Purbeck Stone: PK17 Home Field, Langton Matravers Assessment (February 2018)

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 **Updated Site Area approximately 8.5ha, but no more than 1ha of land (in addition to areas already being worked) expected to be worked during the life of the Plan.** **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		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. • 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.

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.	+	+ ?	• 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.	

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 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 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.	
	–	**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.	• Heritage Assessment required to assess level of impact and identify appropriate mitigation

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			• Potential impact on Acton Conservation Area and its setting	
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	–	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. • Small areas, quantities, progressive restoration and in short campaigns with low stockpiles is recommended.	• Site to be developed as suggested to minimise impacts.
	–	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. • The boundary of the site has been pulled back to remove the south-western corner of the site which was outside the zone of least landscape and visual 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	• 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.

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 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 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	• 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		
			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**	• 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'. • 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**	• 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

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	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.	where considered necessary. • Transport impacts to be considered through Transport Assessment, as noted 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 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	• Potential for contamination of controlled waters	• Appropriate arrangements to be made for ensuring	• Full hydrogeological risk assessment will be required

• Ponds/lakes, including wet habitats • Groundwater	(groundwater) through spillage or seepage of pollutants such as fuel. • Contamination of water supplies or reduction in amount of water available for licenced supplies.	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.	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.

Heritage Impacts

The northern boundary of the site as identified is approximately 30m from the Acton Conservation Area. 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 Home Field site, with potential 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 extension would not be expected to cause substantial harm to the Conservation Area but could have an impact on its setting. If so, this would be expected to be 'less than substantial' harm, and for a temporary period. This potential for harm has been given great and considerable weight in this assessment.

Sites nominated for allocation in the Mineral Sites Plan have been assessed on heritage and other grounds. A number have been rejected for various reasons, and 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 more detailed assessment that would be carried out as part of any planning application would address heritage impacts and identify appropriate mitigation to offset any harm identified.

Mitigation could include screening (an earth bund) and/or 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 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, 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, with the processing plant and other infrastructure 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.

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 an 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. 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. **A modification is proposed to include an additional development guideline to ensure cumulative impacts are minimised.**

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

NB: Further work has been undertaken on cumulative impacts for all sites. This information is presented in a separate document that should be read alongside this report. There is potential for cumulative effects in relation to biodiversity; human health; air (noise/dust); climate/GHGs; landscape and amenity. Impacts are expected to be primarily during preparation/working, i.e. short to medium term; However the scale of working is controlled by the National Trust as landowners to minimise adverse landscape and amenity impacts and to ensure quarrying is of a traditional scale in the landscape setting. Restoration would maintain open landscape and provide ecological enhancement.

There is potential for in-combination effects between receptors such as human health/amenity, landscape and cultural heritage (Listed Buildings) given the concentration of sites in this area and the Acton Conservation Area nearby.

The DGs require cumulative impacts to be taken into consideration. The MPA is satisfied that identified impacts can be addressed by DGs and existing/proposed policy.

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.	• 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.

- Geodiversity benefits, through exposures created and fossils found.
- Possibility of improved public access.

- Transport Assessment will be required at planning application stage, but traffic impacts are expected to capable of mitigation.
- 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.
- Acton Conservation Area and its setting

Overall Recommendation:

Assessment already carried out has flagged up hydrogeology, heritage/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 heritage/archaeological assessment, given that there is a Scheduled Ancient Monument in the vicinity; visual impact assessment, 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.

Updated Recommendation (February 2019)

An additional development guideline is proposed to ensure that consideration is given to cumulative impacts from proposals. This will provide an additional safeguard. The site therefore remains appropriate for allocation in the Bournemouth,

Purbeck Stone: PK 18 Extension to Quarry 4, Acton Assessment (February 2019)

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 **Updated site area 1.3ha** **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.

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 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.
		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	**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.

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	**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. • Potential impact on Acton Conservation Area	• Heritage Assessment required to assess level of impact and identify appropriate mitigation
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 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
	0	0	**Designated Landscapes** • 'Less Significant Adverse Impact' on designated landscapes from this proposal.	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
				Landscape Management 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 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.

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 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.
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.

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 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** • 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.	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			• 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.

Heritage Impacts

The northern boundary of the site as identified is approximately 32m from the Acton Conservation Area. 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 Quarry 4 Extension site, with potential 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 extension would not be expected to cause substantial harm to the Conservation Area but could have an impact on its setting. If so, this would be expected to be 'less than substantial' harm, and for a temporary period. This potential for harm has been given great and considerable weight in this assessment.

Sites nominated for allocation in the Mineral Sites Plan have been assessed on heritage and other grounds. A number have been rejected for various reasons, and 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 more detailed assessment that would be carried out as part of any planning application would address heritage impacts and identify appropriate mitigation to offset any harm identified.

Mitigation could include screening (an earth bund) and/or 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 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, 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, with the processing plant and other infrastructure 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

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. **A modification is proposed to include an additional development guideline to ensure cumulative impacts are minimised.**

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.

NB: Further work has been undertaken on cumulative impacts for all sites. This information is presented in a separate document that should be read alongside this report. There is potential for cumulative effects in relation to biodiversity; human health; air (noise/dust); climate/GHGs; landscape and amenity. Impacts are expected to be primarily during preparation/working, i.e. short to medium term; However the scale of working is controlled by the National Trust as landowners to minimise adverse landscape and amenity impacts and to ensure quarrying is of a traditional scale in the landscape setting. Restoration would maintain open landscape and provide ecological enhancement.

There is potential for in-combination effects between receptors such as human health/amenity, landscape and cultural heritage (Listed Buildings) given the concentration of sites in this area and the Acton Conservation Area nearby.

The DGs require cumulative impacts to be taken into consideration. The MPA is satisfied that identified impacts can be addressed by DGs and existing/proposed policy.

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. • There is potential for impact on the Acton Conservation Area and its setting. • 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 heritage, 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.

Updated Recommendation (February 2019)

An additional development guideline is proposed to ensure that consideration is given to cumulative impacts from proposals. This will provide an additional safeguard. The site therefore remains appropriate for allocation in the Bournemouth.

Purbeck Stone: PK19 Broadmead Field, Gallows Gore, Worth Matravers (February 2019)

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.	• **A modification is proposed to ensure appropriate protection of the SNCI.**
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

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
	?	0	**Surface Water** • There is a watercourse approximately 240m from the site. Proposed development could have Significant Impact, further assessment required.	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. • **An additional development guideline is proposed to ensure retention and protection of water mains and other water related infrastructure.**
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 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** • Listed building adjacent to site proposal, further assessment will be required to determine potential impacts. • Acton Conservation Area 235m east of the site - any impacts expected to be minimal.	• 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.
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.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
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 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	–	0	• Details of the exact point of access from this site on the highway network will be required. It is	• Any proposal for this site would need to be

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
impacts of waste and minerals transport on the transport network, mitigating any residual impacts.			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.	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**	• 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.	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			• 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 and open spaces.	**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. • Restoration to include considering how it might be possible to improve public access in the area.
	–	**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.	

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.

Heritage Impacts

The northern boundary of the site as identified is approximately 350m west of the Acton Conservation Area. 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 Broadmead Field site, with potential 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 extension would not be expected to cause substantial harm to the Conservation Area but could have an impact on its setting. If so, this would be expected to be 'less than substantial' harm, and for a temporary period. This potential for harm has been given great and considerable weight in this assessment.

Sites nominated for allocation in the Mineral Sites Plan have been assessed on heritage and other grounds. A number have been rejected for various reasons, and 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 more detailed assessment that would be carried out as part of any planning application would address heritage impacts and identify appropriate mitigation to offset any harm identified.

Mitigation could include screening (an earth bund) and/or 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 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, 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, with the processing plant and other infrastructure 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

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. **A modification is proposed to include an additional development guideline to ensure cumulative impacts are minimised.**

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.

NB: Further work has been undertaken on cumulative impacts for all sites. This information is presented in a separate document that should be read alongside this report. There is potential for cumulative effects in relation to biodiversity; human health; air (noise/dust); climate/GHGs; landscape and amenity. Impacts are expected to be primarily during preparation/working, i.e. short to medium term; However the scale of working is controlled by the National Trust as landowners to minimise adverse landscape and amenity impacts and to ensure quarrying is of a traditional scale in the landscape setting. Restoration would maintain open landscape and provide ecological enhancement.

There is potential for in-combination effects between receptors such as human health/amenity, landscape and cultural heritage (Listed Buildings) given the concentration of sites in this area and the Acton Conservation Area nearby.

The DGs require cumulative impacts to be taken into consideration. The MPA is satisfied that identified impacts can be addressed by DGs and existing/proposed policy.

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. **A modification is proposed to require consideration is given to the provision of bat roosts.** • 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. • Acton Conservation Area and/or its setting.

Overall Recommendation:

Assessment already carried out has flagged up heritage/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.

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.

Updated Recommendation (February 2019)

A series of additional development guidelines are proposed as modifications to the Mineral Sites Plan. These will provide an additional safeguards and mitigation to reduce the impacts of working. The site therefore remains appropriate for allocation in the Bournemouth.

Other Building Stone: BS02 Marnhull Quarry, Whiteways Lane, (February 2019)

NB: No modifications are proposed to this site allocations

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	• Environmental protection measures to be put in place to reduce dust and noise impacts.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			minimised through normal noise mitigation 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.

NB: Further work has been undertaken on cumulative impacts for all sites. This information is presented in a separate document that should be read alongside this report. There is potential for cumulative effects in relation to climate and amenity. There are also expected secondary effects for human health; water; air (noise/dust) and landscape. No in-combination effects between receptors are expected.

Impacts are expected to be primarily during preparation/working, i.e. short to medium term; However the quarries are small, at a traditional scale in the landscape setting. Restoration would maintain open landscape and provide ecological enhancement.

The MPA is satisfied that identified impacts can be addressed by DGs and existing/proposed policy.

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.

Updated Recommendation (February 2019)

No modifications have been proposed to this site allocation. The site remains appropriate for allocation in the Bournemouth, Dorset and Poole Mineral Sites Plan.

Other Building Stone: BS04 Frogden Quarry, north-east of Sherborne (February 2019)

NB: No modifications are proposed to this site allocations

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		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.	+ +	+	• 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	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
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 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

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
				Guidelines referred to in Minerals Strategy.
	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	+	**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 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	• 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

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			minimising impacts on the transportation network.	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** • 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.	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	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.
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.)

NB: Further work has been undertaken on cumulative impacts for all sites. This information is presented in a separate document that should be read alongside this report. There is potential for cumulative effects in relation to climate and amenity. There are also expected secondary effects for human health; water; air (noise/dust) and landscape. No in-combination effects between receptors are expected.

Impacts are expected to be primarily during preparation/working, i.e. short to medium term; However the quarries are small, at a traditional scale in the landscape setting. Restoration would maintain open landscape and provide ecological enhancement.

The MPA is satisfied that identified impacts can be addressed by DGs and existing/proposed policy.

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.
• 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.	• Possibly limited potential for archaeological impacts, but further assessment will be required. Any identified impacts would be expected to be capable of mitigation. • 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

Potential Benefits	Potential Impacts
	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. • 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.

Updated Recommendation (February 2019)

No modifications have been proposed to this site allocation. The site remains appropriate for allocation in the Bournemouth, Dorset and Poole Mineral Sites Plan.

Other Building Stone: BS05 Whithill Quarry Assessment (February 2019)

NB: No modifications are proposed to this site allocation

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. 142,000 ~~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.

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.	+	+	• 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	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
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 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.

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** • 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 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. • 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.

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 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, to benefit the recreational attraction and use of 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,	–	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.	• Any proposal for this site would need to be accompanied by a Transport Assessment which will need to provide access details

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
mitigating any residual impacts.			• 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.	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.
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	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			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.
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.)

NB: Further work has been undertaken on cumulative impacts for all sites. This information is presented in a separate document that should be read alongside this report. There is potential for cumulative effects in relation to climate. There are also expected secondary effects for human health; water; air (noise/dust); amenity and landscape. No in-combination effects between receptors are expected.

Impacts are expected to be primarily during preparation/working, i.e. short to medium term; However the quarries are small, at a traditional scale in the landscape setting. Restoration would maintain open landscape and provide ecological enhancement.

The MPA is satisfied that identified impacts can be addressed by DGs and existing/proposed policy.

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.

Updated Recommendation (February 2019)

No modifications have been proposed to this site allocation. The site remains appropriate for allocation in the 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, Horton Road(east) Now referred to as AS27 (see above)

NB: AS08 remains a site not promoted by the MPA.

AS27 has been reassessed and can be found in Appendix A

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		Commentary	Mitigation
	P/W	R/A		
19. To move waste management up the waste hierarchy	**N/A**	**N/A**	• This Objective is not relevant to this site nomination	• N/A
20. 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.	• Further information on wildlife interests of SNCI to be sought.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			• 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.	
	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	• 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		
	– –		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.	
21. 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.
22. 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
	–	0	**Surface Water** • There is a pond/ponds within the site and streams in close proximity.	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
				prevent contamination of groundwater resources. • Land Drainage Consent to be obtained from Dorset County Council if works may affect flow of an ordinary watercourse.
23. 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. • Negligible/No impact, during working and restoration.	• Flood Risk Assessment (FRA) will be required.
24. To maintain, conserve and enhance the historic environment (including archaeological sites, historic buildings, conservation areas, historic parks and gardens and other	–	+	**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	• 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

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
locally distinctive features and their settings).	– –		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.	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 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.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
25. 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.
26. 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.
27. 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. • 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

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
				properly reinstated during restoration.
28. 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.
29. To promote the use of alternative materials.	–	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 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.
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 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.	
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.
	0	+		
33. 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.	• 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		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. • 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.	
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 appropriate.
	– –			
35. 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.
36. 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. • 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 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

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

No change – site is not proposed for inclusion in the Mineral Sites Plan

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.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	–	0	**Local recognitions/designations, including ancient woodland and veteran trees** • 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.	• Further assessment required, including consideration of 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.
	0	0	**Surface Water** • Spring within 500m of site. No impacts expected on this.	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
				• 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).	**?**	**?**	**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 <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	**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,	**_ ?**	**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	• Assessment of potential visual impacts will be required <u>at planning application stage</u> and all appropriate mitigation to be included.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
seascape and the coast.			e.g. relating to stockpiles to reduce impacts from across the valley side.	• Northern boundary of site to be sensitively and carefully designed and worked. • Appropriate restoration proposals in line with Landscape Management Guidelines referred to in Minerals Strategy.
	_ ?	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	• 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	• Ensure principles of sustainable development are incorporated into the development of this site.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			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. • 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.
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.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	–	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 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 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.	• Appropriate arrangements to be made for ensuring that runoff from the site does not enter the groundwater unless any silt or	• Full hydrogeological risk assessment will be required as part of a planning application. • Flood Risk Assessment • Water Framework Assessment

	• Contamination of water supplies or reduction in amount of water available for licenced supplies.	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.	• 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 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

No change – site is not proposed for inclusion in the Mineral Sites Plan as Planning Permission has been granted

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 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** • 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.
		+		

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	0	0	**Impact on National Designations** • No impacts expected .	• No action required.
	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	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.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	0	**0**	**Historic Buildings** • No expected impact on Listed Buildings	• No action required.
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	**+**	**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	• No specific action required; site development to take into consideration and

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
mineral resources.	+ +		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.	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 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.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
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. • 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.	• 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.	–	+	• 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.

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 –	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.

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 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** • Development of this site does not affect any rights of way. No impacts.	• No action required.

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: AS09 Hurn Court Farm

NB: This site has been permitted and therefore will not be allocated in the Mineral Sites Plan. This assessment has not been updated (November 2018)

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.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	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.
	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.	
	?			

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 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 provided all necessary mitigation is implemented.	• Flood Risk Assessment (FRA) will be required, identifying possible risks and all necessary mitigation.
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	• Full assessment of possible impacts required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	– –		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 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.	• 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, 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	• Environmental protection measures to reduce dust and ensure noise is appropriately mitigated.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			mitigation to be included in the development of the site.	
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.
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.

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. • 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 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	• 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		
			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 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.

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 immediately adjacent to residential properties, with other residences and businesses within 100m. Development would involve mitigation (visual and noise attenuation bunding, standoffs) to limit impacts to appropriate levels.	• Provision of appropriate mitigation, following assessment of likely impacts.
	– –			
	–	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'.***

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 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[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 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.

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

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.

The proposal lies within 5km of a site allocated for development in the Christchurch and East Dorset Consolidated Plan[14] 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.

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.

[14] 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.

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.

This site has been permitted and therefore will not be allocated in the Mineral Sites Plan. This assessment has not been updated (November 2018)

Aggregates: AS10 Moreton Plantation

No change – site is not proposed for inclusion in the Mineral Sites Plan

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	• 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		
			conclusion of adverse effects on integrity of the sites is inevitable. • 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.
	– –	**?**	**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		
				• 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** • 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.	• 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

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
			• Positive management of the scheduled barrows could be part of the mitigation for the 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.	be reduced. 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	• 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		
			along the northern border of the proposed site, there would be little impact on the immediate 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.	• Soil is poor quality in agricultural terms but valuable in terms of potential for heathland restoration. • Soils to be stored/protected

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
			• 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.	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 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.	• Restoration to forestry could provide on-going economic benefits; however, restoration to open access heathland is considered preferable in biodiversity terms

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
		+	• 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.	and could provide limited economic benefits. • Some combination of the two may be most 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 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,	• Transport Assessment to be carried out, identifying opportunities for reducing impacts on the transport network.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
			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 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.

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** • 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 proposal would not come on stream until Warmwell is finished, reducing cumulative impacts. • There may also be an impact on Bere Regis.	• 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 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.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
	– –	+	**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	• 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.

	working of the site. Detailed assessment needed.	

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

No change – site is not proposed for inclusion in the Mineral Sites Plan

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/	• 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		Commentary	Mitigation
	P/W	R/A		
			SANG will discourage public use which could put additional pressure back on the heaths.	
	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	–	?	**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.	• 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
	– –			

Sustainability Objectives	Effects P/W	Effects R/A	Commentary	Mitigation
of water in a sustainable way.			• Site is not within any Source Protection Zone and overlies secondary aquifers. • Two licensed supplies within 500m.	leaving the site and entering the Stour 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. • 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.
	–	?	**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.	
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	?	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

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
gardens and other locally distinctive features and their settings).	?	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. • 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.	along southern edge of site. • Strengthen screening of the site where needed and appropriate.
	0			
	–	+	**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	• 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.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
			B3073 would be essential to protect the approach to the Parley Court buildings.	
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	–	+	**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. • 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.	• Full assessment of landscape and visual impacts required. • 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.

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/restoration 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	• 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.

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. • 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.	• Use energy efficient plant and machinery. • Ensure flood water is able to flow onto the site. • 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 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.

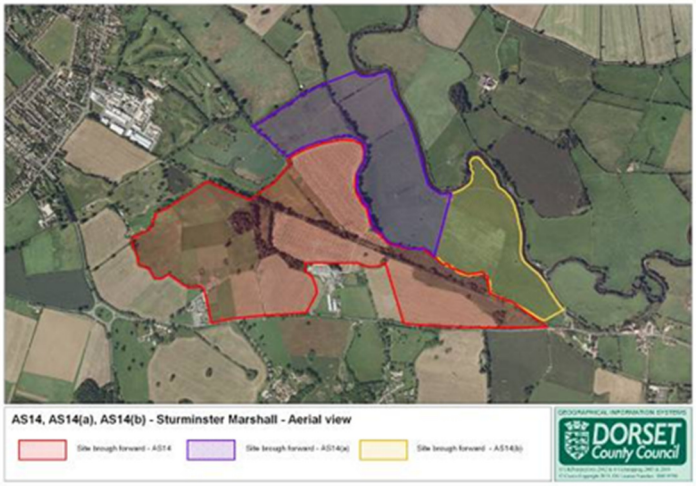
Aggregates: AS14 Sturminster Marshall

No change – site is not proposed for inclusion in the Mineral Sites Plan

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 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).	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
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. • Site is prone 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).	?	+	**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	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			approach avenue of reasonably mature trees. The 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	**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 noise is

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
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.	appropriately mitigated.
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	• 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

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			section of the A31T is unlikely to be acceptable 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.	Development Management Team. • 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

No change – site is not proposed for inclusion in the Mineral Sites Plan

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.	• Flood Risk Assessment (FRA) will be required. • All necessary mitigation to be implemented.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			• Processing plant far removed and on FRZ 1.	
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	• Any assessment required to be carried out, with appropriate mitigation

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			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 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.	implemented as required. • Routing for lorries leaving the site and wanting to turn right not to include the 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
	–	?	**Designated Landscapes** • Adjacent to the Dorset AONB boundary so will impact on its setting.	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	– –		• Further assessment required to assess extent of impact and options for mitigation.	impact would be acceptable. • If the site is developed, appropriate restoration proposals in line with Landscape Management 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	**+**	**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. • 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

No change – site is not proposed for inclusion in the Mineral Sites Plan

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.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
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** • 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	?	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	• Full archaeological survey of the area required 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		
archaeological sites, historic buildings, conservation areas, historic parks and gardens and other locally distinctive features and their settings).			have been undertaken would the archaeological impact be understood – at present it could be anywhere from Very Significant to No Significant impact.	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** • 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 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.	• 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	• 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.
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.

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 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.
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 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.
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

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.	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 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

No change – site is not proposed for inclusion in the Mineral Sites Plan

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		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 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.
	? / _	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		
				• 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** • 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 Capacity** • A very significant adverse impact on landscape character, visual and	• Landscape and visual impact assessment to identify impacts; consider whether adequate

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
landscape, including townscape, seascape and the coast.			recreational amenity and a loss of an 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

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
				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 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	• 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		
			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.	
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	• 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		
			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.	
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	– –	+/?	**Impact on Recreational Land**	• Restoration to open access land following working and

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
and open spaces.			• 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 offers the opportunity to restore/improve such access. • The issue of displacement of existing users onto international designations around the site must be addressed.	improvement of access where possible and where appropriate. • Consider phased working and 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

No change – site is not proposed for inclusion in the Mineral Sites Plan

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.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
	?	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.
	?	+	**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	–	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.	• Full archaeological survey of the area required to assess possible presence and significance of non-designated remains and to assess Monuments and

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
buildings, conservation areas, historic parks and gardens and other locally distinctive features and their settings).			• The barrow within the site in particular is a major constraint, and theoretically, extraction that destroyed this nationally-important feature would 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'.	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. • 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,	–	**+**	**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.	• Assessment of potential visual impacts required. • All appropriate mitigation to be included. • Restoration to consider increasing public access/informal recreation and

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
seascape and the coast.			• 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.	to include nature conservation interests. • Appropriate restoration proposals in line with 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.

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 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

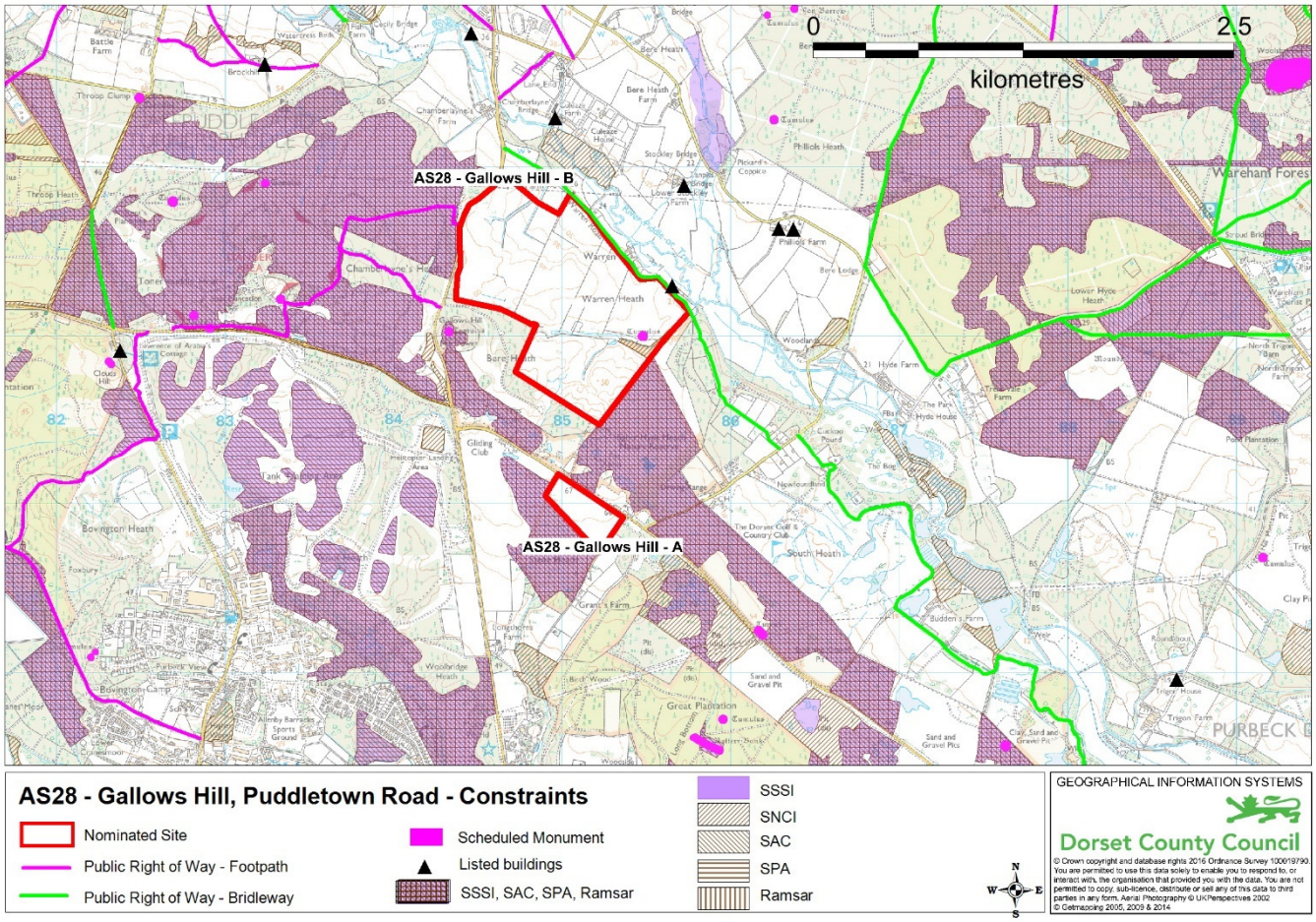
Aggregates: AS28 – Gallows' Hill A&B

No change – site is not proposed for inclusion in the Mineral Sites Plan

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 Guidelines 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 Guidelines 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 Guidelines 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 Guidelines 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 Guidelines 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 Guidelines 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 Guidelines 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

Protection of Water Resources (Hydrology/groundwater/ surface water management and flooding)	
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, 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.

Purbeck Stone: PK15 Downs Quarry Extension

This site is now permitted and no longer forms part of the plan process, A modification is proposed to remove the allocation. No further assessment of this site has been undertaken. November 2018)

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	• Ecological surveys required, with appropriate mitigation to be implemented.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			support the allocation to demonstrate no likely significant effect.	
	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
	0	**0**	**Surface Water** • Site is within 500m of a watercourse.	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
				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**	**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 at planning application stage. • All appropriate mitigation to be carried out, including prior restoration of other quarries as stated.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	–	0	**Designated Landscapes** • Less significant adverse impact.	• Appropriate restoration proposals in line with Landscape Management 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	• 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.

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. • 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..
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	• 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

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			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.	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** • 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	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			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.

Updated November 2018

Site has been permitted and no longer forms part of the Mineral Sites Plan.

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 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.	+	?	• 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	?	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	• Archaeological survey of the area required as part of planning application to assess possible presence and significance of non-designated remains and to assess

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
buildings, conservation areas, historic parks and gardens and other locally distinctive features and their settings).			prominent location all indicate the site's high archaeological potential. • 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.	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 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	**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	• Environmental protection measures to be put in place to

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
impacts of noise.			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.	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	• 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	• 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

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			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.	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	–	?	**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	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.	• Assessment of impacts, with appropriate mitigation identified.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
and open spaces.			• Restoration could seek to formalise or improve this access.	• Realignment of current 'desire lines' as required. • Restoration to include considering how it might be possible to improve public access in the area.
	–	+(?)	**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.	
	– –			

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

No change – site is not proposed for inclusion in the Mineral Sites Plan

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	+	**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		
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.	
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	–	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	• Any proposal for this site would need to be accompanied by a Transport Assessment which will need to provide access details and consider vehicle

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
network, mitigating any residual impacts.			into operation it is thought that it would follow 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.	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.
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.	• Appropriate mitigation to be implemented, following assessment of likely impacts – visual, transport or other. • Restoration to improve landscape of site where possible; and to

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			• 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.	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** • 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

No change – site is not proposed for inclusion in the Mineral Sites Plan as Planning Permission has been granted

-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 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**	**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.

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	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	?	0	**Archaeology** • The ground above is a churchyard and cemetery. Clearly disturbance of human remains is an issue that needs to be	• Further assessment required to assess/ensure mining of the stone under the cemetery would have

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
environment (including archaeological sites, historic buildings, conservation areas, historic parks and gardens and other locally distinctive features and their settings).			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 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.	no impacts on the burials above. • Development will be subject to the normal controls, established at the 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	• Environmental protection measures to reduce dust and ensure noise is appropriately mitigated.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
			mitigation to be included in the development of the site.	
9. To maintain, conserve and enhance soil quality.	**0**	**0**	• No impacts expected	• No action required.
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	• Use energy efficient plant and machinery.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			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.	
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.

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 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. • 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.	• 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 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.

This site has been permitted, following planning application.

Portland Stone: PS02 Perryfield Quarry Extension, Portland

No change – site is not proposed for inclusion in the Mineral Sites Plan

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	**0**	**0**	• Impacts on air quality expected to be negligible.	• Environmental protection measures to

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
air quality and reduce the impacts of noise.			• 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.	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 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

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
				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. • 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
	– –	+	**Impact on Public Rights of Way** • Footpaths to west, east and north of site. Footpath to north of site is adjacent to site	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/ W	R/A		
			boundary. Further assessment on screening required.	facilitate public access. • 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

No change – site is not proposed for inclusion in the Mineral Sites Plan as Planning Permission has been granted

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

No change – site is not proposed for inclusion in the Mineral Sites Plan

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.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	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 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.	• It is noted that this site would be worked intermittently and in limited campaigns. However, no information has been provided about how 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.

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 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 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** • Watercourse forms northern boundary of the site and there is another watercourse on the other side of Crack Lane.	
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	?	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.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
features and their settings).	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.	• 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 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.	

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
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.
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.	• No action required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			• 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.	
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	• 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	• 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		
			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**	**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	– –	**0**	**Impact on Recreational Land**	• Assessment of potential impacts,

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
countryside and open spaces.			• 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.	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.

Purbeck Stone: PK 21 Gallows' Gore, Langton Matravers

This site has been withdrawn. A modification has been proposed to remove the site from the Plan. No further assessment has been prepared.

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	• Site boundary to be amended as suggested, to minimise impacts on biodiversity. • Previously worked areas to south east and any

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	–		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.	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	• 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.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			geodiversity there is a presumption in favour of an appropriate level of quarrying activity continuing in order to sustain these on-going interests.	
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. 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 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 500 m 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. • Although the site is not at 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** • 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 – 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 action required.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
			• No significant impact expected.	
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.

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 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.
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 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

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
				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 further 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.

Sustainability Objectives	Effects		Commentary	Mitigation
	P/W	R/A		
	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.

Updated November 2018

Site has been withdrawn - no longer under consideration

Appendix D: Considering and Selecting Site Alternatives

Introduction

For mineral sites, the alternatives are the full range of sites nominated for consideration, all of which have been assessed and a selection made of those considered appropriate for inclusion as site allocations in the Mineral Sites Plan.

The approach to dealing with alternatives varied according to mineral type, as described in this section. However, for each mineral type, the following four questions were posed:

a. How much is needed?

b. Where will it come from?

c. How will sites/alternatives be identified?

d. How will sites/alternatives be assessed and selected?

Sand and Gravel

How much is needed?

The amount of sand and gravel required to be provided for through the allocation of new sites over the Plan period can be calculated, using an annual production figure and taking into account the amount of permitted reserves remaining - this gives an indication of how many site allocations will be needed in the Mineral Sites Plan. This calculation is shown in Chapter 4 of the Mineral Sites Plan.

Where will it come from?

The Minerals Strategy 2014 (Policy AS1) indicates that new sand and gravel extraction sites should be located within the designated aggregate resource blocks, although in certain circumstances quarries may be permitted outside these blocks.

How will sites/alternatives be identified?

The Minerals Strategy established a preference for the identification of for specific sites, through paragraph 5.11 and Policy SS2. The Minerals Strategy did not establish a preference for either extensions to existing sites or for new sites. All sites nominated for inclusion in the Mineral Sites Plan have been considered on their merits.

Assessing potential sites and identifying those most suitable for allocation must include the issue of viability. Without a willing landowner, a site is not viable and is unlikely to be developed. The MPA has focussed on issuing call(s) for sites, as this is considered to be most likely to identify supportive landowners/developers and identify the sites that will ultimately prove viable and therefore more likely to actually be developed.

i. The Calls for Sites – 2007, 2012 and 2014: In order to provide robust evidence for the appraisal of options for the delivery of a sustainable supply of aggregate resources, Dorset County Council made a call for sites in 2007, during the early stages of the preparation of the MSAD. Further calls for sites were issued in 2012 and 2014, to give any potential site nominees every opportunity to submit site nominations for consideration for possible inclusion in the emerging Draft Mineral Sites Plan.

ii. Review of Existing Plans and Previously Considered Sites: In addition to the calls for sites, the Mineral Planning Authority reviewed the adopted Bournemouth, Dorset and Poole Minerals and Waste Local Plan 1999 to identify sites which had not been developed, and could potentially be 'rolled over' to the emerging sites plan. Sites considered for inclusion in the 1999 Local Plan but not ultimately included in that Plan were also considered. Finally, Development Control officers were involved in identifying potential new sites, or site extensions, that could be considered.

iii. Other Site Nominations: As plan preparation continued a number of new sites were identified, either in response to the calls for sites or in some cases sites were nominated not in response to specific calls for sites. All nominated sites were subjected to assessment.

How will sites/alternatives be assessed?

Each site nomination - alternative - has gone through a range of assessments. These include:

i. Applying the 24 site assessment criteria as set out in Appendix 1 of the Minerals Strategy 2014, to produce a Site Assessment proforma sheet;
   - The site selection criteria have been selected to cover all aspects of sustainable development, and are derived from the sustainability objectives identified in the Sustainability Appraisal Scoping Report reference. This is to ensure that sites are appraised having regard to the full scope of sustainability issues which have shaped the Minerals Strategy.
   - The assessments were carried out by a range of specialists, including Dorset County Council officers (minerals policy team members, ecologists, archaeologists, historic buildings, the Jurassic Coast Team, landscape architects) and the Environment Agency for matters relating to hydrology and hydrogeology.

ii. This site assessment information was then applied through the Sustainability Appraisal, which assessed the alternatives against the 18 Sustainability Objectives which were identified from the Sustainability Appraisal Scoping Report. The SA included consideration of cumulative impacts and hydrological issues.

iii. Other strands of the assessment that each alternative went through include the Strategic Flood Risk Assessment and Habitat Regulations Appraisal screening.

iv. There was further and more detailed assessment of specific sites, including heritage assessment and traffic impacts assessment.

How will sites/alternatives be selected?

As noted above, it is known approximately how many sites are required to meet expected demand over the Plan period. Having completed the assessment of all alternatives, the appropriate number of most suitable sites were selected and proposed for allocation.

The sites selected together provided more than the actual amount required; a contingency figure was included, to take into account that one or more sites could be rejected following Examination of the Plan, or some sites may not yield the expected amount of mineral.

The selected sites are set out in Appendix A of this Sustainability Appraisal; sites not being taken forward are shown in Appendix C.

Crushed Rock

How much is needed?

As with sand and gravel, it is possible to calculate how much crushed rock should be provided for over the Plan period. However, the size of the permitted reserve (on Portland) potentially available for crushing/sale is large enough that no new quarries are required during the Plan period.

However, the Minerals Strategy 2014 notes that in exceptional circumstance (e.g. an unexpected reduction in supply) a new (or extended) crushed rock quarry would be possible.

Where will it come from?

A new crushed rock quarry is only possible where the mineral is found - primarily Portland or the Purbeck Plateau.

How will sites/alternatives be identified?

The 'calls for sites' referred to above for sand and gravel also applied to other mineral types, including crushed rock.

How will sites/alternatives be assessed?

All site nominations/alternatives have been assessed as described for sand and gravel above.

How will sites/alternatives be selected?

As noted, exceptional circumstances must be demonstrated to justify a new/extended site, given the existing landbank. In addition, sites proposed must also be acceptable according to the assessments undertaken.

The selected sites are set out in Appendix A of this Sustainability Appraisal; sites not being taken forward are shown in Appendix C.

Ball Clay

How much is needed?

The Minerals Strategy 2014 notes that anticipated supply over the life of the Minerals Strategy 2014 will be 250,000 tonnes per annum. There are not enough existing/identified sites to provide this amount over the life of the Strategy; however, there are criteria based policies for the supply of ballclay, enabling new applications to be made if there is identified need.

Where will it come from?

Future ball clay sites will be located within the ball clay consultation area, as designated. There are areas within the consultation area which are less environmentally constrained, where site searches should begin.

How will sites/alternatives be identified?

As for other minerals, through 'Calls for Sites' as described.

How will sites/alternatives be assessed?

All site nominations/alternatives have been assessed as described for sand and gravel above.

How will sites/alternatives be selected?

It is accepted that not enough sites have been nominated to meet demand. Of the nominated sites - alternatives - any that are considered acceptable following assessment (i.e. it is considered that identified impacts can be appropriately mitigated) will be selected.

The selected sites are set out in Appendix A of this Sustainability Appraisal; sites not being taken forward are shown in Appendix C.

Purbeck Stone

How much is needed?

The Minerals Strategy 2014 provides for 20,000 tonnes of saleable stone per year. It is not always clear how much stone a quarry will produce, before extraction starts. It is also the case that not all quarries

produce all the various types of Purbeck Stone. Therefore the MPA has taken the approach that all nominations of potential sites will be assessed and if found acceptable will be proposed as allocations.

Where will it come from?

Purbeck Stone will be source from the Purbeck Plateau. An Area of Search for Purbeck Stone is identified, within which non-allocated sites may be permitted in order to meet a shortfall in supply. In certain circumstances non-allocated sites outside the Area of Search may be permitted.

How will sites/alternatives be identified?

As for other minerals, through 'Calls for Sites' as described.

How will sites/alternatives be assessed?

All site nominations/alternatives have been assessed as described for sand and gravel above.

How will sites/alternatives be selected?

In order to maintain supply of the various beds of Purbeck Stone, all nominated sites/alternatives that are identified as suitable following assessment have been included as potential allocations.

The selected sites are set out in Appendix A of this Sustainability Appraisal; sites not being taken forward are shown in Appendix C.

Other Building Stone

How much is needed?

There is no set amount identified. The Minerals Strategy 2014 states that 'small-scale building stone quarries' will be permitted, provided certain criteria are met.

Where will it come from?

Where the various types of stone occur.

How will sites/alternatives be identified?

As for other minerals, through 'Calls for Sites' as described.

How will sites/alternatives be assessed?

All site nominations/alternatives have been assessed as described for sand and gravel above.

How will sites/alternatives be selected?

In order to maintain supply, all nominated sites/alternatives that are identified as suitable following assessment have been included as potential allocations.

The selected sites are set out in Appendix A of this Sustainability Appraisal; sites not being taken forward are shown in Appendix C.

These mineral types above are the only ones for which there are proposed allocations in the Mineral Sites Plan, so greater detail on treatment of alternatives is given above.

Table 17 below shows all the various sites considered and assessed throughout the preparation of the Plan, indicating which sites have come out of the allocation process and why.

Table 17: Sites Considered through the Site Identification and Assessment Process

	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 Considered For Inclusion in Pre-Submission Consultation Plan	Sites Under Consideration Following Hearings
Ball Clay	BC01 Carrot Bank	Withdrawn	~~BC01 Carrot Bank~~	~~Withdrawn~~	~~BC01 Carrot Bank~~	~~Withdrawn~~	~~BC01 Carrot Bank~~		~~BC01 Carrot Bank~~	~~BC01 Carrot Bank~~
	BC02 Dorey's	Permitted	~~BC02 Dorey's~~	~~Permitted~~	~~BC02 Dorey's~~	~~Permitted~~	~~BC02 Dorey's~~		~~BC02 Dorey's~~	~~BC02 Dorey's~~
	BC03 Povington	Permitted	~~BC03 Povington~~	~~Permitted~~	~~BC03 Povington~~	~~Permitted~~	~~BC03 Povington~~		~~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	~~BC04 Trigon Hill extension~~ Permitted
		New nomination	~~BC05 Dorey's Holme Heath~~	Withdrawn	~~BC05 Dorey's Holme Heath~~	~~Withdrawn~~	~~BC05 Dorey's Holme Heath~~		~~BC05 Dorey's Holme Heath~~	~~BC05 Dorey's Holme Heath~~
		New nomination	~~BC06 Woolsbarrow~~	Withdrawn	~~BC06 Woolsbarrow~~	~~Withdrawn~~	~~BC06 Woolsbarrow~~		~~BC06 Woolsbarrow~~	~~BC06 Woolsbarrow~~
Aggregates	AS01 Binnegar	Further consultation and assessment	AS01 Binnegar	Further consultation and assessment	AS01 Binnegar	Further consultation and assessment	AS01 Binnegar		~~AS01 Binnegar Permitted~~	~~AS01 Binnegar~~ Permitted
	AS02 Cannon Hill	Withdrawn	~~AS02 Cannon Hill~~	~~Withdrawn~~	~~AS02 Cannon Hill~~	~~Withdrawn~~	~~AS02 Cannon Hill~~		~~AS02 Cannon Hill~~	~~AS02 Cannon Hill~~
	AS03 Crossways	Withdrawn	~~AS03 Crossways~~	~~Withdrawn~~	~~AS03 Crossways~~	~~Withdrawn~~	~~AS03 Crossways~~		~~AS03 Crossways~~	~~AS03 Crossways~~
	AS04 Dorey's	Permitted	~~AS04 Dorey's~~	~~Permitted~~	~~AS04 Dorey's~~	~~Permitted~~	~~AS04 Dorey's~~		~~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~~	~~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 -	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~~	~~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	AS27 Land at Horton Heath - further consideration following Examination
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	~~AS09 Hurn Court Farm~~ Permitted
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~~	~~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~~	~~AS11 Parley Court Phase 3~~
AS12 Philliol's Farm	Further consultation and assessment	AS12 Philliol's Farm	Further consultation and assessment	AS12 Philliol's Farm	Not considered necessary	AS12 Philliol's Farm (under consideration again in case of shortfall)	AS12 Philliol's Farm	AS12 Philliol's Farm	~~AS12 Philliol's Farm~~ Removed following Examination
AS13 Roeshot	Further consultation and assessment	AS13 Roeshot	Further consultation and assessment	AS13 Roeshot	Further consultation and assessment	AS13 Roeshot		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~~	~~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	AS15 Tatchell's
AS16 Trigon Hill	Permitted	~~AS16 Trigon Hill~~	~~Permitted~~	~~AS16 Trigon Hill~~	~~Permitted~~	~~AS16 Trigon Hill~~		~~AS16 Trigon Hill~~	~~AS16 Trigon Hill~~
AS17 Uddens Plantation	Withdrawn	~~AS17 Uddens Plantation~~	~~Withdrawn~~	~~AS17 Uddens Plantation~~	~~Withdrawn~~	~~AS17 Uddens Plantation~~		~~AS17 Uddens Plantation~~	~~AS17 Uddens Plantation~~
AS18 Wimborne Minster	Withdrawn	~~AS18 Wimborne Minster~~	~~Withdrawn~~	~~AS18 Wimborne Minster~~	~~Withdrawn~~	~~AS18 Wimborne Minster~~		~~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	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~~	~~AS21 Came Home Farm~~
	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	~~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~~	~~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)~~	~~AS24 Purple Haze (south)~~
			New nomination	AS25 Station Road	Further consultation and assessment	AS25 Station Road		AS25 Station Road	AS25 Station Road
			New nomination	AS26 Hurst Farm	Further consultation and assessment	AS26 Hurst Farm		AS26 Hurst Farm	AS26 Hurst Farm
					New nomination	AS28 Gallows' Hill A&B	AS28 Gallows' Hill A&B	~~AS28 Gallows' Hill - Site A only - Withdrawn~~	~~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	PK16 Swanworth Quarry Extension
			New Nomination - Recycled Aggregate	RA01 White's Pit	Further consultation and assessment	RA01 White's Pit		RA01 White's Pit	RA01 White's Pit
Purb	PK01 Belle Vue	Withdrawn	~~PK01 Belle Vue~~	~~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	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~~	~~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~~	~~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~~	~~PK05 Land South of Acton Field and Priests Way~~
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~~	~~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~~	~~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 - Not considered suitable	~~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~~	~~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	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~~	~~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	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	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	PK18 Quarry 4 Extension

		New nomination	PK19 Broadmead	Further consultation and assessment	PK19 Broadmead	Further consultation and assessment	PK19 Broadmead			PK19 Broadmead	PK19 Broadmead
				New nomination	PK21 Gallows' Gore	Further consultation and assessment	PK21 Gallows' Gore			PK21 Gallows' Gore - Withdrawn	PK21 Gallows' Gore - Withdrawn
		New nomination	Kingston Hill (Purbeck marble)	Withdrawn prior to further consultation							
				New nomination	PK20 Crack Lane (Purbeck marble)	Not taken forward to consultation					
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	~~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~~	~~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~~	~~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	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	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	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~~	~~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~~	~~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~~	~~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)	~~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~~	~~NP05 Hyde Farm~~

Appendix E: Swanworth Quarry - Further Information

Exceptional Circumstances Test 1 – Need and Economy

Swanworth Contribution to Dorset Crushed Rock Supplies

E 1 The crushed rock used in Dorset is provided by quarries within Dorset or by importation, primarily from Somerset, either by road or rail. The historic sales of crushed rock in Dorset are identified in the Bournemouth, Dorset and Poole Local Aggregates Assessment (LAA).

E 2 Sales of locally won crushed rock over recent years have varied between 150,000 tonnes and 280,000 tonnes per year, the figures being largely dependent on the general level of economic activity. Sales from Swanworth amounted to approximately 50% of the crushed stone annually produced in Dorset during the same time period.

E 3 The first full year that Suttle Stone Quarries operated Swanworth Quarry was 2012 when sales amounted to only 62,000 tonnes due to the effects of the economic downturn and the new entry into the crushed rock business. Sales have gradually increased as the Suttle Stone Quarries business became more mature and integrated with the recycling operation at Manning's Heath. Sales remained restricted however, due to the limitations of the quarry processing plant inherited from Tarmac.

E 4 In order to address the processing limitations Suttles invested in new processing equipment in 2014 which allowed for more efficient crushing and screening of stone and a greater production of premium limestone products.

E 5 Sales have risen as a consequence of the improved processing operations and the improving economy from 104,000 tonnes in 2014 to 120,000 tonnes in 2015 and have remained between 120,000 to 130,000 tonnes since then. It is not anticipated that sales will increase beyond 130,000 tonnes per year in the future.

E 6 Crushed rock has been imported into Dorset by rail from Whatley Quarry in the Mendips in Somerset at varying levels up to 160,000 tonnes per year although the most recent 10 year average level of imports is only 50,000 tonnes per year as there have been no imports between 2012 and 2017. Imports have resumed.

E 7 The LAA also identifies that road imports of crushed rock, primarily from Somerset, amounted to approximately 260,000 tonnes in 2014, equivalent to 49% of the 530,000 tonnes of crushed rock consumed (LAA paragraph 1.33). This level of road imports is likely to increase in the future if rail imports cease and also as the economy improves with an associated increase in demand for construction aggregates.

E 8 Swanworth clearly makes an important contribution to the local crushed rock requirements and provides a spatial and sustainable source of material compared to the sites in Portland and the Mendips.

E 9 The advice in the NPPF at paragraph 145 (7th bullet point) is that mineral planning authorities should ensure that large landbanks bound up in very few sites do not stifle competition and Swanworth effectively provides an alternative source to crushed rock supplies to those from Portland and the Mendips.

E 10 The different types of limestone product sold from Swanworth between 2012 and 2017 is shown in **Table 17** below.

Table 17 - Swanworth Quarry Sales Split

Swanworth Quarry Sales Split 2012 - 2017	Percentage
Type 1 sub-base	56
Single size chippings	25
Block stone/Gabion	8
Other	6
Agricultural limestone dust	4
Dimension stone	0.25

E 11 Most products are sold within 30 miles of Swanworth. Stone is a heavy, bulky and relatively cheap product which makes the haulage element of the cost high and therefore the stone source needs to be as close as possible to the market. Longer transport distances, particularly for material such as Type 1 sub-base (the cheapest material in Table 2) are not desirable.

E 12 Some materials which have specialist uses and can therefore command a higher price travel further, e.g. Gabion stone, single sized chippings for decorative use and rock armour for river/coastal defence and for rail infrastructure works.

E 13 Some limestone block stone from Swanworth, from the 'Freestone Beds', has been transported to California Quarry to be cut as dimension stone and has been used in the local area. This stone is the same material that is extensively worked on the Isle of Portland.

E 14 The quarry extension area has the potential to produce larger unfractured block which would help to supplement the availability of dimension stone from Portland.

Economics

E 15 The Manning's Heath recycling depot merchants a wide range of aggregates, including those sourced from Swanworth. It also acts as a major hub for the receipt and subsequent recycling of construction and demolition waste in the area. Builders and contractors are able to deliver inert waste and collect aggregate products from the site. The provision of Type 1 sub-base and decorative products from Swanworth is key to its popularity with local traders and builders who can obtain all the products they need for a construction project.

E 16 The inert waste is recycled at Manning's Heath. The non-aggregate inert material remaining from the recycling operation is taken to Swanworth on returning HGVs for use in the recovery operation in site restoration.

E 17 The integrated relationship between Swanworth and Manning's Heath depot is very important in the success of both enterprises and is fundamental to the high percentage of "back haulage" utilised by the business where HGVS travel fully loaded in both directions taking Swanworth stone to customers or Manning's Heath and bringing inert waste materials back to Swanworth for restoration or recycling. Approximately 70% of Swanworth HGV movements use back haulage.

E 18 The annual turnover for Suttle Stone Quarries in 2016-2017 was almost £8 million with a similar turnover for Suttle Projects. Suttles strive to utilise local suppliers wherever possible.

E 19 There are almost 180 individual suppliers for the Suttle Stone Quarries business based in Dorset supplying a wide range of services and products. Annual expenditure during 2017 with individual Dorset suppliers ranged between £259,000 and £55. In addition Suttle Projects have over 90 individual Dorset based suppliers with annual expenditure levels in 2017 between £625,000 and £11

per supplier. Suttle Stone and Suttle Projects contribute significantly to the local and national economies.

Employment

E 20 Suttles employ a workforce that almost entirely consists of Dorset residents and are fortunate to have a loyal team with a low staff turnover. Currently Suttle Stone Quarries employs 52 and Suttle Projects employs 30. Currently all but five of the 82 Suttle employees reside in Dorset and 90% of the quarry based employees reside in Purbeck. The Suttles jobs are in general permanent, full time positions unlike some local jobs which are dependent on the seasonal nature of tourism.

Exceptional Circumstances Test 2 – Alternatives

Limestone

E 21 There are no realistic opportunities to extend the existing quarry into immediately adjacent land. To the east the depth of overburden above the limestone is excessive, well over 15 metres deep, and the area would be particularly prominent from local viewpoints. To the south, beyond the restored quarry area, the land is open, overlooked from a number of viewpoints and lies closer to Worth Matravers village. Neither area is owned or controlled by Suttle Stone Quarries and consequently neither area has previously been promoted to Dorset as a potential extension area.

E 22 It is considered that the only opportunity to continue the existing quarry and associated business is to extend extraction operations into the area allocated in the Draft Mineral Sites Plan, PK-16, for which Suttle control the mineral rights and the ability to develop.

E 23 The alternatives to limestone extraction at Swanworth are limited. There is relatively little geological exposure of limestone within Dorset all of which lies within the Area of Outstanding Natural Beauty or on the Isle of Portland. The only other limestone crushed rock source in Dorset is on Portland, where two companies control the supply of material. Other sources of limestone crushed rock lie in the Mendip area of Somerset. Additionally there is a railhead at Hamworthy near Poole that has periodically been used for transporting crushed rock from the Mendips.

E 24 Portland crushed rock is produced either as a by-product of dimension stone production from quarry sites and underground mine operations or is produced by working the Cherty Series limestone bed which lies beneath the dimension stone beds. Stone extraction on Portland is controlled by a single extensive planning permission granted in 1951 although there are considerable landscape, ecological and amenity constraints with certain parts of the permission.

E 25 Portland is not considered as a sustainable source of crushed rock due its distance from the main market of Bournemouth and Poole which is almost twice as far as Swanworth. Swanworth lies approximately 22 miles from the main Bournemouth and Poole market. Portland is located some 42 miles away from this market area and the Mendip Quarries are 60+ miles away.

E 26 The supply of material from Portland rather than Swanworth would result in almost twice the amount of road miles travelled by HGVs with consequent fuel consumption and engine emissions.

E 27 Swanworth also supplies 35,000 tonnes of limestone each year within the Purbeck District area, only a few miles from the quarry. Portland stone would be 20 miles further away.

E 28 The Mendips have substantial consented reserves of limestone and supply the majority of crushed rock imported by road into Dorset. The Mendip quarries are almost three times the distance from the Poole/Bournemouth market in comparison to Swanworth. It is not known whether back haulage occurs.

E 29 Mendips limestone is a purple/dark grey colour and not colour comparable to the stone used in Dorset.

E 30 The Dorset LAA estimates that road imports in 2014 amounted to approximately 260,000 tonnes of limestone, some 49% of the total crushed rock used in Dorset (LAA paragraph 1.33 and 1.69).

E 31 Crushed rock has previously been imported into the Hamworthy rail depot near Poole from Whatley Quarry on the Mendips. No imports were made between 2012 and 2017 and the limited operation undertaken in 2017 is to close during 2018 for economic reasons.

E 32 It is likely that the demand for crushed rock will continue at the current level and may well increase due to the number of proposed housing completions and employment development (LAA paragraphs 1.70 to 1.82).

E 33 The supply of crushed rock from Swanworth involves considerably less road miles, less fuel consumption and less associated engine emissions than supplies from Portland or from the Mendips.

E 34 Supplying crushed stone from Swanworth to the Bournemouth and Poole market would result in approximately 100,000 fewer HGV miles every year when compared with supplies from Portland and 200,000 fewer HGV miles every year when compared to supplies from the Mendips (calculation based on 100,000 tonnes supply annually from Swanworth with 20 tonne HGV load which would equate to 5,000 HGV loads per year).

E 35 These figures would double if the return HGV journey was included. Clearly Swanworth provides a sustainable source of crushed rock particularly when back haulage of material is considered.

E 36 Dorset estimate that the consented reserves on Portland, termed a landbank of permitted reserves, amount to 13 million tonnes although this figure will be substantially reduced as a consequence of the Review of Mineral Planning Permissions as required under the Environment Act 1995 and other significant environmental constraints as well as the trend towards underground mining. A hypothetical landbank of 13 million tonnes is sufficient to supply locally won crushed rock for 48 years at a rate of 270,000 tonnes per year.

E 37 The Planning Practice Guidance published October 2014 by the Ministry of Housing, Communities and Local Government, refers to the size of landbanks in paragraph 084 and states that:

There is no maximum landbank level and each application for minerals extraction must be considered on its own merits regardless of the length of the landbank.

E 38 There are many mineral planning authorities that have substantial landbanks of crushed rock aggregate that are more extensive than the Dorset landbank although a substantial landbank does not preclude the grant of new permissions for more aggregate in these areas. Planning decisions should be made following consideration of the merits of the proposals.

E 39 The Planning Practice Guidance paragraph 084 goes on to state that:

There are a number of reasons why an application for aggregate minerals development is brought forward in an area where there exists an adequate landbank. These could include:

- *Significant future increases in demand that can be forecast with reasonable certainty.*
- *The location of the consented reserve is inappropriately located relative to the main market areas.*
- *The nature, type and qualities of the aggregate such as its suitability for a particular use within a distinct and separate market.*
- *Known constraints on the availability of consented reserves that might limit output over the plan period.*

E 40 It is considered that several of these reasons are applicable to the allocation of the Quarry extension. The demand for crushed rock will continue at the current level and may well increase due to the predicted level of residential and employment development during the next 15 years. The alternative consented reserves of limestone in Portland are located considerably further from the main market and alternative aggregate types cannot match the characteristics and specifications of Swanworth products.

Alternative Aggregate – Sand and Gravel

E 41 Sand and gravel is not a comparable alternative for many of the products from Swanworth.

E 42 Sand and gravel is a conglomeration of smaller particles of other rocks which have been first eroded and then deposited as a result of water (fluvial or marine) or ice action (glaciers). Sand and gravel contains no large individual pieces and therefore cannot be used for applications where larger sizes materials are needed. By comparison limestone is a solid sedimentary rock which is formed in 'massive' deposits over a great depth. By comparison limestone is a solid mass and the size of the product can be controlled during the quarrying process to give sizes ranging from fine dust to say 5 tonne pieces measuring approximately 1.2 metre square.

E 43 Sand and gravel contains no cohesive properties whereas limestone has cohesive properties both through clay in its bedding planes, which can be processed out during production, or utilised as a benefit depending on the final application. The natural action of lime also acts as a basic cement.

E 44 Sand and gravel is largely composed of impervious silica and flint which are pH neutral whereas limestone is composed of more porous calcium carbonate which is alkali.

E 45 Sand and gravel is generally yellow/brown in colour with rounded particles whereas Portland limestone is white as evidenced by the walls, tracks, paths and buildings in the area with an angular/blocky shape.

Swanworth Product Range

E 46 Fine limestone dust from Swanworth has applications from agricultural use (treating acid soil types) through to mortar for heritage masonry restoration work. Its alkalinity and its ability to be ground to a fine dust allow for these applications. Sand and gravel does not have these properties.

E 47 Limestone in 6mm, 10mm and 20mm chippings are used primarily for decorative and specialist use. These chippings are distinctively white in comparison to sand and gravel. An example of a specialist use is the supply of 6mm chippings nationally for use in resin bonded surface coatings to architectural stairs and walkways. Swanworth limestone has a porosity which is very compatible with this process. Gravel particles are impervious.

E 48 Limestone sub-base; 20mm to dust mix, Type 1 and open graded sub-base are used to build foundations for all forms of construction. It is the fine particles, produced by crushing, when mixed with larger angular particles that combine to give a material which gives a very stable, load bearing base on which roads, houses, etc, can be built. Limestone alkalinity makes it cementitious which helps the binding process during compaction. Importantly, these factors make a stable platform for the construction process as well.

E 49 Recycled aggregates can be used for some construction applications but the physical properties mean that they are not universally suitable and there is often a deficit in the quantity of recycling feedstock in comparison to demand particularly for construction sub-base.

E 50 Bulk fill materials are used to fill larger void spaces or the lower part of a construction profile which is then generally capped off with Type 1 sub-base.

E 51 Gabion stone is sized from 100mm to 200mm and is used in the creation of Gabion baskets. These are stone filled wire mesh baskets used to form a composite structural wall that is durable and visually attractive. Gabion baskets are used for coastal and inshore marine defence, retaining walls to highways and railway embankments, and also as a modern and attractive landscaping detail.

E 52 The largest particles of gravel are not compatible with the construction of gabion baskets, and without the angular nature of the particles the Gabions would lack the structural strength required.

E 53 Rock armour of all sizes is used for marine and inshore flood defence. Gravel products are too small for these applications.

E 54 Block stone can be produced at Swanworth in any size up to 8 tonnes and is used in many applications; art installations and architectural landscaping, defence against vehicle trespass and civic amenity. Gravel is not suitable for such applications.

E 55 It is important to note that an amount of the Swanworth Portland block stone has been used at California Quarry for cutting into dimension stone products and it hoped to increase production levels from the extension area. Again gravel is not suitable for such applications.

Exceptional Circumstances Test 3 – Environment

E 56 The potential impact on the environment, landscape and recreation would be assessed as part of a planning application and Environmental Impact Assessment (EIA) for the development of the extension area. The extent that any impacts could be moderated would also be determined as part of the EIA process although it is considered from the work that has already been carried out that unacceptable impacts could be mitigated.

E 57 In order to understand the potential level of impact and to demonstrate the necessary assessment work is fully understood, substantial preliminary work has been carried out on certain environmental aspects. Work has been undertaken on landscape, ecology, the water environment, cultural heritage and highways.

Landscape

E 58 Much of Dorset is designated as AONB due to the quality and variety of the landscape. All AONBs/National Parks derive their identity in the first instance from their geology. The Dorset AONB is no exception. It is, among many factors, the rolling hills, ridges, coombes, cliffs, fossils which make people want to live here and visit. It is a living landscape. People have lived, farmed, travelled, worked and quarried here for millennia. While it is the geology and natural forces that have generally created the landform, it is this human activity that has created the land cover and land use.

E 59 The residents and visitors to the AONB and wider area require a supply of aggregates and essential building materials. These either have to come from within the AONB or from further afield. If the aggregates do not come from quarries within the Dorset AONB then they must travel by road from such areas as Portland or the Mendips transferring any landscape and visual impacts elsewhere but with the unsustainable addition of significant lorry movements with their own visual and other impacts on the landscape.

E 60 Swanworth Quarry is a consented operational facility with its infrastructure already in place. With rare exception the plant and major activity is well-concealed. The upper slopes and faces are restored or being restored to an agreed plan. There are landscape and visual advantages in using an existing facility over introducing a new one into the AONB elsewhere. Swanworth Quarry has been providing material to the area for over 100 years and is, in itself and like other building stone quarries, part of the fabric and history of the area. The current Swanworth Quarry can be seen only from a very few limited viewpoints and, then, it is mostly the upper slopes ad faces currently being restored.

E 61 The proposed extension area comprises three nearby fields. The proposed quarry and connection to the existing facility has been devised through numerous iterations and consultations to minimise landscape and visual impacts. To this end, it is only the lower parts of two fields which would be quarried with an access cut across the third field avoiding specific valued landscape elements. The proposed design utilises the strong field pattern with its walls/hedgerows/fences.

E 62 The access road cutting and gabion bridge combination have been designed and located to minimise landscape and visual impacts particularly of internal lorry movements.

E 63 There are very limited viewpoints from which any parts of the extension could be seen. Even these could be mitigated further at detailed design/application stage. Directions of working and sequencing have been devised to minimise impacts and to maximise the infilling and progressive restoration.

E 64 All and any visual or landscape impacts are, in any event, temporary. The restoration of the whole proposed area to the original landform, land cover and land uses ensures this.

E 65 No landscape elements or features of any consequence are permanently lost. There are limited cumulative effects.

E 66 While there would be limited landscape impacts on the AONB and visual impacts to very restricted viewpoints in the AONB these would be temporary.

Ecology

E 67 In order to establish habitat types, their extent and provide a predictive assessment of their likely dependent fauna present ecologists Andrews Ecology were commissioned to undertake a thorough Phase 1 ecological survey.

E 68 The survey work covered a larger area than the currently proposed extension and was carried out before the final extension design had been determined, however the work demonstrated the limited ecological value of the agricultural land and identified the potential for a number of species to be present primarily in the adjacent valleys that would need further survey and assessment work as part of a full EIA. The detailed Phase 1 report is available.

E 69 The Phase 1 survey comprised:

- A desk-study including a search for historical biological data relating to the site and a stratified radius performed by Dorset Environmental Records Centre.
- Phase 1 habitat mapping on 13th August 2014 to the methodology set out in the *Handbook for Phase 1 Habitat Survey: A technique for environmental audit*.
- An assessment of the conservation value of the habitats present against the criteria set for Priority Habitats within the UK Biodiversity Action Plan.
- A predictive assessment of the potential dependent legally protected and/or UK Biodiversity Action Plan (BAP) fauna using published scientific accounts.

E 70 Having completed the Swanworth Quarry Extension Phase 1 survey, it was determined that in order to produce a robust assessment of the overall site detailed surveys and assessments would be required for great crested newts, reptiles, breeding birds, dormouse, badger and bats.

E 71 The necessary survey work would be undertaken following agreement of the scope and extent of the works with Natural England and the Dorset ecologist. The provision of mitigation measures would be determined, as necessary, following the species survey work and assessment.

Water Environment

E 72 A preliminary hydrogeological and hydrological risk assessment was undertaken by BCL Hydrogeologists on the development of the extension area. The purpose of the assessment was to consider the potential impacts on the water regime and particularly on the nearby Encombe Estate water supply. The report is available and contains preliminary findings on the following:

- Baseline characterisation of the local water environment.
- Evaluation of effects to date.
- Impact screening of the proposed extension upon that environment.
- Requirements for further information and assessment.

E 73 Collection and interpretation of published data, in conjunction with site specific information has facilitated the development of a preliminary conceptual model describing the nature of, and interactions between, the groundwater and surface water systems operating within the area.

E 74 The conceptual model has been employed to assist a screening exercise designed to identify the likely impacts of the proposed extension upon the water environment and determine requirements

for further information. The assessment should therefore be viewed as an initial stage of the conventional EIA process.

E 75 The full report was submitted to the EA as well as to Dorset County Council in December 2016. The EA subsequently responded to the report confirming they had no objection to the proposed site extension being included in the Bournemouth, Dorset and Poole Mineral Sites Plan. A copy of the EA letter is available.

Cultural Heritage

E 76 There are several Scheduled Monuments (tumuli) in the vicinity of the extension area and as a consequence a cultural heritage consultant, Andrew Josephs Associates, has been engaged to advise on how best to minimise the potential impact of the extension area on features of cultural heritage in the area and the Scheduled Monuments in particular.

E 77 The initial extension design proposals have demonstrated that there is flexibility in the operation and restoration of the quarry, and further refinement during the planning process should result in an acceptable scheme being designed.

E 78 The extension area has been designed to avoid any physical disturbance of the Scheduled Monument. Shallow soil banks would be established on the boundary of the extension area to screen extraction operations.

E 79 Initial consultation with Historic England has been carried out and a site meeting held in March 2015 to discuss the potential impact of the extension on the Scheduled Monuments. At the meeting it was suggested by Keith Millar (Heritage England Ancient Monuments Inspector) that extraction should not occur in the southernmost field in which the closest Scheduled Monument is located and only access should be provided. Extraction should be restricted to the fields to the north of the Scheduled Monument. This advice has been taken on board in the final extension design.

E 80 In addition the proposals to restore the extension area to agriculture at original ground levels would ensure that there was no long-term impact on the Scheduled Monuments.

E 81 A series of site-based investigations and analysis of heritage and landscape setting issues would be required prior to determination of a planning application. This work would be carried out at the outset of the planning application process and would be coupled with ongoing consultation with English Heritage and Dorset Archaeologists to ensure that sufficient and appropriate work is carried out to allow an informed decision to be made.

Highways

E 82 The Hurlstone Partnership Limited was instructed to review the general acceptability of the proposed quarry extension in terms of highway matters. The review considered the conditions imposed upon the existing planning permissions which would, as far as highway matters are concerned, continue to be applied to the proposed extension. The transport statement is available.

E 83 Effectively the proposed extension would result in a continuation of the existing activities at the site for an additional period of time. There would be no increase in traffic on an hourly, daily, weekly or annual basis when compared with the current situation.

E 84 A review of historic traffic data revealed that even when taking into account predicted traffic growth, the traffic flows between the quarry and the A351 corridor, along which the majority of site vehicles travel, would remain below the volumes previously accommodated on the route. It was also found that the proportion of development traffic on the A35 trunk road, to which the A351 connects, would remain insignificant in the future.

E 85 The safety performance of the site access and the local road network to the A351/A35 was reviewed with reference to personal injury accident data obtained from Dorset County Council. It was found that the existing HGV activities at the site had not led to injury accidents.

E 86 In reviewing the proposed extension for the purposes of the Draft Mineral Sites Plan, Dorset Highways confirmed that the existing site access is adequate and the continuation of activities as a result of the

scheme would be acceptable in terms of highway impact, awarding the site a rating of "Less Significant Adverse Impact".

E 87 It is concluded that the proposed extension to Swanworth Quarry would be acceptable in terms of highway and transport matters taking the assessment work into account and the transport policy test imposed by paragraph 32 of the National Planning Policy Framework, which advises: "Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe".