

Wiltshire and Swindon

Proposed Aggregate Minerals Site Allocations DPD

January 2012

Alistair Cunningham
Director, Economy and Enterprise
Wiltshire Council
Bythesea Road
County Hall
Trowbridge
Wiltshire
BA14 8JN

Celia Carrington
Deputy Chief Executive and Group Director
Environment, Regeneration and Community
Swindon Borough Council
Wat Tyler House
Beckhampton Street
Swindon
SN1 2JH

Executive Summary

Since the adoption of the Minerals Core Strategy and Minerals Development Control Policies DPDs, Wiltshire Council and Swindon Borough Council have undertaken significant work to identify potential sites for inclusion in this **Aggregate Minerals Site Allocations Development Plan Document** ("the Site Allocations DPD"). This work included a focused 'call for sites' in both 2004 and 2006; site identification work through desktop resource sieving exercises; contacting landowners of potential mineral bearing land; and consultation on an initial 'long-list' of 62 potential site options.

Consultation on these 62 potential site options resulted in 40 options being dropped from further consideration on the basis that they would have overriding environmental constraints, were unsuitable for inclusion in the development plan, or were withdrawn by the landowner, leaving 22 site options for further assessment.

The results of detailed environmental assessments were then used to inform the grading of the sites against sustainability criteria. This reduced the number of site options that could be considered suitable for development within the period up to 2026, from 22 to 8. It is envisaged that these 8 site options would be expected to yield an estimated 10.86 million tonnes.

Within a context of diminishing resources, the evidence gathered through detailed assessments undertaken as part of site identification process, shows that there are very few remaining strategic site options in Wiltshire and Swindon that can be considered appropriate and/or deliverable for sand and gravel extraction during the plan period. Against the backdrop of diminishing resources, a continued decline in production within historically worked locations of the plan area and a lack of suitable site options to meet Wiltshire and Swindon's sub-regional apportionment figure for sand and gravel, those sites included in this document are deemed to be the most appropriate site options given an absence of more suitable alternatives. This document sets out the evidence and justification for a reduced sand and gravel provision rate from the government's prescribed position⁽¹⁾ to a local forecast figure of 1.2 million tonnes per annum.

The adopted Minerals Core Strategy advocates a restoration led approach to all minerals development in Wiltshire and Swindon. This Site Allocations DPD therefore plans holistically for each area to ensure that individual sites are developed and restored in such a way that aligns with the principle aspirations for each area, particularly where these aspirations have been identified in other plans or programmes.

This Site Allocations DPD discusses those sites that have been identified as being suitable for mineral working; site specific issues and particular planning requirements that any applicant will have to address through any subsequent planning application process.

The sites identified through this Site Allocations DPD as being suitable for future minerals extraction are as follows (*anticipated mineral reserves are illustrative assessments and may vary when further detailed information is provided at the planning application stage*):

- Cox's Farm (2.4 million tonnes)
- Blackburr Farm (0.81 million tonnes)
- North Farm (0.3 million tonnes)
- Land east of Calcutt (2.2 million tonnes)
- Land at Cotswold Community (2.76 million tonnes)
- Land near Compton Bassett (0.45 million tonnes)
- Extensions to Brickworth Quarry (1.9 million tonnes)

1 The government prescribe how much aggregate minerals each local authority should provide. The adopted Minerals Core Strategy is premised upon a provision rate of 1.85 million tonnes per annum. The forecast provision rates have been updated for the period up to 2020, but the latest figure - 1.41 million tonnes per annum has not been fully ratified by government (at the time of writing).

1	Introduction	1
2	The Upper Thames Valley Mineral Resource Zone	9
3	The Calne Area Minerals Resource Zone	37
4	The South East of Salisbury Mineral Resource Zone	45
5	Monitoring Framework	53
	Appendix 1: Glossary of terms	55

1. Introduction

- 1.1** The **Aggregate Minerals Site Allocations Development Plan Document (DPD)** is the third in a series of documents designed to guide the use of land within Wiltshire and Swindon for the provision of aggregate minerals. Once adopted, it will form part of both Wiltshire and Swindon's Local Development Frameworks (LDFs) and, as such, should be read within the context of the wider development plan for the two areas.
- 1.2** This document takes its lead from the policy framework set out across the adopted Minerals Core Strategy and Minerals Development Control Policies DPDs.⁽²⁾ It provides a spatial representation of the principles set out in these documents by presenting what Wiltshire Council and Swindon Borough Council consider to be a sound framework of sites suitable to meet a realistic assessment of future demand for aggregate minerals (sand and gravel) from Wiltshire and Swindon up to 2026.
- 1.3** Economically viable minerals can only be worked where they exist and consequently there are specific locations where the councils can look to identify potentially suitable sites. The adopted Minerals Core Strategy identifies five broad locations in Wiltshire and Swindon, referred to as Mineral Resource Zones which are considered to be capable of providing a long term supply of sand and gravel (see figure 1.1).

Wiltshire and Swindon's Mineral Resource Zones

- 1.4** The Bristol Avon Mineral Resource Zone (MRZ) is the closest alternative source (geographically and mineralogically) of sand and gravel to the Upper Thames Valley and therefore could potentially supply much of the same market catchment area. However, the sand and gravel deposits in the Bristol Avon are typically shallow and of poorer quality than the Upper Thames Valley gravels. This has been confirmed both by the British Geological Survey and the minerals industry. Although there may be isolated pockets of viable resource within the Bristol Avon, this area would not act as a strategic alternative to the Upper Thames Valley. None of the original site options considered for the Bristol Avon were promoted by the minerals industry. In fact, the industry have indicated that they are not keen to move to this area in the foreseeable future unless market conditions dictate otherwise.
- 1.5** The Calne area MRZ is centrally located within the plan area and theoretically contains extensive deposits of soft sand (otherwise known as 'building sand') albeit in most cases heavily constrained. This area has historically provided a source of sand for mortars, and also supplies resource for a local block making plant. Although no sites have been formally promoted by the minerals industry (one that was originally promoted was subsequently withdrawn), only one of the site options identified by the councils in the Calne area was considered to have potential by the minerals industry. Due to differences in the mineral types and consequently the end uses and markets served, the Calne area MRZ could not provide an alternative source of supply to the Upper Thames Valley. Based on dialogue with the minerals industry there are no indications that demand for soft sand from the Calne area will increase during the plan period.
- 1.6** The South East Salisbury MRZ is located near to the southern boundary of the plan area and provides a source of soft sand on a small scale, which is assumed to be predominantly used for mortars and asphalt, within markets in the south of the county (Salisbury area) and

² The Minerals Core Strategy DPD sets out the strategic planning policy framework for minerals development until 2026. The Minerals Development Control Policies DPD contains a series of policies for determining applications for minerals development within Wiltshire and Swindon.

the neighbouring counties of Dorset and Hampshire. Again due to the differences in the mineral types and consequently the end uses and markets served, the South East of Salisbury MRZ could not provide an alternative source of supply to the Upper Thames Valley.

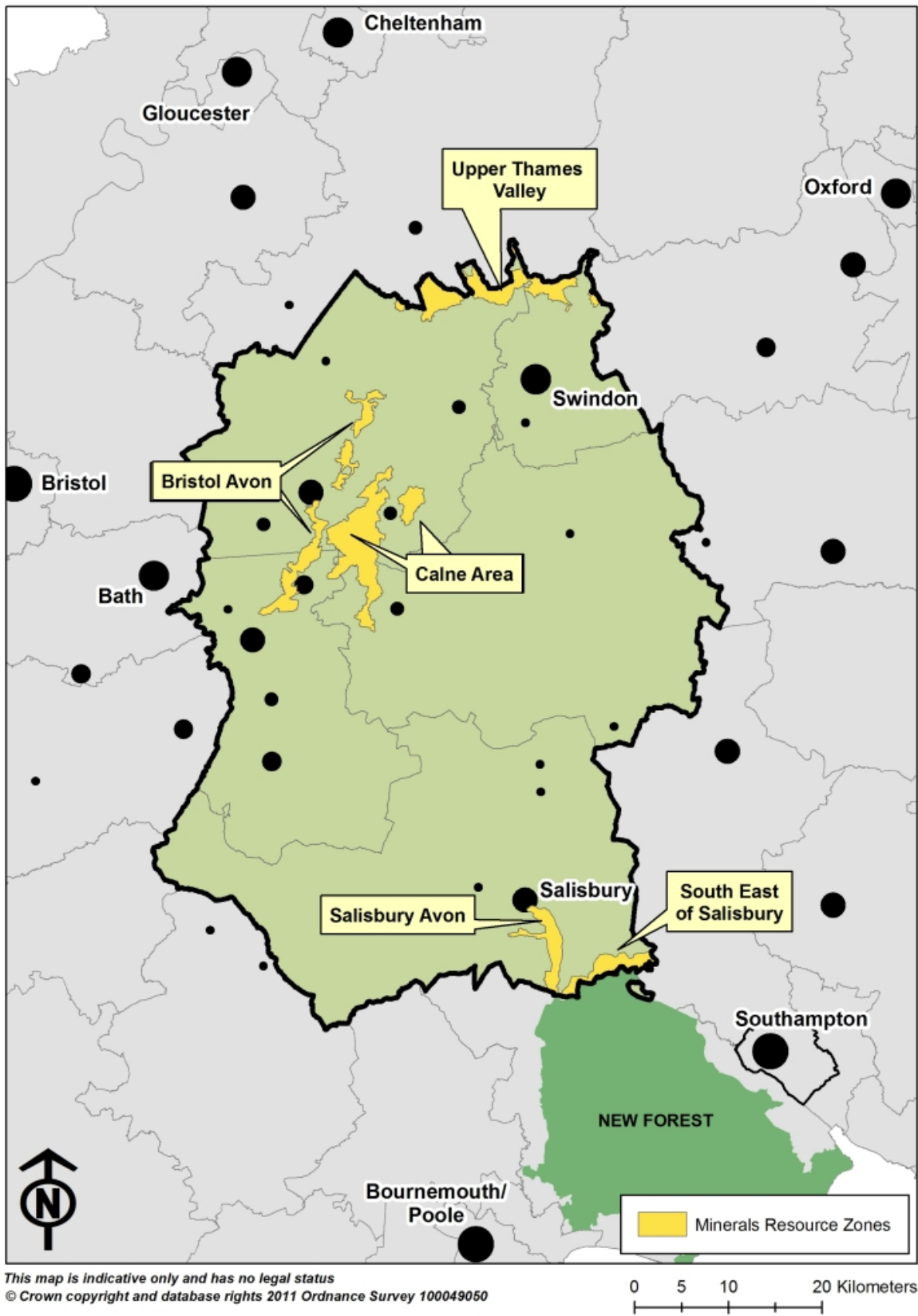
- 1.7** The Salisbury Avon MRZ lies in the south of the plan area and contains deposits of sand and gravel that have not historically been quarried other than for very limited local use. Even if sites were promoted in this area it would be very unlikely that this resource could supply markets served by the Upper Thames Valley (approximately 100km by road).
- 1.8** In principle the councils will be supportive of appropriate applications for minerals development within the locations set out in this document, however this should not be viewed as a guarantee that development will be permitted in all cases. Conversely, proposals for minerals development on sites not included within this document, or in areas that lie outside of the identified Minerals Resource Zones, will still be considered on their own merits⁽³⁾ if they demonstrate that they are in keeping with national policy and the policies of the development plan.
- 1.9** Although the councils are confident that these areas contain deposits of sand and gravel, the quality and quantity of mineral found at specific locations within the Mineral Resource Zones is not necessarily known. Some of the sites in this document have been assessed through historical borehole samples and this secondary data provides a good basis for estimating the quantity and quality of resource within them. The potential yields for the other sites have been estimated by using generic data provided by the British Geological Survey (BGS)⁽⁴⁾. These generic estimates are less reliable and should be treated with an element of caution. It is envisaged that detailed resource estimates will be provided through the planning application process.
- 1.10** The evidence gathered from detailed assessments undertaken as part of the site identification process illustrates that there are very few areas in Wiltshire and Swindon that can be considered appropriate and/or deliverable for sand and gravel extraction during the plan period. The resource in these areas is either highly constrained (in the Calne area; and south east of Salisbury area) or, as in the case of the Upper Thames Valley, is running out as a result of past production. The councils have included those sites (detailed in this document) that are deemed to be the most appropriate given an absence of more suitable alternatives.
- 1.11** This is based on supporting evidence⁽⁵⁾ that illustrates a continued, long term decline in production within historically worked locations of the plan area. Against this economic backdrop, this document sets out evidence and justification for a reduced forecast provision rate for sand and gravel provision for Wiltshire and Swindon, as compared with the Government's prescribed sub-regional apportionment figures. Further detail in relation to overall provision rates, including the government's prescribed figure, is set out at paragraphs 1.25 through to 1.29.

3 In line with policies MCS1 and MCS1(A) of the Wiltshire and Swindon Minerals Core Strategy DPD (Adopted June 2009).

4 [A provisional Assessment of the Sand and Gravel Resources in Wiltshire and Swindon](#) (2007)

5 Wiltshire and Swindon Minerals and Waste Evidence Base Part C: Minerals

Figure 1.1 The location of Mineral Resource Zones in Wiltshire and Swindon



The evidence base

- 1.12** A significant amount of evidence has been gathered to establish whether, in principle, the sites contained within this document are suitable for mineral extraction. The evidence used to support a site allocation in this development plan is not as detailed as would be expected for a planning application.
- 1.13** Therefore, further detailed and up to date evidence will be required to support a planning application for mineral extraction. For this reason the councils have, for each site identified within this document, included a site profile table highlighting particular issues to be addressed at the planning application stage.
- 1.14** The main evidence base to support this document comprises:
- A report on site selection process (detailing the consultation and evidence gathering work undertaken since 2010);
 - Summary of minerals site appraisal matrices report (initial site appraisal matrices completed by officers to highlight key issues for further consideration in the site selection process);
 - Detailed site assessments covering transport, archaeology, the historic built environment, ecology, landscape and visual impact, the water environment and human health and noise;
 - Level 1 Strategic Flood Risk Assessment (SFRA) update;
 - Flood risk and hydrological impact assessment;
 - Ecological site briefings and test of likely significance on European sites;
 - Sustainability Appraisal/Strategic Environmental Assessment (SA/SEA) report (including Cumulative Effects Assessment); and
 - Habitats Regulation Assessment (HRA) report.
- 1.15** The councils will keep the evidence base up-to-date through continuous monitoring and review.

Site selection and appraisal

- 1.16** Since the adoption of the Minerals Core Strategy and Minerals Development Control Policies DPDs, the councils have undertaken a comprehensive search to identify potential sites for inclusion in the Aggregate Minerals Site Allocations DPD. The process for identifying areas of land for aggregates extraction is broadly prescribed in the draft National Planning Policy Framework (NPPF), existing national policy (Minerals Planning Statement (MPS) 1 and accompanying practice guide), and is set out in more detail in the councils' published methodology⁽⁶⁾.
- 1.17** The councils initiated a focused 'call for sites' in April 2004 by writing to mineral operators and landowners known to have an interest in sand and gravel extraction. This resulted in a number of sites being put forward for consideration. However, the estimated yield for these sites was insufficient to meet forecast demand at the time⁽⁷⁾.
- 1.18** The councils issued a further call for sites in 2006 through a newsletter issued to every contact on the councils' consultation database. As a result of this work no additional land was put forward for consideration.

6 Aggregate Minerals Site Allocations DPD Methodology - The results of a constraints sieving exercise applied to remaining sand and gravel resources in Wiltshire and Swindon (March 2010).

7 1.85 million tonnes per annum as set by the Regional Planning Body at that time.

- 1.19** In order to meet the requirements of national policy and to test the capacity of the plan area to deliver forecast demand, the next logical step was to contact owners of potential mineral bearing land to test whether they would consider putting their land forward for sand and gravel extraction. The adopted Mineral Resource Zones cover extensive areas of land, some parts of which were not suitable for development due to planning constraints. The councils therefore embarked on a methodical sieving exercise of the un-worked areas of the five Mineral Resource Zones, removing the most constrained areas from further consideration⁽⁸⁾. Landowners within the remaining areas were then identified and contacted.
- 1.20** Through this exercise owners of potential mineral bearing land were contacted and a total of 62 site options were put forward for consideration. Consultation on these 62 site options resulted in 40 of the initial site options being dropped from further consideration on the basis that:
- development may lead to significant adverse environmental impact; or
 - the options were withdrawn by the landowner.
- 1.21** Following this consultation and the removal of sites from further consideration, 22 site options were taken forward for further detailed assessment.
- 1.22** The further assessments were undertaken by officers at Wiltshire Council with expertise in fields such as ecology, landscape, transport and the historic environment. The results of these assessments were then used to inform the grading of the sites against sustainability criteria. This reduced the number of site options considered suitable for development from 22 to 8 for the period to 2026. The 8 site options would be expected to yield an estimated 10.86 million tonnes.
- 1.23** The evidence shows that a shift in the pattern of aggregates supply within Wiltshire and Swindon is likely to occur during the plan period up to 2026. The adopted Minerals Core Strategy predicts that the tipping point for this change relates to the potential for future minerals development in the Upper Thames Valley, where large-scale sand and gravel extraction has taken place since the 1960's; and consistently at 75-80% of our total production.
- 1.24** Intensive extraction has left a significantly diminished resource, substantially reducing the options for future minerals development in Wiltshire and Swindon. This view is reinforced by the fact that since 2004 neither the minerals industry or the councils have identified or brought forward sufficient land to meet forecast demand in Wiltshire and Swindon. In fact only one site in the Upper Thames Valley has been promoted by the minerals industry since this date. This is not a result of reticence on their part but simply a confirmation, in our view, of what the evidence is indicating in terms of resource availability and the level of constraint in the plan area.

Wiltshire and Swindon's sub-regional apportionment

- 1.25** The councils have taken all reasonable steps to ensure that the capacity of the plan area to deliver the requirements of the sub-regional apportionment has been fully tested against relevant sustainability criteria in line with MPS1.
- 1.26** During the past ten years, production in Wiltshire and Swindon has not matched the government's forecast provision rates despite a general increase output levels between 2001 and 2006, and does not currently meet the latest proposed local guideline figure of 1.41

8 Aggregate Minerals Site Allocations DPD Methodology - The results of a constraints sieving exercise applied to remaining sand and gravel resources in Wiltshire and Swindon (March 2010).

million tonnes per annum⁽⁹⁾. The Mineral Products Association has stated that its members would generally support a forecasting methodology whereby local authorities base their provision rate on the average of the past 10 year's production. For Wiltshire and Swindon, this would equate to a local forecast rate of 1.2 million tonnes per annum and would still provide a sufficient supply of mineral in times of increased or reduced production.

1.27 For Wiltshire and Swindon, it is therefore reasonable to conclude that a local forecast of 1.2 million tonnes per annum more closely reflects actual demand, than figures derived from national and local forecasts published by DCLG.

1.28 Table 1.1 indicates that adequate provision can be made by the allocated sites in this DPD to meet a locally derived forecast figure of 1.2 million tonnes of sand and gravel per annum or 18 million tonnes over the plan period up to 2026.

Table 1.1 Site options required to deliver a locally derived apportionment figure of 1.2 million tonnes of sand and gravel per annum over the plan period to 2026

	Site options required to deliver locally derived apportionment figure of 1.2 million tonnes (mt) per annum	A Forecast of need based on average of 10yrs past production as at 1st January 2011 (million tonnes)	B Permitted reserves and allocations as at 1st January 2011 (million tonnes)	(A-B) Residual requirement for the period up to 2026 (million tonnes)	Estimated yield of site options (million tonnes)
Upper Thames Valley (sharp sand and gravel)	Cox's Farm (estimated 2.4mt) Blackburr Farm (estimated 0.81mt) North Farm (estimated 0.3mt) Land east of Calcutt (estimated 2.2mt) Land at Cotswold Community (estimated 2.76mt)	14.04	3.22 (+3.1 allocated as Preferred Areas at Down Ampney)	7.72	8.47
Calne and SE of Salisbury (soft sand)	Land near Compton Bassett (estimated 0.45mt) Extension to Brickworth Quarry (estimated 1.9mt)	3.96	1.49	2.47	2.39
Totals		18.00	7.81	10.19	10.86

9 National and Local Guidelines for Aggregates Provision 2005 – 2020, DCLG (published September 2011)

- 1.29** The assessment of mineral reserves; and the issue of long-term supply to meet the local forecast provision rate, should be treated flexibly. The councils do not (in policy terms) differentiate between different mineral types for the purposes of landbank maintenance. As such, in overall terms, this document as a whole presents sufficient resources to meet the residual forecast provision requirement of 10.19 million tonnes over the plan period.

What will happen to the site once sand and gravel extraction has ceased - a restoration led approach

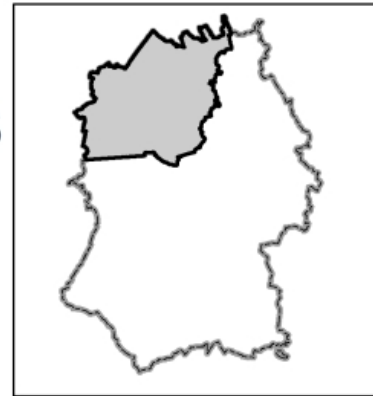
- 1.30** The adopted Minerals Core Strategy advocates a restoration led approach to all minerals development in Wiltshire and Swindon. It is therefore essential to plan holistically for each area to ensure that individual sites are developed and restored in such a way that aligns with the principle aspirations for each area, particularly where these aspirations have been identified in other plans or programmes.
- 1.31** A number of factors such as the quality of agricultural land, the aspirations of landowners and local communities, and the concerns or aspirations of organisations such as the woodlands initiative network (community forest), South West Biodiversity (South West Nature Map), the Royal Society for the Protection of Birds (RSPB), the Environment Agency, Natural England and the Defence Infrastructure Organisation (DIO) will need to be taken into account. Sand and gravel extraction can, for example, provide opportunities for improving flood storage capacity for an area; and lead to enhancements to local biodiversity.

Site profiles and maps




- 1.32** Each inset map included in this document illustrates the site boundary that will be safeguarded for minerals extraction purposes. A brief description of each site and a summary of key specific planning issues that the councils consider should be given detailed consideration and/or are likely to need addressing at the planning application stage. The list should not be viewed as exhaustive, particularly as circumstances may well change over time and the exact details of specific proposals (i.e. planning applications) that will come forward in the future are not currently known.
- 1.33** Furthermore, each site will make a positive contribution to meeting the need for primary aggregate minerals within suitable locations of the identified Minerals Resource Zone of the plan area - in line with the requirements of policies MCS1, MCS1(A), MCS1(B) and MCS1(C) of the Minerals Core Strategy and all other relevant plans of the development plan.

2. The Upper Thames Valley Mineral Resource Zone

Upper Thames Valley Minerals Site Allocations



Key

-  Upper Thames Valley Site Options
-  Key settlements in area
-  North Wiltshire



© Crown copyright and database rights 2011 Ordnance Survey 100049050

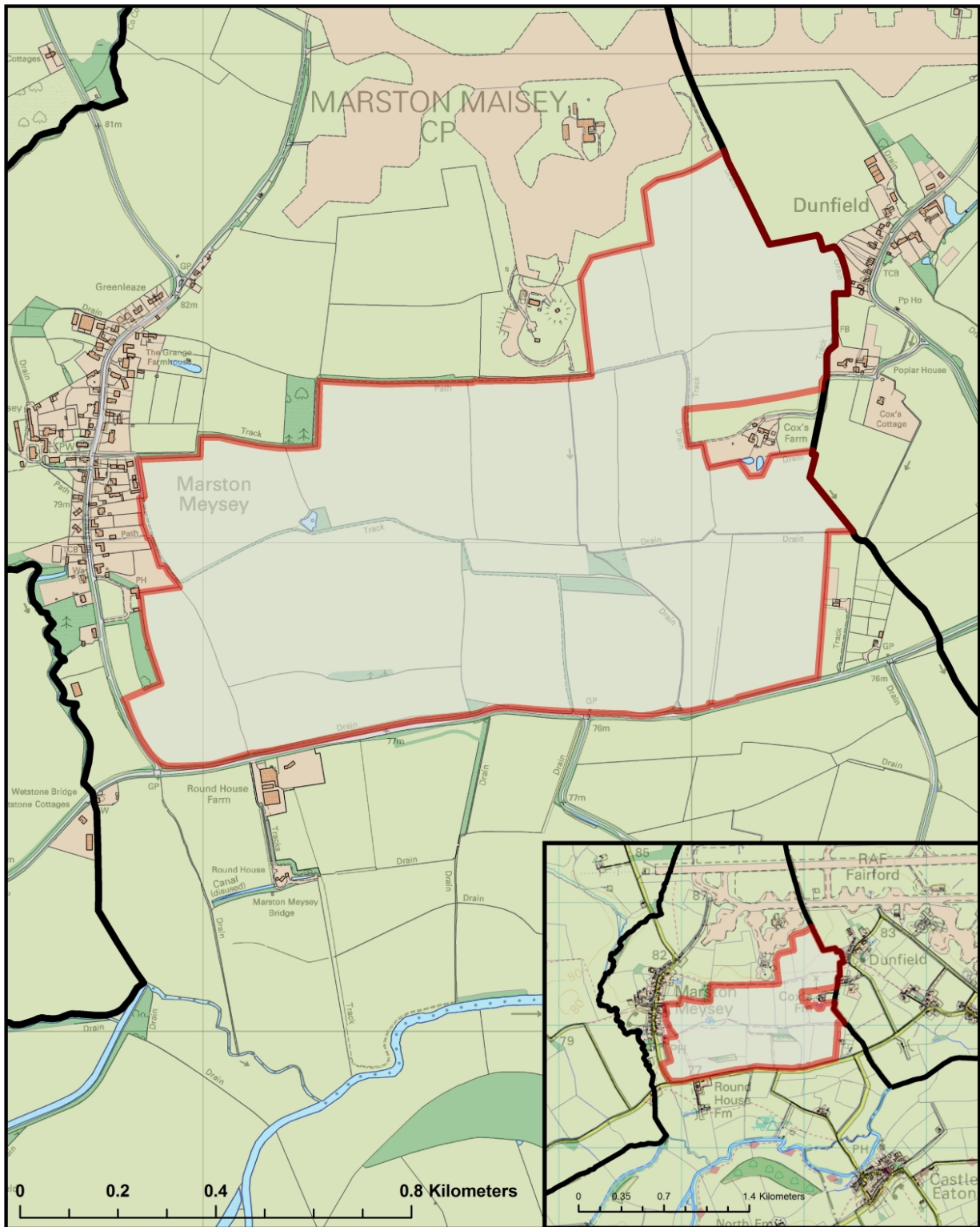
The Upper Thames Valley - Context

- 2.1** The Upper Thames Valley sand and gravel resource crosses the northern boundary of Wiltshire and Swindon into Gloucestershire and extends eastwards into Oxfordshire. It has historically provided a regionally and locally significant source of high quality sharp sand and gravel that predominantly serves the construction markets of Swindon, Chippenham, Bath, Bristol, Cheltenham, Gloucester and also Oxford. It is the primary source of sharp sand and gravel from within Wiltshire and Swindon contributing approximately 75-80% of total production for the plan area.
- 2.2** Past decades have seen a gradual increase in production of sharp sand and gravel from the Wiltshire section of the Upper Thames Valley. This increase peaked in 2003 and since then has shown a steady decline, in part, due to economic circumstance. The evidence suggests that intensive extraction has left a significantly diminished relatively unconstrained resource, thereby substantially reducing the options for future minerals development in Wiltshire and Swindon. The evidence also clearly indicates that the remaining relatively unconstrained resource would be unable to sustain the Government's forecast provision rates into the longer term and this is further supported by the fact that overall production from the Upper Thames Valley is tempered by existing market demand and the market share operated by the industry.
- 2.3** The adopted Minerals Core Strategy predicts that a shift in the pattern of aggregates supply within Wiltshire and Swindon is likely to occur during the plan period up to 2026. This is primarily due to the fact that there are very few available sites within this finite resource area; and is reinforced by the fact that since 2004, the minerals industry has not been able, or required (due to market forces⁽¹⁰⁾), to identify and put forward for consideration, sufficient land to meet forecast demand. This is not simply a result of reticence on their part, but more an affirmation of what the evidence is indicating in terms of resource availability and the level of environmental constraint. Therefore it is highly likely that by 2026 production from the Wiltshire / Swindon section of the Upper Thames Valley will be significantly reduced from current extraction levels.
- 2.4** The adopted Minerals Core Strategy allows for this predicted downward trend. However, in the short and medium term the Upper Thames Valley is expected to continue to play a significant role in the supply of sand and gravel. Table 2.1 indicates that adequate provision of sand and gravel can be delivered through the proposed allocated sites in the Upper Thames Valley to meet a locally derived forecast figure of 1.2 million tonnes of sand and gravel per annum. The table outlines what the Upper Thames Valley area needs to contribute in order to meet this locally derived figure. The following pages show the site options in the Upper Thames Valley.

Table 2.1 Site options required to deliver the Upper Thames Valley (UTV) (sharp sand and gravel) contribution to a locally derived apportionment figure

UTV site options required to deliver locally derived apportionment figure of 1.2 million tonnes (mt) per annum	A Forecast of need based on average of 10yrs past production as at 1st January 2011 (million tonnes)	B Permitted reserves and allocations as at 1st January 2011 (million tonnes)	(A-B) Residual requirement for the period up to 2026 (million tonnes)	Estimated yield of site options (million tonnes)
Cox's Farm (estimated 2.4mt) Blackburr Farm (estimated 0.81mt) North Farm (estimated 0.3mt) Land east of Calcutt (estimated 2.2mt) Land at Cotswold Community (estimated 2.76mt)	14.04	3.22 (+3.1 allocated as Preferred Areas at Down Ampney)	7.72	8.47

Inset Map 1: Cox's Farm



- Cox's Farm
- Plan area

© Crown copyright and database rights 2011 Ordnance Survey 100049050



Table 2.2 : Cox's Farm

Cox's Farm	
Site details	<p>Resource Type: Sand and Gravel</p> <p>Site size: 106.1 hectares</p> <p>Grid reference: E 413500 N 197000</p> <p>Estimated resource yield: 2,400,000 tonnes</p> <p>Current land use: Agricultural</p>
Site description	<p>The site is located in a rural setting; and is in close proximity to and overlooked by dwellings at Marston Meysey (to the west), Dunfield (north east) and Cox's Farm (east). The site option is currently in an agricultural use on land classified as Grades 2 and 3 Best and Most Versatile. There are a number of currently active and proposed quarries to the south and west. The site option is situated adjacent to the military airbase at RAF Fairford and is currently interspersed with intimate copses and dense hedgerows, criss-crossed by numerous Public Rights of Way (PRoW). The site option is characteristic of the area - essentially flat, with open views across the site in places where vegetation does not offer natural screening (e.g. there are views across the site from the C116/C124).</p>
Preferred restoration objective	<p>The site must be sensitively designed and worked in a phased manner to reduce and mitigate the local environmental impact of quarrying. Restoration of the site post working should concentrate on the creation of a mix of wet woodland and lowland meadows/grazing pasture. Replanting and establishing black poplar trees will be a key component of restoration works. Specialist advice in relation to black poplar conservation may be obtained through the Cotswold Water Park Society. Hedgerow and ditch restoration will be necessary to maintain landscape connectivity. In addition, there should be no net loss or degradation of the important local footpath network in the area. Restoration must aim to meet targets for named habitats and species in the Cotswold Water Park Biodiversity Action Plan (CWP BAP) and the Wiltshire Biodiversity Action Plan (WBAP). The critical need to reduce the risk of bird strike associated with air traffic at RAF Fairford is a key consideration for the working and restoration of the site.</p>
Site development - key issues and potential mitigation measures	
Biodiversity and geodiversity	<p>The site is adjacent to RAF Fairford which supports a large population of great crested newt and a number of farmland ponds. The surrounding farmland is likely to provide an important habitat for this population. This area is also known to support farmland birds such as yellowhammer, tree sparrow, turtle dove and barn owl and supports a number of the nationally scarce native black poplar trees. Any planning application for the site should be informed by an extended Phase I survey (particularly with reference to the above species) to determine the existence of habitat features of value to local wildlife populations and to inform relevant mitigation strategies to ensure their protection during extraction and restoration of the site.</p> <p>A robust construction method statement will be required to address management of habitat features on the site during mineral extraction operations to ensure that local biodiversity is not adversely impacted. This is likely to include retention of</p>

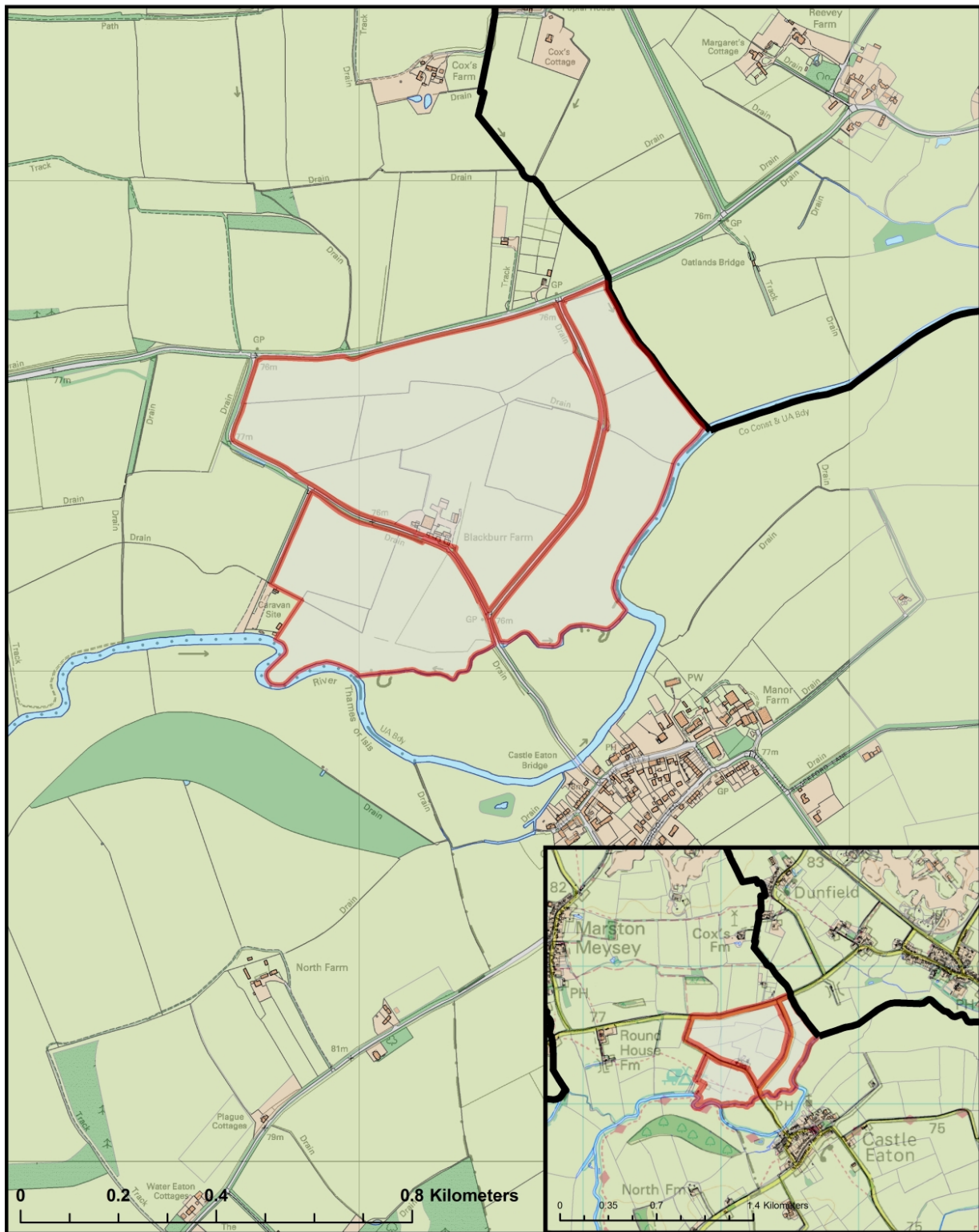
Cox's Farm	
	<p>hedgerows and tree lines, ditches and drains and other connective corridors across and around the site, methods to avoid disturbance to individual species and some habitat manipulation to ensure continuity of habitat availability. Phased working of the site with continual restoration, as an integral part of the process, will ensure that where these features have to be removed to enable extraction, they can be replaced by new planting or equivalent habitat creation in adjacent phased areas, ensuring availability of habitat for wildlife species.</p>
Human health and amenity	<p>Air Quality:</p> <p>A robust Dust Management Plan (DMP) will need to be provided to support any subsequent planning application process. Where appropriate, reasonable and practicable, dust generating activities should be located away from dust sensitive receptors. The DMP should identify and provide appropriate mitigation and monitoring proposals for dust generating activities. Where appropriate, reasonable and practicable, a minimum 100 metre 'stand-off distance' to dust sensitive receptors should be planned for within the overall design of the site.</p> <p>Noise:</p> <p>Detailed consideration will need to be applied to the design of the site at the planning application stage. Robust mitigation and site monitoring measures will need to be designed to reduce the impact of quarrying on surrounding properties and businesses. The site will need to be worked in a sensitive and phased manner with consideration given to:</p> <ul style="list-style-type: none"> • The location of plant and machinery to utilise natural and operational features to provide effective screening from the closest noise sensitive receptors; • Utilising appropriately designed acoustic screening, baffle mounds and locally agreed 'stand-off' distances between quarry phases and noise sensitive receptors.
Landscape and visual	<p>The site can accommodate change. However, further detailed assessment through the planning application process will be required to identify and develop a scheme of working to protect the historic landscape setting of Marston Meysey village. Any application will need to enhance hedgerow networks throughout the site and retain the north western woodland features. Potential need to re-route some PRoW running throughout the site; and enhance PRoW to the north and north western boundary.</p>
Archaeology	<p>A series of undated features, ring ditches, enclosures and trackways are located to the south west of the site. Further features are known to exist along the southern boundary of the site and there is potential for a settlement to the west of the site. Although these features cannot be considered to be an absolute constraint to working the site, any applicant will need to work closely with the County Archaeologist to develop and implement sufficient and suitable mitigation plans.</p>
Historic built environment	<p>Mitigation will need to offer robust buffer and landscape screening to the west of the site in order to protect the setting of the Marston Meysey Conservation Area. The landscape link between Roundhouse Farm/Marston Meysey Bridge and the village should also be maintained. Similarly, to the east, buffers and screening will be required to protect the settings of heritage assets in Dunfield. More detailed</p>

Cox's Farm	
	landscape assessment will be required at the planning application stage in order to assess final requirements.
Traffic and transportation	<p>Access onto the site should make use of the C124 and C116 although planned improvements will need to be made to these routes to ensure that they are of an appropriate standard for minerals HGVs. Concerns with road network suitability, access/egress from the A419 and HGV's travelling through Latton rather than using the A419 southbound junction to Calcutt Junction will need to be fully addressed at the planning application stage. A Transport Assessment should be submitted with a planning application to identify the measures that will be taken to adequately mitigate or compensate for the anticipated transport and related environmental impacts of the proposal.</p> <p>In addition, and where considered appropriate in law, financial contributions will be sought through the planning application process to cover highway improvements and, where deemed necessary, long term maintenance costs.</p>
Water environment	<p>The site lies within Source Protection Zone 1 (SPZ1) and hence groundwater investigations will be required to determine measures to ensure protection of groundwater for this site and in relation to other adjacent mineral site workings. It is imperative that the potential impacts on groundwater flood risk and baseflow for local watercourses and rivers such as the River Thames are adequately investigated and understood, with potentially significant measures required to reduce adverse environmental impacts. In addition, there are a number of local private abstractions that must be ensured protection during site operation.</p> <p>The site is situated within Flood Zones 1, 2 and 3. A Flood Risk Assessment should be submitted with any subsequent planning application.</p> <p>A robust construction method statement and Hydrogeological Impact Assessment should also include details of groundwater protection and stockpile storage areas. Any subsequent planning application will also need to include quarry designs (phasing) and robust mitigation measures to address potential impacts associated with:</p> <ul style="list-style-type: none"> • Dewatering - to be considered in combination with surrounding quarrying operations and incorporating appropriate stand-offs to watercourses. • Elevated levels of suspended solids - covering the design of settlement lagoons, levels and design of site drains, and details of vehicle and wheel washing facilities. • Contamination from chemicals and fuel storage area - covering design and details related to the vehicle storage areas, storage of fuels and lubricants.
Any other issues	Sight lines for RAF Fairford will require protection through appropriate mitigation.
Cumulative effects	Potential for cumulative effects (in both Wiltshire and bordering areas of Gloucestershire) on human health and amenity, the functional connectivity of the local PRow network, traffic and transportation, noise and light pollution, vibration, air quality and cultural heritage. Mitigation could be achieved through strategic phasing of workings in the area to reduce in combination effects. In addition,

Cox's Farm

continued close working with Gloucestershire County Council will help ensure that cumulative effects are identified and, where appropriate addressed, through Sustainability Appraisal / Strategic Environmental Assessment and Habitats Regulations Assessment processes.

Inset Map 2: Blackburr Farm



- Blackburr Farm
- Plan area

© Crown copyright and database rights 2011 Ordnance Survey 100049050



Table 2.3 : Blackburr Farm

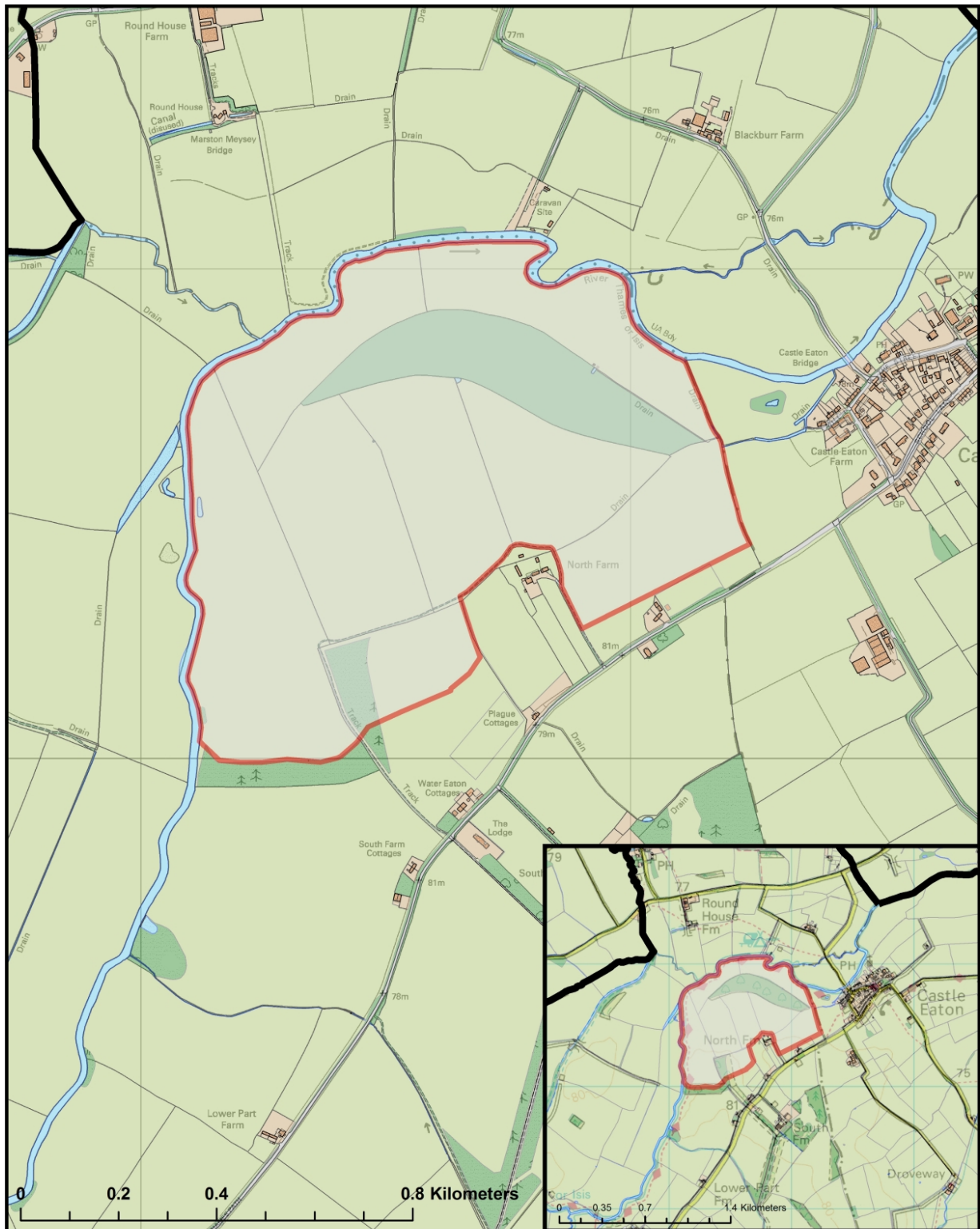
Blackburr Farm	
Site details	<p>Resource Type: Sand and Gravel</p> <p>Site size: 49.7 hectares</p> <p>Grid reference: E 414200 N 196400</p> <p>Estimated resource yield: 812,000 tonnes</p> <p>Current land use: Agricultural</p>
Site description	<p>The site option comprises three units separated by single track roads. It is currently in an agricultural use and the land is classified as Grades 2 and 3 Best and Most Versatile. Blackburr Farm is located towards the centre of the site and the site is situated in close proximity to and overlooked, to some extent, by dwellings at Castle Eaton (approximately 250m south east of the site option) and occupants of the Second Chance Touring Park, which lies adjacent to the south western corner of the site. The site and surrounding area is broadly flat (the village of Castle Eaton is slightly elevated in relation to the site) with views across the site in places where vegetation does not offer natural screening. The River Thames runs along parts of the boundary of the site to the south east and south west.</p>
Preferred restoration objective	<p>The site must be sensitively designed and worked in a phased manner to reduce and mitigate the local environmental impact of quarrying. Restoration of the site post working should concentrate on the creation of a mosaic of wet woodland and reedbed but could also help to boost flood storage capacity through restoration to floodplain grassland meadow/grazing marsh. This would also meet targets in the Cotswold Water Park Biodiversity Action Plan (CWP BAP) by supporting the species that currently inhabit the site; and providing increased habitat potential. The need to reduce the risk of bird strike associated with air traffic at RAF Fairford is a key consideration.</p> <p>Restoration of the canal which bisects the site could also be considered as part of a wider restoration project. However, detailed dialogue with the canals trust will need to be undertaken to examine viability, cost and environmental impact.</p>
Site development - key issues and potential mitigation measures	
Biodiversity and geodiversity	<p>Typical riparian species such as otter and water vole have been frequently recorded at the site and in the surrounding area. There will therefore be a requirement to establish a practical and defensible buffer zone to ensure that the river is protected from pollution and silt run-off; that disturbance of riparian species does not occur as a result of the operation of the mineral site; and that the riparian habitat can continue to provide its function for biodiversity as a valuable corridor between adjacent habitats. In addition, detailed Phase 1 extended surveys will be required to determine the importance of the numerous ditches and drains that cross the site to wildlife and measures designed to protect their integrity as habitat features.</p>

Blackburr Farm	
	<p>Other species currently recorded within, or adjacent to the site include - badgers, farmland birds, brown hare and barn owls. An extended Phase I survey (particularly with reference to the above species) will be required to inform any future planning application for mineral extraction at this site. Further species specific surveys will be required if indicated by the initial survey.</p> <p>A robust construction method statement will be required as part of the planning application, including details of the riparian buffer, protection of trees, hedges and ditches as appropriate and preventative measures to avoid disturbance of wildlife, such as lighting constraints near the river corridor. It should also include details of groundwater protection and stockpile storage areas beyond the floodplain to avoid possible siltation impacts during flood events.</p>
Human health and amenity	<p>Air Quality:</p> <p>A robust Dust Management Plan (DMP) will need to be provided to support any subsequent planning application process. Where appropriate, reasonable and practicable, dust generating activities should be located away from dust sensitive receptors. The DMP should identify and provide appropriate mitigation and monitoring proposals for dust generating activities. Where appropriate, reasonable and practicable, a minimum 100 metre 'stand-off distance' to dust sensitive receptors should be planned for within the overall design of the site.</p> <p>Noise:</p> <p>Detailed consideration will need to be applied to the design of the site at the planning application stage. Robust mitigation and site monitoring measures will need to be designed to reduce the impact of quarrying on surrounding properties and businesses. The site will need to be worked in a sensitive and phased manner with consideration given to:</p> <ul style="list-style-type: none"> • The location of plant and machinery to utilise natural and operational features to provide effective screening from the closest noise sensitive receptors; • Utilising appropriately designed acoustic screening, baffle mounds and locally agreed 'stand-off' distances between quarry phases and noise sensitive receptors.
Landscape and visual	<p>Small field systems and hedgerows to the north allow the site to accommodate change – however, the loss of hedgerows and habitat resource would be a negative outcome and would alter the landscape character of the area, resulting in a temporary loss of biodiversity and sense of place. Significant strengthening of screening to the south will be required to avoid visual impact associated with views from St Marys Church and Castle Eaton. Further significant screening will be required to limit the visual impact of quarrying activity on the Second Chance Touring Park to the west and Blackburr Farm towards the centre of the site.</p>

Blackburr Farm	
	Appropriate and sensitively planned mitigation will be required along the river corridor to the south west and south east boundaries. In addition, appropriate, well thought out and designed mitigation will be needed throughout the site to avoid irreversible loss to landscape character and features.
Archaeology	Evidence of field systems, two undated enclosures, an Iron Age settlement and Romano British trackway, undated settlement, Medieval and Iron Age period finds and ring ditches are located in and around the site. Although these features cannot be considered to be an absolute constraint to working the site, any applicant will need to work closely with the County Archaeologist to develop and implement sufficient and suitable mitigation plans.
Historic built environment	The site is in proximity to Castle Eaton conservation area and the setting of St Marys Church (Grade 1 Listed). The open character of the site to the south leaves Castle Eaton and St Marys Church vulnerable to visual impact. This will need to be overcome by significantly strengthening and planting screening to the south of the site.
Traffic and transportation	<p>The site should be treated as an extension to nearby sites, utilising existing access arrangements wherever possible. Access/egress will be required from the A419 and HGV's should avoid travelling through Latton, instead using the A419 south-bound Calcutt Junction. A Transport Assessment should be submitted with a planning application to identify the measures that will be taken to adequately mitigate or compensate for the anticipated transport and related environmental impacts of the proposal.</p> <p>In addition, and where considered appropriate in law, financial contributions will be sought through the planning application process to cover highway improvements and, where deemed necessary, long term maintenance costs.</p>
Water environment	<p>The site lies within SPZ 2 and 3 and hence groundwater investigations will be required to determine measures to ensure protection of groundwater for this site and in relation to other adjacent mineral site workings.</p> <p>The site is situated within Flood Zone 3. A Flood Risk Assessment should be submitted with any subsequent planning application.</p> <p>A robust construction method statement and Hydrogeological Impact Assessment should also include details of groundwater protection and stockpile storage areas beyond the floodplain to avoid possible siltation impacts during flood events. Any subsequent planning application will also need to include quarry designs (phasing) and robust mitigation measures to address potential impacts associated with:</p> <ul style="list-style-type: none"> • Dewatering - to be considered in combination with surrounding quarrying operations and incorporating appropriate stand-offs to watercourses.

Blackburr Farm	
	<ul style="list-style-type: none"> • Elevated levels of suspended solids - covering the design of settlement lagoons, levels and design of site drains, and details of vehicle and wheel washing facilities. • Contamination from chemicals and fuel storage area - covering design and details related to the vehicle storage areas, storage of fuels and lubricants.
Cumulative effects	<p>Potential for cumulative effects (in both Wiltshire and bordering areas of Gloucestershire) on human health and amenity, the PRow network, traffic and transportation, noise and light pollution, vibration, air quality, the water environment and cultural heritage. Mitigation could be achieved through strategic phasing of workings in the area to reduce in combination effects. In addition, continued close working with Gloucestershire County Council will help ensure that cumulative effects are identified and, where appropriate addressed, through Sustainability Appraisal / Strategic Environmental Assessment and Habitats Regulations Assessment processes.</p>

Inset Map 3: North Farm



- North Farm
- Plan area

© Crown copyright and database rights 2011 Ordnance Survey 100049050



Table 2.4 : North Farm

North Farm	
Site details	<p>Resource Type: Sand and Gravel</p> <p>Site size: 75.6 hectares</p> <p>Grid reference: E 413600 N 195700</p> <p>Estimated resource yield: 300,000 tonnes</p> <p>Current land use: Agricultural</p>
Site description	<p>The site option is currently within agricultural use and the land is predominantly classified as Grade 3 Best and Most Versatile, with a small section of the south eastern corner classed as Grade 2. A lens shaped block of land within the site is used for coppicing and is further surrounded by established trees. The site is bounded on the northern and western sides by the River Thames, along which runs the Thames Path National Trail. Part of the site is exposed to open views from Second Chance Touring Park on the northern bank of the River Thames. Dwellings in Castle Eaton (approximately 250m east of the site), and those along the road leading to Castle Eaton (North Farm, Plague cottages, Water Eaton cottages) are in proximity to the site and would be potential receptors for noise and dust.</p> <p>There is a quarry operating immediately north of the River Thames (beyond the northern boundary of the site) at Roundhouse Farm.</p>
Preferred restoration objective	<p>The site must be sensitively designed and worked in a phased manner to reduce and mitigate the local environmental impact of quarrying. The high water table in the area will present a significant challenge during the operational phases of the site's development. There may be a need to work the site on a 'campaign basis' to alleviate issues associated with annualised winter surface water flooding in the area. It is likely that the site will require inert fill to bring land up to a suitable level post working. Restoration post working will need to reduce the level of open water to reduce the risk of bird strike associated with air traffic at RAF Fairford. With this in mind restoration to wet woodland or floodplain grazing pasture/marsh (Floodplain Grazing Marsh is BAP Priority habitat within Cotswold Water Park) should be fully considered, where appropriate quantities of inert material is available.</p> <p>The restoration of farmland is also of paramount importance to support a return to agricultural use and enhancement of the habitats currently used by farmland birds and mammals (otters and water voles). Replanting and establishing black poplar trees will be a key component of restoration works. Riverside meadows along the Thames, including those associated with Roundhouse Farm, are suitable for restoration to species-rich grassland. Restoration must aim to meet targets for named habitats and species in the Cotswold Water Park Biodiversity Action Plan (CWP BAP) and the Wiltshire Biodiversity Action Plan (WBAP). There is also potential to enhance the legibility of the Thames Path through providing visitor information, signage and improved visual amenity for users.</p>

North Farm

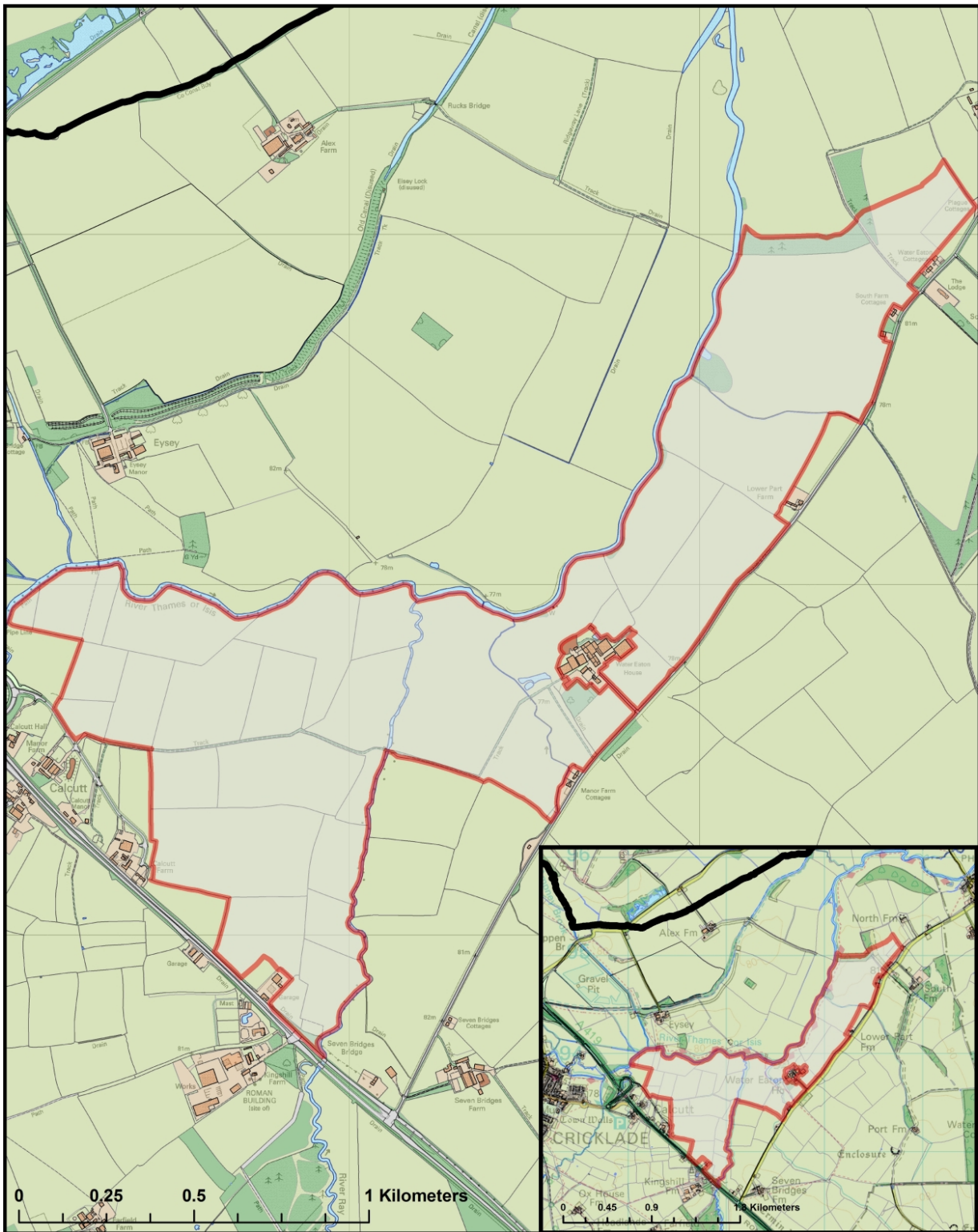
Site development - key issues and potential mitigation measures

<p>Biodiversity and geodiversity</p>	<p>There is a lens of willow coppice within the site which is surrounded by established trees. This existing habitat is well connected to other habitat areas by a significant hedgerow network both around and across the site. This area is notable for supporting good farmland bird populations (notably yellowhammer and tree sparrow), farmland mammals such as harvest mouse and brown hare, and riparian mammals such as otter and water vole. Considerable care will be necessary to ensure these populations are not significantly adversely impacted during any extraction. For any future planning application an extended Phase I survey (particularly with reference to the above species and any other identified species) will be required to determine the existence of habitat features of value to local wildlife populations and to inform relevant mitigation strategies to ensure their protection during extraction and restoration of the site.</p> <p>A robust construction method statement will be required to address management of habitat features on the site during mineral extraction operations to ensure that local biodiversity is not adversely impacted. This is likely to include retention of hedgerows and tree lines, ditches and drains and other connective corridors across and around the site, methods to avoid disturbance to individual species and some habitat manipulation to ensure continuity of habitat availability.</p>
<p>Human health and amenity</p>	<p>Air Quality:</p> <p>A robust Dust Management Plan (DMP) will need to be provided to support any subsequent planning application process. Where appropriate, reasonable and practicable, dust generating activities should be located away from dust sensitive receptors. The DMP should identify and provide appropriate mitigation and monitoring proposals for dust generating activities. Where appropriate, reasonable and practicable, a minimum 100 metre 'stand-off distance' to dust sensitive receptors should be planned for within the overall design of the site.</p> <p>Noise:</p> <p>Detailed consideration will need to be applied to the design of the site at the planning application stage. Robust mitigation and site monitoring measures will need to be designed to reduce the impact of quarrying on surrounding properties and businesses. The site will need to be worked in a sensitive and phased manner with consideration given to:</p> <ul style="list-style-type: none"> • The location of plant and machinery to utilise natural and operational features to provide effective screening from the closest noise sensitive receptors; • Utilising appropriately designed acoustic screening, baffle mounds and locally agreed 'stand-off' distances between quarry phases and noise sensitive receptors.
<p>Landscape and visual</p>	<p>The site can accommodate change. However, a river mitigation strategy will need to be developed for a proportion of the site, as the River Thames runs for more than half of the perimeter of the site.</p>

North Farm	
	<p>With some enhancement of existing hedgerows and advanced planting in key locations, the site could be successfully screened. However, any future workings would need to be sensitively planned to maintain the integrity and setting of Castle Eaton and the Thames Path National Trail (and river environment running along the northern and western boundaries). In addition, mitigation will be required to reduce the environmental impact of quarrying on the Second Chance Touring Park to the north and housing to the south.</p>
Archaeology	<p>Evidence of undated linear features and a Bronze Age ring ditch have been noted within the site. To the north west of the site (across the River Thames) are a series of undated ring ditches, to the north lie 2 Bronze Age barrow features, an undated road, undated ring ditch and a Romano British trackway. Although these features cannot be considered to be an absolute constraint to working the site, any applicant will need to work closely with the County Archaeologist to develop and implement sufficient and suitable mitigation plans.</p>
Historic built environment	<p>The site is in proximity to Castle Eaton conservation area - an appropriately planned buffer and screening will need to be incorporated into the design of the site and presented through any subsequent planning application.</p>
Traffic and transportation	<p>New access onto the site will need to avoid using the adjacent C114 as this route is weight restricted at Castle Eaton and cannot accommodate minerals HGV traffic without significant improvement. The site should be treated as an extension to nearby quarries, utilising any existing access arrangements to the north. A Transport Assessment should be submitted with a planning application to identify the measures that will be taken to adequately mitigate or compensate for the anticipated transport and related environmental impacts of the proposal.</p> <p>In addition, and where considered appropriate in law, financial contributions will be sought through the planning application process to cover highway improvements and, where deemed necessary, long term maintenance costs.</p>
Water environment	<p>The site lies within SPZ 2 and 3 and hence groundwater investigations will be required to determine measures to ensure protection of groundwater for this site and in relation to other adjacent mineral site workings.</p> <p>The site is located within Flood Zone 3. A Flood Risk Assessment should be submitted with any subsequent planning application.</p> <p>A robust construction method statement and Hydrogeological Impact Assessment will be required to include details of groundwater protection and stockpile storage areas. Strict precautionary measures will be required to ensure that no stockpiling occurs within the floodplain and that the works compound where storage of fuel oils and refuelling processes will take place, is situated beyond the floodplain or is suitably protected. Failure to comply could result in significant pollution and damage to local topsoils and built structures both on and off the site during flood events.</p> <p>Any subsequent planning application will also need to include quarry designs (phasing) and robust mitigation measures to address potential impacts associated with:</p>

North Farm	
	<ul style="list-style-type: none"> • Dewatering - to be considered in combination with surrounding quarrying operations and incorporating appropriate stand-offs to watercourses. • Elevated levels of suspended solids - covering the design of settlement lagoons, levels and design of site drains, and details of vehicle and wheel washing facilities. • Contamination from chemicals and fuel storage area - covering design and details related to the vehicle storage areas, storage of fuels and lubricants.
Cumulative effects	<p>Potential for cumulative effects (in both Wiltshire and bordering areas of Gloucestershire) on human health and amenity, traffic and transportation, noise and light pollution, vibration, air quality, the water environment and cultural heritage. Mitigation could be achieved through strategic phasing of workings in the area to reduce in combination effects. In addition, continued close working with Gloucestershire County Council will help ensure that cumulative effects are identified and, where appropriate addressed, through Sustainability Appraisal / Strategic Environmental Assessment and Habitats Regulations Assessment processes.</p>

Inset Map 4: Land east of Calcutt



- Land east of Calcutt
- Plan area

© Crown copyright and database rights 2011 Ordnance Survey 100049050



Table 2.5 : Land east of Calcutt

Land east of Calcutt	
Site details	<p>Resource Type: Sand and Gravel</p> <p>Site size: 172.6 hectares</p> <p>Grid reference: E 411900 N 193800</p> <p>Estimated resource yield: 2,200,000 tonnes</p> <p>Current land use: Agricultural</p>
Site description	<p>The site option is significant in spatial extent and currently within an agricultural use. The land is classified as Grade 3 Best and Most Versatile. The north west boundary of the site is delineated by the River Thames, along which runs the Thames Path National Trail. There is also another PRow that crosses the site. The nearest settlements are Cricklade to the west and Castle Eaton to the north east, although there are a number of closer dwellings located adjacent to, and in proximity to, the site. The site is crossed by an oil pipeline and low level power lines.</p> <p>The site is adjacent to the Cricklade junction of the A419. Eysey Quarry is in operation in close proximity to the north west of the site.</p>
Preferred restoration objective	<p>Due to the significant spatial extent of the site any future quarrying activity must be sensitively designed and worked in a phased manner to reduce and mitigate local environmental impacts. Restoration to species rich grassland meadows and floodplain grazing marsh would be appropriate for this site, but would be dependent on maintaining the existing groundwater regime of the area. This would involve use of inert fill material, non-viable mineral / silty deposits and locally derived clay deposits within the restoration of worked out quarry phases to improve flood storage capacity. The primary aim of this work should be aimed at achieving the creation of a low level, linear valley feature incorporating landscaping and habitat creation. However, any restoration scheme would need to ensure that the aquifer and hydrological regime of the area are not significantly adversely affected.</p> <p>The restoration scheme should aim to be complementary to the nearby North Meadow European site but should also aim to meet targets in the Cotswold Water Park Biodiversity Action Plan (CWP BAP) and the Wiltshire Biodiversity Action Plan (WBAP), providing features and habitats for farmland birds, harvest mouse, brown hare, otters, water voles and curlew.</p> <p>Improving connectivity between habitats and movement across / around the site for a range of mammals, birds and bats should be a key consideration. The site is close to other currently operational and proposed sites and the restoration of the site at Calcutt should aim to provide linkages to these sites for future use by species mentioned in the CWP BAP.</p>

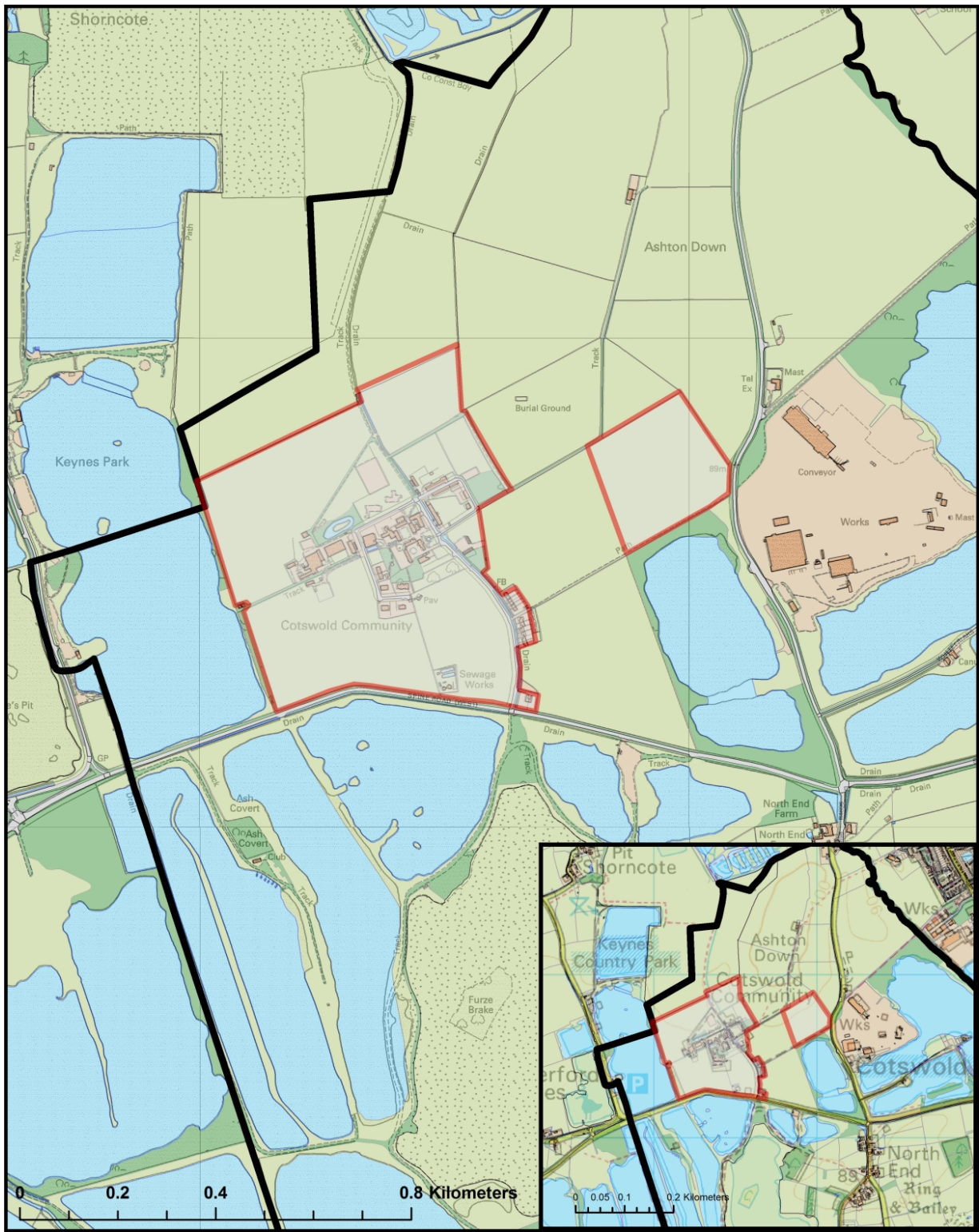
Site development - key issues and potential mitigation measures

<p>Biodiversity and geodiversity</p>	<p>The site is situated 1.1km from North Meadow SSSI, which is a component of the North Meadow and Clattinger Farm Special Area of Conservation (SAC). The Habitats Regulations Assessment (including the test of likely significant effects of operations at this site) indicate that there will be no likely significant effects on the designated features of the SAC.</p> <p>However, as a precautionary measure, to ensure no adverse effects on the European site, any subsequent planning application should be accompanied by a robust construction method statement ensuring that the most up-to-date and informed approach is used to ensure the adequate protection and maintenance/enhancement of biodiversity. Any future planning application for mineral extraction at this site must also be informed by an extended Phase I survey of the whole site, with particular reference to water voles, otters, badgers and foraging bat species (and the habitats they use). Particular consideration should be given to connective features such as hedgerows and field margins. The River Thames and the River Ray County Wildlife Site will require protection in the form of an appropriate and defensible stand-off area where mineral extraction will not be allowed to occur. Details and design of stand offs, together with protection measures for significant trees and hedges on the site should be presented in the construction method statement. This will specifically address groundwater protection, dust and sediment control, storage of stockpiles and any other issues relating to protected habitats or species as indicated by the Phase I survey data.</p>
<p>Human health and amenity</p>	<p>Air Quality:</p> <p>A robust Dust Management Plan (DMP) will need to be provided to support any subsequent planning application process. Where appropriate, reasonable and practicable, dust generating activities should be located away from dust sensitive receptors. The DMP should identify and provide appropriate mitigation and monitoring proposals for dust generating activities. Where appropriate, reasonable and practicable, a minimum 100 metre 'stand-off distance' to dust sensitive receptors should be planned for within the overall design of the site.</p> <p>Noise:</p> <p>Detailed consideration will need to be applied to the design of the site at the planning application stage. Robust mitigation and site monitoring measures will need to be designed to reduce the impact of quarrying on surrounding properties and businesses. The site will need to be worked in a sensitive and phased manner with consideration given to:</p> <ul style="list-style-type: none"> • The location of plant and machinery to utilise natural and operational features to provide effective screening from the closest noise sensitive receptors; • Utilising appropriately designed acoustic screening, baffle mounds and locally agreed 'stand-off' distances between quarry phases and noise sensitive receptors.

Land east of Calcutt	
Landscape and visual	<p>The site can accommodate change, however appropriate mitigation for the River Thames environment and views from the Thames Path National Trail to the north will be required.</p> <p>There is natural screening to the west of the site, but central and eastern areas will require visual mitigation for the properties overlooking the site. This could potentially be achieved through advanced planting as well as through enhancing existing hedgerows and trees to provide screening and improving the landscape character of the site. Screening along the eastern boundary of the site should be strengthened to reduce visual impact in this area.</p>
Archaeology	<p>Possible water meadow features, late medieval finds and an undated ring ditch have been recorded within the site. In addition, a series of Medieval and late Medieval finds and features have been recorded in the immediate area of the site. Although these features cannot be considered to be an absolute constraint to working the site, any applicant will need to work closely with the County Archaeologist to develop and implement sufficient and suitable mitigation plans.</p>
Historic built environment	<p>Mitigation in the form of buffering and landscape screening in the vicinity of listed buildings required.</p>
Traffic and transportation	<p>Consultation with the Highways Agency must be undertaken by any future applicant to satisfactorily demonstrate (at the planning application stage) that safe and suitable access onto the Cricklade junction of the A419 can be engineered. Any submitted planning application will need to avoid the use of the existing farm track and service road connecting to the Cricklade junction of the A419 and the Water Eaton road, as these routes are not up to required HGV standard. The site should be treated as an extension to nearby quarries, and any existing access arrangements should be utilised. A Transport Assessment should be submitted with a planning application to identify the measures that will be taken to adequately mitigate or compensate for the anticipated transport and related environmental impacts of the proposal.</p> <p>In addition, and where considered appropriate in law, financial contributions will be sought through the planning application process to cover highway improvements and, where deemed necessary, long term maintenance costs.</p>
Water environment	<p>The site lies in part within SPZ 3 and hence groundwater investigations will be required to determine measures to ensure protection of groundwater for this site and in relation to other adjacent mineral site workings. In addition, detailed consideration should be given to ensuring the protection of groundwater resources and continuity issues with the nearby North Meadow National Nature Reserve and SAC.</p> <p>The site is located within Flood Zones 2 and 3. A Flood Risk Assessment should be submitted with any subsequent planning application.</p> <p>A robust construction method statement and Hydrogeological Impact Assessment will be required to include details of groundwater protection and stockpile storage areas. Strict precautionary measures will be required to ensure that no stockpiling occurs within the floodplain and that the works compound</p>

Land east of Calcutt	
	<p>where storage of fuel oils and refuelling processes will take place, is situated beyond the floodplain or is suitably protected. Failure to comply could result in significant pollution and damage to local topsoils and built structures both on and off the site during flood events.</p> <p>Any subsequent planning application will also need to include quarry designs (phasing) and robust mitigation measures to address potential impacts associated with:</p> <ul style="list-style-type: none"> • Dewatering - to be considered in combination with surrounding quarrying operations and incorporating appropriate stand-offs to watercourses. • Elevated levels of suspended solids - covering the design of settlement lagoons, levels and design of site drains, and details of vehicle and wheel washing facilities. • Contamination from chemicals and fuel storage area - covering design and details related to the vehicle storage areas, storage of fuels and lubricants.
Cumulative effects	<p>Potential for cumulative effects (in both Wiltshire and bordering areas of Gloucestershire) on human health and amenity, traffic and transportation, noise and light pollution and vibration. Mitigation could be achieved through strategic phasing of workings in the area to reduce in combination effects. In addition, continued close working with Gloucestershire County Council will help ensure that cumulative effects are identified and, where appropriate addressed, through Sustainability Appraisal / Strategic Environmental Assessment and Habitats Regulations Assessment processes.</p>

Inset Map 5: Land at Cotswold Community



- Land at Cotswold Community
- Plan area

© Crown copyright and database rights 2011 Ordnance Survey 100049050



Table 2.6 : Land at Cotswold Community

Land at Cotswold Community	
Site details	<p>Resource Type: Sand and Gravel</p> <p>Site size: 38.56 hectares</p> <p>Grid reference: E 403600 N 195600</p> <p>Estimated resource yield: 2,760,000 tonnes</p> <p>Current use: Agricultural/ former Educational & Residential facility</p>
Site description	<p>The site option is located to the east of the Keynes Country Park (consisting of lakes used for recreation on either side of the former Cotswold Community School). The area is situated in proximity to the Wiltshire / Gloucestershire boundary and is currently within agricultural use on land which is predominantly classified as Grades 2 and 3 Best and Most Versatile.</p> <p>The nearest settlement is Ashton Keynes, approximately 1.6km to the south east of the site option. The nearest operational quarry is at Shorncote to the north of the site. The southern boundary of the site is formed by the western spine road, approximately 850m from the point at which it becomes part of the Local Lorry Route (eastern spine road - B4696). The spine road cycle track also runs along the southern perimeter of the site.</p> <p>The estimated yield for the site has been calculated to incorporate the use of additional mineral reserves located beneath the footprint of the former Cotswold Community School and the non-scheduled section of the eastern part of the site.</p>
Preferred restoration objective	<p>The site must be sensitively designed and worked in a phased manner to reduce and mitigate the local environmental impact of quarrying. Suitable restoration proposals for this site should be sympathetic to the uses taking place at Keynes Country Park and would include open water, ponds, reedbed, wet woodland or grazing pasture. The site is located within the 13km aerodrome safeguarding zone. However, unlike the other promoted site options, RAF Fairford have no significant concerns with the risk of birdstrike in this location.</p> <p>Enhancements for biodiversity should focus on connectivity of habitat areas via enhancements to hedgerows and ditches that can offer secluded corridors for wildlife commuting. In addition, the planting of blackthorn hedges to be managed specifically for Brown Hairstreak butterflies would significantly enhance the local opportunities for biodiversity gain. Proposals for restoration must aim to meet targets for named habitats and species in the Cotswold Water Park Biodiversity Action Plan (CWP BAP) and the Wiltshire Biodiversity Action Plan (WBAP). There is also potential to enhance public access through introducing cycle routes and board walks with interpretation boards.</p>

Land at Cotswold Community

Site development - key issues and potential mitigation measures

<p>Biodiversity and geodiversity</p>	<p>The site is within 2km of Clattinger Farm which is a component part of North Meadow and Clattinger Farm Special Area of Conservation (SAC). The Habitats Regulations Assessment (including the test of likely significant effects of operations at this site) indicate that there will be no likely significant effects on the designated features of the SAC. Evidence indicates that it is very unlikely that water quality, or water resources will be reduced within the European site as a function of quarrying from this site. Precautionary measures are available to protect groundwater and prevent impact from dust deposition, pollution or increased siltation from run off reaching the SAC.</p> <p>A number of species have been recorded in the nearby County Wildlife Sites (west and south) and from the Cotswold Community. These species include merlin, hobby, brown hairstreak, small blue (butterflies), badger, mediterranean gull, wimbrell, green sandpiper, otter, water vole, little ringed plover, osprey, (all either UK Biodiversity Action Plan Priority Species or Schedule 5 birds⁽¹¹⁾) together with great crested newts and at least 5 species of bat (both are European protected species). The barns located within the Cotswold Community support known bat roosts and care will be needed to ensure that key flight lines are preserved throughout the operation of the site. A considerable level of ecological survey will be required (through an extended Phase I ecological assessment) to assess the potential effects of mineral extraction on the adjacent County Wildlife Site and local fauna and flora. The ecological assessment should consider matters such as - the potential for habitat loss, dust and noise pollution and general disturbance. A robust construction method statement will be required to addresses these issues and present mitigation strategies that will remove or substantially reduce impacts to local biodiversity.</p>
<p>Human health and amenity</p>	<p>Air Quality:</p> <p>A robust Dust Management Plan (DMP) will need to be provided to support any subsequent planning application process. Where appropriate, reasonable and practicable, dust generating activities should be located away from dust sensitive receptors. The DMP should identify and provide appropriate mitigation and monitoring proposals for dust generating activities. Where appropriate, reasonable and practicable, a minimum 100 metre 'stand-off distance' to dust sensitive receptors should be planned for within the overall design of the site.</p> <p>Noise:</p> <p>Detailed consideration will need to be applied to the design of the site at the planning application stage. Robust mitigation and site monitoring measures will need to be designed to reduce the impact of quarrying on surrounding properties and businesses. The site will need to be worked in a sensitive and phased manner with consideration given to:</p>

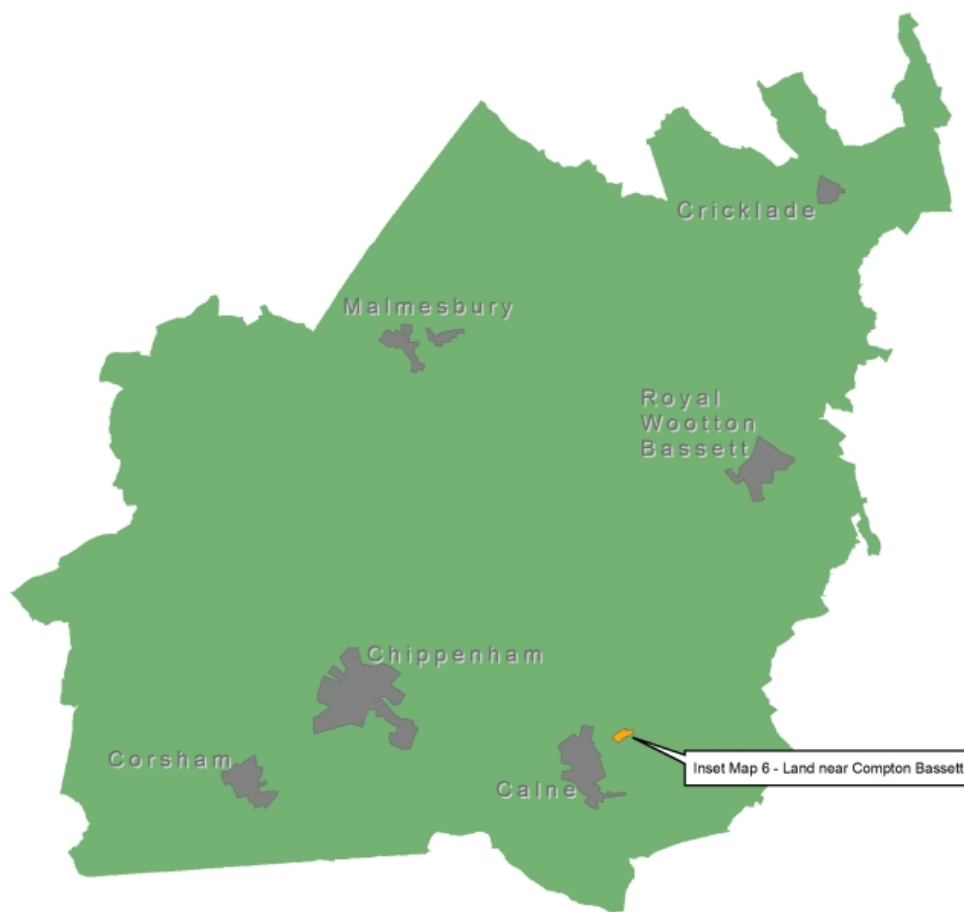
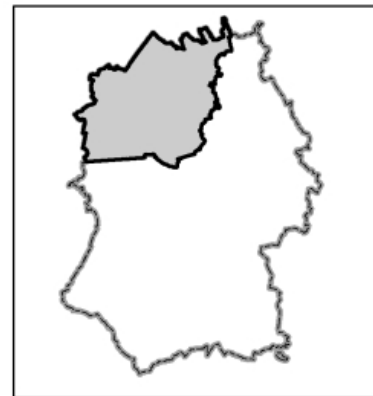
11 The Wildlife and Countryside Act 1981 (as amended)

Land at Cotswold Community	
	<ul style="list-style-type: none"> • The location of plant and machinery to utilise natural and operational features to provide effective screening from the closest noise sensitive receptors; • Utilising appropriately designed acoustic screening, baffle mounds and locally agreed 'stand-off' distances between quarry phases and noise sensitive receptors.
Landscape and visual	<p>The site can accommodate change, as the western part of the site area is completely screened and would lend itself well to be worked. A PRoW does run into the northern section of the site, however this is currently in a poor state and could be redirected and improved to provide greater local connectivity.</p> <p>The eastern part of the site is more open to views but this could be overcome by advanced planting of trees and hedgerows to minimise impacts. The surrounding character of the site is influenced by working quarries to the north and east, meaning that mineral activity on the site would not appear out of place in the surrounding landscape.</p>
Archaeology	<p>Within the immediate vicinity of the site, a Neolithic henge monument and a Saxon building are located to the north; whilst a number of undated ring ditches are located to the east of the site.</p> <p>Within the immediate area of the eastern section of the site, (to the north of the site) a Bronze Age settlement was excavated in advance of mineral extraction (152). A series of undated linear earthworks have also been recorded. A Scheduled Monument is also located in proximity to the southern boundary of the eastern section of the site. Although these features cannot be considered to be an absolute constraint to working the site, any applicant will need to work closely with the County Archaeologist to develop and implement sufficient and suitable mitigation plans.</p>
Historic built environment	<p>Mitigation in the form of bunds, 'stand-offs' and screening would be required to reduce impacts on listed buildings in the centre of the site.</p>
Traffic and transportation	<p>New access onto the site should avoid using the C85 Spine Road West and the adjoining junction with the current Cotswold Community access as these access routes are not suitable to serve this site due to current road alignment and land constraints. Significant upgrading of both the road, visibility and junction alignment will be required if these routes were to be used. Adequate access will be possible if the site is treated as an extension to the adjoining quarry to the north, utilising any existing access arrangements and conveyor systems. These highlighted concerns will need to be addressed through a Transport Assessment submitted with a planning application and to identify the measures that will be taken to adequately mitigate or compensate for the anticipated transport and related environmental impacts of the proposal.</p> <p>In addition, and where considered appropriate in law, financial contributions will be sought through the planning application process to cover highway improvements and, where deemed necessary, long term maintenance costs.</p>

Land at Cotswold Community	
Water environment	<p>A very small part of the site is situated within SPZ 3 and hence an appropriate level of groundwater investigations should be undertaken to ensure protection of groundwater for this site and adjacent restored mineral sites, County Wildlife Sites and water based business interests (for example, Keynes Country Park). Due to the anticipated depth of mineral resource, the infilling of pits following extraction for the purposes of restoration/ after use is likely to further alter groundwater flow and this may add to the potential impacts on surrounding lakes.</p> <p>The site is situated within Flood Zone 3. A Flood Risk Assessment should be submitted with any subsequent planning application.</p> <p>A Hydrogeological Impact Assessment will need to be provided through the planning application process. Any subsequent planning application will also need to include quarry designs (phasing) and robust mitigation measures to address potential impacts associated with:</p> <ul style="list-style-type: none"> • Dewatering - to be considered in combination with surrounding quarrying operations and incorporating appropriate stand-offs to watercourses. • Elevated levels of suspended solids - covering the design of settlement lagoons, levels and design of site drains, and details of vehicle and wheel washing facilities. • Contamination from chemicals and fuel storage area - covering design and details related to the vehicle storage areas, storage of fuels and lubricants.
Cumulative effects	<p>Potential for cumulative effects (in both Wiltshire and bordering areas of Gloucestershire) on human health and amenity, noise and light pollution and vibration. Mitigation could be achieved through strategic phasing of workings in the area to reduce in combination effects. In addition, continued close working with Gloucestershire County Council will help ensure that cumulative effects are identified and, where appropriate addressed, through Sustainability Appraisal / Strategic Environmental Assessment and Habitats Regulations Assessment processes.</p>

3. The Calne Area Minerals Resource Zone

Calne Area Minerals Site Allocation



Key

- Calne Area Site Option
- Key settlements in area
- North Wiltshire



© Crown copyright and database rights 2011 Ordnance Survey 100049050

The Calne Area - Context

- 3.1** The mineral resources within the Calne Mineral Resource Zone provide an essential supply of soft sand used for mortars, concreting and other industrial uses by the construction industry. Because of the nature of some of the end-uses, the aggregates produced from the area supply not only local markets but could potentially be transported over greater distances (in excess of 50km) than the sharp sand and gravel of the Upper Thames Valley.
- 3.2** The Calne Mineral Resource Zone is located broadly north of the centre of Wiltshire, within short distances of Swindon to the north-east; Chippenham to the west; Melksham and Trowbridge to the south-west; and Devizes to the south. The town of Calne is the largest settlement within the predominantly rural area, and is situated between the soft sand bearing geological deposits of greensand to the north-east and east and sandstone to the south-west. To date, the vast majority of minerals operations quarrying these deposits have occurred on land to the east, between Calne and the villages of Compton Bassett and Cherhill.
- 3.3** Table 3.1 indicates the provision that can be made by the allocated site in the Calne area to meet a locally derived forecast figure of 1.2 million tonnes of sand and gravel per annum.

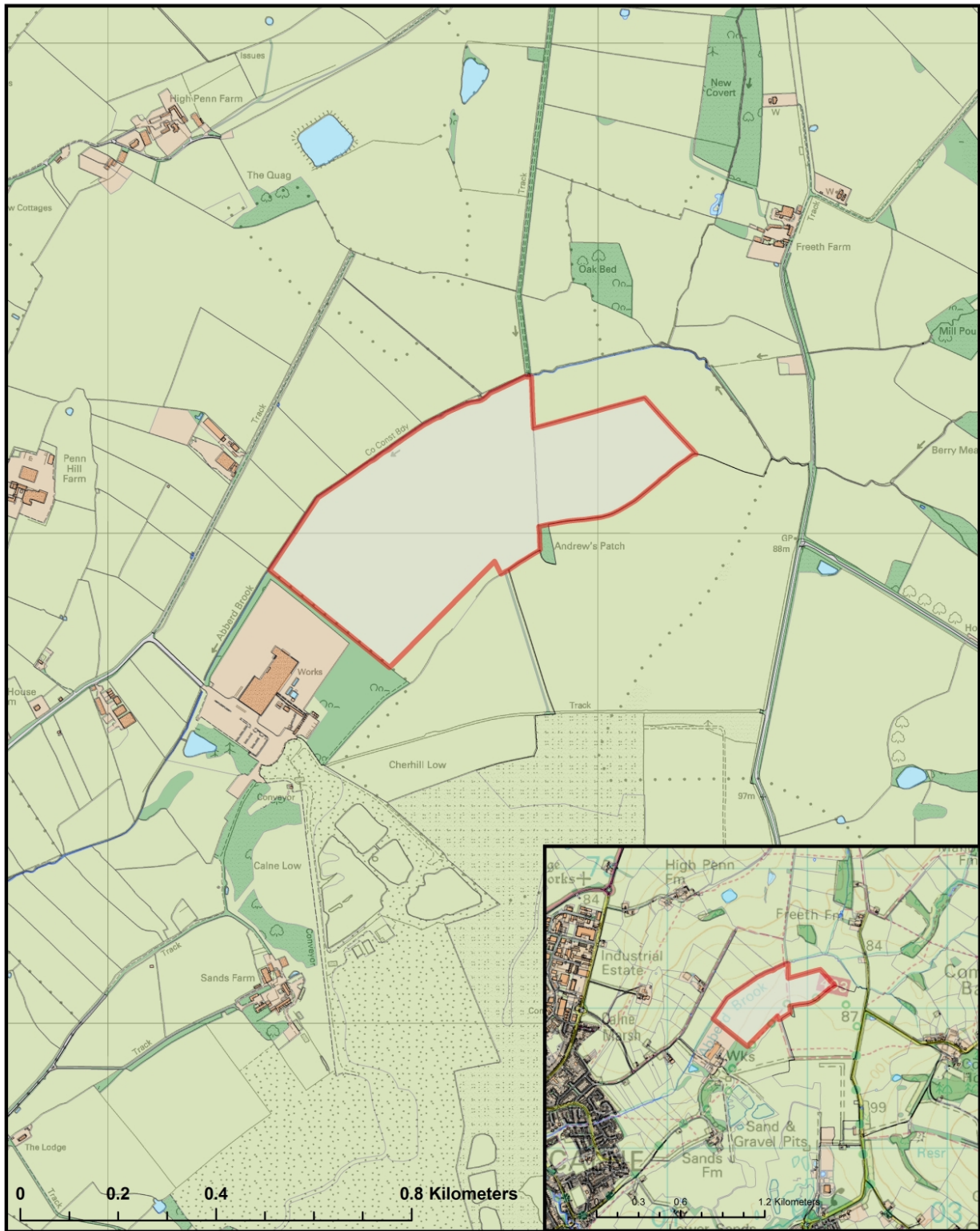
Table 3.1 Site options required to deliver the Calne area (soft sand) contribution to a locally derived apportionment figure


Calne Area site option required to deliver locally derived apportionment figure of 1.2 million tonnes (mt) per annum	A Forecast of need based on average of 10yrs past production as at 1st January 2011 (million tonnes)	B Permitted reserves and allocations as at 1st January 2011 (million tonnes)	(A-B) Residual requirement for the period up to 2026 (million tonnes)	Estimated yield of soft sand site options (million tonnes) ⁽¹²⁾
Land near Compton Bassett (estimated 0.45mt)	3.96	1.49	2.47	2.39

- 3.4** There is one site option required in the Calne area to contribute towards the maintenance of supply to 2026 and potentially beyond (at current extraction rates). The release of additional local resources are tied into the future plans of the two mineral companies operating in the area. These resources are covered by an extant, albeit Dormant mineral planning permission. It is considered that should an application for new planning conditions be submitted and approved, an additional 300 - 400,000 tonnes of sand would be released, thereby topping up the potential landbank further and ensuring that the requirement for the soft sand element of the overall locally derived figure of 1.2 million tonnes of sand and gravel per annum can be met. The following pages show the site option identified in the Calne area.

12 Combined estimated total yield of Land near Compton Bassett and Extensions to Brickworth Quarry

Inset Map 6: Land near Compton Bassett



 Land near Compton Bassett

© Crown copyright and database rights 2011 Ordnance Survey 100049050



Table 3.2 : Land near Compton Bassett

Land near Compton Bassett	
Site details	<p>Resource Type: Sand</p> <p>Site size: 23.4 hectares</p> <p>Grid reference: E 401700 N 172100</p> <p>Estimated resource yield: 450,000 tonnes</p> <p>Current land use: Agricultural</p>
Site description	<p>The closest settlements to the site option are Calne (approximately 1km to the south west) and Compton Bassett (approximately 1.2km east), although there are a few farmstead / private residencies within 500m of the site boundary. Outline consent for 350 homes at Sandpit Lane (located 670m to the south west of the site) has recently been granted on appeal. The site option is currently within agricultural use on land which is predominantly classified as Grades 2 and 3 Best and Most Versatile. The North Wessex Downs Area of Outstanding Natural Beauty (AONB) is approximately 300m east of the site. The northern boundary of the site is delineated by Abberd Brook. A PRoW crosses through the site.</p> <p>The area is served by the A3102 and A4 Local Lorry Routes, approximately 2km south west of the site.</p> <p>The nearest operational quarries to the site are at Sands Farm (to the south) and Lower Compton (east). Both these existing sites also operate as landfill/waste management facilities.</p>
Preferred restoration objective	<p>This site would form an extension to the adjacent quarries in the area. However, restoration through the controlled disposal of waste will not be considered appropriate as there is more than sufficient permitted landfill capacity for Wiltshire and Swindon. Instead, the site should be restored in a phased manner using inert material.</p> <p>Restoration proposals for this site should include returning the majority of the land to agriculture and incorporating - hedgerows, hedgerow trees, ponds and arable field margins to support the creation of BAP Priority Habitats and support habitats and species detailed in the Wiltshire Biodiversity Action Plan (WBAP). The enhancement of Abberd Brook is also encouraged and this may include presenting measures to reduce downstream flood risk in Calne (eg flood retention options).</p> <p>In addition, restoration proposals should seek to restore some of the land to woodland allowing increased opportunity for connection with existing woodland planting in the area. The PRoW network surrounding the site should also be enhanced.</p> <p>Post working, the overall design of the scheme should incorporate measures to improve the National Cycle Route 403 running adjacent to the south of the site.</p>

Land near Compton Bassett

Site development - key issues and potential mitigation measures

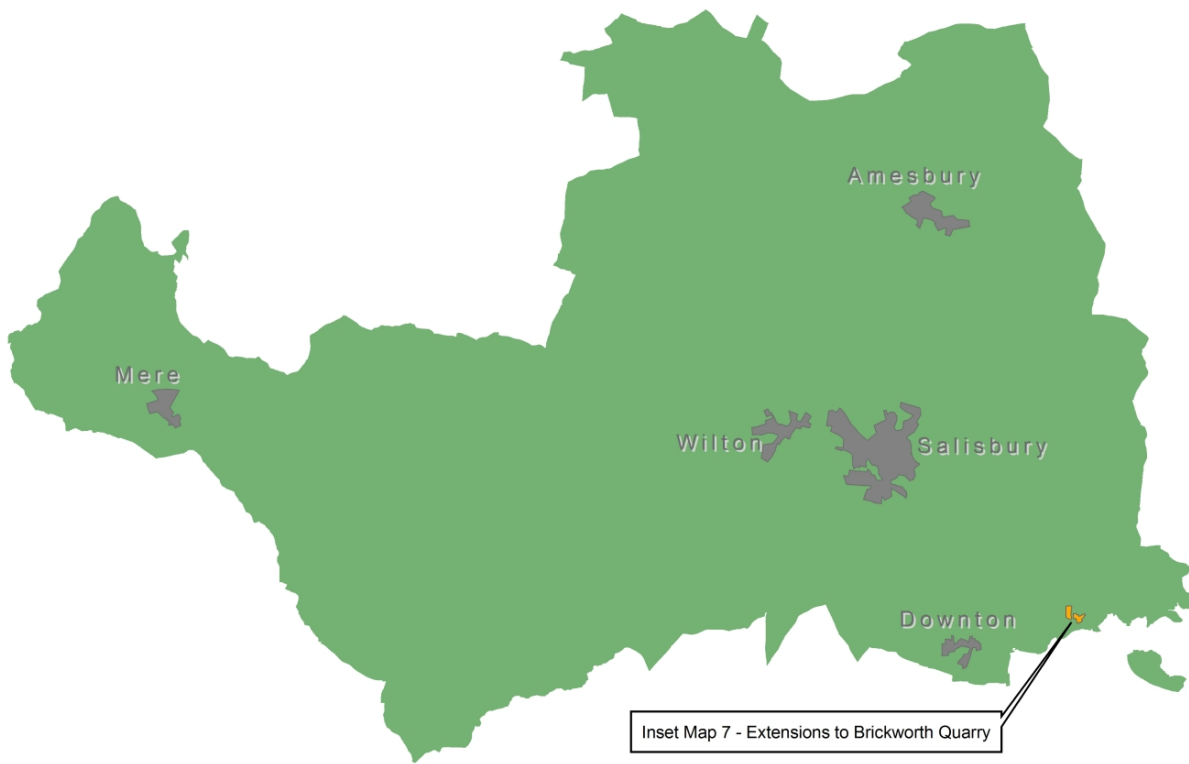
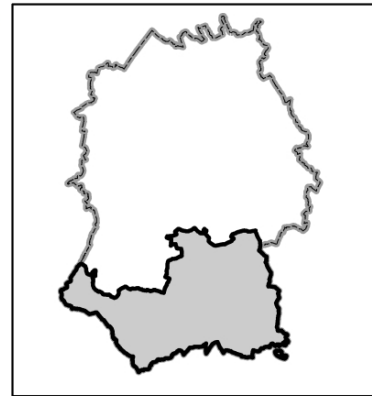
Biodiversity and geodiversity	<p>The Calne Sand Pits County Wildlife Site is located 250m to the south of the site. However it is unlikely that there will be any significant impact on the County Wildlife Site as a result of minerals operations on this site. The site would form an extension to an area that is currently operational for sand extraction and any habitat enhancement agreed, or already implemented in relation to existing extant permissions must not be compromised by any additional mineral extraction operations.</p> <p>The main ecological constraints on this site are in relation to the Abberd Brook that flows along the northern boundary of the site and the network of hedgerows, tree lines and small copses in the surrounding area that form secluded corridors crucial to the permeability of the habitat by wildlife species. These must be protected by suitable stand-offs and buffer zones, together with suitably robust methods for the prevention of pollution of the watercourse and/or any habitat areas downstream of the site.</p> <p>Species in the area include badger, grass snake, bats and particularly associated with the riparian habitat of the Abberd Brook, water voles and otters. An extended Phase I habitat survey with particular reference to these species will be required to inform any future planning application. A robust construction method statement will be required to address the protection of the Abberd Brook, hedgerows and tree lines and methods of working that will ensure that wildlife species are given due regard during either the operational phase or the restoration phase of the mineral workings. This document will also supply details of specific mitigation measures required for any protected species identified by the Phase I survey.</p>
Human health and amenity	<p>Air Quality:</p> <p>Due to the relative remoteness of the site, there are no receptors in the local vicinity. As a result, provided the site is sensitively designed and incorporates appropriate mitigation and monitoring measures, local air quality should not be adversely affected. Nevertheless, a robust Dust Management Plan (DMP) will need to be provided to support any subsequent planning application process.</p> <p>In addition, an assessment of local air quality should be submitted with any subsequent planning application. The assessment should focus upon vehicle routeing associated with the overall development of the site and existing neighbouring quarries / waste management operations. As part of the assessment process, consideration should be given to the feasibility of utilising alternative HGV routes and or speed management on the local highway network to reduce polluting emissions from vehicles entering and leaving the site(s).</p> <p>Noise:</p> <p>Again, the relative remoteness of this particular site, ensures that noise pollution should not be a significant factor to address through any subsequent planning application process. However, as with all quarrying proposals, detailed consideration will need to be applied to the design of the site at the planning</p>

Land near Compton Bassett	
	<p>application stage. Robust mitigation and site monitoring measures will need to be designed to reduce the impact of quarrying. The site will need to be worked in a sensitive and phased manner with consideration given to:</p> <ul style="list-style-type: none"> • The location of plant and machinery (including conveyor systems) to utilise natural and operational features to provide effective screening; • Utilising appropriately designed acoustic screening and baffle mounds.
Landscape and visual	<p>The site has potential to accommodate change provided local screening measures are enhanced and managed (for height) to reduce visual impact of workings. Potential for visual impact on views from Morgans Hill within the AONB will need to be assessed and appropriate mitigation put in place to limit long distance views into the site.</p> <p>Additional screening (in the form of hedgerows and trees) should be put in place to limit visual impact from properties located at Compton Bassett to the east of the site. The elevated position of PRow/Bridleway surrounding the site means that appropriate screening will be required to limit visual impact from these positions.</p>
Archaeology	<p>The site is considered as an area of low archaeological potential with no recorded archaeological features. The site is therefore unlikely to require archaeological mitigation.</p>
Historic built environment	<p>The site is unlikely to require substantial mitigation above that recommended on landscape and visual impact grounds.</p>
Traffic and transportation	<p>The site would be most suitable as an extension to the nearby quarry site utilising current access arrangements with a requirement to prohibit HGV traffic movements through the centre of Calne. Utilising access via Sandpit Lane rather than accessing the site from Lower Compton will aid in reducing the need for associated HGV movements through Calne town centre. A Transport Assessment should be submitted with any planning application to identify the measures that will be taken to adequately mitigate or compensate for the anticipated transport and related environmental impacts of the proposal.</p>
Water environment	<p>The site is situated predominantly within Flood Zone 1, but the northern boundary falls within Flood Zones 2 and 3 where it interacts with the Abberd Brook (main river). A Flood Risk Assessment should be submitted with any subsequent planning application and should make allowances for stand-offs to the Abberd Brook.</p> <p>A robust construction method statement and Hydrogeological Impact Assessment should also include details of groundwater protection and stockpile storage areas. Any subsequent planning application will also need to include quarry designs (phasing) and robust mitigation measures to address potential impacts associated with:</p> <ul style="list-style-type: none"> • Pollution Prevention - to be considered in combination with on-going landfilling operations to the south and south-east of the site and the management of surface waters.



Land near Compton Bassett	
	<ul style="list-style-type: none"> • Dewatering - to be considered in combination with surrounding quarrying operations and incorporating appropriate stand-offs to watercourses. • Elevated levels of suspended solids - covering the design of settlement lagoons, levels and design of site drains, and details of vehicle and wheel washing facilities. • Contamination from chemicals and fuel storage area - covering design and details related to the vehicle storage areas, storage of fuels and lubricants.
Cumulative effects	No cumulative effects expected as the site will likely act as an extension to current quarrying activity in the area.

4. The South East of Salisbury Mineral Resource Zone

South East of Salisbury Minerals Site Options



Key

-  South East of Salisbury Site Options
-  Key settlements in area
-  South Wiltshire



© Crown copyright and database rights 2011 Ordnance Survey 100049050

The South East of Salisbury - Context

- 4.1** The mineral resources associated with land to the south east of Salisbury provide an essential supply of soft sand used for mortars, concreting and other industrial uses by the construction industry. Due to the nature of some of the end-uses, the aggregates produced from the area supply not only local markets but are also believed to be transported over greater distances (in excess of 50km), sometimes further afield than what can be considered as the local market areas of Salisbury, Southampton and Bournemouth / Poole.
- 4.2** The area is located on the south eastern boundary of Wiltshire, within short distances of the city of Salisbury (10km) to the north-west; Southampton (20km) to the south-east; and Bournemouth and Poole (30km) to the south-west. The villages of Redlynch, Whiteparish and Downton are the largest settlements within the predominantly rural landscape.
- 4.3** Historically, the winning and working of aggregates has occurred on a relatively small scale in this area. Production is currently limited to a single site - Brickworth Quarry - which provides a supply of soft sand for the construction industry.
- 4.4** Table 4.1 indicates the provision that can be made by the allocated sites in the south east of Salisbury area to meet a locally derived forecast figure of 1.2 million tonnes of sand and gravel per annum.

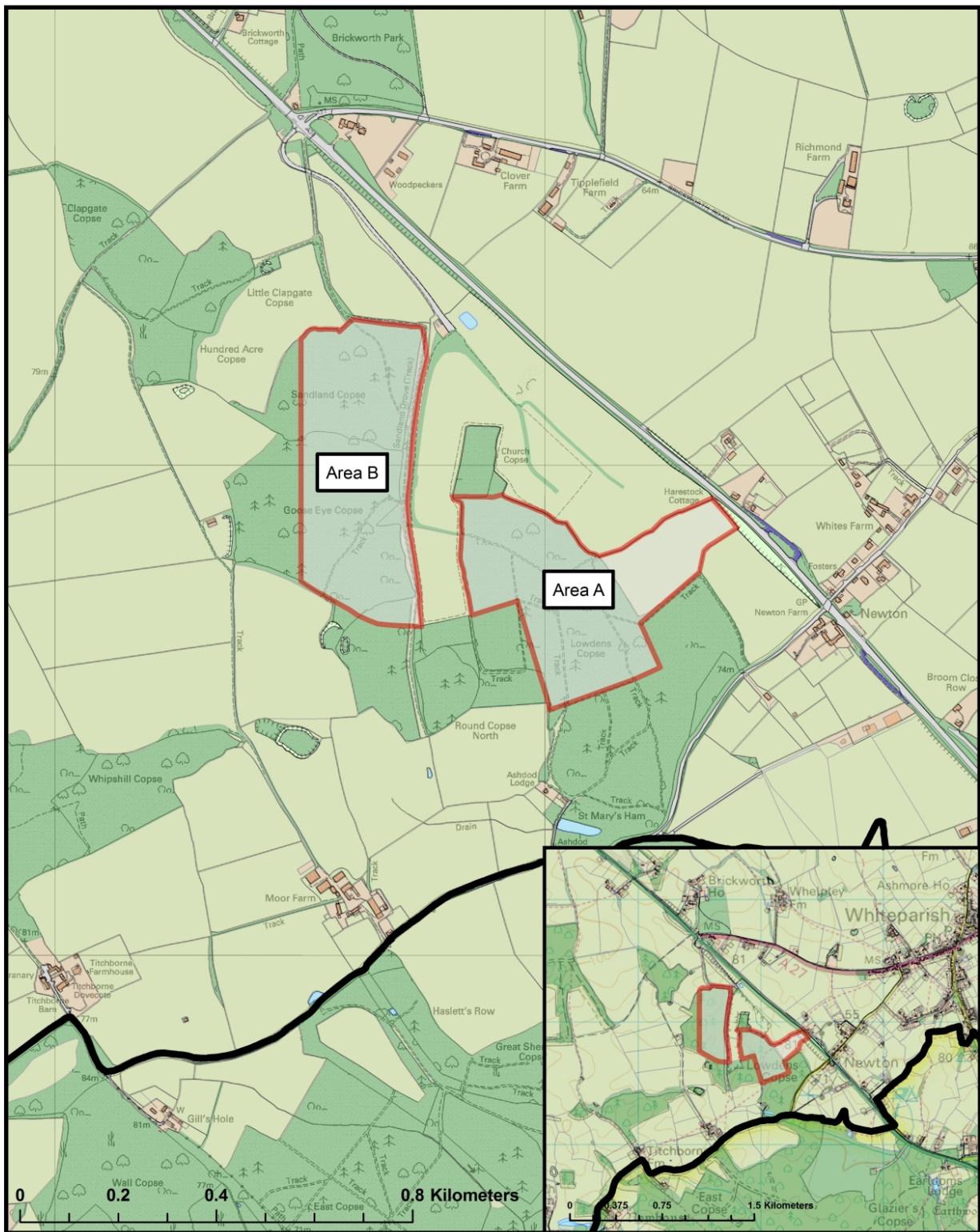
Table 4.1 Site options required to deliver the south east of Salisbury area (soft sand) contribution to a locally derived apportionment figure

SE Salisbury site options required to deliver locally derived apportionment figure of 1.2 million tonnes (mt) per annum	A Forecast of need based on average of 10yrs past production as at 1st January 2011 (million tonnes)	B Permitted reserves and allocations as at 1st January 2011 (million tonnes)	(A-B) Residual requirement for the period up to 2026 (million tonnes)	Estimated yield of soft sand site options (million tonnes) ⁽¹³⁾
Extension to Brickworth Quarry (estimated 1.94mt)	3.96	1.49	2.47	2.39

- 4.5** There is one site option required in the South East of Salisbury area to maintain supply to 2026 and potentially beyond (at current extraction rates). The following pages show the site option (split into 2 areas as an extension to Brickworth Quarry) in the South East of Salisbury area.

13 Combined estimated total yield of Land near Compton Bassett and Extensions to Brickworth Quarry

Inset Map 7: Extensions to Brickworth Quarry



- Extensions to Brickworth Quarry
- Plan area

© Crown copyright and database rights 2011 Ordnance Survey 100049050



Table 4.2 Extensions to Brickworth Quarry

Extensions to Brickworth Quarry - Area A and Area B	
Site details	<p>Resource Type: Sand</p> <p>Site size: 25.2 hectares</p> <p>Grid reference: E 422800 N 122900</p> <p>Estimated resource yield: 1,948,000 tonnes</p> <p>Current land use: Agricultural/Woodland</p>
Site description	<p>Areas A and B are located to the west of the A36, adjacent to Brickworth Quarry. The land is predominantly used for a mix of forestry and agriculture; and the land classified as Grade 3 Best and Most Versatile. Some of the land is also classified as County Wildlife Site / Ancient Woodland. The site is approximately 1km to the south west of Whiteparish and approximately 300m north of the New Forest National Park.</p> <p>There are a number of properties located in proximity to the eastern boundary of area A at Newton. There is a PRow which runs through Area A and another that runs adjacent to the eastern boundary of Area B.</p> <p>Area A and area B should be considered as one site but working should be rigorously phased, restored and managed.</p>
Preferred restoration objective	<p>As outlined above, Areas and A and B should be worked and restored in a phased manner. Restoration to lowland mixed deciduous woodland (through safeguarding and utilising the existing ancient woodland seed bank) to support surrounding BAP habitat in the area is a priority for this site whilst agricultural grazing could also be delivered in places. Restoration must be phased alongside extraction to avoid leaving areas unmanaged between being stripped, worked and restored.</p> <p>Restoration must aim to deliver targets within the Wiltshire Biodiversity Action Plan (WBAP) to support BAP habitats and species. A key focus of the restored site must be the connectivity of habitats both within and around the site and also out into the wider countryside area. Hedgerow and tree planting should be enforced to protect and enhance flight lines for, in particular, nearby barbastelle bat colonies. PRow should be enhanced and designed to move the public through the site and away from areas of sensitive habitat.</p>
Site development - key issues and potential mitigation measures	
Biodiversity and geodiversity	<p>This site lies within 1.5km to the north west of the New Forest Special Area of conservation (SAC). Test of likely significant effect on the designated features of the European site/Natura 2000 site as a result of operations concluded that although there is a mechanism for pollutants to potentially reach the SAC through hydrological connectivity, suitable mitigation methods could be employed to ensure that this would be prevented. The Habitats Regulations Assessment (including the test of likely significant effects of operations at this site) indicates</p>

Extensions to Brickworth Quarry - Area A and Area B

that there will be no likely significant effects on the designated features of the SAC; neither did it identify any other potentially damaging effects of mineral extraction for this Natura 2000 site.

One parcel of the New Forest SSSI, designated for its wet meadows interest, lies within 500m to the south west of area A and the southern tip of area A is hydrologically connected to the New Forest SSSI by a small watercourse. Area A lies partly within Lowden's Copse County Wildlife Site, with area B located almost entirely within the Sandland/Goose Eye Copse County Wildlife Site, all of which are designated for their Ancient Woodland interest. A third Ancient Woodland County Wildlife Site, Painter's Copse, lies a short distance to the south of the site. As the County Wildlife Sites are dependent on both surface water and ground water levels to maintain their special interest, any planning application for mineral extraction will need to provide evidence that the mineral workings will not impact on water levels in adjacent areas and that sediments in run-off can be contained within the site boundary.

There are existing records of badgers, dormouse, several species of butterflies and bats in close proximity to the site and recently recordings of great crested newts within the Brickworth Quarry site. Any future planning application should include an extended phase I habitat survey with particular reference to great crested newts, dormouse, butterflies, bat roosts in trees and bat foraging availability within and around the sites. Phase II species surveys should be conducted as indicated by the Phase I results.

A robust and detailed construction method statement will be required for operation of the site for extraction and restoration processes. This should address all the issues raised and must propose sufficient mitigation to ensure that local wildlife populations are not adversely impacted by the development. If areas of ancient woodland (standing or previously felled) are to be removed to facilitate mineral extraction, a strict soil handling strategy will be required to ensure that ancient woodland soils are preserved and can be returned to their original locations, unadulterated by other soils within the site.

Human health and amenity

Air Quality:

A robust Dust Management Plan (DMP) will need to be provided to support any subsequent planning application process. Where appropriate, reasonable and practicable, dust generating activities should be located away from dust sensitive receptors. The DMP should identify and provide appropriate mitigation and monitoring proposals for dust generating activities. Where appropriate, reasonable and practicable, a minimum 100 metre 'stand-off distance' to dust sensitive receptors should be planned for within the overall design of the site.

Noise:

Detailed consideration will need to be applied to the design of the site at the planning application stage. Robust mitigation and site monitoring measures will need to be designed to reduce the impact of quarrying on surrounding properties and businesses. The site will need to be worked in a sensitive and phased manner with consideration given to:

Extensions to Brickworth Quarry - Area A and Area B	
	<ul style="list-style-type: none"> The location of plant and machinery (including conveyor systems) to utilise natural and operational features to provide effective screening; Utilising appropriately designed acoustic screening and baffle mounds.
Landscape and visual	The site has potential to accommodate change, as it has good existing screening and the opportunity for additional strengthening. The PRoW located in the area may require temporary diversion whilst workings take place. Screening within and around the site should be improved by bolstering hedgerows and retaining some woodland in places. The condition of the landscape could be enhanced in the long term by encouraging new woodland edge planting with native deciduous species and planting hedgerow trees to replace any ageing hedgerow trees on site.
Archaeology	There is a Late Medieval Settlement located within area A and a further settlement with Medieval origins located to the east of the area. An undated field system has been recorded to the west of area B. Although these features cannot be considered to be an absolute constraint to working the site, any applicant will need to work closely with the County Archaeologist to develop and implement sufficient and suitable mitigation plans.
Historic built environment	No mitigation required as the site is significantly screened from nearby settlements and properties and is considered to be of low sensitivity.
Traffic and transportation	Access/egress from the site onto the A36 is suitable through existing access to Brickworth Quarry. Infrastructure is currently in place and any planning application should seek to utilise this as a continuation of existing access arrangements. The existing traffic routing agreement should be maintained and, where appropriate, updated and re-applied through the completion of a new legal agreement.
Water environment	<p>The sites (A and B) lie within SPZ 3 and hence groundwater investigations will be required to determine measures to ensure protection of groundwater for the site, nearby licenced abstraction points and the New Forest SSSI.</p> <p>As the New Forest SSSI and some of the surrounding County Wildlife Sites are dependent on both surface water and ground water levels to maintain their special interest, any planning application for future development of the site for mineral extraction will need to provide evidence that the mineral workings will not impact on water levels in adjacent areas; and that sediments in run-off can be contained within the site boundary.</p> <p>Parts of the site lie within Flood Zones 2 and 3. A Flood Risk Assessment should be submitted with any subsequent planning application.</p> <p>A robust construction method statement and Hydrogeological Impact Assessment will be required to include details of groundwater protection and stockpile storage areas. Any subsequent planning application will also need to include quarry designs (phasing) and robust mitigation measures to address potential impacts associated with:</p> <ul style="list-style-type: none"> Pollution Prevention - to fully consider and address all potential pollutant pathways and risks to existing surface waters and watercourses.

Extensions to Brickworth Quarry - Area A and Area B

	<ul style="list-style-type: none"> • Dewatering - to be considered in combination with surrounding quarrying operations and incorporating appropriate stand-offs to watercourses. • Elevated levels of suspended solids - covering the design of settlement lagoons, levels and design of site drains, and details of vehicle and wheel washing facilities. • Contamination from chemicals and fuel storage area - covering design and details related to the vehicle storage areas, storage of fuels and lubricants. <p>Strict precautionary measures will be required to ensure that no stockpiling occurs within the floodplain and that the works compound where storage of fuel oils and refuelling processes will take place, is situated beyond the floodplain.</p>
Any other issues	The gas/oil pipeline located to the east of the site will require detailed consideration and planned protection measures akin to those currently being successfully employed on site. Appropriate standoffs and protection from mineral workings on site will need to be developed.
Cumulative effects	Potential for cumulative effects on human health and amenity, the PRow network, traffic and transportation, noise and light pollution, vibration and air quality. Mitigation could be achieved through phasing of workings in the area to reduce in combination effects.

5. Monitoring Framework

- 5.1** The preparation of the Aggregate Minerals Site Allocations DPD has been informed by a supporting evidence base. The sites contained within the draft DPD must be monitored and reviewed to ensure that the document responds to changing circumstances; and any other factors affecting the deliverability of the sites contained within it. Policy MCS11 in the adopted Minerals Core Strategy sets out the councils' commitment to delivering a 'plan, monitor and manage' approach to implementing, monitoring and reviewing proposals for minerals development in Wiltshire and Swindon. In line with this, the councils have prepared a monitoring framework for this draft DPD that should be used in conjunction with the monitoring frameworks outlined in both the adopted Minerals Core Strategy and Mineral Development Control Policies DPDs.
- 5.2** The monitoring framework prepared by the councils comprises a short set of indicators and targets. These are consistent with statutory indicators, those included in the councils Annual Monitoring Report (AMR) and the Sustainability Assessment/Strategic Environmental Assessment framework, which support the overall Minerals Development Framework.
- 5.3** The information on monitoring of the site allocations will be reported in the councils' AMRs. Monitoring indicators related to site allocations are set out in the adopted Minerals Core Strategy and shown in Table 5.1. Additional indicators which have been prepared as part of this Site Allocations DPD are set out in Table 5.2.

Table 5.1 Related Minerals Core Strategy monitoring indicators

Policy	Indicator	Responsible agency	Target	Threshold for investigation
MCS1	Remaining resources allocated in Preferred Areas or sites.	Wiltshire Council/Swindon Borough Council	Sufficient to meet forecast demand.	When reserves are insufficient to maintain a minimum 7 year land bank.
MCS1	Total resources allocated in Site Allocations DPD.	Wiltshire Council/Swindon Borough Council	Sufficient to meet forecast demand.	When reserves are insufficient to maintain a minimum 7 year land bank.

Table 5.2 Aggregate Minerals Site Allocations monitoring indicators

Indicator	Responsible agency	Target	Threshold for investigation
% of minerals sites that have been permitted outside of those allocated in the Minerals Site Allocations DPD	Wiltshire Council/Swindon Borough Council	0%	2 applications received within 5 years for minerals sites permitted outside of those allocated in the Minerals Site Allocations DPD.
% of applications with restoration proposals considered in line with the preferred site restoration objectives detailed through	Wiltshire Council/Swindon Borough Council	100%	If the percentage of applications with preferred site restoration objectives falls below 80%.

Indicator	Responsible agency	Target	Threshold for investigation
the Minerals Site Allocations DPD			

Appendix 1: Glossary of terms

Glossary of terms

	Agricultural Land Classification - The Department for Environment, Food and Rural Affairs (DEFRA's) system of classifying agricultural land quality. There are five grades numbered 1 to 5 with grade 3 divided into two sub-grades (3a and 3b).
	Ancient Woodland - Land that has had continuous woodland cover since 1600AD as designated by Natural England.
AMR	Annual Monitoring Report - A report that principally describes how a Local Planning Authority (LPA) is performing in terms of meeting the targets and aspirations for Local Development Document (LDD) preparation as set out in its three-year project plan (the Local Development Scheme). If, as a result of monitoring performance, the Authority's Scheme requires modification, the AMR will be used to justify why targets have not been met within the monitoring year.
AONB	Area of Outstanding Natural Beauty - A landscape area of high natural beauty which has special status, and within which major development will not be permitted, unless there are exceptional circumstances. Designated under the 1949 National Parks and Access to the Countryside Act.
	Biodiversity Action Plan Priority Habitat - List of 65 priority habitats highlighted as priorities for conservation actions under the UK BAP. Priority habitats cover a wide range of semi-natural habitat types that are considered to be particularly important for biodiversity conservation.
BGS	British Geological Survey - A partly publicly funded body which aims to advance geoscientific knowledge of the UK landmass and its continental shelf by means of systematic surveying, monitoring and research.
CLG	Communities and Local Government - Government department for planning and local government.
	Conservation Area - An area of Special Architectural or Historic Interest, the character or appearance of which it is desirable to preserve or enhance, as required by the 'Planning (Listed Buildings and Conservation areas) Act 1990' (Section 69 and 70). Within a Conservation Area there are additional planning controls over certain works carried out.
	Core Strategy DPD - This is one of the most important DPDs to be produced. Wiltshire Council and Swindon Borough Council have produced joint Minerals and Waste Core Strategy DPDs to define the long term strategic vision and policies for minerals and waste development in the plan area.
CWP BAP	Cotswold Water Park Biodiversity Action Plan - The vision of this plan is for the Cotswold Water Park in 2050 to be a premier site for nature conservation where the requirements of industry, leisure, people and wildlife are successfully integrated.
	Cotswold Water Park Society - Formed in 1996, this is a non-profit-distributing environmental body with charitable status which works in partnership with local authorities, parish councils, landowners, mineral companies, environmental organisations, businesses and the Joint Committee - to achieve a careful balance between development, recreation and nature conservation in the Cotswold Water Park.

CWS	County Wildlife Site - Areas of land of recognised value for wildlife, which fall outside the legal protection given to Sites of Special Scientific Interest (SSSI). The Wiltshire Wildlife Sites Project identifies, designates and monitors CWSs and, to date, over 1,500 such sites in have been designated in Wiltshire.
DIO	Defence Infrastructure Organisation - Manages the the military estate, including accommodation for Service personnel and their families, on behalf of the MoD. The DIO was formed on 1 April 2011, when the former Defence Estates organisation was brought together with other infrastructure functions in the MoD to form a single organisation.
	The development plan - The government is committed to ensuring that planning decisions on proposals for development or the change of use of land should not be arbitrary. The statutory development plan will continue to be the starting point in the consideration of planning applications (Section 38(6) of the Planning and Compulsory Purchase Act 2004).
DPD	Development Plan Document - Spatial planning documents that are subject to independent examination. They will have 'development plan' status (please see the explanation of 'the development plan').
DMP	Dust Management Plan - A holistic approach to the management of dust from all sources within quarry sites. A DMP will present a method statement for the control and management of dust throughout the operation of a quarry.
	EC Directive - A European Community legal instruction, which is binding on all Member States, but must be implemented through legislation of national governments within a prescribed timescale.
EA	Environment Agency - Established in April 1996, combining the functions of former local waste regulation authorities, the National Rivers Authority and Her Majesty's Inspectorate of Pollution. Intended to promote a more integrated approach to waste management and consistency in waste regulation. The Agency also conducts national surveys of waste arising and waste facilities.
FRA	Flood Risk Assessment - An assessment of the risk of flooding to the development being proposed and its possible effects on flood risks elsewhere in terms of its effects on flood flows, flood storage capacity and run-off.
	Flood Zone 1 - Defined in PPS 25 as 'Low Probability' of flooding. This zone comprises land assessed as having a less than 1 in 1000 annual probability of river or sea flooding in any year (<0.1%).
	Flood Zone 2 - Defined in PPS 25 as 'Medium Probability' of flooding. This zone comprises land assessed as having between a 1 in 100 and 1 in 1000 annual probability of river flooding (1% – 0.1%) or between a 1 in 200 and 1 in 1000 annual probability of sea flooding (0.5% – 0.1%) in any year.
	Flood Zone 3a - Defined in PPS 25 as 'High Probability' of flooding. This zone comprises land assessed as having a 1 in 100 or greater annual probability of river flooding (>1%) or a 1 in 200 or greater annual probability of flooding from the sea (>0.5%) in any year.
	Flood Zone 3b - Defined in PPS 25 as 'The Functional Floodplain'. This zone comprises land where water has to flow or be stored in times of flood.
	Greenfield site - A site previously unaffected by built development.

HRA	Habitats Regulations Assessment - The assessment of the impacts of implementing a plan or policy on a Natura 2000 Site. Its purpose is to consider the impacts of a land use plan against conservation objectives of the site and to ascertain whether it would adversely affect the integrity of the site. Where significant negative effects are identified, alternative options should be examined to avoid any potential damaging effects.
HGV	Heavy Goods Vehicle - A lorry/truck weighing more than 3.5 tonnes.
	Highways Agency - An executive agency, part of the Department for Transport in England.
	Hydrogeological Impact Assessment - A process of identifying and managing the environmental impacts of development on groundwater resources. The process is linked to existing Environment Agency Policy GP3.
LDD	Local Development Document - A LDD will form part of the LDF and can either be a DPD or a SPD. Wiltshire Council is responsible for producing a Minerals and Waste Development Framework containing Minerals and Waste LDDs.
LDF	Local Development Framework - The LDF comprises a portfolio of LDDs that will provide the framework for delivering the spatial planning strategy for the area. District and Unitary Authorities will prepare LDFs for their area.
LDS	Local Development Scheme - The LDS sets out a three year programme for the preparation of LDDs. As a unitary Planning Authority, Wiltshire Council have prepared separate but complimentary Development Schemes, setting out a timetable for preparation of all planning policy documents including Minerals Development Documents and Waste Development Documents. Schemes must be submitted to the Secretary of State for approval and monitored annually through the AMR system.
LPA	Local Planning Authority - The local authority or council that is empowered by law to exercise planning functions for a particular area of the UK.
MRZ	Mineral Resource Zone - Policy MCS1 of the adopted Minerals Core Strategy states that proposals for new or extended sites for sand and gravel extraction should be located within the Mineral Resource Zones, as identified on the Key Diagram and Proposals Map.
MPS1	Minerals Planning Statement 1 - Published in 2006, this is the overarching planning policy document for all minerals in England. It provides advice and guidance to planning authorities and the minerals industry.
MPA	Minerals Products Association - The trade body for the UK's aggregates, cement and concrete industries.
MoD	Ministry of Defence - The part of the government responsible for matters of military defence.
NNR	National Nature Reserve - a Site of Special Scientific Interest (SSSI) of national or international importance for nature conservation, which is owned or leased by English Nature or is managed on their behalf in the interests of wildlife, research and public appreciation.

	National Park - A reserve declared by a government. In the UK there are 15 members in the National Park family which are protected areas because of their beautiful countryside, wildlife and cultural heritage.
NPPF	National Planning Policy Framework - The draft NPPF was published in July 2011. This is a key part of the Conservative/Liberal Democrat coalition government's reforms to make the planning system less complex and more accessible, and to promote sustainable growth.
	Natural England - A non-departmental public body responsible for ensuring that England's natural environment is protected and improved.
PPG	Planning Policy Guidance note - Government policy statements on a variety of issues that are material considerations in determining planning applications.
PPS	Planning Policy Statement - Guidance documents which set out national planning policy.
PRoW	Public Right of Way - PRoW are highways that allow the public a legal right of passage.
RIGS	Regionally Important Geological or Geo-morphological Site - Important sites for geology and geo-morphology outside of statutorily protected land as identified by the local authority.
	Restoration - The methods by which the land is returned to a condition suitable for an agreed after-use following the completion of operations.
RSS	Regional Spatial Strategy - A regional level planning framework for the regions of England, outside London where spatial planning is the responsibility of the Mayor. They were introduced in 2004. Their revocation was announced by the Conservative/Liberal Democrat coalition government on 6 July 2010. On 10th November 2010 Mr Justice Sales ruled in the case of Cala Homes (South) Ltd v Secretary of State for Communities and Local Government that The Secretary of State for Communities and Local Government was not entitled to use the discretionary power to revoke regional strategies contained in s79(6) of the Local Democracy, Economic Development and Construction Act 2009 to effect the practical abrogation of the regional strategies as a complete tier of planning policy guidance.
RAF	Royal Air Force - The UK's air force, formed in 1918.
RSPB	Royal Society for the Protection of Birds - A charitable organisation which works to promote conservation and protection of birds and the wider environment through public awareness campaigns, petitions and through the operation of nature reserves throughout the UK.
SM	Scheduled Monument - These are archaeological sites or historic buildings considered to be of national importance by the government. The current legislation, the Ancient Monuments and Archaeological Areas Act 1979, supports a formal system of Scheduled Monument Consent for any work to a designated monument. Scheduling is the only legal protection specifically for archaeological sites.
SSSI	Site of Special Scientific Interest - This is a conservation designation denoting a protected area in the UK. SSSIs are the basic building blocks of site based nature conservation legislation including the very best wildlife and geological sites, as designated

	by Natural England. There are over 4,100 SSSIs in England, covering approximately 8% of the country's land area.
	South West Nature Map - A broad scale, strategic vision for change which offers a spatially-based tool for identifying where biodiversity enhancement should be delivered in the future, using existing areas of wildlife value as a starting point. The Nature Map identifies blocks of land, known as Strategic Nature Areas (SNAs) that represent the best areas to maintain and expand wildlife habitats through their management, restoration and/or re-creation.
SPZ	Source Protection Zone - These are groundwater sources used for public drinking water supply. These zones show the risk of contamination from any activities that might cause pollution in the area. The closer the activity, the greater the risk. The SPZ maps show three main zones (inner, outer and total catchment) and a fourth zone of special interest.
SAC	Special Area of Conservation - Designation made under the Habitats Directive to ensure the restoration or maintenance of certain natural habitats and species some of which may be listed as 'priority' for protection at a favourable conservation status.
SPA	Special Protection Area - Designations made under the EC Directive 79/409 on bird conservation (The Birds Directive), the aim of which is to conserve the best examples of the habitats of certain threatened species of bird the most important of which are included as priority species.
	Stakeholder - Anyone who is interested in, or may be affected by the planning proposals that are being considered.
SSCT	Strategically Significant Cities and Towns - Those settlements which play a critical strategic role either regionally or sub-regionally, as identified in the draft RSS (intended for revocation).
SEA	Strategic Environmental Assessment - The EC Directive 2001/42/EC on the effects of certain plans and programmes on the environment (The SEA Directive) was implemented through the Environmental Assessment of Plans and Programmes Regulations 2004, which requires plans and programmes to be examined for likely significant effects on the environment. This legislation places greater importance on the need to consider alternatives as part of the plan preparation process.
SFRA	Strategic Flood Risk Assessment - Required as part of the local planning process as set out in PPS 25: Development and Flood Risk. SFRAs are primarily produced by local planning authorities, in consultation with the Environment Agency, and are intended to form the basis for preparing appropriate policies for flood risk management at the local level. SFRAs are used to inform site-specific Flood Risk Assessments (FRAs) for individual planning applications.
SRN	Strategic Road Network - The Highways Agency is responsible for operating the SRN in England which consists of most motorways and significant trunk A roads.
SCI	Statement of Community Involvement - Sets out the Council's vision and strategy for the standards to be achieved in involving the community and stakeholders in the preparation of all LDDs and in decisions on planning applications.
SPD	Supplementary Planning Document - Whilst not having 'development plan' status, SPDs can form an important part of the LDF of an area. They can be used to expand

	policy or provide further detail to policies in DPDs. Community involvement will be important in preparing SPDs but they will not be subject to independent examination.
	Sustainability Appraisal - LPAs are bound by legislation to appraise the degree to which their plans and policies contribute to the achievement of sustainable development. The process of SA is similar to Strategic Environmental Assessment (SEA) but is broader in context, examining the effects of plans and policies on a range of social, economic and environmental factors. To comply with government policy, Wiltshire Council and Swindon Borough Council are producing a SA that incorporates a SEA of its Minerals and Waste LDDs.
	Swindon Borough Council - Local government authority centred on the town of Swindon.
	Thames Path National Trail - A walk following the River Thames from its source in the Cotswolds to the Thames Barrier in London.
UK BAP	UK Biodiversity Action Plan - Published in 1994, this was the UK Government's response to signing the Convention on Biological Diversity (CBD) at the 1992 Rio Earth Summit. UK BAP Priority Habitat is a list of 65 habitats highlighted as priorities for conservation. The priority habitats cover a wide range of semi-natural habitat types that are judged to be particularly important for biodiversity conservation, and are recognisably distinct within the broad habitats of the UK.
WBAP	Wiltshire Biodiversity Action Plan - The Wiltshire BAP 2008 contains 10 Habitat Action Plans, 1 Species Action Plan, and 1 Habitat Information Note.
	Wiltshire Council - The new unitary authority for Wiltshire as of 1 April 2009.