability of preserving or enhancing the character or appearance of that area.

(2) The provisions referred to in sub-section (1) are the planning Acts …"

A finding of harm to the setting of a listed building is a consideration to which the decision-maker must give "considerable importance and weight" (The Bath Society v Secretary of State for the Environment [1991] 1 W.L.R. 1303, per Glidewell LJ at 1319; and see East Northamptonshire District Council v Secretary of State for Communities and Local Government [2015] 1 W.L.R. 45 , per Sullivan LJ at [22]–[23] and [29]).

The relevant policies of the National Planning Policy Framework are paragraphs 128–135, the material parts of which provide:

"128. In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance… 129. Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise…

131. In determining planning applications, local planning authorities should take account of:

"• the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation; …"

132. When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation. The more important the asset, the greater the weight should be. …

133. Where a proposed development will lead to substantial harm to or total loss of significance of a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or loss is necessary to achieve substantial public benefits that outweigh that harm or loss, or all of the following apply: …

134. Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal, including securing its optimum viable use.

135. The effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that affect directly or indirectly non-designated heritage assets, a balanced judgment will be required having regard to the scale of any harm or loss and the significance of the heritage asset."

The National Planning Policy Framework (paragraph 144) also states:

When determining planning applications, local planning authorities should:

- *give **great weight** to the benefits of the mineral extraction, including to the economy;*

Commentary

In considering the potential development of the Station Road site, with acknowledged impacts on a designated heritage asset, the following points have been taken into consideration.

- There is "a strong presumption against harm to designated assets" (Barnwell [2014] EWCA Civ 137; Forge Field [2014] EWHC 1895 (Admin))
- "Considerable weight" must be given to harm to designated assets, however slight, if more than de minimis (Barnwell; Forge Field; Jones [2015] EWCA Civ 1243)
- *Mordue v Secretary of State for Communities and Local Government and others* [2015] EWCA Civ 1243. Heritage assets have statutory protection, unlike other material considerations; and the NPPF has a complex template for their consideration. Both must be considered in an assessment.
- Failure to assess alternative sites on appropriate public interest criteria (Forge Field; ENV4)
- The policy presumption in favour of sustainable development does not apply to cases of harm to designated assets (Gladman [2016] EWHC 421 (Admin))
- Cumulative effects must be considered (PPG)
- All recognised harm must be included in the recommended Planning balance (Barnwell)
- Undue weight should not be given to the temporary nature of development (National Wind Power [1999] N.P.C. 128)

Development of the site would not cause substantial harm to the Conservation Area and the Listed Buildings but would have an impact on its setting. Development of the site would result in temporary harm to the setting of these heritage assets – this would be 'less than substantial' harm, for a temporary period. This harm has been given great and considerable weight in this assessment.

A range of sites nominated for allocation in the Mineral Sites Plan for sand and gravel quarries have been assessed on heritage grounds and on a range of other grounds. A number have been rejected for reasons other than heritage issues. The remaining sites have been included in the Draft Mineral Sites Plan.

The proposal is for a temporary period, after which the site will be restored and the impact on the heritage asset setting will be removed.

The Heritage Impact Assessment that would be carried out as part of any planning application would identify the setting of the heritage assets and would identify appropriate mitigation to offset the harm to the setting resulting from development of the site to a level that would allow the development to go ahead.

It is expected that the mitigation would be a combination of screening (an earth bund) and a standoff/buffer.

If mitigation is not possible, or if the necessary standoff was such that it made the site uneconomic to develop, then the development would not go ahead.

In considering potential impacts and mitigation, it must be remembered that this is not a planning application, but a nomination for allocation of a site in the Mineral Sites Plan. The evidence required and level of assessment carried out **at this stage** are considered to be proportionate and appropriate. At the planning application stage[13] a detailed Heritage Impact Assessment on the assets and their settings will be carried out, as part of an Environmental Impact Assessment, and the appropriate mitigation identified and applied.

At the current stage, the Mineral Planning Authority is considering whether the proposed nomination can reasonably be allocated through the Mineral Sites Plan, on the understanding that appropriately detailed assessment work will be carried out at a later date, and appropriate mitigation applied.

Although inclusion in an adopted plan gives a site allocation greater weight and likelihood of development, it is **not** deemed planning permission. Any allocation in an adopted plan still needs to go through the full planning application process, including Environmental Impact Assessment, and if impacts are identified that cannot be satisfactorily mitigated, the proposal will not receive permission.

It is considered, taking into account:

- the less than substantial harm to the setting of the heritage assets;
- the great and considerable weight given to such harm, and the strong presumption against such harm;
- the temporary nature of the harm
- the great weight to be given to the provision of mineral
- the fact that minerals must be worked where they are found
- the fact that this is an extension site, and the processing plant and other infrastructure is already available
- the fact that the proposed development will be subject to planning application including Environmental Impact Assessment, and impacts on the setting will be assessed in detail and appropriate mitigation identified

that the public benefit to be received from this proposed development, and the nature and duration of the development causing harm, together with the scope for mitigating this harm, are such that the site should be allocated in the Mineral Sites Plan.

Cumulative Impacts

This site is a new proposal in an area where there is already mineral working. Depending on when it might start and what other sites are operating in the area, there could be an increased level of traffic on local roads, including the B3390.

There are no sites allocated for major development in the Purbeck Local Plan Part 1 (adopted Nov 2012) within 5 km of the proposal. The emerging Purbeck District Council Plan has considered housing development in the vicinity, as has the emerging West Dorset District Council plan.

Transport modelling has been carried out which indicates that the road network can carry the possible traffic levels. Quarry traffic can be held back during peak flow times, to minimise impacts. It is considered that any cumulative impacts can be satisfactorily mitigated.

[13] Dorset County Council is currently considering an application for the development of the Hurn Court Farm Extension

Summary.

Potential Benefits	Potential Impacts
• Provision of aggregate to support the local and wider economy, with accompanying benefits to the economy. • Improved public access may be possible as a part of site restoration. • Reduction of nitrates entering the ground and surface waters and the Frome, possibly on a long-term basis, with benefits to water quality and to nature conservation designations in Poole Harbour.	• Further information will be required on hydrogeology at planning application stage. • Surface drains flow across the surface and any impacts on these will need to be appropriately mitigated. • Development of this site could have significant impacts on archaeology or landscape. Further assessment is required but it is expected that any impacts will be capable of mitigation. • All soils to be properly removed, stored and used in restoration, to minimise impacts on soils. • A Transport Assessment will be required and there may be some transport-related impacts, but it is expected that these will be capable of mitigation. • Development of this site could lead to impacts on neighbouring properties and the village of Moreton. However, all impacts will be required to be appropriately mitigated and it is expected that this will be possible, particularly given the size of the site.

Overall Recommendation:

This is a new site proposal. Further assessment is required to identify all potential impacts along with required mitigation. The proposal offers benefits, including reducing the flow of agricultural fertilisers into the groundwater, the Frome and ultimately into Poole Harbour. It is removed from the protected heathland designations. It is expected that impacts on amenity can be satisfactorily mitigated.

On balance, it appears reasonable on the basis of evidence available that the impacts identified in this sustainability appraisal are capable of satisfactory mitigation and the site nomination can reasonably be included in the Draft Bournemouth, Dorset and Poole Mineral Sites Plan.

Aggregates: AS26 Hurst Farm, Moreton

Site Name/Location: **AS26 Hurst Farm, Moreton** Mineral Type: Sand and gravel		Nominee/Agent: Moreton Estate / Halletec Environmental Local Authority: Purbeck District Council
Site Area: approximately 75 ha	Production: approximately 200,000 tpa	Reserve: approximately 3.3 mt

Impact Assessment Scoring

- -	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain

Timescales for effects:

P/W: Preparation and Working **R/A**: Restoration and Afteruse

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
1. To move waste management up the waste hierarchy	**N/A**	**N/A**	• This Objective is not relevant to this site nomination	• N/A
2. To maintain, conserve and enhance biodiversity	**+ +**	**+**	**European/International Designations** • The permanent change from intensive agriculture to mineral extraction restored to extensive grassland and water bodies would be likely to result in a significant reduction in nitrate levels in receiving waters of the R. Frome, groundwater and Poole Harbour (SPA and Ramsar). If this can be secured there would be strategic nature conservation gain. • In addition, reduction in intensive agricultural management of the fields between the proposed extraction area and the R. Frome would be an additional significant gain, preventing more direct runoff of fertiliser into the river and onward to Poole Harbour. • These benefits will be realised from the time that the fields are taken out of agricultural production.	• Minimise the area returned to intensive agriculture after working and maintain an area of land between the proposed site and the Frome as non-agricultural use land.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	0	0	**Annex 1 Bird Species** • No significant impacts expected	• No action required.
	+ +	+	**National Designations** • Comments made under European/International designations (above) apply to national designations as well	• Minimise the area returned to intensive agriculture after working and maintain the fields between site and Frome as non-agricultural use land.
	0	0	**Protected species** • No significant impacts expected	• No action required.
	+	+	**Local recognitions/designations, including ancient woodland and veteran trees** • Site has potential to contribute to Water Framework Directive (WFD) targets and reduce nitrate enrichment within downstream water bodies if restored to partial wetland.	• Further consideration to be given to restoration options and contributing to WFD targets.
3. To maintain, conserve and enhance geodiversity.	+	0	• The extraction of tertiary deposits and created exposures are of on-going interest to Tertiary and Quaternary geo-scientists as potential, if not active, research sites. • No specific scientific gains or geodiversity enhancements are likely but the exposures may be of interest to the quaternary and tertiary research associations. Provision should be made so that it will be possible to arrange such visits on request.	• Operator to be asked to permit visits to view exposures as required.
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the	?	+	**Groundwater** • Site boundary is within 100 m of a groundwater SPZ1 and there is a licensed abstraction within 250m (adjacent). • The proposed development will need to be supported with a hydrogeological risk assessment at the planning application stage as Hurst Farm is on the border with	• Hydrological assessment required at planning application stage to determine possible impacts on ground and surface waters, with appropriate mitigation to be implemented.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
consumption of water in a sustainable way.	+ +		a groundwater Source Protection Zone 1 (SPZ1) and a licensed abstraction. • Development has the potential to reduce the level of nitrate entering the groundwater and affecting the Frome and Poole Harbour.	• Where necessary mitigating measures should be installed to maintain groundwater levels. • Appropriate arrangements should be put in place to ensure that the water leaving the site and entering the rivers/watercourses is of an acceptable quality. • Any fuel on site should be properly stored to avoid contamination in case of spillage. • Appropriate arrangements should be installed for surface water and silt collection and fuel storage to prevent contamination of groundwater resources. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.
	?	+	**Surface Water** • There are watercourses shown running within the proposed site and River Frome runs north of the site boundary. • It will need to be proved that the minerals proposals will not have an adverse effect on the natural hydrology and water quality. • Restoration proposals should incorporate gain of wetland features which will contribute to the aspirations of the England Biodiversity Strategy. Ensure no impacts from this development and no increased sedimentation. • Development has the potential to reduce the level of nitrate entering the Frome and Poole Harbour.	
	+ +			
5. To reduce flood risk and improve flood management.	0	0	**Flooding/Coastal Stability** • Since part of the site (approximately 10 hectares) lies within Flood Zones 2 and 3, should the actual working area encroach within the floodplain (Flood Zones 2 & 3) there is a requirement to demonstrate application of the Sequential Test. • Processing plant and ancillary infrastructure will be sited outside of Flood Zones 2 & 3 and will not constitute a flood risk. There will be no storage of materials within the flood plain. • A site specific Flood Risk Assessment (FRA) will be required in support of any future planning application.	• Flood Risk Assessment (FRA) will be required. • All necessary mitigation to be implemented.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
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).	?	0	**Archaeology** • There is possibly a watermeadow system on part of the site. The Dorset Historic Environment Record mentions a find of prehistoric flint within the site, and the Scheduled Monument of Hurst Bridge (1002422) lies not far to the east. • The presence (or not) of features associated with the watermeadow systems needs to be determined, then the impact on them, and on the setting of Hurst Bridge and other historic features and on below-ground archaeology needs to be assessed and evaluated before an informed planning decision could be made. • Only when these have been undertaken would the archaeological impact be understood – at present it could be anywhere from a 'Very Significant Adverse Impact' to 'No Significant or Negligible Adverse Impacts'.	• Archaeological survey of the area will be required to assess possible presence and significance of non-designated remains and to assess whether/how these should be protected during working. • All necessary mitigation to be implemented. • Adequate provision to be made for preservation, excavation or recording, as appropriate. • Assessment to include consideration of current land use and field pattern. • Further consideration to be given to restoration proposals, in terms of historic landscapes.
	?	0	**Historic Landscapes** • The site lies in the broad lower section of the valley of the river Frome. Historically some of the land here was heathland, other parts being wooded and under arable cultivation. On the flat lands close to the river itself, extensive systems of watermeadows were constructed from the 18th century onwards. Map evidence suggests that there may well be remains of a watermeadow system on the northern part of this site • The impact on the watermeadow systems in particular needs to be assessed and evaluated. Only when this has happened would the impact on the historic landscape be understood – at present it could be anywhere from a 'Very Significant Adverse Impact' to 'No Significant or Negligible Adverse Impacts'.	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	??	0	**Historic Buildings** • The two closest historic buildings look away from the site and are screened from it by hedges and trees. • The presence of these heritage assets constitutes a potential constraint that has been given considerable weight and importance.	• Any assessment required to be carried out, with appropriate mitigation implemented as required. • If the impacts cannot be mitigated satisfactorily the site will not be developed.
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	_	0	**Landscape Capacity** • Less significant landscape impact. Landscape capacity to accommodate the site is medium. The main impacts for the site will be from the B3390 as there are no rights of way through or near the site. • Development will create a medium adverse impact on the openness of the river valley pasture landscape and a significant adverse impact on the pattern of field boundary hedgerows.	• Assessment of potential visual impacts required and all appropriate mitigation to be included. • Restoration could include increasing public access/informal recreation and including appropriate nature conservation interests. • Advance planting to be carried out to prepare site for working.
	0	0	**Designated Landscapes** • No impact on designated landscapes or their setting.	
8. To protect and improve air quality and reduce the impacts of noise.	?	0	• Impacts on air quality expected to be negligible. • No AQMAs will be affected by the working of this site proposal. Any dust resulting from working will be controlled through normal dust-suppression measures. • Noise mitigation will be addressed at the planning application stage, with appropriate mitigation to be included in the development of the site.	• Environmental protection measures to reduce dust and ensure noise is appropriately mitigated.
9. To maintain, conserve and enhance soil quality.	–	0	• Site contains/comprises good to moderate quality agricultural land. Working the site will have impacts on this soil. • Soils will be stripped and removed to be stored and.	• Soil to be properly stripped and stored prior to working; protected during working; and

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			• Restoration will return the land to original ground levels, and will restore the quality of the land.	returned as part of restoration.
10. To conserve and safeguard mineral resources.	+ +	0	• The site would make an important contribution to aggregate supply in Bournemouth, Dorset and Poole.	• No specific action required. • Site development to take into consideration relevant impacts and mitigate where appropriate.
11. To promote the use of alternative materials.	0	0	• This proposal does not at present promote the use of alternative materials. • It is possible that treated inert waste will be used in restoration of the site, but this will not directly promote the use of alternative materials.	• No action required.
12. To provide an adequate and affordable supply of minerals to meet society's needs.	+	0	• Development of this site would provide a benefit in terms of contributing to the provision of a supply of minerals to meet society's needs. • Ensuring a sustainable supply will depend on the development and management of the site. Providing site development takes into account relevant principles of sustainable development it is expected this will contribute to complying with this objective.	• Ensure principles of sustainable development are incorporated into the development of this site.
13. To promote and encourage sustainable economic growth	+	0	• This site proposal is expected to contribute to economic development on two levels – directly through the provision of employment at the site to be developed and indirectly through the provision of aggregate minerals required for the maintenance of built environment and for new built development. Both levels are expected to maintain employment, skilled and unskilled. • Mineral working has the potential to negatively affect businesses in the locality, e.g. through contributing to traffic congestion, noise, visual and perception related issues. Impacts will be identified and mitigation during working will be applied where necessary – e.g. holding back quarry traffic during peak travel times, further screening. • Restoration to agriculture with some element of public access will, if achieved, offer some economic benefits through both the agriculture	• Full assessment of possible impacts, including on business in the vicinity, and mitigation to be identified and implemented. • Further assessment required to form a view as to what the most appropriate restoration could be.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			and the recreational attraction and use in the wider area (i.e. riding, walking).	
14. To adapt to and mitigate the impacts of climate change.	_	0	• Developing the site as a quarry is expected to have some negative impacts regarding climate change, due primarily to machinery used and transportation of mineral away from site. However, these will in relative terms be negligible. • The Bournemouth, Dorset and Poole Minerals Strategy seeks to address and minimise such impacts through Policy CC1 which requires operators to take into consideration climate change impacts and their possible mitigation for any proposed minerals development. • The development management policies, e.g. DM 1, also address and seek to minimise the issue of sustainable development and climate change. • Restoration to some form of vegetated environment will offer benefits in the form of climate change mitigation, including provision of habitat for wildlife, but again these will be relatively small.	• Use energy efficient plant and machinery. • Implement restoration which provides appropriate habitats to help to increase resilience of flora/fauna.
15. To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any residual impacts.	_ ?	0	• This site has an estimated 200,000 tonnes annual output and approximately 80 vehicle trips per day (40 in and 40 out). Access to the site is proposed via an existing large farm access to the B3390. • Visibility for 60 mph would need to be secured but is achievable from this access. The specific geometry of the access will need to be checked and it may be necessary to provide some localised widening to ensure that vehicles can enter and leave at the same time and pass on the farm access road. These details would be covered by a full Transport Assessment which would be required were this site to be submitted as a planning application. • Any TA should initially be scoped with the Transport Development Management Team. It may also need to consider Highways Agency concerns with regards to movements to the A35T. • Due to the direct access from this site onto the B3390, and the reasonable possibility of an acceptable access	• Transport Assessment to be carried out, identifying opportunities for reducing impacts on the transport network.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			provision, this site has been given a ''No Significant or Negligible Adverse Impacts'' rating.	
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	–	0	• The proposed extension can only realistically be accessed by means of road transport, resulting in a negative impact during development and working. • As far as reasonably possible negative impacts resulting from access and transport will be mitigated, as required by Policies DM1 and DM8 of the Minerals Strategy.	• Mitigate impacts where identified and appropriate.
17. To sustain the health and quality of life of the population	–	0	**Impact on Sensitive Human Receptors** • There are residential properties within site, adjacent to site and in vicinity of site, including properties and businesses on the other side of the river. • Site is large enough to include appropriate mitigation to adequately screen properties from visual/noise impacts. • Impact will be somewhere between 'Significant' and 'Less Significant', given size of site and levels of screening existing and to be created.	• Provision of appropriate mitigation, following assessment of likely impacts. • Restoration to improve landscape of site where possible; and to seek to increase public access. • Mitigation such as screening, bunding and standoffs are expected to be able to adequately address any impacts. • Cumulative impacts on surroundings of working along with the adjacent Woodsford Extension to be taken into consideration and mitigated against.
	?	0	**Impact on Existing Settlements** • Closest settlements include Moreton, Tincleton and Crossways. All are screened by existing trees/woodlands. • Villages along the B3390 may be affected by site traffic. • Impact will be somewhere between 'Significant' and 'Less Significant', given size of site and levels of screening existing and to be created.	
	0	0	**Impact on Airport Safety** • The site is some 35 km from the airport and not considered to be a threat.	• No action required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
18. To enable safe access to countryside and open spaces.	0	+?	**Impact on Recreational Land** • Site is agricultural land and does not appear to include any formal or informal recreational facilities. • Restoration could include some element of public access.	• No action required for working. • Consider including some aspect of public access as part of restoration.
	0	+ ?	**Impact on Public Rights of Way** • Site is agricultural land and there are no public rights of way on, adjacent to or visible from the land. • Restoration could include some element of public access.	• Consideration to be given to opportunities for improving public access in the area through restoration.

Preliminary Hydrological Risk Assessment

Controlled Waters	Issues/Risks	Mitigation	Further information/approval required
• Watercourses • Ponds/lakes, including wet habitats • Groundwater	• The River Basin Management Plan South West River Basin District identifies the Frome as being of 'Poor' environmental quality in this area. Potential for contamination from runoff from site. • Potential for contamination of controlled waters through spillage or seepage of pollutants such as fuel, or silt in water. • Contamination of water supplies or reduction in amount of water available for licenses supplies.	• Appropriate arrangements to be made for ensuring that runoff from the site does not enter the Frome or groundwater unless any silt has first been removed. • Fuel stored on site to be appropriately bunded and sealed to prevent any spillage from entering ground or surface waters. • On-going monitoring during development and working of the site. • Relocation of surface water	• Full hydrogeological risk assessment will be required as part of a planning application. • Flood Risk Assessment • Water Framework Assessment • Further assessment of potential impacts on water quality and levels, particularly for groundwater, is required prior to development. • Assessment of the feasibility of relocating surface water features and associated habitats and species. • Land Drainage Consent to be obtained from Dorset County Council if works

	• Impacts on or removal of surface water features.	features, provided this is feasible. • Need to consider compliance to the Restoration Plan for the River Frome and its floodplain.	may affect flow of an ordinary watercourse.

Flood Risk Commentary

Site is mostly within Flood Zone 1, and partly within Flood Zones 2 & 3.

Some risk of flooding from surface water. Flood Risk Assessment would be required at planning application stage, with a site specific strategy for surface water management that does not increase rates of runoff or generate off site worsening

Sand and gravel extraction is water compatible, so suitable in flood risk terms for allocation in Draft Mineral Sites Plan.

Climate Change predictions may result in flood outlines greater than existing Flood Zone 2. Processing plant/storage/stockpiles should preferably be located in Flood Zone 1, and should be located as far from Flood Zones 2 & 3 as reasonably possible.

Viability

This is a new site proposal. The mineral on the site has been proven, and issues such as site access seem achievable. If part of the site was sterilised through creation of a buffer against the heritage assets to the east, this could potentially affect viability. However, this site is being worked in sequence with the AS25 Station Road site and together it is felt they provide a viable quantum of mineral, even if this site (and Station Road) is reduced in size.

Cumulative Impacts

This site is a new proposal in an area where there is already mineral working. Depending on when it might start and what other sites are operating in the area, there could be an increased level of traffic on local roads, including the B3390.

There are no sites allocated for major development in the Purbeck Local Plan Part 1 (adopted Nov 2012) within 5 km of the proposal. The emerging Purbeck District Council Plan has considered housing development in the vicinity, as has the emerging West Dorset District Council plan.

Transport modelling has been carried out which indicates that the road network can carry the possible traffic levels. Quarry traffic can be held back during peak flow times, to minimise impacts. It is considered that any cumulative impacts can be satisfactorily mitigated.

There could be a cumulative impact if this site proposal was to be worked simultaneously with the proposed Woodsford Extension, immediately to the west. This could lead to disturbance to properties on the north side of the Frome. This issue should be addressed at the planning application stage. . The northern boundary of the site will be pulled back to provide a greater buffer.

Heritage Impacts

There are Listed Buildings to the east of the site, across the B3390 and screened to some extent by vegetation.

Proper assessment of these heritage assets and their settings is required to establish the impact the development of the site would have on the setting of these heritage assets, and the great and considerable weight given to this impact, carefully considered against the public and other benefits of aggregate production.

Policy/Legislative Background

The Historic England website notes:

When making a decision on all listed building consent applications or any decision on a planning application for development that affects a listed building or its setting, a local planning authority must have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses. Preservation in this context means not harming the interest in the building, as opposed to keeping it utterly unchanged.

This obligation, found in sections 16 and 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990, applies to all decisions concerning listed buildings.

The recent Court of Appeal decision in the case of Barnwell vs East Northamptonshire DC 2014(2) made it clear that in enacting section 66(1) of the Planning (Listed Buildings and Conservation Areas) Act 1990 (1) Parliament's intention was that ***'decision makers should give "considerable importance and weight" to the desirability of preserving the setting of listed buildings' when carrying out the balancing exercise'.***

Section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990 (" the 1990 Act ") provides:

"(1) In considering whether to grant planning permission for development which affects a listed building or its setting, the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses."

Section 72 of the 1990 Act provides:

"(1) In the exercise, with respect to any buildings or other land in a conservation area, of any of the provisions mentioned in sub-section (2), special attention shall be paid to the desirability of preserving or enhancing the character or appearance of that area.

(2) The provisions referred to in sub-section (1) are the planning Acts …"

A finding of harm to the setting of a listed building is a consideration to which the decision-maker must give "considerable importance and weight" (The Bath Society v Secretary of State for the Environment [1991] 1 W.L.R. 1303, per Glidewell LJ at 1319; and see East Northamptonshire District Council v Secretary of State for Communities and Local Government [2015] 1 W.L.R. 45 , per Sullivan LJ at [22]–[23] and [29]).

The relevant policies of the National Planning Policy Framework are paragraphs 128–135, the material parts of which provide:

"128. In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance… 129. Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise…

131. In determining planning applications, local planning authorities should take account of:

"• the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation; …"

132. When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation. The more important the asset, the greater the weight should be. …

133. Where a proposed development will lead to substantial harm to or total loss of significance of a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or loss is necessary to achieve substantial public benefits that outweigh that harm or loss, or all of the following apply: …

134. Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal, including securing its optimum viable use.

135. The effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that affect directly or indirectly non-designated heritage assets, a balanced judgment will be required having regard to the scale of any harm or loss and the significance of the heritage asset."

The National Planning Policy Framework (paragraph 144) also states:

When determining planning applications, local planning authorities should:

- *give **great weight** to the benefits of the mineral extraction, including to the economy;*

Commentary

In considering the potential development of the Hurst Farm site, with acknowledged impacts on a designated heritage asset, the following points have been taken into consideration.

- There is "a strong presumption against harm to designated assets" (Barnwell [2014] EWCA Civ 137; Forge Field [2014] EWHC 1895 (Admin))
- "Considerable weight" must be given to harm to designated assets, however slight, if more than de minimis (Barnwell; Forge Field; Jones [2015] EWCA Civ 1243)
- *Mordue v Secretary of State for Communities and Local Government and others* [2015] EWCA Civ 1243. Heritage assets have statutory protection, unlike other material considerations; and the NPPF has a complex template for their consideration. Both must be considered in an assessment.
- Failure to assess alternative sites on appropriate public interest criteria (Forge Field; ENV4)
- The policy presumption in favour of sustainable development does not apply to cases of harm to designated assets (Gladman [2016] EWHC 421 (Admin))
- Cumulative effects must be considered (PPG)
- All recognised harm must be included in the recommended Planning balance (Barnwell)
- Undue weight should not be given to the temporary nature of development (National Wind Power [1999] N.P.C. 128)

Development of the site would not cause substantial harm to the Conservation Area and the Listed Buildings but would have an impact on its setting. Development of the site would result in temporary harm to the setting of these heritage assets – this would be 'less than substantial' harm, for a temporary period. This harm has been given great and considerable weight in this assessment.

A range of sites nominated for allocation in the Mineral Sites Plan for sand and gravel quarries have been assessed on heritage grounds and on a range of other grounds. A number have been rejected for reasons other than heritage issues. The remaining sites have been included in the Draft Mineral Sites Plan.

The proposal is for a temporary period, after which the site will be restored and the impact on the heritage asset setting will be removed.

The Heritage Impact Assessment that would be carried out as part of any planning application would identify the setting of the heritage assets and would identify appropriate mitigation to offset the harm to the setting resulting from development of the site to a level that would allow the development to go ahead.

It is expected that the mitigation would be a combination of screening (an earth bund) and a standoff/buffer.

If mitigation is not possible, or if the necessary standoff was such that it made the site uneconomic to develop, then the development would not go ahead.

In considering potential impacts and mitigation, it must be remembered that this is not a planning application, but a nomination for allocation of a site in the Mineral Sites Plan. The evidence required and level of assessment carried out **at this stage** are considered to be proportionate and appropriate. At the planning application stage[14] a detailed

[14] Dorset County Council is currently considering an application for the development of the Hurn Court Farm Extension

Heritage Impact Assessment on the assets and their settings will be carried out, as part of an Environmental Impact Assessment, and the appropriate mitigation identified and applied.

At the current stage, the Mineral Planning Authority is considering whether the proposed nomination can reasonably be allocated through the Mineral Sites Plan, on the understanding that appropriately detailed assessment work will be carried out at a later date, and appropriate mitigation applied.

Although inclusion in an adopted plan gives a site allocation greater weight and likelihood of development, it is **not** deemed planning permission. Any allocation in an adopted plan still needs to go through the full planning application process, including Environmental Impact Assessment, and if impacts are identified that cannot be satisfactorily mitigated, the proposal will not receive permission.

It is considered, taking into account:

- the less than substantial harm to the setting of the Listed Buildings ;
- the great and considerable weight given to such harm, and the strong presumption against such harm;
- the temporary nature of the harm
- the great weight to be given to the provision of mineral
- the fact that minerals must be worked where they are found
- the fact that this is an extension site, and the processing plant and other infrastructure is already available
- the fact that the proposed development will be subject to planning application including Environmental Impact Assessment, and impacts on the setting will be assessed in detail and appropriate mitigation identified

that the public benefit to be received from this proposed development, and the nature and duration of the development causing harm, together with the scope for mitigating this harm, are such that the site should be allocated in the Mineral Sites Plan.

Summary.

Potential Benefits	Potential Impacts
• Provision of aggregates required for maintenance and construction of the built environment. • Provision of aggregate to support the local and wider economy, with accompanying benefits to the economy. • Restoration could include some increased and improved public access. • Working the site will provide benefits to nature conservation, ground and surface water and European and national nature conservation designations, through removing then limiting the flow of nitrates into ground and surface waters. • Restoration to offer nature conservation benefits through management of the northern part of the site as wetland and reducing the land under intensive agriculture.	• Further information is required on hydrogeology, as the site is close to a Source Protection Zone 1. • Surface drains flow across the surface, and these will need to be appropriately dealt with. • Development of this site could have significant impacts on archaeology, historic landscapes and landscape capacity. Further assessment is required, with appropriate mitigation to be identified and implemented. • Impacts, with great weight attached, on heritage assets in vicinity. • Soils to be appropriately managed and protected. • A full Transport Assessment with impacts and mitigation identified will be required. • There are likely to be impacts on neighbouring properties and businesses, particularly if this site and Woodsford Extension were to be worked simultaneously. Appropriate mitigation to be identified and implemented – this will include phasing of working to reduce impacts and pulling northern boundary back

Overall Recommendation:

This is a new site proposal. Further assessment is required to identify all potential impacts along with required mitigation. The proposal offers the strong benefit of reducing the flow of agricultural fertilisers into the groundwater, the Frome and ultimately into Poole Harbour. It is also removed from the protected heathland designations. As a large site it is expected that impacts on amenity can be satisfactorily mitigated.

Working this site will have impacts, but it is expected that these can be overcome through appropriate mitigation. Further assessment will be required to gain a better understanding of what the impacts might be and how best to mitigate.

Impacts on Listed Buildings and their settings must be carefully considered at planning application stage, to ensure full mitigation.

The issue of cumulative impact must be carefully addressed. The proposed site is immediately adjacent to the proposed Woodsford Extension and adjacent areas of these two sites should not be worked simultaneously, particularly in the northern parts of each site, to minimise impacts on residences and businesses across the river.

Pulling the northern boundary back and leaving an area of unworked land to be managed as wetland will assist in both reducing nitrate flows to the river and reducing impacts on surrounding receptors.

On balance, it appears reasonable on the basis of evidence available that the impacts identified in this sustainability appraisal are capable of satisfactory mitigation and the site nomination can reasonably be included in the Draft Bournemouth, Dorset and Poole Mineral Sites Plan.

Crushed Rock: PK16 Swanworth Quarry Extension

Site Name/Location: **PK16 Swanworth Quarry Extension** **Mineral Type**: Limestone (primarily for crushing)	**Nominee/Agent**: Suttle Stone Quarries/Quarryplan Ltd **Local Authority**: Purbeck District Council	**Site Area**: c. 14 ha **Production**: c. 120,000 tpa **Reserve**: c. 1.7 million tonnes

Impact Assessment Scoring

- -	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain

Timescales for effects:

P/W: Preparation and Working **R/A**: Restoration and Afteruse

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
1. To move waste management up the waste hierarchy	**N/A**	**N/A**	• This Objective is not relevant to this site nomination	• N/A
2. To maintain, conserve and enhance biodiversity	**0**	**+**	**European/International Designations** • A sufficient stand-off from the Isle of Portland to Studland Cliffs SAC to the south would be required to ensure the long term stability of the SAC. • Beyond that, restoration could offer significant habitat gain over the current intensive agricultural land use.	• Ensure appropriate stand-off is included.
	0	**0**	**Annex 1 Bird Species** • No impacts expected.	• No action required.
	0	**0**	**National Designations** • No impacts expected.	• No action required.
	0	**0**	**Protected species** • No impacts expected.	• No action required.
	0	**0**	**Local recognitions/designations, including ancient woodland and veteran trees** • No impacts expected.	• No action required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
3. To maintain, conserve and enhance geodiversity.	+	0 +	• The Purbeck limestone group has an important association with the geology of the Jurassic Coast World Heritage Site. Working quarries in Purbeck have been known to yield important fossils, including dinosaur footprints. They are also of on-going interest for the study of early Cretaceous stratigraphy. • These interests should be acknowledged with the assumption that geologists and the Jurassic Coast Team hosted by DCC will respond positively to any opportunities to recover fossils or record and study unusual features if they are discovered. In terms of geodiversity there is a presumption in favour of an appropriate level of quarrying activity continuing in order to sustain these on-going interests.	• Note potential for quarries to yield fossils or other material of geodiversity interest. • Visits or other investigation of working sites may be requested. • Investigate potential and/or benefits of leaving quarried face open after restoration.
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	? 0	0 0	**Groundwater** • Site overlies Principal Aquifer. No impact on Source Protection Zones. No licenced supplies. • Assessment should be completed to assess the impact on the water resource and on down gradient licensed springs and receiving water course. • Proposed extension overlies part of the area from which Kingston's water supply comes. **Surface Water** • Surface water within approximately 500m of site boundary, to the south.	• Full hydrological assessment required to determine possible impacts, on ground and surface waters, with appropriate mitigation to be implemented. • Appropriate arrangements should be put in place to ensure that the water leaving the site and entering the watercourses or groundwater is of an acceptable quality – with particular reference to protecting Kingston's water supply. • Any fuel on site should be properly stored to avoid contamination in case of spillage. • Appropriate arrangements should be installed for surface water and silt collection and fuel storage to prevent contamination of groundwater resources. • The combined impacts of Purbeck Limestone Quarries should be assessed where a number of sites affect the same water resource or receiving water course.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
5. To reduce flood risk and improve flood management.	**0**	**0**	**Flooding/Coastal Stability** • Site is entirely in Flood Risk Zone 1, no risk of flooding.	• No action required.
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).	-	**?**	**Archaeology** • A barrow that is protected as a Scheduled Monument (Dorset M161 – 'Barrow 1000yds (910m) SE of Kingston Barn) is a constraint to quarrying here. It occupies a location west of the proposed extension.. • Historic England have considered the proposed extension and have indicated that it should be possible to identify and avoid the setting of this western barrow, thereby allowing the proposed extension. • Further assessment will be required at the planning application stage to test the proposed extension boundaries, the relationship of the western barrow to others around Combe Bottom as well as other setting issues and the impact on other below-ground archaeology (the 'Bing Maps' aerial view of the site seems to show cropmarks of ancient field boundaries).	• Full archaeological survey of the area required to assess possible presence and significance of non-designated remains and to assess Monuments and establish their settings and determine how these can be fully protected during working. • Settings of the Monuments to be established prior to working and not to be compromised during working. • All necessary mitigation to be implemented prior to working. • Adequate provision to be made for preservation, excavation or recording, as appropriate. • Further consideration to be given to restoration proposals, in terms of historic landscapes.
	-	**?**	**Historic Landscapes** • The presence of the Monument and associated constraints have been discussed above. • As well as being part of a landscape where quarrying has taken part in the past, the site appears to be one of a number of relatively flat locations around Combe Bottom that were chosen as locations for Bronze Age barrows.	
	0	**0**	**Historic Buildings** • This is a quarry set in a quarrying landscape and the nearest listed buildings are too far away to be affected. • No significant impact expected.	• No action required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	– – – – –	?	**Landscape Capacity** • The site is located within the Purbeck Plateau, an open coastal landscape that provides sweeping views across a predominantly undeveloped context, often incorporating characteristic geometric fields with stone boundaries, of the type that comprise the extension site itself. • The proposal would have a significant adverse impact on the physical landscape, which is highly valued and protected. • Proximity to the Purbeck Way and public highways are of key concerns due to visual effects and operational noise. This will result in significant adverse impacts on sensitive visual receptors and impact negatively on the tranquillity in this part of the AONB. • The earthworks required would also create significant adverse impacts on the open and sloping sides of the valley above the wooded edges and actively impact on the setting of the adjacent tumuli. • Therefore, despite the upper western area being in the 'Zone of Least Landscape and Visual Impact' it is felt access to this area in terms of the impact on the coombe, the rest of the eastern facing slopes and the Purbeck Way means at this scale it is not appropriate for landscape and visual reasons.	• More detailed landscape and visual impact assessment to identify and implement possible mitigation of identified impacts. • If mitigation is not possible, a view will have to be taken as to whether a time-limited impact would be acceptable. • Appropriate restoration proposals in line with Landscape Management Guidelines referred to in Minerals Strategy.
	– –	?	**Designated Landscapes** • Significant Adverse Impact – site is within Dorset Area of Outstanding Natural Beauty and Heritage Coast.	
8. To protect and improve air quality and reduce the impacts of noise.	0	0	• Impacts on air quality expected to be negligible. • No AQMAs will be affected by the working of this site proposal. Any dust resulting from working will be controlled through normal dust-suppression measures. • Noise mitigation will be addressed at the planning application stage, with appropriate mitigation to be included in the development of the site.	• Environmental protection measures to reduce dust and ensure noise is appropriately mitigated.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
9. To maintain, conserve and enhance soil quality.	–	0	• Site is 'Good to Moderate' agricultural land. • Soils will be stripped and protected during preparation and working and reused on site as part of restoration.	• Soil to be properly stripped and stored prior to working; protected during working; and re-spread on site after working.
10. To conserve and safeguard mineral resources.	+ +	0	• The current site provides both dimension stone (from the Portland beds) for construction or sea defence uses as we as crushed rock sold as construction aggregate. This is the only source crushed rock outside of Portland. • The proposed extension would make an important contribution to the supply of crushed rock, primarily for local markets. It would serve to reduce the need for aggregate extraction elsewhere in the county.	• No specific action required; site development to take into consideration relevant impacts and mitigate where appropriate and/or possible.
11. To promote the use of alternative materials.	–	0	• Although the current site does include a recycled aggregates production facility, it is not expected that the proposed extension will also produce recycled aggregates.	• No action required.
12. To provide an adequate and affordable supply of minerals to meet society's needs.	+	0	• Development of this site would provide a benefit in terms of contributing to the provision of a supply of minerals to meet society's needs. • This site plays an important role in supplying crushed rock aggregate to Purbeck, and Bournemouth and Poole.	• Ensure principles of sustainable development are incorporated into the development of this site.
13. To promote and encourage sustainable economic growth	+	0	• This site proposal is expected to contribute to economic development on two levels – directly through the provision of employment at the site to be developed and indirectly through the provision of crushed rock and dimension stone required for construction and other purposes. Both levels are expected to maintain employment, skilled and unskilled. • Mineral working has the potential to negatively affect businesses in the locality, e.g. through contributing to traffic congestion, noise, visual and perception related issues. • Restoration to agriculture will offer some economic benefits through both the agriculture itself and the recreational attraction and use in the wider area (i.e. riding, walking).	• No action required. • Impacts on local businesses will be identified and mitigation during working will be applied where necessary – e.g. holding back quarry traffic during peak travel times, further screening.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
14. To adapt to and mitigate the impacts of climate change.	–	**0**	• Developing land as a quarry is expected to have some negative impacts regarding climate change, due primarily to machinery used and transportation of mineral away from site. However, these will in relative terms be negligible. • The Bournemouth, Dorset and Poole Minerals Strategy seeks to address and minimise such impacts through Policy CC1 which requires operators to take into consideration climate change impacts and their possible mitigation for any proposed minerals development. • The development management policies, e.g. DM 1, also address and seek to minimise the issue of sustainable development and climate change.	• Use energy efficient plant and machinery. • Implement restoration which provides appropriate habitats to help to increase resilience of flora/fauna.
15. To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any residual impacts.	–	**0**	• Access proposed is via the adequate existing Swanworth Quarry access onto the C135. From here vehicles will travel a short distance north onto the B3069 and onward to the A351 through Kingston. • The proposed extension will not be worked concurrently with the existing Swanworth Quarry operations. • The route passes a small number of properties on the edge of Kingston but by-passes the main part of the settlement on the B3069. This site has therefore considered to have a 'Less Significant Adverse Impact'. • Policies DM1 and DM 8 of the Minerals Strategy actively address this issue of minimising impacts on the transportation network.	• Any proposal for this site would need to be accompanied by a Transport Assessment which will need to provide access details and consider vehicle routing. The TA should be scoped with the Transport Development Management Team. • Transport Assessment will identify opportunities for reducing impacts on the transport network.
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	–	**0**	• The proposed extension can only realistically be accessed by means of road transport, resulting in a negative impact under this Objective during development and working. • As far as reasonably possible negative impacts resulting from access and transport will be mitigated, as required by Policies DM1 and DM8 of the Minerals Strategy.	• Mitigate impacts where identified and appropriate.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
17. To sustain the health and quality of life of the population	_	0	**Impact on Sensitive Human Receptors** • Closest property approximately 350m to north/east; others >500m to south, Kingston Village approximately 1km to north-west. • Possibility of some visibility from the north – further assessment will be required, with mitigation through screening if necessary.	• Provision of appropriate mitigation, following assessment of likely impacts. • Restoration to improve landscape of site where possible; and to seek to facilitate public access. • Screening, bunding, standoffs will be used to mitigate impacts where considered necessary. • Transport impacts to be considered through Transport Assessment, as considered above.
	0	0	**Impact on Existing Settlements** • Kingston Village approximately 1km to north west, Worth Matravers approximately 1km to south east. Limited if any visibility from the north, limited if any visibility from the south at Worth Matravers – site would be visible from the C135 north of Worth Matravers. • Access and vehicle number would not change in intensity.	
	0	0	**Impact on Airport Safety** • Site is approximately 23 km from airport, with no wet working or restoration. • No impacts expected.	• No action required.
18. To enable safe access to countryside and open spaces.	_	?	**Impact on Recreational Land** • Majority of the site is agricultural land, no formal/informal recreational use. • Southern part of the site (the dry coombe) appears to have informal access routes, along with a bridleway. This area links the extension to the main quarry and is unlikely to be worked, but will need to be crossed.	• Assessment of potential impacts, with appropriate mitigation identified. This must address impacts on the bridleway. • Restoration to include considering how it might be possible to improve public access in the area.
	_	?	**Impact on Public Rights of Way** • Southern part of the site appears to have informal access routes, along with a bridleway (SE11/83). This area links the extension to the main quarry and is unlikely to be worked, but will need to be crossed. • Bridleway will be significantly affected by the proposed development, during development and working.	

Preliminary Hydrological Risk Assessment

Controlled Waters	Issues/Risks	Mitigation	Further information/approval required
• Watercourses • Ponds/lakes, including wet habitats • Groundwater	• Potential for contamination of controlled waters (groundwater) through spillage or seepage of pollutants such as fuel. • Contamination of water supplies or reduction in amount of water available for licenced supplies.	• Appropriate arrangements to be made for ensuring that runoff from the site does not enter the groundwater unless any silt or other pollutant has first been removed. • Fuel stored on site to be appropriately bunded and sealed to prevent any spillage from entering ground or surface waters. • On-going monitoring during development and working of the site.	• Full hydrogeological risk assessment will be required as part of a planning application. • Flood Risk Assessment • Water Framework Assessment • Further assessment of potential impacts on water quality and levels, particularly for groundwater, is required prior to development. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.

Flood Risk Commentary

Site is entirely within Flood Zone 1.

Limited risk of flooding from surface water. Flood Risk Assessment would be required at planning application stage, with a site specific strategy for surface water management that does not increase rates of runoff or generate off site worsening

Suitable in flood risk terms for allocation in Draft Mineral Sites Plan.

Cumulative Impacts

Site nomination comprises an extension of an existing quarry in an area where there is a concentration and long history of mineral extraction. The site is an extension of an existing quarry and will not be developed until the existing operation is completed. No traffic related impacts are expected, but in landscape terms the impact of the proposed extension could be an intensification over the existing operation. Further assessment is on-going to determine whether impacts can be mitigated.

There could be cumulative visual/landscape impacts, taking into account the current site and how much of that is restored.. This should be addressed at the stage of the planning application. Full visual impact assessment will be required, to identify impacts and mitigation.

There are no sites allocated for major development in the Purbeck Local Plan Part 1 (adopted Nov 2012) within 5 km of the proposal.

The combined impacts of Purbeck Limestone Quarries should be assessed where a number of sites affect the same water resource or receiving water course.

Viability

As an extension to an existing operational site, viability is not considered to be an issue. Great Plantation will use existing processing facilities, road access and serve existing markets, and therefore these do not have to be provided.

Heritage Impacts

There are a number of scheduled monuments in the vicinity, including one, a barrow, within 130m of the proposed extension. There are other barrows in the vicinity, which must be considered (along with their settings) in combination with each other. The impact the development of the site would have on the setting of these assets, and the considerable weight to be given to any harm to the setting of these assets, must be carefully considered against the public and other benefits of aggregate production.

Policy/Legislative Background

The Historic England website notes:

When making a decision on all listed building consent applications or any decision on a planning application for development that affects a listed building or its setting, a local planning authority must have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses. Preservation in this context means not harming the interest in the building, as opposed to keeping it utterly unchanged.

This obligation, found in sections 16 and 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990, applies to all decisions concerning listed buildings.

The recent Court of Appeal decision in the case of Barnwell vs East Northamptonshire DC 2014(2) made it clear that in enacting section 66(1) of the Planning (Listed Buildings and Conservation Areas) Act 1990 (1) Parliament's intention was that ***'decision makers should give "considerable importance and weight" to the desirability of preserving the setting of listed buildings' when carrying out the balancing exercise'.***

Section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990 (" the 1990 Act ") provides:

"(1) In considering whether to grant planning permission for development which affects a listed building or its setting, the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses."

Section 72 of the 1990 Act provides:

"(1) In the exercise, with respect to any buildings or other land in a conservation area, of any of the provisions mentioned in sub-section (2), special attention shall be paid to the desirability of preserving or enhancing the character or appearance of that area.

(2) The provisions referred to in sub-section (1) are the planning Acts …"

A finding of harm to the setting of a listed building is a consideration to which the decision-maker must give "considerable importance and weight" (The Bath Society v Secretary of State for the Environment [1991] 1 W.L.R. 1303, per Glidewell LJ at 1319; and see East Northamptonshire District Council v Secretary of State for Communities and Local Government [2015] 1 W.L.R. 45 , per Sullivan LJ at [22]–[23] and [29]).

The relevant policies of the National Planning Policy Framework are paragraphs 128–135, the material parts of which provide:

"128. In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance… 129. Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise…

131. In determining planning applications, local planning authorities should take account of:

"• the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation; …"

132. When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation. The more important the asset, the greater the weight should be. …

133. Where a proposed development will lead to substantial harm to or total loss of significance of a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or loss is necessary to achieve substantial public benefits that outweigh that harm or loss, or all of the following apply: …

134. Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal, including securing its optimum viable use.

135. The effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that affect directly or indirectly non-designated heritage assets, a balanced judgment will be required having regard to the scale of any harm or loss and the significance of the heritage asset."

The National Planning Policy Framework (paragraph 144) also states:

When determining planning applications, local planning authorities should:

- *give **great weight** to the benefits of the mineral extraction, including to the economy;*

Commentary

In considering the potential development of the Swanworth Quarry site, with acknowledged impacts on a designated heritage asset, the following points have been taken into consideration.

- There is "a strong presumption against harm to designated assets" (Barnwell [2014] EWCA Civ 137; Forge Field [2014] EWHC 1895 (Admin))
- "Considerable weight" must be given to harm to designated assets, however slight, if more than de minimis (Barnwell; Forge Field; Jones [2015] EWCA Civ 1243)
- *Mordue v Secretary of State for Communities and Local Government and others* [2015] EWCA Civ 1243. Heritage assets have statutory protection, unlike other material considerations; and the NPPF has a complex template for their consideration. Both must be considered in an assessment.
- Failure to assess alternative sites on appropriate public interest criteria (Forge Field; ENV4)
- The policy presumption in favour of sustainable development does not apply to cases of harm to designated assets (Gladman [2016] EWHC 421 (Admin))
- Cumulative effects must be considered (PPG)
- All recognised harm must be included in the recommended Planning balance (Barnwell)
- Undue weight should not be given to the temporary nature of development (National Wind Power [1999] N.P.C. 128)

Development of the site would not cause substantial harm to the heritage assets, but would have an impact on their setting. Development of the site would result in temporary harm to the setting of the heritage assets - this would be 'less than substantial' harm, for a temporary period. This harm has been given great and considerable weight in this assessment.

A range of sites nominated for allocation in the Mineral Sites Plan for sand and gravel quarries have been assessed on heritage grounds and on a range of other grounds. A number have been rejected for reasons other than heritage issues. The remaining sites have been included in the Draft Mineral Sites Plan.

The proposal is for a temporary period, after which the site will be restored and the impact on the heritage asset setting will be removed.

The Heritage Impact Assessment that would be carried out as part of any planning application would identify the setting of the heritage asset and would identify appropriate mitigation to offset the harm to the setting resulting from development of the site to a level that would allow the development to go ahead.

It is expected that the mitigation would be a combination of screening (an earth bund) and a standoff/buffer.

If mitigation is not possible, or if the necessary standoff was such that it made the site uneconomic to develop, then the development would not go ahead.

In considering potential impacts and mitigation, it must be remembered that this is not a planning application, but a nomination for allocation of a site in the Mineral Sites Plan. The evidence required and level of assessment carried out **at this stage** are considered to be proportionate and appropriate. At the planning application stage a detailed Heritage Impact Assessment on the assets and their settings will be carried out, as part of an Environmental Impact Assessment, and the appropriate mitigation identified and applied.

At the current stage, the Mineral Planning Authority is considering whether the proposed nomination can reasonably be allocated through the Mineral Sites Plan, on the understanding that appropriately detailed assessment work will be carried out at a later date, and appropriate mitigation applied.

Although inclusion in an adopted plan gives a site allocation greater weight and likelihood of development, it is **not** deemed planning permission. Any allocation in an adopted plan still needs to go through the full planning application process, including Environmental Impact Assessment, and if impacts are identified that cannot be satisfactorily mitigated, the proposal will not receive permission.

It is considered, taking into account:

- the less than substantial harm to the setting of the scheduled monuments;
- the great and considerable weight given to such harm, and the strong presumption against such harm;
- the temporary nature of the harm
- the great weight to be given to the provision of mineral
- the fact that minerals must be worked where they are found
- the fact that this is an extension site, and the processing plant and other infrastructure is already available
- the fact that the proposed development will be subject to planning application including Environmental Impact Assessment, and impacts on the setting will be assessed in detail and appropriate mitigation identified

that the public benefit to be received from this proposed development, and the nature and duration of the development causing harm, together with the scope for mitigating this harm, are such that the site should be allocated in the Mineral Sites Plan.

Summary.

Potential Benefits	Potential Impacts
• Provision of some dimension stone and armour stone – latter has benefits in coastal protection. • Reduction in impacts of agriculture on the SAC to the south. Other benefits to biodiversity from removing the land from agriculture and creating dry coombe if this restoration approach is used. • Geodiversity benefits, through exposures created and fossils found. • Restoration to offer improved public access. • Provision of crushed rock aggregates – in a location away from Portland - required for maintenance and construction of the built environment. • Provision of aggregate to support the local and wider economy, with accompanying benefits to the economy.	• Significant impacts on the Scheduled Monument(s) and settings and on other archaeological features – full assessment of impacts required, with all necessary mitigation identified. English Heritage to agree proposed mitigation. • Significant landscape issues, through impacts on the dry coombe, views from south/west and on Area of Outstanding Natural Beauty and Heritage Coast. Full assessment of impacts required, with all necessary mitigation identified. • Significant impacts on bridleway south and east of site. Further assessment required to consider how this can be mitigated. • A full Transport Assessment with impacts and mitigation identified will be required.

- Assessment of possible impacts on surrounding sensitive receptors (residences, settlements) with full mitigation identified.

Overall Recommendation:

No overall recommendation is made on this site proposal at this time, as it is currently under revision and further information is awaited from promoters.

It has been included for information purposes, and to seek any further comments that consultees may wish to make.

Recycled Aggregates: RA01 Whites Pit, Poole

Site Name/Location: RA01 Whites Pit, Poole **Proposed development:** It is an existing operation	**Nominee/Agent:** Land and Mineral Management **Local Authority:** Borough of Poole
Site Area: approximately 6 ha	**Capacity:** up to 250,000 tpa;

Impact Assessment Scoring

- -	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain

Timescales for effects:

P/W: Preparation and Working **R/A**: Restoration and Afteruse

N.B. the proposal seeks a permanent or long-term approval for recycled aggregate production, so restoration/afteruse has not been considered.

Sustainability Objectives	Effects P/W	Effects R/A	Commentary	Mitigation
1. To move waste management up the waste hierarchy	++	N/A	• Use of a washing plant permits the recycled product to be applied to higher specification uses and reduces the amount of material ultimately requiring landfill.	• No action required.
2. To maintain, conserve and enhance biodiversity	0	N/A	**European/International Designations** • No likely effects identified.	• No action required.
	0	N/A	**Annex 1 Bird Species** • Probably no significant impact, but more information is required to determine the effect on Annex 1 Nightjar who are known to forage north from Canford Heath towards the Stour River and may cross this site.	• Further assessment required, along with any mitigation that may be necessary. • Aggregate recycling operation is currently in operation on the site, so unlikely to be significant effects identified.
	0	N/A	**National Designations** • No likely effects identified.	• No action required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	0	N/A	**Protected species** • No likely effects identified.	• No action required.
	0	N/A	**Local recognitions/designations, including ancient woodland and veteran trees** • No likely effects identified.	• No action required.
3. To maintain, conserve and enhance geodiversity.	0	N/A	• No likely effects identified.	• No action required.
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	_	N/A	**Groundwater** • Site overlies secondary aquifer. Not within any Source Protection Zone designation. • Licensed abstraction sites in proximity, any possible impacts to be appropriately mitigated.	• Further assessment on possible impacts on water supplies and appropriate mitigation if potential impacts identified. • Detailed pollution prevention management plan detailing best practices to minimise pollution incidents, as well as measures that will be taken should a pollution event occur. • Appropriate arrangements should be put in place to ensure that the water leaving the site is of an acceptable quality. • Appropriate arrangements should be installed for surface water and silt collection and fuel storage to prevent contamination of groundwater resources. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse. • An appropriate surface water management scheme would need to be provided at the planning application stage. • This must consider both surface water flow within and off the site, and also take into account water quality issues by incorporating appropriate pollution prevention measures.
	0	N/A	**Surface Water** • Water quality issues may arise from the contaminated land beneath the site, or from the construction/ operation of the recycling centre. • All these issues must be considered in the design and management of the proposed development.	
5. To reduce flood risk and improve flood management.	0	N/A	**Flooding/Coastal Stability** • Entire site is within Flood Risk Zone 1, no expected risk of flooding or contributing to flooding.	• Flood Risk Assessment (FRA) will be required. • All necessary mitigation to be implemented.
6. To maintain, conserve and enhance the	0	N/A	**Archaeology** • Since this area has been quarried and landfilled in restoration, provided that works only take	• No further action required at this stage, tumuli referred to are

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
historic environment (including archaeological sites, historic buildings, conservation areas, historic parks and gardens and other locally distinctive features and their settings).			place within the existing worked/restored area, there should not be a significant impact. • The only way there could be significant archaeological impact would be if there were associated works outside the previously-quarried areas, or if the works had a significant visual impact on several Bronze Age barrows if the vicinity that are protected as Scheduled Monuments.	unlikely to be affected by the proposed development. • Site is already an existing aggregate recycling operation.
	0	**N/A**	**Historic Landscapes** • Since this area has been quarried and landfilled in restoration, provided that works only take place within the existing worked/restored area, there should not be a significant impact.	• No action required.
	0	**N/A**	**Historic Buildings** • No impacts on any listed buildings or settings of any listed buildings.	• No action required.
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	**0**	**N/A**	**Landscape Capacity** • Landscape capacity to accommodate the development is high, provided it is co-ordinated and designed in with the restoration of the remainder of the area.	• Given the fact that the site is currently operating as an aggregate recycling operation, no impacts are expected and no further actions required at this stage.
	0	**N/A**	**Designated Landscapes** • No impact on any designated landscapes.	
8. To protect and improve air quality and reduce the impacts of noise.	**0**	**0**	• Impacts on air quality expected to be negligible. • No AQMAs will be affected by the working of this site proposal. Any dust resulting from working will be controlled through normal dust-suppression measures. • Noise mitigation will be addressed at the planning application stage, with appropriate mitigation to be included in the development of the site.	• Environmental protection measures to reduce dust and ensure noise is appropriately mitigated.
9. To maintain, conserve and enhance soil quality.	**0**	**N/A**	• Site is an existing aggregate recycling operation, located on land previously quarried and landfilled in restoration. • No further impacts on soil quality are expected.	• No action required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
10. To conserve and safeguard mineral resources.	+ +	N/A	• Site is an existing aggregate recycling operation, located on land previously quarried and landfilled in restoration. There are no further mineral resources in the ground to protect. • As a producer of recycled aggregates, this site will serve to conserve resources of primary aggregates elsewhere and reduce the need to quarry these aggregates.	• No action required.
11. To promote the use of alternative materials.	+ +	N/A	• When amalgamated with the nearby recycling operation including washing plant, site will be the largest recycled aggregate production site in Bournemouth, Dorset and Poole. • It will produce washed/recycled aggregate, making it a more flexible product capable of substitution in a wider range of uses.	• No action required.
12. To provide an adequate and affordable supply of minerals to meet society's needs.	+ +	N/A	• Development of this site would provide a benefit in making an important contribution to the provision of a supply of recycled aggregate to meet society's needs for aggregate and delay the rate of quarrying of primary aggregate. • This contribution to a sustainable supply will depend on the development and management of the site. Providing site development takes into account relevant principles of sustainable development it is expected this will contribute to complying with this objective.	• Ensure principles of sustainable development are incorporated into the development of this site.
13. To promote and encourage sustainable economic growth	+	N/A	• This site proposal is expected to contribute to economic development in two main ways – directly through the provision of employment at the site to be developed and indirectly through the provision of (recycled) aggregate minerals required for the maintenance of built environment and for new built development. • Both are expected to maintain/provide employment, skilled and unskilled. Given the expected level of production from this site expected size of the reserve this is likely to be a limited benefit.	• Ensure principles of sustainable development are incorporated into the development of this site.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
14. To adapt to and mitigate the impacts of climate change.	+	N/A	• The further development and continued operation of this site is expected to have some negative impacts regarding climate change, due primarily to machinery used and transportation of mineral away from site. However, these will in relative terms be negligible. • The Bournemouth, Dorset and Poole Minerals Strategy seeks to address and minimise such impacts through Policy CC1 which requires operators to take into consideration climate change impacts and their possible mitigation for any proposed minerals development. • The development management policies, e.g. DM 1, also address and seek to minimise the issue of sustainable development and climate change. • There will be benefits in reducing the amount of new quarrying of land needed.	• The use of energy efficient plant and machinery will assist in reducing climate change impacts.
15. To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any residual impacts.	0	N/A	• The site is an existing aggregate recycling operation and the proposed development, already with a 7 year temporary permission, is to amalgamate another aggregate recycling operation within the nearby complex into the current site. • Access is from an A-Road via signalised junction and private haul road. Congestion occurs at both Gravel Hill Junctions and Bear Cross Roundabout. Additional LGV traffic would have a disproportionate effect on queuing in peak periods, but the proposal is not expected to generate additional traffic. • Both the currently separate sites have the same access onto the public road system, and no increase or decrease in traffic levels bringing materials in and taking product away is expected following amalgamation. • Policies DM1 and DM 8 actively address this issue of minimising impacts on the transportation network.	• No further action required at this stage.
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	–	N/A	• The proposed extension can only realistically be accessed by means of road transport, resulting in a negative impact under this Objective during development and working. • As far as reasonably possible negative impacts resulting from access and transport will be mitigated, as required by Policies DM1 and DM8 of the Minerals Strategy.	• Mitigate impacts where identified and appropriate.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
17. To sustain the health and quality of life of the population	0	N/A	**Impact on Sensitive Human Receptors** • Site is existing aggregate recycling site, well screened by existing landform and existing trees. No visual impacts expected, or noise/dust impacts. No increase in levels of traffic using the site expected and no new access proposed.	• No further action required at this time.
	0	N/A	**Impact on Existing Settlements** • Site is existing aggregate recycling site, well screened by existing landform and existing trees. No visual impacts expected, or noise/dust impacts. No increase in levels of traffic using the site expected and no new access proposed.	
	0	N/A	**Impact on Airport Safety** • Site is approximately 7 km from the airport, but there will be no wet working or restoration. No negative impacts expected.	• No further action required at this time.
18. To enable safe access to countryside and open spaces.	0	N/A	**Impact on Recreational Land** • Site is currently used for recycled aggregate production and does not include any land used for recreational purposes. No impacts expected.	• No further action required at this time.
	0	N/A	**Impact on Public Rights of Way** • No public rights of way cross the site or run near the site. No impacts expected.	• No further action required at this time.

Preliminary Hydrological Risk Assessment

It is noted that the proposed already has a temporary permission and thus the comments made below may not be relevant at this time. The site is some 1.75km from the Stour and drains into the Stour.

The Environment Agency notes that an appropriate surface water management scheme would need to be provided at the planning application stage. This must consider both surface water flow within and off the site, and also take into account water quality issues by incorporating appropriate pollution prevention measures. These water quality issues may arise from the contaminated land beneath the site, or from the construction/ operation of the recycling centre. Therefore all aspects must be considered in the design and management.

Controlled Waters	Issues/Risks	Mitigation	Further information/approval required

• Watercourses • Ponds/lakes, including wet habitats • Groundwater	• The River Basin Management Plan South West River Basin District identifies the Stour as being of 'poor' environmental quality in this area. Potential for contamination from runoff from site. • Potential for contamination of controlled waters through spillage or seepage of pollutants such as fuel, or silt in water. • Contamination of water supplies or reduction in amount of water available for licenses supplies. • Impacts on or removal of surface water features.	• Appropriate arrangements to be made for ensuring that runoff from the site does not enter the Stour or groundwater unless any silt has first been removed. • Fuel stored on site to be appropriately bunded and sealed to prevent any spillage from entering ground or surface waters. • On-going monitoring during development and working of the site.	• Prior written Land Drainage Consent may be required from the Lead Local Flood Authority (LLFA), Dorset County Council in this case) for works that could affect the flow of any ordinary watercourse. • Full hydrogeological risk assessment will be required as part of a planning application. • Flood Risk Assessment • Water Framework Assessment • Further assessment of potential impacts on water quality and levels, particularly for groundwater, is required prior to development. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.

Cumulative Impacts

In itself, the proposed development is not expected to cause any additional/cumulative impacts and as noted already the development already has a time-limited permission.

The proposal is within 5Km (by road) of Kinson District Centre, Bournemouth where housing, employment and retail development (supermarket and small retail units) will be permitted in accordance with Policies CS9 and CS10 of the Bournemouth Local Plan: Core Strategy (adopted October 2012) (Site details not available). Traffic arising from the new development will add to general traffic levels on the A341.

Summary.

Potential Benefits	Potential Impacts
• Provision of washed/graded recycled aggregates, offering an alternative to the quarrying/use of primary aggregates. • Use of a washing plant allows the recyclate to be specified for higher end-uses. • Production and use of recycled aggregate has benefits in limiting the amount of land-won aggregate that has to be produced. What is produced can be used in the most appropriate ways/uses.	• The main impacts expected are the use of equipment of site, and transportation of material to/from the site, contribution to climate change impacts. These are expected to be minimal.

- No intensification of traffic is expected. Traffic movements between the currently separate operations will be reduced.

Overall Recommendation:

This is an existing facility, operating under an existing, although temporary, planning permission.

The proposed development offers many benefits and has limited impacts.

On balance, it appears reasonable on the basis of evidence available that the impacts identified in this sustainability appraisal are capable of satisfactory mitigation and the site proposed for the location of this consolidation of two separate operations can reasonably be included in the Draft Bournemouth, Dorset and Poole Mineral Sites Plan.

Ball Clay: BC04 Trigon Hill Extension

Site Name/Location: **BC04 Trigon Hill Extension** Mineral Type: Ball Clay		Nominee: Imerys Local Authority: Purbeck District Council
Site Area: approximately 27 ha	Production: c. 100,000 tpa;	Reserve: approximately 1,200,000 tonnes

Impact Assessment Scoring

- -	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain

Timescales for effects:

P/W: Preparation and Working **R/A**: Restoration and Afteruse

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
1. To move waste management up the waste hierarchy	**N/A**	**N/A**	• This Objective is not relevant to this site nomination	• N/A
2. To maintain, conserve and enhance biodiversity	**?**	**0**	**European/International Designations** • Proposed area lies just to the south of an area of European heathland. At this stage, without detailed analysis of possible impacts, it is not clear whether there would be any likely significant effect of mineral working on the designated area. • In order to be acceptable the development proposal would have to pass the tests in the Habitats Regulations. • In principle it should be possible to avoid effects on the designated sites through an appropriate stand-off from the development.	• Ecological surveys and hydrological reports required, with appropriate mitigation. • Appropriate assessment under the Habitat Regulations will be required. • Heathland restoration and public access could be created following working.
	_ **?**	**0**	**Annex 1 Bird Species** • Area could support Annex 1 birds as part of the existing forestry crop rotation. Clearance of trees would be likely to result in heathland regeneration and the open habitat would rapidly become suitable for more Annex 1 birds.	• Ecological surveys and hydrological reports required, with appropriate mitigation. • Appropriate assessment under the

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			• The site has the potential to be included in a revision to the heathland SPA boundary. Risk based approach essential here.	Habitat Regulations will be required. • Heathland restoration and public access to be created.
	–	**0**	**National Designations** • Proposed area lies just to the south of an area of Morden Bog and Hyde Heath SSSI. At this stage, without detailed analysis of possible impacts, it is not clear whether there would be any likely significant effect of mineral working on the designated area. • In principle it should be possible to avoid effects on the designated sites through an appropriate stand-off from the development.	• Ecological surveys required, with appropriate mitigation. • Restoration to include creation of invertebrate habitat.
	–	**0**	**Protected species** • There are numerous bat records from Trigon Hill Plantation suggesting the plantation or trees in the area may provide important roosting habitats; assessment will be required to understand the implications of removal of the plantation on bats. • A large badger sett is also known in the plantation and the effects of working on this species would also require assessment. • It is difficult to assess whether mitigation on bats or badger would be acceptable without detailed study on population sizes and locations.	• Ecological surveys required, with appropriate mitigation identified. • Restoration to include appropriate habitats for these species. • Further investigation into likelihood of grant of disturbance licences.
	0	**0**	**Local recognitions/designations, including ancient woodland and veteran trees** • No likely effects identified.	• No action required.
3. To maintain, conserve and enhance geodiversity.	**+**	**0**	• Exposures resulting from working may be of interest. Benefits are only expected during working, and are likely to be obscured or covered as part of restoration.	• Operator to be asked to permit visits to view exposures as required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	?	0	**Groundwater** • No impact on any Source Protection Zones. Site overlies a Secondary Aquifer. • Possible implications of adjacent landfill, including leachate migration to be considered/assessed. • Assessment required to determine possible impacts on hydrogeology, including considering possible hydraulic links with adjacent nature conservation designations. • Impacts to be appropriately mitigated	• Hydrological assessment required to determine possible impacts, on ground and surface waters, with appropriate mitigation to be implemented. • Where necessary mitigating measures should be installed to maintain groundwater levels. • Appropriate arrangements should be put in place to ensure that the water leaving the site and entering the rivers/watercourses is of an acceptable quality. • Any fuel on site should be properly stored to avoid contamination in case of spillage. • Appropriate arrangements should be installed for surface water and silt collection and fuel storage to prevent contamination of groundwater resources. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.
	–	0	**Surface Water** • Watercourse within the site boundary. There appears to be a pond close to the northern edge of the site and other ponds in vicinity. • Assessment required to determine possible impacts on hydrogeology. Impacts to be appropriately mitigated	
5. To reduce flood risk and improve flood management.	0	0	**Flooding/Coastal Stability** • Entire site is within Flood Risk Zone 1, no expected risk of flooding or contributing to flooding.	• Flood Risk Assessment (FRA) will be required. • All necessary mitigation to be implemented.
6. To maintain, conserve and enhance the historic environment (including archaeological sites, historic buildings, conservation areas, historic parks and gardens and other locally	–	0	**Archaeology** • The number of prehistoric barrows in the area in particular indicates that the site has archaeological potential. • There is a Scheduled Monument – a barrow – to the south-west of the site. Part of the setting of this barrow has already been lost. Development of the proposed site is likely to have an impact on the remaining setting area. Any harm is given great weight in the assessment. • Archaeological assessment and evaluation is required. Only when these have been undertaken would the archaeological impact be	• Full archaeological survey of the area required to assess possible presence and significance of non-designated remains and to assess whether/how these should be protected during working. • All necessary mitigation to be implemented.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
distinctive features and their settings).			understood – at present it could be anywhere from Very Significant to No Significant impact.	• Adequate provision to be made for preservation, excavation or recording, as appropriate. • Further consideration to be given to restoration proposals, in terms of historic landscapes.
	–	+	**Historic Landscapes** • Historically much or all of this site would have been heathland. This heathland formed part of the setting of the barrows in the area. • Unsympathetic extraction and quarrying could have a negative impact on the setting of these Monuments, but there is the potential for an improvement in that setting through restoration to heathland. • Further evaluation will be required. When this has been undertaken possible impacts, if any, will be better understood.	
	0	**0**	**Historic Buildings** • Belts of trees separate Trigon House, which is the nearest listed building to the site. Therefore the site has negligible impact on the listed buildings.	• No action required.
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	–	**0**	**Landscape Capacity** • Potential to impact adversely on the open access land to the west and north west. Due to its position on the west slopes of the hillside its sensitivity is increased and its capacity to absorb development is significantly reduced.	• Assessment of potential visual impacts required. • All appropriate mitigation to be identified and implemented. • Restoration to consider increasing public access/informal recreation and to include nature conservation interests. • Appropriate restoration proposals in line with Landscape Management Guidelines referred to in Minerals Strategy.
	– –			
	–	**0**	**Designated Landscapes** • Less significant adverse impact.	• No action required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
8. To protect and improve air quality and reduce the impacts of noise.	–	0	• Impacts on air quality at/around the site expected to be negligible. • Any dust resulting from working will be controlled through normal dust-suppression measures. • Ball clay traffic travelling to/from Devon along the A35 would have some impact on the Chideock AQMA. • Any impacts due to noise resulting from mineral working would be expected to be satisfactorily minimised through normal noise mitigation measures, imposed at the planning application stage.	• Environmental protection measures to be put in place to reduce dust and noise impacts. • Existing measures to address air quality in Chideock AQMA would minimise impacts due to ball clay transport.
9. To maintain, conserve and enhance soil quality.	–	0	• The site comprises primarily heathland, grassland and woodland cover. The area is a former heathland area and so would be expected to have relatively poor, acidic soils. • Site preparation/working would require stripping and storage of the soils, with some impacts on them. • If the site is worked and restored to heathland this will require reinstatement/retention of acidic soils with their seedbank.	• Soil is poor quality in agricultural terms but valuable in terms of potential for heathland restoration. • Soils to be stored/protected during preparation and working and properly reinstated during restoration.
10. To conserve and safeguard mineral resources.	+ +	0	• The site would make an important contribution to the supply of ball clay.	• No specific action required; site development to take into consideration relevant impacts and mitigate where appropriate.
11. To promote the use of alternative materials.	0	0	• This proposal does not at present promote the use of alternative materials.	• No action required.
12. To provide an adequate and affordable supply of minerals to meet society's needs.	+	0	• Development of this site would provide a benefit in terms of contributing to the provision of a supply of minerals to meet society's needs. • Ensuring a sustainable supply will depend on the development and management of the site. • Providing site development takes into account relevant principles of sustainable development it	• Ensure principles of sustainable development are incorporated into the development of this site.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			is expected this will contribute to complying with this objective.	
13. To promote and encourage sustainable economic growth	+	0	• This site proposal is expected to contribute to economic development on two levels – directly through the provision of employment at the site to be developed and indirectly through the provision of ball clay and aggregate minerals required for the maintenance of built environment and for new built development and for commercial/industrial uses. • Both levels are expected to maintain employment, skilled and unskilled. However given the expected size of the reserve this is likely to be a limited benefit. • Mineral working has the potential to negatively affect businesses in the locality, e.g. through contributing to traffic congestion on the C7, noise, visual and perception related issues. • Proposed restoration is to heathland/agriculture, both of which offer economic benefits.	• Impacts away from the site will be identified as part of any planning application and mitigation during working will be applied where necessary – e.g. holding back quarry traffic during peak travel times, further screening. • Further assessment required to consider restoration options.
14. To adapt to and mitigate the impacts of climate change.	–	0	• Developing land as a quarry is expected to have some negative impacts regarding climate change, due primarily to machinery used and transportation of mineral away from site. However, these will in relative terms be negligible. • The Bournemouth, Dorset and Poole Minerals Strategy seeks to address and minimise such impacts through Policy CC1 which requires operators to take into consideration climate change impacts and their possible mitigation for any proposed minerals development. • The development management policies, e.g. DM 1, also address and seek to minimise the issue of sustainable development and climate change. • Restoration to some form of vegetated environment will offer benefits in the form of climate change mitigation, including provision of habitat for wildlife, but again these will be relatively small.	• Use energy efficient plant and machinery. • Implement restoration which provides appropriate habitats to help to increase resilience of flora/fauna.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
15. To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any residual impacts.	–	0	• This proposal is for an extension to existing ball clay extraction at Trigon Hill. This is an established site with a good access onto Wareham Forest Road. Access from here to the strategic network is gained via the A35 to the north and the A351 to the east. • The extension site could be expected to generate 55 trips per day although it is thought that the site would follow the cessation of other extraction at Trigon rather than operating in parallel to it. The site has therefore been given a 'Less Significant Adverse Impact' rating. • Should the site intensify movements to Trigon Hill any Transport Statement should consider vehicle routing and any impact on the A351 to the east which experiences high levels of congestion. • Policies DM1 and DM 8 actively address this issue of minimising impacts on the transportation network.	• Any proposal for this site would need to be accompanied by a Transport Assessment which will need to provide access details and consider vehicle routing. The TA should be scoped with the Transport Development Management Team. • Transport Assessment to be carried out, identifying opportunities for reducing impacts on the transport network. • Alternative options to be investigated.
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	–	0	• The proposed extension can only realistically be accessed by means of road transport, resulting in a negative impact under this Objective during development and working. • As far as reasonably possible negative impacts resulting from access and transport will be mitigated, as required by Policies DM1 and DM8 of the Minerals Strategy.	• Mitigate impacts where identified and appropriate.
17. To sustain the health and quality of life of the population	?	0	**Impact on Sensitive Human Receptors** • Cold Harbour properties some 380 m to the east, other residential uses further to the north. • Development would likely require appropriate mitigation (such as visual and noise attenuation bunding, standoffs) to limit impacts. • Adequate scope to screen works, using mitigation such as visual and noise attenuation bunds.	• Provision of appropriate mitigation, following assessment of likely impacts. • Restoration to improve landscape of site where possible;

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	?	0	**Impact on Existing Settlements** • Cold Harbour is closest settlement to the east along with other properties along the C7. • Screening (visual and noise attenuation bunding) would significantly limit the impact of the site working, but there will be impacts of lorries entering/leaving the site. This is an extension and should not result in intensification of any impacts.	and to seek to increase public access. • Transport Assessment to be carried out, identifying opportunities for reducing impacts on the transport network where appropriate.
	0	0	**Impact on Airport Safety** • Site is approximately 23 km from airport and proposed for dry working and restoration. • No impacts expected	• No action required.
18. To enable safe access to countryside and open spaces.	0	?	**Impact on Recreational Land** • Site is agricultural land and forestry, private land with no public access. No formal or informal recreational use. • No impacts expected. Restoration to consider options for improving public access in the area.	• No action required for working. • Restoration to improve public access in the area.
	0	0	**Impact on Public Rights of Way** • No rights of way across the site or adjacent to it. • No impacts expected	

Preliminary Hydrological Risk Assessment

Controlled Waters	Issues/Risks	Mitigation	Further information/approval required
• Watercourses • Ponds/lakes, including wet habitats • Groundwater	• The River Basin Management Plan South West River Basin District identifies the Piddle (the closest main river, some 900m distant) as being of 'Poor' environmental quality. Potential for contamination from runoff from site. • Potential for contamination of controlled waters through spillage or seepage of pollutants such as fuel, or silt in water. • Potential impacts on existing surface water features.	• Appropriate arrangements to be made for ensuring that runoff from the site does not enter the Piddle or groundwater unless any silt has first been removed. • Fuel stored on site to be appropriately bunded and sealed to prevent any spillage from entering ground or surface waters. • On-going monitoring during development and working of the site. • Ground water recharge if considered necessary.	• Full hydrogeological risk assessment will be required as part of a planning application. • Flood Risk Assessment • Water Framework Assessment • Further assessment of potential impacts on water quality and levels, particularly for groundwater, is required prior to development. • Assessment of the feasibility of relocating ponds and associated habitats and species. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.

Flood Risk Commentary

Site is entirely within Flood Zone 1.

Limited risk of flooding from surface water. Flood Risk Assessment would be required at planning application stage, with a site specific strategy for surface water management that does not increase rates of runoff or generate off site worsening

Suitable in flood risk terms for allocation in Draft Mineral Sites Plan.

Heritage Impacts

There is a Scheduled Monument adjacent to the southern/eastern part of the site. Its setting has already been affected by previous quarrying, and development of the current site will cause further harm to the setting of the barrow.

This harm must be given great and considerable weight and must be carefully considered against the public and other benefits of aggregate production.

Policy/Legislative Background

The Historic England website notes:

When making a decision on all listed building consent applications or any decision on a planning application for development that affects a listed building or its setting, a local planning authority must have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it

possesses. Preservation in this context means not harming the interest in the building, as opposed to keeping it utterly unchanged.

This obligation, found in sections 16 and 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990, applies to all decisions concerning listed buildings.

The recent Court of Appeal decision in the case of Barnwell vs East Northamptonshire DC 2014(2) made it clear that in enacting section 66(1) of the Planning (Listed Buildings and Conservation Areas) Act 1990 (1) Parliament's intention was that ***'decision makers should give "considerable importance and weight" to the desirability of preserving the setting of listed buildings' when carrying out the balancing exercise'.***

Section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990 (" the 1990 Act ") provides:

"(1) In considering whether to grant planning permission for development which affects a listed building or its setting, the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses."

Section 72 of the 1990 Act provides:

"(1) In the exercise, with respect to any buildings or other land in a conservation area, of any of the provisions mentioned in sub-section (2), special attention shall be paid to the desirability of preserving or enhancing the character or appearance of that area.

(2) The provisions referred to in sub-section (1) are the planning Acts …"

A finding of harm to the setting of a listed building is a consideration to which the decision-maker must give "considerable importance and weight" (The Bath Society v Secretary of State for the Environment [1991] 1 W.L.R. 1303, per Glidewell LJ at 1319; and see East Northamptonshire District Council v Secretary of State for Communities and Local Government [2015] 1 W.L.R. 45 , per Sullivan LJ at [22]–[23] and [29]).

The relevant policies of the National Planning Policy Framework are paragraphs 128–135, the material parts of which provide:

"128. In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance… 129. Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise…

131. In determining planning applications, local planning authorities should take account of:

"• the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation; …"

132. When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation. The more important the asset, the greater the weight should be. …

133. Where a proposed development will lead to substantial harm to or total loss of significance of a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or loss is necessary to achieve substantial public benefits that outweigh that harm or loss, or all of the following apply: …

134. Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal, including securing its optimum viable use.

135. The effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that affect directly or indirectly non-designated heritage

assets, a balanced judgment will be required having regard to the scale of any harm or loss and the significance of the heritage asset."

The National Planning Policy Framework (paragraph 144) also states:

When determining planning applications, local planning authorities should:

- *give **great weight** to the benefits of the mineral extraction, including to the economy;*

Commentary

In considering the potential development of the Trigon Hill Extension site, with acknowledged impacts on a designated heritage asset, the following points have been taken into consideration.

- There is "a strong presumption against harm to designated assets" (Barnwell [2014] EWCA Civ 137; Forge Field [2014] EWHC 1895 (Admin))
- "Considerable weight" must be given to harm to designated assets, however slight, if more than de minimis (Barnwell; Forge Field; Jones [2015] EWCA Civ 1243)
- *Mordue v Secretary of State for Communities and Local Government and others* [2015] EWCA Civ 1243. Heritage assets have statutory protection, unlike other material considerations; and the NPPF has a complex template for their consideration. Both must be considered in an assessment.
- Failure to assess alternative sites on appropriate public interest criteria (Forge Field; ENV4)
- The policy presumption in favour of sustainable development does not apply to cases of harm to designated assets (Gladman [2016] EWHC 421 (Admin))
- Cumulative effects must be considered (PPG)
- All recognised harm must be included in the recommended Planning balance (Barnwell)
- Undue weight should not be given to the temporary nature of development (National Wind Power [1999] N.P.C. 128)

Development of the site would not cause substantial harm to the barrow itself, but would have an impact on its setting. Development of the site would result in temporary harm to the setting of the barrow – this would be 'less than substantial' harm, for a temporary period. This harm has been given great and considerable weight in this assessment.

A range of sites nominated for allocation in the Mineral Sites Plan for sand and gravel quarries have been assessed on heritage grounds and on a range of other grounds. A number have been rejected for reasons other than heritage issues. The remaining sites have been included in the Draft Mineral Sites Plan.

The proposal is for a temporary period, after which the site will be restored and the impact on the heritage asset setting will be removed.

The Heritage Impact Assessment that would be carried out as part of any planning application would identify the setting of the heritage asset and would identify appropriate mitigation to offset the harm to the setting resulting from development of the site to a level that would allow the development to go ahead.

It is expected that the mitigation would be a combination of screening (an earth bund) and a standoff/buffer.

If mitigation is not possible, or if the necessary standoff was such that it made the site uneconomic to develop, then the development would not go ahead.

In considering potential impacts and mitigation, it must be remembered that this is not a planning application, but a nomination for allocation of a site in the Mineral Sites Plan. The evidence required and level of assessment carried out **at this stage** are considered to be proportionate and appropriate. At the planning application stage a detailed Heritage Impact Assessment on the assets and their settings will be carried out, as part of an Environmental Impact Assessment, and the appropriate mitigation identified and applied.

At the current stage, the Mineral Planning Authority is considering whether the proposed nomination can reasonably be allocated through the Mineral Sites Plan, on the understanding that appropriately detailed assessment work will be carried out at a later date, and appropriate mitigation applied.

Although inclusion in an adopted plan gives a site allocation greater weight and likelihood of development, it is **not** deemed planning permission. Any allocation in an adopted plan still needs to go through the full planning

application process, including Environmental Impact Assessment, and if impacts are identified that cannot be satisfactorily mitigated, the proposal will not receive permission.

It is considered, taking into account:

- the less than substantial harm to the setting of the barrow;
- the great and considerable weight given to such harm, and the strong presumption against such harm;
- the temporary nature of the harm
- the great weight to be given to the provision of mineral
- the fact that minerals must be worked where they are found
- the fact that this is an extension site, and the processing plant and other infrastructure is already available
- the fact that the proposed development will be subject to planning application including Environmental Impact Assessment, and impacts on the setting will be assessed in detail and appropriate mitigation identified

that the public benefit to be received from this proposed development, and the nature and duration of the development causing harm, together with the scope for mitigating this harm, are such that the site should be allocated in the Mineral Sites Plan.

Cumulative Impacts

There is other mineral working in the vicinity, both existing and proposed as well as waste management. The proposed site is an extension to existing mineral working/waste disposal. As an extension site, there will be no cumulative impact but this would represent an extension of time of working.

AS12 Philliol's Farm and AS15 Tatchell's will both use the C7 and with Trigon this could lead to transport impacts, including cumulative impacts. Is this situation were likely to arise, carful assessment would be needed to demonstrate that the road could carry the potential traffic loading. The site at Trigon Hill (BC04) would also have to be taken into consideration, along with any new development in and around Wareham.

The proposal is within 5Km (by road) of a site allocated in the Purbeck Local Plan Part 1 (adopted Nov 2012) (Policy CEN) for development of 200 dwellings and community facilities, off Worgret Road, Wareham. Traffic arising from the new residential development will also add to general traffic levels in / around Wareham.

Viability

As an extension to an existing operational site, viability is not considered to be an issue. The extension will use existing processing facilities, road access and serve existing markets, and therefore these do not have to be provided.

Summary.

Potential Benefits	Potential Impacts
• Provision of ball clay, considered a nationally important mineral. • Economic benefits of mineral production. • Restoration could include some increased and improved public access.	• Site is close to European designated heathland; contains Annex 1 birds and could be designated as a Special Protection Area; there are possible impacts on national designations (SSSI nearby) and possible threats to protected species on/around the site. Further assessment, including Appropriate Assessment, will be required to better understand these impacts and to determine whether they can be satisfactorily mitigated. • Ground and surface water – further assessment required to determine possible impacts of quarrying on hydrology and hydrogeology, but these expected to be capable of mitigation.

- Archaeology and historic landscapes – potential impacts on both of these, further assessment required to determine likely impacts, but any impacts expected to be mitigable.
- Landscape capacity and visual impacts are a key issue and impacts must be assessed and appropriately mitigated. Landscape and visual assessment will be required.

Overall Recommendation:

This is a relatively small site which is primarily intended for the production of ball clay.

Assessment already carried out has flagged up biodiversity, hydrology/hydrogeology, archaeology and landscape/visual impacts as the key issues to be addressed as part of working this site. Further assessment, including Appropriate Assessment under the Habitat Regulations, is required to identify satisfactory mitigation and to identify if there are any additional impacts that will require mitigation.

Inclusion of an element of heathland in the restoration is required.

Subject to the completion of all necessary assessments and providing that any impacts are capable of satisfactory mitigation, it appears reasonable on the basis of evidence available that the site nomination can reasonably be included in the Draft Bournemouth, Dorset and Poole Mineral Sites Plan.

Purbeck Stone : PK02 Blacklands Quarry, Acton

Site Name/Location: PK02 Blacklands Quarry, Acton	**Nominee/Agent**: National Trust **Local Authority**: Purbeck District Council **Mineral Type**: Purbeck Stone	**Site Area**: approximately 1.34 ha **Production**: approx. 2,000 tpa **Reserve**: approx. 52,000 tonnes

Impact Assessment Scoring

- -	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain

Timescales for effects:

P/W: Preparation and Working **R/A**: Restoration and Afteruse

Sustainability Objectives	Effects P/W	Effects R/A	Commentary	Mitigation
1. To move waste management up the waste hierarchy	**N/A**	**N/A**	• This Objective is not relevant to this site nomination	• N/A
2. To maintain, conserve and enhance biodiversity	**0**	**0**	**European/International Designations** • No impacts expected.	• No action required.
	0	**0**	**Annex 1 Bird Species** • No impacts expected.	• No action required.
	0	**0**	**National Designations** • No impacts expected.	• No action required.
	0	**0**	**Protected species** • Great Crested Newt is known to breed in a pond within 500m of the proposed site. However, the current land use of improved agricultural grazing land is unlikely to provide any habitat of importance to the species, and the likely effect of mineral extraction on GCN is probably insignificant.	• Ecological surveys required, with appropriate mitigation if required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
	0	**0**	**Local recognitions/designations, including ancient woodland and veteran trees** • No impacts expected.	• No action required.
3. To maintain, conserve and enhance geodiversity.	**+**	**0** **+**	• The Purbeck limestone group has an important association with the geology of the Jurassic Coast World Heritage Site. Working quarries in Purbeck have been known to yield important fossils, including dinosaur footprints. They are also of ongoing interest for the study of early Cretaceous stratigraphy. • These interests should be acknowledged with the assumption that geologists and the Jurassic Coast Team hosted by DCC will respond positively to any opportunities to recover fossils or record and study unusual features if they are discovered. In terms of geodiversity there is a presumption in favour of an appropriate level of quarrying activity continuing in order to sustain the ongoing interests.	• Note potential for quarries to yield fossils or other material of geodiversity interest. • Visits or other investigation of working sites may be requested. • Investigate potential and/or benefits of leaving quarried face open after restoration.
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	**0**	**0**	**Groundwater** • Site overlies Secondary aquifers. No impact on Source Protection Zones. No licenced supplies.	• Simple hydrological assessment required to determine possible impacts, on ground and surface waters, with appropriate mitigation to be implemented. • Appropriate arrangements should be put in place to ensure that the water leaving the site and entering the watercourses or groundwater is of an acceptable quality. • Any fuel on site should be properly stored to avoid contamination in case of spillage. • Appropriate arrangements should be installed for surface water and silt collection and fuel storage to prevent contamination of groundwater resources. • The combined impacts of Purbeck Limestone Quarries should be assessed where a number of sites affect the same water resource or receiving water course.
	0	**0**	**Surface Water** • Watercourses approximately 460m to the west of the site, but no significant water interests in the vicinity.	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
5. To reduce flood risk and improve flood management.	**0**	**0**	**Flooding/Coastal Stability** • Site is entirely in Flood Risk Zone 1, no risk of flooding.	• No action required.
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).	**?**	**0**	**Archaeology** • The discovery of Iron Age and Roman period remains at the Blacklands site to the west and north of the proposal site indicates the present site's high potential for below-ground archaeology. There is also potential for industrial archaeological evidence of early quarrying. • Archaeological assessment and evaluation would be required before an informed planning decision could be made. Only when these have been undertaken would the archaeological impact be understood – at present it could be anywhere from 'Very Significant' to 'No Significant' impacts.	• Archaeological survey of the area required as part of planning application to assess possible presence and significance of non-designated remains and to assess whether/how these should be protected during working – no further work required at site allocation stage. • All necessary mitigation to be implemented prior to working. • Adequate provision to be made for preservation, excavation or recording, as appropriate. • Further consideration to be given to restoration proposals, in terms of historic landscapes.
	?	**0**	**Historic Landscapes** • The local landscape bears the imprint of previous quarrying dating from the Roman period onwards. It could be argued that the present site would be a continuation of the process, and if the site is to be restored afterwards the impact would be limited in time anyway. • Further evaluation will be required. When this has been undertaken possible impacts, if any, will be better understood.	
	0	**0**	**Historic Buildings** • This is a quarry set in a quarrying landscape and the nearest listed buildings are too far away to be affected. • No significant impact expected.	• No action required.
7. To maintain, conserve and enhance the	–	**0**	**Landscape Capacity** • Potential cumulative adverse impacts on the amenity of users of Priests Way.	• Assessment of potential visual impacts will be

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
landscape, including townscape, seascape and the coast.			• Restoration of adjacent quarries recommended to help avoid any cumulative landscape and visual impact.	required <u>at planning application stage</u>. • All appropriate mitigation to be included. • Appropriate restoration proposals in line with Landscape Management Guidelines referred to in Minerals Strategy.
	0	**0**	**Designated Landscapes** • Less significant adverse impact.	
8. To protect and improve air quality and reduce the impacts of noise.	**0**	**0**	• Impacts on air quality expected to be negligible. • No AQMAs will be affected by the working of this site proposal. Any dust resulting from working will be controlled through normal dust-suppression measures. • Noise mitigation will be addressed at the planning application stage, with appropriate mitigation to be included in the development of the site.	• Environmental protection measures to reduce dust and ensure noise is appropriately mitigated.
9. To maintain, conserve and enhance soil quality.	–	**0**	• Site is 'Good to Moderate' agricultural land. • Soils will be stripped and protected during preparation and working and reused on site as part of restoration.	• Soil to be properly stripped and stored prior to working; protected during working; and re-spread on site after working.
10. To conserve and safeguard mineral resources.	**+ +**	**0**	• The site would make an important contribution to the supply of Purbeck Stone for Bournemouth, Dorset and Poole and all other potential markets.	• No specific action required; site development to take into consideration relevant impacts and mitigate where appropriate.
11. To promote the use of alternative materials.	**0**	**0**	• This proposal does not promote the use of alternative materials – there are no alternatives to Purbeck Stone as such.	• No action required.
12. To provide an adequate and affordable supply of minerals to meet society's needs.	**+**	**0**	• Development of this site would provide a benefit in terms of contributing to the provision of a supply of minerals to meet society's needs. • Ensuring a sustainable supply will depend on the development and management of the site. Providing site development takes into account relevant principles of sustainable development it	• Ensure principles of sustainable development are incorporated into the development of this site.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
			is expected this will contribute to complying with this objective.	
13. To promote and encourage sustainable economic growth	+	0	• This site proposal is expected to contribute to economic development on two levels – directly through the provision of employment at the site to be developed and indirectly through the provision of Purbeck Stone required for new build, repairs and maintenance, decorative and monument work and landscaping work. Both levels are expected to maintain employment, skilled and unskilled. • Mineral working has the potential to negatively affect businesses in the locality, e.g. through contributing to traffic congestion, noise, visual and perception related issues. • Restoration to agriculture will maintain an on-going positive benefit. • Restoration to agriculture will offer some economic benefits through both the agriculture itself and the recreational attraction and use in the wider area (i.e. riding, walking).	• Impacts will be identified as part of any planning application and mitigation during working will be applied where necessary – e.g. further screening. No action required.
	?	+		
14. To adapt to and mitigate the impacts of climate change.	–	0	• Developing land as a quarry is expected to have some negative impacts regarding climate change, due primarily to machinery used and transportation of mineral away from site. However, these will in relative terms be negligible. • The Bournemouth, Dorset and Poole Minerals Strategy seeks to address and minimise such impacts through Policy CC1 which requires operators to take into consideration climate change impacts and their possible mitigation for any proposed minerals development. • The development management policies, e.g. DM 1, also address and seek to minimise the issue of sustainable development and climate change.	• Use energy efficient plant and machinery. • Implement restoration which provides appropriate habitats to help to increase resilience of flora/fauna.
15. To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any	–	0	• Access proposed is onto the B3069 via the existing Acton quarry access and a short section of the C135. The access and the junctions in the immediate vicinity are suitable for the small number of proposed movements to this site (c. 4 trips per week). Onward movements to the strategic network would be via the B3069 to the A351, either through Kingston or Langton Matravers.	• Any proposal for this site would need to be accompanied by a Transport Assessment which will need to provide access details and consider vehicle routing. The TA should be scoped with the Transport Development Management Team.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
residual impacts.			• Policies DM1 and DM 8 of the Minerals Strategy actively address this issue of minimising impacts on the transportation network.	• Transport Assessment will identify opportunities for reducing impacts on the transport network.
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	–	0	• The proposed extension can only realistically be accessed by means of road transport, resulting in a negative impact under this Objective during development and working. • As far as reasonably possible negative impacts resulting from access and transport will be mitigated, as required by Policies DM1 and DM8 of the Minerals Strategy.	• Mitigate impacts where identified and appropriate.
17. To sustain the health and quality of life of the population	–	0	**Impact on Sensitive Human Receptors** • Number of residential properties within 350m and within 500m. Row of cottages just north of Priest's Way. • Site is an extension of existing quarry in an area with a long history of quarrying. Impacts could be either 'Less Significant' or 'Not Significant', given the context of the site.	• Provision of appropriate mitigation, following assessment of likely impacts. • Restoration to improve landscape of site where possible; and to seek to facilitate public access. • Screening, bunding, standoffs will be used to mitigate impacts where considered necessary.
	0			
	0	0	**Impact on Existing Settlements** • Nearest settlement is Acton, some 300m north of the proposed extension. Site extension not visible from Acton. Long history of stone quarrying in the area. • Visual or noise impacts are not expected to affect these settlements, nor will there be any intensification of traffic generated by the proposed extension. However existing traffic levels generated by the current operation will continue for a longer period of time.	• Transport Assessment to be carried out, identifying possible impacts and opportunities for reducing impacts on the transport network.
	0	0	**Impact on Airport Safety** • Site is approximately 23 km from airport, with no wet working or restoration. • No impacts expected.	• No action required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
18. To enable safe access to countryside and open spaces.	0	0	**Impact on Recreational Land** • Site is agricultural land, with no formal/informal recreation use. • There may be an opportunity to provide access following working.	• Assessment of impacts, with appropriate mitigation identified. • Restoration to include considering how it might be possible to improve public access in the area.
	_ ?	0	**Impact on Public Rights of Way** • No rights of way cross the site, but Priests Way runs close to the northern boundary. • Screening unlikely to be required and impacts should be minimal but further assessment required.	

Preliminary Hydrological Risk Assessment

Controlled Waters	Issues/Risks	Mitigation	Further information/approval required
• Watercourses • Ponds/lakes, including wet habitats • Groundwater	• Potential for contamination of controlled waters (groundwater) through spillage or seepage of pollutants such as fuel. • Contamination of water supplies or reduction in amount of water available for licenced supplies.	• Appropriate arrangements to be made for ensuring that runoff from the site does not enter the groundwater unless any silt or other pollutant has first been removed. • Fuel stored on site to be appropriately bunded and sealed to prevent any spillage from entering ground or surface waters. • On-going monitoring during development and working of the site.	• Water Framework Assessment required. • Simple hydrological risk assessment required. • Further assessment of potential impacts on water quality and levels, particularly for groundwater, is required prior to development. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.

Flooding Risk Commentary

Site is entirely within Flood Zone 1.

Limited risk of flooding from surface water. Flood Risk Assessment would be required at planning application stage, with a site specific strategy for surface water management that does not increase rates of runoff or generate off site worsening

Suitable in flood risk terms for allocation in Draft Mineral Sites Plan.

Viability

As an extension to an existing site, the proposal is expected to be viable in development.

Cumulative Impacts

Site is proposed extension of existing site, in an area of both existing and proposed mineral development. It is inevitable that there will be other mineral working in the vicinity as this is the area of Dorset where the Purbeck Stone is sourced. Since the proposal comprises the extension of an existing site and will not be begun until the current site is completed, there will be no cumulative impacts from its development. However, the period of time during which the site is generating site traffic will be extended.

Site nomination comprises an extension to an existing quarry in an area where there is a high concentration and long history of mineral extraction. The cumulative effect of the number of quarries operating in this area should be taken into consideration, and as far as possible no new quarry areas should be opened unless others have been restored.

There could be cumulative visual impacts, if the new site is begun before restoration is finished on the old one.

The proposal is within 5Km (by road) of a town (Swanage) where allocations for the development of 200 dwellings, employment and retail facilities have been made in the Purbeck Local Plan Part 1 (adopted Nov 2012) (Policy SE). (Site details not yet available). Traffic arising from the new residential development will add to general traffic levels in / around Swanage and on the A351.

Summary.

Potential Benefits	Potential Impacts
• Provision of Purbeck Stone. • Support for the Purbeck Stone industry and employment, both locally and wherever Purbeck Stone is exported and used. • Use of the stone for heritage building works/repairs, and for new buildings. • Geodiversity benefits, through exposures created and fossils found. • Possibility of improved public access	• Landscape capacity is one of the biggest potential impacts, especially given the proximity of the site to the Priest's Way footpath. However the proposal is an extension and the current site should be restored before moving to the extension. • Assessment of potential heritage impacts required, but these are expected to be capable of mitigation. • Access is not expected to be an issue. Possible impacts on footpaths to be assessed and mitigated as needed.

Overall Recommendation:

Assessment already carried out has flagged up archaeology, landscape/visual impact and access (including impacts on nearby right of way) as the key issues to be addressed as part of working this site. Further assessment will be required at planning application stage to identify satisfactory mitigation and to identify if there are any additional impacts that will require mitigation.

As the site is an extension of an existing site, it is expected that any impacts should be capable of satisfactory mitigation.

Subject to the completion of all necessary assessments and providing that any impacts are capable of satisfactory mitigation, it appears reasonable on the basis of evidence available that the site nomination can reasonably be included in the Draft Bournemouth, Dorset and Poole Mineral Sites Plan.

Purbeck Stone : PK10 Southard Quarry, near Swanage

Site Name/Location: **PK10 Southard Quarry, near Swanage** **Mineral Type**: Purbeck Stone	**Nominee/Agent**: WJ Haysom & Son **Local Authority**: Purbeck District Council	**Site Area**: approximately 0.5 ha **Production**: 500 tpa **Reserve**: approximately 107,500 tonnes

Impact Assessment Scoring

- -	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain

Timescales for effects:

P/W: Preparation and Working **R/A**: Restoration and Afteruse

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
1. To move waste management up the waste hierarchy	**N/A**	**N/A**	• This Objective is not relevant to this site nomination	• N/A
2. To maintain, conserve and enhance biodiversity	**0**	**0**	**European/International Designations** • No impacts expected.	• No action required.
	0	**0**	**Annex 1 Bird Species** • No impacts expected.	• No action required.
	0	**0**	**National Designations** • No impacts expected.	• No action required.
	0	**0**	**Protected species** • No impacts expected	• No action required.
	0	**0**	**Local recognitions/designations, including ancient woodland and veteran trees** • No impacts expected	• No action required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
3. To maintain, conserve and enhance geodiversity.	+	+	• The Purbeck limestone group has an important association with the geology of the Jurassic Coast World Heritage Site. Working quarries in Purbeck have been known to yield important fossils, including dinosaur footprints. They are also of ongoing interest for the study of early Cretaceous stratigraphy. • These interests should be acknowledged with the assumption that geologists and the Jurassic Coast Team hosted by DCC will respond positively to any opportunities to recover fossils or record and study unusual features if they are discovered. In terms of geodiversity there is a presumption in favour of an appropriate level of quarrying activity continuing in order to sustain these ongoing interests.	• Note potential for quarries to yield fossils or other material of geodiversity interest. • Visits or other investigation of working sites may be requested. • Investigate potential and/or benefits of leaving quarried face open after restoration.
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	0	0	**Groundwater** • Site overlies Secondary aquifers. No impact on Source Protection Zones. No licenced supplies.	• Hydrological assessment required to determine possible impacts, on ground and surface waters, with appropriate mitigation to be implemented. • Appropriate arrangements should be put in place to ensure that the water leaving the site and entering the watercourses or groundwater is of an acceptable quality. • Any fuel on site should be properly stored to avoid contamination in case of spillage. • Appropriate arrangements should be installed for surface water and silt collection and fuel storage to prevent contamination of groundwater resources. • The combined impacts of Purbeck Limestone Quarries should be assessed where a number of sites affect the same water resource or receiving water course.
	0	0	**Surface Water** • Spring within 500m of site. No impacts expected on this.	
5. To reduce flood risk and improve flood management.	0	0	**Flooding/Coastal Stability** • Site is entirely in Flood Risk Zone 1, no risk of flooding.	• No action required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
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).	?	0	**Archaeology** • It is considered that the site has high potential for below-ground archaeology and possibly industrial archaeological evidence of early quarrying. • Archaeological assessment and evaluation would be required before an informed planning decision could be made. Only when these have been undertaken would the archaeological impact be understood – at present it could be anywhere from 'Very Significant' to 'No Significant' impacts.	• Archaeological survey of the area required as part of planning application to assess possible presence and significance of non-designated remains and to assess whether/how these should be protected during working – no further work required at site allocation stage. • All necessary mitigation to be implemented prior to working. • Adequate provision to be made for preservation, excavation or recording, as appropriate. • Further consideration to be given to restoration proposals, in terms of historic landscapes.
	0	0	**Historic Landscapes** • The local landscape bears the imprint of previous quarrying dating from the Roman period onwards. It could be argued that the present site would be a continuation of the process, and if the site is to be restored afterwards the impact would be limited in time anyway.	
	0	0	**Historic Buildings** • This site extends a quarry away from its nearest listed building and the site as a whole is part of a quarrying landscape. This means there is minimal impact on the historic building. • No significant impacts expected	• No action required.
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	?	0	**Landscape Capacity** • There may be an issue of cumulative landscape & visual impact; before this site is consented it is recommended that other quarries in the area are restored. • Potential for an adverse impact on the amenity of the footpath users. Mitigation measures must limit height of stock piles.	• Assessment of potential visual impacts will be required at planning application stage. • All appropriate mitigation to be included, including restoration of other sites in the vicinity, as appropriate. • Appropriate restoration proposals in line with Landscape Management Guidelines referred to in Minerals Strategy.
	?	0	**Designated Landscapes** • Site proposal has a Category C (Less Significant Adverse Impact) rating.	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
8. To protect and improve air quality and reduce the impacts of noise.	0	0	• Impacts on air quality expected to be negligible. • No AQMAs will be affected by the working of this site proposal. Any dust resulting from working will be controlled through normal dust-suppression measures. • Noise mitigation will be addressed at the planning application stage, with appropriate mitigation to be included in the development of the site.	• Environmental protection measures to reduce dust and ensure noise is appropriately mitigated.
9. To maintain, conserve and enhance soil quality.	–	0	• Soils are good to moderate in quality. Any soil removed will be protected during working and either re-used on site or taken elsewhere to be used. Further assessment may be required to determine soil quality.	• Soil to be properly stripped and stored prior to working; protected during working; and re-spread on site after working.
10. To conserve and safeguard mineral resources.	+	0	• The site would make an important contribution to the supply of Purbeck Stone for Bournemouth, Dorset and Poole and all other potential markets.	• No specific action required; site development to take into consideration relevant impacts and mitigate where appropriate.
11. To promote the use of alternative materials.	0	0	• This proposal does not promote the use of alternative materials – no alternatives to Purbeck Stone..	• No action required.
12. To provide an adequate and affordable supply of minerals to meet society's needs.	+	0	• Development of this site would provide a benefit in terms of contributing to the provision of a supply of minerals to meet society's needs. • Ensuring a sustainable supply will depend on the development and management of the site. Providing site development takes into account relevant principles of sustainable development it is expected this will contribute to complying with this objective.	• Ensure principles of sustainable development are incorporated into the development of this site.
13. To promote and encourage sustainable economic growth	+	0	• This site proposal is expected to contribute to economic development on two levels – directly through the provision of employment at the site to be developed and indirectly through the provision of Purbeck Stone required for new build, repairs and maintenance, decorative and monument work and landscaping work. Both	• Impacts to be identified and mitigation during working will be applied where necessary – e.g. holding back quarry traffic during peak

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			levels are expected to maintain employment, skilled and unskilled. • Mineral working has the potential to negatively affect businesses in the locality, e.g. through contributing to traffic congestion, noise, visual and perception related issues. • Restoration to agriculture will offer some further economic benefits through both the agriculture itself and the recreational attraction and use in the wider area (i.e. riding, walking).	travel times, further screening..
14. To adapt to and mitigate the impacts of climate change.	_	**0**	• Developing land as a quarry is expected to have some negative impacts regarding climate change, due primarily to machinery used and transportation of mineral away from site. However, these will in relative terms be negligible. • The Bournemouth, Dorset and Poole Minerals Strategy seeks to address and minimise such impacts through Policy CC1 which requires operators to take into consideration climate change impacts and their possible mitigation for any proposed minerals development. • The development management policies, e.g. DM 1, also address and seek to minimise the issue of sustainable development and climate change.	• Use energy efficient plant and machinery. • Implement restoration which provides appropriate habitats to help to increase resilience of flora/fauna.
15. To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any residual impacts.	_	**0**	• Access proposed is via an existing permitted route through the edge of Swanage to the A351. While the roads used are residential and not ideal for quarry related traffic there is little alternative for this and other local small scale extraction. • The level of trips to and from this site by HGVs is likely to be low and sporadic, being linked to specific extraction campaigns and market demand. • The stipulated assessment criteria mean that this site has been given a 'Significant Adverse Impact' rating as the site necessarily means that HGVs will pass through relatively narrow roads within the existing settlement. • However, extraction at this site has been operational for some time and there is no indication that there will be any significant increase in extraction. Provided that HGV traffic continues to use agreed routes through the residential area to the north there is little adverse impact and the site could be considered to have a 'Less Significant Adverse Impact' rating.	• Any proposal for this site would need to be accompanied by a Transport Assessment which will need to provide access details and consider vehicle routing. • The TA should be scoped with the Transport Development Management Team and is intended to identify opportunities for reducing impacts on the transport network.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			• Policies DM1 and DM 8 of the Minerals Strategy actively address this issue of minimising impacts on the transportation network.	
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	–	0	• The proposed site can only realistically be accessed by means of road transport, resulting in a negative impact under this Objective during development and working. • As far as reasonably possible negative impacts resulting from access and transport will be mitigated, as required by Policies DM1 and DM8 of the Minerals Strategy.	• Mitigate impacts where identified and appropriate.
17. To sustain the health and quality of life of the population	?	0	**Impact on Sensitive Human Receptors** • No properties within 250m, closest property is approximately 290m, other properties within 500m and on to Swanage. • Site likely to be screened from closest properties, more distant views into site. Site screening may be required.	• Provision of appropriate mitigation, following assessment of likely impacts. • Restoration to improve landscape of site where possible; and to seek to facilitate public access. • Screening, bunding, standoffs will be used to mitigate impacts where considered necessary.
	–	0	**Impact on Existing Settlements** • Closest settlement is Swanage, to the north and north-east, at around 480-500m distant at the closest. • Visually, site is likely to be screened from closest properties. Possibility of more distant views into site and site screening may be required. Context of the site is area of mineral working and waste management. • Traffic/transport impacts are covered under Objective 15 above.	• Transport Assessment to be carried out, identifying possible impacts and opportunities for reducing impacts on the transport network. • Visual impact assessment will also be required, as referred to above.
	0	0	**Impact on Airport Safety** • Site is approximately 22 km from airport, with no wet working or restoration. • No impacts expected.	• No action required.
18. To enable safe access to countryside	0	+ ?	**Impact on Recreational Land** • Site is agricultural land, with no formal/informal recreation use.	• Assessment of impacts, with

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
and open spaces.	0	0	**Impact on Public Rights of Way** • No rights of way cross the site or run adjacent to its boundary.	appropriate mitigation identified. • Restoration to include considering opportunities to improve public access in the area.

Preliminary Hydrological Risk Assessment

Controlled Waters	Issues/Risks	Mitigation	Further information/approval required
• Watercourses • Ponds/lakes, including wet habitats • Groundwater	• Potential for contamination of controlled waters (groundwater) through spillage or seepage of pollutants such as fuel. • Contamination of water supplies or reduction in amount of water available for licenced supplies.	• Appropriate arrangements to be made for ensuring that runoff from the site does not enter the groundwater unless any silt or other pollutant has first been removed. • Fuel stored on site to be appropriately bunded and sealed to prevent any spillage from entering ground or surface waters. • On-going monitoring during development and working of the site.	• Full hydrogeological risk assessment will be required as part of a planning application. • Flood Risk Assessment • Water Framework Assessment • Further assessment of potential impacts on water quality and levels, particularly for groundwater, is required prior to development. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.

Flood Risk Commentary

Site is entirely within Flood Zone 1.

Limited risk of flooding from surface water. Flood Risk Assessment would be required at planning application stage, with a site specific strategy for surface water management that does not increase rates of runoff or generate off site worsening

Suitable in flood risk terms for allocation in Draft Mineral Sites Plan.

Cumulative Impacts

Site is an extension to an existing quarry in an area where there is a high concentration and long history of mineral extraction. As an extension, it is not expected that there will be any cumulative impacts for traffic.

In terms of other impacts – further assessment may be necessary, along with other works such as restoration of other quarries in the vicinity and minimising the height of stockpiles. There may be an issue of cumulative landscape & visual impact; before this site is consented it is recommended that other quarries in the area are restored.

The proposal is within 5Km (by road) of a town (Swanage) where allocations for the development of 200 dwellings, employment and retail facilities have been made in the Purbeck Local Plan Part 1 (adopted Nov 2012) (Policy SE). (Site details not yet available). Traffic arising from the new residential development will add to general traffic levels in / around Swanage and on the A351.

Viability

As an extension to an existing operational site, viability is not considered to be an issue. The extension is expected to use existing processing facilities, road access and serve existing markets, and therefore these do not have to be provided.

Summary.

Potential Benefits	Potential Impacts
• Provision of Purbeck Stone. • Support for the Purbeck Stone industry and employment, both locally and wherever Purbeck Stone is exported and used, with associated economic benefits. • Use of the stone for heritage building works/repairs, and for new buildings. • Geodiversity benefits, through exposures created and fossils found. • Possibility of improved public access	• Transport impacts to be considered through detailed Transport Assessment at planning permission stage. No intensification of development is expected. • Potential landscape/visual impacts, including cumulative impacts. Further assessment will be required to assess whether the local landscape can accommodate the development and to identify and implement appropriate mitigation. • Further assessment is required to determine whether there will be any archaeology or other heritage impacts, but these are expected to be capable of mitigation.

Overall Recommendation:

Assessment already carried out has flagged up archaeology, landscape/visual impact and access as the key issues to be addressed as part of working this site. Further assessment will be required at planning application stage to identify satisfactory mitigation and to identify if there are any additional impacts that will require mitigation.

As the site is an extension of an existing site, it is expected that any impacts should be capable of satisfactory mitigation.

Subject to the completion of all necessary assessments and providing that any impacts are capable of satisfactory mitigation, it appears reasonable on the basis of evidence available that the site nomination can reasonably be included in the Draft Bournemouth, Dorset and Poole Mineral Sites Plan.

Purbeck Stone: PK15 Downs Quarry Extension

Site Name/Location: **PK15 Downs Quarry Extension**	**Nominee:** Lovell Purbeck Ltd **Agent**: Land and Mineral Management **Local Authority**: Purbeck District Council **Mineral Type**: Purbeck Stone	**Site Area**: approximately 0.67 ha **Production**: 2,500 tpa **Reserve**: approximately 17,000 – 22,000 tonnes

Impact Assessment Scoring

- -	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain

Timescales for effects:

P/W: Preparation and Working **R/A**: Restoration and Afteruse

Sustainability Objectives	Effects P/W	Effects R/A	Commentary	Mitigation
1. To move waste management up the waste hierarchy	**N/A**	**N/A**	• This Objective is not relevant to this site nomination	• N/A
2. To maintain, conserve and enhance biodiversity	**0**	**0**	**European/International Designations** • No impacts expected.	• No action required.
	0	**0**	**Annex 1 Bird Species** • No impacts expected.	• No action required.
	0	**0**	**National Designations** • No impacts expected.	• No action required.
	0	**0**	**Protected species** • Greater Horseshoe Bat is known to inhabit the area close to the proposed site. • Whilst it is unlikely there would be any effect on GHB which would result from quarrying at this location, information would be needed to support the allocation to demonstrate no likely significant effect.	• Ecological surveys required, with appropriate mitigation to be implemented.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	0	0	**Local recognitions/designations, including ancient woodland and veteran trees** • No impacts expected.	• No action required.
3. To maintain, conserve and enhance geodiversity.	+	0	• The Purbeck limestone group has an important association with the geology of the Jurassic Coast World Heritage Site. Working quarries in Purbeck have been known to yield important fossils, including dinosaur footprints. They are also of on-going interest for the study of early Cretaceous stratigraphy. • These interests should be acknowledged with the assumption that geologists and the Jurassic Coast Team hosted by DCC will respond positively to any opportunities to recover fossils or record and study unusual features if they are discovered. In terms of geodiversity there is a presumption in favour of an appropriate level of quarrying activity continuing in order to sustain these on-going interests.	• Note potential for quarries to yield fossils or other material of geodiversity interest. • Visits or other investigation of working sites may be requested. • Investigate potential and/or benefits of leaving quarried face open after restoration.
		+		
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	0	0	**Groundwater** • Site overlies Secondary aquifers. No impact on Source Protection Zones. No licenced supplies.	• Simple hydrological assessment required to determine possible impacts, on ground and surface waters, with appropriate mitigation to be implemented. • Appropriate arrangements should be put in place to ensure that the water leaving the site and entering the watercourses or groundwater is of an acceptable quality. • Any fuel on site should be properly stored to avoid contamination in case of spillage. • Appropriate arrangements should be installed for surface water and silt collection and fuel storage to prevent contamination of groundwater resources. • The combined impacts of Purbeck Limestone Quarries should be assessed where a number of sites affect the same water resource or receiving water course.
	0	0	**Surface Water** • Site is within 500m of a watercourse.	
5. To reduce flood risk and improve flood management.	0	0	**Flooding/Coastal Stability** • Site is entirely in Flood Risk Zone 1, no risk of flooding.	• No action required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
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).	**0**	**0**	**Archaeology** • An archaeological evaluation of this site has been undertaken already (Thames Valley Archaeological Services report dated August 2010 and with site code DQLM10/64). • The results were effectively negative with regard to below-ground archaeology, and no above-ground historic features are known at the site.	• Should any archaeological remains be discovered, adequate provision to be made for preservation, excavation or recording, as appropriate. • Further consideration to be given to restoration proposals, in terms of historic landscapes.
	0	**0**	**Historic Landscapes** • The local landscape bears the imprint of previous quarrying dating from the Roman period onwards. It could be argued that the present site would be a continuation of the process, and if the site is to be restored afterwards the impact would be limited in time anyway.	
	0	**0**	**Historic Buildings** • This is a quarry set in a quarrying landscape and the nearest listed buildings are too far away to be affected. • No significant impact expected.	• No action required.
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	–	**0**	**Landscape Capacity** • There may be an issue with cumulative impact on residential amenity. This proposal is only satisfactory if other quarries in immediate vicinity have been restored prior to its development.	• Assessment of potential visual impacts will be required <u>at planning application stage</u>. • All appropriate mitigation to be carried out, including prior restoration of other quarries as stated. • Appropriate restoration proposals in line with Landscape Management Guidelines referred to in Minerals Strategy.
	–	**0**	**Designated Landscapes** • Less significant adverse impact.	
8. To protect and improve air quality and reduce the impacts of noise.	**0**	**0**	• Impacts on air quality expected to be negligible. • No AQMAs will be affected by the working of this site proposal. Any dust resulting from working will be controlled through normal dust-suppression measures. • Noise mitigation will be addressed at the planning application stage, with appropriate mitigation to be included in the development of the site.	• Environmental protection measures to reduce dust and ensure noise is appropriately mitigated.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
9. To maintain, conserve and enhance soil quality.	–	0	• Site is 'Good to Moderate' agricultural land. • Soils will be stripped and protected during preparation and working and reused on site as part of restoration.	• Soil to be properly stripped and stored prior to working; protected during working; and re-spread on site after working.
10. To conserve and safeguard mineral resources.	+ +	0	• The site would make an important contribution to the supply of Purbeck Stone for Bournemouth, Dorset and Poole and all other potential markets.	• No specific action required; site development to take into consideration relevant impacts and mitigate where appropriate.
11. To promote the use of alternative materials.	–	0	• This proposal does not promote the use of alternative materials.	• No action required.
12. To provide an adequate and affordable supply of minerals to meet society's needs.	+	0	• Development of this site would provide a benefit in terms of contributing to the provision of a supply of minerals to meet society's needs. • Ensuring a sustainable supply will depend on the development and management of the site. Providing site development takes into account relevant principles of sustainable development it is expected this will contribute to complying with this objective.	• Ensure principles of sustainable development are incorporated into the development of this site.
13. To promote and encourage sustainable economic growth	+	0	• This site proposal is expected to contribute to economic development on two levels – directly through the provision of employment at the site to be developed and indirectly through the provision of Purbeck Stone required for new build, repairs and maintenance, decorative and monument work and landscaping work. Both levels are expected to maintain employment, skilled and unskilled. • Mineral working has the potential to negatively affect businesses in the locality, e.g. through contributing to traffic congestion, noise, visual and perception related issues. • Restoration to agriculture will offer some economic benefits through both the agriculture itself and the recreational attraction and use in the wider area (i.e. riding, walking).	• Impacts on local businesses will be identified and mitigation during working will be applied where necessary – e.g. holding back quarry traffic during peak travel times, further screening..

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
14. To adapt to and mitigate the impacts of climate change.	-	0	• Developing land as a quarry is expected to have some negative impacts regarding climate change, due primarily to machinery used and transportation of mineral away from site. However, these will in relative terms be negligible. • The Bournemouth, Dorset and Poole Minerals Strategy seeks to address and minimise such impacts through Policy CC1 which requires operators to take into consideration climate change impacts and their possible mitigation for any proposed minerals development. • The development management policies, e.g. DM 1, also address and seek to minimise the issue of sustainable development and climate change.	• Use energy efficient plant and machinery. • Implement restoration which provides appropriate habitats to help to increase resilience of flora/fauna.
15. To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any residual impacts.	-	0	• Access proposed is via the existing Downs Quarry to the south of the identified site. This in turn has a suitable access directly onto the B3069. The trip generation of the proposed site is not great (4 to 16 movements per day) and is likely to follow reduced extraction within the existing site as existing resources become exhausted. • While routes from the site to the A351 will go through either Langton Matravers or Kingston, the route is via a B class road and the number of trips is relatively low. Provided that there is little increase in HGV traffic over the existing operation, there is little adverse impact and the site is considered to have a 'Less Significant Adverse Impact'. • Policies DM1 and DM 8 of the Minerals Strategy actively address this issue of minimising impacts on the transportation network.	• Any proposal for this site would need to be accompanied by a Transport Assessment which will need to provide access details and consider vehicle routing. The TA should be scoped with the Transport Development Management Team. • Transport Assessment will identify opportunities for reducing impacts on the transport network.
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	-	0	• The proposed extension can only realistically be accessed by means of road transport, resulting in a negative impact under this Objective during development and working. • As far as reasonably possible negative impacts resulting from access and transport will be mitigated, as required by Policies DM1 and DM8 of the Minerals Strategy.	• Mitigate impacts where identified and appropriate.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
17. To sustain the health and quality of life of the population	_	0	**Impact on Sensitive Human Receptors** • Site is an extension of existing quarry in an area with a long history of quarrying. Closest property approximately 50m to the east, others within 250m to east/north/south. • However, the context of the site is of stone quarrying and other properties in the area are very close to quarries/service yards. • Impacts could be 'Less Significant', given the context of the site.	• Provision of appropriate mitigation, following assessment of likely impacts. • Restoration to improve landscape of site where possible; and to seek to facilitate public access. • Restoration of some local quarrying activity, prior to development of this site. • Screening, bunding, standoffs will be used to mitigate impacts where considered necessary. • Transport impacts to be considered through Transport Assessment, as considered above.
	_ _ ?			
	_ ?	0	**Impact on Existing Settlements** • Harman's Cross 850m to the north, Acton and Langton Matravers around 1km to west/south west. Site is completely screened from latter two. • Harman's Cross might have partial views up to the site, depending on screening to be implemented. • It is assumed that this site will not be developed until other locations have been completed; therefore there will not be any intensification of existing traffic levels generated by the proposed extension. However existing traffic levels generated by the current operation will continue for a longer period of time.	
	0	0	**Impact on Airport Safety** • Site is approximately 23 km from airport, with no wet working or restoration. • No impacts expected.	• No action required.
18. To enable safe access to countryside and open spaces.	0	0	**Impact on Recreational Land** • Site is agricultural land, with no formal/informal recreation use.	• Assessment of potential impacts, with appropriate mitigation identified. • Restoration to include considering how it might be possible to improve public access in the area.
	0	0	**Impact on Public Rights of Way** • No rights of way cross the site or run adjacent to its boundary.	

Preliminary Hydrological Risk Assessment

Controlled Waters	Issues/Risks	Mitigation	Further information/approval required
• Watercourses • Ponds/lakes, including wet habitats • Groundwater	• Potential for contamination of controlled waters (groundwater) through spillage or seepage of pollutants such as fuel. • Contamination of water supplies or reduction in amount of water available for licenced supplies.	• Appropriate arrangements to be made for ensuring that runoff from the site does not enter the groundwater unless any silt or other pollutant has first been removed. • Fuel stored on site to be appropriately bunded and sealed to prevent any spillage from entering ground or surface waters. • On-going monitoring during development and working of the site.	• Full hydrogeological risk assessment will be required as part of a planning application. • Flood Risk Assessment • Water Framework Assessment • Further assessment of potential impacts on water quality and levels, particularly for groundwater, is required prior to development. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.

Flood Risk Commentary

Site is entirely within Flood Zone 1

No grounds for objection, subject to detail: The site falls entirely within Flood Zone 1 (low risk – fluvial flooding) according to the Environment Agency's relevant flood modelling, and is not shown to be at any theoretical risk of surface water flooding, by relevant mapping. Given the prevailing geology, it is likely that surface water would be managed via infiltration.

A site specific strategy for surface water management is a requirement for all development (NPPF), as no off site worsening should be offered. Both surface and ground water derived from the site is assumed to migrate north towards the Downshay Farm grouping of properties. Prior Land Drainage Consent may be required from DCC as relevant LLFA, for any works offering an obstruction to flow within a channel with the status of Ordinary Watercourse.

Viability

As an extension to an existing operational site, viability is not considered to be an issue. The site will use existing processing facilities, road access and serve existing markets, and therefore these do not have to be provided.

Cumulative Impacts

Site is an extension to an existing quarry in an area where there is a high concentration and long history of mineral extraction. As an extension, it is not expected that there will be any cumulative impacts for traffic.

There is potential for cumulative visual impacts if the proposed extension is worked while the current site is still in restoration. This would be a time limited impact, and should be addressed at the planning application stage.

The proposal is within 5Km (by road) of a town (Swanage) where allocations for the development of 200 dwellings, employment and retail facilities have been made in the Purbeck Local Plan Part 1 (adopted Nov 2012) (Policy SE). (Site details not yet available). Traffic arising from the new residential development will add to general traffic levels in / around Swanage and on the A351.

The combined impacts of Purbeck Limestone Quarries should be assessed where a number of sites affect the same water resource or receiving water course. To reduce cumulative impacts of quarry development, other quarries in the control of the developer should be restored, and stockpiles reduced if necessary/appropriate, before this site is developed.

It is expected that these impacts are capable of mitigation.

Summary.

Potential Benefits	Potential Impacts
• Provision of Purbeck Stone. • Support for the Purbeck Stone industry and employment, both locally and wherever Purbeck Stone is exported and used, with associated economic benefits. • Use of the stone for heritage building works/repairs, and for new buildings. • Geodiversity benefits, through exposures created and fossils found. • Possibility of improved public access	• Ensure no impacts from working this site on Greater Horseshoe Bats. • No new or intensified transport impacts expected; detailed Transport Assessment required at planning permission stage to consider impacts and identify appropriate mitigation. • Assessment of impacts on landscape capacity and of visual impacts required, with relevant mitigation identified. • Potentially significant impacts on local amenity, particularly neighbouring properties. Full assessment of possible impacts will be required, with relevant mitigation identified. • Further assessment is required to determine whether there will be any archaeology or other heritage issues, with relevant mitigation identified.

Overall Recommendation:

Assessment already carried out has flagged up archaeology, landscape/visual impact and local amenity as the key issues to be addressed as part of working this site. Further assessment will be required to identify satisfactory mitigation and to identify if there are any additional impacts that will require mitigation.

As the site is an extension of an existing site, it is expected that any impacts should be capable of satisfactory mitigation.

Subject to the completion of all necessary assessments and providing that any impacts are capable of satisfactory mitigation, it appears reasonable on the basis of evidence available that the site nomination can reasonably be included in the Draft Bournemouth, Dorset and Poole Mineral Sites Plan.

Purbeck Stone: PK17 Home Field, Langton Matravers

Site Name/Location: **PK17 Home Field, Langton Matravers**	**Nominee:** National Trust **Agent**: Land and Mineral Management **Local Authority**: Purbeck District Council **Mineral Type**: Purbeck Stone	**Site Area**: approximately 10.5 ha **Production**: 2,000 tpa **Reserve**: approximately 340,000 tonnes

Impact Assessment Scoring

- -	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain

Timescales for effects:

P/W: Preparation and Working **R/A**: Restoration and Afteruse

Sustainability Objectives	Effects P/W	Effects R/A	Commentary	Mitigation
1. To move waste management up the waste hierarchy	**N/A**	**N/A**	• This Objective is not relevant to this site nomination	• N/A
2. To maintain, conserve and enhance biodiversity	**0**	**0**	**European/International Designations** • No impacts expected. • Suitable stand-off to protect the SAC grassland immediately to the west will be required.	• Ensure appropriate stand-off is included.
	0	**0**	**Annex 1 Bird Species** • No impacts expected.	• No action required.
	0	**0**	**National Designations** • No impacts expected.	• No action required.
	0	**0**	**Protected species** • No impacts expected	• No action required.
	0	**0**	**Local recognitions/designations, including ancient woodland and veteran trees** • No impacts expected	• No action required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
3. To maintain, conserve and enhance geodiversity.	+	+ ?	• The Purbeck limestone group has an important association with the geology of the Jurassic Coast World Heritage Site. Working quarries in Purbeck have been known to yield important fossils, including dinosaur footprints. They are also of ongoing interest for the study of early Cretaceous stratigraphy. • These interests should be acknowledged with the assumption that geologists and the Jurassic Coast Team hosted by DCC will respond positively to any opportunities to recover fossils or record and study unusual features if they are discovered. In terms of geodiversity there is a presumption in favour of an appropriate level of quarrying activity continuing in order to sustain these ongoing interests.	• Note potential for quarries to yield fossils or other material of geodiversity interest. • Visits or other investigation of working sites may be requested. • Investigate potential and/or benefits of leaving quarried face open after restoration.
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	–	0	**Groundwater** • Impact would vary from 'Less Significant Adverse Impact' to 'Significant Adverse Impact' depending on determined impact for the groundwater spring issues rising 80 m to the west of the site. These springs must be protected. • Site overlies Secondary aquifers. No impact on Source Protection Zones. No licenced supplies.	• Hydrological assessment required to determine possible impacts, on ground and surface waters, with appropriate mitigation to be implemented. • Appropriate arrangements should be put in place to ensure that the water leaving the site and entering the watercourses or groundwater is of an acceptable quality. • Any fuel on site should be properly stored to avoid contamination in case of spillage. • Appropriate arrangements should be installed for surface water and silt collection and fuel storage to prevent contamination of groundwater resources. • The combined impacts of Purbeck Limestone Quarries should be assessed where a number of sites affect the same water resource or receiving water course.
	– –			
	?	0	**Surface Water** • There are watercourses/springs to the west of the site, nearest is approximately 80 m from the site.	
5. To reduce flood risk and improve flood management.	0	0	**Flooding/Coastal Stability** • Site is entirely in Flood Risk Zone 1, no risk of flooding.	• No action required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
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).	?	0	**Archaeology** • There is a Scheduled Monument to the west of the site (SM33164 – 'Pillow mound 145m south east of Eastington Farm'). • The discovery of Iron Age and Roman period remains at the Blacklands site to the east and north-east of the site indicates the present site's high potential for below-ground archaeology. • There is also potential for industrial archaeological evidence of early quarrying. Archaeological assessment (including of the impact on the setting of SM33164 and other Scheduled Monuments in the area) and evaluation would be required before an informed planning decision could be made. • Archaeological assessment and evaluation would be required before an informed planning decision could be made. Only when these have been undertaken would the archaeological impact be understood – at present it could be anywhere from 'Very Significant' to 'No Significant' impact.	• Archaeological survey of the area required <u>as part of planning application</u> to assess possible presence and significance of non-designated remains and to assess whether/how these should be protected during working – <u>no further work required at site allocation stage</u>. • All necessary mitigation to be implemented prior to working. • Adequate provision to be made for preservation, excavation or recording, as appropriate. • Further consideration to be given to restoration proposals, in terms of historic landscapes.
	?	0	**Historic Landscapes** • The local landscape bears the imprint of previous quarrying dating from the Roman period onwards. It could be argued that the present site would be a continuation of the process, and if the site is to be restored afterwards the impact would be limited in time anyway.	
	0	0	**Historic Buildings** • This site is part of a characterful landscape of which the quarrying activities help to form its character. Buildings are not immediately adjacent to the site but derive character from the overall landscape. • The quarry will have no significant impact on the listed buildings.	• No action required.
7. To maintain, conserve and enhance the landscape, including	–	0	**Landscape Capacity** • This site is primarily within the zone of least landscape and visual impact so it will be how the area is worked which will determine its capacity.	• Site to be developed as suggested to minimise impacts. • Site boundary to be amended to remove

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
townscape, seascape and the coast.			• Small areas, quantities, progressive restoration and in short campaigns with low stockpiles is recommended.	the area outside the zone of least landscape and visual impact.
	–	**0**	**Designated Landscapes** • This site is primarily within the zone of least landscape and visual impact, resulting is a less significant adverse impact for most of the proposed site. • However, the south-western corner of the site is outside the zone of least landscape and visual impact and the boundary therefore needs to be amended to remove the area outside the zone.	
8. To protect and improve air quality and reduce the impacts of noise.	**0**	**0**	• Impacts on air quality expected to be negligible. • No AQMAs will be affected by the working of this site proposal. Any dust resulting from working will be controlled through normal dust-suppression measures. • Noise mitigation will be addressed at the planning application stage, with appropriate mitigation to be included in the development of the site.	• Environmental protection measures to reduce dust and ensure noise is appropriately mitigated.
9. To maintain, conserve and enhance soil quality.	–	**0**	• Soils are somewhere between good to moderate to very poor. Any soil removed will be protected during working and either re-used on site or taken elsewhere to be used. Further assessment may be required to determine soil quality.	• Soil to be properly stripped and stored prior to working; protected during working; and re-spread on site after working.
10. To conserve and safeguard mineral resources.	+ +	**0**	• The site would make an important contribution to the supply of Purbeck Stone for Bournemouth, Dorset and Poole and all other potential markets.	• No specific action required; site development to take into consideration relevant impacts and mitigate where appropriate.
11. To promote the use of alternative materials.	–	**0**	• This proposal does not promote the use of alternative materials.	• No action required.
12. To provide an adequate and affordable supply of minerals to	+	**0**	• Development of this site would provide a benefit in terms of contributing to the provision of a supply of minerals to meet society's needs. • Ensuring a sustainable supply will depend on the development and management of the site.	• Ensure principles of sustainable development are incorporated into the

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
meet society's needs.			Providing site development takes into account relevant principles of sustainable development it is expected this will contribute to complying with this objective.	development of this site.
13. To promote and encourage sustainable economic growth	+	0	• This site proposal is expected to contribute to economic development on two levels – directly through the provision of employment at the site to be developed and indirectly through the provision of Purbeck Stone required for new build, repairs and maintenance, decorative and monument work and landscaping work. Both levels are expected to maintain employment, skilled and unskilled. • Restoration to agriculture will offer some economic benefits through both the agriculture itself and the recreational attraction and use in the wider area (i.e. riding, walking).	• No action required.
14. To adapt to and mitigate the impacts of climate change.	_	0	• Developing land as a quarry is expected to have some negative impacts regarding climate change, due primarily to machinery used and transportation of mineral away from site. However, these will in relative terms be negligible. • The Bournemouth, Dorset and Poole Minerals Strategy seeks to address and minimise such impacts through Policy CC1 which requires operators to take into consideration climate change impacts and their possible mitigation for any proposed minerals development. • The development management policies, e.g. DM 1, also address and seek to minimise the issue of sustainable development and climate change.	• Use energy efficient plant and machinery. • Implement restoration which provides appropriate habitats to help to increase resilience of flora/fauna.
15. To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any residual impacts.	_	0	• Access is proposed via the existing service area and the C135 to the B3069. From here vehicles will travel to the A351 either west, past Kingston, or east, through Langton Matravers. Vehicle movements here are expected to be low and will not exceed that which currently exists. • While access to the strategic network will involve travel through existing settlements, the low number of trips plus the B class of the road used means that there will be limited impact. Therefore the site is considered to have a 'Less Significant Adverse Impact'.	• Any proposal for this site would need to be accompanied by a Transport Assessment which will need to provide access details and consider vehicle routing. • The TA should be scoped with the Transport Development Management Team and is intended to identify opportunities for

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			• Policies DM 1 and DM 8 of the Minerals Strategy actively address this issue of minimising impacts on the transportation network.	reducing impacts on the transport network.
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	–	**0**	• Sites which may be developed in this field can only realistically be accessed by means of road transport, resulting in a negative impact under this Objective during development and working. • As far as reasonably possible negative impacts resulting from access and transport will be mitigated, as required by Policies DM1 and DM8 of the Minerals Strategy.	• Mitigate impacts where identified and appropriate.
17. To sustain the health and quality of life of the population	–	**0**	**Impact on Sensitive Human Receptors** • There are properties within 100 m to north-west; 250 m to west and approximately 300 m to the north. Campsites at approximately 400 m and 600 m to north/north west. • Context is small quarries in an area with a long history of Purbeck Stone quarrying. National Trust will control rate of quarrying. Only small areas within the overall field will be quarried – exact sites not known yet. Appropriate mitigation (screening) to be determined.	• Provision of appropriate mitigation, following assessment of likely impacts. • Restoration to improve landscape of site where possible; and to seek to facilitate public access. • Screening, bunding, standoffs will be used to mitigate impacts where considered necessary. • Transport impacts to be considered through Transport Assessment, as noted above.
	0	**0**	**Impact on Existing Settlements** • Acton is approximately 300 m to the north; Langton Matravers is approximately 750 m to north-west. • Impacts are expected to be minimal, given the rate of quarrying and context of the site proposals. • There are already two permitted and working quarries within the overall site. The National Trust, as landowners, will control the rate at which the site is worked to minimize impacts and maintain the appearance of a range of smaller quarries on their land. • Transport issues are considered above.	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	0	0	**Impact on Airport Safety** • Site is approximately 23 km from airport, with no wet working or restoration. • No impacts expected.	• No action required.
18. To enable safe access to countryside and open spaces.	0	0	**Impact on Recreational Land** • Site is agricultural land, not use for formal/informal agricultural purposes.	• Assessment of impacts, with appropriate mitigation identified. • Restoration to include considering how it might be possible to improve public access in the area.
	_	0	**Impact on Public Rights of Way** • Bridleway runs along northern edge of site nomination. Given the context of the site there is no need for realignment of the route and probably no need for special screening. • Further assessment required of possible impacts and appropriate screening.	

Preliminary Hydrological Risk Assessment

Controlled Waters	Issues/Risks	Mitigation	Further information/approval required
• Watercourses • Ponds/lakes, including wet habitats • Groundwater	• Potential for contamination of controlled waters (groundwater) through spillage or seepage of pollutants such as fuel. • Contamination of water supplies or reduction in amount of water available for licenced supplies.	• Appropriate arrangements to be made for ensuring that runoff from the site does not enter the groundwater unless any silt or other pollutant has first been removed. • Fuel stored on site to be appropriately bunded and sealed to prevent any spillage from entering ground or surface waters. • On-going monitoring during development and working of the site.	• Full hydrogeological risk assessment will be required as part of a planning application. • Flood Risk Assessment • Water Framework Assessment • Further assessment of potential impacts on water quality and levels, particularly for groundwater, is required prior to development. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.

Flood Risk Commentary

Site is entirely within Flood Zone 1.

Limited risk of flooding from surface water. Flood Risk Assessment would be required at planning application stage, with a site specific strategy for surface water management that does not increase rates of runoff or generate off site worsening

Suitable in flood risk terms for allocation in Draft Mineral Sites Plan.

Viability

This proposal is about establishing the principle of quarrying across this site, to be released for actual quarrying as may be needed. There are two existing quarries on the site already. The National Trust own the land and will release it as required. Viability is not expected to be a issue.

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Cumulative Impacts

The combined impacts of Purbeck Limestone Quarries should be assessed where a number of sites affect the same water resource or receiving water course.

Site nomination is a field within which there will be small-scale Purbeck Stone extraction. Site is owned by the National Trust who require small-scale and low impact working. Site is in an area where there are a number of other Purbeck Stone workings. There are already two 1 ha quarries at Home Field and provided the working does not intensify, no cumulative impacts are expected.

It is expected that, given the proposal and the approach of the National Trust of low impact quarrying, it will be possible to possible to mitigate impacts.

Traffic arising from the new residential development will add to general traffic levels in / around Swanage and on the A351.

Summary.

Potential Benefits	Potential Impacts on...
• Provision of Purbeck Stone. • Support for the Purbeck Stone industry and employment, both locally and wherever Purbeck Stone is exported and used, with associated economic benefits. • Use of the stone for heritage building works/repairs, and for new buildings. • Geodiversity benefits, through exposures created and fossils found. • Possibility of improved public access.	• Bridleway to the north. Further assessment required, mitigation expected to be possible. • Residents and settlements. Site is relatively close to some dwellings, and to settlements. In the context of the Purbeck plateau with its long history of quarrying, this is not expected to be a problem and should be capable of satisfactory mitigation. • Transport Assessment will be required at planning application stage, but traffic impacts are expected to capable of mitigation. • The south-western corner of the site is outside the zone of least landscape and visual impact. Mitigation will be achieved through removing the area that falls outside the zone.

- Scheduled monument to the west of the site. Not expected to suffer any impacts, provided the setting is considered carefully. Assessment is required to determine whether there will be any archaeology or other heritage issues, and what mitigation will be required.
- Groundwater and surface water both have the potential to be impacted and will require a hydrological assessment to determine what mitigation will be required.

Overall Recommendation:

Assessment already carried out has flagged up hydrogeology, archaeology and landscape/visual impact as key issues to be addressed as part of working this site. Further assessment will be required to identify satisfactory mitigation and to identify if there are any additional impacts that will require mitigation.

Key issues for consideration are need for further hydrological assessment, given that springs rise in the vicinity; need for archaeological assessment, given that there is a Scheduled Ancient Monument in the vicinity; visual impact assessment, given that the field is on the edge of the Purbeck Stone area of search; part of the field (south-western corner) will need to be removed as it lies outside the area of search; there is a bridleway to the north of the site, generally screened, and amenity as there are residences in the vicinity, and Acton is to the north.

Access arrangements are already in place and would be expected to continue.

As National Trust land, only small parts of the site will be worked at any one time and will be restored before other areas are worked, thereby minimising impacts.

Subject to the completion of all necessary assessments and providing that any impacts are capable of satisfactory mitigation, it appears reasonable on the basis of evidence available that the site nomination can reasonably be included in the Draft Bournemouth, Dorset and Poole Mineral Sites Plan.

Purbeck Stone: PK 18 Extension to Quarry 4, Acton

Site Name/Location: **Extension to Quarry 4, Acton**	**Nominee:** National Trust **Agent**: Land and Mineral Management **Local Authority**: Purbeck District Council **Mineral Type**: Purbeck Stone	**Site Area**: approximately 1.1 ha **Production**: 2,000 tpa **Reserve**: approximately 40,000 tonnes

Impact Assessment Scoring

- -	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain

Timescales for effects:

P/W: Preparation and Working **R/A**: Restoration and Afteruse

Sustainability Objectives	Effects P/W	Effects R/A	Commentary	Mitigation
1. To move waste management up the waste hierarchy	**N/A**	**N/A**	• This Objective is not relevant to this site nomination	• N/A
2. To maintain, conserve and enhance biodiversity	**0**	**0**	**European/International Designations** • No impacts expected.	• No action required.
	0	**0**	**Annex 1 Bird Species** • No impacts expected.	• No action required.
	0	**0**	**National Designations** • No impacts expected.	• No action required.
	0	**0**	**Protected species** • No impacts expected.	• No action required.
	0	**0**	**Local recognitions/designations, including ancient woodland and veteran trees** • No impacts expected.	• No action required.
3. To maintain, conserve and enhance geodiversity.	**+**	**+**	• The Purbeck limestone group has an important association with the geology of the Jurassic Coast World Heritage Site. Working quarries in Purbeck have been known to yield important fossils, including dinosaur footprints. They are	• Note potential for quarries to yield fossils or other material of geodiversity interest.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
		0	also of on-going interest for the study of early Cretaceous stratigraphy. • These interests should be acknowledged with the assumption that geologists and the Jurassic Coast Team hosted by DCC will respond positively to any opportunities to recover fossils or record and study unusual features if they are discovered. In terms of geodiversity there is a presumption in favour of an appropriate level of quarrying activity continuing in order to sustain these on-going interests.	• Visits or other investigation of working sites may be requested. • Investigate potential and/or benefits of leaving quarried face open after restoration.
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	–	**0**	**Groundwater** • Site overlies Secondary Aquifer. Private or local water interests identified within 250 m of the site. No impact on source protection zones. • Impact ranges from 'Significant Adverse Impact' to 'Less Significant Adverse Impact'.	• Hydrological assessment required to determine possible impacts, on ground and surface waters, with appropriate mitigation to be implemented. • Appropriate arrangements should be put in place to ensure that the water leaving the site and entering the watercourses or groundwater is of an acceptable quality. • Any fuel on site should be properly stored to avoid contamination in case of spillage. • Appropriate arrangements should be installed for surface water and silt collection and fuel storage to prevent contamination of groundwater resources. • The combined impacts of Purbeck Limestone Quarries should be assessed where a number of sites affect the same water resource or receiving water course.
	0	**0**	**Surface Water** • No watercourses within 500 m.	
5. To reduce flood risk and improve flood management.	**0**	**0**	**Flooding/Coastal Stability** • Site is entirely in Flood Risk Zone 1, no risk of flooding.	• No action required.
6. To maintain, conserve and enhance the historic environment (including archaeological	**?**	**0**	**Archaeology** • It is considered that the site has high potential for below-ground archaeology and possibly industrial archaeological evidence of early quarrying. • Archaeological assessment and evaluation would be required before an	• Archaeological survey of the area required as part of planning application to assess possible presence and significance of non-designated remains and to assess whether/how these

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
sites, historic buildings, conservation areas, historic parks and gardens and other locally distinctive features and their settings).			informed planning decision could be made. Only when these have been undertaken would the archaeological impact be understood – at present it could be anywhere from 'Very Significant' to 'No Significant' impacts.	should be protected during working – <u>no further work required at site allocation stage</u>. • All necessary mitigation to be implemented prior to working. • Adequate provision to be made for preservation, excavation or recording, as appropriate. • Further consideration to be given to restoration proposals, in terms of historic landscapes.
	0	**0**	**Historic Landscapes** • The local landscape bears the imprint of previous quarrying dating from the Roman period onwards. It could be argued that the present site would be a continuation of the process, and if the site is to be restored afterwards the impact would be limited in time anyway.	
	0	**0**	**Historic Buildings** • This site is part of a characterful landscape of which the quarrying activities help to form its character. Buildings are not immediately adjacent to the site but derive character from the overall landscape. • The quarry will have no significant impact on the listed buildings.	• No action required.
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	–	**0**	**Landscape Capacity** • The key issue is the potential cumulative adverse impacts on the amenity of users of Priests Way.	• Assessment of potential visual impacts will be required <u>at planning application stage</u>. • All appropriate mitigation to be included, including restoration of other sites in the vicinity, as appropriate. • Appropriate restoration proposals in line with Landscape Management Guidelines referred to in Minerals Strategy.
	0	**0**	**Designated Landscapes** • 'Less Significant Adverse Impact' on designated landscapes from this proposal.	
8. To protect and improve air quality and reduce the	**0**	**0**	• Impacts on air quality expected to be negligible. • No AQMAs will be affected by the working of this site proposal. Any dust resulting from working will be controlled through normal dust-suppression measures.	• Environmental protection measures to reduce dust and ensure noise is appropriately mitigated.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
impacts of noise.			• Noise mitigation will be addressed at the planning application stage, with appropriate mitigation to be included in the development of the site.	
9. To maintain, conserve and enhance soil quality.	–	0	• Soils are good to moderate in quality. Any soil removed will be protected during working and either re-used on site or taken elsewhere to be used. Further assessment may be required to determine soil quality.	• Soil to be properly stripped and stored prior to working; protected during working; and re-spread on site after working.
10. To conserve and safeguard mineral resources.	+ +	0	• The site would make an important contribution to the supply of Purbeck Stone for Bournemouth, Dorset and Poole and all other potential markets.	• No specific action required; site development to take into consideration relevant impacts and mitigate where appropriate.
11. To promote the use of alternative materials.	–	0	• This proposal does not promote the use of alternative materials.	• No action required.
12. To provide an adequate and affordable supply of minerals to meet society's needs.	+	0	• Development of this site would provide a benefit in terms of contributing to the provision of a supply of minerals to meet society's needs. • Ensuring a sustainable supply will depend on the development and management of the site. Providing site development takes into account relevant principles of sustainable development it is expected this will contribute to complying with this objective.	• Ensure principles of sustainable development are incorporated into the development of this site.
13. To promote and encourage sustainable economic growth	+	0	• This site proposal is expected to contribute to economic development on two levels – directly through the provision of employment at the site to be developed and indirectly through the provision of Purbeck Stone required for new build, repairs and maintenance, decorative and monument work and landscaping work. Both levels are expected to maintain employment, skilled and unskilled. • Restoration to agriculture will offer some further economic benefits through both the agriculture itself and the recreational attraction and use in the wider area (i.e. riding, walking).	• No action required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
14. To adapt to and mitigate the impacts of climate change.	_	0	• Developing land as a quarry is expected to have some negative impacts regarding climate change, due primarily to machinery used and transportation of mineral away from site. However, these will in relative terms be negligible. • The Bournemouth, Dorset and Poole Minerals Strategy seeks to address and minimise such impacts through Policy CC1 which requires operators to take into consideration climate change impacts and their possible mitigation for any proposed minerals development. • The development management policies, e.g. DM 1, also address and seek to minimise the issue of sustainable development and climate change.	• Use energy efficient plant and machinery. • Implement restoration which provides appropriate habitats to help to increase resilience of flora/fauna.
15. To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any residual impacts.	_	0	• Access is proposed via the existing quarry and the C135 to the B3069. From here vehicles will travel to the A351 either west, past Kingston, or east, through Langton Matravers. • Vehicle movements here are expected to be low and will not exceed that which currently exists. While access to the strategic network will involve travel through existing settlements, the low number of trips plus the B class of the road used means that there will be limited impact. • Site is considered to have a 'Less Significant Adverse Impact'. • Policies DM 1 and DM 8 of the Minerals Strategy actively address this issue of minimising impacts on the transportation network.	• Any proposal for this site would need to be accompanied by a Transport Assessment which will need to provide access details and consider vehicle routing. The TA should be scoped with the Transport Development Management Team. • Transport Assessment will identify opportunities for reducing impacts on the transport network.
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	_	0	• The proposed extension can only realistically be accessed by means of road transport, resulting in a negative impact under this Objective during development and working. • As far as reasonably possible negative impacts resulting from access and transport will be mitigated, as required by Policies DM 1 and DM 8 of the Minerals Strategy.	• Mitigate impacts where identified and appropriate.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
17. To sustain the health and quality of life of the population	–	0	**Impact on Sensitive Human Receptors** • Properties within 100 m to north west and 500 m to the north. Campsites within 500 m to north/north west. • Context is small quarries in an area with a long history of Purbeck Stone quarrying. National Trust will control rate of quarrying. • Appropriate screening to be determined.	• Provision of appropriate mitigation, following assessment of likely impacts. • Restoration to improve landscape of site where possible; and to seek to facilitate public access. • Screening, bunding, standoffs will be used to mitigate impacts where considered necessary. • Transport impacts to be considered through Transport Assessment, as noted above.
	–	0	**Impact on Existing Settlements** • Acton is approximately 380 m to the north; Langton Matravers is approximately 650 m to north east. • Minimal impacts expected, given rate of quarrying and context of the site proposals. • Transport issues considered above.	
	0	0	**Impact on Airport Safety** • Site is approximately 23 km from airport, with no wet working or restoration. • No impacts expected.	• No action required.
18. To enable safe access to countryside and open spaces.	0	0	**Impact on Recreational Land** • Site is agricultural land, not used for formal/informal recreational purposes.	• Assessment of impacts, with appropriate mitigation identified. • Restoration to include considering how it might be possible to improve public access in the area.
	–	0	**Impact on Public Rights of Way** • Bridleway (Priest's Way) runs approximately 40 m north of the northern edge of site nomination. • Further assessment required of possible impacts and appropriate screening.	

Preliminary Hydrological Risk Assessment

Controlled Waters	Issues/Risks	Mitigation	Further information/approval required
• Watercourses • Ponds/lakes, including wet habitats • Groundwater	• Potential for contamination of controlled waters (groundwater) through spillage or seepage of pollutants such as fuel. • Contamination of water supplies or reduction in amount of water available for licenced supplies.	• Appropriate arrangements to be made for ensuring that runoff from the site does not enter the groundwater unless any silt or other pollutant has first been removed. • Fuel stored on site to be appropriately bunded and sealed to prevent any spillage from entering ground or surface waters. • On-going monitoring during development and working of the site.	• Full hydrogeological risk assessment will be required as part of a planning application. • Flood Risk Assessment • Water Framework Assessment • Further assessment of potential impacts on water quality and levels, particularly for groundwater, is required prior to development. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.

Flood Risk Commentary

Site is entirely within Flood Zone 1.

Limited risk of flooding from surface water. Flood Risk Assessment would be required at planning application stage, with a site specific strategy for surface water management that does not increase rates of runoff or generate off site worsening

Suitable in flood risk terms for allocation in Draft Mineral Sites Plan.

Viability

As an extension to an existing operational site, viability is not considered to be an issue. The site will use existing processing facilities, road access and serve existing markets, and therefore these do not have to be provided.

Cumulative Impacts

The combined impacts of Purbeck Limestone Quarries should be assessed where a number of sites affect the same water resource or receiving water course.

Site nomination comprises an extension to an existing quarry in an area where there is a high concentration and long history of mineral extraction. The cumulative effect of the number of quarries operating in this area should be taken into consideration, and as far as possible no new quarry areas should be opened unless others have been restored.

The site is within 5Km from a town (Swanage) where allocations for the development of 200 dwellings, employment and retail facilities have been made in the Purbeck Local Plan Part 1 (adopted Nov 2012) (Policy SE) and the Swanage

Local Plan (Policy SS). Traffic arising from the new residential development will add to general traffic levels in / around Swanage and on the A351.

Summary.

Potential Benefits	Potential Impacts on…
• Provision of Purbeck Stone. • Support for the Purbeck Stone industry and employment, both locally and wherever Purbeck Stone is exported and used, with associated economic benefits. • Use of the stone for heritage building works/repairs, and for new buildings. • Geodiversity benefits, through exposures created and fossils found.	• Intensification of impacts on bridleway (Priests Way) to the north, and potentially also on properties to the north. Further assessment required, with appropriate mitigation identified. • Archaeological assessment required to identify possible impacts and any required mitigation. • Transport Assessment will be required at planning application stage, but generally traffic impacts are not expected to cause a problem. As an extension, new traffic levels should not exceed current levels. • Potential for groundwater impacts on water interests will require a hydrological assessment to determine impacts and what mitigation might be required.

Overall Recommendation:

Assessment already carried out has flagged up archaeology and local amenity (including impacts on Priest's Way, residential properties and campsites) as the key issues to be addressed as part of working this site. Further assessment will be required to identify satisfactory mitigation and to identify if there are any additional impacts that will require mitigation.

As the site is an extension of an existing site, it is expected that any impacts should be capable of satisfactory mitigation.

Subject to the completion of all necessary assessments and providing that any impacts are capable of satisfactory mitigation, it appears reasonable on the basis of evidence available that the site nomination can reasonably be included in the Draft Bournemouth, Dorset and Poole Mineral Sites Plan.

Purbeck Stone: PK19 Broadmead Field, Langton Matravers

Site Name/Location: PK19 Broadmead Field, Langton Matravers	**Nominee:** National Trust **Agent**: Land and Mineral Management **Local Authority**: Purbeck District Council **Mineral Type**: Purbeck Stone	**Site Area**: approximately 9.56 ha **Production**: 2,000 tpa **Reserve**: approximately 380,000 tonnes

Impact Assessment Scoring

- -	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain

Timescales for effects:

P/W: Preparation and Working **R/A**: Restoration and Afteruse

Sustainability Objectives	Effects P/W	Effects R/A	Commentary	Mitigation
1. To move waste management up the waste hierarchy	**N/A**	**N/A**	• This Objective is not relevant to this site nomination	• N/A
2. To maintain, conserve and enhance biodiversity	**0**	**0**	**European/International Designations** • No impacts expected.	• No action required.
	0	**0**	**Annex 1 Bird Species** • No impacts expected.	• No action required.
	0	**0**	**National Designations** • No impacts expected.	• No action required.
	?	**0**	**Protected species** • Greater Horseshoe Bat has been recorded from the area immediately adjacent to this site. Without further investigation the implications of quarrying on this rare species are not known, although it is likely that appropriate mitigation could be put in place if necessary.	• Ecological surveys required, with appropriate mitigation if required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
	0	**0**	**Local recognitions/designations, including ancient woodland and veteran trees** • No impacts expected.	• No action required.
3. To maintain, conserve and enhance geodiversity.	**+**	**0**	• The Purbeck limestone group has an important association with the geology of the Jurassic Coast World Heritage Site. Working quarries in Purbeck have been known to yield important fossils, including dinosaur footprints. They are also of on-going interest for the study of early Cretaceous stratigraphy. • These interests should be acknowledged with the assumption that geologists and the Jurassic Coast Team hosted by DCC will respond positively to any opportunities to recover fossils or record and study unusual features if they are discovered. In terms of geodiversity there is a presumption in favour of an appropriate level of quarrying activity continuing in order to sustain these on-going interests.	• Note potential for quarries to yield fossils or other material of geodiversity interest. • Visits or other investigation of working sites may be requested. • Investigate potential and/or benefits of leaving quarried face open after restoration.
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	**?**	**0**	**Groundwater** • Groundwater spring rises 240m from the site. Impacts on this spring could vary from 'Less Significant Adverse Impact' to 'Significant Adverse Impact' – further assessment required. • The combined impacts of Purbeck Limestone Quarries should be assessed where a number of sites affect the same water resource or receiving water course. • Site overlies Secondary aquifers. No impact on Source Protection Zones. No licenced supplies.	• Simple hydrological assessment required to determine possible impacts, on ground and surface waters, with appropriate mitigation to be implemented. • Appropriate arrangements should be put in place to ensure that the water leaving the site and entering the watercourses or groundwater is of an acceptable quality. • Any fuel on site should be properly stored to avoid contamination in case of spillage. • Appropriate arrangements should be installed for surface water and silt collection and fuel storage to prevent contamination of groundwater resources. • The combined impacts of Purbeck Limestone Quarries should be assessed where a number of sites affect the same water resource or receiving water course.
	?	**0**	**Surface Water** • There is a watercourse approximately 240m from the site. Proposed development could have Significant Impact, further assessment required.	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
5. To reduce flood risk and improve flood management.	**0**	**0**	**Flooding/Coastal Stability** • Site is entirely in Flood Risk Zone 1, no risk of flooding.	• No action required.
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).	**?**	**0**	**Archaeology** • There are various archaeological sites in the area, most notably an Iron Age and Roman period settlement and shale-working site just to the north-west. There is also potential for industrial archaeological evidence of early quarrying. • Archaeological assessment and evaluation would be required before an informed planning decision could be made. Only when these have been undertaken would the archaeological impact be understood – at present it could be anywhere from 'Very Significant' to 'No Significant' impact.	• Archaeological survey of the area required <u>as part of planning application</u> to assess possible presence and significance of non-designated remains and to assess whether/how these should be protected during working – <u>no further work required at site allocation stage</u>. • All necessary mitigation to be implemented prior to working. • Adequate provision to be made for preservation, excavation or recording, as appropriate. • Further consideration to be given to restoration proposals, in terms of historic landscapes.
	0	**0**	**Historic Landscapes** • The local landscape bears the imprint of previous quarrying dating from the Roman period onwards. It could be argued that the present site would be a continuation of the process, and if the site is to be restored afterwards the impact would be limited in time anyway.	
	_ ?	**0**	**Historic Buildings** • Listed building adjacent to site proposal, further assessment will be required to determine potential impacts.	• All necessary assessment and mitigation to be implemented prior to working.
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	**0**	**0**	**Landscape Capacity** • Site is in the zone of least landscape and visual impact so it will be how the area is worked which will determine its capacity. • Small areas, quantities, progressive restoration and in short campaigns with low stockpiles is recommended.	• Site to be developed as suggested, to minimise impacts.
	0	**0**	**Designated Landscapes** • Less significant adverse impact.	• No action required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
8. To protect and improve air quality and reduce the impacts of noise.	0	0	• Impacts on air quality expected to be negligible. • No AQMAs will be affected by the working of this site proposal. Any dust resulting from working will be controlled through normal dust-suppression measures. • Noise mitigation will be addressed at the planning application stage, with appropriate mitigation to be included in the development of the site.	• Environmental protection measures to reduce dust and ensure noise is appropriately mitigated.
9. To maintain, conserve and enhance soil quality.	–	0	• Soils are good to moderate. Any soil removed will be protected during working and either re-used on site or taken elsewhere to be used. • Further assessment may be required to determine soil quality.	• Soil to be properly stripped and stored prior to working; protected during working; and re-spread on site after working.
10. To conserve and safeguard mineral resources.	+ +	0	• The site would make an important contribution to the supply of Purbeck Stone for Bournemouth, Dorset and Poole and all other potential markets.	• No specific action required; site development to take into consideration relevant impacts and mitigate where appropriate.
11. To promote the use of alternative materials.	–	0	• This proposal does not promote the use of alternative materials.	• No action required.
12. To provide an adequate and affordable supply of minerals to meet society's needs.	+	0	• Development of this site would provide a benefit in terms of contributing to the provision of a supply of minerals to meet society's needs. • Ensuring a sustainable supply will depend on the development and management of the site. Providing site development takes into account relevant principles of sustainable development it is expected this will contribute to complying with this objective.	• Ensure principles of sustainable development are incorporated into the development of this site.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
13. To promote and encourage sustainable economic growth	+	0	• This site proposal is expected to contribute to economic development on two levels – directly through the provision of employment at the site to be developed and indirectly through the provision of Purbeck Stone required for new build, repairs and maintenance, decorative and monument work and landscaping work. Both levels are expected to maintain employment, skilled and unskilled. • Restoration to agriculture will offer some economic benefits through both the agriculture itself and the recreational attraction and use in the wider area (i.e. riding, walking).	• No action required.
14. To adapt to and mitigate the impacts of climate change.	–	0	• Developing land as a quarry is expected to have some negative impacts regarding climate change, due primarily to machinery used and transportation of mineral away from site. However, these will in relative terms be negligible. • The Bournemouth, Dorset and Poole Minerals Strategy seeks to address and minimise such impacts through Policy CC1 which requires operators to take into consideration climate change impacts and their possible mitigation for any proposed minerals development. • The development management policies, e.g. DM 1, also address and seek to minimise the issue of sustainable development and climate change.	• Use energy efficient plant and machinery. • Implement restoration which provides appropriate habitats to help to increase resilience of flora/fauna.
15. To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any residual impacts.	–	0	• Details of the exact point of access from this site on the highway network will be required. It is expected that access will be gained on the southern side of the site. Any proposal would need to provide details of the access including visibility, geometry and surfacing. • While routes from the site to the A351 will go through either Langton Matravers or Kingston, the route is via a B class road and the number of trips will be low. Provided that trip numbers are low, as expected, there will be little adverse impact and the site is considered to have a 'Less Significant Impact' rating. • Policies DM 1 and DM 8 of the Minerals Strategy actively address this issue of minimising impacts on the transportation network.	• Any proposal for this site would need to be accompanied by a Transport Assessment which will need to provide access details and consider vehicle routing. • The TA should be scoped with the Transport Development Management Team and is intended to identify opportunities for reducing impacts on the transport network.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	–	0	• Sites which may be developed in this field can only realistically be accessed by means of road transport, resulting in a negative impact under this Objective during development and working. • As far as reasonably possible negative impacts resulting from access and transport will be mitigated, as required by Policies DM1 and DM8 of the Minerals Strategy.	• Mitigate impacts where identified and appropriate.
17. To sustain the health and quality of life of the population	?	0	**Impact on Sensitive Human Receptors** • Residential properties adjacent, within 250m and 500m. The local context is small quarries in an area with a long history of Purbeck Stone quarrying. The National Trust as landowner will control rate of quarrying. • Only small areas within the overall field will be quarried – exact sites not known yet. Appropriate screening to be determined.	• Provision of appropriate mitigation, following assessment of likely impacts. • Restoration to improve landscape of site where possible; and to seek to facilitate public access. • Screening, bunding, standoffs will be used to mitigate impacts where considered necessary. • Transport impacts to be considered through Transport Assessment, as noted above.
	?	0	**Impact on Existing Settlements** • Acton approximately 250m to east; Langton Matravers within 750m further east. • Sites will be relatively low impact. Limited visibility towards the east. With appropriate screening, visual impacts would be further reduced. • The National Trust, as landowners, will control the rate at which the site is worked to minimize impacts and maintain the appearance of a range of smaller quarries on their land. • Transport issues are considered above.	
	0	0	**Impact on Airport Safety** • Site is approximately 23 km from airport, with no wet working or restoration. • No impacts expected.	• No action required.
18. To enable safe access to countryside	0	0	**Impact on Recreational Land** • Site is agricultural land, not use for formal/informal agricultural purposes. • No impacts expected.	• Assessment of impacts, with appropriate mitigation identified.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
and open spaces.	–	0/+	**Impact on Public Rights of Way** • Statutory right of way crosses nominated field. Since whole field will not be worked, statutory right of way may not need to be diverted. • Further assessment required of possible impacts and appropriate mitigation.	• Restoration to include considering how it might be possible to improve public access in the area.

Preliminary Hydrological Risk Assessment

Controlled Waters	Issues/Risks	Mitigation	Further information/approval required
• Watercourses • Ponds/lakes, including wet habitats • Groundwater	• Potential for contamination of controlled waters (groundwater) through spillage or seepage of pollutants such as fuel. • Contamination of water supplies or reduction in amount of water available for licenced supplies.	• Appropriate arrangements to be made for ensuring that runoff from the site does not enter the groundwater unless any silt or other pollutant has first been removed. • Fuel stored on site to be appropriately bunded and sealed to prevent any spillage from entering ground or surface waters. • On-going monitoring during development and working of the site.	• Full hydrogeological risk assessment will be required as part of a planning application. • Flood Risk Assessment • Water Framework Assessment • Further assessment of potential impacts on water quality and levels, particularly for groundwater, is required prior to development. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.

Flood Risk Commentary

Site is entirely within Flood Zone 1.

Limited risk of flooding from surface water. Flood Risk Assessment would be required at planning application stage, with a site specific strategy for surface water management that does not increase rates of runoff or generate off site worsening

Suitable in flood risk terms for allocation in Draft Mineral Sites Plan.

Viability

This proposal is about establishing the principle of quarrying across this site, to be released for actual quarrying as may be needed. There are two existing quarries on the site already. The National Trust own the land and will release it as required. Viability is not expected to be a issue.

Cumulative Impacts

The combined impacts of Purbeck Limestone Quarries should be assessed where a number of sites affect the same water resource or receiving water course.

Site nomination is a field within which there will be small-scale Purbeck Stone extraction. Site is owned by the National Trust who require small-scale and low impact working. Site is in an area where there are a number of other Purbeck Stone workings.

Key issues for consideration are need to ensure no impacts on Greater Horseshoe Bats in the vicinity; need for further archaeological and hydrological assessment; and amenity impacts on residences in the vicinity and users of the footpath that crosses the field.

It is expected that, given the proposal and the approach of the National Trust of low impact quarrying, it will be possible to possible to mitigate impacts.

Site nomination comprises a new proposal in an area where there is a high concentration and long history of mineral extraction.

The proposal is within 5Km (by road) of a town (Swanage) where allocations for the development of 200 dwellings, employment and retail facilities have been made in the Purbeck Local Plan Part 1 (adopted Nov 2012) (Policy SE). (Site details not yet available). Traffic arising from the new residential development will add to general traffic levels in / around Swanage and on the A351.

Traffic arising from the new residential development will add to general traffic levels in / around Swanage and on the A351. Output from this site will be managed through the requirements of the landowners, the National Trust, and it is not expected that the site will lead to visual or road transport related cumulative effects.

Summary.

Potential Benefits	Potential Impacts on...
• Provision of Purbeck Stone. • Support for the Purbeck Stone industry and employment, both locally and wherever Purbeck Stone is exported and used, with associated economic benefits. • Use of the stone for heritage building works/repairs, and for new buildings. • Geodiversity benefits, through exposures created and fossils found. • Possibility of improved public access.	• Ensure no impacts from working this site on Greater Horseshoe Bats. • Right of way passing through site area. Further assessment required, mitigation expected to be possible. • Potential impact on landscape capacity of the site. Recommended working approach is small areas, quantities, progressive restoration and in short campaigns with low stockpiles. • Nominated site is relatively close to residential properties, with potential impacts on local amenity. In the context of the Purbeck plateau with its long history of quarrying, this is not expected to be a problem and should be capable of satisfactory mitigation. Assessment of possible impacts required with appropriate mitigation identified. • Transport Assessment will be required at planning application stage, with appropriate mitigation identified. • Groundwater and surface water both have the potential to be impacted and will require a hydrological assessment to determine what mitigation will be required. • Potential archaeological impacts and impacts on Listed Building, further assessment to be carried out at appropriate stage.

Overall Recommendation:

Assessment already carried out has flagged up archaeology, hydrology, landscape, local amenity and access (including impacts on right of way over site) as the key issues to be addressed as part of working land within this site nomination. Further assessment will be required at planning application stage to identify satisfactory mitigation and to identify if there are any additional impacts that will require mitigation.

As the site is an extension of an existing site, it is expected that any impacts should be capable of satisfactory mitigation.

Subject to the completion of all necessary assessments and providing that any impacts are capable of satisfactory mitigation, it appears reasonable on the basis of evidence available that the site nomination can reasonably be included in the Draft Bournemouth, Dorset and Poole Mineral Sites Plan.

Purbeck Stone: PK 21 Gallows' Gore, Langton Matravers

Site Name/Location: PK 21 Gallows' Gore, Langton Matravers	**Owner**: Haysoms **Local Authority**: Purbeck District Council **Mineral Type**: Purbeck Stone	**Site Area**: approximately 4.2 ha **Production**: c. 1800 tpa **Reserve**: up to 30,000 tonnes

Impact Assessment Scoring

- -	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain

Timescales for effects:

P/W: Preparation and Working **R/A**: Restoration and Afteruse

Sustainability Objectives	Effects P/W	Effects R/A	Commentary	Mitigation
1. To move waste management up the waste hierarchy	**N/A**	**N/A**	• This Objective is not relevant to this site nomination	• N/A
2. To maintain, conserve and enhance biodiversity	**0**	**0**	**European/International Designations** • No significant impacts expected	• No action required.
	0	**0**	**Annex 1 Bird Species** • No significant impacts expected	• No action required.
	0	**0**	**National Designations** • No significant impacts expected	• No action required.
	0	**0**	**Protected species** • The small area of rough grassland at the south east corner of the site has potential to support uncommon UK priority BAP species such as the grizzled skipper and dingy skipper.	• Site boundary to be amended as suggested, to minimise impacts on biodiversity. • Previously worked areas to south east

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	–		• This area should be omitted from the site boundary/working area. • Adjacent, similar areas of rough grassland provide habitat for several species of European Protected bats, for which the whole area is nationally important.	and any other adjacent rough grassland around the site to be left untouched and protected from any operations, or impacts from such operations, on rest of site. • Site to be surveyed to identify further possible impacts and any appropriate mitigation to be undertaken.
	0	0	**Local recognitions/designations, including ancient woodland and veteran trees** • The small area of rough grassland at the south east corner of the site has potential to support uncommon UK priority BAP species such as the grizzled skipper and dingy skipper. • This area should be omitted from the site boundary/working area. • Adjacent, similar areas of rough grassland provide habitat for several species of European Protected bats, for which the whole area is nationally important.	
	–			
3. To maintain, conserve and enhance geodiversity.	+	+ ?	• The Purbeck limestone group has an important association with the geology of the Jurassic Coast World Heritage Site. Working quarries in Purbeck have been known to yield important fossils, including dinosaur footprints. They are also of on-going interest for the study of early Cretaceous stratigraphy. • These interests should be acknowledged with the assumption that geologists and the Jurassic Coast Team hosted by DCC will respond positively to any opportunities to recover fossils or record and study unusual features if they are discovered. In terms of geodiversity there is a presumption in favour of an appropriate level of quarrying activity continuing in order to sustain these on-going interests.	• Note potential for quarries to yield fossils or other material of geodiversity interest. • Visits or other investigation of working sites may be requested. • Investigate potential and/or benefits of leaving quarried face open after restoration.
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the	0	0	**Groundwater** • Site overlies Secondary aquifer. No impact on Source Protection Zones. No licenced supplies.	• Hydrological assessment required at planning application stage to determine possible impacts, on ground and surface waters, with appropriate mitigation to be implemented. • Appropriate arrangements should be put in place to ensure that the water leaving the site and entering the watercourses or groundwater is of an acceptable quality. Any fuel on site

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
consumption of water in a sustainable way.	**0**	**0**	**Surface Water** • Spring within 500 m of site. No impacts expected on this.	should be properly stored to avoid contamination in case of spillage. • Appropriate arrangements should be installed for surface water and silt collection and fuel storage to prevent contamination of groundwater resources. • The combined impacts of Purbeck Limestone Quarries should be assessed where a number of sites affect the same water resource or receiving water course.
5. To reduce flood risk and improve flood management.	**0**	**0**	**Flooding/Coastal Stability** • Site is entirely in Flood Risk Zone 1, no risk of flooding. • Although the site is not at risk of flooding,	• No action required.
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).	**?**	**0**	**Archaeology** • The discovery of Iron Age and Roman period settlement remains at a site to the south-west of the proposal site indicates the present site's high potential for below-ground archaeology. There is also potential for industrial archaeological evidence of early quarrying. • Archaeological assessment and evaluation would be required before an informed planning decision could be made. Only when these have been undertaken would the archaeological impact be understood – at present it could be anywhere from 'Very Significant' to 'No Significant' impact.	• Archaeological survey of the area required as part of planning application to assess possible presence and significance of non-designated remains and to assess whether/how these should be protected during working – <u>no further work required at site allocation stage</u>. • All necessary mitigation to be implemented prior to working. • Adequate provision to be made for preservation, excavation or recording, as appropriate. • Further consideration to be given to restoration proposals, in terms of historic landscapes.
	0	**0**	**Historic Landscapes** • The local landscape bears the imprint of previous quarrying dating from the Roman period onwards. It could be argued that the present site would be a continuation of the process, and if the site is to be restored afterwards the impact would be limited in time anyway.	
	0	**0**	**Historic Buildings** • This is a quarry set in a quarrying landscape and the nearest listed buildings are too far away to be affected. • No significant impact expected.	• No action required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	–	0	**Landscape Capacity** • This site proposal is within the area of least landscape and visual sensitivity. • Landscape capacity to accommodate the development is medium. It would be higher if the surrounding existing quarries had been completely restored or where prior to any new quarry opening.	• Assessment of potential visual impacts will be required at planning application stage. • All appropriate mitigation to be included. • Appropriate restoration proposals in line with Landscape Management Guidelines referred to in Minerals Strategy.
	0	0	**Designated Landscapes** • Site proposal is expected to have a less significant adverse impact.	
8. To protect and improve air quality and reduce the impacts of noise.	0	0	• Impacts on air quality expected to be negligible. • No AQMAs will be affected by the working of this site proposal. Any dust resulting from working will be controlled through normal dust-suppression measures. • Noise mitigation will be addressed at the planning application stage, with appropriate mitigation to be included in the development of the site.	• Environmental protection measures to reduce dust and ensure noise is appropriately mitigated.
9. To maintain, conserve and enhance soil quality.	–	0	• The site is currently an area of pasture and soils are either good to moderate or poor in quality. • Any soil removed will be protected during working and either re-used on site or taken elsewhere to be used. Further assessment may be required to determine soil quality.	• Soil to be properly stripped and stored prior to working; protected during working; and re-spread on site after working.
10. To conserve and safeguard mineral resources.	+ +	0	• The site would make an important contribution to the supply of Purbeck Stone for Bournemouth, Dorset and Poole and any other markets.	• No specific action required; site development to take into consideration relevant impacts and mitigate where appropriate.
11. To promote the use of alternative materials.	–	0	• This proposal does not promote the use of alternative materials.	• No action required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
12. To provide an adequate and affordable supply of minerals to meet society's needs.	+	0	• Development of this site would provide a benefit in terms of contributing to the provision of a supply of minerals to meet society's needs. • Ensuring a sustainable supply will depend on the development and management of the site. Providing site development takes into account relevant principles of sustainable development it is expected this will contribute to complying with this objective.	• Ensure principles of sustainable development are incorporated into the development of this site.
13. To promote and encourage sustainable economic growth	+	0	• This site proposal is expected to contribute to economic development on two levels – directly through the provision of employment at the site to be developed and indirectly through the provision of Purbeck Stone required for new build, repairs and maintenance, decorative and monument work and landscaping work. Both levels are expected to maintain employment, skilled and unskilled. • Restoration to agriculture will offer some further economic benefits through both the agriculture itself and the recreational attraction and use in the wider area (i.e. riding, walking).	• No action required.
14. To adapt to and mitigate the impacts of climate change.	-	0	• Developing land as a quarry is expected to have some negative impacts regarding climate change, due primarily to machinery used and transportation of mineral away from site. However, these will in relative terms be negligible. • The Bournemouth, Dorset and Poole Minerals Strategy seeks to address and minimise such impacts through Policy CC1 which requires operators to take into consideration climate change impacts and their possible mitigation for any proposed minerals development. • The development management policies, e.g. DM 1, also address and seek to minimise the issue of sustainable development and climate change.	• Use energy efficient plant and machinery. • Implement restoration which provides appropriate habitats to help to increase resilience of flora/fauna.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
15. To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any residual impacts.	?	0	• Access southwards over adjacent land directly to the B3069, this would be expected to have much less impact and is the preferred access route. • Haycraft's Lane is very narrow, has limited passing opportunity and has poor forward visibility. It would not be acceptable to use Haycrafts Lane to access Harman's Cross, or the Kingston Road. • To be acceptable in highway terms any proposal for this site would need to limit trips to and from the site to the very low levels that could reasonably be expected from the existing agricultural use of the land; travel very short distances and have an acceptable access from the site onto Haycraft's Lane. • It is currently proposed to use Haycrafts Lane for a short distance (c. 50m) to access Landers Quarry land. Working would be summer campaigns, approximately every 2 years. • Policies DM1 and DM 8 of the Minerals Strategy actively address this issue of minimising impacts on the transportation network.	• Any proposal for this site would need to be accompanied by a Transport Assessment which will need to provide access details and consider vehicle routing. • However, on the basis of these comments it appears unlikely that the proposed route will be suitable for use as a quarry access. • The TA should be scoped with the Transport Development Management Team and is intended to identify opportunities for reducing impacts on the transport network.
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	–	0	• The proposed site can only realistically be accessed by means of road transport, resulting in a negative impact under this Objective during development and working. • As far as reasonably possible negative impacts resulting from access and transport will be mitigated, as required by Policies DM1 and DM8 of the Minerals Strategy.	• Mitigate impacts where identified and appropriate.
17. To sustain the health and quality of life of the population	– –	0	**Impact on Sensitive Human Receptors** • Site has residential properties immediately adjacent to it, within 50m and further out. Mitigation/screening will be required. • Although this site has been worked in the past, this was many years ago and	• Provision of appropriate mitigation, following assessment of likely impacts. • Restoration to improve landscape of site where possible; and to seek to facilitate public access.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			further development would make it seem like a new site. It is in close proximity to a number of residences.	• Screening, bunding, standoffs will be used to mitigate impacts where considered necessary.
	0	0	**Impact on Existing Settlements** • Closest settlements are Acton at approximately 600m south east and Langton Matravers at around 700m south/west. Site is not visible from these settlements. • Harman's Cross lies to the north, in the valley. The site will be potentially more visible from the north, which will require sensitive treatment and proper screening of the northern edge of the site. • Traffic impacts on these settlements are expected to be minimal.	• Transport Assessment to be carried out, identifying possible impacts and opportunities for reducing impacts on the transport network. • Visual impact assessment will also be required, as referred to above.
	0	0	**Impact on Airport Safety** • Site is approximately 22 km from airport, with no wet working or restoration. • No impacts expected.	• No action required.
18. To enable safe access to countryside and open spaces.	0	0	**Impact on Recreational Land** • Site is agricultural land. No informal or formal recreational uses noted.	• Assessment of impacts, with appropriate mitigation identified. • Restoration to include considering how it might be possible to improve public access in the area.
	0	0	**Impact on Public Rights of Way** • No rights of way cross the site or run adjacent to it. Closest right of way is a footpath which ends some 30m from north-eastern boundary of site.	

Preliminary Hydrological Risk Assessment

Controlled Waters	Issues/Risks	Mitigation	Further information/approval required
• Watercourses • Ponds/lakes, including wet habitats • Groundwater	• Potential for contamination of controlled waters (groundwater) through spillage or seepage of pollutants such as fuel. • Contamination of water supplies or reduction in amount of water available for licenced supplies. • Potential for water flowing off the site to flood land to the north, downslope from the proposal site	• Appropriate arrangements to be made for ensuring that runoff from the site does not enter the groundwater unless any silt or other pollutant has first been removed. • Fuel stored on site to be appropriately bunded and sealed to prevent any spillage from entering ground or surface waters. • On-going monitoring during development and working of the site.	• Full hydrogeological risk assessment will be required as part of a planning application. • Flood Risk Assessment • Water Framework Assessment • Further assessment of potential impacts on water quality and levels, particularly for groundwater, is required prior to development. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.

Flood Risk Commentary

Site is entirely within Flood Zone 1.

Limited risk of flooding from surface water. Flood Risk Assessment would be required at planning application stage, with a site specific strategy for surface water management that does not increase rates of runoff or generate off site worsening

Suitable in flood risk terms for allocation in Draft Mineral Sites Plan

Viability

This is the only site that is essentially a new site – although it has been worked historically.

The mineral has not been tested but it is expected that mineral is present. The owner and promoter is confident that there is mineral present. As part of a planning application the site will be tested, to establish the presence of mineral.

Cumulative Impacts

Site is a new mineral extraction in an area where there are other areas of mineral extraction. Site has been historically quarried.

The site nomination comprises an extension to an existing quarry in an area where there is a high concentration and long history of mineral extraction. The cumulative effect of the number of quarries operating in this area should be taken into consideration, and as far as possible no new quarry areas should be opened unless others have been restored. The proposed site is adjacent to another

proposed site, Quarr Farm to the north. Both are new sites, and vehicles servicing them would have a cumulative impact on existing traffic levels.

The proposal is within 5 km (by road) of a town (Swanage) where allocations for the development of 200 dwellings, employment and retail facilities have been made in the Purbeck Local Plan Part 1 (adopted Nov 2012) (Policy SE). (Site details not yet available). Traffic arising from the new residential development will add to general traffic levels in / around Swanage and on the A351.

Summary.

Potential Benefits	Potential Impacts
• Provision of Purbeck Stone. • Support for the Purbeck Stone industry and employment, both locally and wherever Purbeck Stone is exported and used, with associated economic benefits. • Use of the stone for heritage building works/repairs, and for new buildings. • Geodiversity benefits, through exposures created and fossils found. • Possibility of improved public access.	• Impacts on biodiversity, specifically due to inclusion of areas of rough grassland, an area of previously quarried land, in the south east corner of the site. Mitigation can be achieved through removing this area from the proposed site boundary and ensuring that this area is protected during working. • Impacts on local amenity, as there are residences in close proximity, as well as further afield, including Harman's Cross to the north. Mitigation, such as standoffs and bunding, will be required. • Access is a key issue, given how narrow Haycraft's Lane is and the importance of its flower rich verges. If Haycrafts Lane is used it will have to be for a short distance only. • The presence of the two reservoirs to the north – to be assessed at planning application stage to determine exactly what level of mitigation they require. • Potential landscape/visual impacts, particularly regarding the capacity of the landscape to accommodate this proposed development. Assessment of possible impacts required, with appropriate mitigation identified, including restoration of quarries in vicinity as far as possible. • Assessment is required to determine whether there will be any archaeology or other heritage impacts, and what mitigation is required.

Overall Recommendation:

Assessment already carried out has flagged up biodiversity, archaeology, landscape, local amenity and access as key issues to be addressed as part of working the land within this site nomination. Further assessment will be required at planning application stage to identify satisfactory mitigation and to identify if there are any additional impacts that will require mitigation.

Impacts on amenity is a key issue in the case of this site in particular. Full assessment will be required, including identification and implementation of mitigation.

Subject to the completion of all necessary assessments and providing that any impacts are capable of satisfactory mitigation, it appears reasonable on the basis of evidence available that the site nomination can reasonably be included in the Draft Bournemouth, Dorset and Poole Mineral Sites Plan.

Other Building Stone: BS02 Marnhull Quarry, Whiteways Lane, Marnhull

Site Name/Location: BS02 Marnhull Quarry, Whiteways Lane, Marnhull	**Nominee/Agent:** Marnhull Stone Limited **Local Authority**: North Dorset District Council **Mineral Type**: Limestone	**Site Area**: 2.02 ha **Production**: approximately 1,500 tpa **Reserve**: approximately 25,000 tonnes

Impact Assessment Scoring

- -	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain

Timescales for effects:

P/W: Preparation and Working **R/A**: Restoration and Afteruse

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
1. To move waste management up the waste hierarchy and promote net self sufficiency	**N/A**	**N/A**	• This Objective is not relevant to this site nomination	• N/A
2. To maintain, conserve and enhance biodiversity	**0**	**0**	**European/International Designations** • No impacts expected	• No action required.
	0	**0**	**Annex 1 Bird Species** • No impacts expected	• No action required.
	0	**0**	**National Designations** • No impacts expected	• No action required.
	0	**0**	**Protected species** • No impacts expected	• No action required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	0	**0**	**Local recognitions/designations, including ancient woodland and veteran trees** • No impacts expected	• No action required.
3. To maintain, conserve and enhance geodiversity.	**+**	**+**	• This extension would continue an existing exposure of the Clavellata Beds of the Corallian Group. This should be considered an enhancement to an existing Local Geological Site at this site.	• Operator to be asked to permit visits/access to view exposures where possible during working. • Opportunities to leave faces exposed when working is finished to be considered.
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	**0**	**0**	**Groundwater** • No impact on Source Protection Zones and no licensed abstraction points within 500m. Site is within a Secondary Aquifer. • Environment Agency advise a Hydrogeological Risk Assessment will be required.	• Hydrological assessment required to determine possible impacts, on ground and surface waters, with appropriate mitigation to be implemented. • Appropriate arrangements should be put in place to ensure that the water leaving the site and entering the watercourses or groundwater is of an acceptable quality. • Any fuel on site should be properly stored to avoid contamination in case of spillage. • Appropriate arrangements should be installed for surface water and silt collection and fuel storage to prevent contamination of groundwater resources. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.
	?	**0**	**Surface Water** • Site boundary is within 250m of watercourse - Chivrick's Brook. • Assessment required to determine possible impacts on hydrogeology. Impacts to be appropriately mitigated.	
5. To reduce flood risk and improve flood management.	**0**	**0**	**Flooding/Coastal Stability** • Entire site is within Flood Risk Zone 1, no expected risk of flooding or contributing to flooding.	• Flood Risk Assessment (FRA) will be required. • All necessary mitigation to be implemented.
6. To maintain, conserve and enhance the historic environment (including archaeological	**?**	**?**	**Archaeology** • According to the Dorset Historic Environment Record, human remains were found nearby during quarrying about 200 years ago. From the description, they sound like part of a Christian cemetery of an indeterminate period.	• Archaeological survey of the area required as part of planning application to assess possible presence and significance of non-designated remains and to assess whether/how these

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
sites, historic buildings, conservation areas, historic parks and gardens and other locally distinctive features and their settings).			• Archaeological evaluation would be appropriate before determination of a planning application to indicate the likely archaeological impact of quarrying and the appropriate mitigation. Potentially the impact could be anywhere from 'Very Significant Adverse Impact' to 'No Significant or Negligible Adverse Impacts'.	should be protected during working – no further work required at site allocation stage. • All necessary mitigation to be implemented prior to working. • Adequate provision to be made for preservation, excavation or recording, as appropriate. • Further consideration to be given to restoration proposals, in terms of historic landscapes.
	0	**0**	**Historic Landscapes** • The site lies in the Blackmore Vale. Seemingly much of the Vale remained wooded until the Middle Ages, and so the field system on and around the site may well be Medieval in origin. • The Mineral Planning Authority is not aware of anything particularly significant about these fields, hence 'Less Significant Adverse Impact' category seems appropriate.	
	0	**0**	**Historic Buildings** • Listed buildings are too far away to be affected. No significant impacts expected.	• No action required.
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	**-**	**0**	**Landscape Capacity** • May be some adverse impacts but if mitigation designed to be sympathetic these can be minimised to cause no significant adverse effects.	• Assessment of potential visual impacts will be required at planning application stage. • All appropriate mitigation to be included. • Appropriate restoration proposals in line with Landscape Management Guidelines referred to in Minerals Strategy.
	0	**0**	**Designated Landscapes** • No significant/negligible impacts expected.	
8. To protect and improve air quality and reduce the impacts of noise.	**0**	**0**	• Impacts on air quality expected to be negligible. • No AQMAs will be affected by the working of this site proposal. Any dust resulting from working will be controlled through normal dust-suppression measures. • Any impacts due to noise resulting from mineral working would be expected to be satisfactorily minimised through normal noise mitigation	• Environmental protection measures to be put in place to reduce dust and noise impacts.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			measures, imposed at the planning application stage.	
9. To maintain, conserve and enhance soil quality.	–	0	• Site is 'Good to Moderate' agricultural land. • Soils will be stripped and protected during preparation and working and reused on site as part of restoration.	• Soil to be properly stripped and stored prior to working; protected during working; and re-spread on site after working.
10. To conserve and safeguard mineral resources.	+	0	• The site would make an important contribution to the supply of building stone.	• No specific action required • Site development to take into consideration relevant impacts and mitigate where appropriate.
11. To promote the use of alternative materials.	–	0	• This proposal does not promote the use of alternative materials.	• No action required.
12. To provide an adequate and affordable supply of minerals to meet society's needs.	+	0	• Development of this site would provide a benefit in terms of contributing to the provision of a supply of minerals to meet society's needs. Ensuring a sustainable supply will depend on the development and management of the site. • Providing site development takes into account relevant principles of sustainable development it is expected this will contribute to complying with this objective.	• Ensure principles of sustainable development are incorporated into the development of this site.
13. To promote and encourage sustainable economic growth	+	0	• This site proposal is expected to contribute to economic development on two levels – directly through the provision of employment at the proposed extension and indirectly through the provision of building stone required for new build, repairs and maintenance, decorative and landscaping work. Both levels are expected to maintain employment, skilled and unskilled. • Restoration to agriculture will offer some further economic benefits. • Further benefits may be available if improved public access can be achieved, through the recreational attraction and use in the wider area (i.e. riding, walking).	• Seek further benefits, such as improved public access, where appropriate.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
14. To adapt to and mitigate the impacts of climate change.	-	0	• Developing land as a quarry is expected to have some negative impacts regarding climate change, due primarily to machinery used and transportation of mineral away from site. However, given the size of the proposed quarry these will in relative terms be negligible. • The Bournemouth, Dorset and Poole Minerals Strategy seeks to address and minimise such impacts through Policy CC1 which requires operators to take into consideration climate change impacts and their possible mitigation for any proposed minerals development. • The development management policies, e.g. DM 1, also address and seek to minimise the issue of sustainable development and climate change.	• Use energy efficient plant and machinery. • Implement restoration which provides appropriate habitats to help to increase resilience of flora/fauna.
15. To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any residual impacts.	-	0	• Entrance to the site will be gained via an existing, suitable, access onto Whiteways Lane. From here vehicles will use the local rural road network to access the B3092. • While this road does pass through some local settlements, the very low numbers of predicted movements, less than one a day, mean that the site has been given a 'Less Significant Adverse Impact' rating. • Policies DM1 and DM 8 of the Minerals Strategy actively address this issue of minimising impacts on the transportation network.	• Any proposal for this site would need to be accompanied by a Transport Assessment which will need to provide access details and consider vehicle routing. The TA should be scoped with the Transport Development Management Team. • The Transport Assessment should identify opportunities for reducing impacts on the transport network.
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	-	0	• The proposed extension can only realistically be accessed by means of road transport, resulting in a negative impact under this Objective during development and working. • As far as reasonably possible negative impacts resulting from access and transport will be mitigated, as required by Policies DM1 and DM8 of the Minerals Strategy.	• Mitigate impacts where identified and appropriate.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
17. To sustain the health and quality of life of the population	0	0	**Impact on Sensitive Human Receptors** • Closest property is Toogoods farm, just over 500m to the north east. • Mitigation measures such as visual and noise attenuation bunds can be used as needed – further assessment will be required to determine what is needed.	• Provision of appropriate mitigation, following assessment of likely impacts. • Restoration to improve landscape of site where possible; and to seek to increase public access. • Transport Assessment to be carried out, identifying opportunities for reducing impacts on the transport network where appropriate.
	0	0	**Impact on Existing Settlements** • Nearest settlement is Marnhull, at approximately 800m to north west. • It is likely that there will be impacts of lorries accessing the site. This is an extension and should not result in intensification of any impacts. • Mitigation measures such as visual and noise attenuation bunds can be used as needed – further assessment will be required to determine what is needed.	
	0	0	**Impact on Airport Safety** • Site is approximately 37 km from Bournemouth airport and approximately 24 km from Yeovilton, with no wet working or restoration.	• No impacts expected and no action required.
18. To enable safe access to countryside and open spaces.	0	0	**Impact on Recreational Land** • Site is agricultural land, no formal or informal recreational use.	• Assessment of impacts, with appropriate mitigation identified. • Restoration to include considering how it might be possible to improve public access in the area.
	–	0	**Impact on Public Rights of Way** • No rights of way on or immediately adjacent to site, but bridleway passes close to eastern edge. • Assessment required to determine what mitigation might be needed to protect bridleway – to be screened as may be required. • Opportunities for improvements to public access to be considered.	

Preliminary Hydrological Risk Assessment

Controlled Waters	Issues/Risks	Mitigation	Further information or approval that may be required
• Watercourses • Ponds/lakes, including wet habitats • Groundwater	• The Stour is the closest main river, some 2.5 km distant, and the River Basin Management Plan South West River Basin District identifies it being of 'Poor' environmental quality in this area. • The Chiswick Brook is approximately 250 m from the site. • There is potential for contamination from runoff from site along with potential for contamination of controlled waters through spillage or seepage of pollutants such as fuel, or silt in water.	• Appropriate arrangements to be made for ensuring that runoff from the site does not enter the surface or groundwater drainage unless any silt has first been removed. • Fuel stored on site to be appropriately bunded and sealed to prevent any spillage from entering ground or surface waters. • On-going monitoring during development and working of the site.	• Water Framework Assessment may be required. • Hydrological risk assessment to consider possible impacts of working this site and any required mitigation. • Further assessment of potential impacts on water quality and levels, particularly for groundwater, is required prior to development. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse. • Flood Risk Assessment

Flood Risk Commentary

Site is entirely within Flood Zone 1.

Limited risk of flooding from surface water. Flood Risk Assessment would be required at planning application stage, with a site specific strategy for surface water management that does not increase rates of runoff or generate off site worsening

Suitable in flood risk terms for allocation in Draft Mineral Sites Plan.

Viability

As an extension to an existing operational site, viability is not considered to be an issue. The site will use existing processing facilities, road access and serve existing markets, and therefore these do not have to be provided.

Cumulative Impacts

Site proposal is an extension to an existing site in an area where there is other mineral working - a building stone quarry approximately 1.5km to the north at Todber – but the amounts of traffic generated are relatively small. In terms of cumulative impacts for mineral working, rating of 'Less Significant Adverse Impact' is justified.

The proposal is within 5km of sites allocated in Sturminster Newton for residential development (380 dwellings in the town in total) in the Pre -Submission draft North Dorset Local Plan Nov 2013. Traffic arising from the new development will add to general traffic levels on the B3092.

Summary.

Potential Benefits	Potential Impacts
• Provision of building stone. • Support for the local economy and provision of employment, through employment in quarrying and the construction industry. • Development of site is expected to provide economic benefits, both directly at the site and in the local area where the stone is expected to be used. • Use of the stone for heritage building works/repairs, and for new buildings. • Geodiversity benefits, through exposures created and fossils found. • Possibility of improved public access.	• No ecological impacts expected. • Possible hydrological impacts, requiring further assessment, but no significant impacts expected. • Potential for archaeological impacts, and further assessment will be required. However, any identified impacts expected to be capable of mitigation. • Possible limited landscape impacts, but expected to be capable of satisfactory mitigation. • Site is agricultural land, which will be lost for a period of time. However, expected to be restored to current use, and is a relatively small area. • Limited climate change impacts would be expected, but site is small in scale and intensity of working is low. • Developing the site will have transport related impacts. However, the level of vehicle movements is low and the site will be worked as an extension, so there will be no intensification of working or cumulative impacts. • No expected issues regarding airfield proximity – no wet working or restoration. • There will be some impacts on the bridleway to the east, but it is expected that these can be mitigated.

Overall Recommendation:

The site is an extension of an existing quarry and no intensification or cumulative impacts would be expected. The proposal would assist in securing a supply of local stone and would provide a benefit to the local economy.

Assessment already carried out has flagged up archaeology, landscape, hydrology and access as issues requiring further assessment at planning application stage to identify satisfactory mitigation. Further assessment also required to identify if there are any additional impacts that will require mitigation.

Subject to the completion of all necessary assessments and providing that any impacts are capable of satisfactory mitigation, it appears reasonable on the basis of evidence available that the site nomination can reasonably be included in the Draft Bournemouth, Dorset and Poole Mineral Sites Plan.

Other Building Stone: BS04 Frogden Quarry, north-east of Sherborne

Site Name/Location: BS04 Frogden Quarry, north-east of Sherborne **Mineral Type:** Limestone		**Nominee/Agent**: Sherborne Castle Estate **Local Authority:** North Dorset District Council
Site Area: 3 ha	**Production:** 2500 tonnes building stone 1000 tonnes agricultural aggregate	**Reserve:** c. 100,000 tonnes

Impact Assessment Scoring

- -	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain

Timescales for effects:

P/W: Preparation and Working **R/A**: Restoration and Afteruse

Sustainability Objectives	Effects P/W	Effects R/A	Commentary	Mitigation
1. To move waste management up the waste hierarchy and promote net self sufficiency	**N/A**	**N/A**	• This Objective is not relevant to this site nomination	• N/A
2. To maintain, conserve and enhance biodiversity	**0**	**0**	**European/International Designations** • No impacts expected	• No action required.
	0	**0**	**Annex 1 Bird Species** • No impacts expected	• No action required.
	0	**0**	**National Designations** • No impacts expected	• No action required.
	0	**0**	**Protected species** • No impacts expected	• No action required.
	0	**0**	**Local recognitions/designations, including ancient woodland and veteran trees** • No impacts expected	• No action required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
3. To maintain, conserve and enhance geodiversity.	+ +	+	• There is a geological Site of Special Scientific Interest (SSSI) at ST648183. However, the proposed extension is south of this, with the current permitted quarry coming between the two. It is not expected that there will be any impact cause by the proposed extension. • The inferior Oolite is the subject of on-going paleontological research. The nature of Inferior Oolite stratigraphy, and of the paleontological interest, means that any opportunity to study fresh sites and exposures are potentially of great value. • Access must be provided to researchers and specifically a nominated Inferior Oolite expert (contact details available on request) with the assumption that important specimens will be retained for research purposes. • At the point of restoration the retention of geological exposures may be desirable and this must be planned for.	• Operator to facilitate access to the exposures where possible during working. • Faces to be left exposed when working is finished, where possible. • Existing geological SSSI to be appropriately protected.
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	0	0	**Groundwater** • Site is on a Principal Aquifer and is not within any Source Protection Zone area. Not known whether there are any licensed extraction facilities in the vicinity. • Environment Agency advise a Hydrogeological Risk Assessment will be required.	• Hydrological assessment required to determine possible impacts, on ground and surface waters, with appropriate mitigation to be implemented. • Appropriate arrangements should be put in place to ensure that the water leaving the site and entering the watercourses or groundwater is of an acceptable quality. • Any fuel on site should be properly stored to avoid contamination in case of spillage. • Appropriate arrangements should be installed for surface water and silt collection and fuel storage to prevent contamination of groundwater resources. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.
	0	0	**Surface Water** • There is a watercourse approximately 430m from the site. • Assessment required to determine possible impacts on hydrogeology. Impacts to be appropriately mitigated	
5. To reduce flood risk and improve flood management.	0	0	**Flooding/Coastal Stability** • Entire site is within Flood Risk Zone 1, no expected risk of flooding or contributing to flooding.	• Flood Risk Assessment (FRA) will be required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
				• Any necessary mitigation to be implemented.
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).	**0**	**0**	**Archaeology** • There are no indications of likely archaeological impacts, and the proposal could be rated 'No Significant or Negligible Adverse Impacts'.	• Survey/assessment of the area to be carried out as part of planning application, to further investigate possible archaeological and historic landscape impacts. • Any necessary mitigation to be identified and implemented prior to working. • Further consideration to be given to restoration proposals, in terms of historic landscapes.
	0	**0**	**Historic Landscapes** • There are no indications that the location has any particular historic significance, although it might form part of the view from locations such as Sherborne New Castle and its grounds.	
	0	**0**	**Historic Buildings** • The nearest listed buildings are within a settlement and the current quarry lies between them and the proposed extension. There are other listed buildings some 500 m to the south east. • It is not expected that the proposed extension will have unacceptable impacts on the listed buildings.	• Further assessment of potential impacts required, with any necessary mitigation to be identified and implemented prior to working.
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	**?**	**0**	**Landscape Capacity** • The potential exists that there could be an impact on the amenity of users of the adjacent footpaths but apart from that the landscape and visual impacts will be limited. • It is recommended that the scale of development is minimised where possible and that extraction takes the form of short campaigns and progressive restoration. • Stockpiles and other infrastructure must not be placed on skyline which must be protected.	• Full assessment of potential visual impacts will be required at planning application stage. • All appropriate mitigation to be identified and implemented. • Appropriate restoration proposals in line with Landscape Management Guidelines referred to in Minerals Strategy.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	0	**0**	**Designated Landscapes** • Less significant adverse impact.	• No action required.
8. To protect and improve air quality and reduce the impacts of noise.	**0**	**0**	• Impacts on air quality expected to be negligible. • No AQMAs will be affected by the working of this site proposal. Any dust resulting from working will be controlled through normal dust-suppression measures. • Any impacts due to noise resulting from mineral working would be expected to be satisfactorily minimised through normal noise mitigation measures, imposed at the planning application stage.	• Environmental protection measures to be put in place to reduce dust and noise impacts.
9. To maintain, conserve and enhance soil quality.	–	**0**	• Soil appears to be good to moderate quality agricultural land. • Soils will be protected during working and restoration could bring the land back into agricultural production.	• Soil to be properly stripped and stored prior to working; protected during working; and re-spread on site after working.
10. To conserve and safeguard mineral resources.	+	**0**	• The site would make an important contribution to the supply of building stone.	• No specific action required • Site development to take into consideration relevant impacts and mitigate where appropriate.
11. To promote the use of alternative materials.	–	**0**	• This proposal does not promote the use of alternative materials.	• No action required.
12. To provide an adequate and affordable supply of minerals to meet society's needs.	+	**0**	• Development of this site would provide a benefit in terms of contributing to the provision of a supply of minerals to meet society's needs. Ensuring a sustainable supply will depend on the development and management of the site. • Providing site development takes into account relevant principles of sustainable development it is expected this will contribute to complying with this objective.	• Ensure principles of sustainable development are incorporated into the development of this site.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
13. To promote and encourage sustainable economic growth	+	0	• This site proposal is expected to contribute to economic development on two levels – directly through the provision of employment at the proposed extension and indirectly through the provision of building stone required for new build, repairs and maintenance, decorative and landscaping work. Both levels are expected to maintain employment, skilled and unskilled. • Restoration to agriculture will offer some further economic benefits. Further benefits may be available if improved public access can be achieved, through the recreational attraction and use in the wider area (i.e. riding, walking).	• Seek further benefits, such as improved public access, where appropriate.
14. To adapt to and mitigate the impacts of climate change.	–	0	• Developing land as a quarry is expected to have some negative impacts regarding climate change, due primarily to machinery used and transportation of mineral away from site. However, given the size of the proposed quarry these will in relative terms be negligible. • The Bournemouth, Dorset and Poole Minerals Strategy seeks to address and minimise such impacts through Policy CC1 which requires operators to take into consideration climate change impacts and their possible mitigation for any proposed minerals development. • The development management policies, e.g. DM 1, also address and seek to minimise the issue of sustainable development and climate change.	• Use energy efficient plant and machinery. • Implement restoration which provides appropriate habitats to help to increase resilience of flora/fauna.
15. To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any residual impacts.	0	0	• Access will be gained via the existing route along Brick Kiln Lane onto Castle Town Way. From here vehicles can access the strategic network a short distance to the south on the A30. • Due to the very low extraction rates, which are not expected to increase above current levels, and the proximity to the strategic network, the site has been given a 'No Significant or Negligible Adverse Impacts' rating. • Policies DM1 and DM 8 of the Minerals Strategy actively address this issue of minimising impacts on the transportation network.	• Any proposal for this site would need to be accompanied by a Transport Assessment which will need to provide access details and consider vehicle routing. • TA to be scoped with the Transport Development Management Team. • The Transport Assessment should identify opportunities for reducing impacts on the transport network.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	–	0	• The proposed extension can only realistically be accessed by means of road transport, resulting in a negative impact under this Objective during development and working. • As far as reasonably possible negative impacts resulting from access and transport will be mitigated, as required by Policies DM1 and DM8 of the Minerals Strategy.	• Mitigate impacts where identified and appropriate.
17. To sustain the health and quality of life of the population	?	0	**Impact on Sensitive Human Receptors** • Closest properties are approximately 430m, to edge of Sherborne. The Gryphon School is also approximately 430m at edge of Sherborne. Blackmarsh Farm to south east is approximately 500+m and Oborne to north/east is approximately 600m. • Rising ground screens views of the existing site. Further assessment will be required to accurately assess potential impacts from the proposed extension and can be undertaken at the appropriate stage. • Site will be screened as required. Site may be worked on a campaign basis, to limit impacts.	• Provision of appropriate mitigation, following assessment of likely impacts. • Restoration to improve landscape of site where possible; and to seek to increase public access. • Transport Assessment to be carried out, identifying opportunities for reducing impacts on the transport network where appropriate.
	?	0	**Impact on Existing Settlements** • Sherborne is closest settlement, within 500m. Although impacts are expected to be minimal, further assessment will be carried out as required. • Site traffic will be required to use Castle Town Way and could have an impact on Sherborne but amount of traffic expected to be low. • Site will be screened as required. Site may be worked on a campaign basis, to limit impacts. As an extension, there would be no intensification.	
	0	0	**Impact on Airport Safety** • Site is approximately 33 km from Bournemouth airport, and approximately 10 km from Yeovilton with no wet working or restoration. • No impacts expected.	• No impacts expected, and no action required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
18. To enable safe access to countryside and open spaces.	**0**	**0**	**Impact on Recreational Land** • Site is agricultural land/former quarry and does not appear to be used for recreational purposes. • Restoration could seek to improve public access.	• Assessment of impacts, particularly on bridleway, with appropriate mitigation identified. • Restoration to include consideration of opportunities to improve public access in the area.
	?	**0**	**Impact on Public Rights of Way** • No rights of way cross the site. A bridleway (N7/17) touches the south western corner. • Restoration could seek to improve access, to/from this route.	

Preliminary Hydrological Risk Assessment

Controlled Waters	Issues/Risks	Mitigation	Further information or approval that may be required
• Watercourses • Ponds/lakes, including wet habitats • Groundwater	• The River Yeo is the closest Main River. Other watercourses approximately 470m distant, that site would drain into. • The River Basin Management Plan South West River Basin District identifies the Yeo as being of 'Poor' environmental quality in this area. • There is potential for contamination from runoff from site and for contamination of controlled waters through spillage or seepage of pollutants such as fuel, or silt in water. • Contamination of water supplies or reduction in amount of water available for licenses supplies. • Impacts on or removal of surface water features.	• Appropriate arrangements to be made for ensuring that runoff from the site does not enter surface waters or groundwater unless any silt has first been removed. • Fuel stored on site to be appropriately bunded and sealed to prevent any spillage from entering ground or surface waters. • On-going monitoring during development and working of the site. • Relocation of surface water features, provided this is feasible.	• Hydrogeological risk assessment may be required at planning application stage. • Flood Risk Assessment • Water Framework Assessment • Further assessment of potential impacts on water quality and levels, particularly for groundwater, is required prior to development. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.

Flood Risk Commentary

Site is entirely within Flood Zone 1.

Limited risk of flooding from surface water. Flood Risk Assessment would be required at planning application stage, with a site specific strategy for surface water management that does not increase rates of runoff or generate off site worsening

Suitable in flood risk terms for allocation in Draft Mineral Sites Plan.

Viability

As an extension to an existing operational site, viability is not considered to be an issue. The site will use existing processing facilities, road access and serve existing markets, and therefore these do not have to be provided.

Cumulative Impacts

Proposal is for an extension to an existing site and no intensification is expected. There is limited additional mineral working proposed or existing in vicinity of site. Cumulative impacts directly caused by this proposed extension are expected to be minimal.

The proposal is within 5Km of sites allocated for mixed residential (279 dwellings) and employment development at Barton Farm, Sherborne (Policy SHER1) and for employment development (2.2Ha) at Sherborne Hotel, Sherborne, as set out in Policy SHER3 in the Pre -Submission draft West Dorset, Weymouth and Portland Local Plan (June 2012) as amended by Proposed Modifications (June 2013).

Traffic arising from the new development will also add to general traffic levels on the A 30. (NB The Barton Farm site does now have planning permission but is retained as an allocation in the Plan.)

Summary.

Potential Benefits	Potential Impacts
	• No ecological impacts expected. • Hydrological investigation will be required at planning application stage, but no significant impacts expected. No flooding risk. • Possibly limited potential for archaeological impacts, but further assessment will be required. Any identified impacts would be expected to be capable of mitigation.
• Exposure of geological faces, during and possibly after working, expected to provide significant geodiversity benefits. • Development of site is expected to provide economic benefits, both directly at the site and in the local area where the stone is primarily expected to be used. • Development of the site secures a source of building stone, primarily for the benefit of the local area/economy. • By-products are crushed to be used on the Estate, providing a limited source of alternative materials. • Restoration could offer limited improvements to public access.	• Listed building impacts not expected, but assessment will determine what mitigation if any may be required. • Possible limited landscape impacts, but expected to be capable of satisfactory mitigation. Method of site working will contribute to limiting impacts • Site is agricultural land, which will be lost for a period of time. However, expected to be restored to current use, and is a relatively small area. • Limited climate change impacts would be expected, but site is small in scale and intensity of working is low. • Developing the site will have limited transport related impacts, through extending the time the site is worked. However, the level of vehicle movements is low and the site will be worked as an extension, so there will be no intensification of working or cumulative impacts. • Impacts on sensitive human receptors and local settlements are expected to be limited, but will be assessed – expected to be capable of mitigation. • No expected issues regarding airfield proximity – no wet working or restoration.

Potential Benefits	Potential Impacts
	• There will be some impacts on the adjacent bridleway to the east, but it is expected that these can be satisfactorily mitigated.

Overall Recommendation:

The site is an extension of an existing quarry and no intensification or cumulative impacts would be expected. The proposal would assist in securing a supply of local stone and would provide a benefit to the local economy.

Assessment already carried out has flagged up archaeology, landscape, hydrology and amenity as issues requiring further assessment at planning application stage to identify satisfactory mitigation. Further assessment also required to identify if there are any additional impacts that will require mitigation.

Subject to the completion of all necessary assessments and providing that any impacts are capable of satisfactory mitigation, it appears reasonable on the basis of evidence available that the site nomination can reasonably be included in the Draft Bournemouth, Dorset and Poole Mineral Sites Plan.

Other Building Stone: BS05 Whithill Quarry

Site Name/Location: BS05 Whithill Quarry On D20518 approximately 1.5 km south-west of junction with A352 **Mineral Type:** Forest Marble (Limestone)		**Nominee/Agent:** Sherborne Castle Estates Land and Mineral Management Ltd **Local Authority:** West Dorset District Council
Site Area: c. 5 ha	**Production (annual):** 1000 tonnes building stone 500 tonnes agricultural aggregate	**Reserve:** c. 6,000 tonnes.

Impact Assessment Scoring

- -	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain

Timescales for effects:

P/W: Preparation and Working **R/A**: Restoration and Afteruse

Sustainability Objectives	Effects P/W	Effects R/A	Commentary	Mitigation
1. To move waste management up the waste hierarchy and promote net self sufficiency	**N/A**	**N/A**	• This Objective is not relevant to this site nomination	• N/A
2. To maintain, conserve and enhance biodiversity	**0**	**0**	**European/International Designations** • No impacts expected	• No action required.
	0	**0**	**Annex 1 Bird Species** • No impacts expected	• No action required.
	0	**0**	**National Designations** • No impacts expected	• No action required.
	0	**0**	**Protected species** • No impacts expected	• No action required.
	0	**0**	**Local recognitions/designations, including ancient woodland and veteran trees** • No impacts expected	• No action required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
3. To maintain, conserve and enhance geodiversity.	+	+	• The Forest Marble Formation was traditionally quarried extensively in Dorset. There are several old workings that have been designated as Local Geological Sites and new and fresh exposures retain a level of interest for study and potential retention of better exposures. • It is recommended that if development proceeds the applicants be requested to allow access to geologists. Leaving exposed faces after working is completed can also be investigated.	• Operator to be asked to permit visits/access to view exposures where possible during working. • Opportunities to leave faces exposed when working is finished to be considered.
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	0	0	**Groundwater** • Site is on a Secondary Aquifer and is not within any Source Protection Zone area. Not known whether there are any licensed extraction facilities in the vicinity. • Environment Agency advise a Hydrogeological Risk Assessment will be required. • Environment Agency had no objection to proposed extension of current quarry, provided depth of extraction was controlled	• Hydrological assessment required to determine possible impacts, on ground and surface waters, with appropriate mitigation to be implemented. • Appropriate arrangements should be put in place to ensure that the water leaving the site and entering the watercourses or groundwater is of an acceptable quality. • Any fuel on site should be properly stored to avoid contamination in case of spillage. • Appropriate arrangements should be installed for surface water and silt collection and fuel storage to prevent contamination of groundwater resources. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.
	?	0	**Surface Water** • Watercourse within 50m from the site and assessment required to consider possible impacts on this stream. • This site lies uphill and immediately across the road from springs feeding tributaries of the River Wriggle. It should be confirmed whether the proposed allocation would affect the headwaters in terms of quality or quantity. • Assessment required to determine possible impacts on hydrogeology. Impacts to be appropriately mitigated	
5. To reduce flood risk and improve flood management.	0	0	**Flooding/Coastal Stability** • Entire site is within Flood Risk Zone 1, no expected risk of flooding or contributing to flooding.	• Flood Risk Assessment (FRA) will be required. • Any necessary mitigation to be implemented.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
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).	**0**	**0**	**Archaeology** • Human burials were found in the adjacent existing quarry a few years ago, and were recorded by Bournemouth Archaeology. • Bournemouth Archaeology have undertaken a further archaeological evaluation of this site in support of the recent planning application. • Their view is that putting in place an archaeological watching brief for future development of the site would be adequate to mitigate damage to known and potential deposits.	• Further survey/assessment of the area likely to be required for further development, and subsequent development to include archaeological watching brief, to mitigation archaeological impacts. • Any other necessary mitigation to be identified and implemented prior to working. • Further consideration to be given to restoration proposals, in terms of historic landscapes.
	0	**0**	**Historic Landscapes** • The site is on the north-eastern end of Lillington Hill, which is also known at Knighton Hill at the opposite end by Knighton village, on the western side of the Blackmore Vale. • Seemingly much of the Vale remained wooded until the Middle Ages, and so the field system on and around the site may well be Medieval in origin. • The Mineral Planning Authority is not aware of anything particularly significant about these fields, resulting in a 'Less Significant Adverse Impact'.	
	0	**0**	**Historic Buildings** • Listed buildings are too far away to be affected. No significant impacts expected.	• No action required.
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	**_ /?**	**0**	**Landscape Capacity** • The proposed development may be open to expansive views in this rural landscape so mitigation measures will be critical to its integration. • It is recommended that the scale of development is minimised where possible through measures such as small scale campaigns with progressive restoration.	• Full assessment of potential visual impacts will be required at planning application stage. • All appropriate mitigation to be identified and implemented. • Appropriate restoration proposals in line with Landscape Management
	0	**0**	**Designated Landscapes** • No significant impact/negligible.	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
				Guidelines referred to in Minerals Strategy.
8. To protect and improve air quality and reduce the impacts of noise.	0	0	• Impacts on air quality expected to be negligible. • No AQMAs will be affected by the working of this site proposal. Any dust resulting from working will be controlled through normal dust-suppression measures. • Any impacts due to noise resulting from mineral working would be expected to be satisfactorily minimised through normal noise mitigation measures, imposed at the planning application stage.	• Environmental protection measures to be put in place to reduce dust and noise impacts.
9. To maintain, conserve and enhance soil quality.	–	0	• Soil appears to be good to moderate quality agricultural land. • Soils will be protected during working and restoration could bring the land back into agricultural production.	• Soil to be properly stripped and stored prior to working; protected during working; and re-spread on site after working.
10. To conserve and safeguard mineral resources.	+	0	• The site would make an important contribution to the supply of building stone.	• No specific action required • Site development to take into consideration relevant impacts and mitigate where appropriate.
11. To promote the use of alternative materials.	–	0	• This proposal does not promote the use of alternative materials.	• No action required.
12. To provide an adequate and affordable supply of minerals to meet society's needs.	+	0	• Development of this site would provide a benefit in terms of contributing to the provision of a supply of minerals to meet society's needs. Ensuring a sustainable supply will depend on the development and management of the site. • Providing site development takes into account relevant principles of sustainable development it is expected this will contribute to complying with this objective.	• Ensure principles of sustainable development are incorporated into the development of this site.
13. To promote and encourage sustainable	+	0	• This site proposal is expected to contribute to economic development on two levels – directly through the provision of employment at the proposed extension and indirectly through the provision of building stone required for new build, repairs and maintenance, decorative and	• Seek further benefits, such as improved public access, where appropriate.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
economic growth			landscaping work. Both levels are expected to maintain employment, skilled and unskilled. • Restoration to agriculture will offer some further economic benefits. Further benefits may be available if improved public access can be achieved, to benefit the recreational attraction and use of the wider area (i.e. riding, walking).	
14. To adapt to and mitigate the impacts of climate change.	_	**0**	• Developing land as a quarry is expected to have some negative impacts regarding climate change, due primarily to machinery used and transportation of mineral away from site. However, given the size of the proposed quarry these will in relative terms be negligible. • The Bournemouth, Dorset and Poole Minerals Strategy seeks to address and minimise such impacts through Policy CC1 which requires operators to take into consideration climate change impacts and their possible mitigation for any proposed minerals development. • The development management policies, e.g. DM 1, also address and seek to minimise the issue of sustainable development and climate change.	• Use energy efficient plant and machinery. • Implement restoration which provides appropriate habitats to help to increase resilience of flora/fauna.
15. To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any residual impacts.	_	**0**	• Entry will be via the existing adequate access onto the local rural network. Access to the strategic network at the A352 is approximately 1.5km north of the site access. Trip generation will be low and no greater than that currently permitted at the site. • Due to the low traffic generation, the close proximity of the strategic network, and the lack of impact on local settlements between the site and the strategic network, this site is considered to cause 'No Significant or Negligible Adverse Impacts'. • Policies DM1 and DM 8 of the Minerals Strategy actively address this issue of minimising impacts on the transportation network.	• Any proposal for this site would need to be accompanied by a Transport Assessment which will need to provide access details and consider vehicle routing. • TA to be scoped with the Transport Development Management Team. • The TA should identify opportunities for reducing impacts on the transport network.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	–	0	• The proposed extension can only realistically be accessed by means of road transport, resulting in a negative impact under this Objective during development and working. • As far as reasonably possible negative impacts resulting from access and transport will be mitigated, as required by Policies DM1 and DM8 of the Minerals Strategy.	• Mitigate impacts where identified and appropriate.
17. To sustain the health and quality of life of the population	?	0	**Impact on Sensitive Human Receptors** • Residential properties within 500m. School approximately 1km away, to south/east. Site is screened by hedges and by the topography. Traffic levels expected to be as at present. • Site will be screened as required and worked on a campaign basis to limit impacts. Further assessment likely to be required to accurately assess potential impacts from the proposed extension and can be undertaken at the appropriate stage.	• Provision of appropriate mitigation, following assessment of likely impacts. • Restoration to improve landscape of site where possible; and to seek to increase public access. • Transport Assessment to be carried out, identifying opportunities for reducing impacts on the transport network where appropriate.
	?	0	**Impact on Existing Settlements** • Lillington approximately 500m to south, Longburton approximately 1.5 km south east, Thornford approximately 2km to south west. No visible impacts. Longburton likely to get traffic impacts, if mineral is taken to A352 for distribution. Traffic levels expected to be as at present. • Site will be screened as required. Site likely to be worked on a campaign basis, to limit impacts. As an extension, there would be no intensification.	
	0	0	**Impact on Airport Safety** • Site is approximately 33 km from Bournemouth airport, and 11 km from Yeovilton with no wet working or restoration. • No impacts expected.	• No action required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
18. To enable safe access to countryside and open spaces.	**0**	**0**	**Impact on Recreational Land** • Site is agricultural land/former quarry and does not appear to be used for recreational purposes. • Restoration could seek to improve public access.	• Assessment of impacts, with appropriate mitigation identified. • Restoration to include considering how it might be possible to improve public access in the area.
	0	**?**	**Impact on Public Rights of Way** • No rights of way cross the site. Restoration could seek to improve access in the area.	

Preliminary Hydrological Risk Assessment

Controlled Waters	Issues/Risks	Mitigation	Further information or approval that may be required
• Watercourses • Ponds/lakes, including wet habitats • Groundwater	• This site lies uphill and immediately across the road from springs feeding tributaries of the Wriggle River, the closest Main River. It should be confirmed whether the proposed allocation would affect the headwaters in terms of quality or quantity. • The Wriggle joins the Yeo, and the River Basin Management Plan South West River Basin District identifies the Yeo as being of 'Poor' environmental quality in this area. The Wriggle is 'Bad'. • There is potential for contamination from runoff from site and for contamination of controlled waters through spillage or seepage of pollutants such as fuel, or silt in water. • Contamination of water supplies or reduction in amount of water available for licenses supplies. • Impacts on or removal of surface water features.	• Appropriate arrangements to be made for ensuring that runoff from the site does not enter surface waters or groundwater unless any silt has first been removed. • Fuel stored on site to be appropriately bunded and sealed to prevent any spillage from entering ground or surface waters. • On-going monitoring during development and working of the site.	• Hydrogeological risk assessment may be required at planning application stage. • Flood Risk Assessment • Water Framework Assessment • Further assessment of potential impacts on water quality and levels, particularly for groundwater, is required prior to development. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.

Flood Risk Commentary

Site is entirely within Flood Zone 1.

Limited risk of flooding from surface water. Flood Risk Assessment would be required at planning application stage, with a site specific strategy for surface water management that does not increase rates of runoff or generate off site worsening

Suitable in flood risk terms for allocation in Draft Mineral Sites Plan.

Viability

As an extension to an existing operational site, viability is not considered to be an issue. The site will use existing processing facilities, road access and serve existing markets, and therefore these do not have to be provided.

Cumulative Impacts

Proposed site is an extension to existing site. There is another existing and proposed site, just over 5km away. Both sites would have relatively low traffic levels, impacts expected to be low.

Both are proposed extensions and therefore no intensification of traffic levels is expected.

The proposal is within 5Km of land allocated for major residential (279 dwellings) and associated development at Barton Farm, Sherborne (Policy SHER1) and for employment development (2.2Ha) at Sherborne Hotel, Sherborne (Policy SHER3) in the Pre -Submission draft West Dorset, Weymouth and Portland Local Plan (June 2012) as amended by Proposed Modifications (June 2013). Traffic arising from the new development will add to general traffic levels on the A30 and through the town. (NB The Barton Farm site does now have planning permission but is retained as an allocation in the Plan.)

Summary.

Potential Benefits	Potential Impacts
• Exposure of geological faces, during and possibly after working, could provide geodiversity benefits. • Development of site is expected to provide economic benefits, both directly at the site and in the local area where the stone is primarily expected to be used. • Development of the site secures a source of building stone, primarily for the benefit of the local area/economy. • By-products are crushed to be used on the Estate, providing a limited source of alternative materials. • Restoration could offer limited improvements to public access.	• No ecological impacts expected. • Hydrological investigation may be required at planning application stage, but no significant impacts expected. No flooding risk. • Potential for archaeological impacts, further assessment will be required. Use of an archaeological watching brief will be expected to mitigate impacts. • No listed building or significant historic landscape impacts expected. • Possible limited landscape impacts, but expected to be capable of satisfactory mitigation. Method of site working will contribute to limiting impacts • Site is agricultural land, which will be lost for a period of time. However, expected to be restored to current use, and is a relatively small area. • Limited climate change impacts would be expected, but site is small in scale and intensity of working is low. • Developing the site will have limited transport related impacts, through extending the time the site is worked. However, the level of vehicle movements is low and the site will be worked as an extension, so there will be no intensification of working or cumulative impacts. • Impacts on sensitive human receptors and local settlements are expected to be limited, but will be assessed – expected to be capable of mitigation.

- No expected issues regarding airfield proximity – no wet working or restoration.
- No impacts on public access – restoration may offer opportunity to improve access.

Overall Recommendation:

The site is an extension of an existing quarry and no intensification or cumulative impacts would be expected. The proposal would assist in securing a supply of local stone and would provide a benefit to the local economy.

Assessment already carried out has flagged up archaeology (need for a watching brief at development), hydrology, landscape capacity and local amenity as issues requiring further assessment at planning application stage to identify satisfactory mitigation. Further assessment also required to identify if there are any additional impacts that will require mitigation.

Subject to the completion of all necessary assessments and providing that any impacts are capable of satisfactory mitigation, it appears reasonable on the basis of evidence available that the site nomination can reasonably be included in the Draft Bournemouth, Dorset and Poole Mineral Sites Plan.

Appendix B: Sites Not Being Taken Forward

Sand and Gravel: AS08 Horton Heath (west) and Redman's Hill (east)

Site Name/Location: AS08 Horton Heath (west) and AS27 Redman's Hill (east) **Mineral Type**: Sand/Gravel	**Nominee/Agent**: AS08 – Wessex Surveyors AS27 – Wessex Surveyors **Local Authority**: East Dorset District Council	**Site Area**: To be confirmed **Production/reserve**: To be confirmed

Impact Assessment Scoring

- -	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain

Timescales for effects:

P/W: Preparation and Working **R/A**: Restoration and Afteruse

Sustainability Objectives	Effects P/W	Effects R/A	Commentary	Mitigation
1. To move waste management up the waste hierarchy	**N/A**	**N/A**	• This Objective is not relevant to this site nomination	• N/A
2. To maintain, conserve and enhance biodiversity	**0**	**0**	**European/International Designations** • Not relevant to this site nomination.	• No action required.
	0	**0**	**Annex 1 Bird Species** • Without mineral extraction, site has potential to be restored to lowland heathland which would contribute locally to supporting Annex 1 birds. Only in combination with other afforested areas would it be likely to contribute to supporting 1% of any Annex 1 species, but in itself the Horton Common SNCI is small and rather isolated. • The site currently has no recreational access function to help reduce pressure on existing heathlands. There has to be a risk that the SNCI might be included in a revision to the Dorset Heathlands SPA, but it is not possible to evaluate that risk without further information on the wildlife interests of the SNCI.	• Further information on wildlife interests of SNCI to be sought.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	0	0	**National Designations** • Not relevant to this site nomination.	• No action required.
	–	+	**Protected species** • The existing open heathland within Horton Common SNCI may support European protected reptiles. The perimeter ancient woodland and boundary trees of the SNCI are very likely to support bats, and any mineral extraction should be designed to avoid this constraint. Common protected reptiles may be found throughout on suitable open ground.	• Ecological surveys required, with appropriate mitigation identified. • Restoration to include consideration of possible benefits for the SNCI and creation of appropriate habitats for these species.
	– –			
	–	+	**Local recognitions/designations, including ancient woodland and veteran trees** • Horton Common SNCI in its entirety within the western proposed site. Broad scale extraction removing this nature conservation site would be inappropriate because it would be difficult or impossible to provide adequate mitigation for effects on wildlife and compensatory habitat provision would be substantial. • Small-scale working within the least wildlife-rich areas of SNCI might be feasible, following detailed evaluation of possible effects. The perimeter ancient woodland and boundary trees of the SNCI are effectively irreplaceable, and any mineral extraction should be designed to avoid this constraint. • The constraints around the Redman's Hill area are unknown at this stage, though much of the land has been improved agriculturally. There may be important boundary features or individual veteran trees.	• Ecological surveys required, with appropriate mitigation identified. • Proposed working area to be reviewed in light of this comment and reduced in size.
	– –			

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
3. To maintain, conserve and enhance geodiversity.	+	+	• Exposures resulting from working may be of interest. Benefits are only expected during working, and are likely to be obscured or covered as part of restoration.	• Operator to be asked to permit visits to view exposures as required.
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	–	0	**Groundwater** • There are water features within 250m which could be impacted by development of the site. A stream flows to north/west of Horton Heath SNCI. Other streams rise/flow in close proximity to site.	• Hydrological assessment required to determine possible impacts, on ground and surface waters, with appropriate mitigation to be implemented. • Further assessment on possible impacts on water supplies and appropriate mitigation if potential impacts identified. • Where necessary mitigating measures should be installed to maintain groundwater levels and/or monitor private water supplies. • Alternative arrangements should be in place in case of a reduction in supply. • Appropriate arrangements should be put in place to ensure that the water leaving the site and entering the rivers/watercourses is of an acceptable quality. • Any fuel on site should be properly stored to avoid contamination in case of spillage. • Appropriate arrangements should be installed for surface water and silt collection and fuel storage to prevent contamination of groundwater resources. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.
	–	0	**Surface Water** • There is a pond/ponds within the site and streams in close proximity.	
5. To reduce flood risk and improve flood management .	0	0	**Flooding/Coastal Stability** • The entire site located within Flood Zone 1 with Flood Zones 2 and 3 within 150 m of northern part of site. • Working is not considered to constitute, or exacerbate an existing, a flood risk.	• Flood Risk Assessment (FRA) will be required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			• Negligible/No impact, during working and restoration.	
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).	–	+	**Archaeology** • A barrow that is protected as a Scheduled Monument (SM29565 – 'Bowl barrow 250m north east of Monmouth's Ash Farm') lies in the south-eastern part of the western area. Several other barrows and an earthwork that are also protected as Scheduled Monuments lie close to the site. The barrow within the site in particular is a major constraint and is afforded the highest protection. • A way forward could be the removal of some of the site from the extraction area. An archaeological assessment and if necessary an evaluation of the site that considers all the barrows mentioned above and their settings, as well as other possible archaeological material on the site, should help in making a decision on this, as well as in understanding the wider archaeological impact of the extraction on this site. • Early discussion with English Heritage should also be helpful in the making of this decision. • If a compromise can be determined that allows some quarrying within a fraction of this site, impacts could be reduced to an acceptable level. • Appropriate restoration could improve the settings of the monuments.	• Archaeological survey to assess Monuments and establish their settings and how these can best be protected during working. • Site working area to be reviewed to remove monuments and their settings. • Archaeological survey to assess possible presence and significance of non-designated remains. • Adequate provision to be made for preservation, excavation or recording, as appropriate. • Settings of the Monuments to be established prior to working and not to be compromised during working.
	– –			
	–	+	**Historic Landscapes** • Until relatively recently, most if not all of this site would have been heathland. The Scheduled Monuments mentioned above would have occupied prominent locations within this landscape. • Restoration to heathland could improve the settings of these Monuments.	• Archaeological survey to assess Monuments and establish their settings and how these can best be protected during working. • Restoration to heathland to benefit Monuments and their settings.
	0	0	**Historic Buildings**	• No action required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			• No listed buildings in the immediate vicinity of the site. The nearest, Harts Farm, is well screened from the site. No impacts expected.	
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	–	+	**Landscape Capacity** • The whole area is within the Horton Common - Three Legged Cross Heath/Farmland Mosaic in the draft East Dorset District Council Landscape Character assessment. This assessment indicates the importance of belts of trees and scrub and all around the site these form key features with mature oaks along the western edges which are ancient boundaries. The site is also part of a prominent ridge line with open views especially to the east. • The site has significant landscape value and any future extraction should be limited in extent and be based on a detailed and independent assessment of landscape character so any future operations conserve and enhance key features and views • Mitigation and restoration to reflect/enhance existing character.	• Landscape and visual impact assessment to identify impacts; adequate mitigation of such impacts before and during working. • Protect and maintain the identified key features of the site. • Appropriate restoration proposals in line with Landscape Management Guidelines referred to in Minerals Strategy.
	0	**0**	**Designated Landscapes** • Negligible impact expected.	• No action required.
8. To protect and improve air quality and reduce the impacts of noise.	**0**	**0**	• Impacts on air quality expected to be negligible. • No AQMAs will be affected by the working of this site proposal. Any dust resulting from working will be controlled through normal dust-suppression measures. • Any impacts due to noise resulting from mineral working would be expected to be satisfactorily minimised through normal noise mitigation measures, imposed at the planning application stage.	• Environmental protection measures to be put in place to reduce dust and noise impacts.
9. To maintain, conserve and enhance soil quality.	–	**0**	• The site comprises agriculture (primarily pasture) woodland and heathland cover. The area is a former heathland area and so would be expected to have relatively poor, acidic soils. • Site preparation/working would require stripping and storage of the soils, with some impacts on them.	• Soil is poor quality in agricultural terms but valuable in terms of potential for heathland restoration. • Soils to be stored/protected during preparation and working and

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			• If the site is worked and restored to heathland this will require reinstatement/retention of acidic soils.	properly reinstated during restoration.
10. To conserve and safeguard mineral resources.	?	0	• In terms of encouraging/promoting the most efficient use of resources, this site has been previously used to a limited extent as a borrow pit during the construction of the adjacent golf course. • In developing this site as a stand-alone quarry, there are a number of constraints to be overcome for what appears to be a relatively small reserve of mineral. • The quality/quantity of minerals on this site needs to be proved before a score can be given for this site. However, a preliminary view would be that developing this site may not be the most efficient use of resources. • Further investigation is required.	• Further investigation required to establish quality/quantity of mineral.
11. To promote the use of alternative materials.	–	0	• This proposal does not at present promote the use of alternative materials.	• No action required.
12. To provide an adequate and affordable supply of minerals to meet society's needs.	+	0	• Development of this site will provide a benefit in terms of contributing to the provision of a supply of minerals to meet society's needs. • Ensuring a sustainable supply will depend on the development and management of the site. Providing site development takes into account relevant principles of sustainable development it is expected this will contribute to complying with this objective.	• Ensure principles of sustainable development are incorporated into the development of this site.
13. To promote and encourage sustainable economic growth	+	0	• This site proposal is expected to contribute to economic development on two levels – directly through the provision of employment at the site to be developed and indirectly through the provision of aggregate minerals required for the maintenance of built environment and for new built development. Both levels are expected to maintain employment, skilled and unskilled.	• Further assessment required to form a view as to what the most appropriate restoration could be.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
		+	However given the expected size of the reserve this is likely to be a limited benefit. • Restoration to heathland and possibly agriculture will offer some economic benefits. • If open access is available on the restored land, some limited benefits due to recreational attraction and use in the wider area (i.e. riding, walking, bird watching) may be realised.	
14. To adapt to and mitigate the impacts of climate change.	–	0	• Developing land as a quarry is expected to have some negative impacts regarding climate change, due primarily to machinery used and transportation of mineral away from site. However, these will in relative terms be negligible. • The Bournemouth, Dorset and Poole Minerals Strategy seeks to address and minimise such impacts through Policy CC1 which requires operators to take into consideration climate change impacts and their possible mitigation for any proposed minerals development. • The development management policies, e.g. DM 1, also address and seek to minimise the issue of sustainable development and climate change. • Restoration to some form of vegetated environment will offer benefits in the form of climate change mitigation, including provision of habitat for wildlife, but again these will be relatively small.	• Use energy efficient plant and machinery. • Implement restoration which provides appropriate habitats to help to increase resilience of flora/fauna.
	0	+		
15. To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any residual impacts.	– –	0	• This proposal is for a new sand and gravel extraction area north of the C2 Horton Road. Details of expected trip generation or point of access are not yet known with certainty. Existing access onto the C2 is insufficient to serve the proposed sites and would be unsafe to use. The access is very narrow, has poor forward visibility and geometry. • There has been some discussion regarding a new access to serve this area emerging to the east of the existing access. This has been promoted in a temporary form to serve a proposed solar farm although no consent has been issued to date. Once on the C2, there are good links to the A31	• Transport Assessment to be carried, identifying opportunities for reducing impacts on the transport network. • New access to be provided to the east of current access.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	0		to the east. The A31 can also be reached to the south along the B3072 although this would involve travelling through West Moors. • Without a new, acceptable, access onto the C66 the Highways Authority would strongly object to any extraction in this location on highway safety grounds. • If the required access improvements are provided then this objection could be removed.	
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	– / – –	0	• The proposed extension can only realistically be accessed by means of road transport, resulting in a negative impact under this Objective during development and working. • As far as reasonably possible negative impacts resulting from access and transport will be mitigated, as required by Policies DM1 and DM8 of the Minerals Strategy.	• Mitigate impacts where identified and appropriate.
17. To sustain the health and quality of life of the population	0 / –	0	**Impact on Sensitive Human Receptors** • There are a number of residences within 500m, the closest being approximately 100m. Mitigation is proposed, through diverting the access road away from houses. • Mitigation (noise attenuation and visual screening bunds) will be required but it is likely that there will still be impacts, including from lorries on the access road. • Further assessment will be required to assess impacts.	• Provision of appropriate mitigation, following assessment of likely impacts.
	–	0	**Impact on Existing Settlements** • Verwood is approximately 1 km to the north-east, and Three Legged Cross over 1km to the south-east. These settlements are unlikely to experience any visual impacts from working in the vicinity of the site. • Lorries travelling from the site to the A31 will pass through Three Legged Cross and Ashley.	• Transport Assessment to be carried, identifying possible impacts and opportunities for reducing impacts on the transport network.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	0	0	**Impact on Airport Safety** • Site is located within 13km safeguarding zone, but not proposed for wet working. No impacts expected.	• No action required.
18. To enable safe access to countryside and open spaces.	_	0	**Impact on Recreational Land** • Footpaths cross the site. There are signs that the former, unrestored mineral workings are used for cycling/motor cycling on an informal basis. • This access will be lost during working, but some form of public access may be possible on restoration.	• No action required for working, apart from closing the area to public access. • Restoration to open space with public access should be considered for its benefits, but could conflict with nature conservation aspirations.
	_ _	0 +	**Impact on Public Rights of Way** • The site is crossed by rights of way, including bridleways E59/15, E59/29 and E46/32 and footpath E59/33. Footpaths E59/17 and E59/30 are adjacent to site boundary. • These rights of way will be strongly impacted by the proposed development, requiring diversion and/or screening. • Restoration will see these routes resumed, possibly with improvements.	• Full assessment of rights of way in the area, including those directly affected by the proposal, to consider whether it will be feasible/possible to carry out the necessary stoppages/diversions. • Restoration to improve public access in the area.

Preliminary Hydrological Risk Assessment

Controlled Waters	Issues/Risks	Mitigation	Further information/approval required
• Watercourses • Ponds/lakes, including wet habitats • Groundwater	• The River Basin Management Plan South West River Basin District identifies the Crane, the closest river, as being of 'good' ecological quality. Potential for contamination from runoff from site.	• Appropriate arrangements to be made for ensuring that runoff from the site does not enter the Crane or groundwater unless silt has	• Full hydrogeological assessment • Flood Risk Assessment • Water Framework Assessment • Further assessment of potential impacts on water quality and levels, particularly for groundwater, is required prior to development.

• Groundwater is of vital importance in this catchment and must be protected, as it supports a significant proportion of the abstraction for public water supply and other uses, for example aquaculture. • Potential for contamination of controlled waters through spillage or seepage of pollutants such as fuel, or silt in water. • Contamination of water supplies or reduction in amount of water available for licensed supplies. • Impacts on or removal of surface water features.	first been removed. • Fuel stored on site to be appropriately bunded and sealed to prevent any spillage from entering ground or surface waters. • On-going monitoring during development and working of the site. • Relocation or recreation of surface water features provided this is feasible.	• Assessment of the feasibility of relocating ponds and associated habitats and species. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.

Cumulative Impacts

Although the area contains deposits of sand/gravel, there is no other working proposed in the immediate vicinity. Closest site proposal is at Purple Haze, southeast of Verwood. Purple Haze is not yet operational, but is likely to become so prior to Horton Heath being developed. Existing workings in Dorset are further away, although there are some workings just across the border in Hampshire. Horton Heath will be essentially a new greenfield site.

The proposal lies within 5km of a site allocated for development in the Christchurch and East Dorset Consolidated Plan* May 2013, Policy VTSW4 N W Verwood – 230 dwellings. Traffic from this proposal will add to traffic on the B3081 and roads through Verwood.

* The Consolidated Plan is an amalgamation of the Christchurch and East Dorset Core Strategy Pre submission draft April 2012 and the Christchurch and East Dorset Schedule of Proposed Changes November 2012.

Summary.

Potential Benefits	Potential Impacts
• Restoration to heathland would provide habitat for protected species and improve linkages between other heathland in the area. • Provision of aggregates required for maintenance and construction. • Restoration to heathland will benefit Scheduled Monuments and their settings and provide a link to the historic landscape that would have previously characterised the area around this site. • Provision of improved public access would provide public benefits.	• Scheduled Monuments and their settings could be affected during Preparation/Working. • Screening vegetation will need to be retained on visual impact and nature conservation grounds. • Noise/visual impacts on properties in the vicinity. • Very strong impacts on informal recreation uses and statutory rights of way.

AS08 – Horton Heath

This is a relatively small site with a number of constraints.

On the basis of the evidence available it does not appear that there is sufficient certainty that the impacts identified in this sustainability appraisal are currently capable of satisfactory mitigation. The site remains part of the mineral resource of Bournemouth, Dorset and Poole but is not at this time included in the Draft Bournemouth, Dorset and Poole Mineral Sites Plan.

AS27 – Redman's Hill

This is a more open field to the east of the Horton Heath site. It has potential for working, but there is a high level of public rights of way in the area and rights of way run along two sides of the site area.

The risks to, and impacts on, users of these rights of way are unacceptably high, so this site has not been included in the Draft Mineral Sites Plan.

Purbeck Stone: PK08 Quarr Farm, Harman's Cross

Site Name/Location: PK08 Quarr Farm, Harman's Cross	**Nominee/Agent**: Symonds and Sampson **Local Authority**: Purbeck District Council **Mineral Type**: Purbeck Stone	**Site Area**: approximately 3.3 ha **Production**: approximately 2,000 tpa **Reserve**: approximately 96,000 tonnes

Impact Assessment Scoring

- -	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain

Timescales for effects:

P/W: Preparation and Working **R/A**: Restoration and Afteruse

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
1. To move waste management up the waste hierarchy	**N/A**	**N/A**	• This Objective is not relevant to this site nomination	• N/A
2. To maintain, conserve and enhance biodiversity	**0**	**0**	**European/International Designations** • No impacts expected.	• No action required.
	0	**0**	**Annex 1 Bird Species** • No impacts expected.	• No action required.
	0	**0**	**National Designations** • No impacts expected.	• No action required.
	0	**0**	**Protected species** • Greater Horseshoe Bat is known to inhabit the area close to the proposed site. Whilst it is unlikely there would be any effect on GHB which would result from quarrying at this location, information would be needed to support the allocation to demonstrate no likely significant effect.	• Ecological surveys required, with appropriate mitigation to be implemented.
	–	**0**	**Local recognitions/designations, including ancient woodland and veteran trees**	• Further assessment required, including consideration of

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			• If access from the main road would be via Haycraft Lane, which is recognised as a narrow lane with flower-rich verges. • Consideration of the possible effects of vehicle movements, and any appropriate mitigation, would be required to ensure the verges are protected.	alternatives to Haycraft Lane for access and options for mitigation for any potential impacts.
3. To maintain, conserve and enhance geodiversity.	+	+	• The Purbeck limestone group has an important association with the geology of the Jurassic Coast World Heritage Site. Working quarries in Purbeck have been known to yield important fossils, including dinosaur footprints. They are also of ongoing interest for the study of early Cretaceous stratigraphy. • These interests should be acknowledged with the assumption that geologists and the Jurassic Coast Team hosted by DCC will respond positively to any opportunities to recover fossils or record and study unusual features if they are discovered. In terms of geodiversity there is a presumption in favour of an appropriate level of quarrying activity continuing in order to sustain these ongoing interests.	• Note potential for quarries to yield fossils or other material of geodiversity interest. • Visits or other investigation of working sites may be requested. • Investigate potential and/or benefits of leaving quarried face open after restoration.
		0		
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	0	0	**Groundwater** • Site overlies Secondary aquifers. No impact on Source Protection Zones. No licenced supplies.	• Simple hydrological assessment required to determine possible impacts, on ground and surface waters, with appropriate mitigation to be implemented. • Appropriate arrangements should be put in place to ensure that the water leaving the site and entering the watercourses or groundwater is of an acceptable quality. • Any fuel on site should be properly stored to avoid contamination in case of spillage. • Appropriate arrangements should be installed for surface water and silt collection and fuel storage to prevent contamination of groundwater resources. • The combined impacts of Purbeck Limestone Quarries should be assessed where a number of sites affect the same water resource or receiving water course.
	0	0	**Surface Water** • Spring within 500m of site. No impacts expected on this.	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
5. To reduce flood risk and improve flood management.	0	0	**Flooding/Coastal Stability** • Site is entirely in Flood Risk Zone 1, no risk of flooding.	• No action required.
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).	?	?	**Archaeology** • It is considered that the site has high potential for below-ground archaeology and possibly industrial archaeological evidence of early quarrying. • Archaeological assessment and evaluation would be required before an informed planning decision could be made. Only when these have been undertaken would the archaeological impact be understood – at present it could be anywhere from 'Very Significant' to 'No Significant' impacts.	• Archaeological survey of the area required as part of planning application to assess possible presence and significance of non-designated remains and to assess whether/how these should be protected during working – no further work required at site allocation stage. • All necessary mitigation to be implemented prior to working. • Adequate provision to be made for preservation, excavation or recording, as appropriate. • Further consideration to be given to restoration proposals, in terms of historic landscapes.
	0	0	**Historic Landscapes** • The local landscape bears the imprint of previous quarrying dating from the Roman period onwards. It could be argued that the present site would be a continuation of the process, and if the site is to be restored afterwards the impact would be limited in time anyway.	
	0	0	**Historic Buildings** • This is a quarry set in a quarrying landscape and the nearest listed buildings are too far away to be affected. • No significant impact expected.	• No action required.
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	_ ?	0	**Landscape Capacity** • This site proposal is just within the area of least landscape and visual sensitivity. The capacity of the landscape to absorb the site is moderate and it is important to ensure the northern boundary is sensitively designed e.g. relating to stockpiles to reduce impacts from across the valley side.	• Assessment of potential visual impacts will be required at planning application stage and all appropriate mitigation to be included. • Northern boundary of site to be sensitively and carefully designed and worked. • Appropriate restoration proposals in line with Landscape Management
	_ ?	0	**Designated Landscapes** • Site proposal is expected to have a less significant adverse impact.	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
				Guidelines referred to in Minerals Strategy.
8. To protect and improve air quality and reduce the impacts of noise.	0	0	• Impacts on air quality expected to be negligible. • No AQMAs will be affected by the working of this site proposal. Any dust resulting from working will be controlled through normal dust-suppression measures. • Noise mitigation will be addressed at the planning application stage, with appropriate mitigation to be included in the development of the site.	• Environmental protection measures to reduce dust and ensure noise is appropriately mitigated.
9. To maintain, conserve and enhance soil quality.	–	0	• Soils are somewhere between good to moderate to very poor. Any soil removed will be protected during working and either re-used on site or taken elsewhere to be used. Further assessment may be required to determine soil quality.	• Soil to be properly stripped and stored prior to working; protected during working; and re-spread on site after working.
10. To conserve and safeguard mineral resources.	+	0	• The site would make an important contribution to the supply of Purbeck Stone for Bournemouth, Dorset and Poole and all other potential markets.	• No specific action required; site development to take into consideration relevant impacts and mitigate where appropriate.
11. To promote the use of alternative materials.	–	0	• This proposal does not promote the use of alternative materials.	• No action required.
12. To provide an adequate and affordable supply of minerals to meet society's needs.	+	0	• Development of this site would provide a benefit in terms of contributing to the provision of a supply of minerals to meet society's needs. • Ensuring a sustainable supply will depend on the development and management of the site. Providing site development takes into account relevant principles of sustainable development it is expected this will contribute to complying with this objective.	• Ensure principles of sustainable development are incorporated into the development of this site.
13. To promote and encourage sustainable	+	0	• This site proposal is expected to contribute to economic development on two levels – directly through the provision of employment at the site to be developed and indirectly through the provision	• No action required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
economic growth			of Purbeck Stone required for new build, repairs and maintenance, decorative and monument work and landscaping work. Both levels are expected to maintain employment, skilled and unskilled. • Restoration to agriculture will offer some further economic benefits through both the agriculture itself and the recreational attraction and use in the wider area (i.e. riding, walking).	
14. To adapt to and mitigate the impacts of climate change.	–	**0**	• Developing land as a quarry is expected to have some negative impacts regarding climate change, due primarily to machinery used and transportation of mineral away from site. However, these will in relative terms be negligible. • The Bournemouth, Dorset and Poole Minerals Strategy seeks to address and minimise such impacts through Policy CC1 which requires operators to take into consideration climate change impacts and their possible mitigation for any proposed minerals development. • The development management policies, e.g. DM 1, also address and seek to minimise the issue of sustainable development and climate change.	• Use energy efficient plant and machinery. • Implement restoration which provides appropriate habitats to help to increase resilience of flora/fauna.
15. To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any residual impacts.	– –	**0**	• If the site is accessed via Haycraft's Lane, taking vehicles to the B3069, approximately 400m to the south or to the A351 approximately 1km to the north, this would be expected to have a 'Significant Adverse Impact'. • Access onto Haycraft's Lane, presumed to be via the same access that serves Avalon, is narrow and does not have suitable geometry to accommodate HGVs. This is compounded by the very narrow nature of Haycraft's Lane at this point. • The remainder of Haycraft's Lane, to the north and south, is very narrow, has limited passing opportunity and has poor forward visibility. To be	• Any proposal for this site would need to be accompanied by a Transport Assessment which will need to provide access details and consider vehicle routing. • However, on the basis of these comments it appears unlikely that the proposed

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	?		acceptable in highway terms any proposal for this site would need to limit trips to and from the site to the very low levels that could reasonably be expected from the existing agricultural use of the land. Any proposal would also need to provide an acceptable access from the site onto Haycraft's Lane. • If the site is limited to a very small number of trips as detailed above it can be assumed to have a 'Significant Adverse Impact' rating due to the poor nature of Haycraft's Lane. • If the site is accessed southwards over adjacent land directly to the B3069, this would be expected to have much less impact and is the preferred access route. • Policies DM1 and DM 8 of the Minerals Strategy actively address this issue of minimising impacts on the transportation network.	route will be suitable for use as a quarry access. • The TA should be scoped with the Transport Development Management Team and is intended to identify opportunities for reducing impacts on the transport network.
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	–	0	• The proposed site can only realistically be accessed by means of road transport, resulting in a negative impact under this Objective during development and working. • As far as reasonably possible negative impacts resulting from access and transport will be mitigated, as required by Policies DM1 and DM8 of the Minerals Strategy.	• Mitigate impacts where identified and appropriate.
17. To sustain the health and quality of life of the population	– –	0	**Impact on Sensitive Human Receptors** • Site has residential properties immediately adjacent to it, within 50m and further out. Screening will be required. • Although this site has been worked in the past, this has not been for many years and its development would make it seem like a new site. It is in close proximity to a number of residences.	• Provision of appropriate mitigation, following assessment of likely impacts. • Restoration to improve landscape of site where possible; and to seek to facilitate public access. • Screening, bunding, standoffs will be used to mitigate impacts where considered necessary.
	–	0	**Impact on Existing Settlements** • Closest settlements are Acton at approximately 600m south east and Langton Matravers at around 700m south/west. Site is not visible from these settlements.	• Transport Assessment to be carried out, identifying possible impacts and opportunities for

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			• Harman's Cross lies to the north, in the valley. The site will be potentially more visible from the north, which will require sensitive treatment and proper screening of the northern edge of the site. • Traffic impacts are expected to be minimal.	reducing impacts on the transport network. • Visual impact assessment will also be required, as referred to above.
	0	**0**	**Impact on Airport Safety** • Site is approximately 22 km from airport, with no wet working or restoration. • No impacts expected.	• No action required.
18. To enable safe access to countryside and open spaces.	**0**	**0**	**Impact on Recreational Land** • Site is fenced agricultural land, used for livery purposes. No informal or formal recreational use, apart from horses.	• Assessment of impacts, with appropriate mitigation identified. • Restoration to include considering how it might be possible to improve public access in the area.
	0	**0**	**Impact on Public Rights of Way** • No rights of way cross the site or run adjacent to it.	

Preliminary Hydrological Risk Assessment

Controlled Waters	Issues/Risks	Mitigation	Further information/approval required
• Watercourses • Ponds/lakes, including wet habitats • Groundwater	• Potential for contamination of controlled waters (groundwater) through spillage or seepage of pollutants such as fuel. • Contamination of water supplies or reduction in amount of water available for licenced supplies.	• Appropriate arrangements to be made for ensuring that runoff from the site does not enter the groundwater unless any silt or other pollutant has first been removed. • Fuel stored on site to be appropriately bunded and sealed to prevent any spillage from	• Full hydrogeological risk assessment will be required as part of a planning application. • Flood Risk Assessment • Water Framework Assessment • Further assessment of potential impacts on water quality and levels, particularly for groundwater, is required prior to development.

		entering ground or surface waters. • On-going monitoring during development and working of the site.	• Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.

Cumulative Impacts

Site is an extension to an existing quarry in an area where there is a high concentration and long history of mineral extraction.

The proposal is within 5Km (by road) of a town (Swanage) where allocations for the development of 200 dwellings, employment and retail facilities have been made in the Purbeck Local Plan Part 1 (adopted Nov 2012) (Policy SE). (Site details not yet available). Traffic arising from the new residential development will add to general traffic levels in / around Swanage and on the A351.

Summary.

Potential Benefits	Potential Impacts
• Provision of Purbeck Stone. • Support for the Purbeck Stone industry and employment, both locally and wherever Purbeck Stone is exported and used, with associated economic benefits. • Use of the stone for heritage building works/repairs, and for new buildings. • Geodiversity benefits, through exposures created and fossils found. • Possibility of improved public access.	• There are residences in close proximity, as well as further afield. Assessment of likely impacts will be required, along with appropriate mitigation. • Access and traffic impacts are key issues, given that Haycraft's Lane is very narrow and has flower rich verges. An alternative access route is likely to be the only way forward, although none is currently proposed. • Assessment is required to consider whether the local landscape capacity can accommodate the development and what mitigation will be required. • The northern edge of the site will require careful assessment, to identify how any visual impacts on the downslope area and across on the other side of the valley can be fully screened/mitigated. • Assessment is required to determine whether there will be any archaeology or other heritage issues, and what mitigation will be required.

Overall Recommendation:

Assessment has flagged up archaeology, landscape/visual impact, local amenity impacts and access as key issues to be addressed as part of working this site. Further assessment will be required at planning application stage to identify satisfactory mitigation and to identify if there are any additional impacts that will require mitigation.

To the south of, and immediately adjacent to, the nominated site are two Wessex Water reservoirs. Water mains are connected to these reservoirs. Development of this site must ensure that there are no impacts on these reservoirs and mains. Development of this site will require liaison with Wessex Water.

Traffic access and likely impacts on Haycraft's Lane and the road verges are particularly important. Unless it can be demonstrated to the satisfaction of the Mineral Planning Authority further work is carried out to demonstrate that Haycrafts Lane can be used with no negative impacts, it appears that some alternative route will be required.

If an alternative access route can be identified, then it is likely that the site has the potential to be worked. The site will be included in the Draft Mineral Sites Plan for the purposes of consultation, subject to alternative and suitable access being found.

Accessing this site via Haycrafts Lane is not considered appropriate. Site has not been included as a proposed allocation primarily on these grounds.

Appendix C: Sites Not Being Taken Forward – Withdrawn or Permitted

Aggregates: AS01 Binnegar

Site Name/Location: **AS01 Binnegar** Mineral Type: Sand	Nominee/Agent: Raymond Brown Local Authority: Purbeck District Council	Site Area: approximately 15 ha Production/reserve: 250,000 tpa; approximately 5 mt

Impact Assessment Scoring

- -	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain

Timescales for effects:

P/W: Preparation and Working **R/A**: Restoration and Afteruse

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
1. To move waste management up the waste hierarchy and promote net self-sufficiency	**N/A**	**N/A**	• This Objective is not relevant to this site nomination	• N/A
2. To maintain, conserve and enhance biodiversity	**0**	**0** **+**	**European/International Designations** • Dorset Heathlands SPA/SAC 300m to SE and 350m to NW. No impacts on European designations expected during working. • Restoration to heathland and/or public open space to mitigate human pressures elsewhere would both offer benefits post-extraction.	• Ecological surveys and hydrological reports. • Heathland restoration or public open space or both.
	0	**0** **+**	**Annex 1 Bird Species** • Area currently contains few opportunities for Annex 1 birds. No expected impacts on these during working. • Restoration to heathland and an open habitat could make this area suitable for the birds, offering post-extraction benefits.	• Ecological surveys and hydrological reports. • Consider revision to heathland SPA boundary and facilitating restoration to heathland.
	0	**0**	**Impact on National Designations** • No impacts expected .	• No action required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	0	0 +	**Other protected species** • The site, and the wider area, is known to support a large population of the plant species Pennyroyal, fully protected under Schedule 8 of the Wildlife & Countryside Act. • In reality the presence of the plant is unlikely to prevent mineral working, but its population will need to be carefully managed to preserve and enhance it in the area. • At the moment there are no known populations of other protected species, but the site could support bat roosts in trees, and reptiles in more open areas, most likely all capable of satisfactory mitigation. • Restoration, or translocation to new areas, could offer enhanced habitats	• Ecological surveys and hydrological reports. • Careful assessment of possible risks to the Pennyroyal population and any other relevant species. • Appropriate strategy for translocation, including preparation of alternate locations for the plant.
	0	0	**Impact on local recognitions/designations, including ancient woodland and veteran trees.** • No impacts expected	• No action required.
3. To maintain, conserve and enhance geodiversity.	+	0	• Exposures resulting from working may be of interest. Benefits are only expected during working, and are likely to be obscured or covered as part of restoration.	• Operator to be asked to permit visits to view exposures as required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	0	0	**Groundwater** • The site does not affect Source Protection Zones and sits on a Secondary Aquifer. It is not known at this stage whether there are any licensed/unlicensed supplies in the vicinity. • Further information will be required but these are not considered to be such serious issues as to preclude further consideration of this site.	• Further assessment on possible impacts on water supplies and appropriate mitigation if potential impacts identified. • Where necessary mitigating measures should be installed to maintain groundwater levels and/or monitor private water supplies. • Alternative arrangements should be in place in case of a reduction in supply. • Appropriate arrangements should be put in place to ensure that the water leaving the site and entering the rivers/watercourses is of an acceptable quality. • Any fuel on site should be properly stored to avoid contamination in case of spillage. • Appropriate arrangements should be installed for surface water and silt collection and fuel storage to prevent contamination of groundwater resources. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse. • Ponds to be assessed and, as appropriate, relocated.
	–	0 +	**Surface Water** • There are two ponds in the north-west of the site. It is feasible that these ponds and associated species can be successfully relocated, subject to relevant assessments being carried out. • There will be an impact on these habitats, but it is expected that in the longer term impacts will be benefits.	
5. To reduce flood risk and improve flood management.	0	0	**Flooding/Coastal Stability** • The site is in Flood Risk Zone 1 and working is not considered to constitute, or exacerbate an existing, a flood risk. • Negligible/No impact, during working and restoration.	• Flood Risk Assessment (FRA) will be required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
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).	–	+	**Archaeology** • Much of the site's northern boundary is defined by the line of an historic earthwork known as Battery Bank, a Scheduled Monument (1016273). This monument was probably a boundary in itself, most likely of Iron Age or Roman date, and possibly a division between grazing units. Damage to this Monument needs to be avoided and impact of any works on its setting needs to be carefully assessed. • A Scheduled Monument lies to the south-east of the site – 'Two Bowl Barrows on South Heath, 290m and 370m East of Binnegar Hall' (1016276). The impact of any works on its setting needs to be carefully assessed. • There is archaeological potential for human burials beyond the scheduled areas, although for much of the site the potential may be low since people would have used the heaths for grazing whilst living elsewhere. • Potentially the impact of the development would be 'Significant Adverse Impact' without appropriate mitigation, and 'Less Significant Adverse Impact' with it. • Since the monuments were likely originally set in an open heathland landscape, restoration of the site to open space/heathland, depending on detail of design, would offer Mild/Strong benefits to the Monuments and their settings	• Archaeological survey to determine nature and significance of non-designated remains. • Adequate provision to be made for preservation, excavation or recording, as appropriate. • Monuments, particularly Battery Bank, to be properly and appropriately protected during preparation/working. • Settings of the Monuments to be established prior to working and not to be compromised during working. • Restoration to heathland could benefit the settings of the Monuments.
	– –			
	–	+	**Historic Landscapes** • The site is likely to have been heathland since the Bronze Age. This would have formed the context for the scheduled barrows and perhaps Battery Bank. • Potentially the impact of the development would be 'Significant Adverse Impact' without appropriate mitigation, and 'Less Significant Adverse Impact' with it. • Restoration to heathland would provide Mild/Strong benefits, particularly in contributing to setting of the Monuments.	• Restoration to heathland to benefit the settings of the Monuments.
	0	0	**Historic Buildings** • No expected impact on Listed Buildings	• No action required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	0	+	**Landscape Capacity** • Site is currently well screened by woodland and provided sufficient vegetation is retained to maintain this screening during preparation/working, impacts are expected to be negligible. • Restoration to open heathland has already been identified as beneficial to the historic environment.	• Appropriate restoration proposals in line with Landscape Management Guidelines referred to in Minerals Strategy. • Maintain screening woodland around edges of site.
	0	0	**Designated Landscapes** • Dorset AONB lies approximately 200m south of site, but site is heavily screened. • Negligible impacts on designated landscapes during and after working.	• Maintain screening woodland around edges of site.
8. To protect and improve air quality and reduce the impacts of noise.	0	0	• Impacts on air quality expected to be negligible. • No AQMAs will be affected by the working of this site proposal. Any dust resulting from working will be controlled through normal dust-suppression measures. • Noise mitigation will be addressed at the planning application stage, with appropriate mitigation to be included in the development of the site.	• Environmental protection measures to reduce dust and ensure noise is appropriately mitigated.
9. To maintain, conserve and enhance soil quality.	0	0	• The site comprises primarily grassland and woodland cover. The area is a former heathland area and so would be expected to have relatively poor, acidic soils. • If the site is worked and restored to heathland this will require reinstatement/retention of acidic soils.	• Soil is poor quality in agricultural terms but valuable in terms of potential for heathland restoration. • Heathland restoration has already been identified as important after use.
10. To conserve and safeguard mineral resources.	+ / + +	0	• In terms of encouraging the most efficient use of resources, this site is considered to provide a mild/strong positive impact as it constitutes an extension of an existing working. Impacts of developing this extension are expected to be relatively limited with no intensification. • The site would make an important contribution to aggregate supply in Bournemouth, Dorset and Poole.	• No specific action required; site development to take into consideration and mitigate where appropriate relevant impacts.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
11. To promote the use of alternative materials.	+ +	0	• In order to achieve desired restoration levels it may be necessary to install an inert waste material recycling facility. • If this is done then this will provide a strong positive benefit during working. It is expected that the recycling facility would finish when or soon after the quarry is completed and restored, giving a negligible impact during afteruse.	• Developing an inert waste recycling facility will promote the use of alternative materials on-site and elsewhere.
12. To provide an adequate and affordable supply of minerals to meet society's needs.	+ +	0	• Development of this site will provide a strong benefit in terms of contributing to the provision of a supply of minerals to meet society's needs. • Ensuring a sustainable supply will depend on the development and management of the site. Providing site development takes into account relevant principles of sustainable development it is expected this will contribute to complying with this objective.	• Ensure principles of sustainable development are incorporated into the development of this site.
13. To promote and encourage sustainable economic growth	+ +	0 +	• This site proposal is expected to contribute to economic development on two levels – directly through the maintenance of current employment at the minerals site adjacent to the proposed development and indirectly through the provision of aggregate minerals required for the maintenance of built environment and for new built development. Both levels are expected to maintain employment, skilled and unskilled. • Restoration to commercial forestry could provide direct and on-going economic benefits. However, the biodiversity benefits of restoration to heathland in this area have already been noted. If open access is available on the restored land, some limited benefits due to recreational attraction and use in the wider area (i.e. walking, bird watching) may be realised.	• Restoration to forestry could provide on-going economic benefits; however, restoration to open access heathland is considered preferable in biodiversity terms and could provide limited economic benefits.
14. To adapt to and mitigate the impacts of climate change.	0	0	• Developing land as a quarry is expected to have some minimal negative impacts regarding climate change, due primarily to machinery used and transportation of mineral away from site. However, these will in relative terms be negligible.	• Use energy efficient plant and machinery. • Implement restoration which provides appropriate habitats to help to increase

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			• The Bournemouth, Dorset and Poole Minerals Strategy seeks to address and minimise such impacts through Policy CC1 which requires operators to take into consideration climate change impacts and their possible mitigation for any proposed minerals development. • The development management policies, e.g. DM 1, also address and seek to minimise the issue of sustainable development and climate change. • Restoration to some form of vegetated environment will offer benefits in the form of minimal climate change mitigation, but again these will be negligible.	resilience of flora/fauna.
15. To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any residual impacts.	–	+	• The proposal is an extension of an existing quarry – no intensification or other change in road transport is expected but the proposed extension will extend the life of the existing development. This can be expected to produce a mild negative impact on the transport network. • The processing plant may be moved nearer to the quarry extension itself – if this happens, this will reduce impacts as lorries won't be crossing Puddletown Road to get to the existing plant site. • Policies DM1 and DM 8 actively address this issue of minimising impacts on the transportation network. • Restoration to open countryside will be positive benefit to the local environment.	• Processing plant to be moved nearer to proposed extension. • Transport Assessment to be carried, identifying opportunities for reducing impacts on the transport network.
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	–	0	• The proposed extension can only realistically be accessed by means of road transport, resulting in a negative impact under this Objective during development and working. • As far as reasonably possible negative impacts resulting from access and transport will be mitigated, as required by Policies DM1 and DM8 of the Minerals Strategy.	• Mitigate impacts where identified and appropriate.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
17. To sustain the health and quality of life of the population	0 –	0	**Impact on Sensitive Human Receptors** • Nearest property is Binnegar Hall, just over 100m to the south of the site. Site is heavily screened and downwind in prevailing winds. It is also higher in elevation. Possible impacts considered to be negligible to mild during preparation and working. • Other properties within 250m of site. • Retaining screening vegetation and use of noise attenuation bunds will minimise impacts on these receptors. • No impacts during Restoration/Afteruse.	• Retain screening vegetation, particularly along southern boundary of site. • Construct noise attenuation bunds along southern boundary of site.
	0	0	**Impact on Existing Settlements** • Properties along A352; Wareham lies approximately 1km to the east. All are screened by vegetation/trees. Visual/noise impacts expected to be negligible with mitigation, during working. • Possible transport impacts are covered above.	• Retain screening vegetation, particularly along southern boundary of site. • Construct noise attenuation bunds along southern boundary of site. • Dust minimisation as required. • Transport assessment to minimise potential impacts.
	0	0	**Impact on Airport Safety** • No impacts expected.	• No action required.
18. To enable safe access to countryside and open spaces.	0	0 +	**Impact on Recreational Land** • Site is private land and has no recreational use. No impacts. • Restoration to open space with public access could be an important benefit in Restoration/Afteruse. • However, restoration to open space with public access could conflict with possible nature conservation uses.	• No action required for working. • Restoration to open space with public access should be considered for its benefits, but could conflict with nature conservation aspirations.
	0	0	**Impact on Public Rights of Way**	• No action required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			• Development of this site does not affect any rights of way. No impacts.	

Preliminary Hydrological Risk Assessment

Controlled Waters	Issues/Risks	Mitigation	Further information/approval required
• Watercourses • Ponds/lakes, including wet habitats • Groundwater	• The site is located north of the Frome and south of the Piddle, and would drain towards the Frome. The River Basin Management Plan South West River Basin District identifies the Frome and the Piddle as being of 'Poor' environmental quality in this area. There is some potential for contamination from runoff from site. • Potential for contamination of controlled waters through spillage or seepage of pollutants such as fuel, or silt in water. • Contamination of water supplies or reduction in amount of water available for licenses supplies. • Impacts on or removal of surface water features.	• Appropriate arrangements to be made for ensuring that runoff from the site does not enter the Frome or groundwater unless any silt has first been removed. • Fuel stored on site to be appropriately bunded and sealed to prevent any spillage from entering ground or surface waters. • On-going monitoring during development and working of the site. • Relocation of surface water features, provided this is feasible. • Need to consider compliance to the Restoration Plan for the River Frome and its floodplain.	• Full hydrogeological risk assessment will be required as part of a planning application. • Flood Risk Assessment • Water Framework Assessment • Further assessment of potential impacts on water quality and levels, particularly for groundwater, is required prior to development. • Assessment of the feasibility of relocating surface water features and associated habitats and species. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.

Cumulative Impacts

This proposal is an extension to an existing site in an area where there is other mineral working (along the Puddletown road). However, the site would not be worked until current quarrying operations at Binnegar are complete. There would be no increase in the intensity of the operation but there would be an extension of time for mineral extraction/restoration.

The proposal is within 5Km (by road) of a site allocated in the Purbeck Local Plan Part 1 (adopted Nov 2012) (Policy CEN) for development of 200 dwellings and community facilities, off Worgret Road, Wareham. Traffic arising from the new residential development will add to general traffic levels in Wareham and on the A352.

Cumulative impacts are expected to be minimal and no specific mitigation is required.

Summary.

Key impacts and benefits are expected to include, but are not necessarily limited to, the following.

Potential Benefits	Potential Impacts
• Provision of aggregates required for maintenance and construction of the built environment, with accompanying benefits to the economy. • Provision of employment, to the benefit of local economy. • If inert waste is imported and processed on-site to assist in restoration, this will contribute to supply of recycled aggregate. • Improved public access may be possible as a part of site restoration. This could lead to reduced visitor pressure on designated heathland sites in the vicinity. • The proposed development is an extension to an existing quarry and as such would not lead to an intensification of development.	• Impacts on Scheduled Ancient Monuments adjacent or in vicinity. Impacts to be fully assessed and mitigated, but expected to be capable of mitigation. • Impacts on Pennyroyal plant on site. It is expected that these can be mitigated through translocation of affected plants. • Impacts on ponds on the site, but these can also be moved as required. • There will be some impacts associated with traffic serving the site – further assessment will be required. • Binnegar Hall and associated buildings lies to the south of the proposed site and could be impacted by noise or visual impacts. Such impacts are expected to be capable of mitigation.

Overall Recommendation:

Key impacts are expected to be on the cultural heritage (Boundary Bank to the north and barrows to the south/east); ecology (the Pennyroyal plant and ponds on the site); and possibly of Binnegar Hall to the south. It is expected that these can be overcome through appropriate mitigation.

Further assessment will be required to gain a better understanding of what the impacts might be and how best to mitigate. Should this site ultimately be developed, it is expected that detailed assessment of impacts and required mitigation will be covered through the required Environmental Impact Assessment.

As an extension, development of the site is not expected to lead to intensification of impacts, but the time period of the impacts will be extended. If the processing plant is ultimately located at the site, some of these impacts (i.e. vehicles crossing the Puddletown Road) will be removed.

Planning permission has been issued for the development of this site and it therefore no longer forms part of the Bournemouth, Dorset and Poole Mineral Sites Plan site identification process

Aggregates: AS10 Moreton Plantation

Site Name/Location: AS10 Moreton Plantation Mineral Type: Sand/Gravel	Nominee/Agent: Aggregate Industries Local Authority: Purbeck District Council	
Site Area: approximately 194 ha	Production: 500,000 tpa;	Reserve: approximately 6-7 mt

Impact Assessment Scoring

- -	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain

Timescales for effects:

P/W: Preparation and Working **R/A**: Restoration and Afteruse

Sustainability Objectives	Effects P/W	Effects R/A	Commentary	Mitigation
1. To move waste management up the waste hierarchy	N/A	N/A	• This Objective is not relevant to this site nomination.	• N/A
2. To maintain, conserve and enhance biodiversity	– –	?	**European/International Designations** • Proposed area supports Annex 1 birds which may be functionally linked to Dorset Heathlands SPA and area is well used as recreation site contributing to the network of areas which help to reduce human recreational pressure on designated heathlands. • There are possible hydrological effects of working the area for mineral on the European wet heaths to the south. Working this area could lead to significant risk of adverse effects on European sites. • At the moment the area includes significant parts of the Dorset Heaths SAC, Dorset Heathlands SPA and Dorset Heathlands Ramsar; these areas must be removed from the possible allocation to have any chance of being taken forward otherwise a conclusion of adverse effects on integrity of the sites is inevitable.	• Ecological surveys and hydrological reports required, with appropriate mitigation. • Heathland restoration and public access to be created. • Nature conservation designations to be removed from proposed development area, with appropriate boundary established.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
			• Restoration to heathland/forestry with open access has the potential to restore these benefits.	
	–	+	**Annex 1 Bird Species** • Area supports Annex 1 birds as part of the existing forestry crop rotation. Clearance of trees would result in heathland regeneration and the open habitat would rapidly become suitable for more Annex 1 birds. • The site has the potential to be included in a revision to the heathland SPA boundary. Risk based approach essential here.	• Ecological surveys and hydrological reports required, with appropriate mitigation. • Heathland restoration and public access to be created. • Nature conservation designations to be removed from proposed development area, with appropriate boundary established.
	–	+	**National Designations** • In addition to comments made above, the area is likely to support rich invertebrate assemblage in existing rides contributing to maintenance of species within SSSI. • At the moment the area includes parts of the Turnerspuddle Heaths SSSI; these areas must be removed from the possible allocation to have any chance of being taken forward as there is no case for directly damaging a nationally important site to extract sand and gravel. • Restoration should include appropriate habitats to support invertebrates.	• Ecological surveys required, with appropriate mitigation. • Restoration to include creation of invertebrate habitat. • Areas of designation to be removed from working area, with appropriate boundary established.
	– –			
	–	?	**Protected species** • Existing rides support significant populations of European protected species, Sand Lizard and Smooth Snake, and common protected reptiles. Depending on population sizes it may be difficult to mitigate fully for effects on EPS and there is a	• Ecological surveys required, with appropriate mitigation identified.

Sustainability Objectives	Effects P/W	Effects R/A	Commentary	Mitigation
	– –		risk that disturbance licences could be refused by NE. • Within the proposed area is a population of the fully protected Ladybird Spider; it is extremely unlikely that permission could ever be granted that would be shown to effect the population of this great rarity. • Depending on population sizes it may be difficult to mitigate fully for effects on these species and there is a risk that disturbance licences could be refused by NE.	• Restoration to include appropriate habitats for these species. • Further investigation into likelihood of grant of disturbance licences. • Ladybird Spider and its habitat not to be affected by any development.
	0	**0**	**Local recognitions/designations, including ancient woodland and veteran trees** • No impacts expected.	• No action required.
3. To maintain, conserve and enhance geodiversity.	**+**	**0**	• Exposures resulting from working may be of interest. Benefits are only expected during working, and are likely to be obscured or covered as part of restoration.	• Operator to be asked to permit visits to view exposures as required.
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	– –	**?**	**Groundwater** • Potential to impact on wet habitats in Turners Puddle Heath Site of Special Scientific Interest. No impact on Source Protection Zones. Overlies secondary aquifers. • EA concern over possible impacts of extraction on groundwater flow patterns within the site and down towards the Frome.	• Hydrological assessment required to determine possible impacts, on ground and surface waters, with appropriate mitigation to be implemented. • Appropriate arrangements should be put in place to ensure that the water leaving the site and entering the rivers/watercourses is of an acceptable quality. • Any fuel on site should be properly stored to avoid contamination in case of spillage. • Appropriate arrangements should be installed for surface water and silt collection and fuel storage to prevent contamination of groundwater resources. • Land Drainage Consent to be obtained from Dorset County
	– –	**?**	**Surface Water** • There are ditches/drainage/watercourses within and around the site boundary which would be impacted by development of the site. • EA concern over impacts of extraction on surface water flow through the site and down towards the Frome.	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
				Council is works may affect flow of an ordinary watercourse.
5. To reduce flood risk and improve flood management .	0	0	**Flooding/Coastal Stability** • Majority of site in FRZ 1, plant proposed to be located on high ground, approximately 1 km from FRZ 2/3. Working is not considered to constitute, or exacerbate an existing, a flood risk. • Negligible/No impact, during working and restoration.	• Flood Risk Assessment (FRA) will be required.
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).	–	+	**Archaeology** • A Scheduled Monument consisting of two bowl barrows on Cloud's Hill (SM33172) is situated on the north-eastern boundary of the proposed site. The setting of the monument comprises the low hill/natural mound on which the barrows are situated and the surrounding lowland area which they overlook. This area would have been heathland for much of the life of the barrow. Part of this area has already been returned to heathland and is not proposed for extraction, thereby protecting this element. • The eastern area proposed for extraction lies south of this. It is my view that in order to visually protect the setting in its entirety this extraction area should be pulled back so as not to cross over the existing track. Overall the potential impact on the setting of the monument would be temporary, for a period of approximately one year. During this time there would be extraction activity and lorry movements south of the Scheduled Monument. • The eastern block is proposed to be restored to heathland at a slightly lower level than existing ground levels. The permanent removal of conifers would therefore have a positive impact on the setting of Cloud's Hill. • Positive management of the scheduled barrows could be part of the mitigation for the	• Archaeological survey to assess Monuments and establish their settings and how these can best be protected during working, as well as to assess possible presence and significance of non-designated remains. • Adequate provision to be made for preservation, excavation or recording, as appropriate. • Settings of the Monuments to be established prior to working and not to be compromised during working. • If the boundary for the eastern area is pulled back as suggested, the impacts of the development would be reduced.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
			development. Archaeological potential for the remainder of the site is likely to be low since people would have used the heaths for grazing whilst living elsewhere.	Otherwise, the proposal would be considered to have a significant adverse impact.
	–	+	**Historic Landscapes** • The heathland of the site forms a major element of the setting of the scheduled barrows as discussed above. • Unsympathetic extraction and quarrying could have a significant negative impact on the setting of these barrows, but there is the potential for an improvement in that setting through pulling back the quarry boundary and restoration to heathland. • Archaeological assessment and evaluation will be required. When these have been undertaken archaeological impacts will be better understood.	• Survey to assess possible presence and significance of non-designated remains. • Adequate provision to be made for preservation, excavation or recording, as appropriate.
	–	0	**Historic Buildings** • Lawrence of Arabia's 19th century cottage, which is Grade II listed, is located to the north-east of the proposed site. However the presence of Cloud's Hill and an area of protected heathland between the site and the listed building means that the site would not impact on the setting of the cottage. • Oaker's Wood Cottage, which is also Grade II listed, lies to the north of the site on the Waddock Cross-Bovington Road. This is a thatched cottage, probably of 18th century date, set within a wooded landscape. The cottage is currently undergoing restoration and extension and the new owners have surrounded the site with a quick growing evergreen dense hedge. This has changed the character of the setting of the listed building. However skyward views of being within a woodland should remain as part of the historic character of the surrounding environment of the building. • The proposed site would involve extraction of sand and gravel to the south of Oaker's Wood Cottage, on the other side of the road. Restoration would be at a lower level and would comprise some large bodies of water, shallow lake margins islands and reedbed over silt ponds. Due to the presence of the dense hedge and a tree belt that would be retained along the northern border of the proposed site, there would be little impact on the immediate	• Further assessment required to ensure adequate and appropriate screening is in place, prior to working. • Strengthen screening of the site where needed and appropriate. • Screening to include bunds to reduce noise impacts, where necessary.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
			setting of the listed building. However, thickening of the tree belt is likely to be required to ensure that the feeling of being within a wooded landscape is not lost and to ensure that any noise disturbance is minimal.	
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	– –	?	**Landscape Capacity** • There are major concerns regarding the significant negative landscape & visual impacts this proposal would have on well used public rights of way and rural lanes as well as on the SPA/SSSIs. Parts of the area are tranquil and sensitive from a landscape and visual perspective. • Cumulative impact may also be an issue especially when viewed from Moreton Village and other areas to the south in association with the Ministry of Defence operations. • The integrity of the distinctive mosaic landscape is important in an area well used for recreation. There may be limited opportunity in smaller forested areas which can result in restoration to heathland to help reduce fragmentation of this habitat.	• Landscape and visual impact assessment required, to identify impacts; adequate mitigation of such impacts before and during working. • If mitigation is not possible, a view will have to be taken as to whether a time-limited impact might be acceptable. • Appropriate restoration proposals in line with Landscape Management Guidelines referred to in Minerals Strategy. • Maintain screening woodland around edges of site.
	0	**0**	**Designated Landscapes** • No expected impacts on designated landscapes.	
8. To protect and improve air quality and reduce the impacts of noise.	**0**	**0**	• Impacts on air quality expected to be negligible. • No AQMAs will be affected by the working of this site proposal. Any dust resulting from working will be controlled through normal dust-suppression measures. • Noise mitigation will be addressed at the planning application stage, with appropriate mitigation to be included in the development of the site.	• Environmental protection measures to reduce dust and ensure noise is appropriately mitigated.
9. To maintain, conserve and enhance soil quality.	–	**0**	• The site comprises primarily heathland, grassland and woodland cover. The area is a former heathland area and so would be expected to have relatively poor, acidic soils. • Site preparation/working would require stripping and storage of the soils, with some impacts on them.	• Soil is poor quality in agricultural terms but valuable in terms of potential for heathland restoration. • Soils to be stored/protected during preparation

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
			• If the site is worked and restored to heathland this will require reinstatement/retention of acidic soils.	and working and properly reinstated during restoration.
10. To conserve and safeguard mineral resources.	+	0	• The site would make an important contribution to aggregate supply in Bournemouth, Dorset and Poole.	• No specific action required; site development to take into consideration and mitigate where appropriate relevant impacts.
11. To promote the use of alternative materials.	0	0	• This proposal does not at present promote the use of alternative materials. • It is possible that treated inert waste will be used in restoration of the site, but this will not directly promote the use of alternative materials.	• No action required.
12. To provide an adequate and affordable supply of minerals to meet society's needs.	+ +	0	• Development of this site will provide a strong benefit in terms of contributing to the provision of a supply of minerals to meet society's needs. • Ensuring a sustainable supply will depend on the development and management of the site. Providing site development takes into account relevant principles of sustainable development it is expected this will contribute to complying with this objective.	• Ensure principles of sustainable development are incorporated into the development of this site.
13. To promote and encourage sustainable economic growth	+	0 +	• This site proposal is expected to contribute to economic development on two levels – directly through the provision of employment at the site to be developed and indirectly through the provision of aggregate minerals required for the maintenance of built environment and for new built development. Both levels are expected to maintain employment, skilled and unskilled. • It is considered that this proposal will provide a strong benefit during site working. • Restoration to commercial forestry could provide direct and on-going economic benefits. However, the biodiversity benefits of restoration to heathland in this area have already been noted. • If open access is available on the restored land, some limited benefits due to recreational attraction and use in the wider area (i.e. walking, bird watching) may be realised.	• Restoration to forestry could provide on-going economic benefits; however, restoration to open access heathland is considered preferable in biodiversity terms and could provide limited economic benefits. • Some combination of the two may be most appropriate.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
14. To adapt to and mitigate the impacts of climate change.	_	0	• Developing land as a quarry is expected to have some negative impacts regarding climate change, due primarily to machinery used and transportation of mineral away from site and loss of vegetation. However, these will in relative terms be negligible. • The Bournemouth, Dorset and Poole Minerals Strategy seeks to address and minimise such impacts through Policy CC1 which requires operators to take into consideration climate change impacts and their possible mitigation for any proposed minerals development. • The development management policies, e.g. DM 1, also address and seek to minimise the issue of sustainable development and climate change. • Restoration to some form of vegetated environment will offer benefits in the form of climate change mitigation, including provision of habitat for wildlife, but again these will be relatively small.	• Use energy efficient plant and machinery. • Implement restoration which provides appropriate habitats to help to increase resilience of flora/fauna.
	0	+		
15. To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any residual impacts.	_	0	• This is a very large new site that proposes to output 0.5 million tonnes per annum. It has been estimated that this could generate 200 trips per day. No access details have been provided but the only real option is to access the C80 that abuts the northern site boundary. There are visibility issues with providing an access on the C80 due to its vertical and horizontal alignment but there does appear to be a straight section of road where the required standards could be met. Any proposals would need to provide full details of the proposed access. • It is expected that the site will act as a successor to the existing and past operations at Warmwell to the south although the traffic distribution is likely to be different. Traffic from the current site at Warmwell disperses to the north and south along the B3390, and to the west and east along the West Stafford by-pass and the A352. The new site would be expected to follow a similar pattern with the exception of movements to the north and east beyond the immediate area. For these movements the likely route for the new site would be the C6 rather than the B3390. This is made more likely by the poor junction layout at Waddock Cross (B3390/C80) which has limited forward visibility. There is therefore potential for increased traffic on the C6 and through Bere Regis that should be	• Transport Assessment to be carried out, identifying opportunities for reducing impacts on the transport network.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			addressed in detail within any Transport Assessment. • An alternative option may be to provide a haul route on the north side of the C80 to enable HGV traffic to enter the B3390 on the straight section of road north of Waddock Cross. There is therefore potential for this site to come forward although there are some issues with regards to the suitability of local junctions and routes to cater for the levels of HGV traffic predicted. • Even with this mitigation there are issues with this site access and significant negative impacts are expected. • Policies DM1 and DM 8 actively address this issue of minimising impacts on the transportation network.	
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	– / – –	0	• The proposed extension can only realistically be accessed by means of road transport, resulting in a negative impact under this Objective during development and working. • As far as reasonably possible negative impacts resulting from access and transport will be mitigated, as required by Policies DM1 and DM8 of the Minerals Strategy.	• Mitigate impacts where identified and appropriate.
17. To sustain the health and quality of life of the population	–	0	**Impact on Sensitive Human Receptors** • There are properties within 50m; others within 250m. • However, it is considered that the site is large enough that the properties around the edges can be appropriately protected and screened. • Development would involve mitigation (visual and noise attenuation bunding, standoffs) to limit impacts.	• Provision of appropriate mitigation, following assessment of likely impacts.
	–	0	**Impact on Existing Settlements** • Moreton lies across Frome valley, approximately 600m to south-west; Bovington Camp is approximately 250 m to the south/east. • Site is large enough that working can be screened from surrounding settlements. • Settlements along the B3390 will experience some impacts from lorry traffic. However this site	• Transport Assessment to be carried, identifying possible impacts and opportunities for reducing impacts on the transport network.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
			proposal would not come on stream until Warmwell is finished, reducing cumulative impacts. • There may also be an impact on Bere Regis.	
	0	0	**Impact on Airport Safety** • Site is approximately 30km from Hurn Airport and is proposed to be restored to wetland. No impacts are expected.	• No action required.
18. To enable safe access to countryside and open spaces.	– –	+	**Impact on Recreational Land** • Site comprises dedicated access land, as part of Forestry Commission holdings. Site is very well used by the public for recreational purposes. • This would change during working but after restoration the site could be open to public access again. Public will be excluded during working, public access may be possible following restoration. • There is an issue in that users of this site might turn to European and national designated sites for recreational purposes, which this site is worked.	• Restoration to open access land following working and improvement of access where possible and where appropriate. • Provision of areas for recreational use while various parts of the site are worked.
	– –	+	**Impact on Public Rights of Way** • Statutory rights of way cross the site and will need to be diverted during working. Restoration will need to re-establish and where appropriate improve these statutory rights of way.	• Restoration and where appropriate improvement of statutory rights of way following working.

Preliminary Hydrological Risk Assessment

Controlled Waters	Issues/Risks	Mitigation	Further information/approval required

• Watercourses • Ponds/lakes, including wet habitats • Groundwater	• The site lies between the Frome and the Piddle, and drains into the Frome. The River Basin Management Plan South West River Basin District identifies both these rivers as being of 'poor' environmental quality. Potential for contamination from runoff from site. • Potential for contamination of controlled waters through spillage or seepage of pollutants such as fuel, or silt in water. • Impacts on or removal of surface water features. Water flowing over/through the site flows into European designated wet heaths to the south and on into the Frome. This flow could be altered by working of the site. Detailed assessment needed.	• Appropriate arrangements to be made for ensuring that runoff from the site does not enter the Frome or groundwater unless any silt has first been removed. • Fuel stored on site to be appropriately bunded and sealed to prevent any spillage from entering ground or surface waters. • On-going monitoring during development and working of the site. •	• Full hydrogeological risk assessment • Flood Risk Assessment • Water Framework Assessment • Further assessment of potential impacts on water quality and levels, particularly for groundwater, is required prior to development. • Assessment of the feasibility of relocating ponds and associated habitats and species. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.

Comments: working of this site has the potential to significantly alter the flow of water through and over this site. This could have significant impacts on the designated wet heaths/valley mires to the south. Full hydrogeological assessment will be required.

Cumulative Impacts

This site proposal is a new site, although it is likely to replace Warmwell quarry and so not represent intensification. There is other mineral working, both existing and proposed, in the area.

The proposal is within 5Km (by track/ road) of a site allocated in the Purbeck Local Plan Part 1 (adopted Nov 2012) for 20 Ha of employment development at Dorset Green Technology Park. (Policy ELS). Traffic arising from the new employment development will also add to general traffic levels on the B3390 and A352.

In addition, traffic from the site accessing the A35 or A31 via Bere Regis would contribute to cumulative impacts in Bere Regis. Alternatively, traffic using the B3390 could contribute to cumulative effects if either of the Moreton Estate sites (AS25 and AS26) were operating simultaneously with Moreton Plantation.

Summary.

Potential Benefits	Potential Impacts
• Restoration to heathland would provide habitat for protected species and improve linkages between other heathland in the area. • Provision of aggregates required for maintenance and construction. • Restoration to heathland will benefit Scheduled Monuments and their settings and provide a link to the historic landscape that would have previously characterised the area around this site. • Possible improvement of public access, following working.	• Site is a popular public recreation/access area and this will be lost or significantly reduced/affected during working, and altered afterwards. • Significant impacts on local landscape. • Potential impacts on historic environment, if no reduction in land to be worked to protect monuments and their settings. • Significant impacts on hydrology and hydrogeology. • Significant impacts on nature conservation interests. • Noise/visual impacts on properties in the vicinity.

Overall Recommendation:

This is a relatively large site which has strong nature conservation interest, local landscape value and historic environment importance. It provides open access and is well used. Water flows through the site to feed designated European wetlands and this could be affected by development of this site. Impacts during actual working are unknown and whether these can be fully offset is also unknown. Historic environment impacts may be mitigated by appropriate standoffs. The potential impacts on hydrology are unknown at this stage.

The site would make an important contribution to the supply of aggregate in Bournemouth, Dorset and Poole. Restoration to heathland with public access should restore at least some amenity and nature conservation benefits

Further information regarding this development has been requested. Until this is provided it is impossible to give a definitive view on this site. However, it is considered that the potential impacts and the level of uncertainty are such that this site should not be relied on as a future source of aggregate for Dorset.

The benefits of developing this site are not considered to outweigh the impacts of working here. **At this time** other sites are considered to be more appropriate options for supplying aggregate.

It is **recommended** that this site should not be included in the emerging Mineral Sites Plan

This site has been withdrawn by the nominee.

Aggregates: AS11 Parley Court, West Parley

Site Name/Location: AS11 Parley Court, West Parley **Mineral Type:** sand and gravel	**Nominee/Agent:** Raymond Brown Group Ltd **Local Authority:** Christchurch Borough Council	**Site Area:** approximately 71 ha **Production**: 150,000 tpa; **Reserve**: approximately 1.3 mt

Impact Assessment Scoring

- -	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain

Timescales for effects:

P/W: Preparation and Working **R/A**: Restoration and Afteruse

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
1. To move waste management up the waste hierarchy	N/A	N/A	• This Objective is not relevant to this site nomination	• N/A
2. To maintain, conserve and enhance biodiversity	–	0	**European/International Designations** • Some of the land on the south side of the river, including the riverside path, is intended to alleviate public access pressure on other areas of European designated land in Bournemouth. • Further assessment required to consider how this land and its use by the public could be affected by the proposed development and what appropriate mitigation might be. • Development of this site could have negative impacts (including visual and noise) on the use of the Stour Valley Local Nature Reserve (LNR) on the other side of the river. This forms an essential part of the Stour Masterplan Project and is a key Sustainable Alternative Natural Greenspace (SANG) for heathland mitigation purposes. It contributes to deflecting pressure away from nearby heathland Special Protection Areas (SPA) and there is a concern that gravel extraction so close to the LNR/ SANG will discourage public use which could put additional pressure back on the heaths.	• Assessment to determine possible impacts and whether mitigation will be possible, and what mitigation will be needed. • This might include advance planting that would serve to screen the proposed development.

Sustainability Objectives	Effects P/W	Effects R/A	Commentary	Mitigation
	0	0	**Annex 1 Bird Species** • Not relevant to this site nomination.	• No action required.
	0	0	**National Designations** • Not relevant to this site nomination.	• No action required.
	?	+	**Protected species** • Otter has been recorded from within the proposed area and an assessment will need to be made of the implications of the development for otter, although the presence of this species is unlikely to be a serious constraint on development, and restoration proposals should be able to build in opportunities for better habitat for this species. • Common protected reptiles may be present in the margins of the proposed area, but mitigation for such populations would be straightforward.	• Ecological surveys required, with appropriate mitigation identified. • Restoration to include appropriate habitats for these species. • Further investigation into likelihood of grant of disturbance licences.
	0	0	**Local recognitions/designations, including ancient woodland and veteran trees** • Not relevant to this site nomination.	• No action required.
3. To maintain, conserve and enhance geodiversity.	+	0	• Exposures resulting from working may be of interest. Benefits are only expected during working, and are likely to be obscured or covered as part of restoration.	• Operator to be asked to permit visits to view exposures as required.
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	– / – –	?	**Groundwater** • Adjacent to River Stour and watercourses run through site. Environment Agency has objected, regarding significant concerns relating to biodiversity and flood risk, as this site could have a direct impact on a significant stretch of the River Stour relating to both flood risk and biodiversity issues. • Site is not within any Source Protection Zone and overlies secondary aquifers. • Two licensed supplies within 500m.	• Hydrological/hydrogeological assessment required to determine possible impacts, on ground and surface waters, with appropriate mitigation to be implemented. • Where necessary mitigating measures should be installed to maintain groundwater levels. • Appropriate arrangements should be put in place to ensure that the water leaving the site and entering the Stour is of an acceptable quality.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
	–	?	**Surface Water** • Adjacent to River Stour and watercourses run through site. Environment Agency has objected, regarding significant concerns relating to biodiversity and flood risk, as this site could have a direct impact on a significant stretch of the River Stour relating to both flood risk and biodiversity issues. • Adjacent to River Stour and watercourses run through site.	• Any fuel on site should be properly stored to avoid contamination in case of spillage. • Appropriate arrangements should be installed for surface water and silt collection and fuel storage to prevent contamination of groundwater resources. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse. • Any proposals would need to consider compliance to the Water Framework Directive. • Also need consider compliance with the Moors River and Lower Stour Restoration Plan (and its floodplain), which is in development.
	– –			
5. To reduce flood risk and improve flood management.	?	?	**Flooding/Coastal Stability** • The majority of the site is within FRZ 2/3, but the processing plant will be within FRZ 1. Site is proposed for sand and gravel extraction, with extraction allowed within functional floodplain.	• Flood Risk Assessment (FRA) will be required. • All necessary mitigation to be implemented.
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).	?	0	**Archaeology** • As previous archaeological work has demonstrated, sites on the Stour valley gravels have archaeological potential in general, particularly for prehistoric material. There is also the potential for the presence of earthworks and structures associated with previous water management. • Archaeological assessment and evaluation is required before an informed planning decision can be made. When these have been undertaken possible archaeological impacts will be understood.	• Survey to assess possible presence and significance of non-designated remains. • Adequate provision to be made for preservation, excavation or recording, as appropriate. • Maintain/protect riverside landscape along southern edge of site. • Strengthen screening of the site where needed and appropriate.
	?	0	**Historic Landscapes** • The site lies in the Stour valley, and archaeological investigation of gravel sites within the valley has shown that the rich resources of the valley were exploited throughout prehistory. Impact could be anywhere between B and D depending on working and restoration methods.	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
	0		• To the southern sector of the site, there are no listed buildings which would be impacted by the proposed extraction. However, the river landscape along this stretch of the Stour is reminiscent of 'Constable country', with vistas through willows and other trees towards the meadows. The historic pattern of drains and tree planting and boundaries is poorly understood but has created a visual result of quality. • Retention of the tree hedges would be necessary to protect the historic landscape in the long-term.	
	–	+	**Historic Buildings** • The cluster of buildings which comprises Parley Court is dominated by the Parley Court Farmhouse, a Grade II listed country house. Associated with this is the now converted barn, which has lost much of its original character, and the adjacent thatched cottage. Both are also Grade II listed. The land surrounding the manor house has been created as a wedding garden area and adds to its character, creating a wide open aspect. • The proposed site abuts the northern edge of the gardens surrounding Parley Court . Garden planting to the south-west of the group of buildings provides some screening from the northern lobe of the site. If this part of the site was for extraction only, there would be minimal impact and the site would be assessed as having 'no significant or negligible impact' but this could potentially move to a higher rating 'less significant impact' depending on noise levels. • If the processing plant is to be located to the north of the site area, the height would create a detrimental impact (visual and audible) to the listed buildings and their setting. • The Parley Court buildings are screened from the north-eastern lobe of the site by trees and garden planting. The proposed access directly from the B3073 would be essential to protect the approach to the Parley Court buildings.	• Plant to be appropriately located/screened to protect Parley Court listed buildings. • Access to be kept away from the listed buildings. • Further assessment required to ensure adequate and appropriate screening is in place, prior to working. • Strengthen screening of the site where needed and appropriate. • Restoration to improve setting of the listed buildings where appropriate.
7. To maintain, conserve and enhance the landscape, including	–	+	**Landscape Capacity** • Much of the site is screened by trees along the river side although there are gaps which will allow views into the site from the opposite side of the river.	• Full assessment of landscape and visual impacts required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
townscape, seascape and the coast.	– –		• Further assessment is required to consider the extent of these impacts on surrounding land, including the adjacent housing areas to the south and the Stour Valley Way, and options for minimising these impacts to an acceptable level. • This may mean the provision of a wide buffer zone along the river corridor. It is important to ensure that restoration maximises opportunities to increase informal recreation/public space in the Stour Valley and to create links to existing public rights of way.	• Identified impacts to be mitigated in most appropriate manner. • Restoration to seek to increase public access/informal recreation in the Stour Valley.
	0	**0**	**Designated Landscapes** • No impacts expected.	• No action required.
8. To protect and improve air quality and reduce the impacts of noise.	**0**	**0**	• Impacts on air quality expected to be negligible. • No AQMAs will be affected by the working of this site proposal. Any dust resulting from working will be controlled through normal dust-suppression measures. • Noise mitigation will be addressed at the planning application stage, with appropriate mitigation to be included in the development of the site.	• Environmental protection measures to reduce dust and ensure noise is appropriately mitigated.
9. To maintain, conserve and enhance soil quality.	–	**0**	• Majority of the land to be worked is identified as poor, although there is some very good land to the north. Working the site will have impacts on this soil. • The site is proposed for restoration to agriculture, and existing soils will be protected and reused. • Restoration will return the land to original ground levels, and will restore the quality of the land.	• Soil to be properly stripped and stored prior to working; protected during working; and re-spread on site after working. • Restoration to include agricultural land and to seek some public access as well.
10. To conserve and safeguard mineral resources.	+	**0**	• The site would make an important contribution to aggregate supply in Bournemouth, Dorset and Poole. • However there are a number of issues to be addressed in the working/restoration of the site.	• No specific action required; site development to take into consideration and mitigate where appropriate relevant impacts.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
11. To promote the use of alternative materials.	+ +	0	• In order to achieve desired restoration levels it may be necessary to install an inert waste material recycling facility. • If this is done then this will provide a strong positive benefit during working. It is expected that the recycling facility would finish when or soon after the quarry is completed and restored, giving a negligible impact during afteruse.	• Developing an inert waste recycling facility will promote the use of alternative materials on-site and elsewhere.
12. To provide an adequate and affordable supply of minerals to meet society's needs.	+	0	• Development of this site will provide a benefit in terms of contributing to the provision of a supply of minerals to meet society's needs. • Ensuring a sustainable supply will depend on the development and management of the site. Providing site development takes into account relevant principles of sustainable development it is expected this will contribute to complying with this objective.	• Ensure principles of sustainable development are incorporated into the development of this site.
13. To promote and encourage sustainable economic growth	+	0	• This site proposal is expected to contribute to economic development on two levels – directly through the provision of employment at the site to be developed and indirectly through the provision of aggregate minerals required for the maintenance of built environment and for new built development. Both levels are expected to maintain employment, skilled and unskilled. However given the expected size of the reserve this is likely to be a limited benefit. • Restoration to agriculture with some element of public access will, if achieved, offer some economic benefits through both the agriculture and the recreational attraction and use in the wider area (i.e. riding, walking).	• Further assessment required to form a view as to what the most appropriate restoration could be.
14. To adapt to and mitigate the impacts of climate change.	–	0	• Developing land as a quarry is expected to have some negative impacts regarding climate change, due primarily to machinery used and transportation of mineral away from site. However, these will in relative terms be negligible. • The Bournemouth, Dorset and Poole Minerals Strategy seeks to address and minimise such impacts through Policy CC1 which requires operators to take into consideration climate change	• Use energy efficient plant and machinery. • Ensure flood water is able to flow onto the site. • Implement restoration which provides appropriate habitats to

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
	+		impacts and their possible mitigation for any proposed minerals development. • The development management policies, e.g. DM 1, also address and seek to minimise the issue of sustainable development and climate change. • The majority of the site floods during times of sustained rainfall, giving the flood waters a place to run on to and slowing the speed of the water run-off. When excavated, these benefits will continue and will be increased, assisting in mitigating climate change impacts.	help to increase resilience of flora/fauna.
15. To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any residual impacts.	–	**0**	• This is a large new site and traffic estimations have been given as 63 trips per day rising to 150 later in the life of the site. No details of intended points of access have been provided however, there is only one existing option along Parley Green Lane which emerges onto the B3073 at two points. To the north of the site Parley Green Lane emerges onto the Parley Lane at a point directly opposite the entrance to Portfield School. There is an obvious conflict of movement here, especially given the high traffic flow along Parley Lane. To the east of	• Any proposal for this site would need to be accompanied by a Transport Assessment which will need to provide access details and consider vehicle routing. The TA should be scoped with the Transport Development Management Team.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
	– –		the site Parley Green Lane emerges on Parley Lane to the south of Bournemouth Airport. • While there is no conflict with other junctions here, there are a large number of other users on this section of Parley Green Lane with the golf course, manor house and equestrian centre. The existing junction here is a simple priority junction and has no right turn lane and has significant numbers of accidents related to turning movements. • Neither access option is suitable for the proposed use in its current form. Given the conflict of movements with the school at the northern access it may be that an improvement of the existing junction to the south of the Airport is a better option. Any Transport Assessment submitted along with this proposal must deal with these access issues and propose suitable junction improvements to cater for the proposed quarry traffic. • The B3073 Parley Lane is also subject to high levels of congestion at certain times of the day and there are significant other housing and business site allocations that will impact upon it. This site will impact upon the capacity and operation of Parley Lane and the Highway Authority will seek to secure contributions towards a package of schemes proposed to ease existing and expected congestion. • Any proposal will also need to look at vehicle routing, avoiding trips through residential areas of Ferndown to the west of the site where possible. There is currently no suitable access for the proposed extraction site which emerges directly onto a road which has significant congestion problems. The site has therefore been given a 'significant adverse impact' rating. Should a suitable access and mitigation towards improvements to Parley Lane be provided, there are good connections with the strategic network and potentially little impact on existing settlements. The site could therefore achieve a 'less significant adverse impact' rating. • Policies DM1 and DM 8 actively address this issue of minimising impacts on the transportation network.	• Transport Assessment will identify opportunities for reducing impacts on the transport network. • Acceptable access onto B3073, with relevant mitigation/improvement, to be identified.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	– / – –	0	• The proposed extension can only realistically be accessed by means of road transport, resulting in a negative impact under this Objective during development and working. • As far as reasonably possible negative impacts resulting from access and transport will be mitigated, as required by Policies DM1 and DM8 of the Minerals Strategy.	• Mitigate impacts where identified and appropriate.
17. To sustain the health and quality of life of the population	– / – –	+	**Impact on Sensitive Human Receptors** • Commercial and residential properties adjacent and within 50m to the north – these are already screened and can be screened further. • Properties in Muscliffe and other areas within 100m and beyond to the south. Part of site is overlooked by properties in Granby Road, Muscliffe. • Views through screening trees of the site from path along river. • Restoration to improve landscape of site where possible; and to seek to increase public access. • Potential impacts on users of the Local Nature Reserve across the river from the site.	• Assessment and provision of appropriate mitigation, such as further tree planting, where possible; no bunding will be permitted in floodplain.
	– / – –	+	**Impact on Existing Settlements** • Muscliffe to the south is the closest settlement, adjacent and across the river. Mostly screened, or partly screened – although some properties overlook the south-western part off the site. • Parley Cross lies to north-west and East Parley to the north. No visual impacts are expected on these sites. • There will be some level of traffic impacts from site traffic. This is discussed further above.	• Transport Assessment to be carried out, identifying possible impacts and opportunities for reducing impacts on the transport network. • Visual impacts assessment will identify potential impacts and necessary mitigation. • Bunding will not be possible in the flood plain, and housing in Muscliffe is raised up above level of the site, making screening difficult to achieve.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
	?	0	**Impact on Airport Safety** • Site is very close to airport. • It will need to be developed, worked and restored in a way that will avoid any birdstrike or other hazards and the airport will be consulted on air safety issues.	• Airport to be consulted on all aspects of the site development and restoration. • All necessary mitigation to be implemented.
18. To enable safe access to countryside and open spaces.	–	+	**Impact on Recreational Land** • Site is private land, used for agriculture, horse grazing and other recreational use such as shooting. There is no public access onto the land. • Development for minerals will impact on these uses, although this will only be temporary. These uses can be restored after mineral working. • No formal/informal recreation on the site. Potential impacts on users of the Local Nature Reserve across the river from the site.	• No action required for working. • Restoration to include some aspect of public access.
	–	+	**Impact on Public Rights of Way** • No rights of way across site, rights of way adjacent to site boundary at two points. May require screening. • Potential impacts on users of the Local Nature Reserve across the river from the site.	• Assessment of impacts, with appropriate mitigation identified. • Restoration to improve public access in the area.

Preliminary Hydrological Risk Assessment

Controlled Waters	Issues/Risks	Mitigation	Further information/approval required
• Watercourses • Ponds/lakes, including wet habitats • Groundwater	• The River Basin Management Plan South West River Basin District identifies the Stour as being of 'poor' environmental quality. Potential for contamination from runoff from site. • Potential for contamination of controlled waters through spillage or seepage of pollutants such as fuel, or silt in water. • Contamination of water supplies or reduction in amount of water available for licenses supplies. • Site is adjacent to the Stour. Assessment is required to demonstrate no hydrogeological connectivity with the Stour.	• Appropriate arrangements to be made for ensuring that runoff from the site does not enter the Stour or groundwater unless any silt has first been removed. • Fuel stored on site to be appropriately bunded and sealed to prevent any spillage from entering ground or surface waters. • On-going monitoring during development and working of the site.	• Full hydrogeological risk assessment • Flood Risk Assessment • Water Framework Assessment • Further assessment of potential impacts on water quality and levels, particularly for groundwater, is required prior to development. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.

Cumulative Impacts

Proposed site is a new site and depending on the timing of its development could represent an intensification. There is an existing quarry in close proximity along with aggregate deposits in the area and further proposals for future working.

There are existing waste management facilities in the area and the potential for future development at the Airport. If the site comes into operation in parallel with the existing extraction here, and thus increases the overall impact on Parley Lane, the Highway Authority will seek to secure contributions towards a package of schemes proposed to ease existing and expected congestion.

The proposal lies within 5Km of a site allocated for development in the Christchurch and East Dorset Consolidated Plan[15] May 2013, Policy BA2 Bournemouth Airport – Northern Business Parks – 60 Ha employment land. Traffic from this development will add to traffic levels on the B3073.

Summary.

Potential Benefits	Potential Impacts
• Provision of aggregates required for maintenance and construction. • If public access can be improved this would provide public benefits. • There is potential for this land to offset pressures on Natura 2000 land elsewhere.	• Noise/visual impacts on properties in the vicinity, particularly properties to the south in Muscliffe. • Potential impacts on users of the Local Nature Reserve across the river from the site, with resultant reduction in effectiveness of the Sustainable Alternative Natural Greenspace • Increased traffic/new junction on B3073, possible cumulative impacts with other sites in vicinity. • Potential impacts on Stour – hydrology, hydrogeology and biodiversity. • Potential impacts on airport.

Overall Recommendation:

This site, if developed, would be a new site. It offers the benefits of contributing to the aggregate supply for Bournemouth, Dorset and Poole and its restoration may offer benefits of increased public access in the Stour valley.

However its development may lead to hydrological and ecological impacts on the Stour; further assessment is required. The fact that there will be a significant buffer along the river edge minimises potential impacts.

There will be time-limited local visual impacts, particularly on some of the housing in Muscliff to the south and also from users of the path running along the south side of the Stour. These are difficult/impossible to mitigate as the land on the south side of the river is raised above the level of the site and no bunding will be allowed in the floodplain.

Cumulative impacts, particularly related to traffic levels, will need to be addressed if the site is working at the same time as the Hurn Court Farm site to the east.

The benefits of developing this site are not considered to outweigh the impacts of working here. **At this time** other sites are considered to be more appropriate options for supplying aggregate.

It is **recommended** that this site should not be included in the emerging Mineral Sites Plan

This site has been withdrawn by the agent.

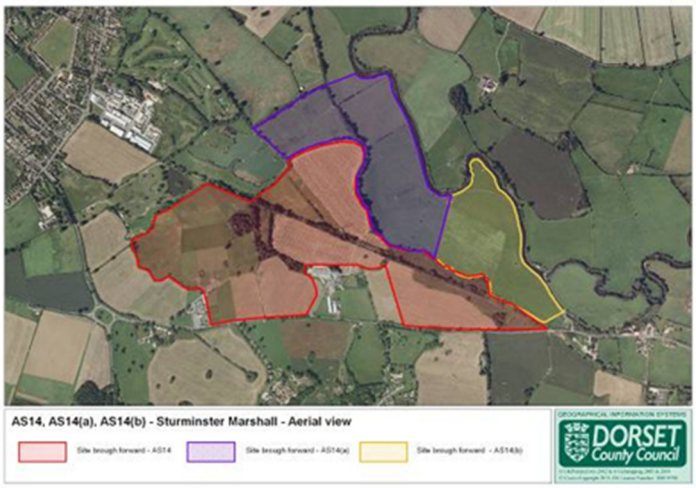
[15] The Consolidated Plan is an amalgamation of the Christchurch and East Dorset Core Strategy Pre submission draft April 2012 and the Christchurch and East Dorset Schedule of Proposed Changes November 2012.

Aggregates: AS14 Sturminster Marshall

Site Name/Location: AS14 Sturminster Marshall Mineral Type: Sand and gravel		Nominee/Agent: None Local Authority: East Dorset District Council
Site Area: approximately 70 ha	Production: 200,000 tpa;	Reserve: approximately 3 mt

Impact Assessment Scoring

- -	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain



N.B.: For information, this Sustainability Appraisal covers the entire area shown in the map. Smaller areas have also more recently been nominated for consideration, but have not been separately assessed.

Timescales for effects:

P/W: Preparation and Working **R/A**: Restoration and Afteruse

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
1. To move waste management up the waste hierarchy	**N/A**	**N/A**	• This Objective is not relevant to this site nomination	• N/A

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
2. To maintain, conserve and enhance biodiversity	0	+ +	**European/International Designations** • Extraction from this site could facilitate restoration to open ground including public open space for informal recreation to mitigate against effects of human pressures on the heaths.	• If site is developed ensure that restoration includes land for public access/recreation.
	0	0	**Annex 1 Bird Species** • No impacts expected .	• No action required.
	0	0	**National Designations** • No impacts expected .	• No action required.
	–	0	**Protected species** • It is possible that there are common protected reptile populations around the existing field margins and along the old railway line, and possibly also Dormouse in hedgerows and the SNCI. • If any of these populations would be affected, mitigation would likely be straightforward.	• Ecological surveys required, with appropriate mitigation identified. • Restoration to include appropriate habitats for these species.
	–	+	**Local recognitions/designations, including ancient woodland and veteran trees** • Henbury Farm Wood SNCI falls within AS14; this woodland is included within the ancient woodland inventory and its conservation within any development would be a high priority. • There are likely to be other features of ecological interest, including veteran trees and species-rich hedgerows, within the larger area proposed for extraction which would require investigation and impact assessment.	• All necessary surveys and assessment to be carried out with negative impacts mitigated as appropriate. • Restoration to include creation/re-creation of habitat, where appropriate.
3. To maintain, conserve and enhance geodiversity.	+	0	• Exposures resulting from working may be of interest. Benefits are only expected during working, and are likely to be obscured or covered as part of restoration.	• Operator to be asked to permit visits to view exposures as required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	0	0	**Groundwater** • Approximately 50% of site is within Source Protection Zone 1. Environment Agency has objected to the site regarding possible groundwater impacts – they also have concerns in relation to water resources and flood risk issues. • Any proposals would need to comply with the Water Framework Directive. • Environment Agency notes that as the site is within SPZ1 they will normally object in principle to any planning application for a development that may physically disturb an aquifer. • The site is situated on alluvial deposits of sands, gravels and clays, overlying chalk bedrock. The alluvial deposits are classified as a Secondary Aquifer whilst the chalk is classified as a Principal Aquifer. Half of the site is located within Source Protection Zone 1 (SPZ1) for the Corfe Mullen Public Water Supply (PWS) source. Given the sensitivity of this site it is imperative that any proposed development is subject to suitable risk assessment. • Any development would therefore need to demonstrate hydrogeological separation from the public supply. • This proposal potentially constitutes a very significant adverse impact , but this could be improved if it can be demonstrated that the site is hydraulically separate from the aquifer supplying the boreholes.	• Further assessment on possible impacts on water supplies and appropriate mitigation if potential impacts identified. • Where necessary mitigating measures should be installed to maintain groundwater levels and/or monitor private water supplies. • Alternative arrangements should be in place in case of a reduction in supply. • Hydrological assessment required to determine possible impacts, on ground and surface waters, with appropriate mitigation to be implemented. • Detailed pollution prevention management plan detailing best practices to minimise pollution incidents, as well as measures that will be taken should a pollution event occur. • Appropriate arrangements should be put in place to ensure that the water leaving the site and entering the rivers/watercourses is of an acceptable quality. • Any fuel on site should be properly stored to avoid contamination in case of spillage. • Appropriate arrangements should be installed for surface water and silt collection and fuel storage to prevent contamination of groundwater resources. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.
	– –			
	–	0	**Surface Water** • Ponds on/near site. • Need to consider compliance to the Moors River and Lower Stour Restoration Plan (and its floodplain).	
5. To reduce flood risk and improve flood management.	0	0	**Flooding/Coastal Stability** • Part of original site and all of extension within FRZs 2&3. Significant area within which to site plant, in FRZ 1.	• Flood Risk Assessment (FRA) will be required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			• Site is prone to flooding.	• All necessary mitigation to be implemented.
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).	?	+	**Archaeology** • Various archaeological finds have been recorded on and around the site, indicating a high potential for below-ground archaeological remains. There is also potential for earthworks and structures associated with watermeadow systems and for industrial archaeological remains relating to the former railway line that crossed the site. • The presence of below-ground archaeological remains and the other features mentioned above needs to be assessed and evaluated before an informed planning decision could be made. Only when these have been undertaken would the archaeological impact be understood – at present it could be anywhere from Very Significant to No Significant impact • Archaeological assessment and evaluation will be required. When these have been undertaken archaeological impacts, if any, will be better understood.	• Full archaeological survey of the area required to assess possible presence and significance of non-designated remains and to assess whether/how these should be protected during working. • All necessary mitigation to be implemented. • Adequate provision to be made for preservation, excavation or recording, as appropriate. • Further consideration to be given to restoration proposals, in terms of historic landscapes. • Development not to impact on White Mill Bridge and other buildings.
	–	+	**Historic Landscapes** • The site lies in the valley of the river Stour, which is relatively broad and flat-bottomed in this area. Such a location was formerly favoured for watermeadow systems. • Archaeological assessment, as described above, is required to properly understand potential impacts on such remains and to determine what mitigation may be required.	
	0	0	**Historic Buildings** • Henbury Hall is well screened from the proposed site. The position of the treatment plant is close to the landscape associated with the Hall but would be well screened by a large clump of trees in front of the Hall. The Hall does not have a recognised park or garden of historic value but does have an immediate landscape similar to planned parkland landscapes of the late 18th century and an offset approach avenue of reasonably mature trees. The	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			setting of this building is not adversely impacted by the proposals. • The Sturminster Marshall conservation area and all the listed buildings in Sturminster Marshall are well screened from the proposed site and therefore their setting is not adversely affected by the proposals. <u>AS14 (a) Sturminster Marshall northern extension:</u> • The original proposal was to extract aggregate to a point close to and fully visible from White Mill Bridge. This has been revised and proposed extraction pulled away to a point where it is not visible from the bridge, removing this impact. • The proposals for the restoration of the original site have a very artificial quality and would benefit from either professional landscape advice and or the input of a creative artist specialising in land-forming artwork.	
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	–	+	**Landscape Capacity** • Retention and management of existing landscape features is important. It is considered that this area has important potential as future accessible open land associated with the Stour Valley Green Infrastructure initiative. • If site is developed, restoration can contribute to this end.	• Landscape and visual impact assessment to identify impacts; adequate mitigation of such impacts before and during working. • If mitigation is not possible, a view will have to be taken as to whether a time-limited impact would be acceptable. • Appropriate restoration proposals in line with Landscape Management Guidelines referred to in Minerals Strategy. • Maintain screening woodland around edges of site.
	0	**0**	**Designated Landscapes** • No significant impact/negligible.	
8. To protect and improve air quality and reduce the impacts of noise.	**0**	**0**	• Impacts on air quality expected to be negligible. • No AQMAs will be affected by the working of this site proposal. Any dust resulting from working will be controlled through normal dust-suppression measures.	• Environmental protection measures to reduce dust and ensure noise is appropriately mitigated.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			• Noise mitigation will be addressed at the planning application stage, with appropriate mitigation to be included in the development of the site.	
9. To maintain, conserve and enhance soil quality.	–	**0**	• Soil quality ranges from poor to very good. Working the site will have impacts on this soil. • Proposed restoration is to wetland/lakes. Any soil removed will be protected during working and either re-used on site or taken elsewhere to be used. • Soils will be protected during working and restoration could bring agricultural land back into production.	• Soil to be properly stripped and stored prior to working; protected during working; and re-spread on site after working.
10. To conserve and safeguard mineral resources.	**+**	**0**	• The site would make an important contribution to aggregate supply in Bournemouth, Dorset and Poole.	• No specific action required; site development to take into consideration relevant impacts and mitigate where appropriate.
11. To promote the use of alternative materials.	**0**	**0**	• This proposal does not at present promote the use of alternative materials and given the sensitivities associated with the nearby borehole extraction, waste is unlikely to be used in restoration.	• No action required.
12. To provide an adequate and affordable supply of minerals to meet society's needs.	**+**	**0**	• Development of this site would provide a benefit in terms of contributing to the provision of a supply of minerals to meet society's needs. • Ensuring a sustainable supply will depend on the development and management of the site. Providing site development takes into account relevant principles of sustainable development it is expected this will contribute to complying with this objective.	• Ensure principles of sustainable development are incorporated into the development of this site.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
13. To promote and encourage sustainable economic growth	+	0	• This site proposal is expected to contribute to economic development on two levels – directly through the provision of employment at the site to be developed and indirectly through the provision of aggregate minerals required for the maintenance of built environment and for new built development. Both levels are expected to maintain employment, skilled and unskilled. However given the expected size of the reserve this is likely to be a limited benefit. • Restoration to agriculture with some element of public access will, if achieved, offer some economic benefits through both the agriculture and the recreational attraction and use in the wider area (i.e. riding, walking).	• Further assessment required to form a view as to what the most appropriate restoration could be.
14. To adapt to and mitigate the impacts of climate change.	-	0	• Developing land as a quarry is expected to have some negative impacts regarding climate change, due primarily to machinery used and transportation of mineral away from site. However, these will in relative terms be negligible. • The Bournemouth, Dorset and Poole Minerals Strategy seeks to address and minimise such impacts through Policy CC1 which requires operators to take into consideration climate change impacts and their possible mitigation for any proposed minerals development. • The development management policies, e.g. DM 1, also address and seek to minimise the issue of sustainable development and climate change. • Restoration to some form of vegetated environment will offer benefits in the form of climate change mitigation, including provision of habitat for wildlife, but again these will be relatively small.	• Use energy efficient plant and machinery. • Implement restoration which provides appropriate habitats to help to increase resilience of flora/fauna.
15. To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any residual impacts.	- -	0	• This is a large site on the north side of the A31T with an estimated annual output of 200,000 tonnes. While no estimation of HGV trip rates has been given it could be in the region of 80 per day. No details have been given regarding the point of access to the site although it does have a long frontage with the A31T. • The Highways Agency have previously raised significant concerns over this proposal both in safety terms and with regards to impact on the A31/A350 roundabout. Any access along this section of the A31T is unlikely to be acceptable	• Any proposal for this site would need to be accompanied by a Transport Assessment which will need to provide access details and consider vehicle routing. The TA should be scoped with the Transport Development Management Team.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			for safety reasons due to the alignment of the road and traffic volumes. The Highways Agency will need to be consulted regarding any proposals at this site. • The only other adjacent carriageway is Moor Lane which travels northbound to Sturminster Marshall. Moor Lane itself is very narrow, has few passing places and serves some dwellings close to its junction with the High Street. The High Street itself is narrow and has significant numbers of parked cars. The main entrance to the local first school is also just south of the junction of Moor Lane and the High Street. Vehicles would then also have to pass along Station Road, a residential street with many parked cars and a well-used local shop. This route is therefore not considered to be suitable for the large numbers of heavy vehicles and any proposal along those lines would be strongly objected to by the Highway Authority. • The only other option would be to create a haul route to the A350 north of the A31 roundabout. There is however, no indication that this is achievable and the Highways Agency may still have issues at the A31 roundabout to the south. • For the above reasons the site has been given a 'Very Significant Adverse Impact'. • Policies DM1 and DM 8 of the Minerals Strategy actively address this issue of minimising impacts on the transportation network, but it is not clear how they could overcome these issues raised.	• Transport Assessment to be carried out, identifying opportunities for reducing impacts on the transport network. • Even with all the required assessment it is not clear how the objections could be overcome.
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	–	**0**	• The proposed extension can only realistically be accessed by means of road transport, resulting in a negative impact under this Objective during development and working. • As far as reasonably possible negative impacts resulting from access and transport will be mitigated, as required by Policies DM1 and DM8 of the Minerals Strategy.	• Mitigate impacts where identified and appropriate.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
17. To sustain the health and quality of life of the population	–	0	**Impact on Sensitive Human Receptors** • A number of residences/businesses in close proximity to proposed development; village of Sturminster Marshall within 500m, industrial estate even closer. • Development would likely require appropriate mitigation (such as visual and noise attenuation bunding, standoffs) to limit impacts.	• Provision of appropriate mitigation, following assessment of likely impacts. • Restoration to improve landscape of site where possible; and to seek to increase public access. • Screening, bunding, standoffs will mitigate impacts to some extent.
	–	0	**Impact on Existing Settlements** • Village of Sturminster Marshall within 500m, industrial estate even closer. Mitigation will be required – visual/noise attenuation bunds. • Development would likely require appropriate mitigation (such as visual and noise attenuation bunding, standoffs) to limit impacts.	
	0	0	**Impact on Airport Safety** • Site is approximately 13km from airport and proposed for wetland restoration. • It will be developed, worked and restored in a way that will avoid any birdstrike or other hazards.	• Airport to be consulted on all aspects of the site development and restoration. • All necessary mitigation to be implemented.
18. To enable safe access to countryside and open spaces.	0	+	**Impact on Recreational Land** • No formal/informal recreation within the site; fishing lakes and golf course adjacent to site.	• No action required for working. • Restoration to include public access, preferably improved levels of public access.
	–	+	**Impact on Public Rights of Way** • The Wareham Forest Way, a way-marked long distance path, crosses the site. • Removing this link permanently would be a significant impact. Removing it temporarily would also constitute an impact, albeit time-limited. • Proposed restoration includes maintaining this link as well as adding further public access across restored land, a positive benefit.	• Assessment of impacts, with appropriate mitigation identified.
	– –			

Preliminary Hydrological Risk Assessment

Controlled Waters	Issues/Risks	Mitigation	Further information/approval required
• Watercourses • Ponds/lakes, including wet habitats • Groundwater	• The River Basin Management Plan South West River Basin District identifies the Stour as being of 'Moderate' environmental quality in this area. Potential for contamination from runoff from site. • Potential for contamination or some other impact on nearby borehole extraction point. • Potential for contamination of controlled waters through spillage or seepage of pollutants such as fuel, or silt in water. • Contamination of water supplies or reduction in amount of water available for licenses supplies. • Impacts on or removal of surface water features.	• Appropriate arrangements to be made for ensuring that runoff from the site does not enter the Stour or groundwater unless any silt has first been removed. • Fuel stored on site to be appropriately bunded and sealed to prevent any spillage from entering ground or surface waters. • On-going monitoring during development and working of the site.	• Full hydrogeological risk assessment, including risk assessment on potential impacts on borehole. • Flood Risk Assessment • Water Framework Assessment • Further assessment of potential impacts on water quality and levels, particularly for groundwater, is required prior to development. • Assessment of the feasibility of relocating ponds and associated habitats and species. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.

Cumulative Impacts

- Site is a new proposal in an area where there is other mineral working.
- The proposal lies within 5Km of a site allocated for development in the Christchurch and East Dorset Consolidated Plan[16] May 2013, Policy CM1 Lockyer's School, Corfe Mullen – 250 dwellings. Traffic from this development will add to traffic levels on the A31.

[16] The Consolidated Plan is an amalgamation of the Christchurch and East Dorset Core Strategy Pre submission draft April 2012 and the Christchurch and East Dorset Schedule of Proposed Changes November 2012.

Summary.

Potential Benefits	Potential Impacts
• Provision of aggregates required for maintenance and construction of the built environment. • Restoration could include some increased public access. • Restoration could include benefits for nature conservation, including reducing visitor impacts on designated heathlands.	• Potential impacts on biodiversity. To be assessed but should be capable of mitigation. • Unacceptable hydrological/hydrogeological impacts, on River Stour and the Corfe Mullen Public Water Supply. • Significant transport impacts relating to gaining satisfactory access to site, and from site to A31. Full Transport Assessment required. • Possible impacts on archaeology – to be fully assessed and not expected to restrict development. All necessary mitigation to be implemented. • Possible impacts on airport to be considered and site to be developed and restored in a way that does not have any impact on airport. • Site is large enough that visual impacts on surrounding properties are expected to be capable of mitigation. • Potential impacts on amenity, including residences and the village of Sturminster Marshall. • Impacts on access – the Wareham Forest Way crosses the site.

Overall Recommendation:

Having considered the likely positive and negative impacts as indicated by the sustainability appraisal, it is considered that there are currently two key impacts that may not be capable of mitigation, or mitigation includes unacceptable risks. These are:

i. The issue of gaining satisfactory access to the site for lorries.

ii. The issue of potential risk/threat to the Corfe Mullen Public Water Supply source would require the development to demonstrate hydrogeological separation from the public supply. A detailed hydrogeological study with risk assessment would be required. Although it may be possible to demonstrate hydrogeological separation, the risk of an event causing contamination of the public water supply still exists and is considered at this time to be unacceptable.

On the basis of the evidence available the nominated site appears to be subject to significant constraints not currently capable of satisfactory mitigation and cannot be included in the Draft Bournemouth, Dorset and Poole Mineral Sites Plan at the present time unless exceptional circumstances (not currently present) arise.

The benefits of developing this site are not considered to outweigh the impacts of working here.

It is **recommended** that this site should not be included in the emerging Mineral Sites Plan

Aggregates: AS20 Came Home Farm

Site Name/Location: AS20 Came Home Farm Mineral Type: Sand and gravel		Nominee/Agent: Came Estate / Land and Mineral Management Local Authority: West Dorset District Council
Site Area: approximately 10 ha	Production: 50,000 tpa;	Reserve: approximately 400,000 tonnes

Impact Assessment Scoring

- -	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain

Timescales for effects:

P/W: Preparation and Working **R/A**: Restoration and Afteruse

Sustainability Objectives	Effects P/W	Effects R/A	Commentary	Mitigation
1. To move waste management up the waste hierarchy	**N/A**	**N/A**	• This Objective is not relevant to this site nomination	• N/A
2. To maintain, conserve and enhance biodiversity	**0**	**0**	**European/International Designations** • No likely effects identified.	• No action required.
	0	**0**	**Annex 1 Bird Species** • No likely effects identified.	• No action required.
	0	**0**	**National Designations** • No likely effects identified.	• No action required.
	?	**0**	**Protected species** • South Winterbourne known to support significant population of Water Vole. Assessment of effects of extraction on this species will be necessary. Otter likely to use river valley as well. • Mitigation for presence of these species is very likely to be achievable.	• Ecological surveys required, with appropriate mitigation identified.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	?	0	**Local recognitions/designations, including ancient woodland and veteran trees** • Winterbournes are rare chalk streams which are groundwater fed and only flow at certain times of year as groundwater levels in the aquifer fluctuate. They support a range of specialist wildlife adapted to this unusual flow regime, including a number of rare or scarce invertebrates, otter and water vole. • Invertebrate sampling carried out confirmed the site has supported *Paraleptophlebia werneri*, a rare mayfly which is a Red Data Book 3 species. *Simulinum latipes*, a regionally notable blackfly species, was also recorded. This stretch of winterbourne had a high conservation value. • The South Winterbourne is a priority habitat (Rivers/chalkstreams) under the European Habitats Directive and UK Biodiversity Action Plan. • The South Winterbourne within the proposed area has been subject to significant biodiversity enhancement works. Extraction could adversely affect the public and private investment in biodiversity gain. • Any loss to this gain would need to be fully compensated elsewhere along the South Winterbourne. • Adjacent SNCI recognised for lichen interest on parkland trees. Assessment of peripheral trees around proposed area for lichen and bryophyte interest would be required. • Consider establishment of parkland type landscape within restoration plans.	• All necessary surveys and assessment to be carried out with negative impacts to be identified and mitigated as appropriate. • Restoration to include creation/re-creation of habitat, where appropriate.
3. To maintain, conserve and enhance geodiversity.	+	0	• Exposures resulting from working may be of interest. Benefits are only expected during working, and are likely to be obscured or covered as part of restoration.	• Operator to be asked to permit visits to view exposures as required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	–	?	**Groundwater** • Potential to impact on South Winterbourne Stream. Site is in a groundwater Source Protection Zone 2. Site overlies a Principal (Bedrock) Aquifer. • Hydrological Risk Assessment would be required.	• Further assessment on possible impacts on water supplies and appropriate mitigation if potential impacts identified. • Where necessary mitigating measures should be installed to maintain groundwater levels. • Hydrological assessment required to determine possible impacts, on ground and surface waters, with appropriate mitigation to be implemented. • Detailed pollution prevention management plan detailing best practices to minimise pollution incidents, as well as measures that will be taken should a pollution event occur. • Appropriate arrangements should be put in place to ensure that the water leaving the site and entering the winterbourne is of an acceptable quality. • Appropriate arrangements should be installed for surface water and silt collection and fuel storage to prevent contamination of groundwater resources. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.
	– –			
	–	?	**Surface Water** • Winterbourne running through and adjacent to site, other drains on site. • Environment Agency has concerns over the proximity of the South Winterbourne to the proposed works. • Particular concern over this section as it is a losing reach and works may exacerbate this leading to increased disconnection from the River Frome. • Secondary concerns over increased sedimentation.	
	– –			
5. To reduce flood risk and improve flood management.	0	0	**Flooding/Coastal Stability** • A significant proportion of the site falls within Flood Zone 2 and 3. • Site is proposed for sand and gravel extraction, which is permitted in the functional floodplain. • Processing plant far removed and on FRZ 1.	• Flood Risk Assessment (FRA) will be required. • All necessary mitigation to be implemented.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
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).	?	0	**Archaeology** • Aerial photographic evidence in the Dorset Historic Environment Record showed, at one time, a complex of earthworks of a watermeadow system on the site. • However, although the ground surface in the area of the site is somewhat uneven, there are no clear traces of watermeadow earthworks. This is probably the result of ploughing at some time, which has largely or wholly obliterated the features recorded in the Dorset Historic Environment Record in this area. • Archaeological assessment and evaluation will be required to indicate potential impacts on this system and on any other below-ground archaeological remains. • When these have been undertaken archaeological impacts, if any, will be better understood.	• Full archaeological survey of the area required to assess possible presence and significance of non-designated remains and to assess whether/how these should be protected during working. • All necessary mitigation to be implemented. • Adequate provision to be made for preservation, excavation or recording, as appropriate. • Further consideration to be given to restoration proposals, in terms of historic landscapes.
	?	0	**Historic Landscapes** • The site lies in the bottom of the valley of the south Winterbourne, a tributary of the river Frome, which it joins nearby at West Stafford. This section of the south Winterbourne, like much of the Frome in this vicinity, contains an extensive series of watermeadow earthworks. These probably date from the 18th and 19th centuries, and were a method of fertilising the land and enabling an earlier growth of grass that allowed stock to graze much earlier in the year. • Assessment and evaluation will be required and when these have been undertaken impacts on the historic landscape, if any, will be better understood. • The impact will vary depending on the quality and extent of survival of these earthworks.	
	_	0	**Historic Buildings** • With respect to Came Home Farm AS20 the minerals extraction itself is not significant but the proposal to potentially route lorries through the gateway adjacent to the Grade II listed Lodge Gate to Came Park is much more significant having an effect on the setting of a group of listed buildings including the Grade I Came House, Grade I Parish Church of St Peter, Grade II Barnes Monument in Came Churchyard, Grade II	• Any assessment required to be carried out, with appropriate mitigation implemented as required. • Routing for lorries leaving the site and wanting to turn right not to include the

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			Old Came Rectory and the Grade II stables building. • Came House, the church and the stables together with the Barnes monument all sit within Came Park whose entrance is through the traditional gate and Lodge Gatehouse. The Park also includes a deserted village which is a scheduled monument. The quiet countrified access through the Lodge Gate has historical value as part of the setting of these monuments but also for its association with the Dorset dialect poet William Barnes. He was rector of Came Church, lived in Came Rectory and famously walked along the road into the Park to deliver Services every Sunday. • The impact on this countrified, semi-idyllic assembled group of related structures would be significant and adverse losing a quality of relationship that has been there for a very long time. • There would be a Significant Adverse Impact if lorries are routed out of Came Farm, through the Park and out past the Lodge . If a way of dealing with the traffic that does not involve spoiling the setting of this Lodge and thus of the related structures can be identified then the impact would be significantly reduced.	option of crossing the road and turning left past the Lodge.
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	_ _	?	**Landscape Capacity** • Open rural countryside where development would have a significant adverse impact on the estate landscape and visual character as well as on the amenity of road, footpath/bridleway users. • Restoration to primarily open water would be a new feature to the local landscape which does not have any ponds/lakes.	• Landscape and visual impact assessment to identify impacts and to assess whether these impacts are capable of appropriate and satisfactory mitigation, before and during working. • If mitigation is not possible, a view will have to be taken as to whether a time-limited impact would be acceptable. • If the site is developed, appropriate restoration proposals in line with Landscape Management
	_ _ _	?	**Designated Landscapes** • Adjacent to the Dorset AONB boundary so will impact on its setting. • Further assessment required to assess extent of impact and options for mitigation.	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
				Guidelines referred to in Minerals Strategy will be required.
8. To protect and improve air quality and reduce the impacts of noise.	**0**	**0**	• Impacts on air quality expected to be negligible. • No AQMAs will be affected by the working of this site proposal. Any dust resulting from working will be controlled through normal dust-suppression measures. • Noise mitigation will be addressed at the planning application stage, with appropriate mitigation to be included in the development of the site.	• Environmental protection measures to reduce dust and ensure noise is appropriately mitigated.
9. To maintain, conserve and enhance soil quality.	–	**0**	• Agricultural soils are good to moderate and working the site will have impacts on this soil. Soils will be protected during working. • Proposed restoration is primarily to open water as a fishing/nature conservation lake. • Soils to be protected and either re-used on site or used elsewhere.	• Soil to be properly stripped and stored prior to working; protected during working; and re-spread on site or elsewhere after working.
10. To conserve and safeguard mineral resources.	+	**0**	• The site would make an important contribution to aggregate supply in Bournemouth, Dorset and Poole.	• No specific action required; site development to take into consideration relevant impacts and mitigate where appropriate.
11. To promote the use of alternative materials.	–	**0**	• This proposal does not promote the use of alternative materials.	• No action required.
12. To provide an adequate and affordable supply of minerals to meet society's needs.	+	**0**	• Development of this site would provide a benefit in terms of contributing to the provision of a supply of minerals to meet society's needs. • Ensuring a sustainable supply will depend on the development and management of the site. Providing site development takes into account relevant principles of sustainable development it is expected this will contribute to complying with this objective.	• Ensure principles of sustainable development are incorporated into the development of this site.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
13. To promote and encourage sustainable economic growth	+	0	• This site proposal is expected to contribute to economic development on two levels – directly through the provision of employment at the site to be developed and indirectly through the provision of aggregate minerals required for the maintenance of built environment and for new built development. • Both levels are expected to maintain employment, skilled and unskilled. However given the expected size of the reserve this is likely to be a limited benefit. • Restoration to a recreational use (fishing lake) will, if achieved, offer on-going economic benefits through the recreational attraction.	• Further assessment required regarding the suitability of a fishing lake/water body restoration in this location.
14. To adapt to and mitigate the impacts of climate change.	–	0	• Developing the site as a quarry is expected to have some negative impacts regarding climate change, due primarily to machinery used and transportation of mineral away from site. However, these will in relative terms be negligible. • The Bournemouth, Dorset and Poole Minerals Strategy seeks to address and minimise such impacts through Policy CC1 which requires operators to take into consideration climate change impacts and their possible mitigation for any proposed minerals development. • The development management policies, e.g. DM 1, also address and seek to minimise the issue of sustainable development and climate change. • Restoration to some form of vegetated environment will offer benefits in the form of climate change mitigation, including provision of habitat for wildlife, but again these will be relatively small.	• Use energy efficient plant and machinery. • Implement restoration which provides appropriate habitats to help to increase resilience of flora/fauna.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
15. To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any residual impacts.	– / – –	0	• While the site abuts the A352, there would be likely to be strong highway objections to any access here due to the horizontal and vertical alignment of the carriageway at this point. • However, if the workings were accessed from the West Stafford Bypass, there may be a solution subject to any required improvements to that access. • The Transport Development Management Team should be contacted to discuss any Transport Assessment prior to submission of a planning application. This document should also consider Highways Agency concerns with regards to movements to the A35T. • As access possibilities onto the A352 are very restricted the site, as proposed, has been given a rating of 'Very Significant Adverse Impact'. However, should the alternative access identified above (or some other acceptable option) be provided then the rating would be 'Less Significant Adverse Impact'. • This site would require a full Transport Assessment were it to be submitted as a planning application. Any TA should initially be scoped with the Transport Development Management Team. It would also need to consider the Highways Agency concerns with regards to movements to the A35T. • Policies DM1 and DM 8 actively address this issue of minimising impacts on the transportation network.	• Any proposal for this site would need to be accompanied by a Transport Assessment which will need to provide access details and consider vehicle routing. The TA should be scoped with the Transport Development Management Team. • Transport Assessment to be carried out, identifying opportunities for reducing impacts on the transport network. • Alternative options to be investigated.
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	–	0	• The proposed extension can only realistically be accessed by means of road transport, resulting in a negative impact under this Objective during development and working. • As far as reasonably possible negative impacts resulting from access and transport will be mitigated, as required by Policies DM1 and DM8 of the Minerals Strategy.	• Mitigate impacts where identified and appropriate.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
17. To sustain the health and quality of life of the population	0	0	**Impact on Sensitive Human Receptors** • Came Home Farm lies within 100m. However, the site is screened from the farm, and the screening can be increased. • Other properties within 500m. Site is already screened, and further screening (visual and noise attenuation bunding) would significantly limit the impact of the site working. • Development would likely require appropriate mitigation (such as visual and noise attenuation bunding, standoffs) to limit impacts.	• Provision of appropriate mitigation, following assessment of likely impacts. • Restoration to improve landscape of site where possible; and to seek to increase public access. • Transport Assessment to be carried out, identifying opportunities for reducing impacts on the transport network with specific reference to traffic impacts on Broadmayne.
	–	0	**Impact on Existing Settlements** • Dorchester approximately 800m to north west, West Stafford approximately 900m to north. No intervisibility, the site is on the valley bottom and well screened. • Potential for more of an impact on Broadmayne if lorries turn left out of the site to take material to Masters Pit on Puddletown Road for processing.	
	?			
	0	0	**Impact on Airport Safety** • Site is approximately 40km from the airport, no impact expected.	• No action required.
18. To enable safe access to countryside and open spaces.	0	?	**Impact on Recreational Land** • Site is agricultural land and not used for formal/informal recreation. • Restoration will be to a recreational use, a commercial fishing lake.	• Further assessment required regarding the impacts, visual and otherwise, of including a fishing lake in this area. • Assessment of impacts required, with appropriate mitigation identified – including whether it is acceptable for the time-limited impacts on the footpath of
	-	0	**Impact on Public Rights of Way** • No rights of way cross the site, but footpath runs along south eastern boundary and another one touches eastern corner of site. • Footpath to south of site overlooks the site and as it ascends hill cannot realistically be screened.	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	– –			quarrying followed by creation of a fishing lake. • Restoration to improve public access in the area.

Preliminary Hydrological Risk Assessment

Controlled Waters	Issues/Risks	Mitigation	Further information/approval required
• Watercourses • Ponds/lakes, including wet habitats • Groundwater	• There is a potential for contamination of the Winterbourne, and therefore the Frome, from runoff from site. The River Basin Management Plan South West River Basin District identifies the Frome as being of 'Poor' environmental quality in this area. • Potential for contamination of controlled waters through spillage or seepage of pollutants such as fuel, or silt in water. • Impacts on or removal of surface water features.	• Appropriate arrangements to be made for ensuring that runoff from the site does not enter the Winterbourne or the Frome or groundwater unless any silt has first been removed. • Fuel stored on site to be appropriately bunded and sealed to prevent any spillage from entering ground or surface waters. • On-going monitoring during development and working of the site.	• Full hydrogeological risk assessment • Flood Risk Assessment • Water Framework Assessment • Further assessment of potential impacts on water quality and levels, particularly for groundwater, is required prior to development. • Assessment of the feasibility of relocating ponds and associated habitats and species. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.

Cumulative Impacts

Site is a new development in an area where there is already mineral development. Visually there will not be any cumulative impacts, but lorries will have impacts particularly where they turn left and head towards Broadmayne.

The proposal is within 5Km of sites of St Georges Road, Dorchester allocated in the Pre -Submission draft West Dorset, Weymouth and Portland Local Plan (June 2012) as amended by Proposed Modifications (June 2013), (Policies DOR 7, DOR 8 and DOR 9) for residential (approx150 dwellings in total) and /or employment development. Traffic arising from the new development will also add to general traffic levels in Dorchester and on the A352.

Summary.

Potential Benefits	Potential Impacts
• Provision of aggregates required for maintenance and construction of the built environment. • Restoration could include some increased and improved public access and will include a fishing lake.	• Visual impacts, from the adjacent AONB and from the footpath going up a hill to the south of the site. Since the site is at the bottom of a valley it is lower than both these viewpoints and lower than the road that runs west and south of it. It is not clear how these impacts will be mitigated. • It is not clear how the proposed restoration will be achieved. • A number of hydrological and nature conservation related impacts have been identified, from impacts on wildlife to impacts on the winterbourne flow to hydrological impacts. Further work, including a year's worth of groundwater monitoring, will be required. • There are potentially serious transportation constraints, with safety issues for vehicles entering and leaving the site. Further work required to determine possible mitigation. • There are impacts on landscape, both in terms of impacts on the AONB and the capacity of the local landscape to absorb the significant changes proposed. • Potential heritage issues, including archaeology, historic landscapes and historic buildings.

Overall Recommendation:

This is a relatively small site which presents a series of potential impacts for which, in some cases, no mitigation has currently been identified.

On the basis of the evidence available it does not appear that there is sufficient certainty that the impacts identified in this sustainability appraisal are currently capable of satisfactory mitigation. The site remains part of the mineral resource of Bournemouth, Dorset and Poole but is not at this time included in the Draft Bournemouth, Dorset and Poole Mineral Sites Plan.

The benefits of developing this site are not considered to outweigh the impacts of working here. **At this time** other sites are considered to be more appropriate options for supplying aggregate.

It is **recommended** that this site should not be included in the emerging Mineral Sites Plan

Site has been withdrawn by agent.

Aggregates: AS22 Trigon Hill Extension

Site Name/Location: **AS22 Trigon Hill Extension** Mineral Type: Sand/Gravel (overlying Ball Clay)		Nominee/Agent: Imerys Local Authority: Purbeck District Council
Site Area: approximately 27 ha	Production: up to 50,000 tpa;	Reserve: approximately 260,000 tonnes

Impact Assessment Scoring

- -	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain

Timescales for effects:

P/W: Preparation and Working **R/A**: Restoration and Afteruse

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
1. To move waste management up the waste hierarchy	**N/A**	**N/A**	• This Objective is not relevant to this site nomination	• N/A
2. To maintain, conserve and enhance biodiversity	**?**	**0**	**European/International Designations** • Proposed area lies just to the south of an area of European heathland. At this stage, without detailed analysis of possible impacts, it is not clear whether there would be any likely significant effect of mineral working on the designated area. • In order to be acceptable the development proposal would have to pass the tests in the Habitats Regulations. • In principle it should be possible to avoid effects on the designated sites through an appropriate stand-off from the development.	• Ecological surveys and hydrological reports required, with appropriate mitigation. • Appropriate assessment under the Habitat Regulations will be required. • Heathland restoration and public access to be created.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	?	0	**Annex 1 Bird Species** • Area could support Annex 1 birds as part of the existing forestry crop rotation. Clearance of trees would be likely to result in heathland regeneration and the open habitat would rapidly become suitable for more Annex 1 birds. • The site has the potential to be included in a revision to the heathland SPA boundary. Risk based approach essential here.	• Ecological surveys and hydrological reports required, with appropriate mitigation. • Appropriate assessment under the Habitat Regulations will be required. • Heathland restoration and public access to be created.
	?	0	**National Designations** • Proposed area lies just to the south of an area of Morden Bog and Hyde Heath SSSI. At this stage, without detailed analysis of possible impacts, it is not clear whether there would be any likely significant effect of mineral working on the designated area. • In principle it should be possible to avoid effects on the designated sites through an appropriate stand-off from the development.	• Ecological surveys required, with appropriate mitigation. • Restoration to include creation of invertebrate habitat.
	?	0	**Protected species** • There are numerous bat records from Trigon Hill Plantation suggesting the plantation or trees in the area may provide important roosting habitats; assessment will be required to understand the implications of removal of the plantation on bats. • A large badger sett is also known in the plantation and the effects of working on this species would also require assessment. • It is difficult to assess whether mitigation on bats or badger would be acceptable without detailed study on population sizes and locations.	• Ecological surveys required, with appropriate mitigation identified. • Restoration to include appropriate habitats for these species. • Further investigation into likelihood of grant of disturbance licences.
	0	0	**Local recognitions/designations, including ancient woodland and veteran trees** • No likely effects identified.	• No action required.
3. To maintain, conserve and enhance geodiversity.	+	0	• Exposures resulting from working may be of interest. Benefits are only expected during working, and are likely to be obscured or covered as part of restoration.	• Operator to be asked to permit visits to view exposures as required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	?	0	**Groundwater** • No impact on any Source Protection Zones. Site overlies a Secondary Aquifer. • Possible implications of adjacent landfill, including leachate migration to be considered/assessed. • Assessment required to determine possible impacts on hydrogeology. Impacts to be appropriately mitigated	• Hydrological assessment required to determine possible impacts, on ground and surface waters, with appropriate mitigation to be implemented. • Where necessary mitigating measures should be installed to maintain groundwater levels. • Appropriate arrangements should be put in place to ensure that the water leaving the site and entering the rivers/watercourses is of an acceptable quality. • Any fuel on site should be properly stored to avoid contamination in case of spillage. • Appropriate arrangements should be installed for surface water and silt collection and fuel storage to prevent contamination of groundwater resources. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.
	–	0	**Surface Water** • Watercourse within the site boundary. There appears to be a pond close to the northern edge of the site and other ponds in vicinity. • Assessment required to determine possible impacts on hydrogeology. Impacts to be appropriately mitigated	
5. To reduce flood risk and improve flood management.	0	0	**Flooding/Coastal Stability** • Entire site is within Flood Risk Zone 1, no expected risk of flooding or contributing to flooding.	• Flood Risk Assessment (FRA) will be required. • All necessary mitigation to be implemented.
6. To maintain, conserve and enhance the historic environment (including archaeological sites, historic buildings, conservation areas, historic parks and gardens and	?	0	**Archaeology** • The number of prehistoric barrows in the area in particular indicates that the site has archaeological potential. • Archaeological assessment and evaluation is required. Only when these have been undertaken would the archaeological impact be understood – at present it could be anywhere from Very Significant to No Significant impact.	• Full archaeological survey of the area required to assess possible presence and significance of non-designated remains and to assess whether/how these should be protected during working. • All necessary mitigation to be implemented. Adequate provision to be made for preservation, excavation or recording, as appropriate.
	?	0	**Historic Landscapes**	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
other locally distinctive features and their settings).			• Historically much or all of this site would have been heathland. This heathland formed part of the setting of the barrows in the area. • Unsympathetic extraction and quarrying could have a negative impact on the setting of these Monuments, but there is the potential for an improvement in that setting through restoration to heathland. • Further evaluation will be required. When this has been undertaken possible impacts, if any, will be better understood.	• Further consideration to be given to restoration proposals, in terms of historic landscapes.
	0	**0**	**Historic Buildings** • Belts of trees separate Trigon House, which is the nearest listed building to the site. Therefore the site has negligible impact on the listed buildings.	• No action required.
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	–	**0**	**Landscape Capacity** • Potential to impact adversely on the open access land to the west and north west. Due to its position on the west slopes of the hillside its sensitivity is increased and its capacity to absorb development is significantly reduced.	• Assessment of potential visual impacts required. • All appropriate mitigation to be included. • Restoration to consider increasing public access/informal recreation and to include nature conservation interests. • Appropriate restoration proposals in line with Landscape Management Guidelines referred to in Minerals Strategy.
	– –			
	–	**0**	**Designated Landscapes** • Less significant adverse impact.	• No action required.
8. To protect and improve air quality and reduce the impacts of noise.	**0**	**0**	• Impacts on air quality expected to be negligible. • No AQMAs will be affected by the working of this site proposal. Any dust resulting from working will be controlled through normal dust-suppression measures. • Noise mitigation will be addressed at the planning application stage, with appropriate mitigation to be included in the development of the site.	• Environmental protection measures to reduce dust and ensure noise is appropriately mitigated.
9. To maintain, conserve and	–	**0**	• The site comprises primarily heathland, grassland and woodland cover. The area is a former	• Soil is poor quality in agricultural terms but valuable in terms of

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
enhance soil quality.			heathland area and so would be expected to have relatively poor, acidic soils. • Site preparation/working would require stripping and storage of the soils, with some impacts on them. • If the site is worked and restored to heathland this will require reinstatement/retention of acidic soils with their seedbank.	potential for heathland restoration. • Soils to be stored/protected during preparation and working and properly reinstated during restoration.
10. To conserve and safeguard mineral resources.	+	0	• The site would make an important contribution to aggregate supply in Bournemouth, Dorset and Poole.	• No specific action required; site development to take into consideration relevant impacts and mitigate where appropriate.
11. To promote the use of alternative materials.	–	0	• This proposal does not at present promote the use of alternative materials.	• No action required.
12. To provide an adequate and affordable supply of minerals to meet society's needs.	+	0	• Development of this site would provide a benefit in terms of contributing to the provision of a supply of minerals to meet society's needs. • Ensuring a sustainable supply will depend on the development and management of the site. • Providing site development takes into account relevant principles of sustainable development it is expected this will contribute to complying with this objective.	• Ensure principles of sustainable development are incorporated into the development of this site.
13. To promote and encourage sustainable economic growth	+	0	• This site proposal is expected to contribute to economic development on two levels – directly through the provision of employment at the site to be developed and indirectly through the provision of ball clay and aggregate minerals required for the maintenance of built environment and for new built development and for commercial/industrial uses. • Both levels are expected to maintain employment, skilled and unskilled. However given the expected size of the reserve this is likely to be a limited benefit. • Proposed restoration is to heathland/agriculture, both of which offer economic benefits.	• Further assessment required to consider restoration options.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
14. To adapt to and mitigate the impacts of climate change.	_	0	• Developing land as a quarry is expected to have some negative impacts regarding climate change, due primarily to machinery used and transportation of mineral away from site. However, these will in relative terms be negligible. • The Bournemouth, Dorset and Poole Minerals Strategy seeks to address and minimise such impacts through Policy CC1 which requires operators to take into consideration climate change impacts and their possible mitigation for any proposed minerals development. • The development management policies, e.g. DM 1, also address and seek to minimise the issue of sustainable development and climate change. • Restoration to some form of vegetated environment will offer benefits in the form of climate change mitigation, including provision of habitat for wildlife, but again these will be relatively small.	• Use energy efficient plant and machinery. • Implement restoration which provides appropriate habitats to help to increase resilience of flora/fauna.
15. To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any residual impacts.	_	0	• This proposal is for an extension to existing extraction at Trigon Hill. This is an established site with a good access onto Wareham Forest Road. • Access from here to the strategic network is gained via the A35 to the north and the A351 to the east. The extension site is estimated to generate 20 trips per day although it is thought that the site would follow the cessation of other extraction at Trigon rather than operating in parallel to it. The site has therefore been given a 'Less Significant Adverse Impact' rating. • Should the site intensify movements to Trigon Hill any Transport Statement should consider vehicle routing and any impact on the A351 to the east which experiences high levels of congestion. • Policies DM1 and DM 8 actively address this issue of minimising impacts on the transportation network.	• Any proposal for this site would need to be accompanied by a Transport Assessment which will need to provide access details and consider vehicle routing. The TA should be scoped with the Transport Development Management Team. • Transport Assessment to be carried out, identifying opportunities for reducing impacts on the transport network.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	–	0	• The proposed extension can only realistically be accessed by means of road transport, resulting in a negative impact under this Objective during development and working. • As far as reasonably possible negative impacts resulting from access and transport will be mitigated, as required by Policies DM1 and DM8 of the Minerals Strategy.	• Mitigate impacts where identified and appropriate.
17. To sustain the health and quality of life of the population	?	0	**Impact on Sensitive Human Receptors** • Cold Harbour properties some 380 m to the east, other residential uses further to the north. • Development will require appropriate mitigation (such as visual and noise attenuation bunding, standoffs) to limit impacts. • Adequate scope to screen works, using mitigation such as visual and noise attenuation bunds.	• Provision of appropriate mitigation, following assessment of likely impacts. • Restoration to improve landscape of site where possible; and to seek to increase public access. • Transport Assessment to be carried out, identifying opportunities for reducing impacts on the transport network where appropriate.
	?	0	**Impact on Existing Settlements** • Cold Harbour is closest settlement to the east along with other properties along the C7. • Screening (visual and noise attenuation bunding) would significantly limit the impact of the site working, but there will be impacts of lorries entering/leaving the site. This is an extension and should not result in intensification of any impacts.	
	0	0	**Impact on Airport Safety** • Site is approximately 23 km from airport and proposed for dry working and restoration. • No impacts expected	• No action required.
18. To enable safe access to countryside and open spaces.	0	?	**Impact on Recreational Land** • Site is agricultural land and forestry, private land with no public access. No formal or informal recreational use. • No impacts expected. Restoration to consider options for improving public access in the area.	• No action required for working. • Restoration to improve public access in the area.
		+		
	0	0	**Impact on Public Rights of Way** • No rights of way across the site or adjacent to it.	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			• No impacts expected	

Preliminary Hydrological Risk Assessment

Controlled Waters	Issues/Risks	Mitigation	Further information/approval required
• Watercourses • Ponds/lakes, including wet habitats • Groundwater	• The River Basin Management Plan South West River Basin District identifies the Piddle (the closest main river, some 900m distant) as being of 'Poor' environmental quality. Potential for contamination from runoff from site. • Potential for contamination of controlled waters through spillage or seepage of pollutants such as fuel, or silt in water. • Potential impacts on existing surface water features.	• Appropriate arrangements to be made for ensuring that runoff from the site does not enter the Piddle or groundwater unless any silt has first been removed. • Fuel stored on site to be appropriately bunded and sealed to prevent any spillage from entering ground or surface waters. • On-going monitoring during development and working of the site. • Ground water recharge if considered necessary.	• Full hydrogeological risk assessment will be required as part of a planning application. • Flood Risk Assessment • Water Framework Assessment • Further assessment of potential impacts on water quality and levels, particularly for groundwater, is required prior to development. • Assessment of the feasibility of relocating or re-creating surface water features and associated habitats and species. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.

Cumulative Impacts

There is other mineral working in the vicinity, both existing and proposed as well as waste management. The proposed site is an extension to existing mineral working/waste disposal. As an extension site, there will be no cumulative impact but this would represent an extension of time of working.

The proposal is within 5Km (by road) of a site allocated in the Purbeck Local Plan Part 1 (adopted Nov 2012) (Policy CEN) for development of 200 dwellings and community facilities, off Worgret Road, Wareham. Traffic arising from the new residential development will also add to general traffic levels in / around Wareham.

Summary.

Key impacts and benefits are expected to include, but are not necessarily limited to, the following.

Potential Benefits	Potential Impacts
• Provision of aggregates required for maintenance and construction of the built environment, with accompanying benefits to the economy. • Restoration could contribute to improved countryside access. • Provision of employment, to the benefit of local economy. • Improved public access to be considered as a part of site restoration. This could lead to reduced visitor pressure on designated heathland sites in the vicinity. • Nature conservation benefits to be considered as part of restoration.	• Site is close to European designated heathland; contains Annex 1 birds and could be designated as a Special Protection Area; there are possible impacts on national designations (SSSI nearby) and protected species on/around the site. Further assessment, including Appropriate Assessment, will be required to better understand these impacts and to determine whether/how they can be satisfactorily mitigated. • Ground and surface water – further assessment required to determine possible impacts, but these expected to be capable of mitigation. • Heritage/archaeology – assessment required to determine likely impacts, but impacts expected to be mitigable. • Significant visual impacts, when site is opened up, with views through site from open access land to south-west. Further assessment including landscape and visual assessment will be required, with appropriate mitigation provided. • The site will be accessed by road.

Overall Recommendation:

This is a relatively small site which is primarily intended for the production of ball clay. Sand/gravel will be removed as part of the excavation of the ball clay. There are a number of issues regarding this site and further assessment will be required, including Appropriate Assessment under the Habitat Regulations.

Key impacts are expected to be on ecology (nearby European and national designations, Annex 1 birds, protected species), landscape/visual impacts and surface/groundwater. Further assessment will be required to gain a better understanding of what the impacts might be and how best to mitigate. Should this site ultimately be developed, it is expected that detailed assessment of impacts and required mitigation will be covered through the required Environmental Impact Assessment.

As an extension, development of the site is not expected to lead to intensification of impacts, but the time period of the impacts will be extended.

This site is no longer under consideration for sand and gravel extraction – withdrawn by nominee.

Aggregates: AS23 Gore Heath, Sandford

Site Name/Location: AS23 Gore Heath Mineral Type: Sand and gravel		Nominee/Agent: Veolia Environmental Services Local Authority: Purbeck District Council
Site Area: approximately 145 ha	Production: approximately 200,000 to 250,000 tpa (to be confirmed);	Reserve: approximately 11 mt

Impact Assessment Scoring

- -	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain

Timescales for effects: **P/W**: Preparation and Working **R/A**: Restoration and Afteruse

Sustainability Objectives	Effects P/W	Effects R/A	Commentary	Mitigation
1. To move waste management up the waste hierarchy	**N/A**	**N/A**	• This Objective is not relevant to this site nomination	• N/A
2. To maintain, conserve and enhance biodiversity	– –	**0**	**European/International Designations** • Proposed area supports Annex 1 birds which may be functionally linked to Dorset Heathlands SPA. The area is well used as recreation site contributing to the network of areas which help to reduce human recreational pressure on designated heathlands. • Site is adjacent to Morden Bog and Hyde Heath SSSI, which is a component of the Dorset Heaths SAC, Dorset Heathland SPA/Ramsar. • Working this area could lead to significant risk of adverse effects on European sites. At the moment the area includes a small part of the Dorset Heaths SAC and Dorset Heathlands Ramsar along the eastern boundary; this area must be removed from the possible allocation to have any chance of being taken forward otherwise a conclusion of adverse effects on integrity of the sites is inevitable.	• Ecological surveys and hydrological reports required, with appropriate mitigation. • Appropriate assessment under the Habitat Regulations will be required. • Heathland restoration and public access to be created.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			• In order to be acceptable the development proposal would have to pass the tests in the Habitats Regulations.	
	_ _	0	**Annex 1 Bird Species** • Area supports Annex 1 birds as part of the existing forestry crop rotation. Clearance of trees would result in heathland regeneration and the open habitat would rapidly become suitable for more Annex 1 birds. • The site has the potential to be included in a revision to the heathland SPA boundary. Risk based approach essential here.	• Ecological surveys and hydrological reports required, with appropriate mitigation. • Appropriate assessment under the Habitat Regulations will be required. • Heathland restoration and public access to be created.
	_ _	0	**National Designations** • In addition to the comments on European/International Designations above, the area is likely to support a rich invertebrate assemblage in existing rides contributing to maintenance of species within SSSI. • At the moment the area includes a small part of the Morden Bog and Hyde Heath SSSI along the eastern boundary; this area must be removed from the possible allocation to have any chance of being taken forward as there is no case for directly damaging a nationally important site to extract sand and gravel.	• Ecological surveys required, with appropriate mitigation. • Restoration to include creation of invertebrate habitat.
	_ _	0	**Protected species** • Existing rides support significant populations of European protected species, Sand Lizard and Smooth Snake, and common protected reptiles. • Depending on population sizes it may be difficult to mitigate fully for effects on EPS and there is a risk that disturbance licences could be refused by Natural England.	• Ecological surveys required, with appropriate mitigation identified. • Restoration to include appropriate habitats for these species. • Further investigation into likelihood of grant of disturbance licences.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	?	0	**Local recognitions/designations, including ancient woodland and veteran trees** • There are possible adverse implications for the Sherford River SNCI to the north of the proposed area, although through assessment it should be possible to avoid adverse effects on the SNCI.	• Ecological surveys required, with appropriate mitigation identified.
3. To maintain, conserve and enhance geodiversity.	+	0	• Exposures resulting from working may be of interest. Benefits are only expected during working, and are likely to be obscured or covered as part of restoration.	• Operator to be asked to permit visits to view exposures as required.
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	? / _	0	**Groundwater** • Site not within a Source Protection Zone. Overlies Secondary Aquifers. • Extraction proposals would be potentially removing a large area of unsaturated zone so potential impacts on water features. • Assessment required to determine possible impacts on hydrogeology. Impacts to be appropriately mitigated	• Hydrological assessment required to determine possible impacts, on ground and surface waters, with appropriate mitigation to be implemented. • Where necessary mitigating measures should be installed to maintain groundwater levels. • Appropriate arrangements should be put in place to ensure that the water leaving the site and entering the rivers/watercourses is of an acceptable quality. • Any fuel on site should be properly stored to avoid contamination in case of spillage. • Restoration proposals should incorporate wetland features which will contribute to the aspirations of the Biodiversity Strategy. • Appropriate arrangements should be installed for surface water and silt collection and fuel storage to prevent contamination of groundwater resources. • Land Drainage Consent to be obtained from Dorset
	? / _	0	**Surface Water** • Sherford River runs 50m to north of site boundary. Pond on north-eastern boundary of site. Other drains and ponds in vicinity of site. Development needs to protect and enhance any water features in site. • Stream within 50m of the northern boundary. • The Sherford River and Sherford Bog Area are very sensitive. Any silt escape would be harmful to the protected area.	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
				County Council if works may affect flow of an ordinary watercourse.
5. To reduce flood risk and improve flood management.	0	0	**Flooding/Coastal Stability** • Site is within FRZ 1.	• Flood Risk Assessment (FRA) will be required. • All necessary mitigation to be implemented.
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).	?	0	**Archaeology** • The Dorset Historic Environment Record has no records of archaeological sites, features or finds within the site (although a milestone on the road on the west side is recorded). • Nevertheless, considering the size of the site the potential for below-ground archaeological remains and other earthworks and other above-ground features needs to be assessed and if necessary evaluated before an informed planning decision can be made. • Only when the relevant works have been undertaken would the archaeological impact be understood – at present it could be anywhere from Very Significant to No Significant impact.	• Full archaeological survey of the area required to assess possible presence and significance of non-designated remains and to assess whether/how these should be protected during working. • All necessary mitigation to be implemented. • Adequate provision to be made for preservation, excavation or recording, as appropriate. • Further consideration to be given to restoration proposals, in terms of historic landscapes.
	– –	+	**Historic Landscapes** • The site was presumably heathland before being brought into its present use. So, the restoration of some of it to heathland could be a positive impact from an historical viewpoint. • Further evaluation will be required. When this has been undertaken possible impacts, if any, will be better understood.	
	0	0	**Historic Buildings** • There are no historic buildings affected by this proposal.	• No action required.
7. To maintain, conserve and enhance the landscape,	– –	?	**Landscape Capacity** • A very significant adverse impact on landscape character, visual and recreational amenity and a loss of an	• Landscape and visual impact assessment to identify impacts; consider whether adequate

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
including townscape, seascape and the coast.			important open space facility for local and visitor users within close proximity to the urban edge. • Assessment required to consider whether working of any scale could be possible.	mitigation of such impacts before and during working is possible. • If mitigation is not possible, a view will have to be taken as to whether a time-limited impact would be acceptable. • Appropriate restoration proposals in line with Landscape Management Guidelines referred to in Minerals Strategy. • Maintain screening woodland around edges of site.
	0	**0**	**Designated Landscapes** • Less significant adverse impact.	• No action required.
8. To protect and improve air quality and reduce the impacts of noise.	**0**	**0**	• Impacts on air quality expected to be negligible. • No AQMAs will be affected by the working of this site proposal. Any dust resulting from working will be controlled through normal dust-suppression measures. • Noise mitigation will be addressed at the planning application stage, with appropriate mitigation to be included in the development of the site.	• Environmental protection measures to reduce dust and ensure noise is appropriately mitigated.
9. To maintain, conserve and enhance soil quality.	–	**0**	• The site comprises primarily heathland, grassland and woodland cover. The area is a former heathland area and so would be expected to have relatively poor, acidic soils. • Site preparation/working would require stripping and storage of the soils, with some impacts on them. • If the site is worked and restored to heathland this will require reinstatement/retention of acidic soils with their seedbank.	• Soil is poor quality in agricultural terms but valuable in terms of potential for heathland restoration. • Soils to be stored/protected during preparation and working and properly reinstated during restoration.
10. To conserve and safeguard mineral resources.	**+**	**0**	• The site would make an important contribution to aggregate supply in Bournemouth, Dorset and Poole.	• No specific action required; site development to take into consideration relevant impacts and mitigate where appropriate.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
11. To promote the use of alternative materials.	0	0	• This proposal does not at present promote the use of alternative materials.	• No action required.
12. To provide an adequate and affordable supply of minerals to meet society's needs.	+	0	• Development of this site would provide a benefit in terms of contributing to the provision of a supply of minerals to meet society's needs. • Ensuring a sustainable supply will depend on the development and management of the site. • Providing site development takes into account relevant principles of sustainable development it is expected this will contribute to complying with this objective.	• Ensure principles of sustainable development are incorporated into the development of this site.
13. To promote and encourage sustainable economic growth	+	0	• This site proposal is expected to contribute to economic development on two levels – directly through the provision of employment at the site to be developed and indirectly through the provision of ball clay and aggregate minerals required for the maintenance of built environment and for new built development and for commercial/industrial uses. • Both levels are expected to maintain employment, skilled and unskilled. However given the expected size of the reserve this is likely to be a limited benefit. • Proposed restoration is to heathland/nature conservation and woodland/forestry, both of which offer economic benefits.	• Further assessment required to consider restoration options.
14. To adapt to and mitigate the impacts of climate change.	-	0	• Developing land as a quarry is expected to have some negative impacts regarding climate change, due primarily to machinery used and transportation of mineral away from site. However, these will in relative terms be negligible. • The Bournemouth, Dorset and Poole Minerals Strategy seeks to address and minimise such impacts through Policy CC1 which requires operators to take into consideration climate change impacts and their possible mitigation for any proposed minerals development. • The development management policies, e.g. DM 1, also address and seek to minimise the issue of sustainable development and climate change. • Restoration to some form of vegetated environment will offer benefits in the form of climate change mitigation, including provision of	• Use energy efficient plant and machinery. • Implement restoration which provides appropriate habitats to help to increase resilience of flora/fauna.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			habitat for wildlife, but again these will be relatively small.	
15. To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any residual impacts.	_ _	?	• This proposal covers a large site to the east of the B3075 Morden Road. Traffic data has not been supplied but is assumed to be in the region of 50 to 75 trips per day. • Access could be achieved onto Morden Road although details indicating the necessary visibility and geometry would need to be supplied. Once on Morden Road, vehicles would either travel north to the A35 at Morden Park Corner or south to the A351 at Sandford. • The existing junction at Morden Park Corner has significant accident problems and any attempt to access this proposal using the junction in its current form would receive the strongest objection from the Highway Authority on highway safety grounds. There is little that can be done to improve Morden Park Corner within the existing highway land. Any improvement would require significant land take. • A previous scheme proposed to realign the northern part of Morden Road further to the east, providing a bigger stagger between the two arms of the crossroads and extended right turn lanes. It also proposed to realign a sharp bend to the east of Morden Park Corner on the A35. The cost for this scheme, or another like it, would be significant. • To the south vehicles could access the A351. This road goes through Sandford, has severe congestion problems and a high accident rate. Any proposal that placed large numbers of HGVs on this road would therefore also be likely to be resisted by the Highway Authority. • For the above reasons this site has been given a 'Very Significant Adverse Impact' rating. Policies DM1 and DM 8 of the Minerals Strategy actively address this issue of minimising impacts on the transportation network, but addressing the identified issues is likely to be generally beyond the scope of these policies.	• Any proposal for this site would need to be accompanied by a Transport Assessment which will need to provide access details and consider vehicle routing. The TA should be scoped with the Transport Development Management Team. • Transport Assessment to be carried out, identifying opportunities for reducing impacts on the transport network. • Alternative options to be investigated.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	–	0	• The proposed extension can only realistically be accessed by means of road transport, resulting in a negative impact under this Objective during development and working. • As far as reasonably possible negative impacts resulting from access and transport will be mitigated, as required by Policies DM1 and DM8 of the Minerals Strategy.	• Mitigate impacts where identified and appropriate.
17. To sustain the health and quality of life of the population	–	0	**Impact on Sensitive Human Receptors** • Closest residence is Sherford Farm at approximately 350 m to the north-west. Other properties in the vicinity, including Sandford to south and south-east, Home Farm buildings to the east. • The site is large enough that it should be possible to screen these residences satisfactorily, using mitigation such as visual and noise attenuation bunds. • Development would likely require appropriate mitigation (such as visual and noise attenuation bunding, standoffs) to limit impacts.	• Provision of appropriate mitigation, following assessment of likely impacts. • Restoration to improve landscape of site where possible; and to seek to increase public access. • Transport Assessment to be carried out, identifying opportunities for reducing impacts on the transport network where appropriate.
	–	0	**Impact on Existing Settlements** • Sandford is within 500m – size of site would permit appropriate screening (visual and noise). Lorries turning left out of the site, or delivering material to Wareham/Purbeck, would have an impact on Sandford/Wareham.	
	0	0	**Impact on Airport Safety** • Site is approximately 19km from Hurn Airport. Wet working not proposed, restoration will be at a lower level and may include wetland areas. • No impacts expected.	• No action required.
18. To enable safe access to countryside and open spaces.	– –	+/?	**Impact on Recreational Land** • Site currently enjoys open access and there are a number of tracks/paths across it. It is extensively used for informal recreation. There will be very significant impacts on users of the site during working.	• Restoration to open access land following working and improvement of access where possible and where appropriate. • Consider phased working and

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			• Restoration offers the opportunity to restore/improve such access. • The issue of displacement of existing users onto international designations around the site must be addressed.	restoration, to provide alternative options for recreational use while various parts of the site are worked.
	0	0	**Impact on Public Rights of Way** • Statutory rights of way along the northern and eastern edges of the site. Site is large enough that these can be appropriately screened during working.	• Assessment of impacts, with appropriate mitigation identified. • Restoration to improve public access in the area.

Preliminary Hydrological Risk Assessment

Controlled Waters	Issues/Risks	Mitigation	Further information/approval required
• Watercourses • Ponds/lakes, including wet habitats • Groundwater	• The River Basin Management Plan South West River Basin District identifies the Sherford River as being of 'Moderate' environmental quality. Potential for contamination from runoff from site. • Environment Agency notes that the Sherford River and Sherford Bog Area are very sensitive. Any silt escape would be harmful to the protected area. • Potential for contamination of controlled waters through spillage or seepage of pollutants such as fuel, or silt in water. • Impacts on or removal of surface water features.	• Appropriate arrangements to be made for ensuring that runoff from the site does not enter the Sherford River or groundwater unless any silt has first been removed. • Fuel stored on site to be appropriately bunded and sealed to prevent any spillage from entering ground or surface waters. • On-going monitoring during development and working of the site.	• Full hydrogeological risk assessment • Flood Risk Assessment • Water Framework Assessment • Further assessment of potential impacts on water quality and levels, particularly for groundwater, is required prior to development. • Assessment of the feasibility of relocating ponds and associated habitats and species. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.

Cumulative Impacts

Proposal is a new site in an area where there is other mineral working existing/proposed. There will be cumulative impacts arising if this site is developed.

The proposal is within 5Km (by road) of a site allocated in the Purbeck Local Plan Part 1 (adopted Nov 2012) (Policy CEN) for development of 200 dwellings and community facilities, off Worgret Road, Wareham. Traffic arising from the new residential development will also add to general traffic levels in Wareham and to a lesser extent the B3075 adjacent to the proposal.

Summary.

Potential Benefits	Potential Impacts
• Provision of significant amount of aggregates required for maintenance and construction of the built environment, making an important contribution to Bournemouth, Dorset and Poole's supply options.	• Site is close to/includes European designated heathland; contains Annex 1 birds and could be designated as a Special Protection Area; there are likely impacts on national designations (SSSI) and possible threats to protected species on/around the site. Further assessment required, including Appropriate Assessment, to establish impacts and whether these can be satisfactorily addressed. • Recreational displacement will be an issue if this site is developed. • Further assessment, including Appropriate Assessment, will be required to better understand these impacts and to determine whether they can be satisfactorily mitigated. • Ground and surface water – further assessment required to determine possible impacts, but these expected to be capable of mitigation. • Heritage/archaeology – assessment required to determine likely impacts, but any impacts expected to be mitigable. • Very significant landscape capacity and visual impacts. Further assessment including landscape and visual assessment will be required, not clear at this stage whether impacts can be mitigated. • Very significant impacts on recreational land use and users. Can be mitigated to some extent by phased working and restoration but will still be impacts. • Significant transport impact for lorries travelling to/from site, either to north or south.

Overall Recommendation:

There are a number of impacts that are likely to be associated with the working of this site, including biodiversity and European designations; impacts of recreational displacement, if this site was developed; hydrology/hydrogeology, archaeology and historic landscapes; landscape capacity; transport/access impacts; impacts on amenity, recreational use. Some are capable of mitigation but it appears that a number are unlikely to be capable of satisfactory mitigation.

Further information has been requested regarding this site, but on the basis of the evidence available the nominated site appears to be subject to significant constraints not currently capable of satisfactory mitigation and cannot be included in the Draft Bournemouth, Dorset and Poole Mineral Sites Plan at the present time unless exceptional circumstances (not currently present) arise. The site remains part of the mineral resource of Bournemouth, Dorset and Poole but is not at this time included in the Draft Bournemouth, Dorset and Poole Mineral Sites Plan.

The benefits of developing this site are not considered to outweigh the impacts of working here. **At this time** other sites are considered to be more appropriate options for supplying aggregate.

It is **recommended** that this site should not be included in the emerging Mineral Sites Plan

Site has been withdrawn by Nominee.

Aggregates: AS24 Purple Haze South

Site Name/Location: AS24 Purple Haze South Mineral Type: Sand and gravel	Nominee/Agent: Somerley Estate (Landowner) and Carter Jonas Local Authority: East Dorset District Council
Site Area: approximately 43 ha Production: (information awaited)… tpa; Reserve: approximately (information awaited) … mt	

Impact Assessment Scoring

- -	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain

Timescales for effects:

P/W: Preparation and Working **R/A**: Restoration and Afteruse

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
1. To move waste management up the waste hierarchy	**N/A**	**N/A**	• This Objective is not relevant to this site nomination	• N/A
2. To maintain, conserve and enhance biodiversity	**?**	**+**	**European/International Designations** • Proposed area is likely to support Annex 1 birds as part of the forestry crop rotation; the populations of these birds may be functionally linked to Dorset Heathlands SPA. • The forestry plantation is well used as recreation site contributing to the network of areas which help to reduce human recreational pressure on designated heathlands. There are possible in-combination effects of mineral working proposals in Hampshire within Ringwood Forest. • Working this area has the potential to lead to significant risk of adverse effects on European sites.	• Ecological surveys and hydrological reports required. • Appropriate assessment under the Habitat Regulations will be required. • Restoration to include heathland restoration and public access/recreational facilities.
	?	**0**	**Annex 1 Bird Species** • Area supports Annex 1 birds as part of the existing forestry crop rotation. Clearance of trees	• Ecological surveys and hydrological reports required, with

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
			would result in heathland regeneration and the open habitat would rapidly become suitable for more Annex 1 birds. • The site has the potential to be included in a revision to the heathland SPA boundary. • Risk based approach essential here.	appropriate mitigation. • Appropriate assessment under the Habitat Regulations will be required. • Heathland restoration and public access to be created.
	?	+	**National Designations** • No additional points to be raised beyond what is mentioned in European/International Decisions above.	• Ecological surveys and hydrological reports required. • Appropriate assessment under the Habitat Regulations will be required. • Restoration to include heathland restoration and public access/recreational facilities.
	?	0	**Protected species** • Existing rides may support populations of European protected species, Sand Lizard and Smooth Snake, and common protected reptiles. Mitigation for effects on reptiles may be necessary. • If so, it seems likely Natural England would be able to issue a disturbance licence if required.	• Ecological surveys required, with appropriate mitigation. • Restoration to include creation of appropriate habitat.
	0	0	**Local recognitions/designations, including ancient woodland and veteran trees** • No impacts expected	• No action required.
3. To maintain, conserve and enhance geodiversity.	+	0	• Exposures resulting from working may be of interest. Benefits are only expected during working, and are likely to be obscured or covered as part of restoration.	• Operator to be asked to permit visits to view exposures as required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	?	0	**Groundwater** • Site overlies a secondary aquifer. A stream which drains the sands (SU 12176 05789) lies within 250m of the site western boundary. There are drains to the East flowing into the Avon SSSI/SAC. The impacts of the development on these flows should be assessed. • No impact on SPZs. • Assessment required to determine possible impacts on hydrogeology. Impacts to be appropriately mitigated.	• Hydrological assessment required to determine possible impacts, on ground and surface waters, with appropriate mitigation to be implemented. • Where necessary mitigating measures should be installed to maintain groundwater levels. • Appropriate arrangements should be put in place to ensure that the water leaving the site and entering the rivers/watercourses is of an acceptable quality. • Any fuel on site should be properly stored to avoid contamination in case of spillage. • Appropriate arrangements should be installed for surface water and silt collection and fuel storage to prevent contamination of groundwater resources. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.
	?	0	**Surface Water** • Site is approximately 120m from a drain, with other drains in the vicinity. • Site is on a ridge between the River Crane on the west and the Avon to the east. Approximately 750m from the Avon. • Assessment required to determine possible impacts on hydrogeology. Impacts to be appropriately mitigated	
5. To reduce flood risk and improve flood management.	0	0	**Flooding/Coastal Stability** • Entire site is within Flood Risk Zone 1, no expected risk of flooding or contributing to flooding.	• Flood Risk Assessment (FRA) will be required. • All necessary mitigation to be implemented.
6. To maintain, conserve and enhance the historic environment (including archaeological sites, historic buildings, conservation areas, historic	–	0	**Archaeology** • A barrow that is protected as a Scheduled Monument (SM31911 – 'Bowl barrow on the eastern part of Ashley Heath, 660m north west of Ashley Lodge') occupies a relatively central location within the site. Several other barrows that are also protected as Scheduled Monuments lie close to the site. • The barrow within the site in particular is a major constraint, and theoretically, extraction that destroyed this nationally-important feature would	• Full archaeological survey of the area required to assess possible presence and significance of non-designated remains and to assess Monuments and establish their settings and how these can best be

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
parks and gardens and other locally distinctive features and their settings).			be a 'Very Significant Adverse Impact'. However, the protection afforded the monument makes this unlikely to happen. • One way to address this issue could be the removal of some of the site from the extraction area. An archaeological assessment and if necessary an evaluation of the site that considers all the barrows mentioned above and their settings, as well as other possible archaeological material on the site, should help in making a decision on this, as well as in understanding the wider archaeological impact of the extraction on this site. Early discussion with English Heritage should also be helpful in the making of this decision. • If a compromise can be determined that allows some quarrying within a fraction of this site, the impact could perhaps drop to a 'Less Significant Adverse Impact'.	protected during working. • All necessary mitigation, including actions such as restoration of hedgerows, to be implemented. • Adequate provision to be made for preservation, excavation or recording, as appropriate. • Settings of the Monuments to be established prior to working and not to be compromised during working. • Further consideration to be given to restoration proposals, in terms of historic landscapes.
	0	+	**Historic Landscapes** • The site is occupied by conifer plantation and must have been heathland before. • Further evaluation will be required. When this has been undertaken possible impacts will be better understood. • Restoration is yet to be finalised, but could include heathland restoration/recreation, giving a positive benefit.	
	0	0	**Historic Buildings** • The nearest listed building is Ashley Lodge but if the woodland cover is maintained between the building and the site then there should be no adverse impact. No impacts expected.	• No action required.
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	–	+	**Landscape Capacity** • Potential impact on the amenity of footpath users and on the on the amenity of forest track users. Also a potential impact on the character of the Heath Forest Mosaic. • Potential to restore the land as Sustainable Alternative Natural Greenspace after extraction as it is within the SE Dorset Green Infrastructure area. Further consideration needed.	• Assessment of potential visual impacts required. • All appropriate mitigation to be included. • Restoration to consider increasing public access/informal recreation and to include nature conservation interests. • Appropriate restoration proposals in line with

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
				Landscape Management Guidelines referred to in Minerals Strategy.
	0	**0**	**Designated Landscapes** • Negligible, no significant impacts expected.	• No action required.
8. To protect and improve air quality and reduce the impacts of noise.	**0**	**0**	• Impacts on air quality expected to be negligible. • No AQMAs will be affected by the working of this site proposal. Any dust resulting from working will be controlled through normal dust-suppression measures. • Noise mitigation will be addressed at the planning application stage, with appropriate mitigation to be included in the development of the site.	• Environmental protection measures to reduce dust and ensure noise is appropriately mitigated.
9. To maintain, conserve and enhance soil quality.	–	**0**	• The site comprises primarily woodland cover but is a former heathland area and so would be expected to have relatively poor, acidic soils. • Site preparation/working would require stripping and storage of the soils, with some impacts on them. • If the site is worked and restored to heathland this will require reinstatement/retention of acidic soils with their seedbank.	• Soil is poor quality in agricultural terms but valuable in terms of potential for heathland restoration. • Soils to be stored/protected during preparation and working and properly reinstated during restoration.
10. To conserve and safeguard mineral resources.	+	**0**	• The site would make an important contribution to aggregate supply in Bournemouth, Dorset and Poole and beyond.	• No specific action required; site development to take into consideration relevant impacts and mitigate where appropriate.
11. To promote the use of alternative materials.	–	**0**	• This proposal does not at present promote the use of alternative materials.	• No action required.
12. To provide an adequate and affordable supply of minerals to	+	**0**	• Development of this site would provide a benefit in terms of contributing to the provision of a supply of minerals to meet society's needs. • Ensuring a sustainable supply will depend on the development and management of the site.	• Ensure principles of sustainable development are incorporated into the

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
meet society's needs.			• Providing site development takes into account relevant principles of sustainable development it is expected this will contribute to complying with this objective.	development of this site.
13. To promote and encourage sustainable economic growth	+	0	• This site proposal is expected to contribute to economic development on two levels – directly through the provision of employment at the site to be developed and indirectly through the provision of aggregate minerals required for the maintenance of built environment and for new built development and for commercial/industrial uses. • Both levels are expected to maintain employment, skilled and unskilled. Proposed restoration is to forestry possibly with some heathland restoration , both of which offer economic benefits.	• Further assessment required to consider restoration options.
14. To adapt to and mitigate the impacts of climate change.	–	0	• Developing land as a quarry is expected to have some negative impacts regarding climate change, due primarily to machinery used and transportation of mineral away from site. However, these will in relative terms be negligible. • The Bournemouth, Dorset and Poole Minerals Strategy seeks to address and minimise such impacts through Policy CC1 which requires operators to take into consideration climate change impacts and their possible mitigation for any proposed minerals development. • The development management policies, e.g. DM 1, also address and seek to minimise the issue of sustainable development and climate change. • Restoration to some form of vegetated environment will offer benefits in the form of climate change mitigation, including provision of habitat for wildlife, but again these will be relatively small.	• Use energy efficient plant and machinery. • Implement restoration which provides appropriate habitats to help to increase resilience of flora/fauna.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
15. To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any residual impacts.	– – ?	0	• It is assumed that estimated HGV trips for this site could be 100 per day. Direct access onto the site would necessarily be onto the B3081. Adjacent to the site is the existing Baker's Hanging junction, between the B3081 and Alderholt Road. This junction and the access to a walkers car park opposite have a poor accident history. This is partly due to the geometry of the road, with a restrictively acute angle to be negotiated for any vehicles that may wish to turn left into Alderholt Road from the B3081, and partly due to restricted forward visibility and speed. • Any access onto the B3081 would need to be to the north of the Baker's Hanging junction. There are issues of vertical alignment and visibility on this section of the B3081 and a Transport Assessment would need to demonstrate that a junction with sufficient visibility and geometry could be provided. • In addition to this a TA would need to consider the movements of HGVs leaving and arriving at the site and any interaction with mineral sites over the border in Hampshire. Vehicle routing will be key and any left turning vehicles into Alderholt Road or other significant impact at Baker's Hanging junction without significant mitigation will be strongly resisted. The option also exists for the landowner to make additional land available, not for quarrying, but directly onto the B3081 south of the Baker's Hanging junction. • Due to issues of direct access onto the B3081 and safety concerns at the Baker's Hanging junction this site has been rated as having a 'Very Significant Adverse Impact' . If a promoter could adequately demonstrate that there is a safe access location and safe vehicle routing then the site could be given a 'No Significant or Negligible Adverse Impacts' rating due to the direct access to the strategic road network. Policies DM1 and DM 8 actively address this issue of minimising impacts on the transportation network.	• Any proposal for this site would need to be accompanied by a Transport Assessment which will need to provide access details and consider vehicle routing. The TA should be scoped with the Transport Development Management Team. • Transport Assessment to be carried out, identifying opportunities for reducing impacts on the transport network. • Alternative options to be investigated.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	–	0	• The proposed extension can only realistically be accessed by means of road transport, resulting in a negative impact under this Objective during development and working. • It may be possible to use conveyor belts to transport mineral across the site. • As far as reasonably possible negative impacts resulting from access and transport will be mitigated, as required by Policies DM1 and DM8 of the Minerals Strategy.	• Mitigate impacts where identified and appropriate.
17. To sustain the health and quality of life of the population	–	0	**Impact on Sensitive Human Receptors** • Two residential properties at approximately 260m; Ashley Heath to south/west at just over 750m. The site is large enough that it should be possible to screen these residences satisfactorily, using mitigation such as visual and noise attenuation bunds. • Site is used for recreational/walking/cycling purposes, or is adjacent to land used for such purposes; there will be impacts on these users of the land .	• Provision of appropriate mitigation, following assessment of likely impacts. • Restoration to improve landscape of site where possible; and to seek to increase and improve public access. • Transport Assessment to be carried out, identifying opportunities for reducing impacts on the transport network where appropriate.
	–	0	**Impact on Existing Settlements** • Ashley Heath to south/west at just over 750m. Verwood almost 2km to north west. The site is large enough that it should be possible to screen the workings satisfactorily, using mitigation such as visual and noise attenuation bunds. • Transport related impacts are addressed under Objective 15 above.	
	0	0	**Impact on Airport Safety** • Site is approximately 8km from airport. Site not expected to be worked or restored wet. • No impacts expected	• No action required.
18. To enable safe access to countryside and open spaces.	– –	+/?	**Impact on Recreational Land** • Site currently enjoys open access and there are tracks/paths across it. It is well used for informal recreation. There will be significant impacts on users of the site, and surroundings, during working.	• Restoration to open access land following working and improvement of access where possible and where appropriate.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
			• Restoration offers the opportunity to restore/improve such access. • The issue of displacement of existing users onto international designations around the site must be addressed.	• Consider phased working and restoration, to provide alternative options for recreational use while various parts of the site are worked.
	– –	+	**Impact on Public Rights of Way** • A statutory right of way (a bridleway) crosses the site and will need to be diverted during working. • Restoration will need to re-establish and where appropriate improve these statutory rights of way. Further assessment of what is needed is required.	• Restoration and where appropriate improvement of statutory rights of way following working.

Preliminary Hydrological Risk Assessment

Controlled Waters	Issues/Risks	Mitigation	Further information/approval required
• Watercourses • Ponds/lakes, including wet habitats • Groundwater	• The River Basin Management Plan South West River Basin District identifies the Avon as being of 'poor' environmental quality. In addition, the River Crane is of 'good' ecological quality. • Potential for contamination from runoff from site. • Potential for contamination of controlled waters through spillage or seepage of pollutants such as fuel, or silt in water. • Contamination of water supplies or reduction in amount of water available for licenses supplies. • Impacts on or removal of surface water features.	• Appropriate arrangements to be made for ensuring that runoff from the site does not enter the Avon or the Crane or groundwater unless any silt has first been removed. • Fuel stored on site to be appropriately bunded and sealed to prevent any spillage from entering ground or surface waters. • On-going monitoring during development and working of the site.	• Full hydrogeological risk assessment • Flood Risk Assessment • Water Framework Assessment • Further assessment of potential impacts on water quality and levels, particularly for groundwater, is required prior to development. • Assessment of the feasibility of relocating ponds and associated habitats and species, as may be necessary. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.

Cumulative Impacts

Site is likely to be worked as an extension to a quarry in Hampshire. Other proposed and existing mineral development in the vicinity.

The Hampshire site is likely to be developed first and in that way the Dorset side, if developed, will not constitute a cumulative impact but rather the extension of an existing site.

There is no land allocated for major development in the Christchurch and East Dorset Consolidated Plan, or in the New Forest District Sites and Development Management DPD Jan 2012 (as amended by Proposed modifications Sept 2013) within 5Km of the proposal.

Summary.

Potential Benefits	Potential Impacts
• It is likely that the site will be able to provide a significant amount of aggregates required for maintenance and construction of the built environment, making an important contribution to Bournemouth, Dorset and Poole's (and other Mineral Planning Authorities) supply options. However, no details on the size/quality of the mineral resource has yet been received. • Restoration has the potential to restore/recreate heathland and also improve public access/recreation facilities in the area.	• Further assessment required to determine potential archaeological impacts; they are likely to be capable of mitigation, but this may take the form of a reduction in the size of the site. • There will be significant impacts on use of the site and area for recreational uses, with likely closures of parts of the site during working . However the site is big enough to maintain parts open while other parts are shut. Restoration has the potential to restore/improve opportunities for recreation and open access in the area. • Transport impacts could potentially be significant, but it is likely that the site is large enough that access will be provided in an area that minimises impacts. Further assessment required. • Impacts on surface and groundwater are not yet known, and detailed assessment will be required. Mitigation, if required, not yet known. • It is likely that there will be some landscape impacts but it is expected that these will be capable of mitigation. • Nature conservation impacts are of key importance, given the site's proximity to Natura 2000 sites, the bird and other species found on the site and in the vicinity and the provision of recreational opportunities provided by the site. Further assessment, including Appropriate Assessment, is required and it is not known yet what mitigation will be required.

Overall Recommendation:

This is a large site, adjacent to another area that has already been included in Hampshire County Council's adopted Minerals and Waste Plan.

As a free –standing site there are a number of issues and uncertainties that justify its exclusion from the Mineral Sites Plan at this time, while awaiting provision of further information. It is also not clear when this site might be expected to be developed, which may not be in the proposed Mineral Sites Plan period.

On the basis of the evidence available the nominated site appears to be subject to significant constraints and it is not clear whether these may be capable of satisfactory mitigation. The site is not considered suitable for inclusion in the Draft Bournemouth, Dorset and Poole Mineral Sites Plan at the present time unless exceptional circumstances (not currently present) arise. The site remains part of the mineral resource of Bournemouth, Dorset and Poole but is not at this time included in the Draft Bournemouth, Dorset and Poole Mineral Sites Plan.

The benefits of developing this site are not considered to outweigh the impacts of working here. **At this time** other sites are considered to be more appropriate options for supplying aggregate.

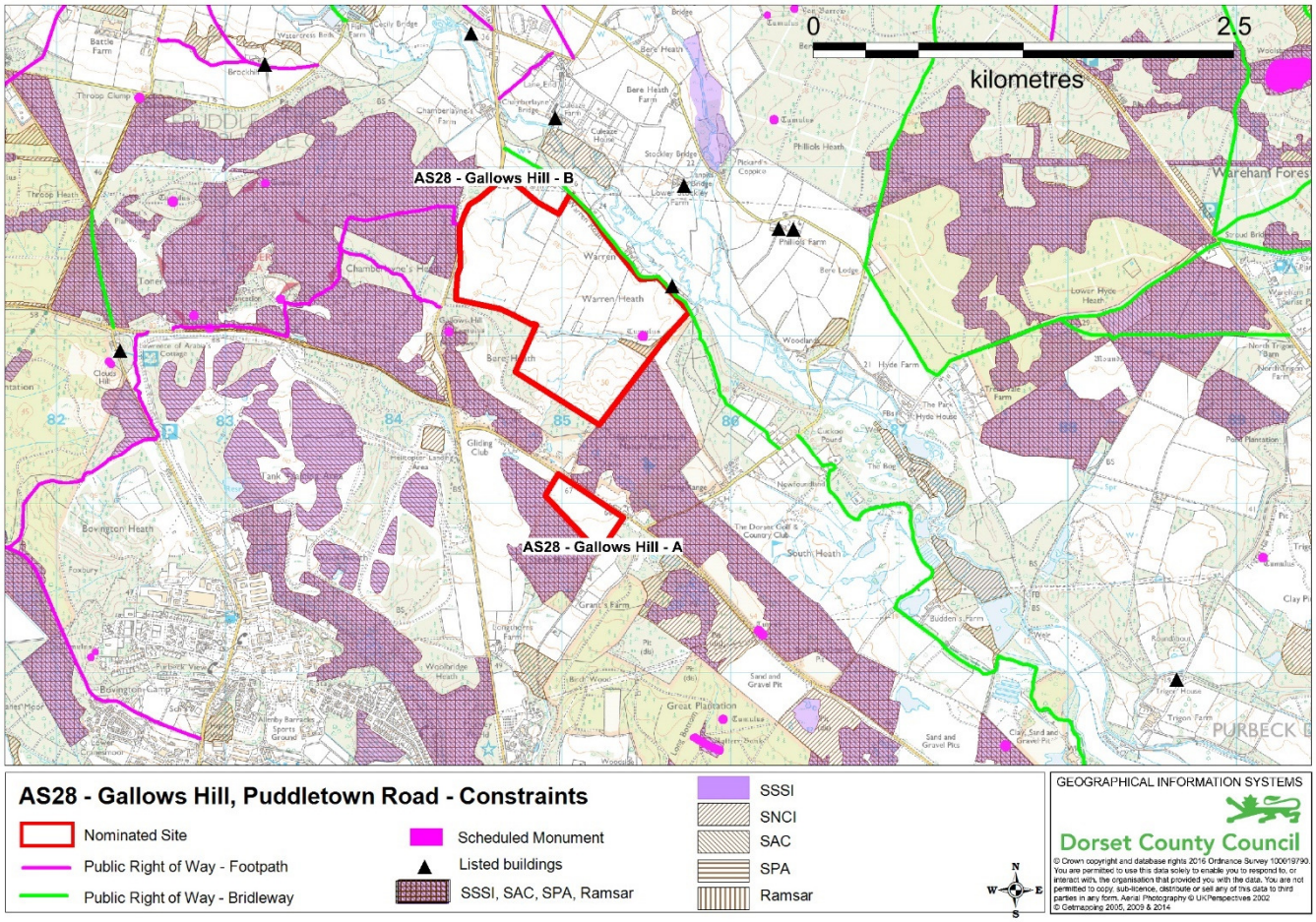
It is **recommended** that this site should not be included in the emerging Mineral Sites Plan

Aggregates: AS28 – Gallows' Hill A&B

At this time, only the Stage 1 Assessment has been carried out on Gallows Hill 'A' – this is included below. No assessment has been carried out on Gallows Hill 'B'.

Very limited information has been supplied for either site, but particularly for Site 'B'. It has not been progressed by the Mineral Planning Authority due to lack of information available

It is understood that assessment work carried out on Site 'A' has revealed hydrogeological constraints. Until advised otherwise, the Mineral Planning Authority are treating Site 'A' as withdrawn



Stage 1 Site Assessment – Gallows Hill Site 'A'

Site Information

Site Location	Adjacent to and north of Stoke Heath, East Stoke, Wareham, Dorset Grid Reference SY 851 909
District/Borough	Purbeck District Council
Parish/Town Council	East Stoke CP
Site Nominee/Owner **Landownership issues?** **Any Mineral Operator interest**	Land and Mineral Management (Agent) on behalf of Holme Sand and Ballast No known landownership issues.
Mineral Planning History **Is the site an extension to existing site?** **Has it been considered for minerals development in the past?** **Partly worked?**	Site is promoted by mineral operator, and would form a follow-on (though not an extension) to for an existing quarry. Not previously worked. Historic records indicate the existence of three permissions in the general vicinity of the site - reference numbers 6/80/115, 6/87/656 and 300256 - difficult to establish which, if any, of these covered your site. The certificate for 6/87/656 appears to relate to the ARC concrete site to the north of the road, did not permit mineral extraction, and expired in 2013. None of these permissions (or any others relating to the site) were included on Dorset's First List of Sites under the Environment Act 1995 and consequently any then extant minerals permissions relating to your site would, by law, have expired in the 1990's under the terms of the Environment Act.
Legal or time-related constraints	
Access to markets?	
Is there geological evidence of the presence and viability of the mineral?	
Does the sequential test for flooding indicate that the site is appropriate for the proposed use?	
Development proposed	Extraction of sand Potential annual output (tpa) 100,000 - 150,000 tonnes estimated Estimated reserve 1 million tonnes Expected life of operation Approximately 10 years
Description of Site	Site is approximately 8.8 ha in area. Existing land use - predominantly agriculture

	Existing Agricultural Land Classification - site is Grade 4 (poor quality agricultural land). Proposed Restoration – not known at present Development of this site would not remove the peripheral vegetation which appears to be of ecological importance. The only habitats which would be at risk would be Semi-improved Acid Grassland and Marshy Grassland, both of which would be reproduced in the site restoration.
Summary of Site Designations/Constraints	Site is adjacent to land of national and international biodiversity importance. Potential for hydrogeological connectivity with protected Stoke Heath to the south.
Relevant Local Planning Policy	**Planning Purbeck's Future – Purbeck Local Plan Part 1 – Adopted November 2012** Policy DH – 400m Heathland Buffer Zone & 5km Buffer Zone Policy CZ – Consultation Zone
Residential properties and other land uses in the vicinity of the site	Grants Farm approximately 250m south; Golf Club approximately 500+m east; campsite approximately 650m to south/west. Aggregate recycling operation adjacent to the east; former industrial/commercial use immediately across road and to north/east.
Traffic Generation & Access Considerations	Directly onto adjacent road, no more detail known at present Possibly 40-60 HGV movements per day, to/from Masters Pit to the south

Appraisal of Site – Using Site Assessment Criteria as set out in The Bournemouth, Dorset and Poole Minerals Strategy 2014

In Appendix 1 (p. 242) of the Minerals Strategy a methodology for assessing sites nominated or identified for consideration as future quarry sites is set out. Each site is assessed against 25 criteria, C1 to C25, reflecting the potential environmental, economic and social impacts/benefits of its development. Assessment is qualitative, and each criterion is given a score as a colour, representing its expected impact, with or without mitigation. These criteria and their responses are set out below, along with further comments from relevant consultees.

Topic: Biodiversity.

SA Objective: To maintain, conserve and enhance biodiversity.

Criterion C1 - Impact on European/international designations.	**A**
This proposed site is adjacent to the designated heathland SAC/SPA/Ramsar. At present the effect of working Site A on the adjacent mire which flows into the heathland sites is unknown and further hydrological studies would be needed to rule this out/inform mitigation. However, restoration to heathland/acid grassland after mineral extraction would be a significant conservation gain as part of the Puddletown Road Policy Area. Development of this area is rated 'A' until further assessment is carried out, and it is determined whether appropriate and adequate mitigation can be applied. Dorset County Council 27/5/16	
Criterion C2 - Impact on areas used by Annex 1 bird species.	**A**
Surveys would be needed to determine how both this area is used by Annex 1 bird species as this information is not yet known. Of particular importance to this site proposal as this is more connected to the adjacent designated heathlands. Mitigation would need to include phasing of work, enhancement/creation of suitable habitat off site or reduction of site boundary to avoid key areas. Until further assessment carried out, both sites rated 'A'. Dorset County Council 27/5/16	
Criterion C3 - Impact on national designations.	**C/E**
This area is adjacent to SSSI heathland and surveys would be needed to determine how connected the proposed areas are to the SSSI in terms of habitat and species. Mitigation of any effects on the SSSI could include buffer strips at the edge of the site, as well as enhancement of the SSSI habitat. Restoration to heathland after mineral extraction has potential for significant conservation gain and for this reason this criterion is classified C/E. Dorset County Council 27/5/16	
Criterion C4 - Impact on protected species.	**C**

Surveys would be needed to determine how this area is used by protected species such as European and common protected reptiles, badgers, dormice etc. These surveys would guide appropriate mitigation to ensure no adverse impact on these species.

Both sites rated 'C', subject to further assessment.

Dorset County Council 27/5/16

Criterion C5 - Impact on local recognitions/designations, including ancient woodland and veteran trees.	**A**	**C**

No Comment

Dorset County Council 27/5/16

Possible Mitigation:

An Environmental Impact Assessment will be carried out as part of any planning application, including detailed assessment of potential impacts and appropriate responses and mitigation. Appropriate mitigation of any impacts will be required as part of any planning permission granted. If adequate and appropriate mitigation cannot be achieved, the site will not be permitted. This requirement will be identified in the Development Considerations of any allocation within the Plan. No further action considered necessary at this stage.

Topic: Geodiversity

SA Objective: To maintain, conserve and enhance geodiversity.

Criterion C6 - Impact on geodiversity.	**D**

It is not expected that specific scientific gains or geodiversity enhancements will result from quarrying this site, but the exposures may be of interest to the quaternary and tertiary research associations. Provision should be made so that it will be possible to arrange such visits on request.

Dorset County Council 4/7/16

Possible Mitigation:

None specifically required, but provision should be made so that it will be possible to arrange such visits on request.

Topic: Landscape

SA Objective: To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.

Criterion C7 – Impact on designated landscapes.

No significant impact/negligible.

Dorset County Council 1.6.2016

Criterion C8 – What is landscape capacity to accommodate proposed development.	**B**

This area lies within the Bovington/Affpuddle Heath/Forest Mosaic Landscape Character Area (Purbeck non AONB Landscape Character Assessment). It is a flat site but is open to glimpsed views from the Puddletown Road, particularly in the winter months and more distant views from the south in the Dorset AONB.

Development could contribute to the overall cumulative landscape and visual impact of development along the Puddletown Road. Development could have a significant landscape and visual impact on the sites character and visual amenity. It is essential therefore that any future extraction should be limited in extent and be based on a detailed and independent assessment of landscape character so any future operations conserve and enhance key features and views and mitigation and restoration reflects existing character.

Dorset County Council 1.6.2016

Possible Mitigation:

An Environmental Impact Assessment will be carried out as part of any planning application, including detailed assessment on the landscape resulting from extracting mineral from this site. It is noted that impacts will be temporary and restoration of an agreed landscape/landform will be agreed and implemented as part of any planning permission granted. This requirement will be identified in the Development Considerations of any allocation within the Plan. No further action considered necessary at this stage.

Criterion C9 – Impact on historic landscapes.	***A***	→	***E***

This area is likely to have been heathland since the Bronze Age. Further assessment is required, and until this is carried out and the results considered and applied, the rating of this site could be anywhere from 'A' (Very Significant Adverse Impact) to 'E' (Positive Impact).

Dorset County Council 10.6.2016

Possible Mitigation:

Full assessment, including Environmental Impact Assessment, will be carried out as part of any planning application. It is noted that impacts of working will be temporary and restoration of an agreed landscape/landform will be agreed and implemented as part of any planning permission granted.

The archaeological potential on the site is noted and acknowledged. It is considered that no further action needs to be taken at this stage, apart from clearly noting the likely presence of the archaeology as part of the site allocation, and requiring full assessment and appropriate mitigation at the planning application and development stage. It is considered that the Development Management policies of the Minerals Strategy, especially Policy DM 7, together with the policy stance of the National Planning Policy Framework, provide adequate protection to any archaeology that may be found during development – to the point that planning permission would be refused in the case of unacceptable and unmitigatable impacts.

This requirement will be identified in the Development Considerations of any allocation within the Plan. No further action considered necessary at this stage.

Historic Environment

Criterion C10 – Impact on historic buildings.	**??**

To be assessed...

Criterion C11 – Impact on archaeology.	**A**	→	**D**

The impact on below-ground archaeology needs to be assessed and evaluated before an informed planning decision could be made.

Only when these have been undertaken would the archaeological impact be understood – at present it could be anywhere from category A ('Very Significant Adverse Impact') to category D ('No Significant or Negligible Adverse Impacts').

Dorset County Council 10.6.2016

Possible Mitigation:

Full assessment, including Environmental Impact Assessment, will be carried out as part of any planning application. This will include assessment of heritage impacts and appropriate mitigation. It is noted that impacts will be temporary and restoration will be agreed and implemented as part of any planning permission granted. This requirement will be identified in the Development Considerations of any allocation within the Plan.

It is considered that the Development Management policies of the Minerals Strategy, especially Policy DM 7, together with the policy stance of the National Planning Policy Framework, and the requirements of the Planning (Listed Buildings and Conservation Areas) Act provide adequate protection to the heritage assets – to the point that planning permission would be refused in the case of unacceptable and unmitigatable impacts.

No further action considered necessary at this stage.

Topic: Water

SA Objective: To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.

Criterion C12 - Impact on hydrogeology or groundwater.	**A**	→	**D**

The criteria classification for this site proposal should be 'A' as it is adjacent to a SAC/SPA/Ramsar/SSSI that is likely to be groundwater dependent.

However, provided hydrogeological assessment shows no significant impact on adjacent SSSI, SAC, SPA and Ramsar, there is no objection to this site being proposed for minerals extraction. A hydrogeological risk assessment would be required at the site allocation stage. Other detailed assessments listed above would be required at the planning application stage.

The Lead Local Flood Authority (Dorset County Council) must be consulted on this proposed allocation.

Both sites have a boundary with Dorset Heaths SAC and Dorset Heathlands SPA/ Ramsar. There is the potential that even a relatively shallow excavation could impact on the habitats in the SAC due to interception of shallow groundwater. Any proposal will need a detailed assessment of this risk in particular.

Environment Agency 17 June 2016

Criterion C13 – Impact on surface waters.	**A**	→	**D**

The criteria classification for this area should be 'A' (Very Significant Adverse Impact) as there is a drain and pond within site. Subject to further assessment, it is expected that these can be safely relocated, should the site be developed for minerals extraction.

The Lead Local Flood Authority (Dorset County Council) must be consulted on this proposed allocation.

The site proposal has a boundary with Dorset Heaths SAC and Dorset Heathlands SPA/ Ramsar. There is the potential that even a relatively shallow excavation could impact on the habitats in the SAC due to interception of shallow groundwater. Any proposal will need a detailed assessment of this risk in particular.

Environment Agency 17 June 2016

Criterion C14 - Impact on flooding or coastal stability.	**A**	→	**D**

The criteria classification for this site proposal should be 'D' (No Significant or Negligible Impact) as it is in Flood Zone 1

A hydrogeological risk assessment would be required at the site allocation stage. Other detailed assessments listed above would be required at the planning application stage.

The Lead Local Flood Authority (Dorset County Council) must be consulted on this proposed allocation.

The site has a boundary with Dorset Heaths SAC and Dorset Heathlands SPA/ Ramsar. There is the potential that even a relatively shallow excavation could impact on the habitats in the SAC due to interception of shallow groundwater. Any proposal will need a detailed assessment of this risk in particular.

Environment Agency 17 June 2016

Possible Mitigation:

Full hydrological assessment will be required as part of any planning application, with measures to protect groundwater and surface water flows to be identified and implemented.

This requirement will be identified in the Development Considerations of any allocation within the Plan. No further action considered necessary at this stage.

Topic: Soil

SA Objective: To maintain, conserve and enhance soil quality

Criterion C15 - Impact on existing soils or land type (including BMV land).	**D**

This site is Agricultural Land Classification Grade 4 - 'poor' agricultural land.

Dorset County Council 5 July 2016

Possible Mitigation:

Soils will be stripped and removed to be stored and returned as part of restoration, according to best practice. Restoration could bring the land back into agricultural production. In conjunction with this, areas of the site may be restored to a nature conservation use.

Topic: Air Quality

SA Objective: To protect and improve air quality and reduce the impacts of noise

Criterion C16 – Impact on AQMAs.	D
No AQMAs to be directly affected - score of 'D' (Less Significant Adverse Impact) applies. Dorset County Council 5 July 2016	
Possible Mitigation: Noise mitigation will be addressed at the planning application stage, with appropriate mitigation to be included in the development of the site.	

Topic: Material Assets (Economic development)

SA Objectives: To conserve and safeguard mineral resources.

To promote the use of alternative materials

To encourage sustainable economic growth

To provide an adequate supply of minerals to meet society's needs.

Criterion C17 - Impact on economic development.	D
The site is currently grassland and there is potential for restoration to heathland at a lower level, making a positive contribution to biodiversity. The site is currently (partly) used for agriculture. It is not known at this time whether this use will/can be resumed after quarrying. The working of this site will maintain supply of construction aggregate and maintain the provision of jobs (including skilled jobs) in the area. The working of this site is not expected to have a significant impact on local businesses/tourism, and is expected to make an overall positive contribution to the local economy. Dorset County Council 5 July 2016	
Possible Mitigation: An Environmental Impact Assessment will be carried out as part of any planning application, identifying potential impacts and appropriate responses and mitigation. Appropriate mitigation will be required as part of any planning permission granted. This will be identified in the Development Considerations within the Plan. No further action considered necessary at this stage.	

Topic: Social Considerations - Human Health and Amenity, Airport Safety and Cumulative Impacts

SA Objectives: To sustain the health and quality of life of the population

Criterion C18 - Impact on Sensitive Human Receptors.	D/E
It is not expected that this site will impact on any sensitive receptors. Dorset County Council 5 July 2016	
Criterion C19 - Impact on existing settlements.	**E**

Bovington Camp lies to the south-west and Bere Regis lies to the north of these areas. It is not expected that the development of this area will have any impact, visual or transport-related, on existing settlements given that existing vegetation provides screening and aggregate from these areas is proposed for processing at Masters Pit.

Dorset County Council 5 July 2016

Possible Mitigation:

An Environmental Impact Assessment will be carried out as part of any planning application, identifying potential impacts and appropriate responses and mitigation. Appropriate mitigation (e.g. visual and noise attenuation bunds and reducing noise at source where possible and appropriate) will be required where necessary as part of any development of the site. This will be identified in the Development Considerations within the Plan. No further action considered necessary at this stage.

Criterion C20 - Impact on airport safety

Site is approximately 25 km from Bournemouth Airport and wet working/restoration is not proposed.

No impacts expected.

Dorset County Council 5 July 2016

Criterion C21 - Effects on cumulative impacts.	**B**

The proposed area would be an extension to an existing site in an area where there is other mineral working (along the Puddletown road), indicating an 'A' score. However, it is expected that the site would not be worked until existing working at Masters Pit are complete. It is expected that the aggregate would be moved by lorry, thereby increasing the level of lorry traffic on the Puddletown Road but the distance involved would be relatively short.

The proposal is within 5Km (by road) of a site allocated in the Purbeck Local Plan Part 1 (adopted Nov 2012) (Policy CEN) for development of 200 dwellings and community facilities, off Worgret Road, Wareham. Traffic arising from the new residential development will add to general traffic levels in Wareham and on the A352.

Further development is being considered within 5km of the proposed sites, through the Partial Review of the Purbeck Local Plan.

Dorset County Council 5 July 2016

Possible Mitigation:

The proposal will include mitigation for visual and noise impacts, following guidance and best practice, to limit cumulative effects. The site would be restored as soon as worked.

The proposal will include mitigation for visual and noise impacts, following guidance and best practice. To minimise traffic impacts, following a Transport Assessment at the planning application stage, measures such as holding back lorry traffic during peak traffic times could be used if necessary.

A traffic impact assessment report has been prepared, indicating that that roads in the area are capable of carrying the proposed quarry traffic.

Topic: Social Considerations – Carbon Emissions

SA Objectives: To adapt to and mitigate the impacts of climate change

Criterion C22 - Impact on carbon emissions	**B**
Site will rely on road transport for access. The site is currently a mixture of grassland and other agriculture. The proposed restoration would likely be either back to agriculture or to heathland, or some combination. The site will be accessed by road, with material being taken a short distance south to Masters Pit. It is not expected that there would be a permanent loss of vegetation. Dorset County Council 5 July 2016	
Possible Mitigation: Guidance and best practice will be followed, to minimise carbon emissions as far as is practicable.	

Topic: Social Considerations

SA Objectives: To enable safe access to countryside and open spaces

Criterion C23 – Impact on recreational land	**D**
The site is private land and has no formal or informal access right or recreational use. There could be opportunities to introduce public access following restoration. This justifies a score of a 'D' (No Significant or Negligible Impact), possibly mitigated to an 'E' (Positive Impact) if public access could be secured. Dorset County Council 5 July 2016	

Criterion C24- Impact on public rights of way	**D**
Site A does not affect any rights of way. Development for minerals extraction to consider options for improved access through restoration. This justifies a score of a 'D' (No Significant or Negligible Impact), possibly mitigated to an 'E' (Positive Impact) if public access could be secured. Dorset County Council 5 July 2016	

Criterion C25 - Are the access proposals acceptable	***C***	***D***

It would be reasonable to expect the existing works entrance that lies immediately to the east of this site to be used. The verge at the end of the west bell-mouth radii shows signs of over-running, probably by the rear axles of longer vehicles and doesn't have an exit taper and this should be addressed. It is expected that the issues identified can be overcome to provide a satisfactory access.

Dorset County Council 5 July 2016

AS28a Gallows Hill South Site Assessment

This would be a new site and require a new access. This must be formed onto the Puddletown Road. It is considered that this could be achievable subject to possible 3rd party issues and adequate visibility being provided and maintained. It is understood material would be processed at an existing site to the east. The advantage of this would be left turn manoeuvres into the site and right turns from the access thus causing little or no delay to passing traffic.

Dorset County Council February 2017

Possible Mitigation:

If developed, a Transport Assessment would be required, identifying possible impacts and appropriate mitigation.

Initial Site Assessment including Input from Specialist Consultees

Traffic/Access	
Highways England	We note that this is a new site, with processing taking place at Masters Pit which would cease extraction operations. As such, we consider it unlikely that there would be an impacts on the SRN, providing that extraction operations at Masters Pit do indeed cease.

Public Rights of Way	
DCC Rights of Way	*Comments have been requested…*

Protection of Water Resources (Hydrology/groundwater/ surface water management and flooding)	
Environment Agency	**Site A** No objection to Area A being proposed for minerals extraction provided hydrogeological assessment shows no significant impact on adjacent SSSI, SAC, SPA and Ramsar. A hydrogeological risk assessment would be required at the site allocation stage. Other detailed assessments listed above would be required at the planning application stage. **Both Sites** We have no objection to the proposed allocations at this site, provided there is no significant impact on the River Piddle and any other watercourses in the vicinity, also provided there is no significant impact on the adjacent SAC/SPA/ Ramsar and SSSI. A hydrogeological risk assessment is required at the site allocation stage. Other detailed assessments would be required at the planning application stage. The Lead Local Flood Authority (Dorset County Council) must be consulted on this proposed allocation. Both sites have a boundary with Dorset Heaths SAC and Dorset Heathlands SPA/ Ramsar. There is the potential that even a relatively shallow excavation could impact on the habitats in the SAC due to interception of shallow groundwater. Any proposal will need a detailed assessment of this risk in particular. Studies required and issues to consider • Hydrogeological assessment at site allocation stage • Flood Risk Assessment at planning application stage • Ecological study if water features present in site • Restoration proposals should incorporate wetland features which will contribute to the aspirations of the Biodiversity Strategy Protect and enhance water features in site Environment Agency – July 2016
Lead Local Flood Authority (LLFA) - DCC	**AS28a Gallows Hill South Site Assessment** No grounds for objection, subject to detail: The site falls entirely within Flood Zone 1 (low risk – fluvial flooding) according to the Environment Agency's relevant flood modelling. However it is shown to be at some theoretical risk of surface water flooding by relevant mapping, which indicates a defined flow path and ditch feature following the southern boundary,

Protection of Water Resources (Hydrology/groundwater/ surface water management and flooding)	
	and an existing pond feature located in the south-eastern corner of the site, during severe rainfall events (1:100/1000yr). A site specific strategy of surface water management should be requested that does not increase rates of runoff or generate off site worsening, in compliance with the NPPF. Prior Land Drainage Consent may be required from DCC as relevant LLFA, for any works offering an obstruction to flow within a channel or ditch with the status of Ordinary Watercourse.
Further work required?	

Nature Conservation – Biodiversity Impacts	
Natural England comments	**AS28 Gallows Hill** In Natural England's view there is significant potential for aggregate extraction within the area shown *(which includes Gallows Hill B as well)* and commensurate gains in biodiversity could be achieved. However, there are a number of significant biodiversity issues which at present are not well identified or explained in the site information presented. Most of these affect particular parts of the potential allocation site and in our view mean that there are some areas within the site that extraction should not take place, and others where further work is needed to establish whether or not extraction could happen without significant harm. In these circumstances, biodiversity enhancement could be achieved both through appropriate restoration and through appropriate management of areas within the proposed allocation site where extraction did not take place. The area shown south of the Puddletown Road – **Gallows Hill A** - is immediately adjacent to the part of Stokeford Heaths SSSI called Stoke Heath (also part of the Dorset Heaths SAC, the Dorset Heathlands SPA and the Dorset Heathlands Ramsar site). Stoke Heath has a high quality mire running along its length and draining from the NW to SE and then southwards. In these circumstances, there may be an adverse hydrological affect from mineral winning immediately to the north which might prevent or limit working of this area. Detailed hydrological work is obviously needed to evaluate impacts. In this case, it is impossible to predict what the outcome of this work might be.

Historic Environment	
Historic England Comments	No comment.

Other Building Stone: BS01 Manor Farm Quarry

Site Name: BS01 Manor Farm Quarry **Location:** West of Manor Farm, Melbury Abbas **Mineral Type:** Shaftsbury Green Sandstone		**Nominee:** Mr & Mrs Johnson (Quarry Farm) **Agent:** Land and Mineral Management **Local Authority:** North Dorset District Council
Site Area: 4 ha	**Production:** c. 2,000 tpa	**Reserve:** c. 25,000 tonnes

Impact Assessment Scoring

- -	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain

Timescales for effects:

P/W: Preparation and Working **R/A**: Restoration and Afteruse

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
1. To move waste management up the waste hierarchy and promote net self sufficiency	**N/A**	**N/A**	• This Objective is not relevant to this site nomination	• N/A
2. To maintain, conserve and enhance biodiversity	**0**	**0**	**European/International Designations** • No impacts expected	• No action required.
	0	**0**	**Annex 1 Bird Species** • No impacts expected	• No action required.
	0	**0**	**National Designations** • No impacts expected	• No action required.
	0	**0**	**Protected species** • No impacts expected	• No action required.
	0	**0**	**Local recognitions/designations, including ancient woodland and veteran trees** • No impacts expected	• No action required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
3. To maintain, conserve and enhance geodiversity.	+	?	• Large exposures in the upper greensand are uncommon inland from the coast in Dorset. There would be a benefit in allowing geologists access to recording any new exposures here. • Retaining exposures could be considered but only if appropriate.	• Operator to be asked to permit visits/access to view exposures where possible during working. • Opportunities to leave faces exposed when working is finished to be considered.
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	?	0	**Groundwater** • Site is on a Principal Aquifer. No impact on any Source Protection Zones. One licensed abstraction site within 250m. • Environment Agency advise a Hydrogeological Risk Assessment will be required.	• Hydrological assessment required to determine possible impacts, on ground and surface waters, with appropriate mitigation to be implemented. • Appropriate arrangements should be put in place to ensure that the water leaving the site and entering the watercourses or groundwater is of an acceptable quality. • Any fuel on site should be properly stored to avoid contamination in case of spillage. • Appropriate arrangements should be installed for surface water and silt collection and fuel storage to prevent contamination of groundwater resources. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.
	?	0	**Surface Water** • Spring and watercourse within 250m of the site boundary. Ponds within 500m. • Assessment required to determine possible impacts on hydrogeology. Impacts to be appropriately mitigated	
5. To reduce flood risk and improve flood management.	0	0	**Flooding/Coastal Stability** • Entire site is within Flood Risk Zone 1, no expected risk of flooding or contributing to flooding.	• Flood Risk Assessment (FRA) will be required. • Any necessary mitigation to be implemented.
6. To maintain, conserve and enhance the historic environment (including archaeological sites, historic buildings, conservation	?	0	**Archaeology** • The presence of two Scheduled Monuments to the south of the proposal site (1016893 – 'Beacon and circular enclosure on Melbury Hill' and 1016894 – 'Cross dyke and linear boundary on Melbury Hill and Compton Down, Melbury Abbas'), the discovery of a Bronze Age cemetery on a quarry site just to the east, and the prominent location all indicate the site's high archaeological potential.	• Archaeological survey of the area required as part of planning application to assess possible presence and significance of non-designated remains and to assess whether/how these should be protected

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
areas, historic parks and gardens and other locally distinctive features and their settings).			• The impact on the setting of the Scheduled Monuments and on below-ground archaeological remains needs to be assessed and if necessary evaluated before an informed planning decision could be made. • Only when these exercises have been undertaken would the archaeological impact be understood – at present it could be anywhere from 'Very Significant' to 'No Significant' impacts.	during working – no further work required at site allocation stage. • All necessary mitigation to be implemented prior to working. • Adequate provision to be made for preservation, excavation or recording, as appropriate. • Further consideration to be given to restoration proposals, in terms of historic landscapes.
	?	0	**Historic Landscapes** • The site is on the side of a hill that is a prominent landmark that can be seen from much of the Blackmore Vale in particular. • Impact would depend on the extent of restoration and could be lessened if relatively small areas are quarried at a time and restored soon after.	
	0	0	**Historic Buildings** • Listed buildings too far away to be affected.	• No action required.
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	– –	?	**Landscape Capacity** • Major in principle concern regarding the significant negative cumulative landscape, visual & amenity impacts this will have on the Area of Outstanding Natural Beauty and in particular, from the well-used paths in the area such as those on Melbury Hill.	• Full assessment of potential visual impacts will be required at planning application stage. • All appropriate mitigation to be included. • Appropriate restoration proposals in line with Landscape Management Guidelines referred to in Minerals Strategy.
	– –	?	**Designated Landscapes** • Very Significant adverse impact.	
8. To protect and improve air quality and reduce the impacts of noise.	0	0	• Impacts on air quality expected to be negligible. • No AQMAs will be affected by the working of this site proposal. Any dust resulting from working will be controlled through normal dust-suppression measures. • Any impacts due to noise resulting from mineral working would be expected to be satisfactorily minimised through normal noise mitigation	• Environmental protection measures to be put in place to reduce dust and noise impacts.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			measures, imposed at the planning application stage.	
9. To maintain, conserve and enhance soil quality.	–	0	• Soil appears to be good to moderate quality agricultural land. • Soils will be protected during working and restoration could bring the land back into agricultural production.	• Soil to be properly stripped and stored prior to working; protected during working; and re-spread on site after working.
10. To conserve and safeguard mineral resources.	+	0	• The site would make an important contribution to the supply of building stone.	• No specific action required • Site development to take into consideration relevant impacts and mitigate where appropriate.
11. To promote the use of alternative materials.	–	0	• This proposal does not promote the use of alternative materials.	• No action required.
12. To provide an adequate and affordable supply of minerals to meet society's needs.	+	0	• Development of this site would provide a benefit in terms of contributing to the provision of a supply of minerals to meet society's needs. Ensuring a sustainable supply will depend on the development and management of the site. • Providing site development takes into account relevant principles of sustainable development it is expected this will contribute to complying with this objective.	• Ensure principles of sustainable development are incorporated into the development of this site.
13. To promote and encourage sustainable economic growth	+	0	• This site proposal is expected to contribute to economic development on two levels – directly through the provision of employment at the proposed extension and indirectly through the provision of building stone required for new build, repairs and maintenance, decorative and landscaping work. Both levels are expected to maintain employment, skilled and unskilled. • Restoration to agriculture will offer some further economic benefits. • Further benefits may be available if improved public access can be achieved, through the recreational attraction and use in the wider area (i.e. riding, walking).	• Seek further benefits, such as improved public access, where appropriate.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
14. To adapt to and mitigate the impacts of climate change.	_	0	• Developing land as a quarry is expected to have some negative impacts regarding climate change, due primarily to machinery used and transportation of mineral away from site. However, given the size of the proposed quarry these will in relative terms be negligible. • The Bournemouth, Dorset and Poole Minerals Strategy seeks to address and minimise such impacts through Policy CC1 which requires operators to take into consideration climate change impacts and their possible mitigation for any proposed minerals development. • The development management policies, e.g. DM 1, also address and seek to minimise the issue of sustainable development and climate change.	• Use energy efficient plant and machinery. • Implement restoration which provides appropriate habitats to help to increase resilience of flora/fauna.
15. To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any residual impacts.	- / ?	0	• Previous extraction of Shaftesbury Green Sandstone to the east of the proposed area has established the principle of mineral extraction in this locality. • No access location onto Quarry Lane has been specified but there are points where an access would be acceptable provided it is of suitable construction and size. Details of this would need to be provided at the time of any planning application. • Access to the strategic network is likely to be gained via West Lane onto the A350 a short distance from the proposed site. While no estimated trip rates have been provided it is likely that they will be very low and sporadic, hence the site has been given a C rating. • Policies DM1 and DM 8 of the Minerals Strategy actively address this issue of minimising impacts on the transportation network.	• Any proposal for this site would need to be accompanied by a Transport Assessment which will need to provide access details and consider vehicle routing. • TA to be scoped with the Transport Development Management Team. • The Transport Assessment should identify opportunities for reducing impacts on the transport network.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	–	0	• The proposed extension can only realistically be accessed by means of road transport, resulting in a negative impact under this Objective during development and working. • As far as reasonably possible negative impacts resulting from access and transport will be mitigated, as required by Policies DM1 and DM8 of the Minerals Strategy.	• Mitigate impacts where identified and appropriate.
17. To sustain the health and quality of life of the population	–	?	**Impact on Sensitive Human Receptors** • Closest properties are residences to north west, within 50m. There are a number of other properties within 500m. • Site will be screened as required. Site will be worked on a campaign basis, which will limit impacts.	• Provision of appropriate mitigation, following assessment of likely impacts. • Restoration to improve landscape of site where possible; and to seek to increase public access. • Transport Assessment to be carried out, identifying opportunities for reducing impacts on the transport network where appropriate.
	– –	?		
	–	?	**Impact on Existing Settlements** • Closest settlement is West Melbury, within 50m. Melbury Abbas is some 600m distant. • Site will be screened as required. Site will be worked on a campaign basis, which will limit impacts.	
	– –	?		
	0	0	**Impact on Airport Safety** • Site is approximately 37 km from Bournemouth airport and approximately 31 km from Yeovilton, with no wet working or restoration.	• No impacts expected and no action required.
18. To enable safe access to countryside and open spaces.	0	+(?)	**Impact on Recreational Land** • Site is agricultural land and not used for informal recreation. Although no right of way exists on the land, a public path crosses the site. • Restoration could seek to formalise or improve this access.	• Assessment of impacts, with appropriate mitigation identified.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	–	+(?)	**Impact on Public Rights of Way** • Public right of way exists adjacent to(west of) the site, and the route actually used crosses the western side of site. N.B. – this section over the site does not appear to be part of the statutory route. • An informal route also crosses the eastern side of the site . • During working these routes will not be available. An alternative for the statutory route to the west will be required and may need to be screened. • Restoration and possibly improvement of the path(s) when working is complete may be possible.	• Realignment of current 'desire lines' as required. • Restoration to include considering how it might be possible to improve public access in the area.
	– –			

Preliminary Hydrological Risk Assessment

Controlled Waters	Issues/Risks	Mitigation	Further information or approval that may be required
• Watercourses • Ponds/lakes, including wet habitats • Groundwater	• The Stour is the closest main river. The site drains into it by other water courses, including the Manston Brook. • The River Basin Management Plan South West River Basin District identifies the Stour as being of 'Moderate' environmental quality where site runoff would join it. • There is potential for contamination from runoff from site along with potential for contamination of controlled waters through spillage or seepage of pollutants such as fuel, or silt in water. • Contamination of water supplies or reduction in amount of water available for licenses supplies.	• Appropriate arrangements to be made for ensuring that runoff from the site does not enter the surface or groundwater drainage unless any silt has first been removed. • Fuel stored on site to be appropriately bunded and sealed to prevent any spillage from entering ground or surface waters. • On-going monitoring during development and working of the site.	• Water Framework Assessment may be required. • Hydrological risk assessment to consider possible impacts of working this site and any required mitigation. • Further assessment of potential impacts on water quality and levels, particularly for groundwater, is required prior to development. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse. • Flood Risk Assessment

Cumulative Impacts

Site is an extension to existing quarry. No other mineral working in the vicinity.

The proposal is within 5Km of sites allocated in Shaftesbury for residential development (1140 dwellings in the town in total) and employment development (7.0Ha) to the south of the A30, in the Pre -Submission draft North Dorset Local Plan Nov 2013. Traffic arising from the new development will add to general traffic levels on the A30 and A350.

Summary.

Potential Benefits	Potential Impacts
• Exposure of geological faces, during and possibly after working, expected to provide geodiversity benefits. • Development of site is expected to provide economic benefits, both directly at the site and in the local area where the stone is expected to be used. • Development of the site will provide a source of building stone, primarily for the benefit of the local area/economy.	• No ecological impacts expected. • Hydrological investigation required, but no significant impacts expected. • Potential for significant archaeological impacts, and further assessment will be required. However, identified impacts may be capable of mitigation but this will not be known until further assessment carried out. • Significant landscape impacts and it is not clear whether these will be capable of mitigation. Further assessment will be required and the scale and method of working to be taken into consideration. • Site is agricultural land, which will be lost for a period of time. However, expected to be restored to current use, and is a relatively small area. • Limited climate change impacts would be expected, but site is small in scale and intensity of working is low. • Developing the site will have transport related impacts. However, the level of vehicle movements is low and the site will be worked as an extension, so there will be no intensification of working or cumulative impacts. • No expected issues regarding airfield proximity – no wet working or restoration. • There will be public access impacts as the statutory footpath deviates from its line and crosses the western part of the site. Another path, non-statutory, crosses the eastern part of the site. These will need to be re-routed and the western path may need to be screened. Restoration may make it possible to improve/formalise access across the site.

Overall Recommendation:

The assessment has identified potentially significant impacts from the working of this site, including landscape, historic environment and amenity issues. It is not clear at this stage whether these can be satisfactorily mitigated and further assessment will be required.

Key issues/impacts are hydrology/hydrogeology, archaeology and historic landscapes, landscape and visual impacts and impacts on designated landscape, amenity (particularly on nearby residences) and rights of way/access.

In addition, the site has been withdrawn by the site nominees from the Mineral Sites Plan site allocation process and therefore will not be taken forward.

The benefits of developing this site are not considered to outweigh the impacts of working here. **At this time** other sites are considered to be more appropriate options for supplying other building stone.

It is **recommended** that this site should not be included in the emerging Mineral Sites Plan

Ball Clay: BC05 Doreys – Holme Heath

Site Name/Location: BC05 Doreys – Holme Heath **Mineral Type:** Ball Clay		**Nominee/Agent**: Imerys **Local Authority:** Purbeck District Council
Site Area: approximately 27 ha	**Production:** c. 79,000 tpa;	**Reserve:** approximately 440,000 tonnes

Impact Assessment Scoring

- -	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain

Timescales for effects:

P/W: Preparation and Working **R/A**: Restoration and Afteruse

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
19. To move waste management up the waste hierarchy and promote net self sufficiency	**N/A**	**N/A**	• This Objective is not relevant to this site nomination	• N/A
20. To maintain, conserve and enhance biodiversity	–	**?**	**European/International Designations** • With European designated heathland almost entirely surrounding the proposed area it is difficult without any further information to come to any other conclusion than mineral extraction would be likely to have adverse effects on the designated areas. • The existing field is currently acidic grassland and almost certainly contributes to supporting Annex 1 birds in the neighbouring designated	• Ecological surveys and hydrological reports required, identifying likely impacts together with possible mitigation for any impacts. • Appropriate assessment under the

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	– –		areas. Further, the field drains from the south-east downslope to the north-west corner, where it feeds the mire system within the designated area; it would be almost impossible to adequately mitigate hydrological effects of extensive working in the field, and certainly impossible to recreate the complex natural topography which the field currently exhibits. • Following detailed study, it might be possible to demonstrate no adverse effect on integrity of very limited working in the easternmost part of the field, where the land slopes to the east and water drains away from the mire.	Habitat Regulations will be required.
	–	?	**Annex 1 Bird Species** • With European designated heathland almost entirely surrounding the proposed area it is difficult without any further information to come to any other conclusion than mineral extraction would be likely to have adverse effects on the designated areas. • The existing field is currently acidic grassland and almost certainly contributes to supporting Annex 1 birds in the neighbouring designated areas. Further, the field drains from the south-east downslope to the north-west corner, where it feeds the mire system within the designated area; it would be almost impossible to adequately mitigate hydrological effects of extensive working in the field, and certainly impossible to recreate the complex natural topography which the field currently exhibits. • Following detailed study, it might be possible to demonstrate no adverse effect on integrity of very limited working in the easternmost part of the field, where the land slopes to the east and water drains away from the mire.	• Ecological surveys and hydrological reports required, identifying likely impacts together with possible mitigation for any impacts. • Appropriate assessment under the Habitat Regulations will be required.
	– –			

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	– / – –	?	**National Designations** • With European designated heathland almost entirely surrounding the proposed area it is difficult without any further information to come to any other conclusion than mineral extraction would be likely to have adverse effects on the designated areas. • A rich invertebrate assemblage is likely to be present in the field which helps to support the adjacent SSSI. • The existing field is currently acidic grassland and almost certainly contributes to supporting Annex 1 birds in the neighbouring designated areas. Further, the field drains from the south-east downslope to the north-west corner, where it feeds the mire system within the designated area; it would be almost impossible to adequately mitigate hydrological effects of extensive working in the field, and certainly impossible to recreate the complex natural topography which the field currently exhibits. • Following detailed study, it might be possible to demonstrate no adverse effect on integrity of very limited working in the easternmost part of the field, where the land slopes to the east and water drains away from the mire.	• Ecological surveys and hydrological reports required, identifying likely impacts together with possible mitigation for any impacts. • Appropriate assessment under the Habitat Regulations will be required.
	– / – –	?	**Protected species** • The field is likely to support common protected reptiles throughout and may support European protected reptiles, Sand Lizard and Smooth Snake. • The size of the population will determine how easy or difficult it is to achieve adequate mitigation and a disturbance licence from NE if required.	• Ecological surveys and hydrological reports required, identifying likely impacts together with possible mitigation for any impacts. • Appropriate assessment under the Habitat Regulations will be required.
	0	0	**Local recognitions/designations, including ancient woodland and veteran trees** • No likely impacts expected.	• No action required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
21. To maintain, conserve and enhance geodiversity.	+	0	• Exposures resulting from working may be of interest to the quaternary and tertiary research associations. Benefits are only expected during working, and are likely to be obscured or covered as part of restoration.	• Provision should be made so that it will be possible to arrange visits on request.
22. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	?	?	**Groundwater** • Licensed water supply site 500m to north west. No impact on SPZs. Site overlies a secondary aquifer and is in proximity to conservation designations and any associated water features. • It is stated under Sustainability Objective 1 above that the field drains from the south-east downslope to the north-west corner, where it feeds the mire system within the designated area; it would be almost impossible to adequately mitigate hydrological effects of extensive working in the field, and certainly impossible to recreate the complex natural topography which the field currently exhibits. • Following detailed study, it might be possible to demonstrate no adverse effect on integrity of very limited working in the easternmost part of the field, where the land slopes to the east and water drains away from the mire.	• Hydrological assessment required to determine possible impacts on ground and surface waters and on any wet heath / mires that might exist in adjacent designated sites, with appropriate mitigation to be identified/implemented. • Where necessary mitigating measures should be installed to maintain groundwater levels. • Appropriate arrangements should be put in place to ensure that the water leaving the site and entering the rivers/watercourses is of an acceptable quality. • Any fuel on site should be properly stored to avoid contamination in case of spillage. • Appropriate arrangements should be installed for surface water and silt collection and fuel storage to prevent contamination of groundwater resources. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.
	?	?	**Surface Water** • There are ponds within 250m of the site. • Assessment required to determine possible impacts on hydrogeology. • Impacts to be appropriately mitigated.	
23. To reduce flood risk and improve flood management.	0	0	**Flooding/Coastal Stability** • Entire site is within Flood Risk Zone 1, no expected risk of flooding or contributing to flooding.	• Flood Risk Assessment (FRA) will be required. • All necessary mitigation to be implemented.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
24. 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).	?	?	**Archaeology** • The Squirrels Cottage barrows to the north-west are protected as a Scheduled Monument. The impact on their setting and on any below-ground archaeology on the site needs to be assessed and evaluated before an informed planning decision can be made. • Archaeological assessment and evaluation is required. Only when these have been undertaken would the archaeological impact be understood – at present it could be anywhere from Very Significant to No Significant Impact.	• Full archaeological survey of the area required to assess possible presence and significance of non-designated remains and to assess whether/how these should be protected during working. • All necessary mitigation to be implemented. • Adequate provision to be made for preservation, excavation or recording, as appropriate. • Further consideration to be given to restoration proposals, in terms of historic landscapes.
	?	?	**Historic Landscapes** • Historically the site was heathland. This forms part of the setting of the scheduled Squirrels Cottage barrows. • Sympathetic restoration to heathland would be rated as No Significant Impact – a lack of this would be Significant Adverse Impact.	
	0	0	**Historic Buildings** • Listed buildings too far away to be affected, therefore the site considered to have negligible impact on the listed buildings.	• No action required.
25. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	–	0	**Landscape Capacity** • Visually relatively remote and inaccessible despite being adjacent to open access land. • There may therefore be some opportunity for extraction, based on this aspect of the assessment, particularly in the lower lying less visible north western section of the site. • Planning of ball clay extraction would therefore need to consider the merits of these landscape issues in association with the key ecological issues.	• Assessment of potential visual impacts required. • All appropriate mitigation to be included. • Restoration to consider increasing public access/informal recreation and to include nature conservation interests. • Appropriate restoration proposals in line with Landscape Management Guidelines referred to in Minerals Strategy.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	0	0	**Designated Landscapes** • Less significant adverse impact	• No action required.
26. To protect and improve air quality and reduce the impacts of noise.	0	0	• Impacts on air quality at/around the site expected to be negligible. • No AQMAs will be directly affected by the working of this site proposal. Any dust resulting from working will be controlled through normal dust-suppression measures. • Ball clay traffic travelling to/from Devon along the A35 would have some impact on the Chideock AQMA. • Any impacts due to noise resulting from mineral working would be expected to be satisfactorily minimised through normal noise mitigation measures, imposed at the planning application stage.	• Environmental protection measures to be put in place to reduce dust and noise impacts. • Existing measures to address air quality in Chideock AQMA would minimise impacts due to ball clay transport.
27. To maintain, conserve and enhance soil quality.	–	0	• The site comprises primarily heathland, grassland and woodland cover. The area is a former heathland area and so would be expected to have relatively poor, acidic soils. • Site preparation/working would require stripping and storage of the soils, with some impacts on them. • If the site is worked and restored to heathland this will require reinstatement/retention of acidic soils with their seedbank.	• Soil is poor quality in agricultural terms but valuable in terms of potential for heathland restoration. • Soils to be stored/protected during preparation and working and properly reinstated during restoration.
28. To conserve and safeguard mineral resources.	+	0	• The site would make an important contribution to the supply of ball clay.	• No specific action required; site development to take into consideration relevant impacts and mitigate where appropriate.
29. To promote the use of alternative materials.	0	0	• This proposal does not at present promote the use of alternative materials.	• No action required.
30. To provide an adequate and affordable supply of minerals to meet society's needs.	+	0	• Development of this site would provide a benefit in terms of contributing to the provision of a supply of minerals to meet society's needs. • Ensuring a sustainable supply will depend on the development and management of the site.	• Ensure principles of sustainable development are incorporated into the development of this site.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			• Providing site development takes into account relevant principles of sustainable development it is expected this will contribute to complying with this objective.	
31. To promote and encourage sustainable economic growth	+	0	• This site proposal is expected to contribute to economic development on two levels – directly through the provision of employment at the site to be developed and indirectly through the provision of ball clay and aggregate minerals required for the maintenance of built environment and for new built development and for commercial/industrial uses. • Both levels are expected to maintain employment, skilled and unskilled. However given the expected size of the reserve this is likely to be a limited benefit. • Proposed restoration is to heathland/agriculture, both of which offer economic benefits.	• Further assessment required to consider restoration options.
32. To adapt to and mitigate the impacts of climate change.	–	0	• Developing land as a quarry is expected to have some negative impacts regarding climate change, due primarily to machinery used and transportation of mineral away from site. However, these will in relative terms be negligible. • The Bournemouth, Dorset and Poole Minerals Strategy seeks to address and minimise such impacts through Policy CC1 which requires operators to take into consideration climate change impacts and their possible mitigation for any proposed minerals development. • The development management policies, e.g. DM 1, also address and seek to minimise the issue of sustainable development and climate change. • Restoration to some form of vegetated environment will offer benefits in the form of climate change mitigation, including provision of habitat for wildlife, but again these will be relatively small.	• Use energy efficient plant and machinery. • Implement restoration which provides appropriate habitats to help to increase resilience of flora/fauna.
33. To minimise the negative impacts of waste and minerals transport on the transport network,	–	0	• This proposed site is a small working close to the current Doreys site and is accessed via an existing, adequate, entry onto Holme Lane. Access to the A351 is gained a short distance to the east via Holme Lane and West Lane. • The site details show a traffic generation of 20 to 25 vehicles per day. However, if this site comes into operation it is thought that it would follow	• Any proposal for this site would need to be accompanied by a Transport Assessment which will need to provide access details and consider vehicle routing. The TA should

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
mitigating any residual impacts.			the cessation of extraction at this and other local pits. There would therefore not be an overall increase in traffic. • If it is in operation simultaneously with other sites, could give rise to cumulative impacts, the impacts of which would need to be addressed. • As the site is not expected to come forward in parallel with the existing operations at this pit, and there are relatively good links with the strategic network, there is unlikely to be any noticeable increase in traffic and it has been given a 'Less Significant Adverse Impact' to 'No Significant Adverse Impact' rating. If the site were to come forward earlier, then consideration would need to be given to the routing of vehicles between the site, any processing facility and the A351. • Policies DM1 and DM 8 actively address this issue of minimising impacts on the transportation network.	be scoped with the Transport Development Management Team. • Transport Assessment to be carried out, identifying opportunities for reducing impacts on the transport network. • Alternative options to be investigated.
34. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	–	**0**	• The proposed extension can only realistically be accessed by means of road transport, resulting in a negative impact under this Objective during development and working. • As far as reasonably possible negative impacts resulting from access and transport will be mitigated, as required by Policies DM1 and DM8 of the Minerals Strategy.	• Mitigate impacts where identified and where appropriate.
35. To sustain the health and quality of life of the population	**?**	**0**	**Impact on Sensitive Human Receptors** • Closest residences within 400-800m. Site is well screened and not visible from residences. • Proposed site is immediately adjacent to rifle range. • Lorry traffic would have impacts on some settlements. This issue is mentioned under Objective 15 above. • Policies DM1 and DM 8 actively address this issue of minimising impacts on the transportation network. Other mitigation can be implemented as considered necessary. • Development would likely require appropriate mitigation (such as visual and noise attenuation	• Appropriate mitigation to be implemented, following assessment of likely impacts – visual, transport or other. • Restoration to improve landscape of site where possible; and to seek to increase public access.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			bunding, standoffs) to limit impacts. Adequate scope to screen works, using mitigation such as visual and noise attenuation bunds.	• Transport Assessment to be carried out, identifying opportunities for reducing impacts on the transport network where appropriate.
	–	0	**Impact on Existing Settlements** • Stoborough Heath is closest settlement at approximately 800m, site is well screened and would not be visible. • Lorry traffic would have impacts on some settlements. This issue is mentioned under Objective 15 above. • Policies DM1 and DM 8 actively address this issue of minimising impacts on the transportation network. Other mitigation can be implemented as considered necessary.	
	0	0	**Impact on Airport Safety** • Site is approximately 24 km from the airport and not proposed for wet working or wet restoration. Not expected to have an impact on the airport.	• No action required.
36. To enable safe access to countryside and open spaces.	0	0	**Impact on Recreational Land** • Site is private land with no public access. No formal or informal recreational use.	• No action required
	–	0	**Impact on Public Rights of Way** • Bridleway runs adjacent to eastern edge of site. It can be screened as required.	• Appropriate mitigation, such as visual screen bunding, to be provided as required.

Preliminary Hydrological Risk Assessment

Controlled Waters	Issues/Risks	Mitigation	Further information or approval that may be required
• Watercourses • Ponds/lakes, including wet habitats • Groundwater	• The River Basin Management Plan South West River Basin District identifies the Frome (the closest main river, some 850m distant) as being of 'Poor' environmental quality. Potential for contamination from runoff from site. • Potential for contamination of controlled waters through spillage or seepage of pollutants such as fuel, or silt in water. • Potential impacts on existing surface water or ground water features – water flows through site to feed downstream designations.	• Appropriate arrangements to be made for ensuring that runoff from the site does not enter the surface or groundwater drainage unless any silt has first been removed. • Fuel stored on site to be appropriately bunded and sealed to prevent any spillage from entering ground or surface waters. • On-going monitoring during development and working of the site. • Ground water recharge if considered necessary.	• Full hydrogeological assessment to consider possible impacts of working this site and any required mitigation. • Flood Risk Assessment • Water Framework Assessment • Further assessment of potential impacts on water quality and levels, particularly for groundwater, is required prior to development. • Assessment of the feasibility of relocating ponds and associated habitats and species. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.

Cumulative Impacts

There is other mineral working in the vicinity, both existing and proposed. The proposed site is an extension, although not directly adjacent, to an existing ball clay quarry. It is not clear at this stage when this site could commence working and whether it might operate at the same time as the current quarry. If that was to happen, this proposed site would have cumulative impacts, which would need to be addressed.

The proposal is within 5Km (by road) of a site allocated in the Purbeck Local Plan Part 1 (adopted Nov 2012) (Policy CEN) for development of 200 dwellings and community facilities, off Worgret Road, Wareham. Traffic arising from the new residential development will also add to general traffic levels in / around Wareham.

Summary.

Potential Benefits	Potential Impacts
• Contributions to the supply of ball clay, a nationally important mineral. • Economic benefits at local and wider levels.	• Potentially significant ecological impacts – it is expected that full Appropriate Assessment will be required, identifying impacts and required mitigation. • Significant effects expected on hydrology, especially hydrogeology, as water flows through site to feed downstream designations – full assessment and mitigation will be required. Will be related to ecological assessment. • Archaeological impacts possible, but not known until assessment – appropriate mitigation to be identified and applied. • Possible limited landscape impacts, further assessment required. • Site access and mineral transport will be by road – further assessment required to establish likely impacts and identify possible mitigation. • Possibility of cumulative impacts if the site is worked simultaneously with other in the vicinity. • Impacts on adjacent bridleway, to be mitigated by screening.

Overall Recommendation:

On the basis of the evidence available it does not appear that there is sufficient certainty that the impacts identified in this sustainability appraisal are currently capable of satisfactory mitigation. Further information will be required to determine likely impacts and whether these can be satisfactorily mitigated.

The site remains part of the mineral resource of Bournemouth, Dorset and Poole but is not at this time included in the Draft Bournemouth, Dorset and Poole Mineral Sites Plan.

The benefits of developing this site are not considered to outweigh the impacts of working here. **At this time** other sites are considered to be more appropriate options for supplying aggregate.

It is **recommended** that this site should not be included in the emerging Mineral Sites Plan

Portland Stone: PS01 Bower's Mine, Weston, Portland

-Site Name/Location:	Nominee: Albion Stone plc Local Authority: Weymouth and Portland Borough Council Mineral Type: Portland Stone	Site Area: approximately 2.6 ha Production: up to 6,800 tonnes per annum Reserve: up to 45,000 tonnes
PS01 Bower's Mine, Weston, Portland		

Impact Assessment Scoring

- -	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain

Timescales for effects:

P/W: Preparation and Working **R/A**: Restoration and Afteruse

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
1. To move waste management up the waste hierarchy	N/A	N/A	• This Objective is not relevant to this site nomination	• N/A
2. To maintain, conserve and enhance biodiversity	0	0	**European/International Designations** • No impacts expected.	• No action required.
	0	0	**Annex 1 Bird Species** • No impacts expected.	• No action required.
	?	0	**National Designations** • The only issue for the Isle of Portland SSSI designation is the potential delay in restoration of Bowers Quarry.	• As far as possible minimise delays to restoration of Bowers Quarry. • Identify whether additional benefits for SSSI can be achieved through this proposed development.
	0	0	**Protected species** • No impacts expected.	• No action required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	0	0	**Local recognitions/designations, including ancient woodland and veteran trees** • No impacts expected.	• No action required.
3. To maintain, conserve and enhance geodiversity.	0	0	• Underground mining on Portland is in keeping with the conservation of the Jurassic Coast and its setting. • Geodiversity interests are expected to be limited, as compared to quarrying.	• Visits or other investigation of working sites may be requested.
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	?	0	**Groundwater** • No impacts expected, but assessment required to ensure no impacts on/from cemetery above. No impacts on any Source Protection Zone. • Environment Agency indicate Hydrological Risk Assessment and Flood Risk Assessment will be required.	• Simple hydrological assessment required to determine possible impacts, on ground and surface waters, with appropriate mitigation to be implemented. • Appropriate arrangements should be put in place to ensure that the water leaving the site and entering the watercourses or groundwater is of an acceptable quality. • Any fuel on site should be properly stored to avoid contamination in case of spillage. • Appropriate arrangements should be installed for surface water and silt collection and fuel storage to prevent contamination of groundwater resources.
	0	0	**Surface Water** • No impacts expected	
5. To reduce flood risk and improve flood management.	0	0	**Flooding/Coastal Stability** • Site is entirely in Flood Risk Zone 1, no risk of flooding.	• No action required.
6. To maintain, conserve and enhance the historic environment (including archaeological sites, historic buildings,	?	0	**Archaeology** • The ground above is a churchyard and cemetery. Clearly disturbance of human remains is an issue that needs to be considered, even if the recent burials in particular are not considered 'archaeological' in most people's opinion. • If disturbance of burials can be avoided, the impact would be D ('No Significant or	• Further assessment required to assess/ensure mining of the stone under the cemetery would have no impacts on the burials above. • Development will be subject to the normal controls, established at the

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
conservation areas, historic parks and gardens and other locally distinctive features and their settings).			Negligible Adverse Impacts') but if it is not clear that this would be the case, archaeological assessment and evaluation may be one way of providing information on the likely impact.	planning application stage, to ensure there is no risk of surface impacts or subsidence during or after working.
	0	**0**	**Historic Landscapes** • Quarrying is a historic activity on Portland and has done much to shape its landscape. A first impression is that underground working would not have a visible impact on this landscape, but there may be impact from associated infrastructure and possibly from subsidence.	
	0	**0**	**Historic Buildings** • If engineers can confirm that the depth of the mine beneath the surface is sufficient that neither the cemetery walls, the graveyard burials and tombstones nor the Church of St George would have their stability affected by this then the impact will be negligible as they already stand in a quarry landscape.	• Full assessment required to ensure no stability issues.
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	**0**	**0**	**Landscape Capacity** • No landscape and visual issues apart from the potential for this to delay the restoration of the rest of the Bowers areas.	• No action required, apart from, as far as possible, minimising delays to the restoration of Bowers Quarry.
	0	**0**	**Designated Landscapes** • No significant/negligible impacts.	
8. To protect and improve air quality and reduce the impacts of noise.	**0**	**0**	• Impacts on air quality expected to be negligible. • No AQMAs will be affected by the working of this site proposal. Any dust resulting from working will be controlled through normal dust-suppression measures. • Noise mitigation will be addressed at the planning application stage, with appropriate mitigation to be included in the development of the site.	• Environmental protection measures to reduce dust and ensure noise is appropriately mitigated.
9. To maintain, conserve and	**0**	**0**	• No impacts expected	• No action required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
enhance soil quality.				
10. To conserve and safeguard mineral resources.	+ +	0	• The site would make an important contribution to the supply of Portland Stone to all potential markets.	• No specific action required. • Site development to take into consideration relevant impacts and mitigate where appropriate.
11. To promote the use of alternative materials.	–	0	• This proposal does not promote the use of alternative materials.	• No action required.
12. To provide an adequate and affordable supply of minerals to meet society's needs.	+	0	• Development of this site would provide a benefit in terms of contributing to the provision of a supply of minerals to meet society's needs. Ensuring a sustainable supply will depend on the development and management of the site. • Providing site development takes into account relevant principles of sustainable development it is expected this will contribute to complying with this objective.	• Ensure principles of sustainable development are incorporated into the development of this site.
13. To promote and encourage sustainable economic growth	+	0	• This site proposal is expected to contribute to economic development on two levels – directly through the provision of employment at the site to be developed and indirectly through the provision of Portland Stone required for new build, repairs and maintenance and decorative/monument work. Both levels are expected to maintain employment, skilled and unskilled.	• No action required.
14. To adapt to and mitigate the impacts of climate change.	–	0	• Developing the proposed mine is expected to have some negative impacts regarding climate change, due primarily to machinery used and transportation of mineral away from site. However, these will in relative terms be negligible. • The Bournemouth, Dorset and Poole Minerals Strategy seeks to address and minimise such impacts through Policy CC1 which requires operators to take into consideration climate	• Use energy efficient plant and machinery.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
			change impacts and their possible mitigation for any proposed minerals development. • The development management policies, e.g. DM 1, also address and seek to minimise the issue of sustainable development and climate change.	
15. To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any residual impacts.	–	0	• This proposal is for an extension to the existing Bower's Mine site. Traffic is not expected to increase and the existing, adequate, access will be used. • The A354 is accessed a short distance from the site. To exit the local area this road passes through Fortuneswell and Weymouth to the north. Access to this site does impact upon existing settlements; however, as there is not expected to be any increase over the existing operation, the site has been given a C ('Less Significant Adverse Impact') rating. • Policies DM 1 and DM 8 of the Minerals Strategy actively address this issue of minimising impacts on the transportation network.	• Any proposal for this site would need to be accompanied by a Transport Assessment which will need to provide access details and consider vehicle routing. The TA should be scoped with the Transport Development Management Team. • The Transport Assessment will identify opportunities for reducing impacts on the transport network.
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	–	0	• The proposed extension can only realistically be accessed by means of road transport, resulting in a negative impact under this Objective during development and working. • As far as reasonably possible negative impacts resulting from access and transport will be mitigated, as required by Policies DM 1 and DM 8 of the Minerals Strategy.	• Mitigate impacts where identified and appropriate.
17. To sustain the health and quality of life of the population	?	0	**Impact on Sensitive Human Receptors** • Site proposal is for mining, accessed from existing quarry. Site boundary is approximately 60m from residential properties and adjacent to listed church building. However as a mine impacts on these are expected to be minimal. • Most significant receptor is the cemetery under which the proposal lies. No physical impact is anticipated as the roof of the mine will be metres below the depth of the graves.	• The Church of England have indicated that there is no problem mining under the cemetery, provided there is no impact on the burials. • Full assessment will be required to ensure no impacts on burials or structures. Any required

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
			• More relevant will be the perceived impact of mining under a cemetery and also the views of the Church as to whether there will be possible issues with consecrated ground. More research is required to determine the extent of possible impact. Rating could vary between A ('Very Significant Adverse Impact') and D ('No Significant or Negligible Adverse Impacts'), depending on the outcome of further investigations.	mitigation to be implemented.
	0	**0**	**Impact on Existing Settlements** • No impacts expected, apart from traffic impacts. These are addressed elsewhere in this report.	
	0	**0**	**Impact on Airport Safety** • No impacts expected	• No action required.
18. To enable safe access to countryside and open spaces.	**0**	**0**	**Impact on Recreational Land** • No impacts expected	• No action required.
	0	**0**	**Impact on Public Rights of Way** • No impacts expected	

Preliminary Hydrological Risk Assessment

Controlled Waters	Issues/Risks	Mitigation	Further information/approval required

• Watercourses • Ponds/lakes, including wet habitats • Groundwater	• Potential for contamination through spillage or seepage of pollutants such as fuel or silt in water.	• Appropriate arrangements to be made for ensuring that runoff from the site does not enter the groundwater unless any silt has first been removed. • Fuel stored on site to be appropriately bunded and sealed to prevent any spillage from entering ground or surface waters. • On-going monitoring during development and working of the site.	• Full hydrogeological risk assessment will be required as part of a planning application. • Flood Risk Assessment • Water Framework Assessment

Cumulative Impacts

Site proposal is an extension of a mining operation in an area with a long history of quarrying. As an extension it is not expected to lead to cumulative impacts.

The proposal is within 5Km of land allocated for major employment development (8.6Ha) at Osprey Quay, Portland (Policy PORT 1) and for residential development (380 dwellings) at the Former Hardy Complex, Portland (Policy PORT2) in the Pre -Submission draft West Dorset, Weymouth and Portland Local Plan (June 2012) as amended by Proposed Modifications (June 2013). Traffic arising from the new development will add to general traffic levels on the A354.

Summary.

Potential Benefits	Potential Impacts on...
• Provision of Portland Stone. • Support for the Portland Stone industry and employment, both locally and wherever the stone is exported and used, with associated economic benefits. • Use of the stone for heritage building works/repairs, and for new buildings.	• Expected impact on Portland SSSI, through delaying restoration of Bowers Quarry. • Mining under the cemetery, and under the buildings/structures could have both physical and perceived impacts. Full assessment required to ensure there will be no impacts on burials or structures. • Water/water quality could be impacted and a hydrological assessment to determine possible impacts/mitigation will be required. • Transport impacts on settlements are expected, but as an extension no intensification is expected. A Transport Assessment will be required at planning application stage, with appropriate mitigation identified.

Overall Recommendation:

Assessment already carried out has flagged up local amenity (in the sense of perceived impacts of mining under graves), archaeology/historic buildings and traffic as the key issues to be addressed as part of working land within this site nomination. Further assessment will be required at planning application stage to identify satisfactory mitigation and to identify if there are any additional impacts that will require mitigation.

As the site is an extension of an existing site, it is expected that any impacts should be capable of satisfactory mitigation.

~~Subject to the completion of all necessary assessments and providing that any impacts are capable of satisfactory mitigation, it appears reasonable on the basis of evidence available that the site nomination can reasonably be included in the Draft Bournemouth, Dorset and Poole Mineral Sites Plan.~~

This site has been permitted, following planning application.

Portland Stone: PS02 Perryfield Quarry Extension, Portland

Site Name/Location: **PS02 Perryfield Quarry Extension, Portland**	**Nominee:** Stone Firms Ltd **Agent**: **Local Authority**: Weymouth and Portland **Mineral Type**: Portland Stone	**Site Area**: **Production** **Reserve**:

Impact Assessment Scoring

- -	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain

Timescales for effects:

P/W: Preparation and Working **R/A**: Restoration and Afteruse

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
1. To move waste management up the waste hierarchy	**N/A**	**N/A**	• This Objective is not relevant to this site nomination	• N/A
2. To maintain, conserve and enhance biodiversity	**0**	**0**	**European/International Designations** • No impacts expected.	• No action required.
	0	**0**	**Annex 1 Bird Species** • No impacts expected.	• No action required.
	0	**0**	**National Designations** • No impacts expected.	• No action required.
	0	**0**	**Protected species** • No impacts expected.	• No action required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
	0	**0**	**Local recognitions/designations, including ancient woodland and veteran trees** • Providing that the over- and inter-burden from quarrying can be stored away from SNCIs such as Bottomcoombe SNCI and other areas supporting calcareous grassland habitat then any effects are likely to be insignificant.	• No action required.
3. To maintain, conserve and enhance geodiversity.	**+**	**0**	• Existing interests and access requirements for scientific or educational study remain.	• Permit access to site where appropriate. • Retain geological face after working if possible and if appropriate.
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	**0**	**0**	**Groundwater** • Criteria classification ''Less Significant Adverse Impact'' as on a Secondary Aquifer. No impact on Source Protection Zones.	• No impacts expected and no action required.
	0	**0**	**Surface Water** • Criteria classification ''No Significant or Negligible Adverse Impacts'' as there are no watercourses within 500m.	
5. To reduce flood risk and improve flood management.	**0**	**0**	**Flooding/Coastal Stability** • Entire site is within Flood Risk Zone 1. No impact on coastal stability.	• No action required.
6. To maintain, conserve and enhance the historic environment (including archaeological sites, historic buildings, conservation areas, historic parks and gardens and	**?**	**0**	**Archaeology** • Unquarried areas of Portland are recognised as having high archaeological potential, and the lawnsheds are mentioned below. • Archaeological assessment and evaluation would be required before an informed planning decision could be made. Only when these have been undertaken would the archaeological impact be understood – at present it could be anywhere from at present it could be anywhere from 'Very Significant' to 'No Significant' impacts.	• Further assessment of possible impacts and appropriate mitigation will be required. • All necessary mitigation to be implemented.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
other locally distinctive features and their settings).	_ ?	–	**Historic Landscapes** • Lawnsheds are a distinctive feature of the Portland landscape. These are strip fields, probably of Medieval date, which were often in individual ownerships. • The site is within an area of such lawnsheds, and although they have been adversely affected by various developments, several original boundaries survive. The impact of quarrying on these would depend upon how the working and restoration methods employed.	
	0	**0**	**Historic Buildings** • There is no significant impact on the nearest listed building (the windmill) or its setting. The building has been stabilised in the past though having a keep out sign on it. • The quarrying is far enough away not to affect the foundations and the before and after settings should be very similar if not exactly the same. Assessment D ('No Significant Impact') therefore.	• No action required.
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	– –	**?**	**Landscape Capacity** • Further open quarrying would be inappropriate in particular due to the site's contribution to the current intactness of the whole area as a unified and undeveloped area of open space close to and overlooked by residential properties and rights of way. • Despite some visually detracting features, further quarrying would negatively impact on key characteristics and its amenity, recreational and historic value and its value as an open undeveloped buffer and setting for adjacent properties and the adjacent conservation area. It is viewed by 'sensitive receptors' i.e. people in residential properties and those engaged in the landscape for recreational/amenity benefits.	• Further assessment required to consider whether any mitigation is possible, and what it should be. • If mitigation is possible, all appropriate mitigation to be implemented as and when needed.
	0	**0**	**Designated Landscapes** • No impacts expected.	• No action required.
8. To protect and improve air quality and	**0**	**0**	• Impacts on air quality expected to be negligible. • No AQMAs will be affected by the working of this site proposal. Any dust resulting from working	• Environmental protection measures to reduce dust and ensure

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
reduce the impacts of noise.			will be controlled through normal dust-suppression measures. • Noise mitigation will be addressed at the planning application stage, with appropriate mitigation to be included in the development of the site.	noise is appropriately mitigated.
9. To maintain, conserve and enhance soil quality.	–	0	• Site is 'Good to Moderate' agricultural land. • Soils will be stripped and protected during preparation and working and reused on site as part of restoration.	• Soil to be properly stripped and stored prior to working; protected during working; and re-spread on site after working.
10. To conserve and safeguard mineral resources.	+ +	0	• The site would make an important contribution to the supply of Portland Stone for Bournemouth, Dorset and Poole and all other potential markets.	• No specific action required; site development to take into consideration relevant impacts and mitigate where appropriate.
11. To promote the use of alternative materials.	–	0	• This proposal does not promote the use of alternative materials.	• No action required.
12. To provide an adequate and affordable supply of minerals to meet society's needs.	+	0	• Development of this site would provide a benefit in terms of contributing to the provision of a supply of minerals to meet society's needs. • Ensuring a sustainable supply will depend on the development and management of the site. Providing site development takes into account relevant principles of sustainable development it is expected this will contribute to complying with this objective.	• Ensure principles of sustainable development are incorporated into the development of this site.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
13. To promote and encourage sustainable economic growth	+	0	• This site proposal is expected to contribute to economic development on two levels – directly through the provision of employment at the site to be developed and indirectly through the provision of Portland Stone required for new build, repairs and maintenance, decorative and monument work and landscaping work. • Both levels are expected to maintain employment, skilled and unskilled.	• No further action required.
14. To adapt to and mitigate the impacts of climate change.	–	0	• Developing land as a quarry is expected to have some negative impacts regarding climate change, due primarily to machinery used and transportation of mineral away from site. However, these will in relative terms be negligible. • The Bournemouth, Dorset and Poole Minerals Strategy seeks to address and minimise such impacts through Policy CC1 which requires operators to take into consideration climate change impacts and their possible mitigation for any proposed minerals development. • The development management policies, e.g. DM 1, also address and seek to minimise the issue of sustainable development and climate change.	• Use energy efficient plant and machinery. • Implement restoration which provides appropriate habitats to help to increase resilience of flora/fauna.
15. To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any residual impacts.	–	0	• This proposal is for an extension to the existing Perryfield Quarry. Traffic is not expected to increase over the current levels and the existing, adequate, access will be used. • The A354 is accessed a short distance from the site. To exit the local area this road passes through Fortuneswell and Weymouth to the north. • Access to this site does impact upon existing settlements, however, as there is not expected to be any increase over the existing operation, the site has been given a C ('Less Significant Adverse Impact') rating. • Policies DM1 and DM 8 of the Minerals Strategy actively address this issue of minimising impacts on the transportation network.	• Any proposal for this site would need to be accompanied by a Transport Assessment which will need to provide access details and consider vehicle routing. The TA should be scoped with the Transport Development Management Team. • Transport Assessment will identify opportunities for reducing impacts on the transport network.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	–	0	• The proposed extension can only realistically be accessed by means of road transport, resulting in a negative impact under this Objective during development and working. • As far as reasonably possible negative impacts resulting from access and transport will be mitigated, as required by Policies DM1 and DM8 of the Minerals Strategy.	• Mitigate impacts where identified and appropriate. • Transport Assessment to be carried out, identifying possible impacts and opportunities for reducing impacts on the transport network.
17. To sustain the health and quality of life of the population	– –	0	**Impact on Sensitive Human Receptors** • Residential properties within 50m to the south; adjacent to existing housing at Shortlands to the north and within 300m to the west. Further assessment and information required regarding screening and stand-offs.	• Further assessment required to consider whether this development may be possible. • If it goes ahead, appropriate mitigation to be provided following assessment of likely impacts. • Screening, bunding, standoffs will be used to mitigate impacts where considered necessary.
	– –	0	**Impact on Existing Settlements** • Site is surrounded by settlements of Easton and Weston, being adjacent to existing properties to the north. The existence of the Important Open Gap identified in the Weymouth and Portland Adopted Local Plan 2005 must be taken into consideration.	
	0	0	**Impact on Airport Safety** • Site is far removed (approximately 50km) from airport. No impacts expected.	• No action required.
18. To enable safe access to countryside and open spaces.	–	+	**Impact on Recreational Land** • No formal recreational use; land shows signs of pathways indicating informal use for walking.	• If development goes ahead, opportunities for restoration to improve landscape of site where possible to be considered; and to seek to facilitate public access.
	– –	+	**Impact on Public Rights of Way** • Footpaths to west, east and north of site. Footpath to north of site is adjacent to site boundary. Further assessment on screening required.	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
				• Any impacts on rights of way to be mitigated.

Preliminary Hydrological Risk Assessment

Controlled Waters	Issues/Risks	Mitigation	Further information/approval required
• Watercourses • Ponds/lakes, including wet habitats • Groundwater	• Potential for contamination through spillage or seepage of pollutants such as fuel, or silt in water.	• Appropriate arrangements to be made for ensuring that runoff from the site does not enter the groundwater unless any silt has first been removed. • Fuel stored on site to be appropriately bunded and sealed to prevent any spillage from entering ground or surface waters. • On-going monitoring during development and working of the site.	• Full hydrogeological risk assessment will be required as part of a planning application. • Flood Risk Assessment • Water Framework Assessment • Further assessment of potential impacts on water quality and levels, particularly for groundwater, is required prior to development. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.

Cumulative Impacts

Site nomination comprises a new proposal in an area where there is a high concentration and long history of mineral extraction.

The proposal is within 5Km of land allocated for major employment development (8.6Ha) at Osprey Quay, Portland (Policy PORT 1) and for residential development (380dwellings) at the Former Hardy Complex, Portland (Policy PORT2) in the Pre -Submission draft West Dorset, Weymouth and Portland Local Plan (June 2012) as amended by Proposed Modifications (June 2013). Traffic arising from the new development will add to general traffic levels on the A354.

Summary.

Potential Benefits	Potential Impacts on...
• Provision of Portland Stone. • Support for the local stone industry and employment, both locally and wherever Portland Stone is exported and used, with associated economic benefits. • Use of the stone for heritage building works/repairs, and for new buildings. • Geodiversity benefits, through exposures created and fossils found. • Possibility of improved public access.	• Archaeology – impacts could be significant, further assessment required to determine whether mitigation is possible. • Landscape Capacity and Historic Landscapes – significant impacts are expected, further assessment required to determine whether mitigation is possible. • Amenity - significant impacts are expected, further assessment required to determine whether mitigation is possible. • Recreation/Access - further assessment required to determine whether mitigation is possible.

Overall Recommendation:

Assessment already carried out has flagged up archaeology/heritage, landscape, local amenity and access as key issues to be addressed as part of working this site nomination. Further assessment will be required to identify satisfactory mitigation and to identify if there are any additional impacts that will require mitigation.

At this stage it is considered likely that the benefits of developing this site do not outweigh the impacts of working.

In addition, no information has been submitted to indicate that this proposal does not conflict with Policy PD2 – Surface Quarrying of Portland Stone - of the Bournemouth, Dorset and Poole Minerals Strategy. This policy prevents future surface quarrying on Portland unless certain criteria are met.

The benefits of developing this site are not considered to outweigh the impacts of working here. **At this time** other sites are considered to be more appropriate options for supplying Portland Stone.

It is **recommended** that this site should not be included in the emerging Mineral Sites Plan

Site has been withdrawn.

Purbeck Stone: PK11 St Aldhelms Quarry Extension, Purbeck

Planning permission for this proposed site extension was granted on 1 April 2015 and therefore this site nomination is no longer under consideration. Details of this permission are as follows:

PLANNING APPLICATION: 6/2013/0055

LOCATION: St Aldhelms Quarry, Worth Matravers, Swanage, Dorset. BH19 3LN

DEVELOPMENT PROPOSED: The extension of St Aldhelm's Quarry by 0.58ha in a south-westerly direction, the continued operation of the quarry, including the importation of stone until 2046, the crushing of waste stone and the restoration of the site to calcareous species rich grassland and the retention of faces of geological interest.

No sustainability appraisal or further assessment is required.

Purbeck Stone: PK20 Crack Lane, Langton Matravers

Site Name/Location: Crack Lane, north of Langton Matravers **Mineral Type:** Purbeck Stone (Purbeck Marble)	**Nominee:** W Haysom and Sons **Local Authority:** Purbeck District Council
Site Area: approximately 0.5 ha **Production:** Likely to be worked in summer campaigns, 900 tonnes/campaign **Reserve:** up to approximately 32,000 tonnes, but only some 16,000 reasonably recoverable	

Impact Assessment Scoring

- -	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain

Timescales for effects:

P/W: Preparation and Working **R/A**: Restoration and Afteruse

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
1. To move waste management up the waste hierarchy	**N/A**	**N/A**	• This Objective is not relevant to this site nomination	• N/A
2. To maintain, conserve and enhance biodiversity	**0**	**0**	**European/International Designations** • No impacts expected.	• No action required.
	0	**0**	**Annex 1 Bird Species** • No impacts expected	• No action required.
	0	**0**	**National Designations** • No impacts expected	• No action required.
	0	**0**	**Protected species** • The site has water vole (protected under Schedule 9 of the Wildlife and Countryside Act) and also provides foraging habitat for adjacent populations of European protected	• It is noted that this site would be worked intermittently and in limited campaigns. However, no information has been provided about how

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	– –		bats (Brown long eared, Bechsteins and Natterers). • These species would all be significantly affected by the loss of this site. This impact would have to be demonstrated to be capable of mitigation for this site proposal to progress.	this low level of working could be achieved with acceptable mitigation of impacts. • Further assessment required to demonstrate that acceptable mitigation is possible, and how this might be achieved. • Also, the potential for restoration to improve the site for the benefit of these species/designations needs to be considered.
	0	0	**Local recognitions/designations, including ancient woodland and veteran trees** • Site is adjacent to two SNCI's and forms an important linking habitat between them. The functionality of the SNCI's would be significantly affected by the loss of this habitat area. • This impact would have to be demonstrated to be capable of mitigation for this site proposal to progress.	
	– –			
3. To maintain, conserve and enhance geodiversity.	+	+	• This site is adjacent to an existing Local Geological Site (Landscape Guidelines). Any excavation at this location has the potential to create fresh exposures that will compliment or enhance those that already exist at the Crack Lane Local Geological Site. Retaining permanent exposures for geological conservation at this site would be desirable. • In addition the extraction of Purbeck Marble for use in building is a valuable link between geological and human heritage and is considered to benefit geological conservation.	• Note potential for quarries to yield fossils or other material of geodiversity interest. • Visits or other investigation of working sites may be requested. • Investigate potential and/or benefits of leaving quarried face open after restoration.
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption	–	0	**Groundwater** • Site overlies Secondary aquifer. No impact on Source Protection Zones. Not known if there are any licenced supplies.	• Simple hydrological assessment required to determine possible impacts, on ground and surface waters, with appropriate mitigation to be implemented. • Appropriate arrangements should be put in place to ensure that the water leaving the site and entering the watercourses or groundwater is of an acceptable quality. Any fuel on site

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
of water in a sustainable way.	_ _	0	**Surface Water** • Watercourse forms northern boundary of the site and there is another watercourse on the other side of Crack Lane.	should be properly stored to avoid contamination in case of spillage. • Appropriate arrangements should be installed for surface water and silt collection and fuel storage to prevent contamination of groundwater resources. • The combined impacts of Purbeck Limestone Quarries should be assessed where a number of sites affect the same water resource or receiving water course.
5. To reduce flood risk and improve flood management.	0	0	**Flooding/Coastal Stability** • Site is entirely in Flood Risk Zone 1, no risk of flooding.	• No action required.
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).	?	0/+	**Archaeology** • The site is expected to have high potential for both industrial archaeological evidence of early quarrying and perhaps other below-ground archaeology. • Archaeological assessment and evaluation would be required before an informed planning decision could be made. Only when these have been undertaken would the archaeological impact be understood – at present it could be anywhere from 'Very Significant' to 'No Significant' impact.	• Archaeological survey of the area required as part of planning application to assess possible presence and significance of non-designated remains and to assess whether/how these should be protected during working – no further work required at site allocation stage. • All necessary mitigation to be implemented prior to working. • Adequate provision to be made for preservation, excavation or recording, as appropriate. • Further consideration to be given to restoration proposals, in terms of historic landscapes.
	0	0	**Historic Landscapes** • The local landscape bears the imprint of previous quarrying dating from the Roman period onwards. It could be argued that the present site would be a continuation of the process, and if the site is to be restored afterwards the impact would be limited in time anyway.	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	+	0	**Historic Buildings** • There are no historic buildings in close proximity to this site therefore there is no impact on historic buildings here except the beneficial effect of releasing stone to repair old buildings or build new ones in sympathy with the Local environment. • This therefore qualifies as positive impact.	• No action required.
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	– –	0?	**Landscape Capacity** • Significant adverse impact. The landscape capacity to accommodate the site is between low and medium. The site is on a prominent corner of a busy and well used tourist route (the A351) and a quiet lane (Crack Lane) and a public footpath runs right through the site. • Although the site will be seen when passing by on these routes development will create an adverse impact on the amenity of users of the AONB, on the intimate character of the clay valley landscape and on the existing site features such as trees, copses and water courses. Further assessment will be required to determine whether mitigation will be possible.	• Visual impacts assessment required to understand more of the potential impacts and what might be needed to mitigate these. • Mitigation – primarily screening – may be possible but it is not known at this stage what would be needed to make this effective.
	– –	0?	**Designated Landscapes** • Significant adverse impact. The site is likely to impact adversely on the Dorset AONB. • Further assessment will be required to determine whether mitigation will be possible.	
8. To protect and improve air quality.	0	0	• Impacts on air quality expected to be negligible. • No AQMAs will be affected by the working of this site proposal. Any dust resulting from working will be controlled through normal dust-suppression measures.	• Environmental protection measures to reduce dust.
9. To maintain, conserve and enhance soil quality.	–	0	• The site is currently an area of pasture and soils are either good to moderate or poor in quality. • Any soil removed will be protected during working and either re-used on site or taken elsewhere to be used. Further assessment may be required to determine soil quality.	• Soil to be properly stripped and stored prior to working; protected during working; and re-spread on site after working.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
10. To conserve and safeguard mineral resources.	+ +	0	• The site would make an important contribution to the supply of Purbeck Stone, specifically Purbeck Marble, for Bournemouth, Dorset and Poole and all other potential markets.	• No specific action required; site development to take into consideration relevant impacts and mitigate where appropriate.
11. To promote the use of alternative materials.	–	0	• This proposal does not promote the use of alternative materials.	• No action required.
12. To provide an adequate and affordable supply of minerals to meet society's needs.	+	0	• Development of this site would provide a benefit in terms of contributing to the provision of a supply of minerals to meet society's needs. • Ensuring a sustainable supply will depend on the development and management of the site. Providing site development takes into account relevant principles of sustainable development it is expected this will contribute to complying with this objective.	• Ensure principles of sustainable development are incorporated into the development of this site.
13. To promote and encourage sustainable economic growth	+	0	• This site proposal is expected to contribute to economic development on two levels – directly through the provision of employment at the site to be developed and indirectly through the provision of Purbeck Stone required for new build, repairs and maintenance, decorative and monument work and landscaping work. Both levels are expected to maintain employment, skilled and unskilled. • The relative rarity of Purbeck Marble adds benefit to this proposal and contributes to maintaining the various skills-bases associated with its preparation and use.	• No action required.
14. To adapt to and mitigate the impacts of climate change.	–	0	• Developing land as a quarry is expected to have some negative impacts regarding climate change, due primarily to machinery used and transportation of mineral away from site. However, these will in relative terms be negligible. • The Bournemouth, Dorset and Poole Minerals Strategy seeks to address and minimise such impacts through Policy CC1 which requires operators to take into consideration climate change impacts and their possible mitigation for any proposed minerals development.	• Use energy efficient plant and machinery. • Implement restoration which provides appropriate habitats to help to increase resilience of flora/fauna.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			• The development management policies, e.g. DM 1, also address and seek to minimise the issue of sustainable development and climate change.	
15. To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any residual impacts.	-?	0	• It is expected that this site would be worked in summer campaigns, with approximately 900 tonnes per annum being produced during those years it is worked. It is not expected that the site would be worked annually. • This would equate to a total of about 60 trips over the course of the campaign. The site access is proposed to be from Crack Lane, a short distance from its junction with the A351. An acceptable access onto Crack Lane to accommodate this low number of trips would be achievable. • It is proposed that trips from the site will go to the Lander's Quarry Yard located to the west of B3069 Langton Matravers. A Transport Statement would be needed with the site to look at potential routes between the two sites. The site is considered to have a 'Less Significant Adverse Impact' . • Policies DM 1 and DM 8 of the Minerals Strategy actively address this issue of minimising impacts on the transportation network.	• Any proposal for this site would need to be accompanied by a Transport Assessment which will need to provide access details and consider vehicle routing. • The TA should be scoped with the Transport Development Management Team and is intended to identify opportunities for reducing impacts on the transport network.
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	–	0	• The proposed site can only realistically be accessed by means of road transport, resulting in a negative impact under this Objective during development and working. • As far as reasonably possible negative impacts resulting from access and transport will be mitigated, as required by Policies DM1 and DM8 of the Minerals Strategy.	• Mitigate impacts where identified and appropriate.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
17. To sustain the health and quality of life of the population	**0**	**0**	**Impact on Sensitive Human Receptors** • Site is very well screened from receptors. Cemetery approximately 130m to the south but woodland in-between. • Impacts are considered to be negligible.	• No action required.
	–	**0**	**Impact on Existing Settlements** • Langton Matravers is approximately 350m to the south, but site is well screened and there is no inter-visibility. • Quarried stone has to be transported to Landers Service Yard. The route has not yet been finalised, but could pass through Langton Matravers. • Rating of this site could vary between 'Significant Adverse Impact' and 'No Significant or Negligible Adverse Impacts', depending on the outcome of the Transport Assessment.	• Provision of appropriate mitigation, should any be required, following assessment of likely impacts. • Restoration to improve landscape of site where possible; and to seek to facilitate public access. • Screening, bunding, standoffs will be used to mitigate impacts where considered necessary. • Transport impacts to be considered through Transport Assessment, as noted above.
	0	**0**	**Impact on Airport Safety** • Site is over 20km from airport and will be worked and restored dry. • No impacts expected.	• No action required.
18. To enable safe access to countryside and open spaces.	– –	**0**	**Impact on Recreational Land** • Site is a small area of pasture-land, crossed by a public footpath. • Apart from this footpath, the site does not appear to be used for any other formal/informal recreational purposes.	• Assessment of potential impacts, with appropriate mitigation identified. This must address impacts on the footpath. • Restoration to include considering how it might be possible to improve public access in the area.
	– –	**0**	**Impact on Public Rights of Way** • Site is crossed by a public footpath and there are other footpaths in the vicinity. • This path will be significantly impacted by this proposal and will need to be diverted appropriately during working campaigns.	

Preliminary Hydrological Risk Assessment

Controlled Waters	Issues/Risks	Mitigation	Further information/approval required
• Watercourses • Ponds/lakes, including wet habitats • Groundwater	• Impacts on surface water features - the site drains through various streams/drains through Swanage and then to the sea, some 3.5 km to the east. • Potential for contamination of drains/streams/sea through spillage or seepage of pollutants such as fuel, or silt in water.	• Appropriate arrangements to be made for ensuring that runoff from the site does not enter the streams/drains or groundwater unless any silt has first been removed. • Fuel stored on site to be appropriately bunded and sealed to prevent any spillage from entering ground or surface waters. • On-going monitoring during development and working of the site.	• Further assessment of potential impacts on water quality and levels, particularly for groundwater, is required prior to development – scope to • Flood Risk Assessment and Water Framework Assessment • Assessment of the feasibility of relocating ponds and associated habitats and species. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.

Cumulative Impacts

The proposal is within 5km (by road) of a town (Swanage) where allocations for the development of 200 dwellings, employment and retail facilities have been made in the Purbeck Local Plan Part 1 (adopted Nov 2012) (Policy SE). (Site details not yet available). Traffic arising from the new residential development will add to general traffic levels in / around Swanage and on the A351.

Site is a new mineral extraction in an area where there are other areas of mineral extraction. Stone from this site will be extracted in time-limited campaigns.

Summary.

Potential Benefits	Potential Impacts
• Geodiversity – exposing the Purbeck Marble will have geodiversity interest/benefit. However, the exposure will be temporary, only during campaigns. • A source of Purbeck Marble to be used in the construction of new buildings and maintenance of existing structures will be a benefit. It will also assist in providing employment and skills maintenance. • Possible benefits through exposure/interpretation of historic quarries/quarrying in the locality.	• The proposed development could have impacts on protected species and local nature conservation designations. It is not known at this stage whether and how these impacts can be mitigated. • There is a stream adjacent to the site boundary and although this is not expected to prevent development of this site, potential impacts on runoff and groundwater must be very carefully assessed and monitored to ensure that there will not be any impacts on these. • The proposed development is expected to have severe impacts on both the capacity of the local landscape to satisfactorily absorb the development and the surrounding designated landscape. Further assessment will be required to see if the impacts can be mitigated in any way. • There will be impacts on users of the footpath which crosses the site, as it will have to be diverted. Further assessment is required to consider impacts and options for diversion. • The preliminary transport assessment indicates that quarry traffic will be relatively low and easily able to gain access to public roads. A more detailed assessment is required to consider impacts of transporting stone to where it will be processed/sold, and whether this will have any impacts on Langton Matravers or any other settlements.

Overall Recommendation:

Although there are important benefits to be realised from developing a source of Purbeck Marble, it appears that the site will have significant landscape impacts. There will also be impacts on biodiversity, hydrology/hydrogeology, potentially archaeology and rights of way/access. In the absence of further information, particularly regarding the specific need for Purbeck Marble and more detail on how the site might be worked, how often it might be worked and how it would be restored/left between working, it is considered that the site is not at this stage appropriate for inclusion in the emerging Mineral Sites Plan.

On the basis of the evidence available it does not appear that there is sufficient certainty that the impacts identified in this sustainability appraisal are currently capable of satisfactory mitigation. The site remains part of the mineral resource of Bournemouth, Dorset and Poole but is not at this time included in the Draft Bournemouth, Dorset and Poole Mineral Sites Plan.

Appendix D: Sites Considered During Preparation of the Plan

Draft Mineral Sites Plan – Stages of Consultation – Sites Under Consideration at Each Stage

	Minerals Site Allocations Document 2008	Outcome	Draft Mineral Sites Plan 2013-2014	Outcome	Draft Mineral Sites Plan 2015	Outcome	Sites Under Consideration 2016	Draft Mineral Sites Plan Update 2016	Sites Under Consideration For Inclusion in Final Draft Plan
Ball Clay	BC01 Carrot Bank	Withdrawn	~~BC01 Carrot Bank~~	~~Withdrawn~~	~~BC01 Carrot Bank~~	~~Withdrawn~~	~~BC01 Carrot Bank~~		~~BC01 Carrot Bank~~
	BC02 Dorey's	Permitted	~~BC02 Dorey's~~	~~Permitted~~	~~BC02 Dorey's~~	~~Permitted~~	~~BC02 Dorey's~~		~~BC02 Dorey's~~
	BC03 Povington	Permitted	~~BC03 Povington~~	~~Permitted~~	~~BC03 Povington~~	~~Permitted~~	~~BC03 Povington~~		~~BC03 Povington~~
	BC04 Trigon Hill extension	Further consultation and assessment	BC04 Trigon Hill extension	Further consultation and assessment	BC04 Trigon Hill extension	Further consultation and assessment	BC04 Trigon Hill extension		BC04 Trigon Hill extension
		New nomination	~~BC05 Dorey's - Holme Heath~~	Withdrawn	~~BC05 Dorey's - Holme Heath~~	~~Withdrawn~~	~~BC05 Dorey's - Holme Heath~~		~~BC05 Dorey's - Holme Heath~~
		New nomination	~~BC06 Woolsbarrow~~	Withdrawn	~~BC06 Woolsbarrow~~	~~Withdrawn~~	~~BC06 Woolsbarrow~~		~~BC06 Woolsbarrow~~
Aggregates	AS02 Cannon Hill	Withdrawn	~~AS02 Cannon Hill~~	~~Withdrawn~~	~~AS02 Cannon Hill~~	~~Withdrawn~~	~~AS02 Cannon Hill~~		~~AS02 Cannon Hill~~
	AS03 Crossways	Withdrawn	~~AS03 Crossways~~	~~Withdrawn~~	~~AS03 Crossways~~	~~Withdrawn~~	~~AS03 Crossways~~		~~AS03 Crossways~~
	AS04 Dorey's	Permitted	~~AS04 Dorey's~~	~~Permitted~~	~~AS04 Dorey's~~	~~Permitted~~	~~AS04 Dorey's~~		~~AS04 Dorey's~~
	AS05 East Parley Residual Reserve	Withdrawn	~~AS05 East Parley Residual Reserve~~	~~Withdrawn~~	~~AS05 East Parley Residual Reserve~~	~~Withdrawn~~	~~AS05 East Parley Residual Reserve~~		~~AS05 East Parley Residual Reserve~~
	AS06 Great Plantation	Further consultation and assessment	AS06 Great Plantation	Further consultation and assessment	AS06 Great Plantation	Further consultation and assessment	AS06 Great Plantation		AS06 Great Plantation -
	AS07 Hodge Ditch Area 2	Permitted	~~AS07 Hodge Ditch Area 2~~	~~Permitted~~	~~AS07 Hodge Ditch Area 2~~	~~Permitted~~	~~AS07 Hodge Ditch Area 2~~		~~AS07 Hodge Ditch Area 2~~
	AS08 Horton Heath	Further consultation and assessment	AS08 Horton Heath	Further consultation and assessment	AS08 Horton Heath (revised areas)	Further consultation and assessment	AS08 Horton Heath (revised areas)		~~AS08 Horton Heath (revised areas) - Not considered suitable for inclusion~~
	AS09 Hurn Court Farm	Further consultation and assessment	AS09 Hurn Court Farm	Further consultation and assessment	AS09 Hurn Court Farm	Further consultation and assessment	AS09 Hurn Court Farm		AS09 Hurn Court Farm

Minerals Site Allocations Document 2008	Outcome	Draft Mineral Sites Plan 2013-2014	Outcome	Draft Mineral Sites Plan 2015	Outcome	Sites Under Consideration 2016	Draft Mineral Sites Plan Update 2016	Sites Under Consideration For Inclusion in Final Draft Plan
AS10 Moreton Plantation	Further consultation and assessment	AS10 Moreton Plantation	Not considered suitable for inclusion	~~AS10 Moreton Plantation~~	~~Not considered suitable for inclusion~~	~~AS10 Moreton Plantation~~		~~AS10 Moreton Plantation~~
AS11 Parley Court Phase 3	Further consultation and assessment	AS11 Parley Court Phase 3	Withdrawn	~~AS11 Parley Court Phase 3~~	~~Not considered suitable for inclusion~~	~~AS11 Parley Court Phase 3~~		~~AS11 Parley Court Phase 3~~
AS12 Phillilol's Farm	Further consultation and assessment	AS12 Phillilol's Farm	Further consultation and assessment	AS12 Phillilol's Farm	Not considered necessary	AS12 Phillilol's Farm (under consideration again in case of shortfall)	AS12 Phillilol's Farm	AS12 Phillilol's Farm
AS13 Roeshot	Further consultation and assessment	AS13 Roeshot	Further consultation and assessment	AS13 Roeshot	Further consultation and assessment	AS13 Roeshot		AS13 Roeshot
AS14 Sturminster Marshall	Withdrawn	~~AS14 Sturminster Marshall~~	~~Withdrawn~~	~~AS14 Sturminster Marshall~~	~~Withdrawn~~	AS14 Sturminster Marshall (under consideration again in case of shortfall)	AS14 Sturminster Marshall	~~AS14 Sturminster Marshall Not considered suitable for inclusion~~
AS15 Tatchell's	Further consultation and assessment	AS15 Tatchell's	Further consultation and assessment	AS15 Tatchell's	Further consultation and assessment	AS15 Tatchell's		AS15 Tatchell's
AS16 Trigon Hill	Permitted	~~AS16 Trigon Hill~~	~~Permitted~~	~~AS16 Trigon Hill~~	~~Permitted~~	~~AS16 Trigon Hill~~		~~AS16 Trigon Hill~~
AS17 Uddens Plantation	Withdrawn	~~AS17 Uddens Plantation~~	~~Withdrawn~~	~~AS17 Uddens Plantation~~	~~Withdrawn~~	~~AS17 Uddens Plantation~~		~~AS17 Uddens Plantation~~
AS18 Wimborne Minster	Withdrawn	~~AS18 Wimborne Minster~~	~~Withdrawn~~	~~AS18 Wimborne Minster~~	~~Withdrawn~~	~~AS18 Wimborne Minster~~		~~AS18 Wimborne Minster~~
AS19 Woodsford	Further consultation and assessment	AS19 Woodsford	Further consultation and assessment	AS19 Woodsford	Further consultation and assessment	AS19 Woodsford		AS19 Woodsford
	New nomination	AS21 Came Home Farm	Not considered suitable for inclusion	~~AS21 Came Home Farm~~	~~Not considered suitable for inclusion~~	~~AS21 Came Home Farm~~		~~AS21 Came Home Farm~~

	Minerals Site Allocations Document 2008	Outcome	Draft Mineral Sites Plan 2013-2014	Outcome	Draft Mineral Sites Plan 2015	Outcome	Sites Under Consideration 2016	Draft Mineral Sites Plan Update 2016	Sites Under Consideration For Inclusion in Final Draft Plan
		New nomination	AS22 Trigon Hill Extension	Further consultation and assessment	AS22 Trigon Hill Extension	Further consultation and assessment	AS22 Trigon Hill Extension		~~AS22 Trigon Hill Extension Withdrawn~~
		New nomination	AS23 Gore Heath	Not considered suitable for inclusion	~~AS23 Gore Heath~~	~~Not considered suitable for inclusion~~	~~AS23 Gore Heath~~		~~AS23 Gore Heath~~
		New nomination	AS24 Purple Haze (south)	Not considered suitable for inclusion	~~AS24 Purple Haze (south)~~	~~Not considered suitable for inclusion~~	~~AS24 Purple Haze (south)~~		~~AS24 Purple Haze (south)~~
				New nomination	AS25 Station Road	Further consultation and assessment	AS25 Station Road		AS25 Station Road
				New nomination	AS26 Hurst Farm	Further consultation and assessment	AS26 Hurst Farm		AS26 Hurst Farm
						New nomination	AS28 Gallows' Hill A&B	AS28 Gallows' Hill A&B	~~AS28 Gallows' Hill Site A only~~
				Crushed Rock (category change from Purbeck stone)	PK16 Swanworth Quarry Extension	Further consultation and assessment	PK16 Swanworth Quarry Extension	PK16 Swanworth Extension	PK16 Swanworth Quarry Extension
				New Nomination - Recycled Aggregate	RA01 White's Pit	Further consultation and assessment	RA01 White's Pit		RA01 White's Pit
Purbeck stone	PK01 Belle Vue	Withdrawn	~~PK01 Belle Vue~~	~~PK01 Belle Vue~~	~~PK01 Belle Vue~~	~~PK01 Belle Vue~~	~~PK01 Belle Vue~~		~~PK01 Belle Vue~~
	PK02 Blacklands Quarry Extension	Further consultation and assessment	PK02 Blacklands Quarry Extension	Further consultation and assessment	PK02 Blacklands Quarry Extension	Further consultation and assessment	PK02 Blacklands Quarry Extension		PK02 Blacklands Quarry Extension
	PK03 California Quarry	Withdrawn	~~PK03 California Quarry~~	~~PK03 California Quarry~~	~~PK03 California Quarry~~	~~PK03 California Quarry~~	~~PK03 California Quarry~~		~~PK03 California Quarry~~
	PK04 Downs Quarry	Withdrawn	~~PK04 Downs Quarry~~	~~PK04 Downs Quarry~~	~~PK04 Downs Quarry~~	~~PK04 Downs Quarry~~	~~PK04 Downs Quarry~~		~~PK04 Downs Quarry~~
	PK05 Land South of Acton Field and Priests Way	Withdrawn	~~PK05 Land South of Acton Field and Priests Way~~	~~PK05 Land South of Acton Field and Priests Way~~	~~PK05 Land South of Acton Field and Priests Way~~	~~PK05 Land South of Acton Field and Priests Way~~	~~PK05 Land South of Acton Field and Priests Way~~		~~PK05 Land South of Acton Field and Priests Way~~

Minerals Site Allocations Document 2008	Outcome	Draft Mineral Sites Plan 2013-2014	Outcome	Draft Mineral Sites Plan 2015	Outcome	Sites Under Consideration 2016	Draft Mineral Sites Plan Update 2016	Sites Under Consideration For Inclusion in Final Draft Plan
PK06 Land to the North of Worth Matravers road	Withdrawn	~~PK06 Land to the North of Worth Matravers road~~	~~PK06 Land to the North of Worth Matravers road~~	~~PK06 Land to the North of Worth Matravers road~~	~~PK06 Land to the North of Worth Matravers road~~	~~PK06 Land to the North of Worth Matravers road~~		~~PK06 Land to the North of Worth Matravers road~~
PK07 Land to the South of B3069	Withdrawn	~~PK07 Land to the South of B3069~~	~~PK07 Land to the South of B3069~~	~~PK07 Land to the South of B3069~~	~~PK07 Land to the South of B3069~~	~~PK07 Land to the South of B3069~~		~~PK07 Land to the South of B3069~~
PK08 Quarr Farm	Further consultation and assessment	PK08 Quarr Farm	Further consultation and assessment	PK08 Quarr Farm	Further consultation and assessment	PK08 Quarr Farm		~~PK08 Quarr Farm~~
PK09 South Downs Quarry	Permitted	~~PK09 South Downs Quarry~~	~~Permitted~~	~~PK09 South Downs Quarry~~	~~Permitted~~	~~PK09 South Downs Quarry~~		~~PK09 South Downs Quarry~~
PK10 Southard Quarry	Further consultation and assessment	PK10 Southard Quarry	Further consultation and assessment	PK10 Southard Quarry	Further consultation and assessment	PK10 Southard Quarry		PK10 Southard Quarry
PK11 St Aldhelm's Quarry	Permitted	~~PK11 St Aldhelm's Quarry~~	~~Permitted~~	~~PK11 St Aldhelm's Quarry~~	~~Permitted~~	~~PK11 St Aldhelm's Quarry~~		~~PK11 St Aldhelm's Quarry~~
	New nomination	PK15 Downs Quarry Extension	Further consultation and assessment	PK15 Downs Quarry Extension	Further consultation and assessment	PK15 Downs Quarry Extension		PK15 Downs Quarry Extension
	New nomination	PK16 Swanworth Quarry Extension	Further consultation and assessment	(See Crushed rock - above)		(See Crushed rock - above)		
	New nomination	PK17 Home Field	Further consultation and assessment	PK17 Home Field	Further consultation and assessment	PK17 Home Field		PK17 Home Field
	New nomination	PK18 Quarry 4 Extension	Further consultation and assessment	PK18 Quarry 4 Extension	Further consultation and assessment	PK18 Quarry 4 Extension		PK18 Quarry 4 Extension
	New nomination	PK19 Broadmead	Further consultation and assessment	PK19 Broadmead	Further consultation and assessment	PK19 Broadmead		PK19 Broadmead
			New nomination	PK21 Gallows' Gore	Further consultation and assessment	PK21 Gallows' Gore		PK21 Gallows' Gore
	New nomination	Kingston Hill (Purbeck marble)	Withdrawn prior to further consultation					

	Minerals Site Allocations Document 2008	Outcome	Draft Mineral Sites Plan 2013-2014	Outcome	Draft Mineral Sites Plan 2015	Outcome	Sites Under Consideration 2016	Draft Mineral Sites Plan Update 2016	Sites Under Consideration For Inclusion in Final Draft Plan
				New nomination	PK20 Crack Lane (Purbeck marble)	Not taken forward to consultation			
	Minerals Site Allocations Document 2008: Sites Assessed and Consulted On	Outcome	Draft Mineral Sites Plan 2013-2014: Sites Assessed and Consulted On	Outcome	Draft Mineral Sites Plan 2015: Sites Assessed and Consulted On	Outcome	Sites Under Consideration 2016	Sites included in Draft Mineral Sites Plan Update 2016	Sites Under Consideration For Inclusion in Final Draft Plan
Portland Stone	PD01 Bower's Mine	Further consultation and assessment	PS01 Bower's Mine	Further consultation and assessment	PS01 Bower's Mine	Further consultation and assessment	PS01 Bower's Mine		~~PS01 Bower's Mine~~ Permitted
		New nomination	PS02 Perryfield Quarry Extension	Withdrawn	~~PS02 Perryfield Quarry Extension~~	~~Withdrawn~~	~~PS02 Perryfield Quarry Extension~~		~~PS02 Perryfield Quarry Extension~~
Other Building Stone	BS01 Manor Farm Quarry	Further consultation and assessment	BS01 Manor Farm Quarry	Withdrawn	~~BS01 Manor Farm Quarry~~	~~Withdrawn~~	~~BS01 Manor Farm Quarry~~		~~BS01 Manor Farm Quarry~~
	BS02 Marnhull Quarry	Further consultation and assessment	BS02 Marnhull Quarry	Further consultation and assessment	BS02 Marnhull Quarry	Further consultation and assessment	BS02 Marnhull Quarry		BS02 Marnhull Quarry
		New nomination	BS04 Frogden Quarry	Further consultation and assessment	BS04 Frogden Quarry	Further consultation and assessment	BS04 Frogden Quarry		BS04 Frogden Quarry
		New nomination	BS05 Whithill Quarry	Further consultation and assessment	BS05 Whithill Quarry	Further consultation and assessment	BS05 Whithill Quarry		BS05 Whithill Quarry
Other Sites*	NP01 Baker's Hanging	Not under consideration	~~NP01 Baker's Hanging~~	~~NP01 Baker's Hanging~~	~~NP01 Baker's Hanging~~	~~NP01 Baker's Hanging~~	~~NP01 Baker's Hanging~~	~~NP01 Baker's Hanging~~	~~NP01 Baker's Hanging~~

NP02 Bovington Farm	**Not under consideration**	~~NP02 Bovington Farm~~	~~NP02 Bovington Farm~~	~~NP02 Bovington Farm~~	~~NP02 Bovington Farm~~	~~NP02 Bovington Farm~~	~~NP02 Bovington Farm~~	~~NP02 Bovington Farm~~
NP03 Gore Heath	**Not under consideration**	~~NP03 Gore Heath~~	~~NP03 Gore Heath~~	~~NP03 Gore Heath~~	~~NP03 Gore Heath~~	~~NP03 Gore Heath~~	~~NP03 Gore Heath~~	~~NP03 Gore Heath~~
NP04 Hurst Farm	**Not under consideration**	~~NP04 Hurst Farm~~	~~NP04 Hurst Farm~~	~~NP04 Hurst Farm~~ (see AS26 above)	~~NP04 Hurst Farm~~	~~NP04 Hurst Farm~~ (see AS26 above)	~~NP04 Hurst Farm~~ (see AS26 above)	~~NP04 Hurst Farm~~ (see AS26 above)
NP05 Hyde Farm	**Not under consideration**	~~NP05 Hyde Farm~~	~~NP05 Hyde Farm~~	~~NP05 Hyde Farm~~	~~NP05 Hyde Farm~~	~~NP05 Hyde Farm~~	~~NP05 Hyde Farm~~	~~NP05 Hyde Farm~~