

Points of the Compass Appraisal

13 January 2017

# Quality information

Checked by	Approved by	
_		
Nick Chisholm-Batten Principal Consultant	Alex White Associate Director	
		Nick Chisholm-Batten Alex White

# Revision History

Revision	<b>Revision date</b>	Details	Authorized	Name	Position
1	12 <sup>th</sup> January 2017	Initial draft for client comment	13 <sup>th</sup> January 2017	Nick Chisholm- Batten	Principal Consultant

### Prepared for:

Melksham Neighbourhood Plan Steering Group

### Prepared by:

AECOM Infrastructure & Environment UK Limited 3rd Floor Portwall Place Portwall Lane Bristol BS1 6NA UK

T: +44 117 901 7000 aecom.com

© 2017 AECOM Infrastructure & Environment UK Limited. All Rights Reserved.

This document has been prepared by AECOM Infrastructure & Environment UK Limited ("A ECOM") for sole use of our client (the "Client") in accordance with generally accepted consultancy principles, the budget for fees and the terms of reference agreed between AECOM and the Client. Any information provided by third parties and referred to herein has not been checked or verified by AECOM, unless otherwise expressly stated in the document. No third party may rely upon this document without the prior and express written agreement of AECOM.

# **Table of Contents**

1.	Introduction	1
2.	Areas considered	1
3.	Approach to the points of the compass appraisal	3
4.	Glossary of constraints	4
5.	Biodiversity	7
6.	Land and soil resources	11
7.	Water resources and flood risk	
8.	Air quality and environmental pollution	19
9.	Historic environment	
10.	Landscape	21
11.	Summary of environmental constraints	22
	11.1 Quadrant 1	
	11.2 Quadrant 2	22
	11.3 Quadrant 3	22
	11.4 Quadrant 4	

## 1. Introduction

AECOM has been commissioned to undertake an independent site assessment and strategic environmental assessment (SEA) in support of the emerging Melksham Neighbourhood Plan (MNP).

The MNP is currently being prepared as a Neighbourhood Development Plan under the Localism Act 2012. The Melksham Neighbourhood Plan area, which covers Melksham Town and Melksham Without Parish<sup>1</sup> in Wiltshire, is being prepared in the context of the Wiltshire Local Plan.

To support the development of the Neighbourhood Plan, the Neighbourhood Plan Steering Group is considering potential locations for allocating sites for housing, employment and Local Green Space through the MNP. This process is being supported through the independent site assessment and an SEA process.

As a first stage for the consideration of potential locations for site allocations, a number of broad areas around Melkshamtown have been evaluated with a view to establishing the likely environmental constraints to development in each area.

In this context, this report presents the findings of this process through a 'points of the compass' appraisal of the Melksham Neighbourhood Plan area. It is anticipated that this will provide an overview of the relative merits of promoting development at various broad areas within the Melksham Neighbourhood Plan area. By doing so, it is anticipated that the appraisal findings will inform forthcoming consultation to be undertaken on the MNP, as well as subsequent decision-making on the choice of broad locations for sites to be allocated through the Neighbourhood Plan.

## 2. Areas considered

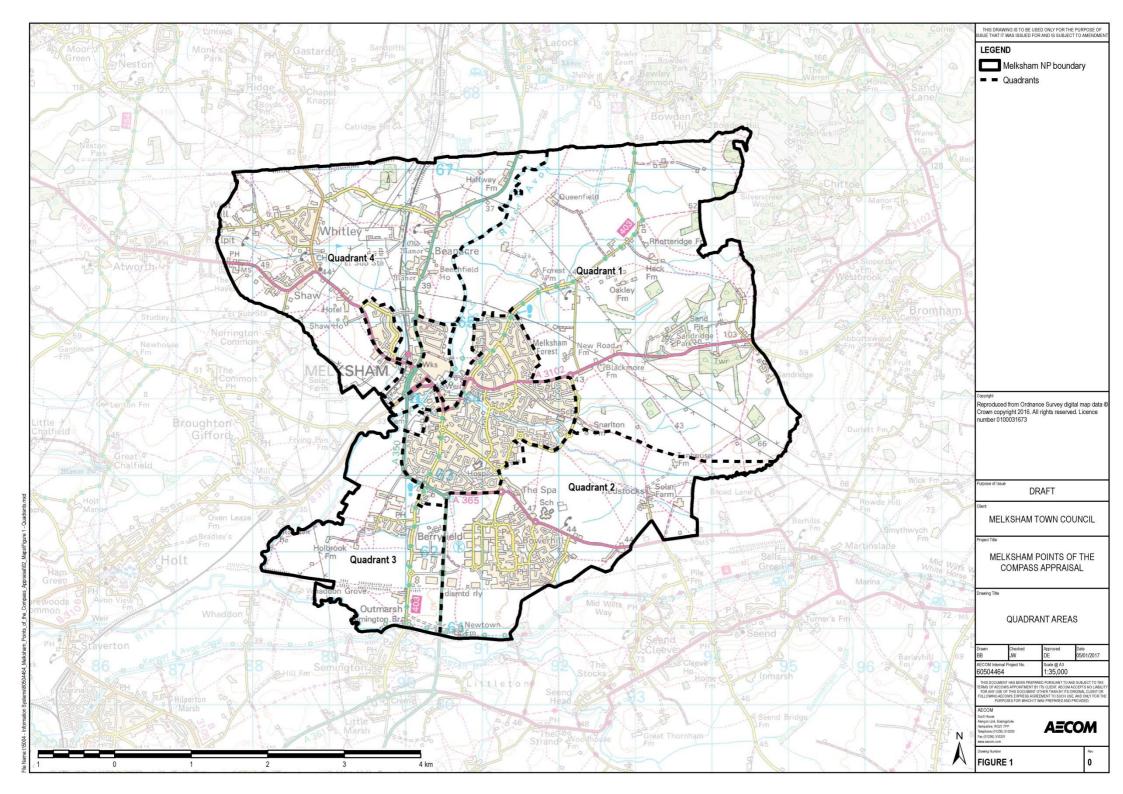
This report has considered four broad areas in the Melksham Neighbourhood Plan area (hereafter referred to as 'quadrants'). These quadrants comprise the areas located outside of the built up area of Melksham town.

The quadrants are as follows:

- Quadrant 1: North East of Melksham The area north east of Melksham and Melksham Forest, bounded by the River Avon to the west and a Public Right of Way to the south. The northern limit is defined by the Melksham Without parish boundary, which follows the course of an old Roman road, while the eastern boundary has no discernible features. The quadrant incorporates Sandridge Park.
- Quadrant 2: South East of Melksham The area is south east of Melksham, bounded by the A350 to the west, the Kennet and Avon Canal to the south and a Public Right of Way to the north. The quadrant incorporates Bowerhill.
- Quadrant 3: South West of Melksham The quadrant comprises the area south west of Melksham, bounded by A 350 to the east, the Kennet and Avon Canal to the south, the River Avon to the west, and Melksham Lane to the north. The quadrant incorporates Berryfield.
- Quadrant 4: North West of Melksham The area is situated north west of Melksham, bounded by an unnamed watercourse to the south and the River Avon to the east. The northern limit is defined by the Melksham Without parish boundary, which follows the course of an old Roman road, while the western boundary has no discernible features. The quadrant incorporates the villages of Shaw, Whitley and Beanacre.

Figure 1 presents the location and boundary of the quadrants.

<sup>&</sup>lt;sup>1</sup> The Melksham Neighbourhood Plan area covers the areas administrated by Melksham Town Council and Melksham Without Parish Council. It does not cover the outlining parishes which are included in the Melksham Community Area.



## 3. Approach to the points of the compass appraisal

The points of the compass appraisal evaluates the key environmental constraints present in each of the four quadrants, including those related to:

- Biodiversity;
- Land and soil resources:
- Water resources and flood risk;
- Air quality and environmental pollution;
- Historic environment: and
- Landscape.

This appraisal has been undertaken by AECOM as an independent and objective desk-based assessment with reference to the following principal sources of information:

- MAGIC interactive mapping<sup>2</sup>;
- Environment Agency 'What's in your backyard?' Interactive Mapping<sup>3</sup>;
- UK Government webpage: Find out if you're at risk of flooding 4;
- Wiltshire Planning Explorer<sup>5</sup>; and
- West Wiltshire District Plan Mapping<sup>6</sup>.

<sup>&</sup>lt;sup>2</sup> DEFRA, (2016); MAGIC Interactive Mapping. [online] available from: <a href="http://magic.defra.gov.uk/">http://magic.defra.gov.uk/</a> (last accessed 1 November 2016).

<sup>&</sup>lt;sup>3</sup> Environment Agency, (2016); What's in your backyard? Interactive Mapping. [online] available from: <a href="http://maps.environment-agency.gov.uk/wiyby/wiybyController?ep=maptopics&lang=e">http://maps.environment-agency.gov.uk/wiyby/wiybyController?ep=maptopics&lang=e</a> (last accessed 1 November 2016).

<sup>&</sup>lt;sup>4</sup> Gov.uk, (2016); Find out if you're at risk of flooding. [online] available from: <a href="https://www.gov.uk/check-flood-risk">https://www.gov.uk/check-flood-risk</a> (last accessed 5 January 2017).

<sup>&</sup>lt;sup>5</sup> Wiltshire County Council, (2016); Wiltshire Planning Explorer. [online] available from: http://www.realitygeo.com/explorer.aspx?cfg=wiltspl (last accessed 1 November 2016).

<sup>&</sup>lt;sup>6</sup> West Wiltshire District Council, (2016); West Wiltshire District Plan Mapping. [online] available

 $from: $\frac{http://www.wiltshire.gov.uk/planninganddevelopment/planningpolicy/westwiltshirelocalplan/westwiltshiredistrictplanmapping.htm (last accessed 1 November 2016).$ 

#### **Glossary of constraints** 4.

Table 1 provides a glossary of the constraints considered through the points of the compass appraisal.

**Table 1. Glossary of constraints** 

Term	Description
Agricultural Land Classification	The Agricultural Land Classification classifies agricultural land in five categories according to its versatility and suitability for growing crops. The top three grades, Grade 1, 2 and 3a, are referred to as 'Best and Most Versatile' (BMV) land.
Air Quality Management Areas (AQMAs)	Designated under the Local Air Quality Management regime for areas currently, or forecast, to exceed National Air Quality Strategy objectives. If a local authority determines that any locations where the objectives are not likely to be achieved, it must declare an Air Quality Management Area there.
Area of Outstanding Natural Beauty	An Area of Outstanding Natural Beauty (AONB) is an area of high scenic quality which has statutory protection in order to conserve and enhance the natural beauty of its landscape. AONBs are designated solely for their landscape qualities, for the purpose of conserving and enhancing their natural beauty (which includes landform and geology, plants and animals, landscape features and the history of human settlement over the centuries).
	The Countryside and Rights of Way Act (2000) confirmed that AONBs have the same status as National Parks in terms of landscape and scenic beauty. The Act places responsibility on local authorities to ensure protection for designated landscapes.
Biodiversity Action Plan (BAP) Priority Habitat	UK BAP priority habitats are those that have been identified as being the most threatened and requiring conservation action under the UK Biodiversity Action Plan (UK BAP). They cover a wide range of seminatural habitat types.
Conservation Area	Conservation areas are designated at the local level to protect the special architectural and historic interest of an area through protecting the features that make it unique and distinctive.
Flood Zones 2 and 3	Flood Zones 2 and 3 are deemed to be areas at risk of flooding.  Flood Zone 2 comprises land assessed as having between a 1 in 100 and 1 in 1,000 annual probability of river flooding (1% – 0.1%). Flood Zone 3 comprises land assessed as having a 1 in 100 or greater annual probability of river flooding (>1%)  Flood Zones are used to apply the sequential test, which seeks to
	steer new development to areas with the lowest probability of flooding.
Listed Buildings	Buildings of special architectural and historic interest listed on the advice of Historic England. Buildings are graded to indicate their relative importance. They include:
	Grade I: A listed building of exceptional interest.  Grade II*: Particularly important buildings of more than special interest.  Grade II: Buildings of special architectural or historic interest.

Term	Description
Groundwater Source Protection Zones	A defined area within which groundwater is extracted for potable water supply. The area is defined by the Environment Agency on the basis of the length of time taken for groundwater to migrate from the potable source.
	There is also a designation for Groundwater Source Protection Zones that apply to sub-surface activity only.
Local Nature Reserves (LNR)	Places with wildlife or geological features that are of special interest locally. They offer people special opportunities to study or learn about nature or simply to enjoy it.
National Nature Reserves (NNR)	National designations protecting he most significant areas of habitat and of geological formations.
Natura 2000 sites	A network of nature protection areas in the territory of the European Union. It is made up of Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) designated respectively under the Habitats Directive and Birds Directive.
Ramsar sites	A wetland site designated of international importance under the Ramsar Convention. The Convention on Wetlands, known as the Ramsar Convention, is an intergovernmental environmental treaty established in 1971 by UNESCO, and coming into force in 1975.
Registered Battlefields	Sites of the most important military battles.
Registered Park and Garden	The English Heritage 'Register of Historic Parks and Gardens of special historic interest in England', identifies over 1,600 sites assessed to be of national importance. In this context Registered Parks and Gardens are those deemed to be of particular historic importance.
Scheduled Monuments	A historic building or site that is included in the Schedule of Monuments kept by the Secretary of State for Culture, Media and Sport. The regime is set out in the Ancient Monuments and Archaeological Areas Act 1979.
Sites of Nature Conservation	West Wiltshire District Council Designation for site of local important wildlife or geological sites.
Site of Special Scientific Interest (SSSI)	Sites of Special Scientific Interest (SSSI) are those areas considered to best represent the UK's natural heritage, such as through the site's diversity of plants, animals and habitats, rocks and landforms, or through combinations of such natural features. Nationally designated, SSSIs are deemed to be the UK's best wildlife and geological sites.
SSSI Impact Risk Zone	SSSI Impact Risk Zones are a GIS tool/dataset which maps zones around each SSSI according to the particular sensitivities of the features for which it is notified. They specify the types of development that have the potential to have adverse impacts at a given location. Natural England is a statutory consultee on development proposals that might impact on SSSIs.
Special Areas of Conservation (SAC)	Special Areas of Conservation. SACs are strictly protected sites designated the EC Habitats Directive. Article 3 of the Habitats Directive requires the establishment of a European network of important high-quality conservation sites that will make a significant contribution to conserving the 189 habitat types and 788 species identified in Annexes I and II of the Directive (as amended). Sites proposed for selection are proposed by the statutory nature conservation agencies, co-ordinated through JNCC.

Term	Description
Special Protection Areas (SPA)	Special Protection Area. The EC Directive on the Conservation of Wild Birds (79/409/EEC) requires member states to safeguard the habitats of migratory birds and certain particularly threatened birds. Under the Directive, the UK is committed to taking "the requisite measures to preserve, maintain and re-establish a sufficient diversity and areas of habitat" for "all species of naturally occurring birds in the wild state". This includes the designation of SPAs.
Surface Water Flood Zone	Surface water flood zones denote the risk from surface water from the impact of heavy rainfall.
World Heritage Site	A historic site is an official location where pieces of political, military, cultural, or social history have been preserved due to their cultural heritage value. Historic sites are usually protected by law, and many have been recognized with the official national historic site status.

## 5. Biodiversity

The biodiversity constraints within each quadrant are discussed in Table 2 below.

Biodiversity constraints have been grouped into the following categories:

- Natura 2000 sites: Special Areas of Conservation (SAC), Special Protection Areas (SPA), and Ramsar sites:
- UK statutory designated sites: Sites of Special Scientific Interest (SSSI), and National Nature Reserves (NNR);
- Non-statutory locally designated sites: Local Nature Reserves (LNR) and Sites of Nature Conservation.

In addition key habitats classified as Biodiversity Action Habitat (BAP) priority habitats and ancient woodland have been identified within each quadrant.

The biodiversity constraints have been mapped in Figure 2.

#### **Table 2. Biodiversity Constraints**

### Quadrant Details of key biodiversity constraints

# Quadrant 1 (north east)

There are no Natura 2000 sites within, adjacent or in close proximity to Quadrant 1. There is part of one statutory designated biodiversity site located in the north eastern part of Quadrant 1, Spye Park SSSI.

• Spye Park SSSI is an extensive habitat mosaic comprising large expanses of some of the finest undisturbed alderwoods in the county, along with oakwoods, parkland and an area of dry acidic grassland containing several locally uncommon plants. Rich communities of lichens, bryophytes and vascular plants flourish in the wet soil conditions prevailing over much of the park.

The quadrant lies within the extent of the SSSI Impact Risk Zone for Spye Park SSSI which applies to residential development within 1km of the SSSI. The scale of residential development it applies to varies with distance, from 10 houses to 100 houses.

There are a number of non-statutory designated biodiversity sites in Quadrant 1 including:

• A number of Sites of Nature Conservation to the east of the quadrant, associated with the River Avon to the west and a number of small woodlands and copses.

In regards to key biodiversity habitats, there are a number of areas of BAP priority habitat and ancient woodland in the quadrant. These include:

- A number of areas of deciduous woodland BAP priority habitat scattered across the east of the quadrant;
- Wood-pasture and parkland BAP priority habitat at Sandridge Park to the south east; and
- Four areas of ancient woodland in the south east of the quadrant at Lower Selves Wood and Upper Selves Wood and in the north east corners of the quadrant at Basin Covert and Hanging Wood.

#### Quadrant Details of key biodiversity constraints

# Quadrant 2 (south east)

There are no Natura 2000 sites within, adjacent or in close proximity to Quadrant 2. There are no statutory designated biodiversity sites in Quadrant 2.

Seend Cleeve Quarry SSSI and Seend Ironstone Quarry and Road Cutting SSSI are located within 2km of the Quadrant boundary.

- Seend Cleeve Quarry SSSI is designated as a key stratigraphic locality for the Oxfordian Stage.
- Seend Ironstone Quarry and Road Cutting SSSI is highly significant in illustrating an unusual iron-rich facies of the Lower Greensand developed near the margins of the marine area formed during the nutfieldensis Zone transgression. Of particular interest is the highly unusual and diverse fauna recorded from the sands, a number of species having been found only at this site.

These are however are designated for their geological exposures, and as such will not be affected by residential development within the quadrant.

The quadrant does not lie within an SSSI Impact Risk Zone for Spye Park SSSI applying to residential development.

There is a non-statutory designated biodiversity site in Quadrant 2, the Kennet and Avon Canal. This is located on the southern boundary of the Quadrant, and locally designated is a Site of Nature Conservation.

There are two small strips of deciduous woodland BAP priority habitat located in the quadrant associated with the dismantled railway, which runs east to west through southern part of the quadrant to the south of Bowerhill. There are also a further two small areas located by the A365 in the north west of the quadrant. These border the settlement boundary of Melksham.

# Quadrant 3 (south west)

There are no Natura 2000 sites or statutory designated biodiversity sites within, adjacent or in close proximity to Quadrant 3.

The quadrant lies within the extent of a number of SSSI Impact Risk Zones; however these do not apply to residential development in this quadrant.

There are three locally designated non-statutory designated biodiversity sites in Quadrant 3 including:

- Conigre Mead Local Nature Reserve, to the south of the River Avon, by Challymead Bridge;
- The Kennet and Avon Canal Site of Nature Conservation on the southern boundary of the quadrant; and
- The River Avon Site of Nature Conservation on the western boundary of the quadrant.

There are four small parcels of deciduous woodland BAP priority habitat in the quadrant, including as follows:

- Strip of land along the dismantled railway, which runs east to west through the southern part of the quadrant to the south of Hampton Park West Business Park and Bowerhill:
- Parcel of land on the edge of Melksham where Berryfield Lane meets the A 350 (Western Way); and
- Two parcels of land to the north east of the quadrant, close to the River Avon and Challymead Bridge.

#### Quadrant Details of key biodiversity constraints

# Quadrant 4 (north west)

There are no Natura 2000 sites or statutory designated biodiversity site within, adjacent or in close proximity to Quadrant 4.

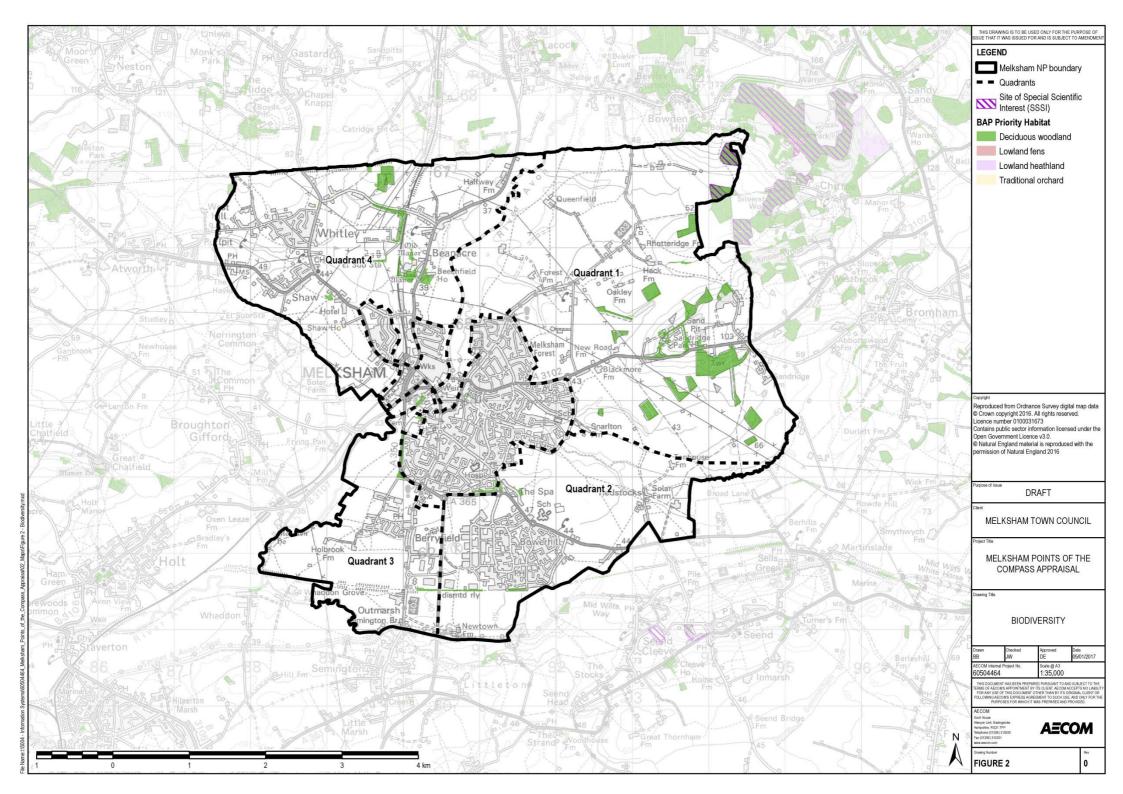
The quadrant lies within the extent of a number of SSSI Impact Risk Zones; however this does not apply to residential development in this quadrant.

There are two locally designated non-statutory designated biodiversity sites in Quadrant 4, the River Avon, to the east of the quadrant and Daniels Wood, to the north of the quadrant. These are both Sites of Nature Conservation.

There are a number of areas of BAP priority habitat and ancient woodland in the quadrant, including:

- A number of areas of deciduous woodland located at different locations in the east of the quadrant, as well as at Shaw Farm; and
- Three areas of traditional orchard, located at Shaw House in the south of the quadrant; as well as at Whitley Barn and Westlands Farm to the north of the quadrant; and

There is also one area of ancient woodland to the north of the Quadrant (Daniels Wood), close to Westlands Farm.



## 6. Land and soil resources

The land and soil resources constraints located within the quadrants are discussed in Table 3 below.

One element has been considered under this theme-the location of Best and Most Versatile (BMV) land, as defined by the land's Agricultural Soil Classification; whereby Grades 1, 2 and 3 are present the BMV land which is the most flexible, productive and efficient in response to inputs and which can best deliver food and non-food crops for future generations<sup>7</sup>.

The areas of the Best and Most Versatile Land present in the four quadrants have been mapped in Figure 3.

#### Note:

Not all areas within the Neighbourhood Plan area have undergone more recent Agricultural Land Classification that differentiates between 3a (land classified as the Best and Most Versatile agricultural land) and 3b land (land not classified as the Best and Most Versatile agricultural land). As such, in some locations in the Neighbourhood Plan area, only the earlier classification from prior to 1988, which does not differentiate Grade 3 land into 3a or 3b land, has been undertaken.

In this context the first figure maps the pre-1988 Agricultural Land Classification in the Neighbourhood Plan area. The second figure, from the MAGIC website, maps the post 1988 Agricultural Land Classification.

It should be noted that for some areas there is a degree of discrepancy between the information presented in the two maps; this has been reported where appropriate. However given the information in the second map represents more recent classification of agricultural land, this information should be given priority when there is an inconsistency.

#### Table 3. Land and Soil Resource Constraints

Quadrant	Details of key land and soil resource constraints
Quadrant 1 (north east)	The majority of agricultural land in Quadrant 1 is either Grade 3 or Grade 4; however there are two areas of Grade 2 in the quadrant, which land classified as the BMV. These areas of Grade 2 cover small parts of the western boundary of the quadrant and further small areas on the northern and eastern boundary of the quadrant.  MAGIC shows that the majority of land closer to Melksham town is Grade 3b, so not BMV land; however there is a parcel of land to the south that is Grade 3a. It also shows a small parcel of land east of Sandridge Park which is classified as Grade 3a.
	agricultural land.
Quadrant 2 (south east)	MAGIC indicates that there is some BMV land in the quadrant, located close to the built up part of Melksham town. This consists of Grade 2 and Grade 3a agricultural land located in the north-westerm part of the quadrant, surrounding Bowerhill Lodge and Farmhouse Court.

<sup>&</sup>lt;sup>7</sup> DCLA, (2014); Planning Practice Guidance, paragraph 26. [online] available from: http://planningguidance.communities.gov.uk/blog/guidance/natural-environment/brownfield-land-soils-and-agricultural-land/ (last accessed 1 November 2016).

#### Quadrant Details of key land and soil resource constraints

# Quadrant 3 (south west)

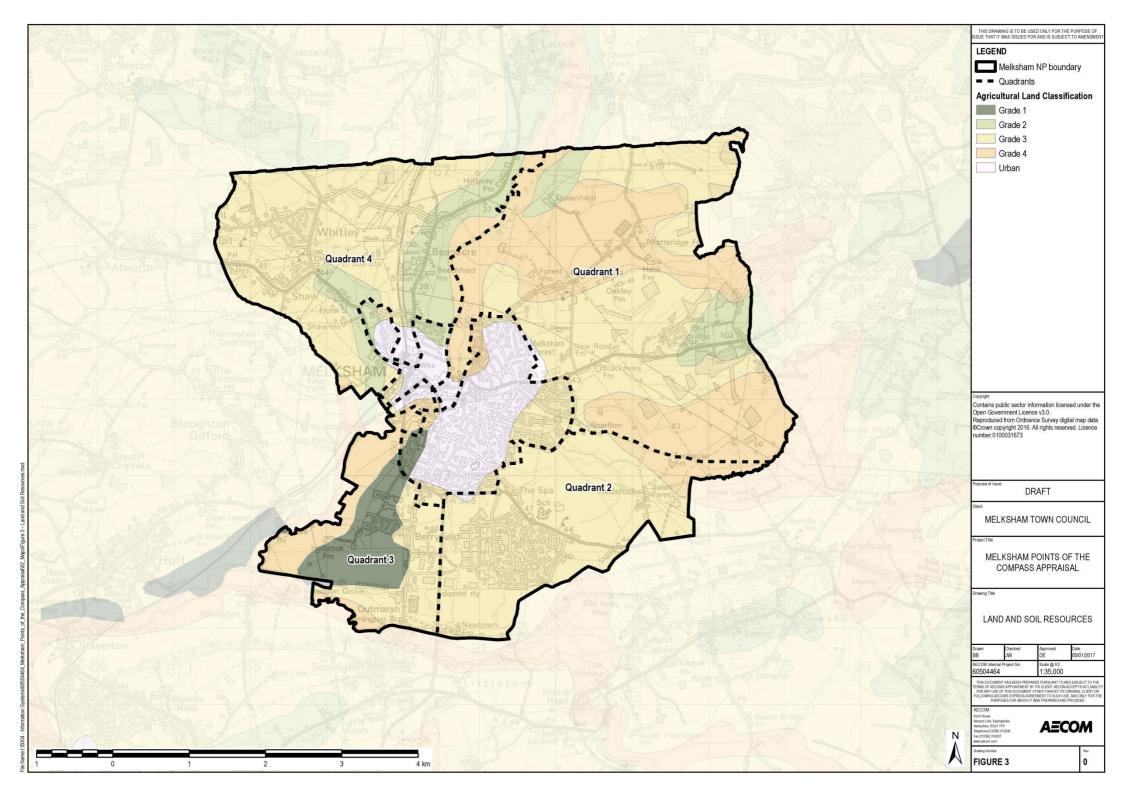
The earlier pre-1988 agricultural land classification indicated that approximately half of the land in Quadrant 3 is land classified as BMV land (Grade 1), which runs through the centre of the Quadrant. It also indicated that to the east of this is Grade 3 land, while to the west is Grade 4.

However MAGIC, which shows more recent classification shows a degree of discrepancy to the information presented in Figure 3, with the area of Grade 1 agricultural land reported above comprising a mixture of Grade 2 and Grade 3a. In addition, the area of Grade 4 reported above is classified as Grade 3b. However significant areas of Quadrant 3 comprises land classified as the Best and Most Versatile.

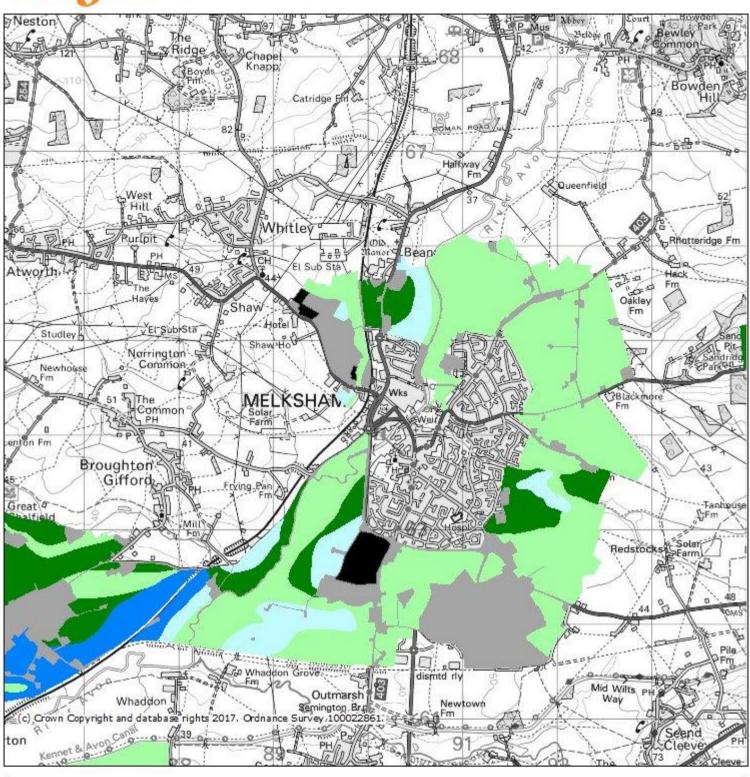
# Quadrant 4 (north west)

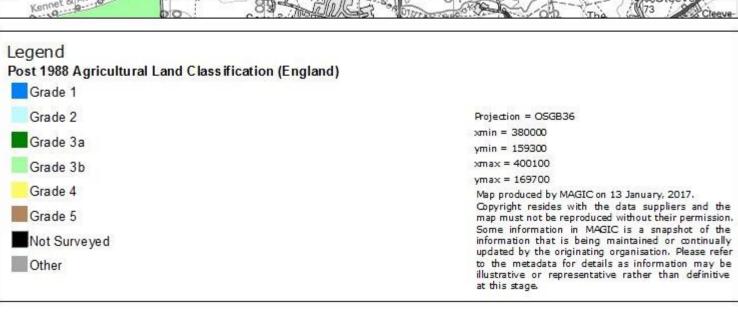
According to the pre-1988 agricultural land classification, the majority of agricultural land in Quadrant 4 is classified as Grade 3; however there are two strips of BMV land (Grade 2) within the quadrant- one that runs along the eastern boundary of the quadrant surrounding the A350, and another which runs through the centre of the quadrant surrounding the A365 (Bath Road). There is also a small parcel of Grade 4 agricultural land to the east.

MAGIC provides very little information for ALC in Quadrant 4. However it indicates that there are small areas of Grade 2 and 3a agricultural land around Beechfield House and Beanacre Manor to the north of Melksham.



# MAGIC Agricultural Land Classification





# 7. Water resources and flood risk

The water resource and flood risk constraints of the quadrants are discussed in Table 4 below.

Examples of water resource and flood risk constraints include:

- Watercourses;
- Fluvial (river) flood risk;
- Surface water flood risk: and
- Groundwater source protection zones.

The water resource and fluvial flood risk constraints have been mapped in Figure 4; Figure 5 provides a map indicating the locations of surface water flood risk in the area.

#### Table 4. Water Resource and Flood Risk Constraints

Quadrant	Details of key water resource and flood risk constraints
Quadrant 1 (north east)	Quadrant 1 includes the River Avon to the west, and other small watercourses that feed into the River Avon.
	Large areas of the northern half of the quadrant are at risk from fluvial flooding. Areas surrounding the River Avon are within Flood Zones 2 and 3, with additional areas of flood risk in the quadrant along the local brook (name unknown).
	There are a large number of small watercourses and drainage ditches across the quadrant. These typically flow east to west and feed into the River Avon. The areas surrounding these are at risk of surface water flooding. The highest risk areas are to the west, within Queenfield, around Woodrow Road, as well as large areas across the southern part of the quadrant to the south of the A3102.
	There are no groundwater source protection zones covering the quadrant.
Quadrant 2 (south east)	Quadrant 2 includes Clackers Brook to the north and the Kennet and Avon Canal on the southern boundary. There is also a local brook (name unknown) between Melksham and Bowerhill.
	The majority of land in the quadrant is not at risk of fluvial flooding, with only land surrounding Clackers Brook within Flood Zones 2 and 3.
	In regards to surface water flooding, areas surrounding Clackers Brook and its associated tributaries to the north of the quadrant, including around Redstocks, are at risk. There are also areas in the vicinity of Bowerhill that are at risk. In addition, there is an area at risk of surface water flooding to the western edge of the quadrant around The Spa.
	There are no groundwater source protection zones in the quadrant.
Quadrant 3 (south west)	Quadrant 3 includes the River Avon, the Kennet and Avon Canal and part of Semington Brook to the south. There are also other local brooks/streams (names unknown) that traverse west to east through the quadrant that feed into the River Avon.
	In regards to fluvial flood risk, areas surrounding the River Avon are within Flood Zones 2 and 3, with additional areas of flood risk in the quadrant along Semington Brook, and the local brooks/streams. The areas surrounding these watercourses are also at risk of surface water flooding; in particular, there are areas in the vicinities of Berryfield and Outmarsh that are at risk of surface water flooding.
	There is a groundwater source protection zone for subsurface activity that is located

in the south western corner of the quadrant.

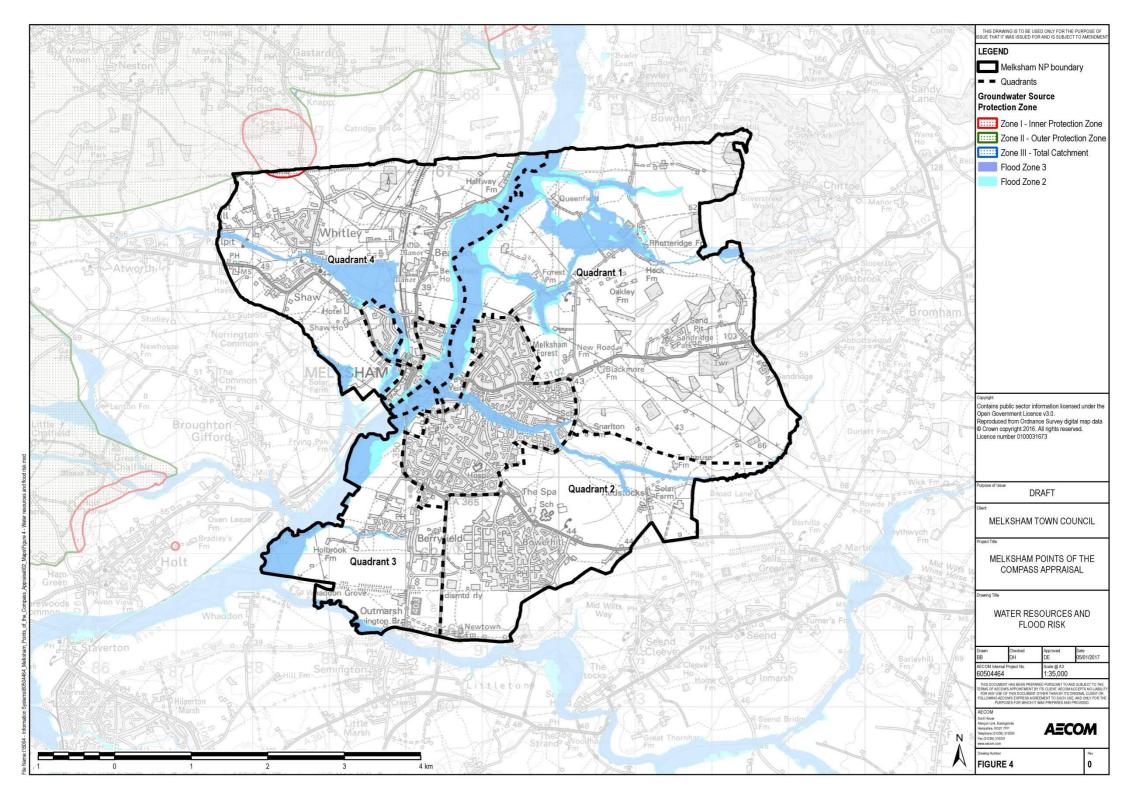
## Quadrant Details of key water resource and flood risk constraints

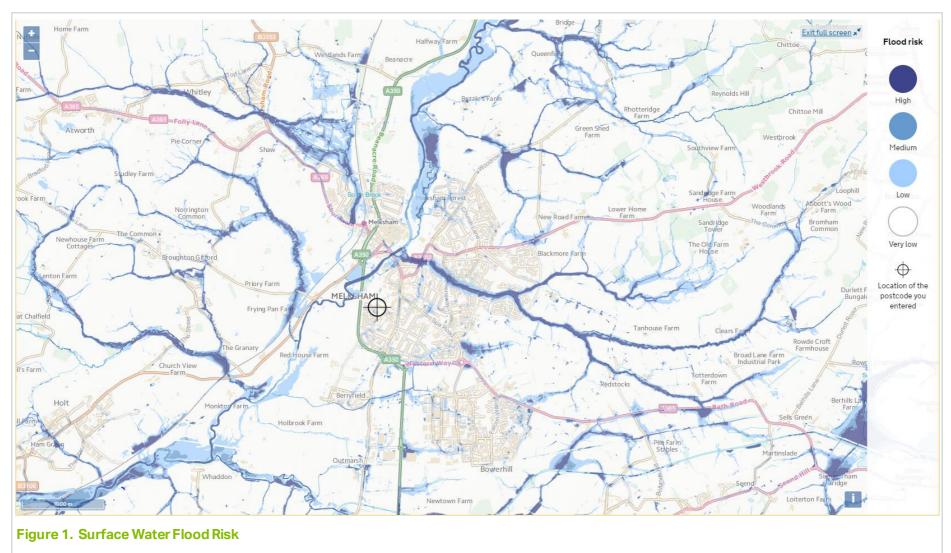
# Quadrant 4 (north west)

Quadrant 4 includes the River Avon to the west and South Brook which transvers es through the centre of the quadrant. There is also an unnamed watercourse on the southern boundary of the quadrant.

In regards to fluvial flood risk, areas surrounding the River Avon are within Flood Zones 2 and 3, with additional areas of flood risk (principally flood zones 3) in the quadrant around Whitley Golf Club to the north, as well as to the south around Roundponds Farm, associated with the unnamed watercourse on the southern boundary of the quadrant. These areas are also at risk of surface water flooding. In addition, there are areas in Shaw and Whitley that are at risk of surface water flooding.

There is a groundwater source protection zone (Zone 1 and 2) on the north west boundary of the quadrant, above Whitley.





Source: 'Find out if you're at risk of flooding' (Gov.ukwebsite)8

<sup>&</sup>lt;sup>8</sup> Gov.uk, (2016); Find out if you're at risk of flooding. [online] available from: <a href="https://www.gov.uk/check-flood-risk">https://www.gov.uk/check-flood-risk</a> (last accessed 5 January 2017).

## 8. Air quality and environmental pollution

In relation to this theme, the points of the compass appraisal has considered the locations of Air Quality Management Areas (AQMAs).

There are no known existing air quality and environmental pollution issues within the quadrants.

## 9. Historic environment

Historic environment constraints located in the quadrants are discussed in Table 5 below.

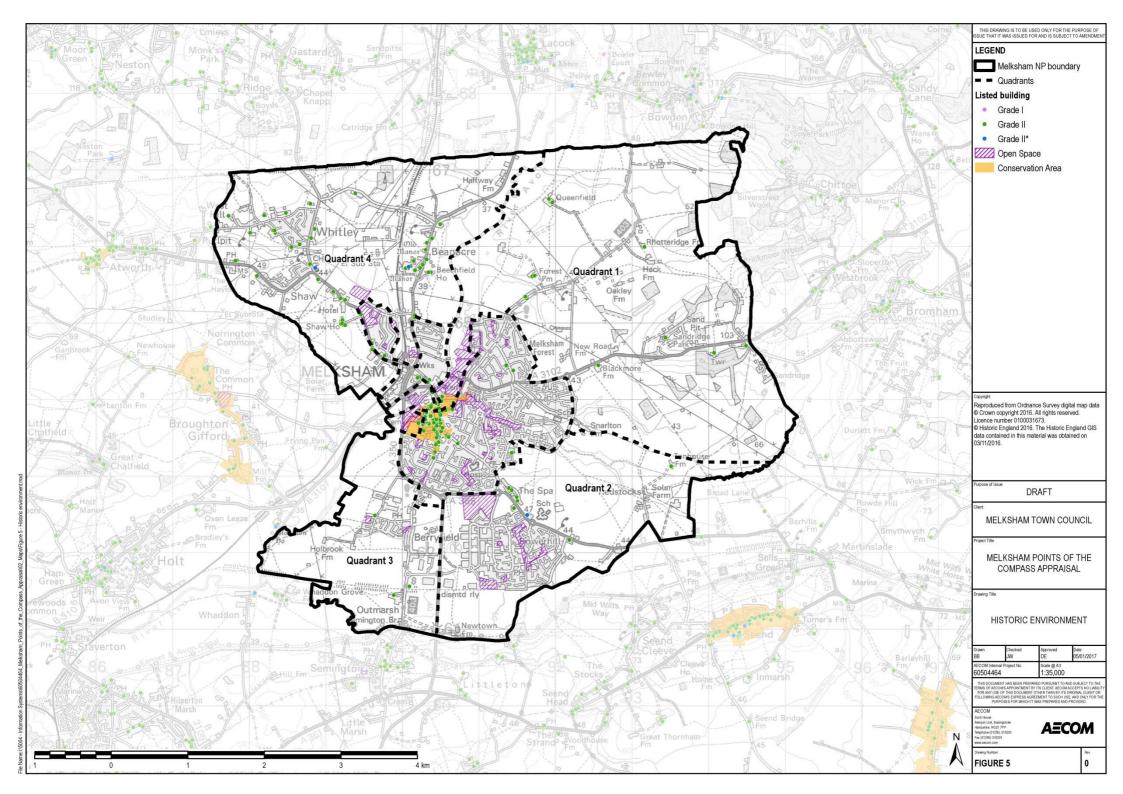
The historic environment constraints considered include:

- Statutory historic environment designations, including: World Heritage Sites; Scheduled Monuments; nationally listed buildings (Grades I, II, and II\*); and conservation areas.
- Non-statutory historic environment designations, including Registered Parks and Gardens; Registered Battlefields; and Areas of Higher Archaeological Potential.

The historic environment constraints have been mapped in Figure 6.

**Table 5. Historic Environment Constraints** 

Quadrant	Details of key historic environment constraints
Quadrant 1 (north east)	There are eleven Grade II listed buildings scattered throughout Quadrant 1, many of which are associated with farmhouses or houses, as well as Sandridge Lodge and Sandridge Tower at Sandridge Park. In addition, within the Melksham settlement boundary, four Grade II listed properties are present.  Melksham Conservation Area is partly within Quadrant 1.
	The Grade II listed Spye Park Registered Park and Garden is located adjacent to the north east of Quadrant 1.
Quadrant 2 (south east)	There is one Grade II* listed building in Quadrant 2 (Woolmore Farmhouse), located off the A365 on the northern edge of Bowerhill, adjacent to Melksham Oak Community School.
	There are eight Grade II listed buildings in Quadrant 2. Six of these are clustered along the A365 and The Spa north of Bowerhill, and are associated with Bowerhill Farmhouse and The Spa. Two are located outside of the main settlements in the quadrant, and are associated with farmhouses (Old Loves Farm and Tanhouse Farm). Two Grade II listed buildings are also located just outside of the quadrant to the west, associated with Bowerhill Lodge Farmhouse.
Quadrant 3 (south west)	There are three Grade II listed buildings located in Quadrant 3 outside of the settlement boundary of Melksham, including: Berryfields Cottages in Berryfield, the Old Railway Farmhouse; and the Siding and Outmarsh Farmhouse in Outmarsh. There are also a number of Grade II listed buildings within the main settlement boundary of Melksham to the north of the quadrant.  Melksham Conservation Area is partly within Quadrant 3.
Quadrant 4 (north west)	There is one Grade I listed building present in the quadrant, Beanacre Old Manor, located to the north of Melksham town. There are also two Grade II* listed buildings: Christ Church in Shaw; and Beanacre Manor with Dairy. There are a large number of Grade II listed buildings present in Quadrant 3, concentrated in Whitley, Beanacre, along the A365 Bath Road south east of Shaw and at Shaw House.



# 10. Landscape

Landscape constraints of the quadrants are discussed in Table 6 below.

Landscape constraints have been grouped into the following categories:

- Statutory landscape designations, including: Areas of Outstanding Natural Beauty (AONB); and
- Non-statutory landscape designations, including Special Landscape Areas; Recreation Space and Open Space.

 $Figure\,6\,above\,shows\,the\,location\,of\,Open\,Spaces.$ 

### **Table 6. Landscape Constraints**

Quadrant	Details of key landscape constraints
Quadrant 1 (north east)	There are no statutory landscape designations covering Quadrant 1.  In terms of non-statutory designations, land in the eastern part of Quadrant 1 is designated as a Special Landscape Area; this area covers land east of Blackmore Farm and Rhotteridge Farm, and incorporates Sandridge Park.  There are also areas of recreational open space and open space with the quadrant towards the centre of Melksham adjacent to the River Avon; and another outside of the town centre adjacent to Forest and Sandridge Church of England Primary School.
Quadrant 2 (south east)	There are no statutory landscape designations covering Quadrant 2. In terms of non-statutory designations, there are a number of areas of recreational space and open space within Bowerhill, as well as on land adjacent to Bowerhill, between the settlement and Western Way.
Quadrant 3 (south west)	There are no statutory landscape designations covering Quadrant 3. In terms of non-statutory designations, there are areas of recreational space in the quadrant, including: in Melkshamassociated with Conigre Mead Local Nature Reserve, located to the south of the River Avon by Challymead Bridge; as well as in Berryfield.
Quadrant 4 (north west)	There are no statutory landscape designations covering Quadrant 4.  In terms of non-statutory designations, there are areas of recreational space and open space in the quadrant, including: a number along the A365 associated within the settlements along the route. The areas around Shaw and Whitley play important local roles for local landscape character in relation to facilitating separation between the settlements.

## 11. Summary of environmental constraints

AECOM have undertaken a points of the compass appraisal to support the MNP. The appraisal evaluates the relative sustainability merits of promoting development at various broad areas in the vicinity of Melksham town.

This report summarises the findings of the evaluation, and considers four broad areas (referred to as 'quadrants') in the vicinity of Melksham town. In this context the appraisal evaluates the key environmental constraints present in each of the quadrants.

The following summary provides an overall appraisal of each quadrant.

### 11.1 Quadrant 1

Quadrant 1 contains a number of significant constraints to development, including significant areas at risk of fluvial flood risk, a Special Landscape Area, listed buildings, designated sites for biodiversity (including a nationally designated SSSI), and areas of BAP Priority Habitat and ancient woodland.

With the exception of fluvial flood risk associated with the River Avon, which covers the western part of the quadrant, these constraints are principally located to the north and east of the quadrant, in the areas further away from Melksham town. In this context the areas within Quadrant 1 that are most suited to development are those relatively less constrained closest to the settlement boundary of Melksham.

### 11.2 Quadrant 2

Quadrant 2 contains some constraints to development, including areas at risk of fluvial flood risk, areas of BAP Priority Habitat, land designated for open space and/or recreation space and land classified as the Best and Most Versatile Agricultural Land.

The areas of Quadrant 2 which are most constrained are located to the north of the quadrant. The areas around Bowerhill Lodge and Farmhouse Court are constrained by land classified as the Best and Most Versatile Agricultural Land and areas at risk of fluvial flood risk exist along Clackers Brook. The area surrounding The Spa, Melksham Road and Bowerhill Farm and Woolmore Farm, as well as the area to the east of Bowerhill Lodge Farm are also constrained by features of historic environment interest.

Development to the immediate north of Bowerhill would lead to an amalgamation of Bowerhill with Melksham town, affecting local distinctiveness and existing locally valued separation between the settlements.

The areas within Quadrant 2 which are least constrained are those to the south and east of Bowerhill.

#### 11.3 Quadrant 3

Quadrant 3 contains a number of significant constraints to development.

The most constrained parts of the quadrant are located to the north and west of the area close to the River Avon, which are heavily constrained by areas of fluvial flood risk, and the northern part of the area close to the settlement boundary of Melksham, which is constrained by historic environment and open space considerations. In addition, a large part of the quadrant comprises land classified as the Best and Most Versatile Agricultural Land, in particular land between Berryfield and Melksham and south of Holbrook Farm.

The areas within Quadrant 3 which are least constrained are those located to the east of Berryfield.

### 11.4 Quadrant 4

Quadrant 4 contains a number of significant constraints to development, including areas at risk of fluvial flood risk, designated sites for biodiversity, and areas of BAPPriority Habitat. The most constrained parts of the quadrant are located in the eastern parts of the area, close to the River Avon and around Whitley Golf Club to the east of Shaw. In addition, there are areas of the quadrant that are covered by land classified as the Best and Most Versatile agricultural land, in particular land to the east and south.

The areas of the quadrant that are relatively less constrained are those located in the western parts of Quadrant 4, around Shaw and Whitley to the west of the B3353. However these locations play important roles for local distinctiveness, including in relation to facilitating separation between the settlements.