Sustainability Appraisal of AS27 Land at Horton Heath – December 2018

Introduction

Sustainability appraisal is a systematic and iterative process undertaken during the preparation of a plan or strategy. Its role is to assess the extent to which the emerging policies and proposals will help to achieve relevant environmental, social and economic objectives. In doing so, it provides an opportunity to consider ways in which the plan or strategy can contribute to improvements in environmental, social and economic conditions, as well as a means of identifying and addressing any adverse effects that draft policies and proposals might have.

Legal Framework

Section 39 of the Planning and Compulsory Purchase Act, 2004 requires Local Development Documents (including Minerals and Waste Development Documents) to be prepared with the objective of contributing to the achievement of sustainable development. Sustainable development will ensure a better quality of life for present and future generations. Section 19 (5) of the Act requires Local Planning Authorities to carry out an appraisal of the sustainability of the proposals in each document and prepare a report of findings of the appraisal. Sustainability appraisal is integral to document preparation as a means of assessing their potential social, environmental and economic effects. It is a positive tool for developing policies to ensure that they reflect sustainable development principles. The appraisal should take place in parallel with the formulation of policies.

The European Strategic Environment Assessment Directive 2001/42/EC requires an environmental assessment of plans and programmes prepared by public authorities that are likely to have significant effect upon the environment. This process is referred to commonly as "Strategic Environmental Assessment" (SEA), and covers relevant plans and programmes whose preparation began after 21 July 2004. A key requirement of the SEA process is the production of an environmental report describing the likely significant effects of implementation of the plan and alternative options which were considered when producing the plan. This Sustainability Appraisal incorporates the requirements of the SEA Directive.

Sustainability Appraisal Scoping Report

The Waste & Minerals Sustainability Appraisal Scoping Report, published in March 2015 was the first stage of this process. It set out the scope of the appraisal and the information to be gathered or relied upon. It applies to all the minerals and waste development plan documents that will be prepared. The Scoping Report identifies the sustainability objectives that have been used in the sustainability appraisal of the policies and proposals of the Mineral Sites Plan. It also sets out baseline information for minerals and for each of the topics addressed through the sustainability appraisal process. The report replaces the previous Scoping Report, published in 2014, and provides updated baseline information and a revised set of objectives and indicators to reflect the latest guidance and policy. The sustainability appraisal scoping report and the series of accompanying topic papers can be downloaded from the website: https://www.dorsetforyou.gov.uk/planning-buildings-land/planning-policy/dorset-county-council/sustainability-appraisal-minerals-and-waste.aspx

The main part of the scoping report has been organised by topics identified in 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. Each topic was explored and analysed using the tasks suggested in the guidance. Relevant plans, programmes and policies were identified and reviewed, and their implications for the minerals development plan documents (DPDs) considered. Initial baseline information, often in the form of maps, was collected and included in the report.

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.

Appraisal of AS27, Land at Horton Heath

This appraisal has involved assessing the performance the AS27 site option against each objective using a matrix (matrices to assess all other Mineral Sites Plan policies and site allocations can be found on our website). The appraisal was based on professional judgement, officer discussions, technical knowledge and the evidence base. A series of colours have been used to highlight the impact for each objective.

-	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain	
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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 'score' is meant to represent impacts **without** mitigation. A red or orange score does not mean that mitigation is impossible, it is usually possible.

Commentary has been provided to explain the outcome for each assessment. Following this, an explanation of cumulative impacts is included. Finally, a summary and recommendation is presented. The assumptions and the outcomes of the assessments are largely subjective. Stakeholders are invited to comment on the SA.

The matrices ensure a standardised approach which has been used to assess each site allocation in the Mineral Sites Plan. This approach provides consistency and a clear audit trail to demonstrate how assessments have been undertaken. Further information, including the Pre-Submission Draft of the Mineral Sites Plan Sustainability Appraisal (MSPSD 03), can be seen online at:

https://www.dorsetforyou.gov.uk/planning-buildings-land/planning-policy/dorset-countycouncil/pdfs/planning/msp/sustainability-appraisal-main-report-december-2017.pdf

Alongside the sustainability appraisal, the site assessments contain greater detail relating to the site. The sustainability appraisal and site assessment process, together, draw out the potential positive and negative impacts, opportunities and where necessary identified the need for further work and/or suitable mitigation.

Stakeholders are invited to comment on the SA matrix set out below during the consultation period. The consultation period runs from 17 December 2018 to 28 January 2019.

Sand and Gravel: AS27 Land at Horton Heath, Horton Road (Assessment November 2018)

Site Name/Location:	Nominee/Agent:		
AS27 Land at Horton Heath,	Dorset Property Surveys	Site Area: 16.2 (approx.)	
Horton Road, Horton, Wimborne	Local Authority:	Production/reserve: between 2,400,000t and 3,500,000t	
Mineral Type: Sand/Gravel	East Dorset District Council		

Impact Assessment Scoring

-	Strong Negative Impact	-	Minor Negative Impact	+	Minor Positive Impact	++	Strong Positive Impact	0	Negligible or No Effect	?	Uncertain	
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Timescales for effects:

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

S	Sustainability Effects Objectives P/W R/A		ects	Commentany	Mitiantion
			res P/W R/A		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
				European/International Designations	
				• Area AS27 lies to the west of Horton Common SSSI, a component part of the Dorset Heaths SAC and Dorset Heathlands SPA/Ramsar.	• Eurther investigations will be
2.	To maintain, conserve and enhance biodiversity	-	-	• The site is hydrologically linked to the European sites and would once have fed the mire which historically ran from AS207 east to Horton Common SSSI.	 Further investigations will be needed to determine how to protect the hydrological link between AS27 and Horton Common SSSI.
				• There is a layer of Broadstone Clay beneath the sand and gravel and disturbance of this risks affecting the hydrology of Horton Common SSSI.	

Sustainability	Effe	ects		
Objectives	P/W	R/A	Commentary	Mitigation
	+	0	 Annex 1 Bird Species Site is proposed to be restored to low grade pasture – this is unlikely to support Annex 1 birds. The site currently has no recreational access function to help reduce pressure on existing acid grasslands. 	•
	-	-	 National Designations Area AS27 lies to the west of Horton Common SSSI, a component part of the Dorset Heaths SAC and Dorset Heathlands SPA/Ramsar. The site is hydrologically linked to the European sites and would once have fed the mire which historically ran from AS207 east to Horton Common SSSI. There is a layer of Broadstone Clay beneath the sand and gravel and disturbance of this risks affecting the hydrology of Horton Common SSSI. 	 Further investigations will be needed to determine how to protect the hydrological link between AS27 and Horton Common SSSI.
	+	+	 Protected species Hedgerows should be assessed for dormice and to determine whether they are important under the Hedgerows Regs, 1997. 	 Ecological surveys required, with appropriate mitigation identified.

Sustainability	Effe	ects	Commentant	Midianation
Objectives	P/W	R/A	Commentary	Mitigation
		+	 Local recognitions/designations, including ancient woodland and veteran trees There may be important boundary features or individual veteran trees which would need assessment. 	 Ecological surveys required, with appropriate mitigation identified.
3. To maintain, conserve and enhance geodiversity.	+	0	• No specific scientific gains or geodiversity enhancements are likely, but the exposures may be of interest to the quaternary and tertiary research associations.	 Operator to be asked to permit visits to view exposures if required.
4. To maintain,	_	0	GroundwaterProximity to secondary aquifer	• Hydrological assessment required to demonstrate no significant negative impact on hydrogeological connectivity and pathways and surface water flow regimes. This is to protect river
conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.		0	Surface Water • There is a pond in close proximity.	 and wetland habitats and ecology, and also river users. Assessment to demonstrate that the proposed restoration will have no significant impact on water quality and cause no deterioration in WFD status. This is particularly relevant for sites adjacent to, and which drain to, watercourses and wetland features of interest. 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

Sustainability	Effe	ects		
Objectives	P/W	R/A	Commentary	Mitigation
				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	 Flooding/Coastal Stability The entire site located within Flood Zone 1 Working is not considered to constitute, or exacerbate an existing, a flood risk. 	 Flood Risk Assessment (FRA) will be required.
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).	-	+	 An archaeological assessment and probably an evaluation of the site that considers all the Monuments and their settings, as well as other possible archaeological material on the site, is needed. An assessment needs to be undertaken to establish what is important about the SM; how the quarry sites contribute to the significance of the SMs and their setting; what would impact would quarrying have on the significance of the SMs; how could harm be avoided; could improvements be achieved. Quarrying impacts on topography and historic landform could have very significant impacts on the settings of the SMs and their inter-relationship within the landscape. 	 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. Settings of the Monuments to be established prior to working and not to be compromised during working.
			inter-relationship within the	

Sustainability	Effe	ects	Commenter	Mitiantion
Objectives	P/W	R/A	Commentary	Mitigation
			'landscape monuments', which have an intimate and highly significant relationship with the local topography; their relationship with the landform and their inter- relationship with each other across the landscape are important factors in their heritage significance.	
			 Early discussion with English Heritage should also be helpful in the making of this decision. 	
			 Appropriate restoration could improve the settings of the monuments. 	
			Historic Landscapes	
	_	+	 Site covers a wider area in a broad lower lying area of acid grassland and former acid grassland. It could have a significant impact on setting, in view of its location between the groups of SMs (the barrows on the ridge to the W and the barrows and earthwork dikes to the E). There is a suggestion that the area might be reinstated to original contours. However, this would entail a good supply of backfill material and very many vehicle movements, either of which could present high risk factors to satisfactory completion of a restoration scheme. This area, lower less undulating than the ridge to the west at AS08, has greater potential for archaeological features and would need careful evaluation. 	 Archaeological survey to assess Monuments and establish their settings and how these can best be protected during working. Restoration to acid grassland to benefit Monuments and their settings, however this is not proposed.
			 Restoration to acid grassland could improve the settings of these Monuments. 	

Sustainability	Effe	ects		
Objectives	P/W	R/A	Commentary	Mitigation
	0	0	 Historic Buildings No listed buildings in the immediate vicinity of the site. The nearest, Harts Farm, is well screened from the site. No impacts expected. 	 No action required.
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 EDDC 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 some 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 and mitigation and restoration reflects existing character. The adjacent bridleway is a key visual receptor. It is important that prior to any application a full LVIA is carried out to assess impacts from all key visual receptors. 	 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.

Sustainability	Effe	ects				
Objectives	P/W	R/A	Commentary	Mitigation		
	0	0	Designated LandscapesNegligible 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) Site preparation/working would require stripping and storage of the soils, with some impacts on them. If the site is worked and restored to acid grassland this will require reinstatement/retention of acidic soils. 	 Soil is poor quality in agricultural terms but valuable in terms of potential for acid grassland 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 will make a contribution to aggregates supply and thus have a positive impact on the local and wider economy. There is potential for quarry operations, including quarry traffic, to have a negative impact on local businesses. This would be further assessed at the planning application stage. 	 Consideration will need to be given to the impact of quarry traffic on businesses locally. 		

Sustainability	Effe	ects		
Objectives	P/W	R/A	Commentary	Mitigation
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	promote d courage + stainable pnomic	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	 Further assessment required to form a view as to what the most
encourage sustainable economic growth		+ +	 for the maintenance of built environment and for new built development. Both levels are expected to maintain employment, skilled and unskilled. Restoration to agriculture will offer some economic benefits. 	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.	 Use energy efficient plant and machinery. Implement restoration which provides appropriate habitats to help to increase resilience of flora/fauna.

Sustainability	Effe	ects	Commenter	
Objectives	P/W	R/A	Commentary	Mitigation
	0	+	 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, but again these benefits will be relatively small. 	

Sustainability	Effects		Commentant	Mitiantion	
Objectives	P/W	R/A	Commentary	Mitigation	
15. To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any residual impacts.	0	0	 For the purposes of assessment around 80 movements per day, has been assumed. The access serving the permitted solar farm should be suitable to accommodate this level of traffic. The existing Clump Farm access, on the brow of the hill to the west is unsuitable for any intensification of use. Once on the C2, there are good links to the A31 to the east. The A31 can also be reached to the south along the B3072 although this would involve travelling through West Moors. Development would have potential impacts on a number of A31 junctions, including Ameysford, West Moors, Brocks Pine and Ashley Heath. 	 Transport Assessment to be carried out to identify the extent of the traffic impact on the strategic road network and any mitigation requirements 	
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 There are a number of residences within 500m, the 	 Provision of appropriate mitigation, following assessment of likely impacts. 	

Sustainability I	Effe	ects	Commentary	
Objectives	P/W	R/A		Mitigation
	-		 closest being approximately 50m. 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.	
	-	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 or noise 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 Heath and could have an impact. 	 Transport Assessment to be carried, identifying possible impacts and opportunities for reducing impacts on the transport network.
	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 Bridleways follow the boundaries of the site, and there are other rights of way in the vicinity. There will be impacts on users of these rights of way and these should be addressed. 	 Consideration will be needed to mitigate impacts on rights of way during working.
		0	 Impact on Public Rights of Way Bridleways follow the boundaries of the site. There will be impacts on users of 	 Full assessment of rights of way in the area required.

Sustainability Objectives	Effects		Commentant	
	P/W	R/A	Commentary	Mitigation
		+	these rights of way and these should be addressed.	

AS27 Preliminary Hydrological Risk Assessment

Controlled Waters	Issues/Risks	Mitigation	Further information/approval required
 Watercourses Ponds/lakes, including wet habitats to the north of the site Groundwater 	 There is a layer of Broadstone Clay beneath the aggregate and disturbance of this risks affecting the hydrology of Horton Common Site of Special Scientific Interest, including the Dorset Heaths SAC and Dorset Heathlands SPA/RAMSAR. 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. 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. 	 Appropriate arrangements to be made for ensuring that runoff from the site does not enter the Crane or groundwater unless 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 or recreation of surface water features provided this is feasible. 	 Full hydrogeological assessment Flood Risk Assessment Water Framework Assessment Further 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 Assessment

<u>Comment from Flood Risk Management Team, Dorset County Council, Lead Local Flood Authority</u>: 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 by relevant mapping to be at theoretical risk of surface water flooding. However, the site is seen to be approximately 1000m upstream / south of extensive fluvial, surface & ground water flooding adjacent to the Main River Crane, Bridge Farm & beyond, and is approximately 400m upstream of a number of on-line ponds (Wedge Hill Farm) which may well have a commercial and/or recreational purpose.

Whilst BGS data suggests that the site sits above a bedrock of a Parkstone Sand Member (sedimentary sand) with some overburden of River Terrace Deposits (sand & gravel) to the west, any existing surface water runoff or ground water emergence is perceived to migrate northwards into a receiving (Ordinary) watercourse, flowing towards the (man-made) ponds referred to above.

A site-specific strategy of surface water management should be requested that does not increase rates of runoff / generate downstream worsening or diminish water quality into the receiving system/s. As such the proposed activity should comply with the recommendations of the recently revised NPPF (July 2018) and other relevant legislation. Prior Land Drainage Consent may be required from DCC/FRM as relevant LLFA, for any works offering an obstruction to flow or realignment to a channel with the status of Ordinary Watercourse.

Cumulative Impacts

Although the area contains deposits of sand/gravel, the only other working is a small sand quarry that has recently been permitted immediately to the east of AS27 at Horton Common. Further afield it is proposed to work at Purple Haze, southeast of Verwood. Purple Haze is not yet operational, but may 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 a new greenfield site. AS08 lies to the north west but is not proposed for inclusion in the Mineral Sites Plan.

The proposal lies within 5km of sites allocated for development in the Christchurch and East Dorset Local Plan - Part 1 Core Strategy Consolidated Plan Adopted April 2014. Policies VTSW4 and Policy VTSW5 allocate new neighbourhoods in Verwood. Traffic from these proposals would add to traffic on the B3081 and roads through Verwood.

Summary

Potential Benefits	Potential Impacts	
 Restoration to acid grassland would provide habitat for protected species and improve linkages between other heathland/acid grassland in the area. 	 Hydrological impacts on Horton Common SSSI Heritage/setting impacts - Scheduled Monuments and their settings could be affected during Preparation/Working. 	
 Provision of aggregates required for maintenance and construction. 	• Screening vegetation will need to be retained on visual impact and nature conservation	
 Restoration to acid grassland 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. 	 grounds. Noise/visual impacts on properties in the vicinity. Impacts on informal recreation uses and statutory rights of way that border the site. 	

Overall Recommendations

The AS27 Land at Horton Heath site 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. Quarrying will affect the topography and the historic landform which could have significant impacts on the settings of Scheduled Monuments. There is a need for a heritage impacts assessment. The potential for hydrological impacts on the Horton Common SSSI and European designations must be fully assessed, to ensure no impact.

The Mineral Planning Authority have concerns about the allocation of this site, due to the need for more detailed heritage work to inform the assessment and the potential for hydrological impacts. However, it would be a good source of Poole Formation sand.

This site will be subject to further consultation as an omission site to ensure that local people and interest groups have an opportunity to comment on the proposals before any decision on allocation can be made.