Sustainability Appraisal / Strategic Environmental Assessment

Appendix 6 – Site Assessments

Sharp Sand and Gravel Sites

Soft Sand Sites

Sharp Sand and Gravel Sites

Minerals and Waste Site Assessment form

Site ID:	MW003	**Site Name:**	Aldermaston Bridge
Site Address:	Basingstoke Road, Aldermaston	**Parish:**	Aldermaston
Mineral/Waste development:	Mineral extraction	**Site Area:**	18ha

Recommendation

Recommendation:	Site is **not** recommended for allocation
Justification:	Only a small area of the site (approx. 7.5ha out of 18ha) is considered suitable for development in landscape terms, it is not considered that this small area would be viable to extract and therefore, the site is not considered suitable for allocation.

Key Considerations

Biodiversity: The site is located to the south of Aldermaston Gravel Pit SSSI and the River Kennet SSSI flows through the site. Habitat/Ecology and hydrological assessments will be required with appropriate mitigation to ensure no negative impacts on the respective SSSIs.

Landscape: The site is located in an area of high landscape sensitivity, only the northern part of the site should be developed, with the southern part of the site remaining as agricultural land. A Landscape Visual Impact Assessment will be required, and landscape mitigation in accordance with the Council's Landscape and Visual Assessment.

Rights of Way: Rights of way crossing the site will need to be retained or diverted. Buffers are to be retained or new routes supplied.

Flooding: The site is located within flood zone 3b, while sand and gravel extraction is a water compatible activity consideration of the siting of buildings/plant material on the site would be required to site these in areas of lowest flood risk.

Cumulative Impact: There are a number of sites in the locality and therefore careful consideration of phasing would be required should all sites be taken forward to ensure that not all sites were developed at the same time.

Site Assessment

Biodiversity: The site is located to the south of Aldermaston Gravel Pit SSSI, itself a former quarry, and the River Kennet flows through the site. There is potential for a negative impact on environmental sustainability unless adequate mitigation is provided to ensure no contamination to the SSSI or the River Kennet. The site is also within the Kennet Valley East Biodiversity Opportunity Area. Although this is not a constraint to development it does mean that opportunities should be taken to improve biodiversity in the area. This could be done through the restoration scheme. Natural England has requested that the restoration scheme should provide opportunities to improve biodiversity and provide links to Gravel Pit Farm SSSI. Habitat/ecology and hydrological assessments will be required.

Agricultural Land Classification: The site is currently in agricultural use, with the northern part of the site shown to be grade 3b agricultural land and the southern part of the site grade 4.

Heritage: The site is close to a number of listed buildings and the Aldermaston Conservation Area.

Historic England consider that it is unlikely that development of the site will have a significant impact on these heritage assets. From field walking and Holocene predictive mapping there is some potential for archaeology and therefore, a desk based assessment would be required.

Landscape/Townscape: Overall the area is considered to be of high landscape sensitivity. Only the northern part of the site is recommended for allocation (approx. 7.5ha), with the southern part of the site remaining as agricultural land and landscape buffers. A Landscape and Visual Impact Assessment would be required and mitigation measures, as set out in the Council's Landscape and Visual Assessment. The Council's Landscape and visual Assessment states that the site should be restored to existing levels avoiding the creation of lakes or ponds. The restored pasture should be subdivided by hedgerows and hedgerow trees to create field sizes in keeping with those around the site.

The site is located to the south of Aldermaston Wharf and north of Aldermaston Village. Consideration of the setting of the site in relation to these settlements would be required.

Amenity: Noise and dust generation from the site is likely, however, mitigation measures would reduce these impacts, including limits on operating hours. The site is not particularly close to sensitive receptors, therefore, there is unlikely to be a significant impact.

Rights of way: There are a number of footpaths in the area, with one crossing the southern part of the site. There is also a permitted cycle path running along the northern boundary of the site broadly parallel to the A340 (Basingstoke Road). Should development take place the footpath, and ideally the permitted cycle path would need to be retained or diverted. Buffers to the paths would also need to be considered to reduce the impact of extraction.

Flooding: The site is located in flood zone 3b. Although mineral extraction is a water compatible activity, consideration of the areas most at risk from flooding is required especially in relation to the location of any plant materials to be present on the site. All plant/buildings required on site would need to be located in the area of lowest flood risk. Mineral extraction can lead to improved flood mitigation through the lowering of land resulting in greater flood storage areas.

Water Environment: The site is with SPZ 2 (northern part of the site) and 3 (southern part of the site). The Environment Agency has some concerns regarding infilling of the site, however, it is considered that this could be dealt with adequately to ensure no negative impact on local water quality.

Highways: Access to the site would be onto A340. The A340 is classified as a 'district access route to key destinations' in the West Berkshire Freight Strategy. Suitable site lines can be provided onto the A340. Access to the site should be within the 30mph section of the road. Transport assessment work would be required, which would need to specifically assess the potential impact on the canal bridge at Aldermaston Wharf.

Employment: Development of the site could have a positive impact on the local economy and job creation.

Geology/Mineral Resources: The site is underlain by sharp sand and gravel. No work has been carried out to determine the depth or quality of the mineral reserve.

Utilities: A southern gas network pipe runs along the north eastern boundary of the site. Appropriate buffers would need to be provided to the pipeline.

Restoration/After-care: The site is proposed to be restored using inert infill material. The site promoter has not provided any details regarding a proposed restoration scheme. The Council's landscape assessment indicates that the site should be restored to existing levels avoiding the

creation of lakes or ponds to retain the character of the area. Natural England would like to see improvements to biodiversity links between the site and the adjacent SSSI.

Cumulative Impact: There are a number of sites being considered in this locality: Aldermaston Bridge (MW001), Wasing Lower Farm (MW012), Padworth Park Farm (MW014), which if all developed together could have a significant negative impact on sustainability especially environmental and social sustainability. Phasing of sites coming forward would be a key consideration, in terms of highways, landscape and amenity impacts. The site promoter has suggested that development of this site could follow on from the works at Lower Farm, Wasing ensuring that extraction works would not occur on both sites at the same time.

Sustainability Appraisal: Overall development of this site would be likely to have a negative impact on environmental sustainability. However, development of this nature is temporary and good restoration would return the site to a similar, or better, state than its current state. Mitigation measures would be required for the duration of the development to ensure no long term negative impacts result from the development. It is predicted that there would be a positive impact on economic sustainability as a result of job creation and supporting the local economy.

Deliverability: The site is likely to come forward following completion of works at Lower Farm, Wasing. The Site promoter has indicated that the site would be suitable to come forward in 11 – 15 years, towards the end of the plan period with a lifetime of approximately 4 – 6 years. The landowner is supportive of the proposal and there is no indication that the site would not be deliverable within the plan period.

The distribution of material across the site is unknown. A reduced developable site area from that originally proposed as recommended by the landscape work could impact on the deliverability and viability of the site.

Consultation

Site Consultation 2016: A number of issues were raised as part of the sites consultation in summer 2016 these included the general need for minerals development, impacts on ecology, local amenity, landscape, highways, historic environment and the water environment as well as issues associated with restoration and after-care and the cumulative impact of development along with other sites in the area.

- *Ecology – Specific concerns were raised regarding a lack of consideration of the environmental and the potential impact development could have on local biodiversity, agricultural land and the river Kennet.*
- *Amenity – Impacts of n*oise*, dust and air pollution on health and well being was highlighted as was the potential impact on local open space/recreation, including the rights of way network.*
- *Landscape – Concern was raised over the potential impact on the character of the landscape and the countryside in particular the visual impact of development. Screening hedges were suggested as one way to reduce the impact.*
- *Restoration/After-care – The consultation provided little information regarding restoration of the site, however comments focused around a lack of faith in good restoration coming forward. Comments suggested that landfill should not be used and the site should be restored to wetland, to increase biodiversity, or recreational facilities including footpaths.*
- *Water environment – Significant concern was raised regarding flood risk on the site which is within flood zone 3b and in an area of high ground water. The northern section of the site is adjacent to the River Kennet, with potential for an impact on the confluence of the River Enborne and River Kennet.*
- *Highways – Locally there is concern regarding the suitability of the road network for HGV*

traffic. Concern was also raised regarding the potential impacts on the cycle path between Aldermaston Village and Aldermaston Wharf which is well used by children and parents to reach the primary school in the village.

- *Historic Environment – A number of listed buildings are close to the site and the potential impact needs to be considered.*
- *Cumulative Impact – Concern was raised over the number of sites being considered given the size of West Berkshire. Three sites are being promoted in this area, with one site already having been granted permission for extraction yet to commence.*

All of these issues have been addressed in the Site Consultation Response report (December 2016).

Preferred Options Consultation 2017: The site was not included as a preferred option. No comments were received on the site.

Submitted Proposal from Site Promoter

Extraction of 0.5m tonnes of sharp sand and gravel. Infilling 200,000m^3 void with locally sourced inert material to restore the site. Site would be worked over a 4 – 6 year period.

Approximately 12 ha of the site considered suitable for development by the proposer.

Access onto the A340 at a location that will provide suitable sightlines.

Planning History

No planning history for this site.

The site is in the same ownership as Wasing Lower Farm, part of which has planning permission for gravel extraction. It has been proposed that the site might best be developed as a follow on to Wasing Lower Farm.

Sustainability Appraisal (SA) / Strategic Environmental Assessment (SEA) criteria assessment

Site name	Site address
Aldermaston Bridge	Aldermaston
Development Potential / proposal	Extraction of 200,000 tonnes of sharp sand and gravel, and 100,000m^3 inert landfill

Key:

++	+	?	0	-	- -
Significantly Positive	Positive	Uncertain	Neutral	Negative	Significantly Negative

SA Objective	Criteria	Effects of site allocation on SA objectives	Justification for assessment	Mitigation / enhancement	Comment
1) To protect and enhance biodiversity and geological diversity throughout West Berkshire	Is there likely to be an impact on biodiversity?	-	Aldermaston Gravel Pits SSSI is directly to the north of the proposed site. The River Kennet flows through the site and watercourses are valuable habitats in their own right, also acting as ecological corridors.	Mitigation would be required. This should include a buffer zone between working and the SSSI / watercourses. Monitoring of the impacts on the SSSI would also be required with additional mitigation measures implemented if an adverse impact is identified	There is potential for a negative impact on environmental sustainability in the medium term without mitigation. Assessment, monitoring, and application of suitable controls could mitigate this however, and potentially result in an improvement on a permanent basis through restoration incorporating biodiversity enhancements.
	Is there likely to be an impact on geodiversity?	?	The extraction of mineral and subsequent infilling with inert waste would permanently alter the geological makeup of the site.		
2) To maintain and enhance water quality and resources	Is there likely to be an impact on water quality?	-	Aldermaston Gravel Pits SSSI is directly to the north and the River Kennet flows through the site.	Monitoring of the impacts on the SSSI and water courses would also be required with additional mitigation	Without mitigation there is potential for a negative impact on environmental sustainability in the

			The site is within high groundwater risk area.	measures implemented if an adverse impact is identified	medium term.
	Is there likely to be an impact on water resources?	**0**	Unlikely to be an impact on water resources.		
3) To minimise the risk and impact of flooding	Is there likely to be an impact in terms of flood risk?	**+**	The majority of the site is within flood zone 3b, however sand and gravel extraction is considered to be water compatible development. The extraction of sand and gravel has the potential to improve flood mitigation measures, including improved flood storage areas.	The voids created by extraction could potentially be positive for flood risk in the sense that they could provide extra capacity for floodwaters in the medium term or permanently depending on the restoration scheme. Infilling of the voids with inert waste could have implications for potential flood storage capacity. However, if restored to a lower level, the site could provide flood storage capacity.	This site could potentially have a positive impact on environmental and economic sustainability through the reduction of flood risk via provision of extra capacity for floodwater in the medium/long term
4) To maximise the sustainable use of land and the protection of soils, safeguarding the best and most versatile agricultural land	Is there likely to be an impact on the best and most versatile agricultural land?	**?**	The northern part of the site is shown as grade 3 while the southern part is shown as grade 4, therefore, the impact on agricultural land would depend on the areas of the site worked	Restoration of the site should restore any lost agricultural land to its former quality.	Following the extraction of the mineral there should be no long term impact on sustainability as restoration of the site should be to a similar or better state, however, in the short and medium term there could be an impact on environmental and economic sustainability.
	Is there likely to be an impact on soil quality?	**0**	It is likely that the soils would be removed and stored during the working of the site to be used for restoration purposes so	Conditions would be imposed to ensure soils are used on site as part of the restoration scheme.	

			there is unlikely to be an impact on soil quality.		
	Would previously developed land be utilised?	**0**	It is acknowledged that new mineral sites are generally 'greenfield', however once the land is restored it would return to 'greenfield'. In theory therefore, the impact would be 'neutral'.		
5) To conserve and enhance the character of the historical environment, cultural heritage assets, and features of archaeological importance	Is there likely to be an impact on the historic environment?	**?**	The site is close to a number of heritage assets.	Consideration of the potential impact on the local heritage assets would be required and it is likely that any negative impacts could be mitigated to an acceptable level.	With appropriate mitigation measures there should not be any impact on environmental sustainability.
6) To minimise the impact on landscape and townscape character	Is there likely to be an impact on the townscape?	**0**	Unlikely to be an impact on townscape		Without mitigation there is potential for a negative impact on environmental sustainability in the medium term and on a permanent basis depending on the restoration of the site.
	Is there likely to be an impact on the landscape?	**-**	The landscape character of the area is defined as medium-high, therefore, there is potential for a negative landscape impact.	Mitigation measures would be required, in line with the Landscape and Visual Assessment. A reduced developable area would also reduce the impact on the landscape.	
7) To protect air quality in West Berkshire	Is there likely to be an impact on air quality?	**-**	Potential negative impact on air quality as a result of dust generation and traffic movements.	As part of a planning application air quality and dust assessments would potentially be required and mitigation measures including dust suppression techniques	This site could potentially have a negative impact on environmental sustainability, however, this would only be for the duration of the

				may be required to ensure negative impacts are mitigated to an acceptable level.	extraction/restoration works. Mitigation measures would reduce any short/medium term impacts with no long term impacts.
8) To maximise energy efficiency, the proportion of energy generated from renewable sources and adaptability to climate change	Is there likely to be an impact on the amount of renewable energy capacity being provided in West Berkshire?	**0**	Unlikely to impact on renewable energy capacity		There is an overall uncertain impact on both environmental and economic sustainability due to the unknown nature of the restoration potential on the site.
	Is there likely to be an impact with regard to adaptability to climate change?	**? / +**	Climate change may increase the likelihood / frequency of flooding and the voids created from mineral extraction could potentially accommodate some of this floodwater in the medium term and on a permanent basis depending on the restoration scheme.	The voids created by extraction could potentially be positive in the sense that they could provide extra capacity for floodwaters.	
9) To ensure the sustainable management of waste, minimise the quantity of waste sent to landfill, and to maximise the re-use, recovery and recycling of waste	Is this likely to have an impact on the amount of waste going to landfill?	**-**	The site is proposed for mineral extraction and inert landfilling as part of the restoration scheme	Landfilling is proposed for restoration purposes.	With regard to the sustainable management of waste there is likely to be a negative impact on environmental sustainability.
	Is this likely to have an impact in terms of the quantity of waste being reused, recovered and/or recycled?	**0**	The site would result in extraction of primary material, therefore, would not impact on reuse, recovery or recycling.		
10) To promote the sustainable transport of minerals and waste within West Berkshire	Is it likely that rail or waterborne transportation would be used in connection with this site?	**-**	Limited opportunities for rail or waterborne transport from the site, meaning there will be a reliance on road transport.		This site could potentially have a negative impact on environmental sustainability in respect of sustainable transport in the short – medium
	Is there likely to be an impact on the transport	**-**	Mineral extraction and inert landfilling would	A Transport Assessment/Statement	

	network (including the local road network and the Strategic Road Network)?		generate traffic movements. There is likely therefore, to be a negative impact on the transport network on a medium term basis.	would be required as part of the development management process in order to assess whether the impacts on the transport network would be acceptable and set out what mitigation measures would be required.	term, however, due to the temporary nature of mineral extraction in the long term there would be a neutral impact.
11) To conserve mineral resources in West Berkshire through safeguarding of primary aggregates and encouragement of the use of recycled aggregate where possible and appropriate	Is there likely to be an impact in terms of safeguarding of primary aggregates?	**0**	Unlikely to have an impact on safeguarding of primary aggregates although development of the site would provide primary aggregates for construction purposes.		The site makes use of primary aggregates for construction purposes, therefore preventing sterilisation of the material. It is unlikely that there would be an impact on any element of sustainability.
	Is there likely to be an impact in terms of the use of recycled aggregate/construction and demolition wastes?	**?**	There is potential for recoverable material used for inert infill to be taken from the imported waste material to produce recycled aggregate, the residual material being deposited in the void. If this was the case there could be a positive impact.		
12) To protect human health and well being and maintain the quality and quantity of public open space amenity across West Berkshire, and	Is there likely to be an impact on the quality and quantity of open space amenity?	**-**	A number of rights of way are in close proximity to or cross the site.	Rights of way would need to be protected or diverted for the duration of the extraction period. The site is in private ownership and not generally open to the public.	There is likely to be a negative impact on environmental and social sustainability while the site is being worked, however once working has ceased and the land has been

protect areas of tranquillity in the context of minerals and waste development	Is it likely that there would be an impact with regard to areas of tranquillity?	-	The area is quiet and rural in nature, and mineral extraction and inert landfilling may result in a negative impact on tranquillity for the duration of the works.	Mitigation could potentially include a phased working scheme with progressive restoration, landscaping measures and noise controls. The restoration scheme is likely to dictate whether there would be a permanent impact and if this would be positive or negative.	reclaimed the impact on all elements of sustainability would potentially be neutral.
13) To minimise public nuisance	Is it likely that there would be an impact with regard to odour?	0	There is unlikely to be an impact on odour.		There is likely to be a negative impact on environmental and social sustainability while the site is being worked, however once working has ceased and the land has been reclaimed the impact on all elements of sustainability would potentially be neutral.
	Is it likely that there would be an impact on noise levels?	-	Mineral extraction and inert landfilling and the associated traffic movements would have a negative impact in terms of noise	A noise assessment, setting out any required mitigation would likely be undertaken as part of the development management process. Mitigation could reduce any negative impact to an acceptable level.	
	Is it likely that there would be an impact with regard to light pollution?	0	Unlikely to be an impact on light pollution		

14) To support opportunities for economic development, including jobs, arising from waste and minerals related activities	Is there likely to be an impact on the local and wider economy?	+	Mineral extraction and inert landfilling is likely to be beneficial for the local and wider economy providing direct and indirect employment in the medium term (during the working of the site).		There is likely to be a positive impact on economic sustainability.
	Is there likely to be an impact in terms of employment?	+	Mineral extraction and inert landfilling is likely to be beneficial for the local and wider economy providing direct and indirect employment in the medium term (during the working of the site)		

Summary

Overall development of this site would be likely to have a negative impact on environmental sustainability. However, development of this nature is temporary and good restoration would return the site to a similar, or better, state than its current state. Mitigation measures would be required for the duration of the development to ensure no long term negative impacts result from the development. It is predicted that there would be a positive impact on economic sustainability as a result of job creation and supporting the local economy.				
Effect:	**Likelihood:**	**Scale:**	**Duration:**	**Timing:**
Predominantly negative	Medium	Local	Temporary	Short/Medium Term

Minerals and Waste Site Assessment form

Site ID:	MW004	**Site Name:**	Boot Farm
Site Address:	Brimpton Road, Brimpton Common	**Parish:**	Brimpton
Mineral/Waste development:	Mineral extraction	**Site Area:**	30ha

Recommendation

Recommendation:	The site is **not** recommended for allocation		
Justification:	The site has been withdrawn from consideration for allocation.		
Proposal for Allocation:	Extraction of sand and gravel. Restoration to agriculture at a lower level, with potential for some infill to improve the landform.		
Approximate Extraction Volume:	750,000 tonnes	**Phasing / Timescale:**	10 – 12 years
Approximate Infill Volume:	500,000m^3	**Availability:**	By 2025

Key Considerations

Key considerations:

Biodiversity: The site is located close to two SSSIs, with the relevant mitigation measures and hydrological assessment it is not considered that this would be a significant issue affecting the site. Habitat/ecology and hydrological assessments would also be required as set out in the Council's Preliminary Ecological Appraisal.

Highways: While in general traffic movements are likely to be low, consideration of the most appropriate haulage route for HGVs will be required due to the nature of the local highway network. Access is proposed to be using the B3051 to the south of the site, improvements would be required to the junction of Brimpton Lane and the B3051. Transport assessment work would be required.

Landscape: the site is considered suitable for development in landscape terms subject to a reduced developable area and mitigation measures as set out in the Council's Landscape and Visual Assessment. A Landscape and Visual Impact Assessment would be required. The site promoter has agreed to the 'developable' area of the site as proposed through the preferred options.

Site Assessment

Biodiversity: There are three SSSIs and four Local Wildlife Sites within 1km of the site, all of which are also classified as ancient woodland. The provision of appropriate buffers and mitigation would need to be considered. Natural England has indicated that there may be some sensitivity in terms of hydrological impact, however this is not likely to be a significant issue if adequate mitigation and control measures are put in place. Habitat/ecology surveys would be required as set out in the Council's Preliminary Ecological Appraisal.

Agricultural Land Classification: Grade 3

Heritage: There are limited heritage assets in the area, although there are some listed buildings, a scheduled monument and a Grade II registered historic park and garden within 500m of the site. Consideration of any development on the setting of these heritage assets would be required. There is some potential for prehistoric/palaeolithic archaeology, field walking from 1970s found areas of burnt flint and flakes/cores and also possibly roman rood tile. Therefore a heritage impact assessment, desk based archaeological assessment and field evaluation would be required

Landscape/Townscape: The site is considered to be in an area of medium/low landscape character sensitivity and medium/high landscape sensitivity. The majority of the site is considered acceptable for development (approx. 19ha) subject to mitigation measures, including a significant buffer to Boot Farm itself, as set out in the Council's Landscape and Visual Assessment. A Landscape and visual Impact Assessment will be required to support any future planning application.

The site is approximately 1km from Brimpton itself although there are a limited number of dwellings close to the site at Brimpton Common. It is not considered that development of the site would impact on townscape.

Amenity: Noise and dust generation from the site is likely, however, mitigation measures would reduce these impacts, including limits on operating hours. The site is adjacent to a children's nursery at Boot Farm, therefore, appropriate mitigation, including a wide buffer would be required to ensure no negative impacts on the nursery would result from works on the site. Impacts on other residential properties will need to be considered, but with appropriate mitigation provided are not considered to be a concern.

Rights of way: No public rights of way cross the site, although there are some rights of way nearby. Consideration of the impact on these rights of way would be required.

Flooding: The site is not at risk from flooding from any source.

Water Environment: A small area to the northwest of the site and along the eastern boundary of the site are within SPZ3.

Highways: Access to the site should come from Brimpton Lane. Due to the restricted nature of Brimpton Lane to the north, the haul route will be to the south towards the B3051. Improvements would be required to the junction of Brimpton Lane with the B3051 to ensure adequate sight lines could be achieved. It is predicted that vehicle movements will be relatively low. Transport assessment work will be required. The site promoter has indicated that if material was not processed on the site it could be transported to Mortimer Quarry (approx. 6km to the south east, close to Burghfield Common but within in Hampshire).

Economy: Development of the site would have a positive impact on the local economy and job creation as well as the potential to increase the life of the processing plant at Mortimer Quarry should material be transported there for processing

Geology/Mineral Resources: The site geology is sharp sand and gravel. The British Geological Survey Mineral Assessment Report 24 (Aldermaston, Berkshire) records that this site is in a resource block with a mean mineral thickness of 2.6m and mean overburden thickness of 0.5m and the mineral is classified as 'clayey' gravel. One borehole record is present on the south west boundary of the site (SU56SE30). This records the mineral deposit as approx. 3.3m and overburden as approx.1m.

Utilities: Blacknest seismic monitoring station is located 0.3km from the southern boundary of the

site. Concerns previously raised by AWE have been overcome following further discussions with the landowner regarding the details of extraction.

Restoration/After-care: The site would be restored to lower level agriculture with some potential infilling to improve the landform. The Council's Preliminary Ecological Appraisal suggests that should the site be allocated it should be restored to mosaic woodland, grassland and hedgerows, characteristic of the surrounding landscape. Sub-division of the large field by new hedgerows would increase hedgerow habitats and improve habitat connectivity providing net gains for biodiversity. If the site is to be restored to grassland, there is the opportunity to create species-rich grassland, which could be managed as a hay meadow, providing net gains for biodiversity, there may also be the potential to create ponds with the site.

Cumulative Impact: There are no other sites in the local area proposed for allocation, therefore, it is unlikely there would be any cumulative impacts from development of the site.

Sustainability Appraisal: Overall development of this site would be likely to have a neutral impact on sustainability. A number of negative impacts have been identified, mainly in relation to environmental sustainability, however, these are likely to be short/medium term impacts as a result of the development itself but there should be no long term negative impacts as mineral development is temporary in nature. Good restoration should mean that there is no long term negative impact, and could result in improvements, especially in relation to environmental sustainability. It is predicted that there would be a positive impact on economic sustainability as a result of job creation and supporting the local economy. Potential impacts on social sustainability are likely to be neutral in the long term, but there could be some short/medium term negative impacts unless adequate mitigation measures are introduced.

Deliverability: The site has been withdrawn from consideration for allocation.

Consultation

Sites Consultation 2016: A number of issues were raised as part of the sites consultation in summer 2016 these included general need for mineral extraction, ecology, amenity, landscape, highways, historic environment and restoration.

- *Ecology – Potential for a negative impact on the local environment*
- *Amenity – Noise is a concern, good standards of amenity should be retained for local communities, cumulative impacts with other sites need to be taken into account.*
- *Landscape – The site is considered to be highly visible and the gradient of the site would mean restoration would be difficult*
- *Highways – Concern over excess traffic and the impact on HGVs on the local road network. Concern was also raised regarding the impact to the local rights of way network*
- *Historic Environment – Concern over the potential impact on local listed buildings, heritage assets need to be taken into account.*

All of these issues have been addressed in the Site Consultation Reponses Report (December 2016).

Preferred Options Consultation 2017: A number of issues were raised as part of the Preferred Options consultation in summer 2017, including:

- *Amenity – concerns regarding the impact of HGVs on the local primary school and children's nursery. Concerns over pollution (noise, dust, air quality)*
- *Need – Unsure as to why this site is required based on the need for sand and gravel*
- *Viability - No work has been undertaken to determine the viability of the site*
- *Landscape – the LVA does not accurately reflect the visibility of the site from Brimpton.*

Concern over the impact on the landscape. Restored agricultural land never does as well as virgin agricultural land

- *Ecology – proximity of the site to LWS and SSSI, concern over the impact on wildlife. Restoration proposals should look to provide biodiversity enhancements.*
- *Transport – Access is not suitable for HGVs. Other sites have better access being located next to "A" roads. Concerns over additional HGV traffic and the road safety impact*
- *Flooding – extraction could damage natural groundwater flow paths and result in flooding within the village.*
- *Heritage – proximity of the site to heritage assets, which need proper consideration*
- *Other – The site is close to a Forensic Seismology site, the impact on this sensitive site would need to be considered.*

All of these issues have been addressed in the Preferred Options Consultation Response Report (September 2018).

Submitted Proposal from Site Promoter

Originally proposed for extraction of 1m tonnes of sand and gravel (revised down to 750,000 tonnes following the Preferred Options to take into account the required buffers/margins. Site would be worked over 10 – 12 years.

The site would be restored to lower level agriculture, with some potential infill to improve the landform.

No fixed processing plant is proposed. A mobile dry screener may be needed, and there is also the potential to process material off site at Mortimer Quarry.

Planning History

No planning history.

Sustainability Appraisal (SA) / Strategic Environmental Assessment (SEA) criteria assessment

Site name	Site address
Boot Farm	Brimpton Road, Brimpton Common
Development Potential / proposal	Extraction of 700,000 tonnes of Sand & Gravel and restoration

Key:

++	+	?	0	-	- -
Significantly Positive	Positive	Uncertain	Neutral	Negative	Significantly Negative

SA Objective	Criteria	Effects of site allocation on SA objectives	Justification for assessment	Mitigation / enhancement	Comment
1) To protect and enhance biodiversity and geological diversity throughout West Berkshire	Is there likely to be an impact on biodiversity?	**0 / -**	While the site is close to a number of sites of nature conservation importance they are not considered close enough for there to be either direct or indirect impacts on these sites. Areas of hedgerows could be removed, and development of the site could impact on the habitats provided by the adjacent woodland	Mitigation would be required in line with the Preliminary Ecological Assessment to protect the adjacent woodland and where possible on site hedgerows should be retained and protected, or enhancement features provided where there may be loss of hedgerows.	There is potential for a negative impact on environmental sustainability in the medium term without mitigation measures being implemented. Assessment, monitoring and application of suitable controls would mitigation this impact and, in the long term restoration of the site should provide net gains for biodiversity.
	Is there likely to be an impact on geodiversity?	**?**	The extraction of mineral would create a void and permanently alter the geodiversity of the site.		
2) To maintain and enhance water quality and resources	Is there likely to be an impact on water quality?	**0**	While the site is close to SSSIs it is not considered that development of the site would impact on water	Hydrological / biodiversity assessments and ongoing monitoring will	Without mitigation there is potential for a negative impact on environmental sustainability in the

			quality.	be required. Mitigation measures will need to be implemented.	medium term.
	Is there likely to be an impact on water resources?	**0**	There is unlikely to be an impact on water resources as a result of the proposed mineral extraction.		
3) To minimise the risk and impact of flooding	Is there likely to be an impact in terms of flood risk?	**0**	The site is not at risk from flooding.		There is unlikely to be an impact on flood risk and so it is also unlikely that there would be an impact on any element of sustainability.
4) To maximise the sustainable use of land and the protection of soils, safeguarding the best and most versatile agricultural land	Is there likely to be an impact on the best and most versatile agricultural land?	**?**	The site is shown as being Agricultural land grade 3.	Restoration should return the land to its original (or better) state.	It is unknown as to whether there would be an impact on environmental and economic sustainability in the short/medium term, however, restoration should return the site to its existing condition (or better) resulting in a neutral or positive impact in the long term.
	Is there likely to be an impact on soil quality?	**0**	It is likely that the soils would be removed and stored during the working of the site to be used for restoration purposes so there is unlikely to be an impact on soil quality on a permanent basis.	Conditions would be put in place to ensure soils are retained on site and used for restoration purposes.	
	Would previously developed land be utilised?	**0**	It is acknowledged that new mineral sites are generally 'greenfield', however once the land is restored it would return to 'greenfield'.		
5) To conserve and enhance the character of the historical environment, cultural heritage assets, and features of archaeological importance	Is there likely to be an impact on the historic environment?	**0 / ?**	There are some heritage assets close to the site, but it is considered unlikely that there would be any impact on these heritage assets. There is some prehistoric archaeological potential on the site which will need to be investigated further.	Consideration of the heritage setting of the listed buildings will need to be considered, but careful design of the site should mitigation any impacts. Further archaeological assessment will be	There is an unknown impact on environmental sustainability without further consideration of the heritage assets and archaeological potential on the site.

				required.	
6) To minimise the impact on landscape and townscape character	Is there likely to be an impact on the townscape?	**0**	Unlikely to be an impact on townscape		Without mitigation there is potential for a negative impact on environmental sustainability in the medium term. Restoration of the site should return the site to its greenfield nature and therefore, over the long term there should be a neutral impact on sustainability.
	Is there likely to be an impact on the landscape?	**-**	The site is in an area of medium landscape sensitivity .Part of the site is considered suitable for development in landscape terms.	General landscape mitigation measures should be provided, in line with the Landscape and Visual Assessment. A reduced developable area would also help to reduce the impact on the landscape.	
7) To protect air quality in West Berkshire	Is there likely to be an impact on air quality?	**-**	Potential negative impact on air quality as a result of dust generation and traffic movements.	As part of a planning application air quality and dust assessments would potentially be required and mitigation measures including dust suppression techniques may be required to ensure negative impacts are mitigated to an acceptable level.	Without mitigation it is likely that there would be a negative impact on environmental sustainability in the medium term, however, in the long term the impact should be neutral.
8) To maximise energy efficiency, the proportion of energy generated from renewable sources and adaptability to climate change	Is there likely to be an impact on the amount of renewable energy capacity being provided in West Berkshire?	**0**	Unlikely to impact on renewable energy capacity.		Unlikely to be an impact on any element of sustainability.
	Is there likely to be an impact with regard to adaptability to climate	**0**	Unlikely to impact on adaptability to climate change.		

	change?				
9) To ensure the sustainable management of waste, minimise the quantity of waste sent to landfill, and to maximise the re-use, recovery and recycling of waste	Is this likely to have an impact on the amount of waste going to landfill?	?	The site is being proposed for mineral extraction with potential for some limited infilling with inert material		The restoration of the site may include some limited infilling with inert material, and therefore, there would be an unknown impact on environmental sustainability in the long term.
	Is this likely to have an impact in terms of the quantity of waste being reused, recovered and/or recycled?	0	Unlikely to be an impact on the quantity of waste being reused, recovered and/or recycled.		
10) To promote the sustainable transport of minerals and waste within West Berkshire	Is it likely that rail or waterborne transportation would be used in connection with this site?	-	There are limited opportunities for rail or waterborne transport from the site meaning there will be a reliance on road transport.		As the site would likely be based on road transport there is likely to be a medium term negative impact on environmental sustainability, however, in the long term the impact should be neutral.
	Is there likely to be an impact on the transport network (including the local road network and the Strategic Road Network)?	-	It is likely that additional road-based traffic would be generated, so there would potentially be a negative impact in this regard in the medium term.	A Transport Assessment would be required as part of the development management process in order to assess the impacts on the transport network and set out what mitigation measures would be required. Traffic movements would need to be south from the site due to the narrow nature of the road network to the north.	
11) To conserve mineral resources in West Berkshire through safeguarding of primary aggregates and	Is there likely to be an impact in terms of safeguarding of primary aggregates?	0	Unlikely to have an impact on safeguarding of primary aggregates although development of the site would provide primary		The site makes use of primary aggregates for construction purposes, therefore preventing sterilisation of the

encouragement of the use of recycled aggregate where possible and appropriate			aggregates for construction purposes.		material. It is unlikely that there would be an impact on any element of sustainability.
	Is there likely to be an impact in terms of the use of recycled aggregate/construction and demolition wastes?	**0**	Restoration of the site may include a small amount of infilling with inert fill.	Opportunities for fill material to be sorted and any 'usable' material to be removed from the fill material for recycling	
12) To protect human health and well-being and maintain the quality and quantity of public open space amenity across West Berkshire, and protect areas of tranquillity in the context of minerals and waste development	Is there likely to be an impact on the quality and quantity of open space amenity?	**0**	Restoration of the site does not propose to include public access, therefore, there will be no impact on the quality or quantity of open space.		There would potentially be a negative impact on social sustainability in the medium term however, with good restoration there should be no long term, sustainability impact.
	Is it likely that there would be an impact with regard to areas of tranquillity?	**-**	Mineral extraction could potentially impact negatively on tranquillity in the medium term.	Mitigation could potentially include a phased working scheme with progressive restoration, landscaping measures and noise controls.	
13) To minimise public nuisance	Is it likely that there would be an impact with regard to odour?	**0**	Unlikely to be an impact on odour.		There is likely to be a negative impact on environmental and social sustainability while the site is being worked, however once working has ceased and the land has been reclaimed the impact on all elements of sustainability would potentially be neutral.
	Is it likely that there would be an impact on noise levels?	**-**	The extraction of sand and gravel and the associated vehicle movements are likely to have a noise impact in the medium term.	A noise assessment, setting out any required mitigation would likely be undertaken as part of the development management process. Mitigation could reduce any negative impact to an acceptable level.	
	Is it likely that there would be an impact with regard to light pollution?	**0**	Unlikely to be an impact on light pollution.		

14) To support opportunities for economic development, including jobs, arising from waste and minerals related activities	Is there likely to be an impact on the local and wider economy?	+	Mineral extraction is likely to be beneficial for the local and wider economy providing direct and indirect employment in the medium term as well as resources for the local market.		There is likely to be a positive impact on economic sustainability.
	Is there likely to be an impact in terms of employment?	+	Mineral extraction is likely to be beneficial for the local and wider economy providing direct and indirect employment in the medium term.		

Summary:

Overall development of this site would be likely to have a neutral impact on sustainability. A number of negative impacts have been identified, mainly in relation to environmental sustainability, however, these are likely to be short/medium term impacts as a result of the development itself but there should be no long term negative impacts as mineral development is temporary in nature. Good restoration should mean that there is no long term negative impact, and could result in improvements, especially in relation to environmental sustainability. It is predicted that there would be a positive impact on economic sustainability as a result of job creation and supporting the local economy. Potential impacts on social sustainability are likely to be neutral in the long term, but there could be some short/medium term negative impacts unless adequate mitigation measures are introduced.				
Effect:	**Likelihood:**	**Scale:**	**Duration:**	**Timing:**
Predominantly neutral	Medium	Local	Temporary	Short / Medium Term

Minerals and Waste Site Assessment form

Site ID:	MW007	**Site Name:**	Cowpond Piece
Site Address:	Off Island Farm Road, Ufton Nervet	**Parish:**	Ufton Nervet
Mineral/Waste development:	Mineral extraction	**Site Area:**	66ha

Recommendation

Recommendation:	Site is **not** recommended for allocation.
Justification:	While it is recognised that minerals can only be extracted from where they lie, more sites have been promoted for development and were considered to be potentially suitable for development than are required to meet the Council's need and therefore, there are choices to be made as to which sites to take forward for allocation. There are a number of potential constraints on the site, which while they could be overcome significant mitigation or compensation measures would be required, which would not be required for other sites. Therefore, it is not considered appropriate to allocate the site. The main constraints highlighted for the site relate the ecological and landscape impacts. The site is wholly within a Local Wildlife Site designated for bird habitats and with a range of rare fungi on the site, while development of the site may potentially be possible this would only be with significant mitigation and off site compensation measures being provided. The landscape assessment indicates that only a small part of the site is immediately suitable for development in landscape terms, without additional landscape work being provided. This additional work has not been provided and therefore, currently it is not possible to determine how much of the site would be suitable for development.

Key Considerations

Biodiversity: The site is within a Local Wildlife Site, designated for birds and fungi species present on the site. The LWS is considered to be of County level importance and the ecological impact would be a significant constraint to development of the site, with significant mitigation and off-site compensation measures required.

Landscape: The site is located in an area of medium landscape sensitivity, and without additional detailed landscape work only a small part of the site is considered suitable for development. No additional landscape work has been carried out, and therefore, there is a degree of uncertainty as to the area of the site that might be suitable for development in landscape terms.

Cumulative Impact: The site is located adjacent to another site promoted for development, Firlands (MW008) and close to an active quarry site at Mortimer Quarry in Hampshire.

Consideration of the cumulative impacts would be required, should all three sites be permitted to work at the same time. However, it is unlikely that the three sites would be operational together given that this site would be worked following completion of the works at Mortimer Quarry.

Site Assessment

Biodiversity: The site is currently managed woodland for commercial forestry. It is close to some Ancient replanted and Ancient Semi-Natural woodland. The site is within the Cowpond Piece and Gibbet Piece Local Wildlife Site, designated for birds and fungi. The LWS is considered to be of County level importance. The Council's Preliminary Ecological Assessment states that development of the site would result in habitat loss and an overall loss of biodiversity within species groups and is considered to be a significant constraint to the development of the site. It is considered unlikely that adequate mitigation/compensation measures could be delivered on site, and therefore, off-site compensation measures would be required. Restoration of the site would need to enhance the biodiversity of the Local Wildlife Sites taking into account the targets of the Burghfield to Tadley Plateau BOA. The site is also adjacent to the Pamber Living Landscapes project area.

Agricultural Land Classification: The site is classified as non-agricultural land as it is used for forestry, with a small area of grade 3 agricultural land along the eastern edge of the site.

Heritage: There is a listed building and scheduled monuments close to the site which would need further consideration to ensure there are no negative impacts on the heritage assets or their setting. The HER indicates a range of features on the site and while the site is under commercial forestry there is potential for multi-period archaeological, therefore, Heritage Impact Assessment, a desk based assessment and field evaluation would be required with any planning application submitted.

Landscape/Townscape: Overall the site is considered to be an area of medium landscape sensitivity. Only part of the site is considered suitable for development in landscape terms. The open area to the north of the site (approx. 7ha) is considered acceptable for development subject to landscape mitigation measures as set out in the Council's Landscape and Visual Assessment. The remainder of the site (approx. 37ha) may be suitable for extraction, but would require further assessment to identify areas where extraction would not harm the Local Wildlife Site, landscape diversity of the site, nor the value of the site as a recreational asset, although it should be noted that the site is privately owned and access is at the owners discretion. This larger area of the site may be suitable for extraction in a phased manor, with extraction and restoration taking place before moving on to the next phase. A detailed Landscape and Visual Impact Assessment would be required to determine the final area of the site suitable for development. Restoration of the site should be to mixed native woodland and heathland or pasture to link to the existing field pattern to the east of the site, potentially at a lower level. Improved access to the public could also be considered.

The site is located to the south of Ufton Nervet and west of Burghfield Common, separated by another site being considered for allocation for mineral extraction (Firlands, MW008) and close to an area of permitted housing development (yet to be started). Four Houses

Corner Gypsy and Traveller site is located to the south east of the site. Consideration of the setting of these settlements and the gypsy and traveller site will be required, including adequate buffers. A 20m tree lined buffer is proposed around the site.

Amenity: Noise and dust generation from the site is likely, however, mitigation measures would reduce these impacts, including limits on operating hours. The site is relatively close to residential properties, however, mitigation measures would meaning that mitigation ensure no negative impacts on local amenity.

Rights of way: No rights of way cross the site, however, there are a number of rights of way running along the boundaries of the site to the north. While there are a number of permitted paths within the site, these are not public rights of way and are there at the landowner's discretion. The landowner has confirmed that any works would be phased to retain a permissive path through the site.

Flooding: The site is not at risk from fluvial or ground water flooding although there is some limited potential for surface water flooding on the site.

Water Environment: The majority of the site is within SPZ2, with a small area to the north within SPZ3.

Highways: It is proposed that material would be transferred by conveyer to Mortimer Quarry to the south of the site. The site would operate as a satellite extension to Mortimer Quarry and so vehicle movements would be the same or similar to those already taking place (approx. 80 movements per day). Reclamation movements, would be required to the site at an estimated 60 – 80 movements per day. Other vehicle access to the site would be likely to access the primary road network via the Padworth Road onto the A340 and the A33. The A340 is classed as a 'district access route to key destinations' and the A33 is classed as a 'strategic lorry route for through HGV traffic' in the West Berkshire Freight Strategy. If Access was to be provided directly to the site it is proposed to be onto Camp Road. A transport assessment would be required if the site was proposed for allocation.

Employment: Development of the site would have a positive impact on the local economy by supplying mineral resources to the local market and by retain jobs currently operating from Mortimer Quarry.

Geology/Mineral resources: The site is underlain by sharp sand and gravel deposits. The British Geological Survey Mineral Assessment Report 24 (Aldermaston, Berkshire) records borehole information for the site on the north western boundary (66NW13).This shows an overburden thickness of 0.5m, and mineral thickness of 2.6m, with 12% fines, 22% sand and 66% gravel. This site is in a resource block with a mean mineral thickness of 3.3m, and mean overburden thickness of 0.4m and the mineral is classified as 'clayey' gravel.

Utilities: Electricity pylons are present on the site, with pipelines (oil/gas) running along the west and southern boundaries of the site. Consideration of the pylons and pipelines would be required as part of the site design stage.

Restoration/After-care: The site promoter has proposed restoration back to the existing use (forestry) at existing levels. . From a landscape point of view the site should be restored to mixed native woodland and heathland or pasture to link to the existing field

pattern to the east of the site, potentially at a lower level. Net gains for biodiversity and public amenity should be provided. The Council's Preliminary Ecological Assessment states that the site should be restored to a mosaic of broadleaved woodland and lowland heathland, with some opportunity to create ponds within the site.

Cumulative Impact: The site is in close proximity to an active quarry at Mortimer Quarry, Hampshire. The site is proposed to be worked as a satellite extension to Mortimer Quarry, and therefore, there should be no cumulative impacts.

The site is also adjacent to another site put forward for consideration, Firlands (MW008). It may be possible for both sites to be worked together, but there would need to be consideration of the cumulative impact in particular in relation to the highways and amenity impacts.

Sustainability Appraisal: Development of the site would be likely to have a potential negative / significantly negative impact on environmental sustainability in terms of the impact of development on biodiversity and ecology on the site. This impact could be over the longer term without significant mitigation measures being provided. A number of other negative impacts have been identified, mainly in relation to environmental sustainability, however, these are likely to be short/medium term impacts as a result of the development itself but these should not be longer term negative impacts as mineral development is temporary in nature. It is predicted that there would be a positive impact on economic sustainability as a result of job creation and supporting the local economy. Potential social sustainability is likely to be neutral in the longer term, but in the short term, without adequate mitigation measures there could be a negative impact on amenity.

Deliverability: The site promoter has confirmed that the site is likely to come forward as a satellite extension to Mortimer Quarry (located in Hampshire). The site promoter has indicated that the site would be suitable to come forward in 11 – 15 years, with a lifetime of approximately 10 years. The land owner is supportive of the use of the site for mineral extraction. For the site to operate as a satellite site from Mortimer Quarry an extension of time, and permission for the importation of material for processing would be required for the processing plant at Mortimer Quarry, as the quarry is in Hampshire, this would be subject to permission granted by another Mineral Planning Authority.

Consultation

Site Consultation 2016: A number of issues were raised as part of the sites consultation in summer 2016 these included the general need for minerals development, impacts on the landscape, ecology, amenity, water environment, highways, historic environment as well as issues associated with restoration and after-care.

- *Landscape – Concern over the landscape impact of extraction given experience of impacts at other sites. The site is poor quality, would not result in loss to agricultural land*
- *Ecology – Concern over potential negative impact on the environment and wildlife*
- *Amenity – The site is currently used as public amenity space*
- *Water Environment – The site is prone to flooding*
- *Highways – Access should come from Camp Road, not Island Farm Road to reduce neighbour disturbance*

- *Historic Environment – Concern over impact on significant archaeological interest in the area.*
- *Restoration – Concerns over potential for landfilling of the site, would rather see lower level restoration or a lake. Preference indicated for site to be restored to similar state to current.*

All of these issues have been addressed in the Site Consultation Reponses Report (December 2016).

Preferred Options 2017: A number of issues were raised as part of the Preferred Options consultation in summer 2017, including:

- *Phasing/Cumulative Impact – The site is close to previous workings, and adjacent to another preferred option (Firlands). Only one of the sites should be developed at a time.*
- *Ecology – Concern regarding the impact on wildlife, given the proximity of the site to LWSs, and to the potential for fragmentation of habitats if restoration is not carried out in an appropriate way. Restoration should result in net gains for biodiversity.*
- *Highways – the proposed access is shown as close to a bend with poor sight-lines, a location further south on Camp Road would be more appropriate.*
- *Heritage – Concern over the impact on heritage assets (scheduled monument) and potential for non-scheduled archaeological remains that may not be on the HER.*
- *Restoration/Aftercare – Restoration should focus on priority habitats (eg. Heathland) rather than forestry. Aftercare periods should be of a sufficient timescale to ensure habitat created is successfully delivered.*

All of these issues have been addressed in the Preferred Options Consultation Response Report (September 2018).

Submitted Proposal from Site Promoter

Extraction of 2,000,000 tonnes of sand and gravel over a 10 - 15 year period.

The site likely to come forward within next 11 – 15 years, phased to be developed after exiting works at Mortimer Quarry (Hampshire) as a satellite extension to the quarry. Material would be transported via conveyer to Mortimer Quarry for processing.

Restoration of the site is likely to include the importing of inert reclamation material, in a similar way to the restoration undertaken at neighbouring Mortimer Quarry.

Planning History

No planning history

Sustainability Appraisal (SA) / Strategic Environmental Assessment (SEA) criteria assessment

Site name	Site address
Cowpond Piece	Off Island Farm Road, Ufton Nervet
Development Potential / proposal	Extraction of up to 2,000,000 tonnes of sharp sand and gravel, restoration to existing use (forestry) at existing levels.

Key:

++	+	?	0	-	- -
Significantly Positive	Positive	Uncertain	Neutral	Negative	Significantly Negative

SA Objective	Criteria	Effects of site allocation on SA objectives	Justification for assessment	Mitigation / enhancement	Comment
1) To protect and enhance biodiversity and geological diversity throughout West Berkshire	Is there likely to be an impact on biodiversity?	**- / - -**	Majority of the site is within Cowpond Piece & Gibbet Piece LWS, designated for its fungi and birds. It is considered to be of country level importance. The site is currently in use for commercial forestry.	Significant mitigation and off-site compensation measures would be required. Restoration of the site would need to provide net gains for biodiversity. Boundary trees should be retained and protected.	Even with mitigation/compensation there could be a long term impact on environmental sustainability due to the site's location within a Local Wildlife Site.
	Is there likely to be an impact on geodiversity?	**?**	Mineral extraction would permanently alter the geological make up of the site.		
2) To maintain and enhance water quality and resources	Is there likely to be an impact on water quality?	**0**	Unlikely to be an impact on water quality.		It is unlikely that there will be an impact on sustainability.
	Is there likely to be an impact on water resources?	**0**	There is unlikely to be an impact on water resources		
3) To minimise the risk and impact of flooding	Is there likely to be an impact in terms of flood risk?	**0**	The site is not at risk from fluvial flooding and although a very small part		Unlikely there would be an impact on any element of sustainability.

			of the site is at risk from surface water flooding it is not considered that development would impact on flood risk.		
4) To maximise the sustainable use of land and the protection of soils, safeguarding the best and most versatile agricultural land	Is there likely to be an impact on the best and most versatile agricultural land?	**?**	The majority of the site is used for commercial forestry while the north eastern corner appears to be in agricultural use. The eastern edge of the site is shown as grade 3 agricultural land, therefore, the impact on agricultural land would depend on the areas of the site worked	Restoration of the site should restore any lost agricultural land to its former quality.	Restoration of the site should return the site to a similar or better state following the extraction of the mineral. There should be no long term impact on sustainability, however, in the short, medium term there could be an impact on environmental and economic sustainability.
	Is there likely to be an impact on soil quality?	**0**	It is likely that the soils would be removed and stored during the working of the site to be used for restoration purposes so there is unlikely to be an impact on soil quality on a permanent basis.	Conditions would be imposed to ensure soils are used on site as part of the restoration scheme.	
	Would previously developed land be utilised?	**0**	It is acknowledged that new mineral sites are generally 'greenfield', however once the land is restored it would return to 'greenfield'. In theory therefore, the impact would be 'neutral'.		

5) To conserve and enhance the character of the historical environment, cultural heritage assets, and features of archaeological importance	Is there likely to be an impact on the historic environment?	?	There is some potential for archaeological interest on the site. Depending on the value of what is there and how it is managed there could be a negative or positive impact.	Consideration of the potential impact on local heritage assets and archaeology would be required and mitigation measures set out to ensure mitigation of negative impacts to a satisfactory level.	Whether or not there would be a negative or positive impact is uncertain, however with appropriate mitigation measures there should not be any impact on environmental sustainability.
6) To minimise the impact on landscape and townscape character	Is there likely to be an impact on the townscape?	0	The site is close to the settlements of Burghfield Common and Ufton Nervet, but it is not considered that development would impact on townscape		Depending on the area of the site worked there could be a negative impact on environmental sustainability in the short/medium term. However, with appropriate restoration the longer term impact should be neutral.
	Is there likely to be an impact on the landscape?	-	The site is considered to be in an area of medium landscape sensitivity and therefore, there is potential for a negative impact on the landscape depending on the area of the site to be developed.	Mitigation measures would be required, in line with the Landscape and Visual Assessment. A reduced developable area and/or phasing of the development would also help to reduce any potential negative impact.	
7) To protect air quality in West Berkshire	Is there likely to be an impact on air quality?	-	Potential negative impact on air quality as a result of dust generation and traffic movements.	As part of a planning application air quality and dust assessments would potentially be required and mitigation measures including dust suppression techniques may be required to ensure negative impacts are mitigated to an acceptable level. If material was transported to neighbouring Mortimer Quarry by conveyor there would be few traffic	Without mitigation it is likely that there would be a negative impact on environmental sustainability in the medium term. However, in the longer term, once works have been completed, there should be no negative sustainability impacts. Movement of material by conveyor rather than by lorry would also help to reduce the

				movements from the site which would reduce the air quality impact from traffic.	impact on air quality.
8) To maximise energy efficiency, the proportion of energy generated from renewable sources and adaptability to climate change	Is there likely to be an impact on the amount of renewable energy capacity being provided in West Berkshire?	**0**	Unlikely to impact on renewable energy capacity		There is unlikely to be an impact on any element of sustainability.
	Is there likely to be an impact with regard to adaptability to climate change?	**0**	Unlikely to impact on adaptability to climate change.		
9) To ensure the sustainable management of waste, minimise the quantity of waste sent to landfill, and to maximise the re-use, recovery and recycling of waste	Is this likely to have an impact on the amount of waste going to landfill?	**-**	The site is proposed to be restored to existing levels, therefore, inert fill material will be required.	Although the site is proposed for landfilling, this would be undertaken for restoration purposes and the material would be inert.	There is likely to be a negative impact on sustainability as a result of infilling of the site, although the material will be inert and all 'usable' material will be removed prior to filling for reuse, recovery or recycling.
	Is this likely to have an impact in terms of the quantity of waste being reused, recovered and/or recycled?	**?**	the site is proposed to be restored to existing levels using inert fill, there is the potential for fill material to be sorted and processed prior to use to ensure all usable material is removed for reuse, recovery or recycling.	Although the site is proposed for landfilling, this would be undertaken for restoration purposes and the material would be inert with the possibility for all 'useable' material to be removed prior to filling.	
10) To promote the sustainable transport of minerals and waste within West Berkshire	Is it likely that rail or waterborne transportation would be used in connection with this site?	**-**	Limited opportunities for rail or waterborne transport from the site, meaning there will be a reliance on road transport.		There is an unknown impact in the on environmental sustainability in the medium term, however, in the longer term, once the works have been completed there will be no long term impact on sustainability.
	Is there likely to be an impact on the transport network (including the local road network and the Strategic Road Network)?	**?**	The site is proposed to be worked as a satellite extension to Mortimer Quarry with material transported to Mortimer Quarry by conveyer,	A Transport Assessment/Statement would be required as part of the development management process in order to assess the impacts	

			therefore there should be no impact on the transport network. There would be importation of material by road for the restoration phase of the development, which could have an impact on the road network.	on the transport network and set out what mitigation measures would be required.	
11) To conserve mineral resources in West Berkshire through safeguarding of primary aggregates and encouragement of the use of recycled aggregate where possible and appropriate	Is there likely to be an impact in terms of safeguarding of primary aggregates?	**0**	Unlikely to have an impact on safeguarding of primary aggregates although development of the site would provide primary aggregates for construction purposes.		The site makes use of primary aggregates for construction purposes, therefore preventing sterilisation of the material. It is unlikely that there would be an impact on any element of sustainability.
	Is there likely to be an impact in terms of the use of recycled aggregate/construction and demolition wastes?	**0**	The site is proposed to be restored to existing levels using inert fill material.	Opportunities for fill material to be sorted and any 'usable' material to be removed from the fill material for recycling	
12) To protect human health and well being and maintain the quality and quantity of public open space amenity across West Berkshire, and protect areas of tranquillity in the context of minerals and waste development	Is there likely to be an impact on the quality and quantity of open space amenity?	**-**	There are a number of footpaths in close proximity to the site and a number of permitted paths cross the site.	Rights of way would need to be protected or diverted for the duration of the extraction period. The site is in private ownership and the permitted paths are provided at the discretion of the landowner, therefore, and while there is no automatic right for these to be retained the land owner has indicated that access will be retained to the site.	There would potentially be a negative impact on social sustainability in the medium term, however there should be no long term sustainability impact.

	Is it likely that there would be an impact with regard to areas of tranquillity?	-	Mineral extraction could potentially impact negatively on tranquillity in the medium term.	Mitigation measures could include a phased working scheme with progressive restoration, landscaping measures and noise controls. This would reduce the impact on local tranquillity.	
13) To minimise public nuisance	Is it likely that there would be an impact with regard to odour?	0	There is unlikely to be an impact on odour		There is likely to be a negative impact on environmental and social sustainability while the site is being worked, however once working has ceased and the land has been reclaimed the impact on all elements of sustainability would be neutral
	Is it likely that there would be an impact on noise levels?	-	The extraction processes are likely to have a noise impact	A noise assessment, setting out any required mitigation would likely be undertaken as part of the development management process. Mitigation could reduce any negative impact to an acceptable level.	
	Is it likely that there would be an impact with regard to light pollution?	0	Unlikely to be an impact on light pollution		
14) To support opportunities for economic development, including jobs, arising from waste and minerals related activities	Is there likely to be an impact on the local and wider economy?	+	Mineral extraction is likely to be beneficial for the local and wider economy providing direct and indirect employment in the medium term as well as mineral resources for the local market.		In the context of this objective, it is considered that there would be a positive impact on economic sustainability in the medium term.
	Is there likely to be an impact in terms of employment?	+	Mineral extraction is likely to be beneficial for the local and wider economy providing direct and indirect employment in the medium term. There would also be job retention for staff working at Mortimer Quarry.		

Summary

Development of the site would be likely to have a potential negative / significantly negative impact on environmental sustainability in terms of the impact of development on biodiversity and ecology on the site. This impact could be over the longer term without significant mitigation measures being provided. A number of other negative impacts have been identified, mainly in relation to environmental sustainability, however, these are likely to be short/medium term impacts as a result of the development itself but these should not be longer term negative impacts as mineral development is temporary in nature. It is predicted that there would be a positive impact on economic sustainability as a result of job creation and supporting the local economy. Potential social sustainability is likely to be neutral in the longer term, but in the short term, without adequate mitigation measures there could be a negative impact on amenity.				
Effect:	**Likelihood:**	**Scale:**	**Duration:**	**Timing:**
Potential significant negative	Medium	Local	Temporary	Short/Medium Term

Minerals and Waste Site Assessment form

Site ID:	MW008 **Site Name:**	Firlands	
Site Address:	Hollybush Lane, Burghfield Common, RG7 3JN	**Parish:**	Sulhamstead
Mineral/Waste development:	Mineral extraction	**Site Area:**	12.7ha

Recommendation

Recommendation:	The site is **not** recommended for allocation.
Justification:	While it is recognised that minerals can only be extracted from where they lie, more sites have been promoted for development and were considered to be potentially suitable for development than are required to meet the Council's need and therefore, there are choices to be made as to which sites to take forward for allocation. There are significant concerns as to whether suitable access can be provided to the site, and therefore, there is a question over the deliverability of the site at the current time.

Key Considerations

Landscape/Townscape: The site is located in an area of medium/high landscape sensitivity, mitigation measures will be required to ensure no negative impacts. A Landscape and Visual Impact Assessment will be required. The site is in close proximity to Burghfield Common and Ufton Nervet, consideration would need to be given to the impacts on amenity and the local community and appropriate mitigation measures provided.

Highways: There is concern as to whether suitable access to the site can be achieved given the inadequacy of Island Farm Road to take HGV traffic and the possible route onto Padworth Road requires crossing third party land and a local wildlife site.

Biodiversity: The may be potential for an access to the site to be delivered directly onto Padworth Road, however, this would involve crossing a Local Wildlife Site (third party land), which would require mitigation and potentially compensation measures.

Cumulative Impact: The site is close to an active quarry site at Mortimer Quarry in Hampshire, there would need to be consideration of the potential cumulative impacts, in particular the highways impact, in relation to Mortimer Quarry.

Site Assessment

Biodiversity: The site is located within a Biodiversity Opportunity Area (BOA) and adjacent to a Local Wildlife site with an area of Ancient Replanted Woodland and Ancient & Semi-Natural woodland close to the site. It is not anticipated that development of the site would have an impact on these woodland areas. Possible access to the site directly onto Padworth Road would be through a local wildlife site, mitigation measures and possible compensation would be required. Hedgerows and mature trees on the site should be retained or compensation measures may be required as set out in the Council's Preliminary Ecological Assessment. Approximately three quarters of the site is subject to a

tree protection order. Restoration of the site should include net gains for biodiversity minimising fragmentation between habitats and retaining links between habitats. Habitat/ecological and hydrology assessments will be required at planning application stage as set out in the Preliminary Ecological Assessment, particularly taking into account the location of the access route to the site.

Agricultural Land Classification: Grade 3

Heritage: There is a listed building and scheduled monuments as well as a number of features listed in the HER close to the site which would need further consideration to ensure there are no negative impacts as a result of any development on the site. There is potential for Palaeolithic archaeology on the site. Further evaluation of the site would be required to verify geophysical survey results already undertaken, a Heritage Impact Assessment and updated archaeological desk-based and field evaluation would be required with any planning application submitted.

Landscape/Townscape: The site is currently pasture land. Overall the site is considered to be in an area of medium/high landscape sensitivity. The whole site is considered suitable for development in landscape terms subject to mitigation measures as set out in the Council's Landscape and Visual Assessment. A Landscape and Visual Impact Assessment would be required to accompany any planning application coming forward. The site should be restored to its existing use at existing levels. From a landscape point of view, access should come from Island Farm Road.

The site is located to the west of Burghfield Common and to the south of Ufton Nervet, separated by woodland and pasture land. Planning permission was granted (on appeal) in 2015 for 90 dwellings on the western edge of Burghfield Common approx. 350m to the east of the site. Consideration of the setting of these settlements and any potential impacts will be required. Buffers will be required between the site and the existing residential areas.

Amenity: Noise and dust generation from the site is likely, however, mitigation measures would reduce these impacts, including limits on operating hours. The site is relatively close to residential properties, meaning that mitigation measures will be important to ensure no negative impacts on local amenity.

Rights of way: A right of way runs along the northern edge of the southern parcel of land, a second right of way passes close to the northern parcel of land. The rights of way will need to be retained and buffers provided to ensure no negative impacts on those using the paths.

Flooding: The site is not at risk from fluvial or groundwater flooding although there is limited potential for surface water flooding on the site.

Water Environment: The site is within SPZ2.

Highways: The site promoter has indicated that access will be via Padworth Road, however this crosses third party land and a Local Wildlife Site. While the Council's landscape advice recommends access from Island Farm Road, this route is unsuitable for HGVs. As a result there is significant concern that suitable access to the site cannot be achieved. Vehicle movements are considered to be moderate. A Transport Statement

woould be required should the site go forward.

Employment: Development of the site would have a positive impact on the local economy and job creation giving an overall positive impact on economic sustainability and supply of mineral resources to the local market.

Geology/Mineral Resources: Intrusive survey work carried out by the site promoter indicates the presence of approx. 700,000 tonnes of sharp sand and gravel (5/6 gravel, 1/6 sand). The British Geological Survey Mineral Assessment Report 24 (Aldermaston, Berkshire) records that this site is in a resource block with a mean mineral thickness of 3.3m, and mean overburden thickness of 0.4m and the mineral is classified as 'clayey' gravel.

Utilities: Pylons pass through the northern most parcel of land. This would need to be taken into account at the site design stage.

Restoration/After-care: The site promoter has indicated that the site would be restored using inert infill material. The Council's landscape advice states that the site should be restored to existing levels and land use. Restoration to lowland healthland could also be considered. Restoration would need to provide opportunities for net gains for biodiversity and public amenity.

Cumulative Impact: The site is in close proximity to an active quarry at Mortimer Quarry in Hampshire. It is likely that the site would come forward while Mortimer Quarry is still active and therefore, the cumulative impacts, especially in relation to transport, would need to be considered. However, it is not considered that there would result in a significant impact. The site is also close to another site put forward for consideration in the plan (Cowpond Piece, MW007), however as neither site is recommended for allocation there will not be any cumulative impact.

Sustainability Appraisal: Overall development of this site would be likely to have a neutral impact on sustainability. There are some potential negative impacts in relation to environmental sustainability, however, these are likely to be short/medium term impacts as the result of the development itself but there should be no long term negative impacts as mineral development is temporary in nature. Good restoration should mean that there is no long term negative impact, and should result in improvements, especially in relation to environmental sustainability. It is predicted that there would be a positive impact on economic sustainability as a result of job creation and supporting the local economy. Potential social sustainability is likely to be neutral in the longer term, but in the short term, without adequate mitigation measures there could be a negative impact on amenity.

Deliverability: The landowner is supportive of the use of the site for mineral extraction. The site is currently subject to an agreement that gravel extraction will not take place for a number of years while residential development takes place close to the site which could limit the development potential of the site in the short term, however in the medium/long term this agreement would not limit the extraction of gravel from the site. The parties subject to this agreement are seeking to remove this restriction to allow for mineral extraction in the shorter term. The site, once developed would have a lifetime of approximately 6 – 7 years. There are concerns regarding access arrangements to the site that may involve third party land, there is no evidence that this route would be achievable

and therefore, the deliverability of the site is uncertain at this time.

Consultation

Sites Consultation 2016: A number of issues were raised as part of the sites consultation in summer 2016 these included general need for mineral extraction, impacts on amenity, landscape, highways and historic environmental as well as issues associated with restoration and after-care.

- *Amenity – Combined with additional housing development taking place in Burghfield Common mineral extraction with lead to further disruption, concerns over noise and the proximity of the site to existing residential development. It was also proposed that rights of way should be screened with hedges.*
- *Landscape – Loss of fields and countryside, the site is considered to be rural in nature and visible from the surrounding area*
- *Highways – Concerns over increased congestion, the impact on the rights of way network and road safety concerns for children walking to school along Hollybush Lane. Concern was also raised regarding the suitability of Island Farm Road/Hollybush Lane for HGV traffic.*
- *Historic Environment – There are no designated heritage assets in the area, but consideration should be given to archaeology.*
- *Restoration – No details of the restoration plans have been provided, restoration should be to agriculture or forestry.*

All of these issues have been addressed in the Site Consultation Reponses Report (December 2016).

Preferred Options Consultation 2017: A number of issues were raised as part of the Preferred Options consultation in summer 2017, including:

- *Townscape – Concern over development so close to residential developments in Burghfield Common and Ufton Nervet*
- *Heritage – Consideration of possible non-scheduled archaeological remains is required.*
- *Ecology – development should minimise fragmentation between habitats and maintain habitat links to ensure net gains for biodiversity. The hydrological impact needs to be considered*
- *Highways – Access to the site in unclear, resulting in concerns over road safety.*
- *Restoration/Aftercare – Disappointment that the site is proposed to be returned to agriculture, restoration should be to lowland healthland. Aftercare should be of sufficient timescales to ensure habitat creation is successfully delivered, 25 years is suggested.*

All of these issues have been addressed in the Preferred Options Consultation Response Report (September 2018).

Submitted Proposal from Site Promoter

Extraction of 600,000t of gravel and 100,000t (sharp) sand. Restoration will be via infilling with inert material

The whole 12.7ha site is considered suitable for extraction.

Access to site would be onto Padworth Road, but the route from the site to Padworth Road may require improvements to Island Farm Road and its junction with Padworth Road.

Planning History

No Planning History.

Planning permission granted (on appeal) for development on an adjacent site (14/01730/OUTMAJ) for housing, the sites are within the same landownership.

Sustainability Appraisal (SA) / Strategic Environmental Assessment (SEA) criteria assessment

Site name	Site address
Firlands	Firlands, east of Island Farm Road, Burghfield Common
Development Potential / proposal	Extraction of 500,000 tonnes of sand and gravel. Restoration with inert material

Key:

++	+	?	0	-	- -
Significantly Positive	Positive	Uncertain	Neutral	Negative	Significantly Negative

SA Objective	Criteria	Effects of site allocation on SA objectives	Justification for assessment	Mitigation / enhancement	Comment
1) To protect and enhance biodiversity and geological diversity throughout West Berkshire	Is there likely to be an impact on biodiversity?	-	The site is within a BOA and adjacent to a LWS, with TPOs present on three quarters of the site. The site is in an area considered important for fungi and birds.	An ecological assessment and ongoing monitoring would potentially need to be undertaken. Depending on the findings mitigation and/or controls may be required. TPOs, boundary trees and hedgerows should be retained. The site is within a BOA, and so restoration should bring biodiversity enhancements.	Due to potential impacts on biodiversity, there may be a negative environmental sustainability effects in the short/medium term. In the long term there is potential for a positive impact on biodiversity through restoration of the site.
	Is there likely to be an impact on geodiversity?	?	Mineral extraction and inert landfilling would permanently alter the geological make up of the site.		
2) To maintain and enhance water quality and resources	Is there likely to be an impact on water quality?	0	Unlikely to be an impact on water quality.		It is unlikely that there will be an impact on sustainability.
	Is there likely to be an	0	There is unlikely to be an		

	impact on water resources?		impact on water resources as a result of this site being developed.		
3) To minimise the risk and impact of flooding	Is there likely to be an impact in terms of flood risk?	**0**	The site is not at risk from fluvial flooding and although a very small part of the site is within a surface water flood risk area it is not considered that development would impact on flood risk.		Unlikely that there would be an impact on any element of sustainability.
4) To maximise the sustainable use of land and the protection of soils, safeguarding the best and most versatile agricultural land	Is there likely to be an impact on the best and most versatile agricultural land?	**?**	The site is shown as grade 3.	The site should be restored to its existing condition.	It is unknown as to whether there would be an impact on environmental and economic sustainability in the short/medium term, however, restoration should return the site to its existing condition resulting in a neutral impact in the long term.
	Is there likely to be an impact on soil quality?	**0**	It is likely that the soils would be removed and stored during the working of the site to be used for restoration purposes so there is unlikely to be an impact on soil quality on a permanent basis.	Conditions could be used to ensure soils removed are stored and used in the restoration of the site.	
	Would previously developed land be utilised?	**0**	It is acknowledged that new mineral sites are generally 'greenfield', however once the land is restored it would return to 'greenfield'. In theory therefore, the impact would be 'neutral'.		
5) To conserve and enhance the character of the historical environment, cultural heritage assets, and features of archaeological importance	Is there likely to be an impact on the historic environment?	**?**	The site is close to a number of heritage assets.	It is unlikely that there would be direct impact on any heritage assets, however mitigation measures may be required in relation to the setting of these sites.	With mitigation measures there is unlikely to be an impact on environmental sustainability.

6) To minimise the impact on landscape and townscape character	Is there likely to be an impact on the townscape?	**? / -**	The site is close to the settlements of Burghfield Common and Ufton Nervet	Mitigation measures would be required to ensure no negative impact on townscape.	Without mitigation there is potential for a negative impact on environmental sustainability in the medium term. However, in the longer term once works have been completed, there would be no negative sustainability impacts.
	Is there likely to be an impact on the landscape?	**? / -**	The site is considered to be in an area of medium/high landscape sensitivity, but is considered suitable for development in landscape terms.	Mitigation measures would be required, in line with the Landscape and Visual Assessment.	
7) To protect air quality in West Berkshire	Is there likely to be an impact on air quality?	**-**	Potential negative impact on air quality as a result of dust and traffic generation.	As part of a planning application air quality and dust assessments would potentially be required and mitigation measures including dust suppression techniques may be required to ensure negative impacts are mitigated to an acceptable level.	Without mitigation it is likely that there would be a negative impact on environmental sustainability in the medium term. However, in the longer term, once works have been completed, there would be no negative sustainability impacts.
8) To maximise energy efficiency, the proportion of energy generated from renewable sources and adaptability to climate change	Is there likely to be an impact on the amount of renewable energy capacity being provided in West Berkshire?	**0**	Unlikely to impact on renewable energy capacity		There is unlikely to be an impact on any element of sustainability.
	Is there likely to be an impact with regard to adaptability to climate change?	**0**	Unlikely to impact on adaptability to climate change.		
9) To ensure the sustainable management of waste, minimise the quantity of waste sent to landfill, and to maximise the re-use, recovery and	Is this likely to have an impact on the amount of waste going to landfill?	**-**	The site is proposed for mineral extraction and inert landfilling so this would have a negative impact.	Although the site is proposed for landfilling, this would be undertaken for restoration purposes and the material would be inert.	There is likely to be a negative impact on sustainability as a result of infilling of the site, although the material will be inert and all 'usable' material
	Is this likely to have an impact in terms of the	**?**	the site is proposed to be restored to existing levels	Although the site is proposed for landfilling, this	

recycling of waste	quantity of waste being reused, recovered and/or recycled?		using inert fill, there is the potential for fill material to be sorted and processed prior to use to ensure all usable material is removed for reuse, recovery or recycling.	would be undertaken for restoration purposes and the material would be inert with the possibility for all 'useable' material to be removed prior to filling.	will be removed prior to filling for reuse, recovery or recycling.
10) To promote the sustainable transport of minerals and waste within West Berkshire	Is it likely that rail or waterborne transportation would be used in connection with this site?	-	Limited opportunities for rail or waterborne transport from the site, meaning there will be a reliance on road transport.		This site could have a negative impact on environmental sustainability in respect of sustainable transport. However, in the longer term, once the work has been completed there would be no long term negative impact on sustainability.
	Is there likely to be an impact on the transport network (including the local road network and the Strategic Road Network)?	-	Mineral extraction and inert landfilling would generate traffic movements.	A Transport Assessment/Statement would be required as part of the development management process in order to assess the impacts on the transport network and set out what mitigation measures would be required.	
11) To conserve mineral resources in West Berkshire through safeguarding of primary aggregates and encouragement of the use of recycled aggregate where possible and appropriate	Is there likely to be an impact in terms of safeguarding of primary aggregates?	0	Unlikely to have an impact on safeguarding of primary aggregates although development of the site would provide primary aggregates for construction purposes.		It is unlikely that there would be an impact on any element of sustainability.
	Is there likely to be an impact in terms of the use of recycled aggregate/construction and demolition wastes?	?	the site is proposed to be restored to existing levels using inert fill, there is the potential for fill material to be sorted and processed prior to use to ensure all usable material is removed for reuse, recovery or recycling.	Although the site is proposed for landfilling, this would be undertaken for restoration purposes and the material would be inert with the possibility for all 'useable' material to be removed prior to filling.	

12) To protect human health and well being and maintain the quality and quantity of public open space amenity across West Berkshire, and protect areas of tranquillity in the context of minerals and waste development	Is there likely to be an impact on the quality and quantity of open space amenity?	**0**	There are a number of footpaths in close proximity to the site, but there is no formal access to the site itself. Therefore, it is unlikely that there would be an impact on open space.	Rights of way would need to be retained and protected, with buffers/bunding provided.	There would be a potential negative impact on social sustainability, in the medium term, however there should be no long term sustainability impact.
	Is it likely that there would be an impact with regard to areas of tranquillity?	**-**	Mineral extraction could potentially impact negatively on tranquillity in the medium term.	Mitigation measures would potentially include a phased working scheme with progressive restoration, landscaping measures and noise control. This would reduce the impact on local tranquillity.	
13) To minimise public nuisance	Is it likely that there would be an impact with regard to odour?	**0**	Unlikely to impact on odour.		There is likely to be a negative impact on environmental and social sustainability while the site is being worked, however once working has ceased and the land has been reclaimed the impact on all elements of sustainability would potentially be neutral.
	Is it likely that there would be an impact on noise levels?	**-**	The extraction of sand and gravel and the associated vehicle movements are likely to have a noise impact.	A noise assessment, setting out any required mitigation would likely be undertaken as part of the development management process. Mitigation could reduce any negative impact to an acceptable level.	
	Is it likely that there would be an impact with regard to light pollution?	**0**	There is unlikely to be an impact on light pollution.		
14) To support opportunities for economic development, including jobs, arising from waste and minerals related activities	Is there likely to be an impact on the local and wider economy?	**+**	Mineral extraction is likely to be beneficial for the local and wider economy providing direct and indirect employment in the medium term as well as mineral resources for the local market		There is likely to be a positive impact on economic sustainability in regard to this objective.

	Is there likely to be an impact in terms of employment?	+	Mineral extraction is likely to be beneficial for the local and wider economy providing direct and indirect employment in the medium term		

Summary

Overall development of this site would be likely to have a neutral impact on sustainability. There are some potential negative impacts in relation to environmental sustainability, however, these are likely to be short/medium term impacts as the result of the development itself but there should be no long term negative impacts as mineral development is temporary in nature. Good restoration should mean that there is no long term negative impact, and should result in improvements, especially in relation to environmental sustainability. It is predicted that there would be a positive impact on economic sustainability as a result of job creation and supporting the local economy. Potential social sustainability is likely to be neutral in the longer term, but in the short term, without adequate mitigation measures there could be a negative impact on amenity.				
Effect:	**Likelihood:**	**Scale:**	**Duration:**	**Timing:**
Predominantly neutral	Medium	Local	Temporary	Short/Medium Term

Minerals and Waste Site Assessment form

Site ID:	MW001	**Site Name:**	Frouds Lane
Site Address:	Frouds Lane / A340, Aldermaston	**Parish:**	Aldermaston
Mineral/Waste development:	Mineral extraction	**Site Area:**	8.1ha

Recommendation

Recommendation:	The site is **not** recommended for allocation.
Justification:	There is likely to be a significantly negative impact on environmental sustainability as a result of the landscape impact from development of the site.

Key Considerations

Landscape: The site is not considered suitable for development in landscape terms due to the fact that it contributes to the attractive open valley landscape of the Kennet Valley and provides an important open agricultural setting to the adjacent listed buildings and SSSI.

Site Assessment

Biodiversity: the site is adjacent to Gravel Pit Farm SSSI, itself a former quarry and within a Biodiversity Opportunity Area. Mitigation measures will be required to ensure no negative impacts on the SSSI. There is potential for biodiversity improvements to the site as part of the restoration phase. Restoration of the site should provide opportunities to improve biodiversity and provide links to Gravel Pit Farm SSSI. Hydrological and habitat/ecological assessments will be required.

Agricultural Land Classification: The site is mainly within 3b, with the northern corner classified as grade 3a.

Heritage: The site is close to a number of listed buildings and the Aldermaston Conservation Area. It is considered unlikely that there would be a significant impact on the heritage assets, however further consideration would be required at planning application stage should the site be allocated.

Landscape/Townscape: The site is within an area of medium/low landscape sensitivity, however, it is not considered suitable for development as a processing hub. The site contributes to the attractive open valley landscape and provides an important open agricultural setting to the adjacent listed buildings and SSSI.

The site is close to a limited number of residential properties. Consideration of the setting of the site in relation to these and Aldermaston Village and Wharf would be required. The proposals would result in the industrialisation of this locality for a long period.

Amenity: Noise and dust generation from the site is likely, however, mitigation measures would reduce these impacts, including limits on operating hours.

Rights of way: There are no rights of way in the immediate vicinity of the site, although

there is a permitted path running broadly parallel to the A340 (partly through the adjacent site at Aldermaston Bridge, MW003). Consideration of the impact on this permitted path would be required.

Flooding: The southern part of the site is within flood zone 3 (none of the site is within flood zone 3b). The site is proposed as a processing plant, which is considered a "Less Vulnerable" activity, which can be carried out within flood zone 3a. Design of the site would need to consider the siting of the processing machinery and aim to situate these in an area least likely to flood.

Water Environment: The site is in SPZ2.

Highways: Access to the site is proposed to come directly onto the A340. The A340 is classified as a 'district access route to key destinations' in the West Berkshire Freight Strategy. Transport assessment work would be required.

Employment: Development of the site could have a positive impact on the local economy and job creation.

Geology/Mineral Resources: The site is underlain by sharp sand and gravel, which would be extracted prior to development of the processing hub.

Utilities: A gas pipeline runs along the southern boundary of the site.

Restoration/After-care: The site promoter has not proposed a restoration scheme for the site. The site would need to be restored following completion of the works.

Cumulative Impact: There are a number of sites being considered in this locality, which if all developed together could have a significant impact. Phasing of sites coming forward would be a key consideration, in terms of highways, landscape and amenity impacts.

Sustainability Appraisal: Development of this site would be likely to have a potentially significantly negative impact on environmental sustainability as a result of the landscape impact. Despite the temporary nature of this development, it is considered that the landscape impact could not be mitigated to prevent harm to the landscape. It is predicted that there would be a positive impact on economic sustainability as a result of job creation and supporting the local economy.

Deliverability: The site promoter has indicated that the site is available and deliverable.

Consultation

Sites Consultation 2016: The site was submitted in response to the sites consultation therefore it was not subject to public consultation at that stage.

Preferred Options Consultation 2017: The site was not included as a preferred option and no comments were received in relation to the site.

Submitted Proposal from Site Promoter

Extraction of 0.2m tonnes of sand and gravel from 7ha of an 8.1ha site and a processing

hub for minerals from the sites in Aldermaston (Aldermaston Bridge (MW003), Spring Lane (MW010), Wasing Lower Farm (MW012) and Padworth Park Farm (MW014)). Access will be directly on the A340.

Planning History

No planning history.

Sustainability Appraisal (SA) / Strategic Environmental Assessment (SEA) criteria assessment

Site name	Site address
Frouds Lane	Frouds Lane, A340, Aldermaston
Development Potential / proposal	Minerals and Processing, 0.2 million tonnes of sand and gravel.

Key:

++	+	?	0	-	- -
Significantly Positive	Positive	Uncertain	Neutral	Negative	Significantly Negative

SA Objective	Criteria	Effects of site allocation on SA objectives	Justification for assessment	Mitigation / enhancement	Comment
1) To protect and enhance biodiversity and geological diversity throughout West Berkshire	Is there likely to be an impact on biodiversity?	-	The site is within a Biodiversity Opportunity Area. Aldermaston Gravel Pits SSSI is adjacent to the north east of the site.	Mitigation would be required. This could include a buffer zone between working and the SSSI / watercourses. Monitoring of the impacts on the SSSI would also be required with additional mitigation measures implemented if an adverse impact is identified.	There is potential for a negative impact on environmental sustainability in the medium term without mitigation. Assessment, monitoring, and application of suitable controls could mitigate this however, and potentially result in an improvement on a permanent basis through good restoration.
	Is there likely to be an impact on geodiversity?	?	The extraction of mineral would permanently alter the geological makeup of the site.		
2) To maintain and enhance water quality and resources	Is there likely to be an impact on water quality?	-	Aldermaston Gravel Pits SSSI is adjacent to the north east of the site. A drain runs along the north western boundary and through the site, leading	Monitoring of the impacts on the SSSI and waste courses would be required with additional measures implemented if an adverse impact is identified.	Without appropriate investigation and mitigation there is potential for a negative impact on environmental

			into the Aldermaston Gravel Pits SSSI.		sustainability in the medium term.
	Is there likely to be an impact on water resources?	**0**	There is unlikely to be an impact on water resources.		
3) To minimise the risk and impact of flooding	Is there likely to be an impact in terms of flood risk?	**+**	Part of the site is within flood zone 3, however, sand and gravel extraction is considered to be water compatible development. Extraction of sand and gravel has the potential to improve flood mitigation measures, including flood storage areas.	The voids created by extraction could potentially be positive for flood risk as they could provide extra capacity for floodwaters in the medium term or permanently depending on the restoration scheme.	This site could have a positive impact on environmental and economic sustainability through the reduction of flood risk via provision of extra capacity for floodwater in the medium term, or on a permanent basis.
4) To maximise the sustainable use of land and the protection of soils, safeguarding the best and most versatile agricultural land	Is there likely to be an impact on the best and most versatile agricultural land?	**?**	The site is classified as grade 3. The overall impact would depend on the restoration scheme.	Restoration of the site should restore any temporarily forfeited agricultural land to its former quality.	There is an unknown impact on economic sustainability in the short/medium term, however if restored to agriculture the long term impact would be neutral.
	Is there likely to be an impact on soils?	**0**	It is likely that the soils would be removed and stored during the working of the site to be used for restoration purposes so there is unlikely to be an impact on soil quality on a permanent basis.	Conditions could be used to ensure soils are returned to the site as part of the restoration scheme.	
	Would previously developed land be utilised?	**0**	It is acknowledged that new mineral sites are generally 'greenfield', however once the land is restored it would return to 'greenfield'.		

5) To conserve and enhance the character of the historical environment, cultural heritage assets, and features of archaeological importance	Is there likely to be an impact on the historic environment?	?	There are a number of Listed buildings and structures in the vicinity.	Consideration of the potential impact on local heritage assets would be required and mitigation measures set out to ensure no negative impacts.	With appropriate mitigation measures there should not be any impact on environmental sustainability.
6) To minimise the impact on landscape and townscape character	Is there likely to be an impact on the townscape?	0	Unlikely to be an impact on townscape.		There is likely to be a significant negative impact on environmental sustainability as a result of development on the site.
	Is there likely to be an impact on the landscape?	- -	The site is not considered suitable for development in landscape terms.	Mitigation measures would not mitigate the harm from development of the site.	
7) To protect air quality in West Berkshire	Is there likely to be an impact on air quality?	-	Potential negative impact on air quality as a result of dust generation and traffic movements.	As part of a planning application air quality and dust assessments would potentially be required and mitigation measures including dust suppression techniques may be required to ensure negative impacts are mitigated to an acceptable level.	The site could potentially have a negative impact on environmental sustainability, however, this would only be for the duration of the works. Mitigation measures would reduce any short/medium term impacts.
8) To maximise energy efficiency, the proportion of energy generated from renewable sources and adaptability to climate change	Is there likely to be an impact on the amount of renewable energy capacity being provided in West Berkshire?	0	The site is being proposed for mineral extraction and processing. This is not likely to result in renewable energy being generated so the impact is likely to be neutral in this regard.		There is an overall uncertain impact on environmental sustainability due to the unknown nature of the restoration scheme for the site.
	Is there likely to be an impact with regard to adaptability to climate change?	? / +	Climate change may increase the likelihood / frequency of flooding and the voids created from mineral extraction could potentially accommodate	The voids created by extraction could potentially be positive in the sense that they could provide extra capacity for floodwaters in the medium term or	

			some of this floodwater in the medium term and on a permanent basis depending on the restoration scheme.	permanently depending on the restoration scheme.	
9) To ensure the sustainable management of waste, minimise the quantity of waste sent to landfill, and to maximise the re-use, recovery and recycling of waste	Is this likely to have an impact on the amount of waste going to landfill?	**0**	The site is proposed for mineral extraction and processing. No infilling has been proposed so the impact is likely to be neutral.		Unlikely to be an impact on any element of sustainability.
	Is this likely to have an impact in terms of the quantity of waste being reused, recovered and/or recycled?	**0**	The site is proposed for mineral extraction and processing. No importation or management of waste has been proposed so the impact is likely to be neutral.		
10) To promote the sustainable transport of minerals and waste within West Berkshire	Is it likely that rail or waterborne transportation would be used in connection with this site?	**-**	Limited opportunities for rail/waterborne transport from the site meaning there will be a reliance on road transport.		This site could have a temporary negative impact on environmental sustainability in the medium term in respect of sustainable transport. However, in the long term there would be a neutral impact on sustainability.
	Is there likely to be an impact on the transport network (including the local road network and the Strategic Road Network)?	**-**	Mineral extraction and processing would generate traffic movements, so there is likely to be a negative impact on the transport network.	A Transport Assessment / Statement would be required as part of the development management process in order to assess whether the impacts on the transport network would be acceptable and set out what mitigation measures would be required.	
11) To conserve mineral resources in West Berkshire through safeguarding of primary aggregates and encouragement of the	Is there likely to be an impact in terms of safeguarding of primary aggregates?	**0**	Unlikely to have an impact on safeguarding of primary aggregates although development of the site would provide primary aggregates for construction		The site makes use of primary aggregates for construction purposes, therefore preventing sterilisation of the material. It is unlikely

use of recycled aggregate where possible and appropriate			purposes.		that there would be an impact on any element of sustainability.
	Is there likely to be an impact in terms of the use of recycled aggregate/construction and demolition wastes?	?	There is potential for recoverable material used for inert infill to be taken from the imported waste material to produce recycled aggregate, the residual material being deposited in the void. If this was the case there could be a positive impact.		
12) To protect human health and well being and maintain the quality and quantity of public open space amenity across West Berkshire, and protect areas of tranquillity in the context of minerals and waste development	Is there likely to be an impact on the quality and quantity of open space amenity?	0	Unlikely to impact on open space amenity.		There is a possible negative impact on environmental sustainability without mitigation measures.
	Is it likely that there would be an impact with regard to areas of tranquillity?	-	The site is rural in nature and development could impact on tranquillity.	Mitigation measures could be provided to reduce the impact on tranquillity.	
13) To minimise public nuisance	Is it likely that there would be an impact with regard to odour?	0	There is unlikely to impact on odour.		There is likely to be a negative impact on environmental and social sustainability while the site is being worked/operated, however once working/operating has ceased and the land has been reclaimed the impact on all elements of sustainability would potentially be neutral.
	Is it likely that there would be an impact on noise levels?	-	Mineral extraction and processing and the associated traffic movements would have a negative impact in terms of noise	A noise assessment, setting out any required mitigation would likely be undertaken as part of the development management process. Mitigation could reduce any negative impact to an acceptable level.	
	Is it likely that there would be an impact with regard to light pollution?	0/?	There is housing in close proximity to the west and light pollution could potentially be an issue	This would potentially require assessment and mitigation including limiting operating hours and controls	

			depending on the design of the site and the proposed operating hours.	on lighting design/angles	
14) To support opportunities for economic development, including jobs, arising from waste and minerals related activities	Is there likely to be an impact on the local and wider economy?	+	Mineral extraction and processing is likely to be beneficial for the local and wider economy providing direct and indirect employment in the medium term.		There is likely to be a positive impact on economic sustainability.
	Is there likely to be an impact in terms of employment?	+	Mineral extraction and processing is likely to be beneficial for the local and wider economy providing direct and indirect employment in the medium term.		

Summary

Development of this site would be likely to have a potentially significantly negative impact on environmental sustainability as a result of the landscape impact. Despite the temporary nature of this development, it is considered that the landscape impact could not be mitigated to prevent harm to the landscape. It is predicted that there would be a positive impact on economic sustainability as a result of job creation and supporting the local economy.				
Effect:	**Likelihood:**	**Scale:**	**Duration:**	**Timing:**
Potentially significant negative	Medium	local	Temporary	Short/Medium Term.

Minerals and Waste Site Assessment form

Site ID:	MW009	**Site Name:**	Gravel Pit Farm
Site Address:	Grange Lane, Beenham	**Parish:**	Beenham
Mineral/Waste development:	Mineral extraction	**Site Area:**	34ha

Recommendation

Recommendation:	The site is **not** recommended for allocation.
Justification:	The site is not considered suitable for development due to the negative impact on the landscape. The site is in an area of medium landscape sensitivity within the AONB. It is not considered that mitigation measures would mitigate the harm caused to the environment, and as a result there is likely to be a significant negative impact on sustainability should the site be developed. Other reasonable alternatives exist such that the requirement for sharp sand and gravel is able to be met from outside of the AONB.

Key Considerations

Landscape/Townscape: The site is located within the AONB in an area of medium landscape sensitivity. The site is not considered suitable for development in landscape terms, and results in a significantly negative impact on environmental sustainability.

Biodiversity: Although Jenning's Copse Local Wildlife Site is located approximately 60m from the study site, it is considered that impacts on Local Wildlife Sites, and their valued habitats, can be avoided. Hedgerows are of local ecological value and so removal of hedgerow would require compensation. Wet woodland within the site is considered to be of district value and loss of the woodland would pose a significant ecological constraint. There are records of the great crested newt from ponds within a 250m radius of the site, and assessment of all ponds within this radius would be required.

Site Assessment

Biodiversity: Aldermaston Gravel Pits Site of Special Scientific Interest (SSSI) is located approximately 80m to the south of the site. However, there are no foreseeable impacts or constraints with regard to the SSSI due to the intervening landuse, which comprises a road, railway line and canal. Although Jenning's Copse Local Wildlife Site is located approximately 60m from the study site, it is considered that impacts on Local Wildlife Sites, and their valued habitats, can be avoided.

The majority of the site comprises agriculturally improved grassland, species-poor marshy grassland, defunct hedgerows and some scattered trees. These habitats have been evaluated as negligible value or value at the site level only, and loss of these habitats would not pose a significant constraint.

However, hedgerows are of local ecological value and so removal of hedgerow (to create site access for example) would require compensation. Wet woodland within the site is considered to be of district value and loss of the woodland would pose a significant ecological constraint. Wet woodland is a habitat of principal importance, as listed within

Section 41 of the NERC Act 2006.

With regard to species, there are records of the great crested newt from ponds within a 250m radius of the site, and assessment of all ponds within this radius is recommended, to inform the need for further, more detailed, surveys for this species. Further surveys for breeding birds, badgers and bats (roosts in trees) are also recommended.

There is potential for an impact on the hydrology of the area. A hydrological assessment and ecology assessment would be required to determine the possible impacts on the SSSI. Monitoring and feedback loops would be required throughout the lifetime of the development to ensure no negative impacts on the SSSI.

Agricultural Land Classification: The majority of the site is assessed as being grade 3 agricultural land, with the eastern end grade 1. Grade 1 agricultural land is considered to be the best quality agricultural land and therefore, this needs to be taken into account.

Heritage: A listed milestone marker sits on the southern boundary of the site adjacent to the A4. There are a number of other listed buildings relatively close to the site, but development of the site is unlikely to impact on these sites. Previous evaluation of the area indicates potential for archaeology, further work would be required.

Landscape/Townscape: The site is located in the AONB, and has been assessed as having a medium landscape sensitivity. The Council's Landscape and Visual Assessment recognises that the site could be sympathetically restored but that the location of the site in a particularly attractive area of the AONB, offering valuable relief from the industrial activity at Beenham, means that the site is not recommended for mineral extraction.

The site is close to Aldermaston Wharf, although it is separated by the A4 and the railway line. The site is close to Beenham industrial areas to the east of the site.

Amenity: Noise and dust generation from the site is likely, however the site is not that close to residential properties and mitigation measures would be able to reduce these impacts.

Rights of way: There are a number of rights of way close to the site, including one which crosses the western part of the site and another that runs along the eastern boundary of the site. The rights of way would need to be retained or diverted and buffers provided to separate them from the site to ensure no negative impacts for those using the rights of way.

Flooding: The site is not at risk from fluvial flooding. The southern boundary of the site is at risk of surface water flooding, along with a small area to the south east of the site. Consideration of the surface water flood risk would be required and appropriate mitigation measures provided.

Water Environment: The site is within SPZ2.

Highways: The site promoter has indicated that material would potentially be transported by lorry/articulated dump truck to the Beenham Tile Factory approx. 250m from the site. Vehicles would have direct access to the A4 from the site. The A4 is defined as a 'district

access routes to key destinations; in the West Berkshire Freight Strategy. There may be issues with slow moving HGVs joining/leaving the A4 and therefore, access would need to be subjected to a Road Safety Audit. A Transport Statement would be required.

Employment: Development of the site would have a positive impact on the local economy and job creation.

Geology/Mineral Resources: The site is underlain by sharp sand and gravel although the depth and quality is unknown.

Utilities: An oil pipeline runs along the southern boundary.

Restoration/After-care: the site is proposed to be restored using inert material, although no further details have been supplied.

Cumulative Impact: The site is close to a number of other potential sites, including Beenham Waste Complex (MW018) and the proposed mineral sites to the south of Aldermaston Wharf (Aldermaston Bridge – MW001, Frounds Lane/A340 – MW00, Padworth Park Farm – MW014). If other sites in this area were to be developed consideration of the cumulative impact would be needed. The site is proposed to come forward following the extraction at Wasing Lower Farm (MW012).

Sustainability Appraisal: Development of the site would be likely to have a significantly negative impact on environmental sustainability as a result of the landscape impact. A number of other negative impacts are also identified in relation to environmental sustainability, however, these are likely to be short/medium term as good restoration of the site would restore the site to a similar, or better state. Mitigation measures could be introduced to ensure there are no longer term impacts. It is predicted that there would be a positive impact on economic sustainability as a result of job creation/retention and support of the local economy. There are also potential positive impacts as a result of processing the infill material for any recyclable/reusable material prior to infilling of the site.

Deliverability: The site is likely to come forward following completion of the works at Wasing Lower Farm. The site promoter has indicated the site would be suitable to come forward in 11 – 15 years, towards the end of the plan period with a lifetime of approx. 10 to 12 years. There is no indication that the site would not be deliverable.

Consultation

Consultation:
Sites Consultation 2016: A number of issues were raised as part of the sites consultation in summer 2016 these included general need for mineral extraction, planning history, ecology, amenity, landscape, restoration, water environment, highways and historic environment.

Planning History – previous application for development of the site was refused due to the location within the AONB and the gravel type not suiting the quality for tile manufacturing.

- *Ecology – impact on biodiversity and water quality*
- *Amenity – Impact on Beenham village in terms of noise and disruption, concerns over*

air quality and dust impacts, change in character of the area as a result of mineral workings and HGV traffic, concerns over light pollution

- *Landscape – The site is located within the AONB, and development would have a negative impact on the landscape and visual attraction of the area. The concentration of mineral/waste working in the area is changing the character of the area.*
- *Restoration – concern over what the inert material could be and associated impacts such as odour. Little detail provided regarding the proposed restoration of the site. New rights of way should be included as part of the restoration scheme.*
- *Water Environment – concern regarding the impact on flood risk as several properties in the area flooded in 2007. Concerns regarding the impact on the water table and surface water run off.*
- *Highways/Transport – Concerns associated with additional HGV movements onto the A4, concerns regarding the impact on the local rights of way network. The A4 is considered a good transport link.*
- *Historic Environment – concern over the impact on the listed buildings close to the site. Heritage assessments would be required. Assessment of the impact has not taken place and so the development could lead to significant harm. The grade II listed mile stone should be retained.*
- *Other – impact on property values, presence of an oil pipeline along the southern part of the site.*

All of these issues have been addressed in the Site Consultation Reponses Report (December 2016).

Preferred Options 2017: The site was not included as a preferred option, so no comments were received directly regarding this site, however, general comments were made as to why sites in the AONB had been automatically excluded from the site assessment process.

Submitted Proposal from Site Promoter

The site is proposed for extraction of 850,000 tonnes of sand and gravel extraction from approx. 25ha of the site. Extraction would be carried out over 10 to 12 years.

The site would be restored using inert materials, which would be dry screened and crushed to recover the reusable elements.

It is proposed that the existing access to the site would be used.

Planning History

Planning permission was refused in 2003 for extraction of sand and gravel on the site. Application number 03/02461/FUL.

Sustainability Appraisal (SA) / Strategic Environmental Assessment (SEA) criteria assessment

Site name	Site address
Gravel Pit Farm	Grange Lane, Beenham
Development Potential / proposal	Extraction of sand and gravel.

Key:

++	+	?	0	-	- -
Significantly Positive	Positive	Uncertain	Neutral	Negative	Significantly Negative

SA Objective	Criteria	Effects of site allocation on SA objectives	Justification for assessment	Mitigation / enhancement	Comment
1) To protect and enhance biodiversity and geological diversity throughout West Berkshire	Is there likely to be an impact on biodiversity?	-	Aldermaston Gravel Pits SSSI is located to the south of the site, separated by the A4 and the railway line. An area of ancient semi-natural woodland and a local wildlife sites are located to the north of the site. Wet woodland within the site is considered to be of district value and loss of the woodland would pose a significant ecological constraint.	An ecological and hydrological assessment would be required to determine the possible impacts development of the site would have on the SSSI, woodland and LWS. An assessment of great crested newts from ponds within a 250m radius of the site is required. Hedgerows are of local ecological value and so removal of hedgerow would require compensation.	There is likely to be a negative impact on environmental sustainability as a result of development of this site without further work. Any potential impacts would need to be mitigated in the short/medium term but in the long term should be neutral in terms of sustainability.
	Is there likely to be an impact on geodiversity?	?	Extraction of mineral from the site would permanently alter the geological makeup of the site.		
2) To maintain and	Is there likely to be an	?	There is an unknown	A hydrological	There is an unknown

enhance water quality and resources	impact on water quality?		impact on water quality due to the presence of the A4 between the site and the SSSI.	assessment and potentially ongoing monitoring would be required to ensure no negative impacts on the SSSI.	impact on environmental sustainability, however, with additional assessment and appropriate mitigation there should be a neutral impact on sustainability.
	Is there likely to be an impact on water resources?	**0**	Unlikely to be an impact on water resources.		
3) To minimise the risk and impact of flooding	Is there likely to be an impact in terms of flood risk?	**0**	Unlikely to be an impact on flood risk		There will be a neutral impact on all elements of sustainability.
4) To maximise the sustainable use of land and the protection of soils, safeguarding the best and most versatile agricultural land	Is there likely to be an impact on the best and most versatile agricultural land?	**?**	The site is classed as grade 3 agricultural land, with a small area of grade 1 in the east of the site. The impact would depend on the area of the site to be developed.	Restoration of the site should restore any lost agricultural land to its former quality.	Following mineral extraction there would be no long term impact on sustainability as restoration of the site should be to a similar or better state. However, in the short/medium term there could be an impact on environmental and economic sustainability.
	Is there likely to be an impact on soil quality?	**0**	It is likely that the soils would be removed and stored during the working of the site to be used for restoration purposes so there is unlikely to be an impact on soil quality.	Conditions would be imposed to ensure soils are used on site as part of the restoration scheme.	
	Would previously developed land be utilised?	**0**	It is acknowledged that new mineral sites are generally 'greenfield', however once the land is restored it would return to 'greenfield'. In theory therefore, the impact would be 'neutral'.		

5) To conserve and enhance the character of the historical environment, cultural heritage assets, and features of archaeological importance	Is there likely to be an impact on the historic environment?	?	The site is close to a number of heritage assets, including a listed milestone marker on the southern boundary of the site.	Consideration of the potential impact on the local heritage assets would be required and it is likely that any negative impacts could be mitigated to an acceptable level.	With appropriate mitigation measures there should not be any impact on environmental sustainability.
6) To minimise the impact on landscape and townscape character	Is there likely to be an impact on the townscape?	0	Unlikely to be an impact on townscape		Due to the location of the site in the AONB and the landscape advice given it is likely that there would be a significantly negative impact on environmental sustainability if the site was to be developed.
	Is there likely to be an impact on the landscape?	- -	The site is located within the AONB in an area of medium landscape sensitivity. The site is not recommended for development due to the impact on the landscape in the Council's Landscape and Visual Assessment	Even with mitigation measures the site is not considered acceptable for development in landscape terms.	
7) To protect air quality in West Berkshire	Is there likely to be an impact on air quality?	-	Potential negative impact on air quality as a result of dust generation and traffic movements.	As part of a planning application air quality and dust assessments would potentially be required and mitigation measures including dust suppression techniques may be required to ensure negative impacts are mitigated to an acceptable level.	This site could potentially have a negative impact on environmental sustainability, however, this would only be for the duration of the extraction/restoration works. Mitigation measures would reduce any short/medium term impacts with no long term impacts.

8) To maximise energy efficiency, the proportion of energy generated from renewable sources and adaptability to climate change	Is there likely to be an impact on the amount of renewable energy capacity being provided in West Berkshire?	**0**	Unlikely to impact on renewable energy capacity		Unlikely to be an impact on any element of sustainability.
	Is there likely to be an impact with regard to adaptability to climate change?	**0**	Unlikely to impact on adaptability to climate change		
9) To ensure the sustainable management of waste, minimise the quantity of waste sent to landfill, and to maximise the re-use, recovery and recycling of waste	Is this likely to have an impact on the amount of waste going to landfill?	**-**	The site is proposed for mineral extraction and inert landfilling as part of the restoration scheme	Landfilling is proposed for restoration purposes.	There will be both a positive and negative impact on environmental sustainability. The site proposes the use of inert infill material which would result in a negative impact, however, it is proposed to process the infilling material to recover reusable/recyclable material before infilling the site.
	Is this likely to have an impact in terms of the quantity of waste being reused, recovered and/or recycled?	**+**	It is proposed that the recoverable material to be taken from the imported waste material to produce recycled aggregates, the residual material being used to infill the site.		
10) To promote the sustainable transport of minerals and waste within West Berkshire	Is it likely that rail or waterborne transportation would be used in connection with this site?	**-**	Limited opportunities for rail or waterborne transport from the site, meaning there will be a reliance on road transport.		This site could potentially have a negative impact on environmental sustainability in respect of sustainable transport in the short – medium term, however, due to the temporary nature of mineral extraction in the long term there would be a neutral impact.
	Is there likely to be an impact on the transport network (including the local road network and the Strategic Road Network)?	**-**	Mineral extraction and inert landfilling would generate traffic movements. There is likely therefore, to be a negative impact on the transport network on a medium term basis.	A Transport Assessment/Statement would be required as part of the development management process in order to assess whether the impacts on the transport network would	

				be acceptable and set out what mitigation measures would be required.	
11) To conserve mineral resources in West Berkshire through safeguarding of primary aggregates and encouragement of the use of recycled aggregate where possible and appropriate	Is there likely to be an impact in terms of safeguarding of primary aggregates?	**0**	Unlikely to have an impact on safeguarding of primary aggregates although development of the site would provide primary aggregates for construction purposes.		The site makes use of primary aggregates for construction purposes, therefore preventing sterilisation of the material. The processing of the inert fill prior to filling to remove any recyclable/reusable material would have a positive impact on environmental and economic sustainability.
	Is there likely to be an impact in terms of the use of recycled aggregate/construction and demolition wastes?	**+**	There is potential for recoverable material used for inert infill to be taken from the imported waste material to produce recycled aggregate, the residual material being deposited in the void. If this was the case there could be a positive impact.		
12) To protect human health and well being and maintain the quality and quantity of public open space amenity across West Berkshire, and protect areas of tranquillity in the context of minerals and waste development	Is there likely to be an impact on the quality and quantity of open space amenity?	**-**	A number of rights of way are in close proximity to or cross the site.	Rights of way would need to be protected or diverted for the duration of the extraction period. The site is in private ownership and not generally open to the public.	Overall there is likely to be a negative impact on environmental and social sustainability while the site is being worked, however, once work has ceased and the land has been restored the overall impact should be neutral.
	Is it likely that there would be an impact with regard to areas of tranquillity?	**0**	The site is not close to residential properties and is adjacent to an industrial area, therefore there is unlikely to be an impact on tranquillity.		
13) To minimise public nuisance	Is it likely that there would be an impact with regard to odour?	**0**	There is unlikely to be an impact on odour.		There is likely to be a negative impact on environmental and

	Is it likely that there would be an impact on noise levels?	-	Mineral extraction and inert landfilling and the associated traffic movements would have a negative impact in terms of noise	A noise assessment, setting out any required mitigation would likely be undertaken as part of the development management process. Mitigation could reduce any negative impact to an acceptable level.	social sustainability while the site is being worked, however once working has ceased and the land has been reclaimed the impact on all elements of sustainability would potentially be neutral.
	Is it likely that there would be an impact with regard to light pollution?	0	Unlikely to be an impact on light pollution		
14) To support opportunities for economic development, including jobs, arising from waste and minerals related activities	Is there likely to be an impact on the local and wider economy?	+	Mineral extraction and inert landfilling is likely to be beneficial for the local and wider economy providing direct and indirect employment in the medium term (during the working of the site).		There is likely to be a positive impact on economic sustainability.
	Is there likely to be an impact in terms of employment?	+	Mineral extraction and inert landfilling is likely to be beneficial for the local and wider economy providing direct and indirect employment in the medium term (during the working of the site)		

Summary

Development of the site would be likely to have a significantly negative impact on environmental sustainability as a result of the landscape impact. A number of other negative impacts are also identified in relation to environmental sustainability, however, these are likely to be short/medium term as good restoration of the site would restore the site to a similar, or better state. Mitigation measures could be introduced to ensure there are no longer term impacts. It is predicted that there would be a positive impact on economic sustainability as a result of job creation/retention and support of the local economy. There are also potential positive impacts as a result of processing the infill material for any recyclable/reusable material prior to infilling of the site.				
Effect:	**Likelihood:**	**Scale:**	**Duration:**	**Timing:**

Potentially significantly negative	Medium	Local	Temporary	Short/Medium term

Minerals and Waste Site Assessment form

Site ID:	MW013	**Site Name:**	Manor Farm
Site Address:	Brimpton	**Parish:**	Brimpton
Mineral/Waste development:	Mineral extraction	**Site Area:**	20ha

Recommendation

Recommendation:	The site is **not** recommended for allocation
Justification:	While it is recognised that minerals can only be extracted from where they lie, more sites have been promoted for development and were considered to be potentially suitable for development than are required to meet the Council's need (as set out in the LAA) and therefore, there are choices to be made as to which sites to take forward for allocation. While the site is largely seen as appropriate for development, there is an existing legal claim on the site. While not a planning consideration, there is a concern over deliverability in the short/medium term, which means that the site is not considered appropriate for development at this time.

Key Considerations

Biodiversity: The site is adjacent to the River Kennet SSSI and a LWS, with the relevant mitigation measures and hydrological assessment it is not considered that this would be a significant issue affecting the site, especially as the developable area of the site excludes the area immediately adjacent to the SSSI. There is an area of ancient woodland located west of the site which will need to be protected by appropriate buffers. Ecological/Hydrological assessments would be required at planning application stage.

Rights of way: There are a number of rights of way crossing the site. The developable area of the site takes these into account, using the rights of way as boundaries for the developable area. The rights of way will need to be retained, or diverted throughout the lifetime of the site. Buffers to the rights of way may also be required.

Landscape: Only part of the site is considered suitable for development in landscape terms, subject to the mitigation measures set out in the Council's Landscape and Visual Assessment. A Landscape and Visual Impact Assessment will be required at planning application stage.

Deliverability: The site is subject to an existing legal claim regarding shooting rights, and while this may be able to be resolved, in the short/medium term this is a constraint on deliverability of the site.

Site Assessment

Biodiversity: The site is adjacent to an area of Ancient Semi Natural Woodland to the west and adjacent to the River Kennet SSSI. The site is also within a Biodiversity Opportunity Area and Local Wildlife Site. Natural England has indicated that there should be a buffer of at least 10m between the river bank and the extraction site and minimum 15m buffers

should be provided to the ancient woodland. The developable area of the site move the extraction area away from these areas, and the buffer provided is considered appropriate to mitigate any impacts. There are active bird groups in the area, which will need to be taken into consideration. Restoration of the site should be in line with protecting and enhancing the SSSI. Habitat/ecology and hydrological assessment would be required at planning application stage. The site is within the West Berkshire Living Landscapes project area, restoration of the site should seek to meet the objectives of the Living Landscape.

Agricultural Land Classification: The majority of the site is within agricultural land classification grade 4, with small areas to the south west and south east classed as grade 3.

Heritage: The site is close to the Brimpton Conservation Area and some listed buildings as well as a scheduled monument. Full consideration of the impact of development on these heritage assets would be required. A Heritage Impact Assessment, desk based archaeological assessment and field evaluation would be required with any planning application submitted.

Landscape/Townscape: The site is in an area of medium/high landscape character. A reduced developable area (agreed by the site promoter) should be considered ensuring no negative impacts on the setting of the River Kennet SSSI. Mitigation measures will be required as set out in the Council's Landscape and Visual Assessment. Restoration should be to arable farm land at existing levels. A Landscape and Visual Impact Assessment will be required at planning application stage.

The site is close to the village of Brimpton, however the developable area of the site takes this into account by moving the development away from the village. Consideration of the impact on Brimpton will be required, however, it is not considered that there would be a significant impact.

Amenity: Noise and dust generation from the site is likely, however, mitigation measures would reduce these impacts, including limits on operating hours.

Rights of way: There are a number of rights of way passing through or adjacent to the site. The developable area proposed takes these into account. These rights of way would need to be retained or diverted and buffers provided to separate them from the site to ensure no negative impacts for those using the right of way.

Flooding: The northern part of the site is within flood zone 3, a groundwater emergence zone and has some risk of surface water flooding, while the rest of the site is not at risk from flooding. While mineral extraction is a water compatible activity, this area at risk from flooding is excluded from the developable area of the site.

Water Environment: The site is in SPZ3.

Highways: The sire promoter has indicated that the adjacent landowner has agreed that extracted material can be transported from the site using an internal access road between the site and Colthrop Mineral Processing Plant, as a result there will be no HGV movements from the site itself. Vehicle movements from Colthorp Mineral Processing Plant are estimated at 60 movements per day.

If an internal haul road was not possible access would be onto Brimpton Road and then the A4. The A4 is classed as a 'district access route to key destinations' in the West Berkshire Freight Strategy. Transport assessment works would be required including details of the access to ensure width and visibility attributes are satisfactory.

Employment: Development of the site would have a positive impact on the local economy and job creation.

Geology/Mineral Resources: The site is underlain by sharp sand and gravel deposits. The British Geological Survey Mineral Assessment Report 24 (Aldermaston, Berkshire) records borehole information for the site, near the eastern boundary (SU56NE7). This shows an overburden thickness of 0.7m, and a mineral thickness of 4.2m with 10% fines, 26% sand and 64% gravel. The site is in a resource block with a mean mineral thickness of 3.6m and mean overburden thickness of 1.2m and the mineral is classified as gravel. Mineral resource is estimated at 600,000 tonnes.

Utilities: 132kV electricity line passes through the site. Consideration of the route of the line would be required to ensure no disruption to the power supply to Thatcham. Southern gas network pipes run along the eastern edge of the site (outside the proposed developable area) and through the centre of the site. Consideration of the pipeline would be required when determining the area of the site suitable for extraction.

Restoration/After-care: The site will be restored to agriculture, with biodiversity and flood management enhancements. There is an opportunity for low level floodplain grassland to be created along with reed beds or ridge and furrow grassland.

Cumulative Impact: While there are no other sites adjacent to this one, there are other sites within the wider Brimpton Area. Consideration of the potential cumulative impacts, especially in relation to highways would need to be considered. Phasing of the sites to ensure not all are developed at the same time would help to reduce any potential cumulative impacts. The site promoter has also suggested that the site could replace the existing site at Kennetholme Quarry, works and restoration of Kennetholme would need to be completed prior to development stating on this site to ensure no negative cumulative impacts.

Sustainability Appraisal: Overall the site would be likely to have a negative impact on environmental sustainability, with the exception of the environmental benefits of the production of recycled aggregate and the associated recycling rates. However, development of this nature is temporary and good restoration would return the site to a similar, or better, state than its current state. Mitigation measures would be required for the duration of the development to ensure no long term negative impacts result from the development. It is predicted that there would be an unknown impact on economic sustainability, as while mineral extraction creates jobs, there could be a loss of farming related employment as a result of the loss of agricultural land. There is also a potentially positive impact in relation to managing and reducing flood risk.

Deliverability: The site has been submitted on behalf of the land owner, and there is no indication that the site would not be viable. The site promoter has indicated that the site would be suitable to come forward in 1 – 5 years, towards the beginning of the plan period

with a lifetime of approx. 5 – 6 years. There is potential for the site to be developed as an extension to the Kennetholme Quarry, which would impact on the viability of the site. There are third party shooting rights on the land which may impact on deliverability if an adequate solution cannot be found between the third party and the land owner.

Consultation

Sites Consultation 2016: A number of issues were raised as part of the sites consultation in summer 2016 these included general need for mineral extraction, environment/ecology, amenity, landscape, water environment, highways and historic environment.

- *Environment/ecology – Impact on local rights of way, trees and the River Kennet were raised.*
- *Amenity – Concerns regarding noise and disruption to Brimpton village were raised, as well as the impact of haulage routes on the character of the environment and infrastructure.*
- *Landscape – The site is considered to be visible from multiple locations, including residential properties.*
- *Water environment – Extraction and restoration must be done in such a way as to reduce flood risk. Concern over the potential knock-on effects on flooding downstream.*
- *Highways – Development of a quarry was considered to be inappropriate due to the impact on traffic and road safety. Local infrastructure is not considered suitable for HGVs.*
- *Historic Environment – Potential impacts on local listed buildings and scheduled monuments. Brimpton is a historic settlement dating back to 944AD and with links to King John.*

All of these issues have been addressed in the Site Consultation Reponses Report (December 2016).

Preferred Options Consultation 2017: A number of issues were raised as part of the Preferred Options consultation in summer 2017, including:

- Amenity – concerns over noise, dust and air pollution. Loss of views. Lack of care for residents
- Need – there is no need for this site to be allocated.
- Landscape – extraction would damage the landscape, and would be seen from a wide area.
- Restoration – grassland farming is different from arable farming, and there is no evidence that the site could be restored to the same quality it was before.
- Ecology – concern over the impact on wildlife. The site is close to LWS and SSSI. The allocation of a number of sites close together could result in improved biodiversity gains through restoration as the sites could interact.
- Water environment – concerns over pollution of water courses. High water table in the area.
- Highways – concerns over road safety with HGVs using rural roads. Some of the local roads have a weight restriction on them. Poor access compared to other sites located closer to A roads. Loss of rights of way.
- Flooding – concern over increased flood risk as a result of works on the site.

- Heritage – the site is close to a number of heritage assets
- Agricultural land – development would result in the loss of agricultural land
- SA/SEA – the site has not been assessed properly.
- Deliverability/Availability – the site is not deliverable due to shooting rights over the land.

All of these issues have been addressed in the Preferred Options Consultation Reponses Report (September 2018)

Submitted Proposal from Site Promoter

Submitted Proposal:
The site is proposed for extraction of 600,000 tonnes of sand and gravel from 15ha of the 20ha site (the reduced site area proposed as part of the Preferred Options consultation has been agreed). Extraction would be carried out over a 4 - 5 year period.

Restoration is proposed to be back to agriculture with some grassland and water on the site.

Access is proposed to be via an internal access road to the Colthrop Processing Plant.

Planning History

No planning history.

Sustainability Appraisal (SA) / Strategic Environmental Assessment (SEA) criteria assessment

Site name	Site address
Manor Farm, Brimpton	Manor Farm, Brimpton Road, Brimpton
Development Potential / proposal	Extraction of 600,000 tonnes sharp sand and gravel. Restoration partly form inert infill

Key:

++	+	?	0	-	- -
Significantly Positive	Positive	Uncertain	Neutral	Negative	Significantly Negative

SA Objective	Criteria	Effects of site allocation on SA objectives	Justification for assessment	Mitigation / enhancement	Comment
1) To protect and enhance biodiversity and geological diversity throughout West Berkshire	Is there likely to be an impact on biodiversity?	-	The north of the site abuts the River Kennet SSSI and parts of the site are wet woodland. Areas of woodland to the north and south of the site, once of which is designated as ancient woodland, hedgerows and hedgerow trees. The proposed internal haul route would cross the SSSI	The reduced site area as a result of the landscape work shows that no development should take place within the area of the site adjacent to the SSSI which will further reduce the impact. Mitigation, including appropriate buffers to woodland, would be required. Consideration of the haul route and the impact on the SSSI and proposed mitigation would be required.	There is potential for a negative impact on environmental sustainability in the medium term without mitigation. Assessment, monitoring and application of suitable controls could mitigate this however, and potentially result in an improvement on a permanent basis through restoration incorporating biodiversity enhancements.
	Is there likely to be an impact on geodiversity?	?	The extraction of mineral and the infilling of the void with inert waste would permanently alter the geodiversity of the site.		

2) To maintain and enhance water quality and resources	Is there likely to be an impact on water quality?	-	The north of the site abuts the River Kennet SSSI. Although developable area means extraction would be some distance from the SSSI.	Monitoring and Assessment of the impacts on the SSSI and water course would need to be considered and mitigation measures implemented where necessary.	Without mitigation there is potential for a negative impact on environmental sustainability in the medium term.
	Is there likely to be an impact on water resources?	0	Unlikely to be an impact on water resources		
3) To minimise the risk and impact of flooding	Is there likely to be an impact in terms of flood risk?	+	The northern part of the site (to the north of Manor Lane) is within zone 3. However, sand and gravel extraction is considered to be water compatible development. The extraction of sand and gravel has the potential to improve flood mitigation measures, including improved flood water storage capacity.	The voids created by extraction could potentially be positive for flood risk in the sense that they could provide extra capacity for floodwaters in the medium term or permanently depending on the restoration scheme. Infilling of the voids with inert waste could have implications for potential flood storage capacity. However, if infilled and restored to a lower level, the site could provide flood storage capacity on a permanent basis.	This site could have a positive impact on environmental and economic sustainability through the reduction of flood risk via provision of extra capacity for floodwater.
4) To maximise the sustainable use of land and the protection of soils, safeguarding the best and most versatile agricultural land	Is there likely to be an impact on the best and most versatile agricultural land?	?	The majority of the site is classed as grade 4, while the south western and south eastern corners are classed as grade 3.	Restoration of the site should restore any lost agricultural land to its former quality.	Restoration of the site should return the site to a similar state following the extraction of the mineral so there should be no long term impact on sustainability, however, in the short/medium term there could be an impact on environmental and economic sustainability.
	Is there likely to be an impact on soil quality?	0	It is likely that the soils would be removed and stored during the working of the site to be used for restoration purposes so there is unlikely to be an impact on soil quality on a	Conditions could be included to ensure that any soils removed were stored and replaced as part of the restoration scheme.	

			permanent basis.		
	Would previously developed land be utilised?	**0**	It is acknowledged that new mineral sites are generally 'greenfield', however once the land is restored it would return to 'greenfield'.		
5) To conserve and enhance the character of the historical environment, cultural heritage assets, and features of archaeological importance	Is there likely to be an impact on the historic environment?	**?**	The site is close to some listed buildings, a conservation area and a scheduled monument.	Consideration of the potential impact on the local heritage assets would be required and it is likely that any negative impacts could be mitigated to an acceptable level.	Whether there would be an impact on sustainability is unknown, but it is considered unlikely with inclusion of appropriate mitigation measures.
6) To minimise the impact on landscape and townscape character	Is there likely to be an impact on the townscape?	**0**	Unlikely to impact on townscape.		Without mitigation there is potential for a negative impact on environmental sustainability in the medium term and on a permanent basis depending on the restoration of the site.
	Is there likely to be an impact on the landscape?	**-**	The landscape character of the area is defined as medium/high landscape character, therefore, there is potential for a negative landscape impact.	Mitigation measures would be required, in line with the Landscape and Visual Assessment. A reduced developable area would also reduce the impact on the landscape.	
7) To protect air quality in West Berkshire	Is there likely to be an impact on air quality?	**-**	Potential negative impact on air quality as a result of dust generation and traffic movements.	As part of a planning application air quality and dust assessments would potentially be required and mitigation measures including dust suppression techniques may be required to ensure negative impacts are mitigated to an acceptable level.	This site could have a negative impact on environmental sustainability, however, this would only be for the duration of the extraction/restoration works. Mitigation measures would reduce any short/medium term impacts.

8) To maximise energy efficiency, the proportion of energy generated from renewable sources and adaptability to climate change	Is there likely to be an impact on the amount of renewable energy capacity being provided in West Berkshire?	**0**	Unlikely to impact on renewable energy capacity		There is an overall uncertain impact on environmental or economic sustainability due to the unknown nature of the restoration on the potential site. in the long term depending on the restoration scheme. If restored to a lower level, the site could provide flood storage capacity on a permanent basis.
	Is there likely to be an impact with regard to adaptability to climate change?	**? / +**	Climate change may increase the likelihood / frequency of flooding and the voids created from mineral extraction could potentially accommodate some of this floodwater in the medium term depending on the restoration scheme.	The voids created by extraction could potentially be positive in the sense that they could provide extra capacity for floodwaters	
9) To ensure the sustainable management of waste, minimise the quantity of waste sent to landfill, and to maximise the re-use, recovery and recycling of waste	Is this likely to have an impact on the amount of waste going to landfill?	**-**	The site is proposed for mineral extraction and inert landfilling	Landfilling is proposed for restoration purposes.	Overall there is likely to be both a positive and negative impact on environmental sustainability, with a positive impact on economic sustainability. The site is proposed for infilling, with will result in a negative impact, however, the processing of material for the infilling is likely to recover reusable/recyclable material, which will have a positive impact.
	Is this likely to have an impact in terms of the quantity of waste being reused, recovered and/or recycled?	**?**	the site is proposed to be restored to existing levels using inert fill, there is the potential for fill material to be sorted and processed prior to use to ensure all usable material is removed for reuse, recovery or recycling.	Although the site is proposed for landfilling, this would be undertaken for restoration purposes and the material would be inert with the possibility for all 'useable' material to be removed prior to filling.	
10) To promote the sustainable transport of minerals and waste within West Berkshire	Is it likely that rail or waterborne transportation would be used in connection with this site?	**-**	Limited opportunities for rail or waterborne transport from the site, meaning there will be a reliance on road transport.		The site could potentially have a negative impact on environmental sustainability in respect of sustainable transport in the short/medium term, however, due to the temporary nature of
	Is there likely to be an impact on the transport network (including the	**0**	An internal haul road is proposed, which would not impact on the road	Details of the haul route would be required. A Transport	

	local road network and the Strategic Road Network)?		network as material would be transported internally to Colthrop Processing Plant.	assessment/Statement would be produced as part of the development management process in order to assess the impacts on the transport network where necessary negative impacts would be mitigated to an acceptable level.	mineral extraction in the long term there would be a neutral impact.
11) To conserve mineral resources in West Berkshire through safeguarding of primary aggregates and encouragement of the use of recycled aggregate where possible and appropriate	Is there likely to be an impact in terms of safeguarding of primary aggregates?	**0**	Unlikely to have an impact on safeguarding of primary aggregates although development of the site would provide primary aggregates for construction purposes.		The site makes use of primary aggregates for construction purposes, therefore, prevents sterilisation of the material. It is unlikely that there would be an impact on any element of sustainability.
	Is there likely to be an impact in terms of the use of recycled aggregate/construction and demolition wastes?	**0**	The site is proposed to be restored to existing levels using inert fill material.	Opportunities for fill material to be sorted and any 'usable' material to be removed from the fill material for recycling	
12) To protect human health and well being and maintain the quality and quantity of public open space amenity across West Berkshire, and protect areas of tranquillity in the context of minerals and waste development	Is there likely to be an impact on the quality and quantity of open space amenity?	**-**	A right of way crosses the site.	Rights of way would need to be protected or diverted for the duration of the extraction period.	There is likely to be a negative impact on environmental and social sustainability while the site is being worked, however once working has ceased and the land has been reclaimed the impact on all elements of sustainability would be neutral.
	Is it likely that there would be an impact with regard to areas of tranquillity?	**-**	The area is rural in character and there are public rights of way running across the site.	Mitigation could potentially include a phased working scheme with progressive restoration, landscaping measures and noise controls.	
13) To minimise public nuisance	Is it likely that there would be an impact with regard to odour?	**0**	Unlikely to be an impact on odour		There is likely to be a negative impact on environmental and social

	Is it likely that there would be an impact on noise levels?	-	Mineral extraction and inert landfilling and the associated traffic movements would have a negative impact in terms of noise.	A noise assessment, setting out any required mitigation would likely be undertaken as part of the development management process. Mitigation could reduce any negative impact to an acceptable level.	sustainability while the site is being worked, however once working has ceased and the land has been reclaimed the impact on all elements of sustainability would potentially be neutral.
	Is it likely that there would be an impact with regard to light pollution?	0	Unlikely to be an impact on light pollution.		
14) To support opportunities for economic development, including jobs, arising from waste and minerals related activities	Is there likely to be an impact on the local and wider economy?	+	Mineral extraction and inert landfilling is likely to be beneficial for the local and wider economy providing direct and indirect employment in the medium term as well as mineral resources for the local market.		There is likely to be an unknown impact on economic sustainability in regard to this objective as mineral extraction will create jobs and support the local economy, but there could be an impact on employment related to the farming industry.
	Is there likely to be an impact in terms of employment?	?	Mineral extraction and inert landfilling is likely to be beneficial for the local and wider economy providing direct and indirect employment in the medium term, however development of the site could impact on local farming related employment.		

Summary

Overall the site would be likely to have a negative impact on environmental sustainability, with the exception of the environmental benefits of the production of recycled aggregate and the associated recycling rates. However, development of this nature is temporary and good restoration would return the site to a similar, or better, state than its current state. Mitigation measures would be required for the duration of the development to ensure no long term negative impacts result from the development. It is predicted that there would be an unknown impact on economic sustainability, as while mineral extraction creates jobs, there could be a loss of farming related employment as a result of the loss of agricultural land. There is also a potentially positive impact in relation to managing and reducing flood risk.				
Effect:	**Likelihood:**	**Scale:**	**Duration:**	**Timing:**
Predominantly neutral	Medium	Local	Temporary	Short/Medium Term

Minerals and Waste Site Assessment form

Site ID:	MW014	**Site Name:**	Padworth Park Farm
Site Address:	Padworth Lane, Lower Padworth, Reading, RG7 4HY	**Parish:**	Aldermaston / Padworth
Mineral/Waste development:	Mineral extraction	**Site Area:**	130ha

Recommendation

Recommendation:	The site is **not** recommended for allocation
Justification:	The site is not considered suitable for development due to the potential negative impact on the landscape. The site is in an area of high landscape sensitivity in the setting of the AONB. It is not considered that mitigation measures would mitigate the harm caused to the environment, and as a result there is likely to be a significant negative impact on sustainability should this site be developed. There is also concern over whether adequate access can be provided to the site and the potential impact on biodiversity and ecology.

Key Considerations

Landscape: The site is within an area of high landscape sensitivity in the setting of the AONB. It is not considered suitable for development in landscape terms, and would result in a significantly negative impact on environmental sustainability.

Biodiversity: The site is close to a number of designated and sensitive biodiversity areas, including the River Kennet and a SSSI. Mitigation measures would be required and consideration of the hydrological links between the site and the SSSI. Hydrological and habitat/ecological assessments would be required.

Highways: There is concern over the delivery of access to the site and traffic movements. Detailed transport assessment work would be required to determine whether the site would be suitable in highways terms.

Site Assessment

Biodiversity: The site is close to areas of Ancient Semi Natural Woodland and within UK BAP priority habitat and a Local Wildlife Site. Concern has been raised regarding the development of the site by the Council's ecologist. There is a SSSI close to the boundary of the site, consideration of hydrological links between the site and the SSSI would be required. A number of water courses run through the site, which is also adjacent to the River Kennet. Consideration of the impact on these water courses would be required, including a potential buffer between the banks of the water courses and any workings. Hydrological and habitat/ecological assessments would be required.

Agricultural Land Classification: The majority of the site is classified as grade 3b agricultural land, with a small area at the centre of the site and along the southern edge classified as grade 3a.

Heritage: Two conservation areas are located close to the site with a number of listed buildings and a scheduled monument in the local area. There is potential for archaeology on the site and a desk based archaeological assessment would be required accompanied by any relevant field evaluations.

Landscape/Townscape: The area is in an area of high landscape sensitivity. It is not recommended that the site is considered for allocation. The area makes a significant contribution to the Kennet Valley riparian landscape and to the parkland setting of Padworth College.

While there are a number of residential properties close to the site development of the site is not considered to impact on townscape.

Amenity: Noise and dust generation from the site is likely, however, mitigation measures would reduce these impacts, including limits on operating hours. The site is close to Padworth College, consequently, there could be a negative amenity impact on the pupils and staff at the college.

Rights of way: A right of way runs thought the centre of the site. Should development take place the right of way would need to be retained or diverted and buffers and/or screening would be required to reduce the impact of extraction on the path.

Flooding: Approximately half of the site is located in flood zone 3. Although mineral extraction is a water compatible activity consideration of the areas most at risk from flooding is required especially in relation to the location of any plant materials to be present on the site. All plant/buildings required on site would need to be located in the area of lowest flood risk. Mineral extraction can lead to improved flood mitigation through the lowering of land resulting in greater flood storage areas, although no restoration scheme has been proposed.

Water Environment: Parts of the site are in all three SPZ zones. The Environment Agency have raised concerns regarding infilling of the site, however, it is considered that this could be dealt with adequately to ensure no negative impacts on local water quality.

Highways: Access to the site is currently unclear, however access onto the A340 would be preferred. Details of access would need to be provided showing adequate width and visibility. Transport assessment work would be required. Given the lack of detail regarding access and vehicle movements the site is currently not considered suitable for development in highways terms.

Employment: Development of the site would have a positive impact on the local economy and job creation.

Geology/Mineral Resources: The site is underlain with sand and gravel. Boreholes show the mineral content to be 60 – 70% gravel, 30 – 40% sand and 5 – 8% silt. The depth of mineral generally ranges up to 2m below ground level.

Utilities: An oil pipeline runs along the southern boundary of the site. Consideration of the pipeline would be required when considering areas of the site suitable for extraction.

Restoration/After-care: The site promoter has indicated that the site could be infilled and

returned to agriculture/amenity land, or could be left to form lakes with an amenity after use. The area has been suggested as suitable for growing cricket bat willow. Any landfilling required as part of the restoration is likely to use inert material.

Cumulative Impact: There are a number of sites in the local area, Spring Lane (MW010) to the south, Aldermaston Bridge (MW003) and Lower Farm, Wasing (MW012) to the west. If all sites were developed there is potential for significant cumulative impacts especially in relation to amenity and transport. Careful consideration of phasing would be required if all sites were considered acceptable for development.

Sustainability Appraisal: Overall development of the site would be likely to have a negative impact on sustainability, with a significantly negative impact on environmental sustainability as a result of the landscape impact from developing the site. It is not considered that this negative impact could be mitigated, where as many of the other negative sustainability impacts could be mitigated reducing the impact of the development in the short/medium term. It is predicted that there would be a positive impact on economic sustainability as a result of job creation and supporting the local economy and also in terms of flood risk as restoration of the site could provide improved flood risk management.

Deliverability: The site promoter has indicated that the site is available and that there are no issues relating to deliverability or viability.

Consultation

Sites Consultation 2016: A number of issues were raised as part of the sites consultation in summer 2016 these included a general need for mineral extraction, planning history, ecology, amenity, landscape, agriculture, water environment, highways, historic environment, economy and cumulative impacts.

- *Planning History – The area has been subject to 3 previous applications that were refused due to impacts on rights of way, HGV traffic and impact on the character of the area. Concern that experience elsewhere shows that sites are not restored as they should be.*
- *Ecology – Concerns regarding the impact on local ecology. The site is within a LWS, BOA and BAP habitat*
- *Amenity – Concern over loss of green/open space and impacts on the right of way network. Concerns also raised regarding the impacts of noise, odour, health and visual impacts and concern regarding the impact on Padworth College.*
- *Landscape – Development of the site would damage the rural character of the area.*
- *Agriculture – The site is of poor quality agriculturally. The farm has been under entry level and higher level Countryside Stewardship agreement since 2007.*
- *Water Environment – Concern over the impact on water quality and flooding in the area. Concern that there has been no hydrological assessment or input from the Environment Agency.*
- *Highways – Concerns regarding air quality, noise and road safety from additional traffic. A340 is not suitable for additional traffic. Concerns over access to the site. Access should be via the A340, other routes are not suitable for HGV traffic.*
- *Historic Environment – Concern over the impact on the historic buildings located close to the site.*
- *Economy – Development would result in a negative impact on the livery yard, fishing,*

house prices, Padworth College. Jobs will be created.

- *Cumulative impacts – Concern over existing poor air quality in the area as a result of existing minerals and waste sites, concerns over traffic impacts and number of potential sites in the areas.*

All of these issues have been responded to in the Site Consultation Reponses Report (December 2016).

Preferred Options Consultation 2017: The site was not included as a preferred option. No comments were received on the site.

Submitted Proposal from Site Promoter

The site is proposed for extraction of approximately 2.4m tonnes of sand and gravel over an area of approximately 90ha (from a total site area of 130ha). This would leave a void of approx 1,500,000 m^3. No restoration strategy has been proposed.

The site was previously submitted for a larger area, however the eastern most part of the site (north/east of Padworth College) has been withdrawn.

Planning History

79/11608/ADD – application for extraction and processing sand and gravel with ancillary works and the restoration and after-use of the site. Not determined, dismissed at appeal.

Sustainability Appraisal (SA) / Strategic Environmental Assessment (SEA) criteria assessment

Site name	Site address
Padworth Park Farm	Padworth Park Farm, Padworth lane, Lower Padworth, Reading, Berkshire, RG7 4HY
Development Potential / proposal	Extraction of 2,444,000 tonnes of sharp sand and gravel. Restoration to either agricultural land or as lakes.

Key:

++	+	?	0	-	- -
Significantly Positive	Positive	Uncertain	Neutral	Negative	Significantly Negative

SA Objective	Criteria	Effects of site allocation on SA objectives	Justification for assessment	Mitigation / enhancement	Comment
1) To protect and enhance biodiversity and geological diversity throughout West Berkshire	Is there likely to be an impact on biodiversity?	-	Aldermaston Gravel Pits SSSI is close to the site. The site is adjacent to the River Kennet and a water course flows through the site. Development of the site could have a negative impact on biodiversity.	Mitigation would be required. This should include a buffer zone between the site and the River Kennet. Assessment of the potential impacts on the SSSI and River Kennet would be required with mitigation measures implemented if an adverse impact is identified.	There is potential for a negative impact on environmental sustainability in the medium term without mitigation. Assessment, monitoring, and application of suitable controls could mitigate this however, and potentially result in an improvement on a permanent basis through biodiversity enhancements as part of the restoration.
	Is there likely to be an impact on geodiversity?	?	The extraction of mineral and subsequent infilling with inert waste would potentially permanently alter the geological makeup of the site.		
2) To maintain and enhance water quality and resources	Is there likely to be an impact on water quality?	-	The site is adjacent to the River Kennet and close to Aldermaston Gravel Pits SSSI, therefore, there is potential for an impact on	Monitoring and Assessment of the impacts on the SSSI and water course would be required with mitigation measures implemented	Without mitigation there is potential for a negative impact on environmental sustainability in the medium term.

			water quality.	where necessary.	
	Is there likely to be an impact on water resources?	**0**	There is unlikely to be an impact on water resources		
3) To minimise the risk and impact of flooding	Is there likely to be an impact in terms of flood risk?	**+**	Over half of the site is within flood zone 3, however, sand and gravel extraction is considered to be water compatible development. The extraction of sand and gravel has the potential to improve flood mitigation measures, including improved flood storage areas.	The voids created by extraction could potentially be positive for flood risk in the sense that they could provide extra capacity for floodwaters in the medium term or permanently depending on the restoration scheme. Infilling of the voids with inert waste could have implications for potential flood storage capacity. However, if infilled and restored to a lower level, the site could provide some flood storage capacity.	This site could have a positive impact on environmental and economic sustainability through the reduction of flood risk via provision of extra capacity for floodwater.
4) To maximise the sustainable use of land and the protection of soils, safeguarding the best and most versatile agricultural land	Is there likely to be an impact on the best and most versatile agricultural land?	**?**	The site is shown as grade 3 and grade 4, therefore, the impact on agricultural land would depend on the areas of the site worked.	Restoration of the site should restore any lost agricultural land to its former quality.	Restoration of the site should return the site to a similar state following the extraction of the mineral, however this is dependent on restoration to agriculture, and lakes are a possibility. Subject to restoration to agriculture there should be no long term impact on sustainability, however, in the short/medium term there could be an impact on environmental and economic sustainability.
	Is there likely to be an impact on soil quality?	**0**	It is likely that the soils would be removed and stored during the working of the site to be used for restoration purposes so there is unlikely to be an impact on soil quality.	Conditions would be imposed to ensure soils are used on site as part of the restoration scheme.	
	Would previously developed land be utilised?	**0**	It is acknowledged that new mineral sites are generally 'greenfield', however once the land is restored it would return to		

			‘greenfield’. In theory therefore, the impact would be ‘neutral’.		
5) To conserve and enhance the character of the historical environment, cultural heritage assets, and features of archaeological importance	Is there likely to be an impact on the historic environment?	**?**	The site is close to a number of heritage assets.	Consideration of the potential impact on the local heritage assets would be required and it is likely that any negative impacts could be mitigated to an acceptable level.	With appropriate mitigation measures there should not be any impact on environmental sustainability.
6) To minimise the impact on landscape and townscape character	Is there likely to be an impact on the townscape?	**0**	Unlikely to be an impact on townscape.		Even with mitigation measures provided it is considered that there is potential for a significantly negative impact on environmental sustainability as a result of the landscape impact.
	Is there likely to be an impact on the landscape?	**- -**	The site is located in an area of high landscape sensitivity.	The site is not considered suitable for development in landscape terms.	
7) To protect air quality in West Berkshire	Is there likely to be an impact on air quality?	**-**	Potential for dust generation and traffic movements as a result of extraction.	As part of a planning application air quality and dust assessments would potentially be required and mitigation measures including dust suppression techniques may be required to ensure negative impacts are mitigated to an acceptable level.	This site could have a negative impact on environmental sustainability, however, this would only be for the duration of the extraction/restoration works. Mitigation measures would reduce any short/medium term impacts,
8) To maximise energy efficiency, the proportion of energy generated from renewable sources and adaptability to climate change	Is there likely to be an impact on the amount of renewable energy capacity being provided in West Berkshire?	**0**	Unlikely to be an impact on renewable energy capacity.		Overall there is an uncertain impact on environmental and economic sustainability due to the unknown nature of the restoration potential on the site. If restored to a lower
	Is there likely to be an impact with regard to adaptability to climate change?	**? / +**	Climate change may increase the likelihood / frequency of flooding and the voids created from	The voids created by extraction could potentially be positive in the sense that they could provide extra	

			mineral extraction could potentially accommodate some of this floodwater in the medium term and on a permanent basis depending on the restoration scheme.	capacity for floodwaters	level, the site could provide flood storage capacity on a permanent basis, providing long term benefits
9) To ensure the sustainable management of waste, minimise the quantity of waste sent to landfill, and to maximise the re-use, recovery and recycling of waste	Is this likely to have an impact on the amount of waste going to landfill?	?	The site is proposed for mineral extraction and potentially inert landfilling as part of the restoration scheme, however there is also potential for the site to be left as lakes.	The impact would depend on the restoration scheme for the site, the details of which are not currently available.	The sustainability impact is unknown as it depends on the restoration scheme proposed for the site. Two options have been put forward as possibilities which would have different sustainability impacts.
	Is this likely to have an impact in terms of the quantity of waste being reused, recovered and/or recycled?	?	There is potential for recycled aggregate to be produced from materials imported as part of the restoration scheme. However, the final restoration scheme is to be decided so the impact is unknown.	The impact would depend on the restoration scheme for the site, the details of which are not currently available.	
10) To promote the sustainable transport of minerals and waste within West Berkshire	Is it likely that rail or waterborne transportation would be used in connection with this site?	-	Limited opportunities for rail or waterborne transport from the site, meaning there will be a reliance on road transport.		This site could have a negative impact on environmental sustainability in respect of sustainable transport in the short/medium term, however, due to the temporary nature of mineral extraction in the long term there would be a neutral impact.
	Is there likely to be an impact on the transport network (including the local road network and the Strategic Road Network)?	-	Mineral extraction and inert landfilling would generate traffic movements.	A Transport assessment/Statement would be produced as part of the development management process in order to assess whether the impacts on the transport network would be acceptable and where necessary/possible negative impacts would be mitigated	

				to an acceptable level.	
11) To conserve mineral resources in West Berkshire through safeguarding of primary aggregates and encouragement of the use of recycled aggregate where possible and appropriate	Is there likely to be an impact in terms of safeguarding of primary aggregates?	**0**	Unlikely to have an impact on safeguarding of primary aggregates although development of the site would provide primary aggregates for construction purposes.		The site makes use of primary aggregates for construction purposes, therefore, sterilisation of the material would not occur. It is unlikely that there would be an impact on any element of sustainability.
	Is there likely to be an impact in terms of the use of recycled aggregate/construction and demolition wastes?	**0**	The site is proposed for mineral extraction and potential inert landfilling, therefore there is not considered to be any impact		
12) To protect human health and well being and maintain the quality and quantity of public open space amenity across West Berkshire, and protect areas of tranquillity in the context of minerals and waste development	Is there likely to be an impact on the quality and quantity of open space amenity?	**-**	There are a number of rights of way close to the site, including one that runs through the site.	Rights of way would need to be protected or diverted for the duration of the extraction period. Restoration of the site could improve the quality and quantity of open space amenity in the area depending on the restoration scheme.	There is likely to be a negative impact on environmental and social sustainability while the site is being worked, however once working has ceased and the land has been reclaimed the impact on all elements of sustainability could potentially be positive depending on the final restoration scheme.
	Is it likely that there would be an impact with regard to areas of tranquillity?	**-**	The area is quiet and rural in nature, and mineral extraction and inert landfilling may result in a negative impact on tranquillity for the duration of the works.	Mitigation could potentially include a phased working scheme with progressive restoration, landscaping measures and noise controls.	
13) To minimise public nuisance	Is it likely that there would be an impact with regard to odour?	**0**	Unlikely to be an impact on odour.		There is likely to be a negative impact on environmental and social sustainability while the site is being worked, however once working has ceased, the impact
	Is it likely that there would be an impact on noise levels?	**-**	Mineral extraction and the associated traffic movements would have a negative impact in terms	A noise assessment, setting out any required mitigation would likely be undertaken as part of the development	

			of noise in the medium term	management process. Mitigation could reduce any negative impact to an acceptable level.	on all elements of sustainability would potentially be neutral.
	Is it likely that there would be an impact with regard to light pollution?	**0**	Unlikely to be an impact on light pollution.		
14) To support opportunities for economic development, including jobs, arising from waste and minerals related activities	Is there likely to be an impact on the local and wider economy?	**+**	Mineral extraction is likely to be beneficial for the local and wider economy providing direct and indirect employment in the medium term.		There is likely to be a positive impact on economic sustainability.
	Is there likely to be an impact in terms of employment?	**+**	Mineral extraction is likely to be beneficial for the local and wider economy providing direct and indirect employment in the medium term.		

Summary

Development of the site will potentially have a significantly negative impact on environmental sustainability as a result of the landscape impact from developing the site. It is not considered that this negative impact could be mitigated, where as many of the other negative sustainability impacts could be mitigated reducing the impact of the development in the short/medium term. It is predicted that there would be a positive impact on economic sustainability as a result of job creation and supporting the local economy and also in terms of flood risk as restoration of the site could provide improved flood risk management.				
Effect:	**Likelihood:**	**Scale:**	**Duration:**	**Timing:**
Potentially significantly negative impact on environmental sustainability in relation to landscape	Medium	Local	Temporary	Short/Medium term

Minerals and Waste Site Assessment form

Site ID:	MW010	**Site Name:**	Land off Spring Lane
Site Address:	Aldermaston, Reading, RG7 4NT	**Parish:**	Aldermaston
Mineral/Waste development:	Mineral extraction	**Site Area:**	25.5ha

Recommendation

Recommendation:	Site is **not** recommended for allocation.
Justification:	The area of the site considered suitable for development is much reduced on the area put forward by the site promoter. There are concerns that such a small area of the site would not be viable to extract mineral from. In addition, there are concerns in relation to the delivery of suitable access to the site as road access would be on to narrow rural lanes of Spring Lane or Rag Hill and while the site promoter has indicated access could come from land to the north there is no indication of how this would be delivered, and it may rely on another site (Padworth Park Farm, MW014) coming forward for development. There are also concerns regarding the suitability of the local road network for HGV traffic.

Key Considerations

Highways: There is concern over whether adequate access can be provided to the site due to the narrow rural nature of Spring Lane and Rag Hill. The site promoter has indicated that access could come from the land to the north, but there is no further evidence as to how this would be delivered. The local road network is not considered suitable for HGV traffic.

Landscape: The site is considered to be in an area of medium/high landscape sensitivity and therefore only the eastern parcel of land (approx. 3ha) is considered suitable for development, subject to mitigation measures set out in the Council's Landscape and Visual Assessment.

Cumulative Impact: There are a number of sites being considered in this local area and the cumulative impacts should all the sites come forward for development would need careful consideration and phasing would be required.

Site Assessment

Biodiversity: There is an area of Ancient and Semi-Natural Woodland between the two parts of the site proposed and is adjacent to a number of Local Wildlife Sites. Habitat/ecology assessments would be required.

Agricultural Land Classification: The centre of the site is classified as grade 4 agricultural land with the remainder of the site classified as grade 3.

Heritage: The site is immediately to the north of Aldermaston Court Historic Park and Garden, and there are a number of listed buildings in close proximity to the site. Consideration of the setting of these heritage assets would be required. A desk based

archaeological assessment would be required to determine whether there is any archaeological interest and mitigation measures may be required depending on the findings.

Landscape/Townscape: The site is currently in agricultural use as arable/pasture. Overall the site is considered to be in an area of medium/high landscape sensitivity. Only part of the eastern parcel of land (approx. 3ha) is considered suitable for development subject to landscape mitigation measures set out in the Council's Landscape and Visual Assessment. The remainder of the site should be retained as arable farmland/pasture. It is recommended that the site is restored to pasture at existing levels. Access to the site should come from Rag Hill to avoid a negative impact on the rural character of Spring Lane.

While there are a few listed buildings close to the site the site is some distance from the village of Aldermaston to the west, however, it is not considered to be an impact on townscape.

Amenity: Noise and dust generation from the site is likely, however, mitigation measures would reduce these impacts, including limits on operating hours.

Rights of way: A footpath crosses the western part of the site, however this is within the parcel of land which is not considered suitable for development in landscape terms, therefore, if the site was to be developed it is unlikely that there would be an impact on the right of way.

Flooding: The site is not at risk from fluvial or groundwater flooding, however there are small areas with a risk of surface water flooding.

Water Environment: The site is within SPZ3.

Highways: Access to the site is constrained, as both Spring Lane and Rag Hill have restricted widths which may be unsuitable for HGV traffic. A 'before and after' study may be required, with the site promoter liable for any costs associated with damage to the road as a result of HGV movements. The site promoter has indicated that access could come via land to the north although no details of how this access would be delivered have been provided. Transport assessment work will be required.

Employment: Development of the site would have a positive impact on the local economy and job creation.

Geology/Mineral Resources: No boreholes have been undertaken for this site, however they have been done for the land immediately to the north of the site (Padworth Park Farm, MW014) The adjacent site is shown to have a mineral context of 60 – 70% gravel, 30 – 40% sand and 5 – 8% of fine silt at a depth of up to 2m below ground level. Topsoil is typically 0.2 – 0.4m thick with soft clay and peat overburden of 1 – 3m thick in low lying areas and up to 1m in the higher terrace area.

Restoration/After-care: The site promoter has indicated that the site could be infilled and returned to agriculture of amenity land, or the voids could be left to form open lakes for amenity or recreation purposes. If any infill is required this would be likely to be inert fill material. From a landscape point of view there would be a preference for restoration to agriculture.

Utilities: An oil pipeline runs through the north of the site.

Cumulative Impact: The site is in close proximity to a number of other sites being considered, Padworth Park Farm (MW014), Aldermaston Bridge (MW003) and Wasing Lower Farm (MW012). Should all these sites being considered for development come forward there would be potential for a significant cumulative impact in terms of highways and amenity. Consideration would need to be given to phasing of development to minimise the impact.

Sustainability Appraisal: Overall the site is likely to have a neutral impact on sustainability. A number of negative impacts have been identified, mainly in relation to environmental sustainability, however, these are likely to be short/medium term impacts as a result of the development itself but there should be no long term negative impacts as mineral development is temporary in nature. Good restoration should mean that there is no long term negative impact, and could result in improvements, especially in relation to environmental sustainability. There are concerns regarding landscape, although a reduced site area would help to mitigate this impact. There are also concerns regarding the impact of HGVs on the local highway network. It is considered that this could have longer term negative sustainability impacts if mitigation measures, both during and after works on the site, are not implemented. It is predicted that there would be a positive impact on economic sustainability as a result of job creation and supporting the local economy. Potential social sustainability is likely to be neutral in the longer term, but in the short term, without adequate mitigation measures there could be a negative impact on amenity.

Deliverability: The site promoter has not indicated any deliverability issues with the site, however the reduced developable area suggested through the landscape work could impact on the viability and therefore, deliverability of the site.

Consultation

Consultation: A number of issues were raised as part of the sites consultation in summer 2016 these included general need for mineral extraction, impacts on amenity, ecology, landscape, water environment, highways, historic environment as well as issues associated with restoration and after-care.

- *Amenity – Concerns were raised regarding the impacts on residential properties along Spring Lane and Raghill as well as concerns regarding the long history of mineral extraction in this area meaning that other areas/sites should be considered before continued development in this single area. Impact on the right of way was also raised.*
- *Ecology – Concern regarding the impact on local wildlife and the Local Wildlife sites adjacent to the site*
- *Landscape – Visibility of the site was raised as a concern, with a request that all landscape impacts should be identified and considered to ensure no adverse impacts. The loss of agricultural land was also raised.*
- *Water Environment – Spring Lane was highlighted as an area at risk from flooding with properties and the lane flooded in 2007, partly resulting from the natural spring at the top of the lane. The area was also considered to be at a low risk of flooding as the site is on a slope.*

- *Highways – Concern regarding access to the site for HGVs in particularly in relation to the local roads. Impacts on road safety for pedestrians/cyclists was also raised as a concern.*
- *Historic Environment – Impact on local listed buildings and Aldermaston Court registered Historic Park and Garden. Further assessment is required including an archaeological desk based assessment.*
- *Restoration – Lack of confidence in adequate restoration was raised as a concern, as other local sites have not been restored to what is considered to be an adequate manor. This poor restoration has resulted in flooding of fields and requirement for additional in-fill material to fill the void. This has resulted in a substantial visual and environmental impact.*

All of these issues have been addressed in the Site Consultation Reponses Report (December 2016).

Preferred Options Consultation 2017: The site was not included as a preferred option. No comments were received on the site.

Submitted Proposal from Site Promoter

Extraction of 1,000,000t sand and gravel creating void space of approx. 625,000$m^{3.}$ 20ha of the site is considered suitable for development. Access could be gained from adjacent land to the north of the site. The site would have a lifetime of approximately 5 years.

Planning History

No planning history

Sustainability Appraisal (SA) / Strategic Environmental Assessment (SEA) criteria assessment

Site name	Site address
Spring Lane	Aldermaston, West Berkshire, RG7 4NT
Development Potential / proposal	Extraction of 150,000 tonnes of sand and gravel. Restoration either to lower level agriculture or lakes with improved local amenity/recreation space.

Key:

++	+	?	0	-	- -
Significantly Positive	Positive	Uncertain	Neutral	Negative	Significantly Negative

SA Objective	Criteria	Effects of site allocation on SA objectives	Justification for assessment	Mitigation / enhancement	Comment
1) To protect and enhance biodiversity and geological diversity throughout West Berkshire	Is there likely to be an impact on biodiversity?	-	The site abuts 3 LWSs which are woodland and Deerswood LWS lies directly to the south of the site on the opposing side of Spring Lane Pockets of woodland, small copses, hedgerows and hedgerow trees.	An ecological assessment would potentially need to be undertaken. Depending on the findings mitigation would be required. This could include buffers between areas of working and on-site management of hydrology. Trees and hedgerows should be retained and protected.	Due to the potential impacts on biodiversity, there may be a negative impact on environmental sustainability in the medium term without adequate mitigation measures. Restoration should ensure there are no negative long term sustainability impacts.
	Is there likely to be an impact on geodiversity?	?	The extraction of mineral and potential infilling of the site would permanently alter the geodiversity of the site.		
2) To maintain and enhance water quality and resources	Is there likely to be an impact on water quality?	0	Unlikely to have an impact on water quality		It is unlikely that there will be an impact on sustainability.
	Is there likely to be an impact on water resources?	0	There is unlikely to be an impact on water resources as a result of this site		

			being developed.		
3) To minimise the risk and impact of flooding	Is there likely to be an impact in terms of flood risk?	**0**	The site is not at risk from fluvial flooding and although a very small part of the site is at risk from surface water flooding it is not considered that development would impact on flood risk.		There is unlikely to be an impact on flood risk and so it is also unlikely that there would be an impact on this element of sustainability.
4) To maximise the sustainable use of land and the protection of soils, safeguarding the best and most versatile agricultural land	Is there likely to be an impact on the best and most versatile agricultural land?	**?**	The site is a combination of grade 3 and 4 agricultural land, therefore, depending on the area of the site that is subject to extraction there could be an impact.	Restoration of the site should restore any lost agricultural land to its former quality.	Following the extraction of the mineral there should be no long term impact on sustainability as restoration of the site should be to a similar or better state, however, in the short and medium term there could be an impact on environmental and economic sustainability.
	Is there likely to be an impact on soil quality?	**0**	The impact on soils would depend on the restoration scheme. If the site was restored to agriculture there would be no impact, however, if the site was to be restored to lakes there would be an impact on soils.	Conditions would be imposed to ensure soils are used on site as part of the restoration scheme.	
	Would previously developed land be utilised?	**0**	It is acknowledged that new mineral sites are generally 'greenfield', however once the land is restored it would return to 'greenfield'.		
5) To conserve and enhance the character of the historical environment, cultural heritage assets, and features of archaeological importance	Is there likely to be an impact on the historic environment?	**?**	The site is close to a Historic Park and Garden and a number of listed buildings. However, it is unlikely that development would impact on these assets	Consideration of local heritage assets and suitable mitigation measures would be required to ensure no negative impacts on local heritage assets	With adequate mitigation measures there should not be an impact on environmental sustainability.

6) To minimise the impact on landscape and townscape character	Is there likely to be an impact on the townscape)?	**0**	Unlikely to be an impact on townscape		Without mitigation there is potential for a negative impact on environmental sustainability in the medium term and on a permanent basis depending on the restoration of the site.
	Is there likely to be an impact on the landscape)?	**-**	The site is considered to be in an area of medium/high landscape sensitivity. The impact on the landscape would depend on the area of the site to be developed	Mitigation measures would be required, in line with the Landscape and Visual Assessment. A reduced developable area would also help to reduce a potentially negative impact on the landscape.	
7) To protect air quality in West Berkshire	Is there likely to be an impact on air quality?	**-**	Potential negative impact on air quality as a result of dust generation and traffic movements.	As part of a planning application air quality and dust assessments would potentially be required and mitigation measures including dust suppression techniques may be required to ensure negative impacts are mitigated to an acceptable level.	Without mitigation it is likely that there would be a negative impact on environmental sustainability in the medium term. However, in the longer term, once works have been completed, there should be no negative sustainability impacts.
8) To maximise energy efficiency, the proportion of energy generated from renewable sources and adaptability to climate change	Is there likely to be an impact on the amount of renewable energy capacity being provided in West Berkshire?	**0**	Unlikely to impact on renewable energy capacity.		There is unlikely to be an impact on any element of sustainability in respect of this objective.
	Is there likely to be an impact with regard to adaptability to climate change?	**0**	Unlikely to impact on adaptability to climate change.		
9) To ensure the sustainable management of waste, minimise the quantity of waste sent to landfill, and to maximise the re-use, recovery and	Is this likely to have an impact on the amount of waste going to landfill?	**?**	The impact on waste going to landfill would depend on the restoration scheme. If the site it to be restored using inert fill this would impact on the amount of waste going to landfill. If	If restoration using infill is proposed using a minimum amount of fill material this would help to reduce the impact.	It is unclear as to whether there would be an impact on any element of sustainability as it would depend on the restoration scheme proposed.

recycling of waste			the site was to be restored to lakes, there would be no impact.		
	Is this likely to have an impact in terms of the quantity of waste being reused, recovered and/or recycled?	**0**	Unlikely to impact on the quantity of waste being reused, recovered or recycled.		
10) To promote the sustainable transport of minerals and waste within West Berkshire	Is it likely that rail or waterborne transportation would be used in connection with this site?	**-**	Limited opportunities for rail or waterborne transport from the site, meaning there will be a reliance on road transport.		There could potentially be a negative impact on environmental sustainability due to the use of road-based transport and the potential impact on the local rural highway network. Without adequate mitigation measures, potentially going on beyond the completion of the site there could be a longer term negative impact on environmental sustainability.
	Is there likely to be an impact on the transport network (including the local road network and the Strategic Road Network)?	**-**	Mineral extraction and (potentially) inert landfilling would generate traffic movements. There is likely therefore, to be a negative impact on the transport network on a medium term basis (throughout the period of working). There is concern regarding the suitability of the local highway network for HGV movements.	A Transport Assessment/Statement would be required as part of the development management process in order to assess whether the impacts on the transport network would be acceptable and set out what mitigation measures would be required.	
11) To conserve mineral resources in West Berkshire through safeguarding of primary aggregates and encouragement of the use of recycled aggregate where possible and appropriate	Is there likely to be an impact in terms of safeguarding of primary aggregates?	**0**	Unlikely to have an impact on safeguarding of primary aggregates although development of the site would provide primary aggregates for construction purposes.		The impact on safeguarding is likely to be neutral, however as recycled aggregate will be produced from the imported material this could be positive for environmental sustainability in the medium term.
	Is there likely to be an impact in terms of the use of recycled aggregate/construction and demolition wastes?	**?**	There is potential for recoverable material used for inert infill to be taken from the imported waste material to produce recycled aggregate, the		

			residual material being deposited in the void. If this was the case there could be a positive impact.		
12) To protect human health and well being and maintain the quality and quantity of public open space amenity across West Berkshire, and protect areas of tranquillity in the context of minerals and waste development	Is there likely to be an impact on the quality and quantity of open space amenity?	-	A right of way runs through the site.	Rights of way would need to be protected or diverted for the duration of the extraction period. If only part of the site is considered suitable for development this may mean there is no impact on the right of way.	There is likely to be a negative impact on environmental and social sustainability during the working of the site, however, in the longer term there would be no sustainability impact.
	Is it likely that there would be an impact with regard to areas of tranquillity?	-	Mineral extraction could potentially impact negatively on tranquillity in the medium term.	Mitigation could potentially include a phased working scheme with progressive restoration, landscaping measures and noise controls.	
13) To minimise public nuisance	Is it likely that there would be an impact with regard to odour?	0	Unlikely to be an impact on odour.		There is likely to be a negative impact on environmental and social sustainability while the site is being worked, however, once working has ceased and the land has been reclaimed the impact on all elements of sustainability would be neutral.
	Is it likely that there would be an impact on noise levels?	-	The extraction of sand and gravel and the associated vehicle movements are likely to have a noise impact	A noise assessment, setting out any required mitigation would likely be undertaken as part of the development management process. Mitigation could reduce any negative impact to an acceptable level.	
	Is it likely that there would be an impact with regard to light pollution?	0	Unlikely to be an impact on light pollution		
14) To support opportunities for economic development, including jobs, arising from waste and minerals related activities	Is there likely to be an impact on the local and wider economy?	+	Mineral extraction is likely to be beneficial for the local and wider economy providing direct and indirect employment in the medium term (during the		It is considered that there would be a positive impact on economic sustainability in the medium term.

			working of the site)		
	Is there likely to be an impact in terms of employment?	+	Mineral extraction is likely to be beneficial for the local and wider economy providing direct and indirect employment in the medium term (during the working of the site)		

Summary

Overall the site is likely to have a neutral impact on sustainability. A number of negative impacts have been identified, mainly in relation to environmental sustainability, however, these are likely to be short/medium term impacts as a result of the development itself but there should be no long term, negative impacts as mineral development is temporary in nature. Good restoration should mean that there is no long term negative impact, and could result in improvements, especially in relation to environmental sustainability. There are concerns regarding landscape, although a reduced site area would help to mitigate this impact. There are also concerns regarding the impact of HGVs on the local highway network. It is considered that this could have longer term negative sustainability impacts without mitigation measures, both during and after works on the site. It is predicted that there would be a positive impact on economic sustainability as a result of job creation and supporting the local economy. Potential social sustainability is likely to be neutral in the longer term, but in the short term, without adequate mitigation measures there could be a negative impact on amenity.

Effect:	**Likelihood:**	**Scale:**	**Duration:**	**Timing:**
Predominantly neutral	Medium	Local	Temporary	Short/Medium term

Minerals and Waste Site Assessment form

Site ID:	MW015	**Site Name:**	Tidney Bed
Site Address:	Bath Road, Sulhamstead / Ufton Nervet	**Parish:**	Ufton Nervet
Mineral/Waste development:	Mineral extraction	**Site Area:**	34ha

Recommendation

Recommendation:	The site **is** recommended for allocation		
Justification:	Minerals can only be extracted where they lie. While some constraints have been identified on this site they are not considered to be significant in terms of sustainability and the majority are only likely to be short/medium term associated with the extraction phase. The site is considered suitable for development in landscape terms subject to mitigation measures. While other 'preferred options' sites have a lower flood risk, they are not considered to be 'reasonably available' in line with para 158 of the NPPF. Even though the site is partly within flood zone 2 and 3, gravel extraction is a water compatible activity and development of the site can take into account the flood risk. In the longer term, following restoration of the site there are potential benefits in terms of biodiversity and flood management enhancements.		
Proposal for Allocation:	Extraction of Sand and gravel. Restoration proposed to agriculture using inert infill and biodiversity enhancements.		
Approximate Extraction Volume:	1,000,000 tonnes	**Phasing / Timescale:**	10 years
Approximate Infill Volume	660,000m^3	**Availability:**	Immediately

Key Considerations

Highways: While there is not expected to be a significant highways impact as a result of development of this site, access on to the A4, either directly or via Ufton Lane, it would need to be demonstrated that access can adequately and safely be provided onto the A4 for HGVs. A Transport Assessment would be required at planning application stage.

Landscape: the site is in an area of medium/high landscape sensitivity adjacent to the AONB. The site is considered suitable for development. Mitigation measures would be required as set out in the Council's Landscape and Visual Assessment. A Landscape and Visual Impact Assessment would be required in support of any future planning application.

Flooding: Much of the site is located within Flood Zone 2 and 3 with a number of natural drains running across the site. The River Kennet is located to the south of the site. Any buildings/plant materials on the site would need to be located outside the flood zones and consideration of the water courses and river Kennet to the south of the site would be required. A Flood Risk Assessment and Hydrological assessment would be required.

Site Assessment

It should be noted that the site area of the site has changed since the Preferred Options. The southern area of the site formerly included within the proposed site has been withdrawn. The following assessment has been updated to only take into account the northern part of the site still being promoted for mineral extraction.

Biodiversity: There are considered to be no significant ecological constraints on the site, although it is adjacent to (separated by the railway) a Local Wildlife Site and Biodiversity Opportunity Area. The buffer of the railway means that it is not considered development of the site would have any impacts on the LWS. The hedgerows within the site should be retained, or compensated for where they are proposed to be removed and the woodland on the site is a priority habitat and will need to be protected. Mitigation measures will be required in line with the Council's Preliminary Ecological Assessment. Habitat/ecological assessments will be required.

Agricultural Land Classification: The site is classified as grade 3 agricultural land.

Heritage: The site is located adjacent to Tyle Mill Conservation Area (although separated by the railway line) and includes a number of features identified in the HER. There is a listed milepost and boundary stone along the north western boundary which English Heritage has requested are retained. There are also potential for views from Englefield House to the north, which is a listed building. A Heritage Impact Assessment, desk-based assessment and field evaluation will be required with any planning application submitted due to multi period potential.

Landscape/Townscape: The site is within an area of medium/high landscape sensitivity, adjacent to the North Wessex Downs AONB. The area of the site now promoted for development is considered suitable for development subject to the mitigation measures set out in the Council's Landscape and Visual Assessment. Restoration of the site should be to agriculture at existing levels. A Landscape and Visual Impact Assessment will be required.

There are a number of residential properties close to the site along the A4, however, it is not considered that there would be a significant impact on townscape.

Amenity: Noise and dust generation from the site is likely, however, mitigation measures would reduce these impacts, including limiting operating hours.

Rights of way: There are no rights of way directly affected by development of the site, although there a two rights of way close to the site, one to the north of the A4, and the other being the canal towpath to the south of the railway line. It is not considered likely that there would be an impact on these rights of way.

Flooding: Approximately half the site is within flood zone 2 or 3. Parts of the site area also at risk from surface water flooding. While mineral extraction is water compatible development consideration of the areas at risk from flooding is required, especially in relation to any plant material to be present on the site. All plant/buildings required should be located to the west of the site outside the flood risk areas. A number of water courses/natural drains run through the site, flow paths would need to be retained and appropriate buffers provided.

Water environment: The site lines within SPZ2. A risk management based approach would

be required to the consideration of the northern part of the site within SPZ2. The Environment Agency has some concerns regarding infilling of the site (based on the original site area), however, it is considered that this could be dealt with adequately as to ensure no negative impacts on local water quality. Mineral extraction can lead to improved flood mitigation through the lowering of land resulting in greater flood storage areas.

Highways: The site is located to the south of the A4, which is classified as a 'district access route to key destinations' in the West Berkshire Freight Strategy. Access would be either via a new junction on to the A4, or onto Ufton Lane and then onto the A4. Access onto the A4, would need to be subjected to a Road Safety Audit to ensure slow-moving vehicles would not result in road safety issues. A transport assessment would be required.

Employment: Development of the site would have a positive impact on the local economy through job creation and supply of mineral resources to the local market

Geology/Mineral Resources: The site is underlain by sand and gravel deposits. The British Geological Survey Mineral Assessment Report 24 (Aldermaston, Berkshire) records borehole information for the north east corner of the northern parcel (SU66NW6). SU66NW6 shows an overburden thickness of 0.2m, and mineral thickness of 3.1m, with 9% fines, 34% sand and 57% gravel. The site is in a resource block with a mean mineral thickness of 4m, and mean overburden thickness of 1.2m and the mineral is classified as gravel. Borehole survey data indicates approximately 1,000,000 tonnes of resource within the site.

Utilities: No known issues. While overhead lines cross the site these can be relocated to enable mineral extraction and restoration.

Restoration/After-care: The site is proposed to be restored to agriculture, with a degree of inert infill. Biodiversity net gains and flood risk management enhancements would need to be considered.

Cumulative Impact: The site is isolated in nature, therefore, it is not considered likely to result in cumulative impacts.

Sustainability Appraisal: Overall development of this site would be likely to have a neutral impact on sustainability. However, development of this nature is temporary and good restoration would return the site to a similar or better state than its current state, resulting in a neutral impact. Mitigation measures would be required for the duration of the development to ensure no long term impacts result from the development. It is predicted that there would be a positive impact on economic sustainability as a result of job creation and supporting the local economy. It is also predicted that there would be a positive impact in relation to flooding as extraction of the site could result in improved flood water storage.

Deliverability: The site promoter has confirmed that the proposed developable site area included within the preferred options is acceptable and has withdrawn the southern part of the site. There are no known issues relating to viability or deliverability of the site and the site could come forward within the next 5 years, with a life time of 10 - 15 years (including restoration). The land owner is supportive of use of the site for mineral extraction.

Consultation

Sites Consultation 2016: A number of issues were raised as part of the sites consultation in summer 2016 these included general need for mineral extraction, planning history, ecology, amenity, landscape, restoration, agriculture, water environment, highways, historic environment, water supply and cumulative impacts.

- *Planning History – There has been evidence of poor operations/buffers at other sites*
- *Ecology – Concerns regarding the ecological impact of development of the site*
- *Amenity – Concern raised over the impact of noise and pollution, in particular on Beenham Village and the Spring Inn. Mitigation measures would be required during extraction phases*
- *Landscape – Impact on the natural beauty and habitat of the Kennet Valley and the AONB. No LVIA has been carried out.*
- *Restoration – Concern raised regarding impact of restoration on groundwater flows. Success depends on the motivation of the operator and monitoring by the Council. Potential for amenity improvements, potentially including boating facilities.*
- *Agriculture – The site is grade 3 arable land and the A4 is already well developed.*
- *Water environment – A number of drainage streams/ditches cross the site, which is within flood zone 3. Potential impact on groundwater levels. Concern over who would take responsibility if flooding occurred in the future.*
- *Highways – Concern regarding increased traffic onto the A4, especially in terms of access and existing junctions onto the A4. The local road network is not considered suitable for HGVs. Potential opportunities for rail/canal to transport materials.*
- *Historic Environment – Impact on listed buildings, including a boundary stone and milepost on the A4 and the Tyle Mill conservation area.*
- *Water supply – Some properties in the local area have no access to mains water.*
- *Cumulative impact – A considerable number of sites have been put forward in the Padworth area and a significant amount of extraction has already taken place in the area.*

All of these issues have been addressed in the Site Consultation Reponses Report (December 2016).

Preferred Options Consultation 2017: A number of issues were raised as part of the Preferred Options consultation in summer 2017, including:

- *Agriculture – concern over loss of grade 3 agricultural land.*
- *Need – there is no need for the site*
- *Highways/Transport – The site has good access to the A4, but concerns also raised regarding access onto the A4 itself in terms of road safety. All material would be transported from the site for processing resulting in additional traffic. Further transport work should be undertaken prior to the allocation of the site.*
- *Landscape – The location of the site adjacent to the AONB has not been taken into account. Restoration of the site will not return the site to its natural form.*
- *Ecology – Due to unknown restoration proposals the impact on biodiversity remains unknown. The site is within a BOA and BAP habitat and adjacent to LWSs. Suitable buffers would be required to the woodland/water courses on and adjacent to the site.*
- *Amenity – concerns over the impact on the Soring Inn and Cricket Pitch*
- *Water – there are a number of extraction sites close to the site, with an agricultural exclusion zone – concerns over whether the site could be infilled.*

- *Heritage - the site is close to a number of historic buildings and a conservation area. Further consideration of archaeology would be required.*
- *SA/SEA – does not highlight any specific benefits of the site. No economic assessment has been undertaken. Lack of evidence to support neutral long term impacts.*
- *Restoration – concern raised over infilling of the site with inert waste. Restoration should be to high quality agricultural land with maximum biodiversity benefits. Aftercare needs to be of a sufficient timescale to ensure habitat created is delivered successfully (eg. 25 years)*

All of these issues have been addressed in the Preferred Options Consultation Response Report (September 2018).

Submitted Proposal from Site Promoter

Originally a larger site was proposed for allocation for 1.5m tonnes covering an area both north and south of the railway. The proposed site area was reduced (removing the area to the south of the railway from the proposal) following the preferred options consultation and following testing of the site the new site area is proposed for 1m tonnes of sand and gravel extraction over a 10 year period.

The extraction void would be partly infilled with inert material and the site restored to agriculture with some biodiversity enhancements.

Processing would take the form of a modern low profile processing plant and stockpiling area to the west of the retained woodland.

Access is proposed on to the A4 or onto Ufton Lane.

Planning History

No planning history.

Sustainability Appraisal (SA) / Strategic Environmental Assessment (SEA) criteria assessment

Site name	Site address
Land adjacent to Tidney Bed/A4	Land adjacent to Tidney Bed/A4
Development Potential / proposal	Extraction of 1m tonnes of sand and gravel. Restoration using inert landfill.

Key:

++	+	?	0	-	- -
Significantly Positive	Positive	Uncertain	Neutral	Negative	Significantly Negative

SA Objective	Criteria	Effects of site allocation on SA objectives	Justification for assessment	Mitigation / enhancement	Comment
1) To protect and enhance biodiversity and geological diversity throughout West Berkshire	Is there likely to be an impact on biodiversity?	**0**	The site is not considered to be of high ecological value although it is located adjacent to a LWS	Mitigation measures may be required. Restoration of the site would seek to provide biodiversity enhancements to the site.	There is an unlikely to be any impact on sustainability, although restoration of the site does propose biodiversity enhancements which would result in a positive impact on environmental sustainability.
	Is there likely to be an impact on geodiversity?	**?**	The extraction of mineral and subsequent infilling with inert waste would potentially permanently alter the geological makeup of the site.		
2) To maintain and enhance water quality and resources	Is there likely to be an impact on water quality?	**-**	The EA indicates that the site is within a 'High Risk Ground Water' area.	A hydrological / hydrogeological assessment, and ongoing water quality monitoring could be undertaken. Mitigation measures may be required.	Without mitigation there is potential for a negative impact on environmental sustainability in the medium term.
	Is there likely to be an impact on water resources?	**0**	Unlikely to be an impact on water resources.		

3) To minimise the risk and impact of flooding	Is there likely to be an impact in terms of flood risk?	+	Approximately half the site is in flood zone 3, however sand and gravel extraction is considered to be water compatible development. The extraction of sand and gravel has the potential to improve flood mitigation measures, including improved flood storage.	The voids created by extraction could potentially be positive for flood risk as they could provide extra capacity for floodwaters in the medium term or permanently depending on the restoration scheme.	This site could have a positive impact on environmental and economic sustainability through the reduction of flood risk via provision of extra capacity for floodwater.
4) To maximise the sustainable use of land and the protection of soils, safeguarding the best and most versatile agricultural land	Is there likely to be an impact on the best and most versatile agricultural land?	?	the site is recorded as being grade 3	Restoration of the site should restore any lost agricultural and to its former quality.	Restoration of the site should return the site to a similar state following the extraction of the mineral. There should be no long term impact on sustainability, however, in the short/medium term there could be an impact on economic and environmental sustainability.
	Is there likely to be an impact on soil quality?	0	It is likely that the soils would be removed and stored during the working of the site to be used for restoration purposes so there is unlikely to be an impact on soil quality on a permanent basis.	Conditions could be imposed to ensure soils are used in the restoration of the site	
	Would previously developed land be utilised?	0	It is acknowledged that new mineral sites are generally 'greenfield', however once the land is restored it would return to 'greenfield'.		
5) To conserve and enhance the character of the historical environment, cultural heritage assets, and features of archaeological importance	Is there likely to be an impact on the historic environment?	?	Tyle Mill Conservation Area is directly to the south east of the site boundary, but is separated from the site by the - railway line. There are a number of listed buildings in the local area.	Assessment of the impact on the historic environment would be required to be undertaken. Landscaping measures, phased working and controls on the working would potentially mitigate ill-effects.	Without mitigation there could be a negative impact on environmental and social sustainability, however, with restoration this should only be a short/medium term impact.

6) To minimise the impact on landscape and townscape character	Is there likely to be an impact on the townscape?	**0**	Unlikely to be an impact on townscape		Without mitigation there is potential for a negative impact on environmental sustainability in the medium term and on a permanent basis depending on the restoration of the site.
	Is there likely to be an impact on the landscape?	**0**	The site is in an area of medium/high landscape sensitivity adjacent to the AONB. The area of the site now promoted for development is considered appropriate in landscape terms.	Mitigation measure would be required in line with the Landscape and Visual Assessment.	
7) To protect air quality in West Berkshire	Is there likely to be an impact on air quality?	**-**	Potential impact on air quality as a result of dust generation and traffic movements.	As part of a planning application air quality and dust assessments would potentially be required and mitigation measures including dust suppression techniques may be required to ensure negative impacts are mitigated to an acceptable level.	The site could have a negative impact on environmental sustainability, however, this would only be for the duration of the extraction/restoration works. Mitigation measures would reduce any short/medium term impacts.
8) To maximise energy efficiency, the proportion of energy generated from renewable sources and adaptability to climate change	Is there likely to be an impact on the amount of renewable energy capacity being provided in West Berkshire?	**0**	Unlikely to impact on renewable energy capacity.		There may be a positive impact on environmental and economic sustainability, depending on the restoration scheme proposed.
	Is there likely to be an impact with regard to adaptability to climate change?	**? / +**	Climate change may increase the likelihood / frequency of flooding and the voids created from mineral extraction could potentially accommodate some of this floodwater in the medium term and on a permanent basis depending on the restoration scheme.	The voids created by extraction could potentially be positive in the sense that they could provide extra capacity for floodwaters	

9) To ensure the sustainable management of waste, minimise the quantity of waste sent to landfill, and to maximise the re-use, recovery and recycling of waste	Is this likely to have an impact on the amount of waste going to landfill?	-	The site is proposed to be restored to existing levels, therefore, inert fill material will be required.	Although the site is proposed for landfilling, this would be undertaken for restoration purposes and the material would be inert.	There is likely to be a negative impact on sustainability as a result of infilling of the site, although the material will be inert and all 'usable' material will be removed prior to filling for reuse, recovery or recycling.
	Is this likely to have an impact in terms of the quantity of waste being reused, recovered and/or recycled?	?	the site is proposed to be restored to existing levels using inert fill, there is the potential for fill material to be sorted and processed prior to use to ensure all usable material is removed for reuse, recovery or recycling.	Although the site is proposed for landfilling, this would be undertaken for restoration purposes and the material would be inert with the possibility for all 'useable' material to be removed prior to filling.	
10) To promote the sustainable transport of minerals and waste within West Berkshire	Is it likely that rail or waterborne transportation would be used in connection with this site?	-	The site is adjacent to the railway line however, it is not considered that its use directly from the site would be viable, therefore, there would be a continued reliance on road-based transport.		The site could have a negative impact on environmental sustainability in respect of sustainable transport in the short/medium term, however, due to the temporary nature of mineral extraction in the long term there would be a neutral impact.
	Is there likely to be an impact on the transport network (including the local road network and the Strategic Road Network)?	-	Mineral extraction and inert landfilling would generate traffic movements. There is likely therefore, to be a negative impact on the transport network on a medium term basis.	A Transport assessment/Statement would be produced as part of the development management process in order to assess whether the impacts on the transport network would be acceptable and where necessary/possible negative impacts would be mitigated to an acceptable level.	
11) To conserve mineral resources in West Berkshire through safeguarding of primary aggregates and	Is there likely to be an impact in terms of safeguarding of primary aggregates?	0	Unlikely to have an impact on safeguarding of primary aggregates although development of the site would provide primary		The site makes use of primary aggregates for construction purposes, therefore, prevents sterilisation of the

encouragement of the use of recycled aggregate where possible and appropriate			aggregates for construction purposes.		material. It is unlikely that there would be an impact on any element of sustainability.
	Is there likely to be an impact in terms of the use of recycled aggregate/construction and demolition wastes?	**0**	The site is proposed to be restored to existing levels using inert fill material.	Opportunities for fill material to be sorted and any 'usable' material to be removed from the fill material for recycling	
12) To protect human health and well being and maintain the quality and quantity of public open space amenity across West Berkshire, and protect areas of tranquillity in the context of minerals and waste development	Is there likely to be an impact on the quality and quantity of open space amenity?	**0**	There are some rights of way in the local area, but they are not adjacent to the site itself and will not be impacted by the development of the site		There may be a unknown impact on environmental and social sustainability while the site is being worked, however once working has ceased and the land has been reclaimed the impact on all elements of sustainability would potentially be neutral.
	Is it likely that there would be an impact with regard to areas of tranquillity?	**?**	Although it is acknowledged that the A4 and the railway line are in close proximity, the area is rural in nature, and mineral extraction and inert landfilling may result in a negative impact on tranquillity in the medium term.	Mitigation could potentially include a phased working scheme with progressive restoration, landscaping measures and noise controls.	
13) To minimise public nuisance	Is it likely that there would be an impact with regard to odour?	**0**	Unlikely to be an impact on odour.		There is likely to be a negative impact on environmental and social sustainability while the site is being worked, however once working has ceased and the land has been reclaimed the impact on all elements of sustainability would potentially be neutral.
	Is it likely that there would be an impact on noise levels?	**-**	Mineral extraction and inert landfilling and the associated traffic movements would have a negative impact in terms of noise.	A noise assessment, setting out any required mitigation would likely be undertaken as part of the development management process. Mitigation could reduce any negative impact to an acceptable level.	

	Is it likely that there would be an impact with regard to light pollution?	**0**	Unlikely to be an impact on light pollution.		
14) To support opportunities for economic development, including jobs, arising from waste and minerals related activities	Is there likely to be an impact on the local and wider economy?	**+**	Mineral extraction and inert landfilling is likely to be beneficial for the local and wider economy providing direct and indirect employment in the medium term as well as mineral resources for the local market.		There is likely to be a positive impact on economic sustainability.
	Is there likely to be an impact in terms of employment?	**+**	Mineral extraction and inert landfilling is likely to be beneficial for the local and wider economy providing direct and indirect employment in the medium term.		

Summary

Overall development of this site would be likely to have a neutral impact on sustainability. However, development of this nature is temporary and good restoration would return the site to a similar or better state than its current state, resulting in a neutral impact. Mitigation measures would be required for the duration of the development to ensure no long term impacts result from the development. It is predicted that there would be a positive impact on economic sustainability as a result of job creation and supporting the local economy. It is also predicted that there would be a positive impact in relation to flooding as extraction of the site could result in improved flood water storage.				
Effect:	**Likelihood:**	**Scale:**	**Duration:**	**Timing:**
Predominantly neutral	Medium	Local	Temporary	Short/Medium Term

Minerals and Waste Site Assessment form

Site ID:	MW012	**Site Name:**	Wasing Lower Farm
Site Address:	Wasing, Aldermaston	**Parish:**	Wasing / Aldermaston / Woolhampton
Mineral/Waste development:	Mineral extraction	**Site Area:**	31ha

Recommendation

Recommendation:	The site is **not** recommended for allocation.
Justification:	While it is recognised that minerals can only be extracted from where they lie, more sites have been promoted for development and were considered to be potentially suitable for development than are required to meet the Council's need and therefore, there are choices to be made as to which sites to take forward for allocation. While the site is largely seen as appropriate for development, it would be worked as an extension to an existing permitted site, following completion of the extraction at the permitted site. Work has not started on the permitted site (although the permission has been implemented) and therefore, there is a question over the deliverability of this site within the plan period.

Key Considerations

Landscape: The site is in an area of medium or medium/high landscape sensitivity, only areas A, B and D are recommended for development, with access only coming through area C (as per the existing planning permission). A Landscape and Visual Impact Assessment will be required at planning application stage, and landscape mitigation provided in accordance with the Council's Landscape and Visual Assessment.

Rights of Way: Rights of way adjacent to the site will need to be retained or diverted. Buffers to be retained or new routes would be required. Temporary diversion with planning permission for adjacent site already in place, may need to be retained/ extended.

Cumulative Impact: There is a possible cumulative impact associated with the already permitted development at Lower Farm, however, the site promoter has indicated that these would be developed following on from the existing permission, not at the same time which would ensure no cumulative impacts resulting from a much larger Lower Farm site.

Flooding: several parts of the site are at risk from fluvial flooding. While mineral extraction of sand and gravel is a water compatible activity consideration needs to be made to the siting of plant material and buildings on the site so that they are located in the area of least flood risk. Mitigation measures may need to be considered depending on where any plant material is likely to be situated. The site is proposed as an extension to an existing quarry and therefore, will use the existing plant/processing/buildings on the site.

Deliverability: The site is proposed to be worked as an extension to an existing permitted site following completion of the extraction phases of this permitted site. Work has not yet

started on the permitted site, and therefore, there is a question over the deliverability of this site within the plan period.

Site Assessment

Note: Comments in italics relate to comments made in relation to the planning application for the adjacent Wasing Lower Farm site.

Biodiversity: The site is close to two areas of Ancient Semi-Natural Woodland and two SSSIs (River Kennet SSSI to the north west and Woolhampton Reed Bed SSSI to the north east). The site is also within a Local Wildlife Site and partly within a Biodiversity Opportunity Area. The River Enborne runs through an area of the site already consented for mineral extraction. Consideration would be required in relation to hydrology and the potential impact on the SSSIs, however it is considered that with adequate mitigation measures, including buffers, there should be no adverse impacts on the SSSIs or watercourse. Restoration of the site will provide opportunities for net biodiversity gains. Hydrological and Habitat/ecological assessments will be required at planning application stage. Part of the site is within the West Berkshire Living Landscapes project area, restoration of the site should seek to meet the objectives of the Living Landscape.
Comments on permitted scheme: No concerns were raised on the planning application in relation to the site's proximity to the SSSI, further considerations of net gains for biodiversity were required and adequate safeguards restoration proposals put in place. The Council's ecology was content that with suitable mitigation measures, and contributions to the nature reserve at Woolhampton Quarry the development would be acceptable.

Agricultural Land Classification: The developable area of the site is largely classified as grade 3b agricultural land, with a small area within area B classified as 3a. Area D is classed as grade 2, with a small area to the south of area C classified as grade 4 agricultural land.
Comments on permitted scheme: Natural England required detailed soil handling measures as part of the permitted planning application.

Heritage: There are a number of listed buildings close to the site and a scheduled monument (although this is separated from the site by the Kennet and Avon Canal and railway line), as well as a number of features identified in the HER. The site is to the north of the Wasing Park grade II Historic Park and Garden. There is multi period potential on the site, including scope for Palaeolithic archaeology. A Heritage Impact Assessment, desk based assessment and field evaluation will be required with any planning application submitted. There may be some benefits in construction of a geoarchaeological deposit model.
Comments on permitted scheme: Assessment of the site as part of the previous application indicated low potential for archaeological features or deposits of high significance on the site, although it is noted that there are a range of features and deposits of local and regional significance that require further investigation, recording, analysis and publication.

Landscape/Townscape: The site has been assessed as two individual parcels of land, the three western most areas have been considered together (areas A, B, D), with the eastern part of the site considered separately (area C). Area C is considered to be in an area of medium/high landscape sensitivity and is not recommended for further development beyond the existing permission for access into the existing quarry. Areas A, B, D are considered to be in an area of medium landscape sensitivity and are acceptable for development subject

to mitigation measures as set out in the Council's Landscape and Visual Assessment. Restoration should take place as extraction for each parcel of land completes to ensure the shortest possible restoration phase. Restoration should be to agriculture with additional wooded copses and enhancement of tree cover along water courses. A Landscape and Visual Impact Assessment will be required at planning application stage.
Comments on permitted scheme: The Council's landscape consultant confirmed that the permitted site would not generate an adverse impact on the AONB, and that with the mitigation measures proposed as part of the application including landscape management, planting and restoration are proposal would be acceptable.

The site is located to the north west of Aldermaston Village and to the south of Woolhampton Village. Consideration of the impact on these villages would be required.

Amenity: Noise and dust generation from the site is likely, however, mitigation measures would reduce these impacts, including limits on operating hours. There is an airfield located on area A, this will be relocated to an alternative location within the estate.
Comments on permitted scheme: Environmental Health officers did not raise any concerns regarding the previous application following clarification that the dewatering pump would not generate adverse noise impacts.

Rights of way: A right of way crosses the site, running between parcels A and B and running along the boundary of the existing permitted quarry. The right of way would need to be retained and buffers provided to separate the path from the site to ensure there are no negative impacts for those using the right of way. A temporary diversion has been proposed as part of the existing planning permission for the Lower Farm site, should this extension go ahead it is likely that the diversion would remain in place until all works are complete.

Flooding: Parcel A is not at risk from fluvial flooding. A small part of Parcel B is within flood zone 2, and a small part of parcel D is within flood zone 3. Parcel C is completely within flood zone 3, but is not proposed for allocation. Parcel D and part of C are within a groundwater emergence zone and all three sites are potentially at risk from surface water flooding. While mineral extraction is a water compatible activity consideration of the areas at risk from flooding is required especially in relation to any plant material to be present on the site. All plant/buildings required on the site should be located outside the flood risk areas. Mineral extraction can lead to improved flood mitigation through the lowering of land resulting in greater flood storage areas. The site is proposed as an extension to an existing permitted quarry and therefore, the majority of flooding related issues have already been considered as part of the consent already granted.
Comments on permitted scheme: The Environment Agency initially objected to the planning application for the site, but following additional information provided in relation to biodiversity, groundwater and flood risk all concerns have been addressed and the site is considered acceptable subject to mitigation measures and appropriately worded conditions. The restoration scheme proposes the site is not quite returned to existing levels to provide additional floodplain storage.

Water Environment: The site is within SPZ3. The Environment Agency have some concerns regarding infilling of the site, however, it is considered that this could be dealt with adequately as to ensure no negative impact on local water quality.

Highways: Access to the site will be via the A340, using the existing permitted access (via

parcel C). The A340 is classified as a 'district access route to key destinations' in the West Berkshire Freight Strategy. As this site would provide an extension to an existing permitted quarry it is expected that the traffic impact would continue at a similar level over a longer period of time therefore there would not be a cumulative impact in relation to these two sites. There are a number of other potential sites within the local area, and cumulative impacts with these would need to be considered. Traffic movements are expected to be similar to those from the permitted Lower Farm site at 120 movements per day. Transport assessment work would be required at planning application stage, which would need to specifically assess the potential impact on the canal bridge at Aldermaston Wharf.
Comments on permitted scheme: Highway officers assessing the previous planning application for the now permitted site did not considered that the highway impact would be acceptable subject to mitigation measures on the local road network.

Employment: The site is proposed as an extension to an existing permitted quarry at Lower Farm, and therefore, new jobs are unlikely to be created, rather the extension would provide further work for existing employees.

Geology/Mineral Resources: Land surrounding the site has permission for sand and gravel extraction. Therefore, it is likely that there are adequate mineral resources under the remainder of the site. The British Geological Survey Mineral Assessment Report 24 (Aldermaston, Berkshire) records borehole information in Area A (SU56NE12) and in Area C (SU56NE14). SU56NE12 shows an overburden thickness of 1.4m, and mineral thickness of 3.3m, with 18% fines, 27% sand and 55% gravel. SU56NE14 shows an overburden thickness of 0.4m, and mineral thickness of 4.2m, with 10% fines, 21% sand and 69% gravel. The site is in a resource block with a mean mineral thickness of 4m, and mean overburden thickness of 1.2m and the mineral is classified as gravel.

Utilities: No known issues.

Restoration/After-care: The site is proposed to be restored to agriculture with biodiversity enhancements to the lower lying north eastern area. The site promoter has indicated that some infill with inert material will be required. Any restoration proposals that could result in the creation of large bodies of water would need to take into account the proximity of the site to the relocated airfield to minimise the chance of bird strike.
Comments on permitted scheme: The permitted site includes a restoration strategy for phased working and restoration. The restoration seeks to return the site back to agricultural use, with some inert fill to return the site almost too existing levels, allowing for additional floodplain storage. Restoration will also achieve net gains in biodiversity and amenity with long term management and improved rights of way network and the introduction of fishing lakes.

Cumulative Impact: The site is proposed as an extension to the existing Lower Farm Quarry granted permission in 2013. The extension would extend the lifetime of the quarry. It is not expected to be worked at the same time reducing the potential cumulative impact with the existing quarry. The site is close to a number of other sites being considered, which if developed together could have a significant negative impact on sustainability. Phasing of sites coming forward would be a key consideration in terms of highways, landscape and amenity impacts.

Sustainability Appraisal: Overall development of this site would be likely to have a

negative impact on environmental sustainability. Development of this nature is temporary and good restoration would return the site to a similar or better state than its current state. Mitigation measures would be required for the duration of the development to ensure no long term negative impacts result from the development. It is predicted that there would be a positive impact on economic sustainability as a result of supporting the local economy. It is also predicted that there would be a positive impact in relation to flooding as extraction of the site could result in improved flood water storage.

Deliverability: The site is likely to come forward following completion of works on the already permitted part of the site. The site promoter has indicated that the site would be suitable to come forward in 11 – 15 years, towards the end of the plan period with a lifetime of approximately 6 – 7 years. As work has not yet commenced on the already permitted site there is some uncertainty as to when this site would be likely to come forward.

Consultation

Sites Consultation 2016: A number of issues were raised as part of the sites consultation in summer 2016 these included general need for mineral extraction, impacts on amenity, landscape, agriculture, water environment, highways and the historic environment.

- *Amenity – The site is relatively close to Aldermaston village, the noise could impact on children's learning and the local environment. Concern was raised that the village could become completely surrounded by gravel pits. The right of way adjacent to the site is considered important and should be physically separated from the site.*
- *Landscape – Impacts on the landscape need to be considered*
- *Agriculture – Development would result in a loss of agricultural land*
- *Water environment – The area is prone to flooding, reducing the amount of farm land will reduce the area available for flooding putting more properties at risk. Potential disturbance to the River Kennet and River Enborne.*
- *Highways – The local area cannot cope with more lorries, the local road network is unsuitable for HGV traffic. Concern was raised regarding the single lane bridge over the canal at Aldermaston Wharf. Further consideration should be made regarding the use of rail transport.*
- *Historic environment – The site is close to a number of listed buildings and a registered park and garden.*

Other issues raised referred to the impact on Brimpton Airstrip and support for the site as the only people who overlook the site are the landowners who could easily be screened from the site.

All of these issues have been addressed in the Site Consultation Reponses Report (December 2016).

Preferred Options Consultation 2017: A number of issues were raised as part of the Preferred Options consultation in summer 2017, including:

- *General – development would result in encroachment towards the urban area. Concerns over impact on quality of life and lack of duty of care towards residents.*
- *Amenity – concerns over noise pollution and damage to local properties.*
- *Restoration – lack of trust that sites will be restored adequately*

- *Landscape – the site is in an area of natural beauty well used by the local community.*
- *Flooding – the site currently acts as flood defences to the surrounding area which would be lost of the site was developed.*
- *Transport – the site does not meet the guidance set out in the Freight Strategy 2014 or Climate Change Strategy 2014. Local roads are not appropriate for HGVs*
- *Heritage – there are a number of listed buildings close to the site. There is potential for archaeological remains which require further investigation.*
- *The site is within a BOA, adjacent to a LWS and close to a SSSI. Buffers would be required between the river and LWS. Phasing of development would be required to minimise fragmentation of habitats.*
- *Restoration – proposals are welcomed and reflect the proximity of the site to designated ecological sites including provision for biodiversity enhancements. More of the site should be restored to nature conservation. Where the site is restored to agriculture this should be High Nature Value agriculture. Restoration periods should be long enough to ensure habitat created is delivered successfully (at least 25 years).*

All of these issues have been addressed in the Preferred Options Consultation Response Report (September 2018).

Submitted Proposal from Site Promoter

Site contains 4 areas proposed for sand and gravel extraction with a total site area of 31ha and an extraction volume of 0.95m tonnes.

- Area 3A – 12ha, 0.35m tonnes (2-3 year extraction period)
- Area 3B – 9ha, 0.25m tonnes (2-3 year extraction period)
- Area 3C – 7ha, 0.2m tonnes (2 year extraction period)
- Area 3D – 3ha, 0.15m tonnes (1 year extraction period)

Extraction would be carried out over a 5 year period as part of the continued operation of the Lower Farm Wasing Quarry (granted permission in 2013). Processing would either take place off site (at Marley Factory, Beenham as with the existing permitted site), or could be carried out on the site.

The extraction void would be infilled with inert material to being the majority of the site back to original ground levels over a period of 6 years with some overlapping with the mineral extraction phasing. The site is proposed to be restored to farmland with biodiversity improvements on the lower lying north eastern area.

Access would be via the existing permitted access to Lower Farm Wasing Quarry.

The airfield present on area A would be relocated to another part of the estate.

Planning History

Permission was granted in 2013 on the site for progressive mineral extraction and restoration using imported inert materials to agriculture, lakes and grassland, the construction of a new access onto the A340, together with ancillary buildings and internal roads (including improvements to existing bridge across the River Enborne). (Application number 12/01220/MINMAJ).

Planning permission was refused in 2002 for extraction of sand and gravel and erection of processing plant and ready mixed concrete plant, importation of inert materials for recycling and subsequent restoration at Woolhampton Quarry (included areas 3A/3B).

Sustainability Appraisal (SA) / Strategic Environmental Assessment (SEA) criteria assessment

Site name	Site address
Wasing Lower Farm	Lower Farm, Wasing, Aldermaston
Development Potential / proposal	Extension to Lower Farm Quarry with 3 additional areas for extraction of 750,000 tonnes of sand and gravel. Restoration to lower level agriculture

Key:

++	+	?	0	-	- -
Significantly Positive	Positive	Uncertain	Neutral	Negative	Significantly Negative

SA Objective	Criteria	Effects of site allocation on SA objectives	Justification for assessment	Mitigation / enhancement	Comment
1) To protect and enhance biodiversity and geological diversity throughout West Berkshire	Is there likely to be an impact on biodiversity?	**? / -**	The site is close to the River Kennet SSSI and the River Enborne runs between the parcels of land proposed. The site is close to areas of ancient woodland and a LWS as well as being within a BOA.	Mitigation will be required. This should include a buffer zone between working and the SSSI/watercourses. Monitoring of the impacts on the SSSI will be required. Trees and hedgerows on the site should be retained. Restoration of the site would have the potential to provide biodiversity enhancements to the site. Development on the adjacent areas have already been granted permission for mineral extraction. These parcels would extend the life of the quarry.	There is potential for a negative impact on environmental sustainability in the medium term without mitigation. Assessment, monitoring and application of suitable controls could mitigation this and could result in environmental improvements in the longer term through biodiversity enhancements.

	Is there likely to be an impact on geodiversity?	?	The extraction of mineral and subsequent infilling with inert waste would permanently alter the geological makeup of the site.		
2) To maintain and enhance water quality and resources	Is there likely to be an impact on water quality?	-	The River Kennet SSSI is to the north of the site and the River Enborne flows thought the site.	Monitoring and assessment of the impacts on the SSSI and water courses would also be required with additional mitigation measures implemented if an adverse impact is identified	Without mitigation there is potential for a negative impact on environmental sustainability in the medium term.
	Is there likely to be an impact on water resources?	0	Unlikely to be an impact on water resources.		
3) To minimise the risk and impact of flooding	Is there likely to be an impact in terms of flood risk?	+	Parts of the site are within flood zone 3, however sand and gravel extraction is considered to be water compatible development. The extraction of sand and gravel has the potential to improve flood mitigation measures, including improved flood storage.	The voids created by extraction could potentially be positive for flood risk in the sense that they could provide extra capacity for floodwaters in the medium term or permanently depending on the restoration scheme. Infilling of the voids with inert waste could have implications for potential flood storage capacity. However, if restored to a lower level, the site could provide flood storage capacity on a permanent basis.	This site could potentially have a positive impact on environmental and economic sustainability through the reduction of flood risk via provision of extra capacity for floodwater in the medium term, or on a permanent basis.
4) To maximise the sustainable use of land and the protection of soils, safeguarding the best and most versatile	Is there likely to be an impact on the best and most versatile agricultural land?	?	The site is shown as a combination of grade 2, 3 and 4 agricultural land. The impact would depend on the areas of the site	Restoration of the site should restore any lost agricultural land to its former quality.	Restoration of the site should return it to a similar state. Following the extraction of the mineral there should be no long

agricultural land			developed.		term impact on sustainability, however, in the short/medium term there could be an impact on economic and environmental sustainability.
	Is there likely to be an impact on soil quality?	**0**	It is likely that the soils would be removed and stored during the working of the site to be used for restoration purposes so there is unlikely to be an impact on soil quality on a permanent basis.	Conditions would be imposed to ensure soils are used on site as part of the restoration scheme.	
	Would previously developed land be utilised?	**0**	It is acknowledged that new mineral sites are generally 'greenfield', however once the land is restored it would return to 'greenfield'.		
5) To conserve and enhance the character of the historical environment, cultural heritage assets, and features of archaeological importance	Is there likely to be an impact on the historic environment?	**?**	The site is close to a number of heritage assets. Further assessment work is required to determine the impact	A desk based archaeological survey and potential field evaluation is required to determine the impact on the historic environment, with mitigation measures proposed where required.	It is considered that there would be a limited impact on sustainability, however, further work would be required in order to adequately assess the impact on the historic environment.
6) To minimise the impact on landscape and townscape character	Is there likely to be an impact on the townscape?	**0**	Unlikely to be an impact on townscape		Without mitigation there is potential for a negative impact on environmental sustainability in the medium term and on a permanent basis depending on the restoration of the site.
	Is there likely to be an impact on the landscape?	**-**	The landscape character of the area is defined as a combination of medium and medium/high, therefore, there is potential for a negative impact on the landscape	Mitigation measures would be required in line with the Landscape and Visual Assessment. A reduced developable area would also reduce the impact on the landscape.	
7) To protect air quality in West Berkshire	Is there likely to be an impact on air quality?	**-**	Potential negative impact on air quality as a result of dust generation and traffic movements.	As part of a planning application air quality and dust assessments would potentially be required and	This site could potentially have a negative impact on environmental sustainability, however,

				mitigation measures including dust suppression techniques may be required to ensure negative impacts are mitigated to an acceptable level.	this would only be for the duration of the extraction/restoration works. Mitigation measures would reduce any short/medium term impacts.
8) To maximise energy efficiency, the proportion of energy generated from renewable sources and adaptability to climate change	Is there likely to be an impact on the amount of renewable energy capacity being provided in West Berkshire?	**0**	Unlikely to impact on renewable energy capacity		There may be a positive impact on environmental and economic sustainability depending on the restoration scheme. If restored to a lower level, the site could provide flood storage capacity on a permanent basis.
	Is there likely to be an impact with regard to adaptability to climate change?	**? / +**	Climate change may increase the likelihood / frequency of flooding and the voids created from mineral extraction could potentially accommodate some of this floodwater in the medium term and on a permanent basis depending on the restoration scheme.	The voids created by extraction could potentially be positive in the sense that they could provide extra capacity for floodwater	
9) To ensure the sustainable management of waste, minimise the quantity of waste sent to landfill, and to maximise the re-use, recovery and recycling of waste	Is this likely to have an impact on the amount of waste going to landfill?	**-**	The site is proposed for mineral extraction and inert landfilling.		There is likely to be a negative impact on sustainability as a result of infilling of the site, although the material will be inert and all 'usable' material will be removed prior to filling for reuse, recovery or recycling.
	Is this likely to have an impact in terms of the quantity of waste being reused, recovered and/or recycled?	**?**	the site is proposed to be restored to existing levels using inert fill, there is the potential for fill material to be sorted and processed prior to use to ensure all usable material is removed for reuse, recovery or recycling.	Although the site is proposed for landfilling, this would be undertaken for restoration purposes and the material would be inert with the possibility for all 'useable' material to be removed prior to filling.	
10) To promote the sustainable transport of minerals and waste within West Berkshire	Is it likely that rail or waterborne transportation would be used in connection with	**-**	Limited opportunities for rail or waterborne transport from the site, meaning there will be a		This site could have a negative impact on environmental sustainability in the

	this site?		reliance on road transport.		short/medium term, however, due to the temporary nature of mineral extraction in the long term there would be a neutral impact.
	Is there likely to be an impact on the transport network (including the local road network and the Strategic Road Network)?	-	Mineral extraction and inert landfilling would generate additional traffic movements.	A Transport assessment/Statement would be produced as part of the development management process in order to assess whether the impacts on the transport network would be acceptable and where necessary/possible negative impacts would be mitigated to an acceptable level.	
11) To conserve mineral resources in West Berkshire through safeguarding of primary aggregates and encouragement of the use of recycled aggregate where possible and appropriate	Is there likely to be an impact in terms of safeguarding of primary aggregates?	0	Unlikely to have an impact on safeguarding of primary aggregates although development of the site would provide primary aggregates for construction purposes.		The site makes use of primary aggregates for construction purposes, therefore, prevents sterilisation of the material. It is unlikely that there would be an impact on any element of sustainability.
	Is there likely to be an impact in terms of the use of recycled aggregate/construction and demolition wastes?	0	The site is proposed to be restored to existing levels using inert fill material.	Opportunities for fill material to be sorted and any 'usable' material to be removed from the fill material for recycling	
12) To protect human health and well being and maintain the quality and quantity of public open space amenity across West Berkshire, and protect areas of tranquillity in the context of minerals and waste	Is there likely to be an impact on the quality and quantity of open space amenity?	-	A number of rights of way are in close proximity to or cross the site.	Rights of way would need to be protected or diverted for the duration of the extraction period. Restoration could improve the quantity and quality of open space, depending on the scheme proposed.	There is likely to be a negative impact on environmental and social sustainability while the site is being worked, however, once working has ceased and the land has been reclaimed the impact on all elements of sustainability

development	Is it likely that there would be an impact with regard to areas of tranquillity?	-	The area is quiet and rural in nature, and mineral extraction and inert landfilling may result in a negative impact on tranquillity for the duration of the works.	Mitigation could potentially include a phased working scheme with progressive restoration, landscaping measures and noise controls.	would be neutral.
13) To minimise public nuisance	Is it likely that there would be an impact with regard to odour?	0	Unlikely to be an impact on odour.		There is likely to be a negative impact on environmental and social sustainability while the site is being worked, however once working has ceased and the land has been reclaimed the impact on all elements of sustainability would potentially be neutral.
	Is it likely that there would be an impact on noise levels?	-	Mineral extraction and inert landfilling and the associated traffic movements would have a negative impact in terms of noise.	A noise assessment, setting out any required mitigation would likely be undertaken as part of the development management process. Mitigation could reduce any negative impact to an acceptable level.	
	Is it likely that there would be an impact with regard to light pollution?	0	Unlikely to be an impact on light pollution.		
14) To support opportunities for economic development, including jobs, arising from waste and minerals related activities	Is there likely to be an impact on the local and wider economy?	+	Mineral extraction and inert landfilling is likely to be beneficial for the local and wider economy providing direct and indirect employment in the medium term as well as mineral resources for the local market.		There is likely to be a positive impact on economic sustainability.
	Is there likely to be an impact in terms of employment?	+	Mineral extraction and inert landfilling is likely to be beneficial for the local and wider economy providing direct and indirect employment in the medium term		

Summary

Overall development of this site would be likely to have a negative impact on environmental sustainability. Development of this nature is temporary and good restoration would return the site to a similar or better state than its current state. Mitigation measures would be required for the duration of the development to ensure no long term negative impacts result from the development. It is predicted that there would be a positive impact on economic sustainability as a result of supporting the local economy. It is also predicted that there would be a positive impact in relation to flooding as extraction of the site could result in improved flood water storage.				
Effect:	**Likelihood:**	**Scale:**	**Duration:**	**Timing:**
Predominantly negative	Medium	Local	Temporary	Short/Medium Term

Minerals and Waste Site Assessment form

Site ID:	MW016	**Site Name:**	Waterside Farm
Site Address:	Crookham Hill Road, Thatcham	**Parish:**	Thatcham
Mineral/Waste development:	Mineral extraction	**Site Area:**	40ha

Recommendation

Recommendation:	The site is **not** recommended for allocation
Justification:	The acceptable developable area of the site (approx. 5ha) is not considered viable for extraction. There are a number of landscape impacts that cannot be overcome, which mean that the developable area of the site has been reduced to such an extent that there would be greater highway impacts, with access onto Crookham Hill being unacceptable in highways terms due to poor sight lines. As a result the site is not considered suitable for allocation.

Key Considerations

Viability: The small developable area of the site is not viable for extraction.

Landscape: The site is within an area of medium/high landscape sensitivity in the setting of the River Kennet SSSI and much of the land is grade 2 agricultural land. The Council's Landscape and Visual Assessment indicates that only 1 parcel of land would be suitable for development. Further landscape work would be required in the form of a Landscape and Visual Impact Assessment, which could demonstrate a larger proportion of the site is suitable for development. No additional landscape evidence has been received from the site promoter to rebut the Council's landscape advice.

Biodiversity: The site is adjacent to the River Kennet SSSI, concerns regarding the hydrological impact on the river. Assessment work would be required and mitigation measures set out. Consideration would need to be taken of the potential impact on transporting material from the site to the processing plant at Colthrop as this would require crossing the SSSI. This does already happen further downstream in relation to the site at Kennetholme Quarry, therefore, it is not considered to be a significant issue. Hydrological and habitat/ecological assessments will be required.

Rights of Way: Rights of way cross the site and would need to be retained or diverted. Buffers to be retained or new routes would be required.

Highways: The reduced site area means that there is no opportunity for an internal haul road to the Colthrop Processing Plant and therefore, access to the site would need to be on to Crookham Hill. Access onto Crookham Hill is not considered acceptable due to poor sight lines.

Site Assessment

Biodiversity: The site is in close proximity to areas of Ancient Semi-Natural Woodland and a Local Wildlife Site. The site also comprises a priority habitat of coastal and floodplain

grazing marsh. Transportation of material from the site to Colthrop Industrial Estate will require careful consideration of these areas. The site is also close to the River Kennet SSSI. Natural England have requested that should the site progress a buffer of at least 10m will be required between any extraction work and the river bank. Mitigation measures are likely to be required and adequate controls put in place to ensure there is no long term, significant impact on the SSSI. An 8m biodiversity buffer would be required from the top of the river bank. Natural England have also requested that Priors Moor Ditch is taken into account in any assessment carried out and should be protected from flooding. It is proposed that extracted material is transported over the River Kennet to the processing plant at Colthrop Industrial Estate, careful consideration of how this would be delivered would be required although there is already a crossing over the River Kennet to transport material from Kennetholme to the processing plant. Habitat and hydrological assessment would be required. The site is within the West Berkshire Living Landscapes project area, restoration of the site should seek to meet the objectives of the Living Landscape.

Agricultural Land Classification: The majority of the site is within grade 2 agricultural land.

Heritage: There is a listed building and a scheduled monument close to the site. The HER indicates there is some archaeological potential, particularly late upper Palaeolithic and Mesolithic, as well as Roman, on the site. A Heritage Impact Assessment, desk based archaeological assessment and field evaluation would be required with any planning application submitted. The site would benefit from the construction of a geoarchaeological deposit model.

Landscape: Overall the site is considered to be in an area of medium/high landscape sensitivity in the setting of the River Kennet SSSI. As a result only a small part of the site (4.6ha) to the north west is considered suitable for development in landscape terms subject to mitigation measures as set out in the Council's Landscape and Visual Assessment. Mitigation should include retention of existing boundary vegetation and water courses, screen bunding to roads and footpaths and permanent woodland planting adjacent to the north western corner of the site. The site should be restored to its natural landform following extraction. In landscape terms access should come from Crookham Hill away from the junction with Chamberhouse Mill Lane. Mitigation measures should mean that there is no long term negative environmental sustainability effects, although it is recognised that there would be short/medium term impacts.

Setting/townscape: The site is located to the south of Thatcham, separated by the railway line, Kennet and Avon Canal and River Kennet as well as Thatcham football club. There are a number of residential properties close to the site, the setting of which would need to be considered.

Amenity: Due to the proximity of residential properties to the site careful consideration of amenity impacts would be required. Dust and noise generation is likely from the site, and so mitigation measures would be required, including limits on operating hours.

Rights of way: A number of rights of way pass close to, or through the wider site. These would need to be retained or diverted should the site be developed. Buffers, and potentially bunds would be required to mitigate the impact of extraction works on the rights of way network.

Flooding: The majority of the site is within either flood zone 2 or 3. Although mineral extraction is a water compatible activity consideration of the areas at most risk from flooding is required especially in relation to any plant materials to be present on the site. All plant/buildings required on the site should be located in areas at lowest risk of flooding. . A 16m buffer would be required to the river through environmental permitting. The Environment Agency have raised some concerns regarding infilling of the site, stating that infilling is not appropriate development in flood zone 3b. Infilling of the site will only be acceptable where the restoration plan shows that there will be no unacceptable pollution and there will be an overall reduction in flood risk. The site is within a groundwater emergence zone and parts of the site are at risk from surface water flooding. As mineral extraction leaves a void there is potential for increased flood storage to be provided on the site following the completion of the extraction works.

Water Environment: The site is within SPZ3.

Highways: The site is adjacent to the River Kennet and Kennet and Avon Canal, therefore, there could be some potential for movement of material by canal, although this has not been investigated. The site promoter has indicated that access to the site would be via an internal haul route to the Colthrop Industrial Estate. Material would then be transported onto the A4. The A4 is classed as a 'district access route to key destinations' in the West Berkshire Freight Strategy. Material would be transported from the site, across the River Kennet via a temporary bridge to the processing facility at Colthrop. The site promoter has indicated that this site would come forward following completion of extraction works at Kennetholme quarry; therefore, there would be no net increase in traffic movements onto the A4 from the processing plant at Colthrop. Transport assessment work would be required to include details of the route between the site and the adopted highway. However, if the proposed developable area is reduced as set out in the landscape assessment the internal haul route would not be achievable and a new access would be required onto Crookham Hill, this is not be acceptable in highway terms due to poor sight lines.

Employment: As this site is likely to replace the existing site at Kennetholme Quarry it is likely that employment would just move from one site to the other, therefore additional jobs are unlikely to be created, but the development of this site would protect existing employment of those working at the Kennetholme quarry.

Geology/Mineral Resources: Boreholes have been taken for part of the site and indicate 2.4m of soils and overburden and over 2.5m of sand and gravel. Resources thin northwards towards the river. Within the plateau gravel area depths are typically 0.4m of soils with over 2m of gravel. The British Geological Survey Mineral Assessment Report 24 (Aldermaston, Berkshire) records that this site is in a resource block with a mean mineral thickness of 3.6m, and mean overburden thickness of 1.2m and the mineral is classified as gravel. Borehole data held by the BGS shows a range of mineral thickness from 0.6m – 3.2m and a range of overburden thickness from 1.5m – 4.2m.

Utilities: 132kV electricity line passes to the north east of the site. Consideration of the line would be required when considering haul routes from the site to Colthrop Processing plant to ensure no disruption to Thatcham's power supply. Southern gas network pipes run along the southern and western edges of the site (outside the developable area).

Restoration/After-care: The site promoter proposes to restore the northern pockets of the site back to agriculture at the original levels using imported inert material, with the southern pockets of the site restored to lower level agriculture. Natural England has requested that restoration objectives should seek to protect and enhance the SSSI though the creation of species rich floodplain and meadows, fen and reed bed. Restoration could also contribute to and incorporate objectives of the 'Whole river restoration plan for the River Kennet and River Lambourn SSSI'.

Cumulative Impact: The site is close to the Kennetholme Quarry site, located to the north east of the site. Extraction has finished at Kennetholme Quarry so the two sites would be not be operational at the same time. This site is seen as a replacement for the Kennetholme Quarry. Therefore, there are unlikely to be any significant cumulative impacts resulting from this site.

Sustainability Appraisal: Overall development of this site would be likely to have a negative impact on environmental sustainability. However, development of this nature is temporary and good restoration would return the site to a similar, or better, state than its current state. Mitigation measures and monitoring of effects would be required for the duration of the development to ensure no long term negative impacts result from the development. It is predicted that there would be a positive impact on economic sustainability as a result of job creation and supporting the local economy.

Deliverability: The Council's Landscape advice indicates that only a small part of the site (4.6ha) is suitable for development. It may be that such a small area is not viable for extraction which could impact on the deliverability of the site.

Consultation

Sites Consultation 2016: A number of issues were raised as part of the sites consultation in summer 2016 these included general need for mineral extraction, planning history, ecology, amenity, landscape, agriculture, historic environment, water environment. An ePetition was also submitted with 70 signatures objecting to development of this site.

- Need – Two differing views were submitted regarding the need for this site, which is considered to be significant in size. Some views stated that West Berkshire badly need additional quarry resources, other stated that no further extraction was required.
- Planning history – The site has twice been considered as unsuitable for gravel extraction, without anything changing. The area already has a precedent for extraction as there are restored areas adjacent to the site. Concern raised regarding phasing on the site and restoration potential.
- Ecology – The site is considered to support a significant amount of biodiversity, which would be negatively impacted on if development was to take place. Concern was also raised about the potential negative impact on water quality of the SSSI and the knock-on effect on aquatic life, especially in relation in infill the site with inert material.
- Amenity – The site is close to an urban/residential area with other sites promoted having better access and less impact on quality of life. Concerns over air pollution, dust and traffic as well as use of local footpaths and the impact that extraction may have on enjoyment of the countryside. The 12 year life of the proposed development is not considered to be short term. Others saw the benefits of using the processing plant at Colthrop as reducing impacts as the processing plant is already in use.

- Landscape – Reference was made to the site being within the AONB, or that it should be. The development of the site is considered to impact negatively on the beauty of the area.
- Agriculture – Restoration of the site would be likely to increase flooding on the site meaning the site is less suitable for agriculture.
- Historic Environment – The site is considered to be close to sites of previous archaeological excavation.
- Water Environment – The site is considered beneficial at reducing flood risk to local residential properties which are vulnerable to flooding. Hydrology needs to be understood and fully assessed. Concern raised regarding erection of bunds and the impact that this could have on flood risk. Concerns regarding the impact on flooding downstream of the site was also raised. Development could impact on local water quality, including boreholes/wells used for local water supplies.

All of these issues have been addressed in the Site Consultation Reponses Report (December 2016).

Preferred Options Consultation 2017: A number of issues were raised as part of the Preferred Options consultation in summer 2017, including:

- Economy – no economic assessment has been made Reserves – Reserves likely to be significantly less than Council estimate. The site is not needed. The area proposed is likely to be too small to be commercially viable.
- Flooding – the site is within the natural flood plain, concerns over the impact on flood risk. Within an area of high water table. Impact on the River Kennet SSSI. An SFRA is required.
- Landscape – this is an area of natural beauty which would be destroyed for 12 years
- Transport – concerns over traffic impact and impacts on the rights of way network. Crookham is closed to HGVs. Potential impact on Thatcham level crossing. Access to the processing plant could be achieved without using the local road network.
- Ecology – concerns over impact on wildlife, as a number of ‘at risk’ species have been identified on the site. Adjacent to River Kennet SSSI and a LWS. Significant buffers would be required to the SSSI.
- Amenity – proximity to Thatcham, concerns over noise, air and dust pollution.
- Heritage – The site is not close to any designated heritage assets. Consideration needs to be given to archaeological remains.
- Infrastructure – power line passes through part of the site.
- Restoration – concerns over drainage of the site following restoration. Proposals need to take into account biodiversity enhancements to complement the SSSI.

All of these issues have been addressed in the Preferred Options Consultation Response Report (September 2018).

Submitted Proposal from Site Promoter

Extraction of approximately 1m tonnes of sand and gravel, worked and restored on a progressive basis working approximately 100,000t per annum, with each active phase lasting approximately 9 months. The site would be worked over a 12 year period. Landscape features would be retained and the site progressively restored back to agricultural use at existing ground levels with enhanced flood mitigation measures.

30ha of the site is considered suitable for development.

Material could be transported by an internal haul road to the permanent mineral processing facility located at Colthrop, via a temporary bridge, without the need to access the road network prior to processing.

The site would be a replacement for the existing quarry at Kennetholme Farm.

Planning History

No Planning History.

The site was previously promoted and considered for the withdrawn Berkshire Core Strategy (2008) developed by the former Berkshire Joint Strategic Planning Unit. It was discounted on access grounds, as the proposed access via Crookham Hill was not considered acceptable.

Sustainability Appraisal (SA) / Strategic Environmental Assessment (SEA) criteria assessment

Site name	Site address
Waterside Farm	Land to the south of Thatcham and to the east of Crookham Hill road at Waterside Farm
Development Potential / proposal	Extraction of 200,000 tonnes of valley and plateau gravel. Restoration using inert infill and to lower level.

Key:

++	+	?	0	-	- -
Significantly Positive	Positive	Uncertain	Neutral	Negative	Significantly Negative

SA Objective	Criteria	Effects of site allocation on SA objectives	Justification for assessment	Mitigation / enhancement	Comment
1) To protect and enhance biodiversity and geological diversity throughout West Berkshire	Is there likely to be an impact on biodiversity?	-	The River Kennet SSSI is immediately north of some parts of the site. Prior's Moor Ditch runs through the northern pockets of extraction and this feeds into the River Kennet SSSI. Ancient woodland / LWS surrounding the proposed pockets of plateau gravel. The haul route would be required to cross the SSSI.	Mitigation would be required and could include a buffer zone between working and the SSSI / watercourses. The southern parts of Waterside Farm are surrounded by LWSs. The site is also in a BOA and the WBC/BBOWT Living Landscape Project area. Restoration proposals could support biodiversity enhancements.	There is potential for a negative impact on environmental sustainability in the medium term without mitigation. Good restoration could result in improvements to biodiversity in the long term.
	Is there likely to be an impact on geodiversity?	?	The extraction of mineral and subsequent infilling with inert waste would potentially permanently alter the geological makeup of the site.		

2) To maintain and enhance water quality and resources	Is there likely to be an impact on water quality?	-	The River Kennet SSSI is immediately north of some parts of the site. Prior's Moor Ditch runs through the northern pockets of extraction and this feeds into the River Kennet SSSI. The site is considered to be a High Risk Ground Water Area.	Mitigation could include a buffer zone between working and the SSSI / watercourses. Hydrological assessment and ongoing monitoring would be required.	Without mitigation there is potential for a negative impact on environmental sustainability in the medium term. In the longer term the environmental sustainability would depend on the restoration scheme proposed. Good restoration should result in benefits and a neutral, if not positive impact, on environmental sustainability in the long term
	Is there likely to be an impact on water resources?	0	There is unlikely to be an impact on water resources as a result of the proposed mineral extraction and inert landfilling.		
3) To minimise the risk and impact of flooding	Is there likely to be an impact in terms of flood risk?	+	Part of the site is within flood zone 3b and at risk from surface water flooding, however sand and gravel extraction is considered to be water compatible. The extraction of sand and gravel has the potential to improve flood mitigation measures, including improved flood storage.	The voids created by extraction could potentially be positive for flood risk in the sense that they could provide extra capacity for floodwaters in the medium term or permanently depending on the restoration scheme. Infilling of the voids with inert waste could have implications for potential flood storage capacity. However, if restored to a lower level, the site could provide flood storage capacity on a long term basis.	This site could have a positive impact on environmental and economic sustainability through the reduction of flood risk via provision of extra capacity for floodwater in the long term.
4) To maximise the sustainable use of land and the protection of	Is there likely to be an impact on the best and most versatile	-	The site is a combination of grades 2, 3 and 4.	Development of the parcels of land should be directed away from the best and	Restoration of the site should return the site to a similar state

soils, safeguarding the best and most versatile agricultural land	agricultural land?			most versatile agricultural land (grades 2, 3) and if these areas are proposed for development the restoration scheme should seek to return the site to its former quality.	following the extraction of the mineral. There should be no long term impact on sustainability, however, in the short, medium term there could be an impact on environmental and economic sustainability.
	Is there likely to be an impact on soil quality?	**0**	It is likely that the soils would be removed and stored during the working of the site to be used for restoration purposes so there is unlikely to be an impact on soil quality on a permanent basis.	Conditions could be used to ensure soils removed are stored and replaced as part of the restoration of the site	
	Would previously developed land be utilised?	**0**	It is acknowledged that new mineral sites are generally 'greenfield', however once the land is restored it would return to 'greenfield'.		
5) To conserve and enhance the character of the historical environment, cultural heritage assets, and features of archaeological importance	Is there likely to be an impact on the historic environment?	**0**	It is unlikely that there would be an impact on the historic environment		Unlikely to be an impact on any element of sustainability.
6) To minimise the impact on landscape and townscape character	Is there likely to be an impact on the townscape?	**0**	Unlikely to be an impact on townscape		Without mitigation there is potential for a negative impact on

	Is there likely to be an impact on the landscape	-	The site is considered to be in an area of medium/high landscape sensitivity	Mitigation measures would be required, in line with the Landscape and Visual Assessment. A reduced developable area would also reduce the impact on the landscape, as would phasing across the site.	environmental sustainability in the medium term and on a permanent basis depending on the restoration of the site.
7) To protect air quality in West Berkshire	Is there likely to be an impact on air quality?	-	Potential negative impact on air quality as a result of dust generation and traffic movements.	As part of a planning application air quality and dust assessments would potentially be required and mitigation measures including dust suppression techniques may be required to ensure negative impacts are mitigated to an acceptable level.	This site could have a negative impact on environmental sustainability, however, this would only be for the duration of the extraction/restoration works. Mitigation measures would reduce any short/medium term impacts. In the long term the impact should be neutral.
8) To maximise energy efficiency, the proportion of energy generated from renewable sources and adaptability to climate change	Is there likely to be an impact on the amount of renewable energy capacity being provided in West Berkshire?	0	Unlikely to impact on renewable energy capacity.		There may be a positive impact on environmental and economic sustainability in the longer term as a result of extraction on the site.
	Is there likely to be an impact with regard to adaptability to climate change?	? / +	Climate change may increase the likelihood / frequency of flooding and the voids created from mineral extraction could potentially accommodate some of this floodwater in the medium term and on a permanent basis depending on the	The voids created by extraction could potentially be positive in the sense that they could provide extra capacity for floodwaters in the medium term or permanently depending on the restoration scheme. If restored to a lower level, the site could provide flood	

			restoration scheme.	storage capacity on a permanent basis.	
9) To ensure the sustainable management of waste, minimise the quantity of waste sent to landfill, and to maximise the re-use, recovery and recycling of waste	Is this likely to have an impact on the amount of waste going to landfill?	-	The site is proposed for mineral extraction and inert landfilling as part of the restoration scheme.	Although the site is proposed for landfilling, this would be undertaken for restoration purposes and the material would be inert. Infill material will be kept to the minimum required for the restoration to ensure minimal impact.	As a result of landfilling being undertaken there would potentially be a negative impact on environmental sustainability
	Is this likely to have an impact in terms of the quantity of waste being reused, recovered and/or recycled?	0	The site would result in extraction of primary material, therefore, would not impact on reuse, recovery or recycling.		
10) To promote the sustainable transport of minerals and waste within West Berkshire	Is it likely that rail or waterborne transportation would be used in connection with this site?	-	While the site is adjacent to the railway line and Kennet and Avon Canal there are limited opportunities for their use to transport material resulting in a focus on road based transport.		This site could have a negative impact on environmental sustainability in the short/medium term, however, due to the temporary nature of mineral extraction there would be neutral long term impacts.
	Is there likely to be an impact on the transport network (including the local road network and the Strategic Road Network)?	-	Mineral extraction and inert landfilling would generate traffic movements. There is likely therefore, to be a negative impact on the transport network on a medium term basis.	Material from the site will be transported to the Colthrop processing plant without using the highway network, which will help to reduce the impact.	
11) To conserve mineral resources in West Berkshire through safeguarding of primary aggregates and encouragement of the	Is there likely to be an impact in terms of safeguarding of primary aggregates?	0	Unlikely to have an impact on safeguarding of primary aggregates although development of the site would provide primary aggregates for		The site makes use of primary aggregates for construction purposes, therefore preventing sterilisation of the

use of recycled aggregate where possible and appropriate			construction purposes.		material. It is unlikely there would be an impact on any element of sustainability.
	Is there likely to be an impact in terms of the use of recycled aggregate/construction and demolition wastes?	**0**	The site would be used for mineral extraction and inert infilling so there is unlikely to be any impact on production of recycled aggregate.		
12) To protect human health and well being and maintain the quality and quantity of public open space amenity across West Berkshire, and protect areas of tranquillity in the context of minerals and waste development	Is there likely to be an impact on the quality and quantity of open space amenity?	**-**	There are a number of rights of way close to, or crossing the site.	Rights of way would need to be protected or diverted for the duration of the extraction period. The site is in private ownership and not generally open to the public.	There is likely to be a negative impact on environmental and social sustainability in respect of this objective while the site is being worked, however once working has ceased and the land has been reclaimed the impact on all elements of sustainability would potentially be neutral
	Is it likely that there would be an impact with regard to areas of tranquillity?	**-**	The area is quiet and rural in nature, and mineral extraction and inert landfilling may result in a negative impact on tranquillity	Mitigation could potentially include a phased working scheme with progressive restoration, landscaping measures and noise controls.	
13) To minimise public nuisance	Is it likely that there would be an impact with regard to odour?	**0**	Unlikely to be an impact on odour		There is likely to be a negative impact on environmental and social sustainability while the site is being worked, however once working has ceased and the land has been reclaimed the impact on all elements of sustainability would potentially be neutral.
	Is it likely that there would be an impact on noise levels?	**-**	Mineral extraction and inert landfilling would have a negative impact in terms of noise	A noise assessment, setting out any required mitigation would likely be undertaken as part of the development management process. Mitigation could reduce any negative impact to an acceptable level.	
	Is it likely that there would be an impact with regard to light pollution?	**0**	Unlikely to be an impact in terms of light pollution.		

14) To support opportunities for economic development, including jobs, arising from waste and minerals related activities	Is there likely to be an impact on the local and wider economy?	+	Mineral extraction, and inert landfilling are likely to be beneficial for the local and wider economy providing direct and indirect employment in the medium term and mineral resources to the local economy.		There is likely to be a positive impact on economic sustainability
	Is there likely to be an impact in terms of employment?	+	Mineral extraction, and inert landfilling are likely to be beneficial for the local and wider economy providing direct and indirect employment in the medium term.		

Summary

Overall development of this site would be likely to have a negative impact on environmental sustainability. However, development of this nature is temporary and good restoration would return the site to a similar, or better, state than its current state. Mitigation measures and monitoring of effects would be required for the duration of the development to ensure no long term negative impacts result from the development. It is predicted that there would be a positive impact on economic sustainability as a result of job creation and supporting the local economy.				
Effect:	**Likelihood:**	**Scale:**	**Duration:**	**Timing:**
Predominantly negative	Medium	Local	Temporary	Short/Medium Term

Soft Sand Sites

Minerals and Waste Site Assessment form

Site ID:	MW002	**Site Name:**	60 Acre Field
Site Address:	Old Street, near Oare, Hermitage	**Parish:**	Chieveley
Mineral/Waste development:	Mineral extraction	**Site Area:**	24ha

Recommendation

Recommendation:	The site is **not** recommended for allocation
Justification:	The site is located in the AONB, and is not considered acceptable for development in landscape terms. While it is recognised that there is a need soft sand set out in the LAA there is an alternative site that is considered acceptable in landscape terms which is proposed to be allocated.

Key Considerations

Landscape: The site is within an area of medium landscape sensitivity within the AONB. The Council's Landscape Assessment considers that the site would have a significantly negative impact on the special character AONB.

Heritage: Previous Iron Age and Roman archaeology found in the area, consideration of the significance of these assets would be required through archaeological assessments and field evaluation.

Site Assessment

Biodiversity: The site is adjacent to an area of ancient semi natural woodland and a local wildlife site to the north. Development of the site, with appropriate mitigation as set out in the Council's Preliminary Ecological Assessment, is not expected to have a detrimental impact on these areas. Hydrological and habitat/ecological assessments including a Breeding Bird Survey and Badger Survey would be required to support any planning application submitted and the woodland retained.

Agricultural Land Classification: The majority of the site grade 3b, with a small area of 3a at the centre of the site.

Heritage: There are two listed buildings relatively close to the site. There are prehistoric and Roman buried remains within the site. A Heritage Impact Assessment, desk based archaeological assessment and updated field evaluation would be required with any planning application submitted.

Landscape/Townscape: The site is located within the AONB, in an area of medium sensitivity. The site is considered to have a strong rural and remote character forming part of a wider pattern of agricultural fields enclosed by woodland. There are sensitive sequential and panoramic views from rights of way surrounding and crossing the site. Extraction in one part of the site would affect the whole area as there is no existing historic boundary evident to justify dividing the site, therefore, the site is not considered suitable for development in landscape terms.

There are a limited number of residential properties in close proximity to the site and therefore, with appropriate screening/buffers, development of the site is not considered to impact on townscape.

Amenity: Noise and dust generation from the site is likely, however, mitigation measures could reduce those impacts, including on operating hours.

Rights of way: There are a number of rights of way close to the site, with three rights of way running along the boundary of the site to the south, east and west. Development would need to take into account the presence of the rights of way, mitigation, including appropriate buffers, would be required.

Flooding: The site is not at risk from fluvial flooding or groundwater flooding, although a very small area to the south of the site is at risk from surface water flooding. Development of the site would be able to take the flood risk into account.

Water Environment: The site is within SPZ2.

Highways: Access to the site is proposed to be from the south east boundary of the site, via the former adjacent landfill site and then onto Old Street, with traffic then using Old Street and Priors Court Road to reach the A34/M4. Introduction of a 'no right turn' from the site is proposed by the site promoter. Once restoration commences, there may be the opportunity to backload lorries to reduce overall traffic movements. The proposed access route to the site is considered suitable for the proposed vehicle movements. A Transport Assessment would be required to accompany any planning application considering any impact on the Strategic Road Network.

Employment: Development of the site would have a positive impact on the local economy and would have potential to retain the jobs currently at Copyhold Farm once that site is worked out.

Geology/Mineral Resources: The site is underlain by soft sand deposits. A Mineral Assessment has been carried out which indicates that the soft sand deposits are of a depth and quality that is suitable for extraction.

Restoration/After-care: The site is proposed to be progressively restored to existing levels using inert fill and returning the existing soils to the site. Restoration would include additional hedgerow and broadleaved woodland and a limited area of wetland. The Council's Preliminary Ecological Assessment states that should the site be developed it should be restored to woodland, with glades and grassland, with the creation of new hedgerow habitat.

Utilities: No known issues.

Cumulative Impact: The site is relatively isolated with no other sites proposed in the local areas, therefore, there are not likely to be any cumulative impacts.

Sustainability Appraisal: It is predicted that there would be a potentially significantly negative impact on environmental sustainability as a result of the landscape impact from developing the site. A number of other negative impacts are predicted in relation to

environmental sustainability, however, these are likely to be short/medium term as good restoration of the site would restore the site to a similar, or better state. Mitigation measures would be required to ensure no long term negative impacts on these elements. It is predicted that there would be a positive impact on economic sustainability as a result of job creation and supporting the local economy.

Deliverability: The site promoter has indicated that there are no concerns regarding the viability or deliverability.

Consultation

Site Consultation 2016: A number of issues were raised as part of the sites consultation in summer 2016 these included general need for mineral extraction, planning history, ecology, amenity landscape, restoration, flooding, highways, and historic environment.

- *Planning History – Previous application rejected in 2012. Arguments at appeal relating to local economic need were not upheld.*
- *Ecology – unacceptable impact on AONB and local wildlife*
- *Amenity – impact on users of the ROW network. Impact on Cold Ash Farm breeding programme for Exmoor Ponies.*
- *Landscape – The site is within the AONB which needs to be protected. Exceptional circumstances need to be demonstrate to justify extraction in the AONB.*
- *Restoration – Development of the site for extraction would open up the site for a future application for waste disposal on the site. Concern over enforceability of restoration and aftercare of sites.*
- *Flooding – Concerns restoration of the site will increase flood risk.*
- *Highways – concerns over additional traffic causing disturbance to local residents. The road network is not considered suitable for HGV traffic. Concerns over road safety impacts.*
- *Historic Environment – Are considered to be highest level of sensitivity, with several areas of historic interest close to the site.*

All of these issues have been addressed in the Site Consultation Reponses Report (December 2016).

Preferred Options 2017: The site was not included in the preferred options. General comments were received regarding why sites in the AONB had been automatically excluded from the site assessment process. The following comments were received regarding this site:

- *Reasons for rejection of the site have not been justified*
- *Extraction and restoration of the site would not have a detrimental impact on landscape and would provide benefits by breaking up a large agricultural field*
- *Location within the AONB is the only constraint for the site*
- *The impact of operations on the site can be mitigated*
- *The site is confined and well screened*
- *There is a local need to provide soft sand*

All of these issues have been addressed in the Preferred Options Consultation Response Report (September 2018).

Submitted Proposal from Site Promoter

The site is proposed for extraction of approx. 643,000 tonnes of (recoverable) soft sand over a period of approx. 14 years.

Access to the site would be from the south east boundary of the site, via the former adjacent landfill site and then onto Old Street.

A mobile dry screen sand processing plant would be used. It is intended to relocate the plant from Copyhold Farm Quarry.

The site would be progressively restored to level similar to existing levels using inert materials and replacement of top soil and overburden materials from within the site. Any clay waste from the screening plant would be used as a lining material for the infilling of the site.

Processing of the inert material would take place on site to remove any possible recyclable material prior to infilling. Top soils removed for the excavation would be restored to the site.

The recycling plant would be located at the southern end of the site set down in the quarry following an early phase of extraction.

Planning History

Application for extension to existing quarry at Hermitage Farm Pit withdrawn in 2003 (application number: 00/01538/TEMP)

EIA Screening and Scoping opinions requested 2015 (application numbers 15/02561/SCREEN and 15/02575/SCOPE)

Sustainability Appraisal (SA) / Strategic Environmental Assessment (SEA) criteria assessment

Site name	Site address
60 Acre Field	Old Street, near Oare, Hermitage, RG18 9XZ
Development Potential / proposal	Extraction of soft sand with progressive restoration to existing levels using inert material.

Key:

++	+	?	0	-	- -
Significantly Positive	Positive	Uncertain	Neutral	Negative	Significantly Negative

SA Objective	Criteria	Effects of site allocation on SA objectives	Justification for assessment	Mitigation / enhancement	Comment
1) To protect and enhance biodiversity and geological diversity throughout West Berkshire	Is there likely to be an impact on biodiversity?	-	The site is adjacent to an area of ancient semi natural woodland and a local wildlife site.	An ecological assessment would need to be undertaken, with the mitigation measures dependent on the findings of the assessment. This could include buffers between area of working and on-site management of hydrology.	There may be a negative impact on environmental sustainability in the medium term without adequate mitigation measures. Restoration should ensure there are no long term negative sustainability impacts.
	Is there likely to be an impact on geodiversity?	?	The extraction of mineral and potential infilling would permanently alter the geodiversity of the site.		
2) To maintain and enhance water quality and resources	Is there likely to be an impact on water quality?	0	Unlikely to be an impact on water quality		It is unlikely that there will be an impact on this element of sustainability.
	Is there likely to be an impact on water resources?	0	Unlikely to be an impact on water resources.		
3) To minimise the risk and impact of flooding	Is there likely to be an impact in terms of flood risk?	0	The site is not at risk from fluvial flooding although a small area to the south of the site is at risk from		There is unlikely to be an impact on flood risk and so there will not be an impact on

			surface water flooding. It is not considered that development would impact on flood risk.		this element of sustainability.
4) To maximise the sustainable use of land and the protection of soils, safeguarding the best and most versatile agricultural land	Is there likely to be an impact on the best and most versatile agricultural land?	**?**	The majority of the site is classed as grade 3b with a small area of 3a at the centre of the site. The impact on agricultural land would depend on how much of the site is developed and the phasing of the development.	Restoration of the site should restore any lost agricultural land to its former quality. Soils should be removed, stored and returned to the site.	Following the extraction of the mineral there should be no long term impact on this sustainability objective as restoration of the site should be to a similar or better state. However, in the short and medium term there could be an impact on environmental and economic sustainability.
	Is there likely to be an impact on soil quality?	**0**	The soils would be removed and stored during the working of the site, and used for restoration to agriculture. There is unlikely to be an impact on soil quality in the long term.		
	Would previously developed land be utilised?	**0**	The site is 'greenfield' however through restored the land would return to 'greenfield'		
5) To conserve and enhance the character of the historical environment, cultural heritage assets, and features of archaeological importance	Is there likely to be an impact on the historic environment?	**0**	There are 2 listed buildings relatively close to the site, but development is unlikely to impact on the historic environment.	Consideration of local heritage assets and suitable mitigation measures would be required to ensure no negative impacts on local heritage assets.	With adequate mitigation measures there should not be an impact on this sustainability objective.
6) To minimise the impact on landscape and townscape character	Is there likely to be an impact on the townscape?	**0**	The site is rural in nature, therefore, there is unlikely to be an impact on townscape.		There is likely to be a significant negative impact on this sustainability

	Is there likely to be an impact on the landscape	- -	The site is located within the AONB, in an area of medium sensitivity. The site is not considered suitable for development in landscape terms.	Even with mitigation measures the site is not considered acceptable for development in landscape terms.	objective should this site be developed due to the impact on landscape.
7) To protect air quality in West Berkshire	Is there likely to be an impact on air quality?	-	There is a potential short/medium term negative impact on air quality as a result of dust generation and traffic movements.	Air quality and dust assessments would be required and mitigation measures including dust suppression techniques may be required to ensure negative impacts are mitigated to an acceptable level.	There could be a negative impact on this sustainability objective in the short/medium term without adequate mitigation measures, however, in the long term there would be no sustainability impact.
8) To maximise energy efficiency, the proportion of energy generated from renewable sources and adaptability to climate change	Is there likely to be an impact on the amount of renewable energy capacity being provided in West Berkshire?	0	Unlikely to be an impact on renewable energy capacity.		Unlikely to be an impact on any element of this sustainability objective.
	Is there likely to be an impact with regard to adaptability to climate change?	0	Unlikely to be an impact on adaptability to climate change.		
9) To ensure the sustainable management of waste, minimise the quantity of waste sent to landfill, and to maximise the re-use, recovery and recycling of waste	Is this likely to have an impact on the amount of waste going to landfill?	0	The site is proposed for mineral extraction and inert landfilling, but only material that cannot be recycled would be used for infill.	Landfilling is proposed for restoration purposes.	Overall there is likely to be both a positive impact on environmental sustainability as the processing of the material for infilling is likely to recover reusable/recyclable material which will
	Is this likely to have an impact in terms of the quantity of waste being reused, recovered and/or	+	Recoverable material would be extracted from imported waste prior to infilling.		

	recycled?				have a positive impact leaving only non-recyclable waste to be used for infilling.
10) To promote the sustainable transport of minerals and waste within West Berkshire	Is it likely that rail or waterborne transportation would be used in connection with this site?	-	Limited opportunities for rail or waterborne transport from the site, meaning there will be a reliance on road transport.		The site would potentially have a negative impact on this sustainability objective in respect of sustainable transport in the short/medium term, however, due to the temporary nature of mineral extraction in the long term the impact would be neutral.
	Is there likely to be an impact on the transport network (including the local road network and the Strategic Road Network)?	-	Mineral extraction and inert infilling will generate traffic movements. Therefore, in the short/medium term there could be negative impacts on the highway network. The site has good access to the strategic road network, therefore, would only have a limited impact on the local road network.	A Transport Assessment/Statement would be produced as part of the development management process in order to assess the potential impacts on the transport network and set out mitigation measures.	
11) To conserve mineral resources in West Berkshire through safeguarding of primary aggregates and encouragement of the use of recycled aggregate where possible and appropriate	Is there likely to be an impact in terms of safeguarding of primary aggregates?	0	Unlikely to have an impact on safeguarding of primary aggregates although development of the site would provide primary aggregates for construction purposes. The site would provide soft sand to help meet the needs of the district.		Suitable material would be extracted from the imported waste material to produce recycled material, therefore there would be a positive impact on this sustainability objective.
	Is there likely to be an impact in terms of the use of recycled aggregate/construction and demolition wastes?	+	There is potential for material to be taken from the imported waste material to produce recycled aggregate, the residual material being deposited in the void. If this was the case there		

			could be a positive impact.		
12) To protect human health and well being and maintain the quality and quantity of public open space amenity across West Berkshire, and protect areas of tranquillity in the context of minerals and waste development	Is there likely to be an impact on the quality and quantity of open space amenity?	**? / -**	There are a number of rights of way close to the site, with three running along the boundary of the site.	Rights of way would need to be protected for the duration of the extraction period.	There is likely to be a negative impact on environmental and social sustainability while the site is being worked, however once working has ceased and the land has been reclaimed the impact on this sustainability objective would be neutral.
	Is it likely that there would be an impact with regard to areas of tranquillity?	**-**	The area is rural in character extraction could impact on tranquillity.	Mitigation measures could potentially include a phased working scheme with progressing restoration, landscaping measures and noise controls to reduce the impact on tranquillity.	
13) To minimise public nuisance	Is it likely that there would be an impact with regard to odour?	**0**	Unlikely to be an impact on odour		There is likely to be a negative impact on environmental and social sustainability while the site is being worked, however, once working has ceased and the land has been reclaimed the impact on this sustainability objective would be neutral.
	Is it likely that there would be an impact on noise levels?	**-**	Mineral extraction and inert landfilling and the associated traffic movements would have a negative impact in terms of noise.	A noise assessment, setting out any required mitigation would likely be undertaken as part of the development management process. Mitigation could reduce any negative impact to an acceptable level.	
	Is it likely that there would be an impact with regard to light pollution?	**0**	Unlikely to be an impact on light pollution.		
14) To support opportunities for economic development, including jobs, arising from waste and minerals related activities	Is there likely to be an impact on the local and wider economy?	**+**	Mineral extraction is likely to be beneficial for the local and wider economy providing direct and indirect employment in the medium term (during the working of the site).		It is considered that there would be a positive impact on this sustainability objective in the medium term

	Is there likely to be an impact in terms of employment?	+	Mineral extraction is likely to be beneficial for the local and wider economy providing direct and indirect employment in the medium term (during the working of the site).		

Summary

It is predicted that there would be a potentially significantly negative impact on environmental sustainability as a result of the landscape impact from developing the site. A number of other negative impacts are predicted in relation to environmental sustainability, however, these are likely to be short/medium term as good restoration of the site would restore the site to a similar, or better state. Mitigation measures would be required to ensure no long term negative impacts on these elements. It is predicted that there would be a positive impact on economic sustainability as a result of job creation and supporting the local economy.				
Effect:	**Likelihood:**	**Scale:**	**Duration:**	**Timing:**
Significantly negative impact on environmental sustainability in relation to landscape.	Medium	Local	Temporary	Short/Medium Term

Minerals and Waste Site Assessment form

Site ID:	MW005	**Site Name:**	Chieveley Services
Site Address:	Land adjacent to the M4/A34 Chieveley Services, Oxford Road, Newbury	**Parish:**	Chieveley
Mineral/Waste development:	Mineral extraction	**Site Area:**	22ha

Recommendation

Recommendation:	The site **is** recommended for allocation		
Justification:	The LAA shows that there is a need for soft sand within West Berkshire. The majority of soft sand within West Berkshire is located within the AONB, and therefore, exceptional circumstances would need to be demonstrated. There are no suitable sites outside of the AONB, and therefore, it is considered that exceptional circumstances have been demonstrated. This site is considered appropriate for mineral extraction in landscape terms and has better access to the strategic road network that the alternative site being considered and therefore, is consider the most appropriate site for allocation. The final extraction volume for the site would be subject to landscape work to determine the appropriate site area for extraction.		
Proposal for Allocation:	Extraction of soft sand. Restoration to agriculture at existing levels using inert material.		
Approximate Extraction Volume:	400,000 – 670,000 tonnes	**Phasing / Timescale:**	10 – 12 years
Approximate Infill Volume:	260,000m^3	**Availability:**	By 2025

Key Considerations

Landscape: The site is located within the AONB, although the site is considered to be of medium-low landscape sensitivity and is therefore, considered suitable for mineral development subject to the mitigation measures set out in the Council's Landscape and Visual Assessment. A Landscape and Visual Impact Assessment would be required and landscape mitigation in accordance with the Council's landscapes and Visual Assessment. The LVIA would need to demonstrate the area of the site suitable for extraction.

However, due to the location of the site within the AONB the principle of development needs to be considered and it would need to be demonstrated that there is an overriding need for the site in this location with no suitable sites located elsewhere outside the AONB.

Rights of Way: The rights of way through and adjacent to the site would need to be retained or diverted. Buffers would need to be provided to the rights of way.

Highways: The proximity of the site to the Strategic Road Networks and the Services means that any development on the site would need to demonstrate there would be no

adverse impact on the Strategic Road Network or the operation of the Services.

Site Assessment

Note: Comments in italics relate to comments made in relation to the previous planning application for the site.

Biodiversity: The site is adjacent to areas of ancient semi natural woodland and local wildlife sites, however it is considered that the impacts on the LWS could be adequately mitigated. Hedgerows and mature trees would need to be protected or compensated for if they are to be removed. Mitigation measures would be required as set out in the Council's Preliminary Ecological Assessment. There is a Local Geological Site to the north east of the site. Habitat/ecology assessments would be required with any planning application submitted.
The Council's Ecologist commented on the previous application and did not have any objections to the development as long as adequate mitigation measures were introduce.

Agricultural Land Classification: The northern part of the site is grade 2 with the southern half grade 3.

Heritage: There are a number of listed buildings close to the site, however it is unlikely there would be an impact on these buildings. There has been limited excavation work in the area showing potential for Iron Age material. A Heritage Impact Assessment, desk based archaeological assessment and field evaluation would be required with any planning application submitted. *Archaeological work carried out to support previous planning application indicates limited archaeological interest on the site. Some limited evidence of Iron Age activity towards the centre of the site. The discoveries are of local and regional importance, although not of such importance that they should be preserved in situ. The archaeology will need to be investigated, recorded, analysed and published as appropriate.*

Landscape/Townscape: The site is located within the AONB, however it has been assessed as being in an area of medium-low landscape sensitivity due to the proximity of the site to Chieveley Services and the strategic road network. A smaller site area is considered appropriate for development. Mitigation measures would be required as set out in the Council's Landscaped and Visual Assessment. Restoration of the site should be to arable and pasture fields with all buildings removed. A Landscape and Visual Impact Assessment will be required with any planning application submitted, setting out the area of the site acceptable for development. *At the time of the previous planning application a site adjacent to this one was still subject to mineral workings and it was considered that development of this site would further extend the quarrying in this part of the AONB by another 10 years. The site was, in principle (subject to suitable mitigation measures and restoration proposals), considered suitable for extraction.*

The site is adjacent to Chieveley Services and the junction of the M4 with the A34. The site is relatively close to the village of Curridge to the east, but the lie of the land means that it is unlikely there would be a significant impact on the village.

Amenity: Noise and dust generation from the site is likely, however, mitigation measures would reduce these impacts, including limits on operating hours. The site is located away

from residential properties, and therefore, the amenity impact would be limited. *No concerns were raised regarding noise and dust (subject to mitigation) in relation to the previous planning application on the site.*

Rights of way: There are a number of rights of way close to the site, with one crossing the site and another running along the eastern boundary of the site. The developable area takes into account the right of way to the east of the site. These rights of way would need to be retained or diverted and buffers provided to separate them from the site to ensure no negative impacts for those using the rights of way. *At the time of the previous planning application concerns were raised regarding Byway 49 and Footpath 37. Byway 49 had previously been diverted, but as the diversion had expired had become obstructed and unusable. Concerns were raised regarding potential conflict between non-motorized users of the rights of way and heavy quarry traffic and the length of time the rights of way in this area have already been disrupted by extraction works with few benefits provided to ameliorate the disruption.*

Flooding: The site is not at risk from fluvial flooding. A small area across the centre of the site is at risk from surface water flooding, with the north western part of the site within a groundwater emergence zone.

Water Environment: The site is within SPZ3.

Highways: The site promoter has proposed that access to the site would be to the south of the service station using a new access crossing land adjacent to the site but within the same landownership. Vehicles would have direct access to the A34/M4 interchange. The A34 and M4 are part of the strategic road network and are considered as a strategic lorry route in the West Berkshire Freight Strategy. Easy access is also available to the A4 which is classed as a 'district access route to key destinations' in the Freight Strategy. A Transport Assessment and Site Management Plan would be required with any planning application submitted, along with consultation with Highways England. Any development of the site would need to ensure that it would not impact on the operation of the services or the safe operation of the Strategic Road Network. *A Transport Statement was submitted with the previous planning application for the site and was considered acceptable. Access to the site via the existing haul route and Chieveley Services was considered acceptable.*

Employment: Development of the site would have a positive impact on the local economy and job creation.

Geology/Mineral Resources: The site is underlain by soft sand deposits. A Mineral Assessment has been carried out which indicates that the soft sand deposits are of a depth and quality that is suitable for extraction. Borehole data indicates a viable deposit and a *previous planning application on the site would suggest that extraction of the mineral deposit is considered viable.*

Utilities: No known issues.

Restoration/After-care: It is proposed that the site would be restored to lower level agriculture.

Cumulative Impact: While there are no other sites in close proximity to this site,

consideration of the cumulative impact on the highway network would be required.

Sustainability Appraisal: Overall development of this site would be likely to have a neutral impact on sustainability. A number of negative impacts have been identified, mainly in relation to environmental sustainability, however, these are likely to be short/medium term impacts as a result of the development itself but, there should be no long term negative impacts as mineral development is temporary in nature. Good restoration should mean that there is no long term negative impact, and could result in improvements, especially in relation to environmental sustainability. The site is located within the AONB, however the site is not considered to be of high landscape sensitivity and mitigation measures, including a reduced site area, would mitigation this impact. It is predicted that there would be a positive impact on economic sustainability as a result of job creation and supporting the local economy. While the site could result in additional traffic movements, it is adjacent to the strategic road network and therefore, it is unlikely that there would be a significant impact on environmental sustainability. Potential social sustainability is likely to be neutral in the long term, but in the short term, without adequate mitigation measures there could be a negative impact on amenity.

Deliverability: The site has been submitted on behalf of the land owner, and there is no indication that the site would not be viable. The depth and quality of the mineral resources could impact on the viability of the site, however, there is no indication that this would prevent the site coming forward. The site promoter has indicated that the site would be suitable to come forward in 1 – 5 years, towards the beginning of the plan period, with a lifetime of approx. 10 years.

Consultation

Site Consultation 2016: A number of issues were raised as part of the sites consultation in summer 2016 these included general need for mineral extraction, ecology, amenity, landscape, restoration and highways.

- *Ecology – impact on biodiversity*
- *Amenity – Concerns regarding impact on the local Riding School which uses the ROW network as well as impact on green space, health and noise pollution. Concern also raised regarding the impact of the site on Cold Ash Farm breeding sites for Exmoor ponies.*
- *Landscape – The site is within the AONB, with views from the surrounding area.*
- *Restoration – concerns regarding restoration of the site as another local site has not been fully restored.*
- *Highways – Concern of impact on local rural roads*

All of these issues have been addressed in the Site Consultation Reponses Report (December 2016)

Preferred Options 2017: Site was not included in the preferred options, so no comments were received directly regarding the site, however, general comments were made as to why the sites in the AONB had been automatically excluded from the site assessment process.

Submitted Proposal from Site Promoter

The site is proposed for extraction of 670,000 tonnes of sand. This was revised down to

400,000 tonnes of sand from approx. 7ha of the site following the preferred options to take into account the required buffers.

Extraction would take place in a series of small extraction, so that at any one time less than 2ha is being extracted and restored. Extraction would be carried out over an 8 - 10 year period. Extracted mineral would be processed on site using a small mobile dry screener.

It is proposed that the site would be restored to agriculture at existing levels using inert materials, with the potential to improve screening of the Services and M4.

Access to the site would be directly onto the M4/A34 junction south of the service station.

Planning History

Planning History:
Planning permission was refused in 2011 for sand extraction on the site (wider area proposed for development) application number 11/00233/MINMAJ. Appeal subsequently dismissed as unable to demonstrate exceptional circumstances for extraction in the AONB.

Sustainability Appraisal (SA) / Strategic Environmental Assessment (SEA) criteria assessment

Site name	Site address
Chieveley Services	Land adjacent to the M4/A34 Chieveley Services, Oxford Road, Newbury
Development Potential / proposal	Soft Sand extraction and processing of approx. 400,000 tonnes.

Key:

++	+	?	0	-	- -
Significantly Positive	Positive	Uncertain	Neutral	Negative	Significantly Negative

SA Objective	Criteria	Effects of site allocation on SA objectives	Justification for assessment	Mitigation / enhancement	Comment
1) To protect and enhance biodiversity and geological diversity throughout West Berkshire	Is there likely to be an impact on biodiversity?	**0 / -**	Ancient woodland is located to the south and south east of the site, with local wildlife sites to the east and south of the site.	An ecological assessment would be required and ongoing monitoring would potentially need to be undertaken. Depending on the findings mitigation and/or controls may be required. Appropriate buffers would be required to the ancient woodland and local wildlife sites.	Due to potential impacts on biodiversity, there may be a negative impact on environmental sustainability in the medium term where no mitigation is proposed.
	Is there likely to be an impact on geodiversity?	**?**	Extraction of mineral from the site would permanently alter the geological makeup of the site. There is a Local Geological Site to the north east of the site.		
2) To maintain and enhance water quality and resources	Is there likely to be an impact on water quality?	**-**	The EA indicate that the site is within a 'High Risk Groundwater' area.	A hydrological / hydrogeological assessment, and ongoing	Without mitigation there is potential for a negative impact on

				water quality monitoring could be undertaken. Mitigation measures may be required.	environmental sustainability in the medium term.
	Is there likely to be an impact on water resources?	**0**	Unlikely to be an impact on water resources.		
3) To minimise the risk and impact of flooding	Is there likely to be an impact in terms of flood risk?	**0**	Unlikely to be an impact on flood risk.		
4) To maximise the sustainable use of land and the protection of soils, safeguarding the best and most versatile agricultural land	Is there likely to be an impact on the best and most versatile agricultural land?	**?**	The eastern part of the site is shown as grade 3, with the western part of the site grade 2, therefore, the impact on agricultural land would depend on the areas of the site worked.	Restoration of the site should restore any lost agricultural land to its former quality.	Following mineral extraction there would be no long term impact on sustainability as restoration of the site should be to a similar or better state, however, in the short and medium term there could be an impact on environmental and economic sustainability.
	Is there likely to be an impact on soil quality?	**0**	It is likely that soils would be removed and stored during the working of the site to be used for restoration purposes so there is unlikely to be an impact on soil quality.	Conditions would be imposed to ensure soil are used on site as part of the restoration scheme.	
	Would previously developed land be utilised?	**0**	It is acknowledged that new mineral sites are generally 'greenfield' however, once the land is restored it would return to 'greenfield'.		
5) To conserve and enhance the character of the historical environment, cultural heritage assets, and features of archaeological importance	Is there likely to be an impact on the historic environment?	**0**	There are a number of listed buildings 0.5km from the site, however it is unlikely that there would be an impact on these.	Consideration of the potential impact on the local heritage assets would be required and it is likely that any negative impacts could be mitigated to an acceptable level.	

6) To minimise the impact on landscape and townscape character	Is there likely to be an impact on the townscape?	**0**	Unlikely to impact on townscape.		Without mitigation measures there is potential for a negative impact on environmental sustainability in the medium term and on a permanent basis depending on the restoration of the site.
	Is there likely to be an impact on the landscape?	**-**	The site is located within the AONB. The landscape character of the area is defined as Medium-Low, therefore, there is unlikely to be a significant negative impact on the landscape, despite the location within the AONB.	Mitigation measures would be required, in line with the Landscape and Visual Assessment. A reduced developable area would also reduce the impact on the landscape.	
7) To protect air quality in West Berkshire	Is there likely to be an impact on air quality?	**-**	Potential negative impact on air quality as a result of dust generation and traffic movements from the site.	As part of a planning application air quality and dust assessments would potentially be required and mitigation measures including dust suppression techniques may be required to ensure negative impacts are mitigated to an acceptable level.	There could be a negative impact on environmental sustainability, however, this would only be for the duration of the extraction/restoration works. Mitigation measures would reduce any short/medium term impacts.
8) To maximise energy efficiency, the proportion of energy generated from renewable sources and adaptability to climate change	Is there likely to be an impact on the amount of renewable energy capacity being provided in West Berkshire?	**0**	Unlikely to impact on renewable energy capacity.		Unlikely to be an impact on any element of sustainability.
	Is there likely to be an impact with regard to adaptability to climate change?	**0**	Unlikely to impact on adaptability to climate change.		
9) To ensure the sustainable management of waste, minimise the quantity of	Is this likely to have an impact on the amount of waste going to landfill?	**0**	The site is proposed for mineral extraction and inert landfilling, but only material that cannot be	Landfilling is proposed for restoration purposes.	Overall there is likely to be both a positive impact on environmental

waste sent to landfill, and to maximise the re-use, recovery and recycling of waste			recycled would be used for infill.		sustainability as the processing of the material for infilling is likely to recover reusable/recyclable material which will have a positive impact leaving only non-recyclable waste to be used for infilling.
	Is this likely to have an impact in terms of the quantity of waste being reused, recovered and/or recycled?	+	Recoverable material would be extracted from imported waste prior to infilling.		
10) To promote the sustainable transport of minerals and waste within West Berkshire	Is it likely that rail or waterborne transportation would be used in connection with this site?	-	Limited opportunities for rail or waterborne transport from the site, meaning there would be a reliance to road transport.		The site could potentially have a negative impact on environmental sustainability in respect of sustainable transport in the short/medium term, however, due to the temporary nature of mineral extraction in the long term there would be a neutral impact.
	Is there likely to be an impact on the transport network (including the local road network and the Strategic Road Network)?	- / ?	Mineral extraction would generate traffic movements, therefore, there could be a negative impact on the transport network in the short/medium term. However, the site is adjacent to the M4/A34 junction and therefore, has good access to the Strategic Road Network, with no impact on the local road network.	A Transport Assessment/Statement would be required as part of the development management process in order to assess whether the impacts on the transport network would be required.	
11) To conserve mineral resources in West Berkshire through safeguarding of primary aggregates and encouragement of the use of recycled aggregate where possible and appropriate	Is there likely to be an impact in terms of safeguarding of primary aggregates?	0	Unlikely to have an impact on safeguarding of primary aggregates although development of the site would provide primary aggregates for construction purposes. The site would provide soft sand to help meet the needs of the district.		Unlikely to be an impact on any element of sustainability.

	Is there likely to be an impact in terms of the use of recycled aggregate/construction and demolition wastes?	**0**	Unlikely to be an impact on use of recycled aggregates.		
12) To protect human health and well being and maintain the quality and quantity of public open space amenity across West Berkshire, and protect areas of tranquillity in the context of minerals and waste development	Is there likely to be an impact on the quality and quantity of open space amenity?	**-**	A right of way passes through the site, with others running along the eastern boundary of the site.	Mitigation measures would be required to minimise the impact on the Public Right of Way network.	There would potentially be a negative impact on social sustainability in the medium term. Mitigation measures would be required to ensure no long term negative impacts.
	Is it likely that there would be an impact with regard to areas of tranquillity?	**0**	The site is adjacent to the junction of the A34/M4 and therefore, it is not considered that development of the site would impact on tranquillity		
13) To minimise public nuisance	Is it likely that there would be an impact with regard to odour?	**0**	There is unlikely to be an impact on odour.		There is likely to be a neutral impact on environmental and social sustainability due to the location of the site adjacent to the M4/A34.
	Is it likely that there would be an impact on noise levels?	**0**	The site is adjacent to the junction of the A34/M4 therefore, it is considered that the additional noise generated from the site would not have an impact on overall noise levels.	A noise assessment would be required as part of the development management process.	
	Is it likely that there would be an impact with regard to light pollution?	**0**	Unlikely to be an impact on light pollution.		
14) To support opportunities for economic development, including jobs, arising from waste and minerals related activities	Is there likely to be an impact on the local and wider economy?	**+**	Mineral extraction is likely to be beneficial for the local and wider economy providing direct and indirect employment in the medium term as well as mineral resources for the local market.		It is considered that there would be a positive impact on economic sustainability in the medium term

	Is there likely to be an impact in terms of employment?	+	Mineral extraction is likely to be beneficial for the local and wider economy providing direct and indirect employment in the medium term.		

Summary

Overall development of this site would be likely to have a neutral impact on sustainability. A number of negative impacts have been identified, mainly in relation to environmental sustainability, however, these are likely to be short/medium term impacts as a result of the development itself but, there should be no long term negative impacts as mineral development is temporary in nature. Good restoration should mean that there is no long term negative impact, and could result in improvements, especially in relation to environmental sustainability. The site is located within the AONB, however the site is not considered to be of high landscape sensitivity and mitigation measures, including a reduced site area, would mitigation this impact. It is predicted that there would be a positive impact on economic sustainability as a result of job creation and supporting the local economy. While the site could result in additional traffic movements, it is adjacent to the strategic road network and therefore, it is unlikely that there would be a significant impact on environmental sustainability. Potential social sustainability is likely to be neutral in the long term, but in the short term, without adequate mitigation measures there could be a negative impact on amenity.				
Effect:	**Likelihood:**	**Scale:**	**Duration:**	**Timing:**
Predominantly neutral	Medium	Local	Temporary	Short/Medium Term

Minerals and Waste Site Assessment form

Site ID:	MW011	**Site Name:**	Long Lane
Site Address:	East of Long Lane and north of Fishers Lane, Cold Ash	**Parish:**	Cold Ash
Mineral/Waste development:	Mineral extraction	**Site Area:**	16ha

Recommendation

Recommendation:	The site is **not** recommended for allocation
Justification:	Access to the site is unlikely to be deliverable in terms of achieving the required sight lines and therefore, the site is not considered suitable for development. In addition development of the site is likely to result in a potential negative impact on the landscape. The site is in an area of high landscape sensitivity in the setting of the AONB. It is not considered that mitigation measures would mitigate the harm caused to the environment, and as a result there is likely to be a significant negative impact on sustainability should this site be developed.

Key Considerations

Landscape: The site is within an area of high landscape sensitivity in the setting of the AONB. It is not considered suitable for development in landscape terms, and results in a significantly negative impact on environmental sustainability.

Biodiversity: The site is within the Impact Risk Zone for Cold Ash Quarry SSSI, identified for its geological interest. Mitigation measures would be required and consideration of the hydrological links between the site and the SSSI.

Highways: Significant concerns regarding the provision of a new access onto the B4009. It is considered unlikely that appropriate sight lines could be achieved.

Site Assessment

Biodiversity: The site is close to areas of ancient semi natural woodland, a local wildlife site and a SSSI although none of these are adjacent to the site itself. Natural England has identified the site as being within the Impact Risk Zone for Cold Ash Quarry SSSI. The site is notified on geological grounds for Tertiary Palaeobotany and Palaeoentomology and water dependent and could be affected by changes in hydrology. Consideration of the impacts on the SSSI would be required. Hydrological and habitat/ecology assessments would be required.

Agricultural Land Classification: The site is classified as grade 3

Heritage: The site is opposite a listed building with other listed buildings and a scheduled monument close to the site. A desk based archaeological assessment would be required.

Landscape/Townscape: The site is considered to be in an area of high landscape sensitivity, in the setting of the AONB. There are numerous landscape and visual

sensitivities, and the site is visually exposed with a strong landscape pattern and distinctive character typical of the wider landscape character area. The site is not considered suitable for development in landscape terms.

There are a number of residential properties and a boarding school close to the site however, it is not considered that the site would impact on townscape.

Amenity: Noise and dust generation from the site is likely, however, mitigation measures could reduce those impacts, including limits on operating hours.

Rights of way: There are a number of rights of way close to the site, however, development of the site would not directly affect these paths.

Flooding: The site is not at risk from fluvial flooding, with a small part of the site at risk from surface water flooding. The siting of any plant material/buildings would need to be in the areas of the site at least risk of flooding.

Water Environment: The site is within SPZ3.

Highways: There are significant concerns regarding the deliverability of a suitable access to the site. It is considered unlikely that adequate sight lines can be provided on to the B4009 for a safe access to be delivered. The proposal to reduce the speed limit on the road to reduce the required sight lines would not be supported by the Council due to the nature of the road and lack of other development in the vicinity. The haulage route is likely to run along the B4009 to Newbury and join the strategic road network. This route itself is considered suitable for the proposed vehicle movements.

Employment: Development of the site would have a positive impact on the local economy and job creation.

Geology/Mineral Resources: A borehole survey has been undertaken for the site. The site is underlain by soft sand with an average depth of 4.2m with 2.3m of overburden.

Utilities: no known issues.

Restoration/After-care: it is proposed that the site is restored to lower level agricultural land, meaning that there is no need for infill material.

Cumulative Impact: The site is relatively isolated with no other sites proposed in the local areas, therefore, there are not likely to be any cumulative impacts.

Sustainability Appraisal: Overall development of the site would be likely to have a neutral impact on sustainability, however it is predicted that there would be a significantly negative impact on environmental sustainability as a result of the landscape impact from developing this site. A number of other negative impacts are predicted in relation to environmental sustainability, however, these are likely to be short/medium term as good restoration of the site should restore the site to a similar state that it is currently in. Mitigation measures would be required to ensure no long term negative impacts on these elements. It is predicted that there would be a positive impact on economic sustainability as a result of job creation and supporting the local economy.

Deliverability: The site promoter has not indicated that there would be any issues with viability or deliverability.

Consultation

Sites Consultation 2016: A number of issues were raised as part of the sites consultation in summer 2016 these included general need for mineral extraction, planning history, ecology, amenity, landscape, restoration, highways, water environment and historic environment.

- *Planning history – 3 applications within 2km of this site have been reduced on the basis of unsatisfactory road network. There have been a number of quarries in the area, it is time for this to stop. Inadequate enforcement of planning conditions, concerns over track record of developers in relation to planning conditions and restoration.*
- *Ecology – Concerns raised regarding the impact on wildlife, livestock, and Exmoor Ponies and on the SSSI close to the site.*
- *Amenity – Concern over the impact on the local community in terms of noise, vibration and dust. 12 years is a long time for disruption to continue. Area used for walking, cycling and horse riding, potential for impacts to local rights of way network.*
- *Landscape – In the setting of the AONB, the area is beautiful and tranquil. No exceptional circumstances have been identified. Development would result in the loss of agricultural land and the rural buffer between Newbury and Hermitage*
- *Restoration – Concern regarding the track record of development to deliver adequate restoration was raised. Concern that restoration could result in the site being used for landfill.*
- *Highways – Poor accident record in the local area, which would be worse with slow moving HGVs, proposed access has poor sight lines, concerns over mud being left on the road network, potential for conflict between school buses and HGVs. The B4009 is not considered suitable for HGV traffic.*
- *Water environment – 2 ditches cross the site with surface water common in winter/spring.*
- *Historic Environment – Impact on the disused railway line, impact on the setting of local listed buildings.*

Other sites considered more appropriate.

All of these issues have been addressed in the Site Consultation Reponses Report (December 2016).

Preferred Options Consultation 2017: *The site was not included as a preferred option and no comments were received on the site.*

Submitted Proposal from Site Promoter

Extraction of soft sand of approximately 500,000 tonnes to be worked in a series of small extraction areas of approx. 30 – 40,000 tonnes per annum over a 12 year period.

Site would be restored to lower level agriculture without the need to import infill material.

Planning History

No planning history.

Sustainability Appraisal (SA) / Strategic Environmental Assessment (SEA) criteria assessment

Site name	Site address
Long Lane, Cold Ash	Long Lane, Cold Ash Farm, Cold Ash , Thatcham
Development Potential / proposal	Extraction of 500,000 tonnes of soft sand. Restoration to lower level agriculture

Key:

++	+	?	0	-	- -
Significantly Positive	Positive	Uncertain	Neutral	Negative	Significantly Negative

SA Objective	Criteria	Effects of site allocation on SA objectives	Justification for assessment	Mitigation / enhancement	Comment
1) To protect and enhance biodiversity and geological diversity throughout West Berkshire	Is there likely to be an impact on biodiversity?	?	There is unlikely to be an impact on biodiversity as the site itself is agricultural land and it is not considered likely to be ecologically sensitive.	Consideration of biodiversity will be required and mitigation measures introduced where appropriate.	It is uncertain as to whether there would be an impact on environmental sustainability as a result of the site being developed.
	Is there likely to be an impact on geodiversity?	?	The extraction of mineral and potential infilling of the site would permanently alter the geodiversity of the site. The site is close to a SSSI designated on geological grounds.	This would likely require a hydrological/hydrogeological assessment to establish whether there would be a negative impact on the SSSI features. Mitigation measures may be required to ensure no negative impacts.	
2) To maintain and enhance water quality and resources	Is there likely to be an impact on water quality?	-	There is a watercourse running through the site. The site is within a 'high risk groundwater area'. Mineral extraction could potentially impact on water quality in the medium term	A hydrological assessment with be required with ongoing water quality monitoring Mitigation measures may be required.	Without mitigation there could potentially be a negative impact on environmental sustainability in the medium term due to the potential impact on

					water quality.
	Is there likely to be an impact on water resources?	**0**	There is unlikely to be an impact on water resources as a result of this site being developed.		
3) To minimise the risk and impact of flooding	Is there likely to be an impact in terms of flood risk?	**0**	The site is located in flood zone 1 with a small area at risk from surface water flooding. Flooding is not an issue for mineral extraction, therefore there is unlikely to be an impact on flood risk.		Unlikely that there would be an impact on any element of sustainability.
4) To maximise the sustainable use of land and the protection of soils, safeguarding the best and most versatile agricultural land	Is there likely to be an impact on the best and most versatile agricultural land?	**?**	The site is identified as being grade 3 agricultural land. The impact on agricultural land would depend on how much of the site is developed and the phasing of the development.	Restoration of the site should restore any lost agricultural land to its former quality.	Following the extraction of the mineral there should be no long term impact on sustainability as restoration of the site should be to a similar or better state, however, in the short and medium term there could be an impact on environmental and economic sustainability.
	Is there likely to be an impact on soil quality?	**0**	The soils would be removed and stored during the working of the site, and used for restoration to agriculture. There is unlikely to be an impact on soil quality	Conditions would be imposed to ensure soils are used on site as part of the restoration scheme.	
	Would previously developed land be utilised?	**0**	This site is 'greenfield', however if the land was restored it would return to 'greenfield'.		

5) To conserve and enhance the character of the historical environment, cultural heritage assets, and features of archaeological importance	Is there likely to be an impact on the historic environment?	**0**	Unlikely to be an impact on the historic environment.		Unlikely to be an impact on any element of sustainability.
6) To minimise the impact on landscape and townscape character	Is there likely to be an impact on the townscape?	**0**	Unlikely to be an impact on townscape		There is likely to be a significant negative impact on environmental sustainability should this site be developed due to the impact on the landscape.
		- -	The site is located in an area of high landscape sensitivity in the setting of the AONB. The site is not considered suitable for minerals development in landscape terms.	Even with mitigation measures the site is not considered acceptable for development in landscape terms.	
7) To protect air quality in West Berkshire	Is there likely to be an impact on air quality?	**-**	Potential negative impact on air quality as a result of dust generation and traffic movements.	As part of a planning application air quality and dust assessments would potentially be required and mitigation measures including dust suppression techniques may be required to ensure negative impacts are mitigated to an acceptable level.	This site could have a negative impact on environmental sustainability, however this would only be for the duration of the extraction/restoration works. Mitigation measures would reduce any short/medium term impacts.
8) To maximise energy efficiency, the proportion of energy generated from renewable sources and adaptability to climate change	Is there likely to be an impact on the amount of renewable energy capacity being provided in West Berkshire?	**0**	Unlikely to be an impact on renewable energy capacity.		Unlikely to be an impact on any element of sustainability.
	Is there likely to be an impact with regard to adaptability to climate	**0**	Unlikely to be an impact on adaptability to climate change		

	change?				
9) To ensure the sustainable management of waste, minimise the quantity of waste sent to landfill, and to maximise the re-use, recovery and recycling of waste	Is this likely to have an impact on the amount of waste going to landfill?	**0**	Unlikely to be an impact on the amount of waste going to landfill.		Unlikely to have an impact on any element of sustainability.
	Is this likely to have an impact in terms of the quantity of waste being reused, recovered and/or recycled?	**0**	Unlikely to have an impact on the reuse, recovery or recycling of waste.		
10) To promote the sustainable transport of minerals and waste within West Berkshire	Is it likely that rail or waterborne transportation would be used in connection with this site?	**-**	Limited opportunities for rail or water transport from the site, meaning there will be a reliance on road transport.		This site could potentially have a negative impact on environmental sustainability in respect of sustainable transport in the short/medium term, however, due to the temporary nature of mineral extraction in the long term there would be a neutral impact.
	Is there likely to be an impact on the transport network (including the local road network and the Strategic Road Network)?	**-**	Mineral extraction will generate traffic movements, therefore there is likely to be a negative impact on the transport network in the medium term. If the provision of a new access, including the required widths, geometry and sight lines, onto the B4009 cannot be provided the proposal would be resisted.	A Transport Assessment/Statement would be required as part of the development management process in order to assess whether the impacts on the transport network would be acceptable and set out what mitigation measures would be required.	
11) To conserve mineral resources in West Berkshire through safeguarding of primary aggregates and encouragement of the use of recycled	Is there likely to be an impact in terms of safeguarding of primary aggregates?	**0**	Unlikely to have an impact on safeguarding of primary aggregates although development of the site would provide primary aggregates for construction purposes		Unlikely to be an impact on any element of sustainability.

aggregate where possible and appropriate	Is there likely to be an impact in terms of the use of recycled aggregate/construction and demolition wastes?	**0**	Unlikely to impact on the use of recycled aggregates		
12) To protect human health and well being and maintain the quality and quantity of public open space amenity across West Berkshire, and protect areas of tranquillity in the context of minerals and waste development	Is there likely to be an impact on the quality and quantity of open space amenity?	**0**	Unlikely to impact on the quality of open space amenity.		There would potentially be a negative impact on social sustainability in the medium term. In the long term the impact is uncertain due to the specifics of the restoration being unknown.
	Is it likely that there would be an impact with regard to areas of tranquillity?	**-**	The area is quiet and rural in nature, and mineral extraction would result in a negative impact on tranquillity for the duration of the works.	Mitigation could potentially include a phased working scheme with progressive restoration, landscaping measures and noise controls. The restoration scheme is likely to dictate whether there would be a permanent impact and if this would be positive or negative.	
13) To minimise public nuisance	Is it likely that there would be an impact with regard to odour?	**0**	Unlikely to be an impact on odour		There is likely to be a negative impact on environmental and social sustainability while the site is being worked, however once extraction work has ceased and the land has been reclaimed the impact on all elements of sustainability would potentially be neutral.
	Is it likely that there would be an impact on noise levels?	**-**	Mineral extraction and the associated vehicle movements are likely to have a noise impact in the medium term	A noise assessment, setting out any required mitigation would likely be undertaken as part of the development management process. Mitigation could reduce any negative impact to an acceptable level.	
	Is it likely that there would be an impact with regard to light pollution?	**0**	Unlikely to be an impact on light pollution		
14) To support opportunities for economic development, including jobs, arising from waste and minerals related	Is there likely to be an impact on the local and wider economy?	**+**	Mineral extraction is likely to be beneficial for the local and wider economy providing direct and indirect employment in the medium term.		It is considered that there would be a positive impact on economic sustainability in the medium term.

activities	Is there likely to be an impact in terms of employment?	+	Mineral extraction is likely to be beneficial for the local and wider economy providing direct and indirect employment in the medium term.		

Summary

Overall development of the site would be likely to have a neutral impact on sustainability, however it is predicted that there would be a significantly negative impact on environmental sustainability as a result of the landscape impact from developing this site. A number of other negative impacts are predicted in relation to environmental sustainability, however, these are likely to be short/medium term as good restoration of the site should restore the site to a similar state to its current state. Mitigation measures would be required to ensure no long term negative impacts on these elements. It is predicted that there would be a positive impact on economic sustainability as a result of job creation and supporting the local economy.				
Effect:	**Likelihood:**	**Scale:**	**Duration:**	**Timing:**
Potentially significantly negative impact on environmental sustainability in relation to landscape and highway impact	Medium	Local	Temporary	Short/Medium term