

Study of land surrounding Key Settlements in Cotswold District: Update



Additional Sites 2015: Final Report
to
Cotswold District Council

November 2015

Tel: 029 2043 7841

Email: sw@whiteconsultants.co.uk

Web: www.whiteconsultants.co.uk



COTSWOLD
DISTRICT COUNCIL



CONTENTS

	page
PART 1	
1 Introduction	3
2 Summary of findings	4
Tables	
Table 1 Additional sites landscape sensitivity: Housing/small scale mixed development	
PART 2	
3 Site sensitivities	
Sites are considered in turn in settlement order with associated figures	
Andoversford	7
Down Ampney	10
Fairford	13
Lechlade	15
Mickleton	18
Moreton-in-Marsh	20
Northleach	22
Siddington	24
South Cerney	27
Stow-on-the-Wold	31
Tetbury	33
Willersey	36

Cover photo- Field adjacent to a development site north of Cirencester Road, Tetbury

PART 1

1. Introduction

- 1.1. White Consultants were appointed by Cotswold District Council in April 2014 to undertake an update of the landscape assessment around key settlements¹ undertaken in 2000.
- 1.2. The scope of the study was to update the assessment taking into account the impact of any physical change since 2000, any revised assessments, policies and up-to-date guidance and focussing on the strategic housing land availability assessment (SHLAA) sites coming forward. The sites considered in this report are new sites that have been put forward for inclusion into the update of the SHLAA that is currently being carried out by Cotswold District Council.
- 1.3. The report should be considered as an annex of a study of deliverable sites dated May 2014 which explains the method for assessment, the landscape context for the district and considers each settlement and its relationship with the surrounding landscape. This report does not repeat this information but the assessments of the sites works within its context. The study is intended to form part of the evidence base which will inform the emerging Cotswold District Local Plan (2011-2031).
- 1.4. The report is divided into two parts. In Part 1, we introduce the assessment (1.0) and briefly set out a summary of the site assessments [2.0]. The sensitivity assessments for each identified site are set out in Part 2 in settlement alphabetical order.

¹ Study of Land Surrounding Key Settlements in Cotswold District, White Consultants, June 2000

2. Summary of Findings

2.1. The landscape sensitivities of each site are summarised in Table 1.

Table 1 Additional sites landscape sensitivity- Housing

HOUSING SITES		
Settlement	Site Ref	Sensitivity
Andoversford	A_10	High/medium
Andoversford	A_9	High/medium
Down Ampney	DA_11	Medium
Down Ampney	DA_9B	Medium
Fairford	F_50	High/medium
Lechlade	L_31	Medium + high/medium
Lechlade	L_32	High/medium
Mickleton	MK_10	Medium
Moreton in Marsh,	M_61	High/medium
Northleach	N_18	High
Siddington	SD_9D	High/medium
Siddington	SD_15	High/medium
South Cerney	SC_30	High/medium
South Cerney	SC_31	Medium
South Cerney	SC_32	High/medium
Stow on the Wold	STW_E10*	High
Tetbury	T_39	Medium/low
Tetbury	T_71	Medium
Willersey	W_11	Medium/low and medium

*site considered as housing which also covers small scale mixed development (see Main Report May 2014 Paragraph 2.11).

PART 2

3. Site Sensitivities

3.1. The context of each settlement and sensitivity of each site is set out in the following pages. Below, an explanation of the purpose of each section is set out.

3.2. The assessment of each site is concise, picking out the main characteristics and factors which influence sensitivity.

Site Description

3.3. This section summarises the description of the site and its context drawing from desk study and site visits.

Site Sensitivity Summary

3.4. This section summarises the overall landscape sensitivity of the site for housing development. The method used to arrive at this judgement is explained in the method section.

Landscape context

3.5. The relevant national character area, landscape character type and landscape character area are noted. The Historic Landscape Character description covering the site is also set out.

Landscape Designations

3.6. Landscape designations covering the site are listed in this section and comments made as to the specific features. Designations can indicate that the area is sensitive.

Biodiversity Designations

3.7. Nature conservation designations covering the site are listed in this section and comments made as to the specific features. Designations can indicate that the area is sensitive.

Historic Designations

3.8. Historic conservation designations covering the site are listed in this section and comments made as to the specific features. Designations can indicate that the area is sensitive.

Other constraints

3.9. Other factors such as the presence of Flood Zone 3 on the site and public rights of way (PROW) are noted. The former can act as a very serious constraint whilst PROWs indicate the presence of sensitive receptors who may have views of the site or use it for recreational enjoyment and visual amenity.

4. Andoversford

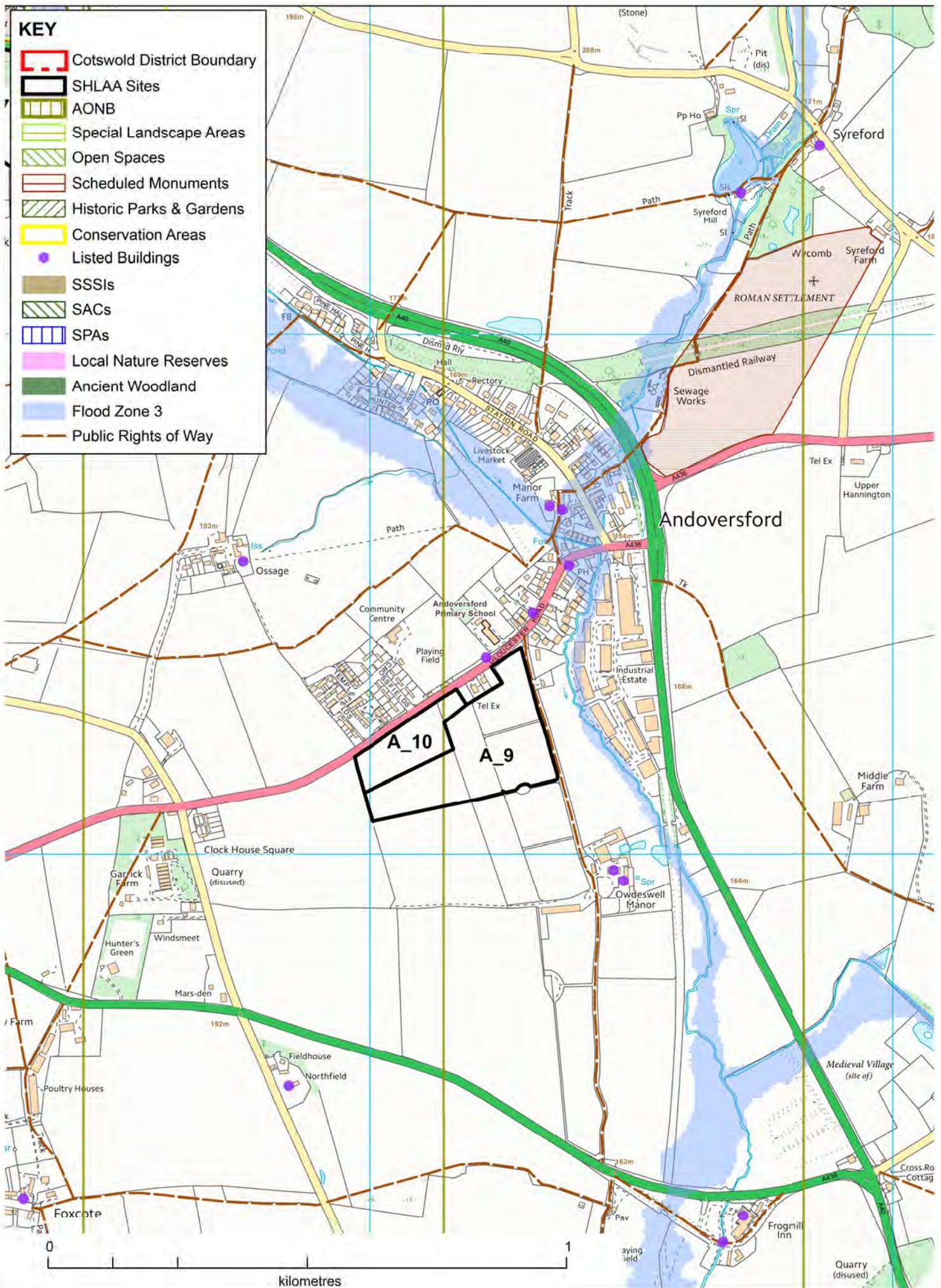
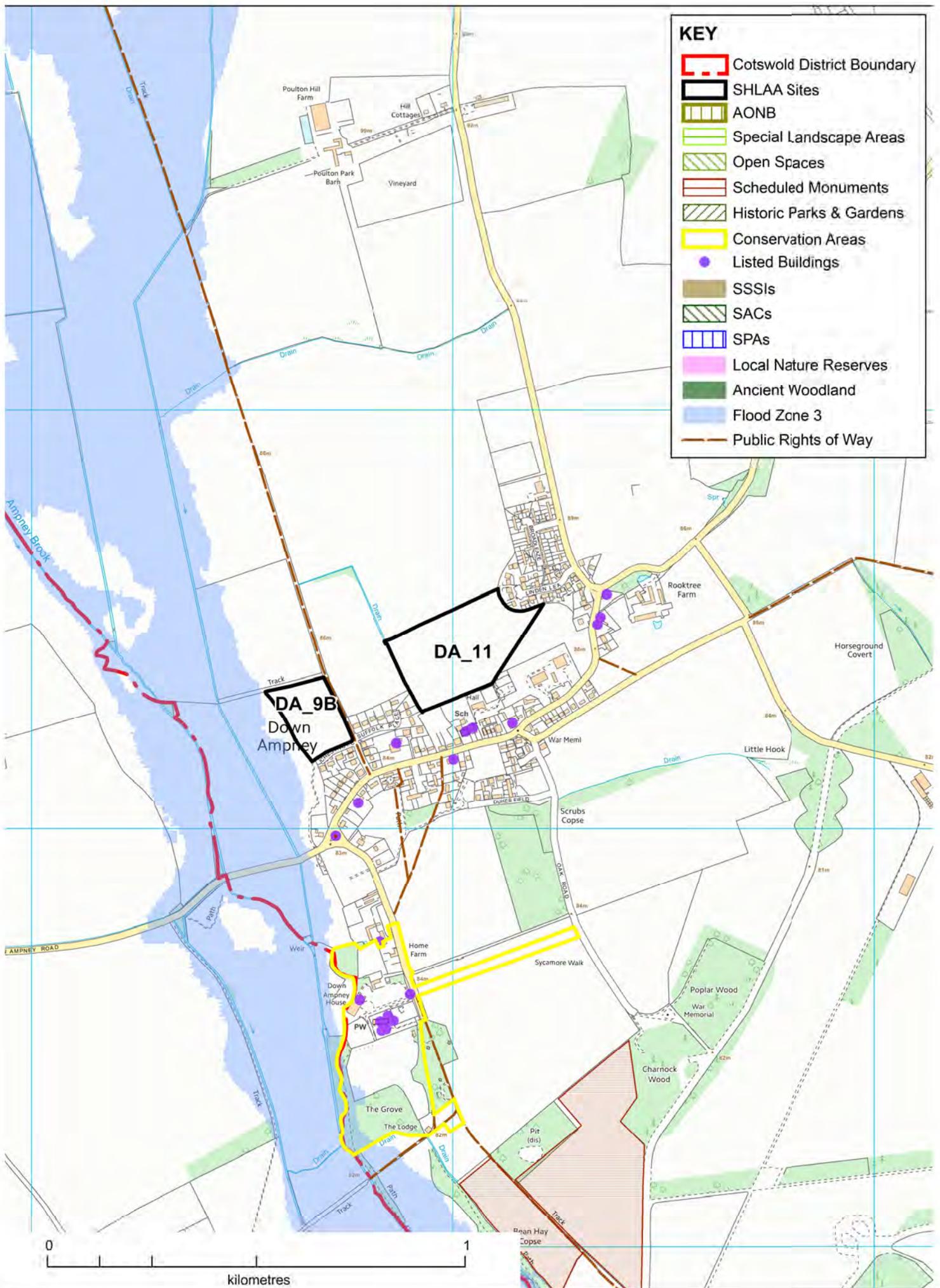


Figure A/F/2 - ANDOVERSFORD
Housing Sites, Constraints and Designations

Site Reference: A_9	Settlement:	Andoversford
<p>DESCRIPTION:</p> <p>The site lies on the southern edge of the settlement with a small part of its northern boundary adjoining Gloucester Road. It lies on the valley slopes falling from west to east. It comprises two horse paddocks to the east, part of a third paddock and the middle section of a field to the west with no boundaries on two sides. This effectively steps the site away from the Gloucester Road but has no apparent logic. The eastern boundary is a formal mature beech avenue, with some birch, which forms the access to the listed Owdeswell Manor to the south east, and is also a public right of way. The Manor itself is partially obscured by agricultural buildings to the north. Beyond the stream to the east is an industrial estate which is well screened by a tree belt. The paddocks are bounded by fences in rectilinear pattern with relatively recently planted trees, and a distinctive copse to the south, all of which reinforce the formality of the area. The field to the west is rectilinear and pastoral with a strong outgrown hedge boundary to the west. Two 20c houses, a utilities building and high conifer hedge on the Gloucester Road abut the site. On the other side of the road there is the primary school, listed dwelling, playing field, and housing estate at Templefields/Crossfields which lies on the edge of the village. The western boundary of the latter roughly aligns with the western boundary of this site. The site is apparent from the Gloucester Road over a low hedge and from the public right of way to the east, and the upper slopes are visible from the south. The site has limited tranquillity due to its location adjacent to housing albeit in a rural location. It lies within the Cotswolds AONB.</p>		
<p>LANDSCAPE SENSITIVITY:</p> <p>Evaluation: High/medium</p> <p>Justification:</p> <p>The site has susceptibility to housing as it is on a valley side in open countryside. Development would extend the built form where there is only currently a small amount of linear development. Its eastern part would adversely affect the public right of way and the formal driveway to Owdeswell Manor which forms part of the experience of the listed Manor and is part of its setting although not directly intervisible with the Manor. The part of the site which includes part of the field to the west is more potentially prominent within the landscape being higher up the slope and having no northern or southern boundary. This would also be visible as extending the settlement up the slopes in views from Gloucestershire Way to the south near the A436/A40 junction. The value of the site is that it lies within the AONB, is within the setting of Owdeswell Manor and opposite a listed building on Gloucester Road.</p>		
<p>LANDSCAPE CONTEXT</p> <p><i>National Character Area:</i> Cotswolds</p> <p><i>Landscape Character Type:</i> 7. High Wold</p> <p><i>Landscape Character Area:</i> Cotswolds High Wold Plateau</p> <p><i>Historic Landscape Character:</i> Riverine pasture, probably meadows now largely enclosed (<i>does not apply to site</i>)</p>		
<p>CONSTRAINTS/DESIGNATIONS</p> <p><i>Landscape:</i> within Cotswolds AONB</p> <p><i>Historic:</i> The Mount, Grade II listed building on the opposite side of the A436</p> <p><i>Biodiversity:</i> none</p> <p><i>Other (floodplain, PROWs):</i> PROW runs along the eastern boundary</p>		

Site Reference: A_10	Settlement:	Andoversford
DESCRIPTION:		
<p>The site lies on the southern edge of the settlement with its northern boundary adjoining Gloucester Road. It lies on the valley slopes falling from west to east. It comprises of the northern parts of two adjoining grass fields. It therefore has no tangible southern boundary. The western boundary is a strong outgrown hedge. To the east is a utilities building, which, with two 20c houses, is the only development on this side of the Gloucester Road outside the village core. On the other side of the road there is the village playing field and housing estate at Templefields/ Crossfields which lies on the edge of the village. The western boundary of the latter roughly aligns with the western boundary of this site. The site is apparent from the Gloucester Road over a low hedge at its eastern end although an outgrown hedge lies along the rest of this boundary. The site has limited tranquillity due to its location adjacent to housing albeit in a rural location. It lies within the Cotswolds AONB.</p>		
LANDSCAPE SENSITIVITY:		
Evaluation:	High/medium	
Justification:		
<p>The site has susceptibility to housing as it is on a valley side in open countryside. Development would extend the built form where there is only currently a very small amount of linear development and therefore would enclose the Gloucester Road approach on both sides. The likely removal of hedgerow to enable the development would suburbanise the approach to the village. Development on the site would be likely to affect the open setting of Owdeswell Manor. The site would also be visible as extending the settlement up the slopes in view from Gloucestershire Way to the south near the A436/A40 junction. The value of the site is that it lies within the AONB and within the setting of Owdeswell Manor.</p>		
LANDSCAPE CONTEXT		
<i>National Character Area:</i>	Cotswolds	
<i>Landscape Character Type:</i>	7. High Wold	
<i>Landscape Character Area:</i>	Cotswolds High Wold Plateau	
<i>Historic Landscape Character:</i>	Less regular organised enclosure partly reflecting former unenclosed cultivation patterns	
CONSTRAINTS/DESIGNATIONS		
<i>Landscape:</i>	within Cotswolds AONB	
<i>Historic:</i>	none	
<i>Biodiversity:</i>	none	
<i>Other (floodplain, PROWs):</i>	none	

5. Down Ampney

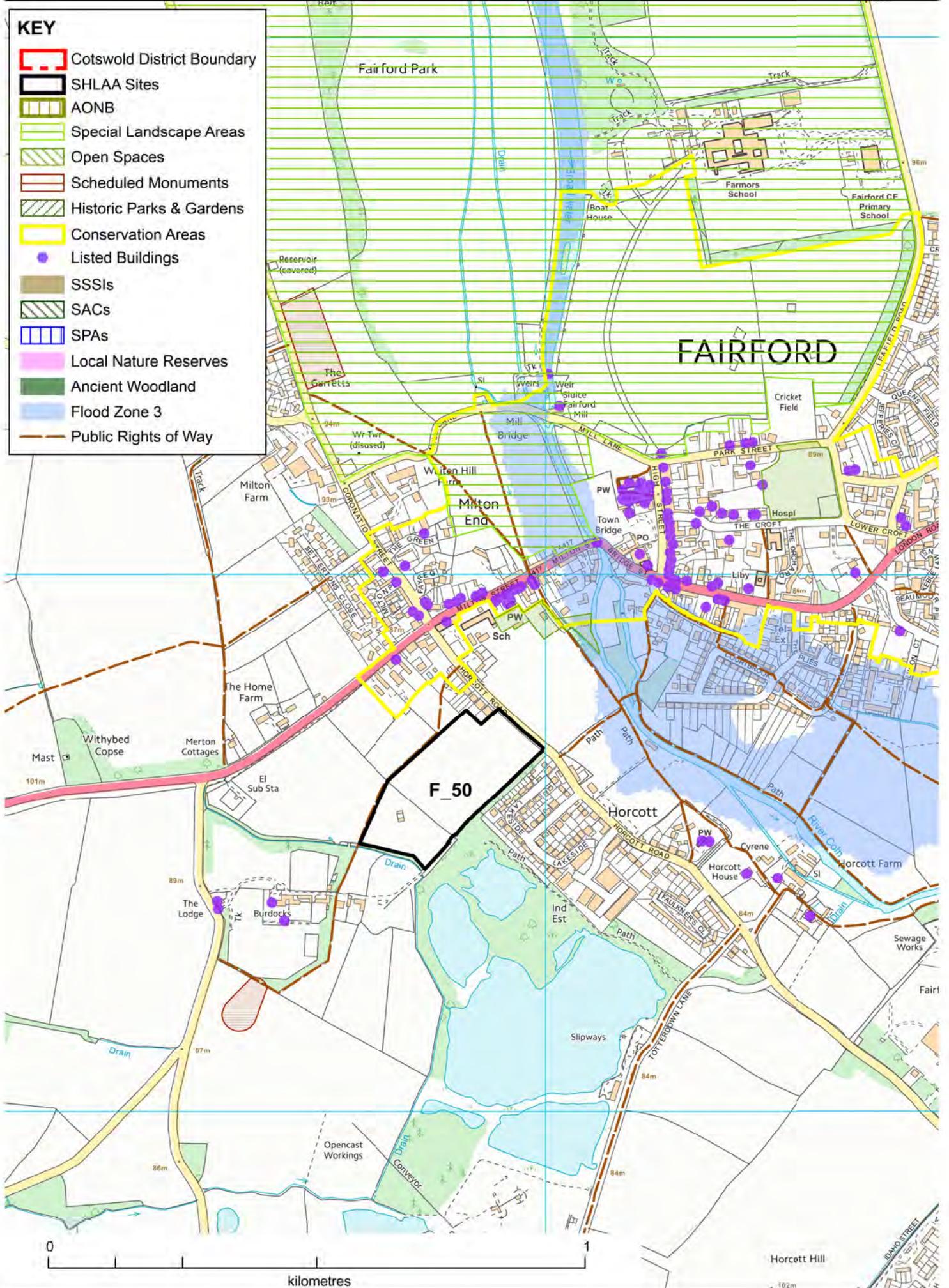


**Figure DA/F/2 - DOWN AMPNEY
 Housing Sites, Constraints and Designations**

Site Reference: DA_9b	Settlement:	Down Ampney
DESCRIPTION:		
<p>This site consists of part of a large, flat arable field on the north western edge of the settlement, with no vegetated boundaries to west, apart from a track through the field. To the south, it is overlooked by the frontages of houses on Chestnut Close, with a low fence and grass verge against the road permitting clear views into the site. There are key views to the western site edge from Down Ampney Road to the south where users see the settlement for the first time as they cross over a watercourse. Hedge growth in summer tends to make this is a glimpse view. The broad footpath which lies along the eastern site boundary is well hedged to either side, with occasional large trees and this, together with the dense trees around the perimeter of the field to the north, provide a good degree of screening to the north and east and screens houses on Suffolk Place to an extent. There are long views to the north over the hedge boundaries to rising land. The site is moderately tranquil.</p>		
LANDSCAPE SENSITIVITY:		
Evaluation:	Medium	
Justification:		
<p>This site is susceptible to development by reason of its visibility from the Down Ampney Road to the south which means that any development on its western end would significantly extend the settlement and the site has no existing vegetation boundaries on this edge to help mitigate effects. Also its location on the settlement edge, the presence of houses facing the site from Chestnut Drive and the PROW along its eastern boundary contribute to sensitivity. However, the site is of limited value, being part of a large arable field which is well screened by hedges and trees from the wider landscape. If development were permitted, built form should be kept as far away from the western edge as possible with housing designed to face towards the settlement along Chestnut Drive, and vegetative screening to filter views from the wider landscape. As there is no existing boundary to the west, the establishment of a strongly vegetated boundary, using locally indigenous species, should also be a condition of consent for development.</p>		
LANDSCAPE CONTEXT		
<i>National Character Area:</i>	Upper Thames Clay Vales	
<i>Landscape Character Type:</i>	River Basin Lowland	
<i>Landscape Character Area:</i>	Down Ampney	
<i>Historic Landscape Character:</i>	Existing settlement - extent by mid 19th century (does not apply to this site)	
CONSTRAINTS/DESIGNATIONS		
<i>Landscape:</i>	none	
<i>Historic:</i>	none	
<i>Biodiversity:</i>	none	
<i>Other (floodplain, PROWs):</i>	none	

Site Reference: DA_11	Settlement:	Down Ampney
DESCRIPTION:		
<p>This site comprises the main part of a level pastoral/fallow field north of the centre of the village including village hall and play/recreation/sports area. It effectively links this with the separate block of housing to the north east. There is no northern boundary with the arable field to the north although a permissive footpath runs along here. The western boundary is outgrown hedge and trees which limits views from this direction. There is a path (non PROW) which defines the south east site boundary linking the housing with the community facilities, with a continuation of the field beyond to the village road and apparently disused farm buildings. A hedge along the road limit views from the east although there are some glimpse views where there is a fence. The site is highly visible from the village recreation area, adjacent houses and the path, allowing views to the rising countryside to the north. Users of the public footpath to the north west would have oblique views of the site. Views from the Poulton Hill road to the north would be screened by newly planted poplars. The site plays a role as part of one of the remaining green gaps in the settlement form which has been one of its key characteristics.</p>		
LANDSCAPE SENSITIVITY:		
Evaluation:	Medium	
Justification:		
<p>The site is susceptible to development by reason of its contribution to the settlement character as one of its green gaps/wedges integrating the countryside with the settlement, allowing views out, and its land use as pasture/fallow grassland, making it part of the wider farmed landscape. It is of limited intrinsic value in itself. Development would make a linear edge to the settlement completely changing the current settlement's indented character which the Village Design Statement sought to reinforce as a pragmatic approach to accommodating development. It appears that the design of the recent housing to the north east made some effort to retain this character with a curved edge and a gap with the main settlement to the south west. Visual connection between the community facilities and the wider landscape would be lost. Development here is undesirable. If development were permitted, it should retain the green corridors separating the housing to the north east from the site and have a very strong vegetated/tree edge and corridor to the north to provide screening and continued access as a permissive route. The northern boundary of built development also should be indented. Any developer should demonstrate how development here would contribute to the character of the settlement.</p>		
LANDSCAPE CONTEXT		
<i>National Character Area:</i>	Upper Thames Clay Vales	
<i>Landscape Character Type:</i>	River Basin Lowland	
<i>Landscape Character Area:</i>	Down Ampney	
<i>Historic Landscape Character:</i>	Existing settlement - present extent (<i>does not apply to this site</i>)	
CONSTRAINTS/DESIGNATIONS		
<i>Landscape:</i>	none	
<i>Historic:</i>	none	
<i>Biodiversity:</i>	none	
<i>Other (floodplain, PROWs):</i>	none	

6. Fairford



KEY

- Cotswold District Boundary
- SHLAA Sites
- AONB
- Special Landscape Areas
- Open Spaces
- Scheduled Monuments
- Historic Parks & Gardens
- Conservation Areas
- Listed Buildings
- SSSIs
- SACs
- SPAs
- Local Nature Reserves
- Ancient Woodland
- Flood Zone 3
- Public Rights of Way

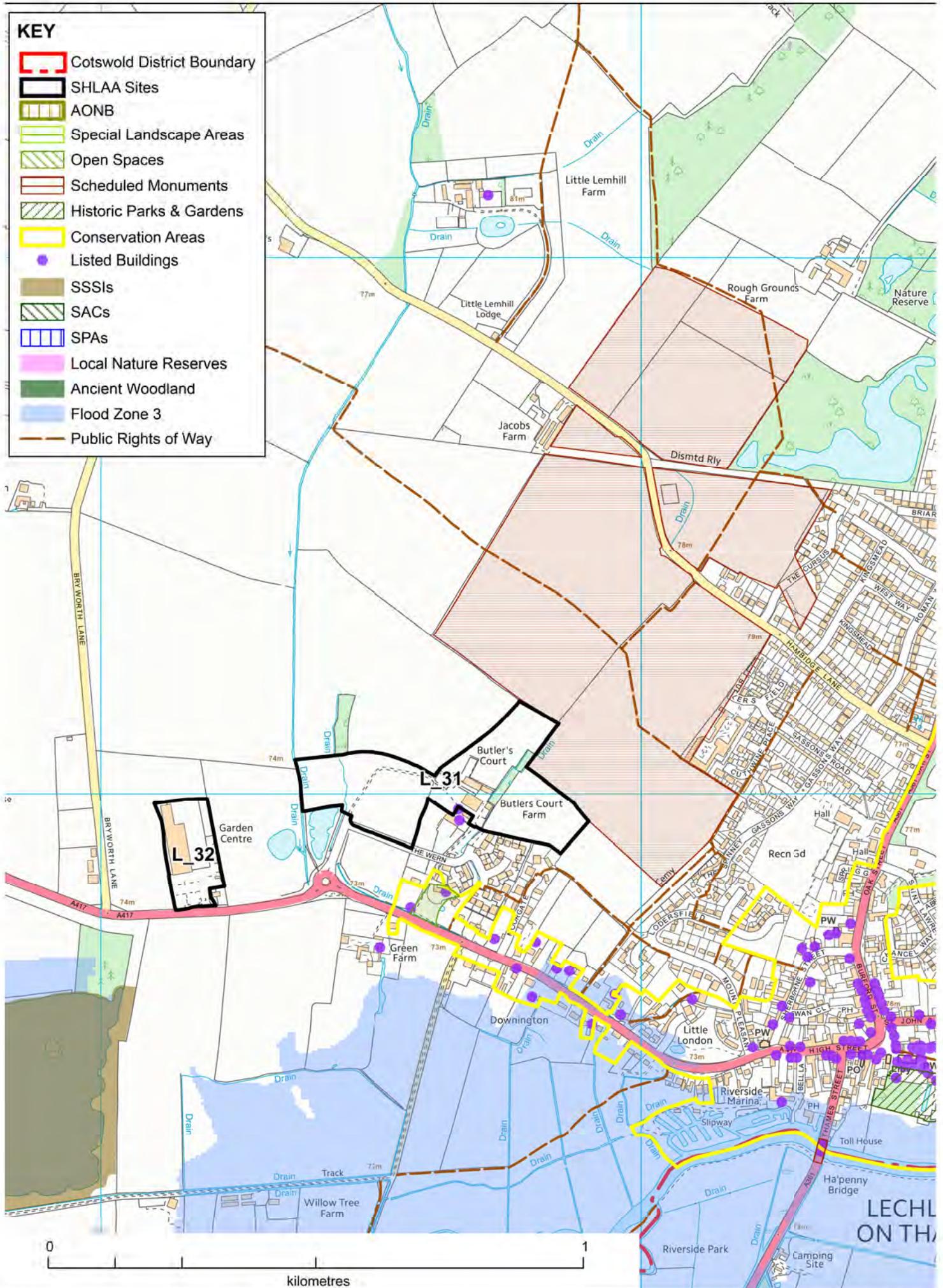
FAIRFORD

F_50

**Figure F/F/2 - FAIRFORD
Housing Sites, Constraints and Designations**

Site Reference: F_50	Settlement:	Fairford
DESCRIPTION:		
<p>The site lies on the south western edge of Fairford on very gently sloping land separating it from Horcott to the south. There are two improved pasture fields separated by an outgrown hedge with trees. To the north, there is the edge of the settlement and a low stone wall with other low field boundaries allowing glimpsed and filtered views through maturing trees from the A417. New housing is being constructed to the north west beyond a low boundary. To the south west, there is an outgrown hedge with trees along a watercourse. Mature trees lie on the southern boundary with Horcott and vegetated gravel workings. The Horcott Road to the north east is fenced with occasional trees within the site, allowing clear views. The edges of Fairford are recessive and indented with an incremental mix of traditional buildings to the north within the Conservation Area, linear development further south and a small hedged field to the rear of properties. A public footpath runs along the northern edge of the site linking the settlement to the countryside to the south west. The site has limited tranquillity due to the presence of the A417 and housing to the north and south.</p>		
LANDSCAPE SENSITIVITY:		
Evaluation:	High/medium	
Justification:		
<p>The site is susceptible to change from housing as it provides a green gap between Fairford and Horcott when combined with playing fields along the River Coln corridor to the north east. This allows the settlements to retain their separate identities. If the site was developed it would, with other new development, enclose fields to the north which provide the setting to the western end of the Conservation Area which features recessive but attractive traditional buildings which form a positive introduction to the old settlement. As such, it would remove contact between the Conservation Area and the wider countryside on this side of the settlement which would be undesirable.</p>		
LANDSCAPE CONTEXT		
<i>National Character Area:</i>	Upper Thames Clay Vales	
<i>Landscape Character Type:</i>	River Basin Lowland	
<i>Landscape Character Area:</i>	Fairford and Lechlade	
<i>Historic Landscape Character:</i>	Less regular organised enclosure partly reflecting former unenclosed cultivation patterns	
CONSTRAINTS/DESIGNATIONS		
<i>Landscape:</i>	none	
<i>Historic:</i>	none	
<i>Biodiversity:</i>	none	
<i>Other (floodplain, PROWs):</i>	Public footpath runs along northern boundary	

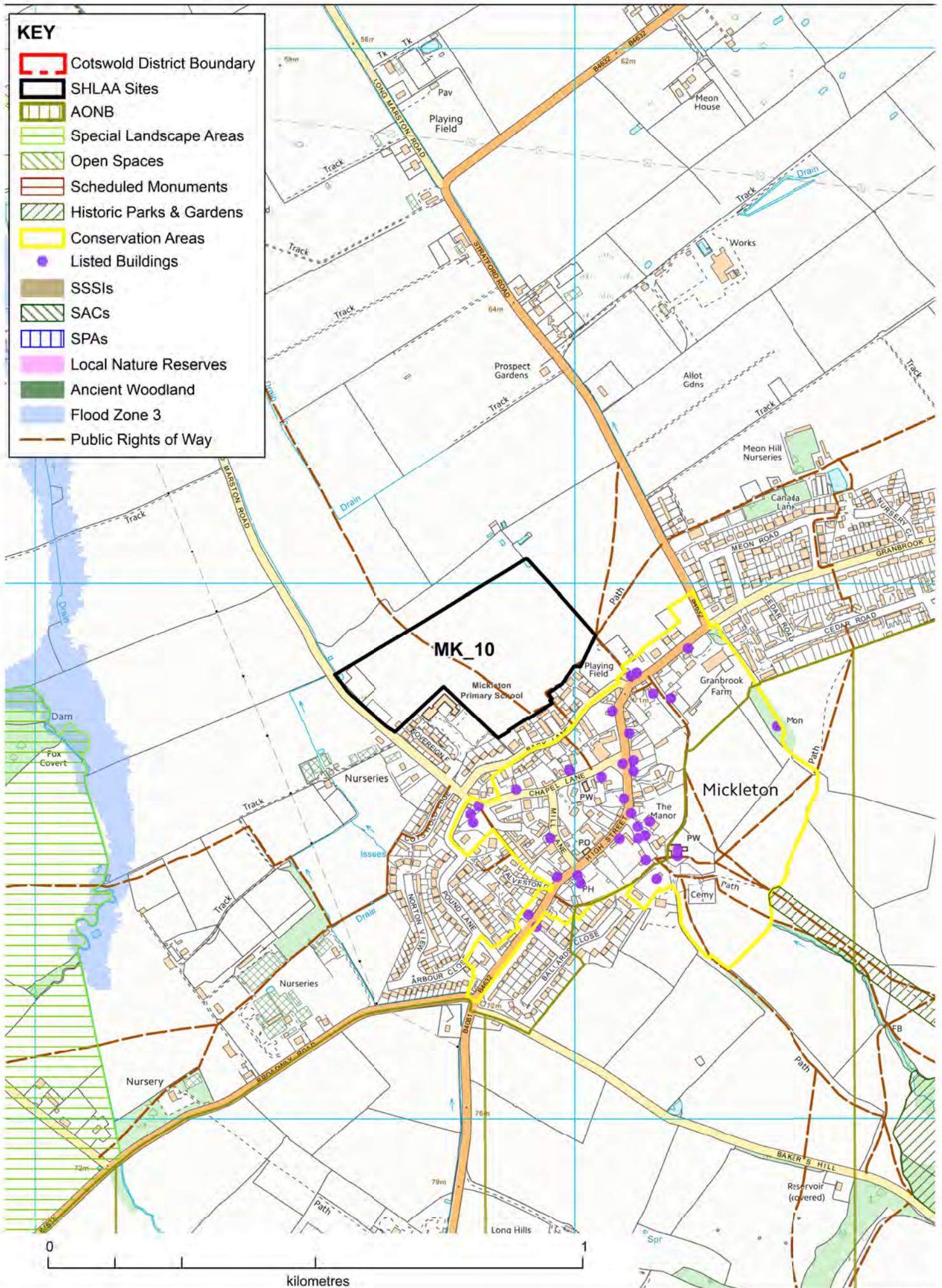
7. Lechlade-On-Thames



Site Reference: L_31	Settlement:	Lechlade
DESCRIPTION:		
<p>The site lies on the western edge of the settlement and comprises of a number of fields and elements with varied character. To the west there is a small overgrown field with a balancing pond with established vegetation to the south, overgrown hedges on other sides and trees to the west, and a tree belt outside the site to the north. A further fallow field with scrub is located east of this field, crossed by a farm access. This has similar character to site L19 to the south in that it appears to have been prepared for development, and is visible from the A417. Butlers Court Farm to the east is a small farm complex of small steel roofed sheds and dilapidated brick sheds with partially removed roofs and a garden enclosure to the west. There is a listed farmhouse directly to the south with mature garden trees and vegetation. To the north and west of this are two apparently unimproved semi-regular pasture fields with outgrown hedges and separated by a belt of deciduous trees. Outside the site to the north and east there are large regular arable and grassland fields with low cut hedges and very few trees. A large scheduled monument lies in this area but is not apparent on the ground. This landscape to the north is relatively open and very gently rolling farmland with few features but one or two public footpaths and apparently popular for informal walking and dog walking. A cemetery lies to the east across a field. To the south east there is relatively recent housing which is recessive when viewed from the north due to the intervening field and hedgerows.</p>		
LANDSCAPE SENSITIVITY:		
Evaluation:	Medium and High/medium	
Justification:		
<p>The sensitivity of the site varies. The two fields to the west extend the settlement but are relatively well screened from the east by a combination of trees and hedges on site as well as the nursery further east still, and the tree belt to the north. There is some visibility from the north which raises sensitivity. The most westerly field should form the final edge to the settlement in this direction. These enclosures are considered to be of medium sensitivity.</p> <p>The pasture fields to the east are susceptible to change as they are open to view to the north from public footpaths and the scheduled monument. They would tend to enclose the open space on this side of the settlement being more apparent in views from the public footpaths. The farm complex and enclosure west of the farm are susceptible as housing would completely change the character of the farm complex and surround the listed buildings adjacent to the south. These elements of the site have high/medium sensitivity with the most sensitive being the farm complex and the northern pasture which is most exposed to view from the wider landscape, SAM and PROWs.</p>		
LANDSCAPE CONTEXT		
<i>National Character Area:</i>	Upper Thames Clay Vales	
<i>Landscape Character Type:</i>	River Basin Lowland	
<i>Landscape Character Area:</i>	Fairford and Lechlade	
<i>Historic Landscape Character:</i>	Less irregular enclosure partly reflecting former unenclosed cultivation patterns	
CONSTRAINTS/DESIGNATIONS		
<i>Landscape:</i>	none	
<i>Historic:</i>	Grade II listed Butlers Court with gate piers and wall to the south	
<i>Biodiversity:</i>	none	
<i>Other (floodplain, PROWs):</i>	none	

Site Reference: L_32	Settlement:	Lechlade
DESCRIPTION:		
<p>The site is a rectangular site in open countryside west of Lechlade and separated from it by a grass field and other open land. It is located to the north of the A417 road approaches adjacent to a pair of houses on the road. It is a commercial retail nursery outlet with a large low building close to the western boundary, outdoor hardstanding for plants and parking to the south and east. The eastern and northern boundaries are high trimmed evergreen hedges with some deciduous trees which fairly effectively screen the building. The eastern boundary has high native hedge with trees. The southern boundary incorporates the wide entrance and has sight lines with hedges and maturing trees which help to partially screen the built form and parking. Along the A417 the hedges are low either side of the site and opposite so views towards its boundaries are possible from these directions. Hedges to the north and west on Bryworth Lane, beyond an intervening field, restrict views from these directions.</p>		
LANDSCAPE SENSITIVITY:		
Evaluation:	High/medium	
Justification:		
<p>Though a brownfield site it has susceptibility to housing as it is separated and isolated from the settlement in open countryside and visible from the A417 directly to the south. Any development here would become a precedent for expansion of the settlement in this direction.</p>		
LANDSCAPE CONTEXT		
<i>National Character Area:</i>	Upper Thames Clay Vales	
<i>Landscape Character Type:</i>	River Basin Lowland	
<i>Landscape Character Area:</i>	Fairford and Lechlade	
<i>Historic Landscape Character:</i>	Less irregular enclosure partly reflecting former unenclosed cultivation patterns (<i>now garden centre</i>)	
CONSTRAINTS/DESIGNATIONS		
<i>Landscape:</i>	none	
<i>Historic:</i>	none	
<i>Biodiversity:</i>	none	
<i>Other (floodplain, PROWs):</i>	none	

8. Mickleton

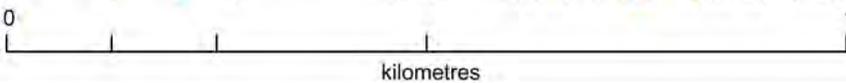


KEY

- Cotswold District Boundary
- SHLAA Sites
- AONB
- Special Landscape Areas
- Open Spaces
- Scheduled Monuments
- Historic Parks & Gardens
- Conservation Areas
- Listed Buildings
- SSSIs
- SACs
- SPAs
- Local Nature Reserves
- Ancient Woodland
- Flood Zone 3
- Public Rights of Way

MK_10

Mickleton



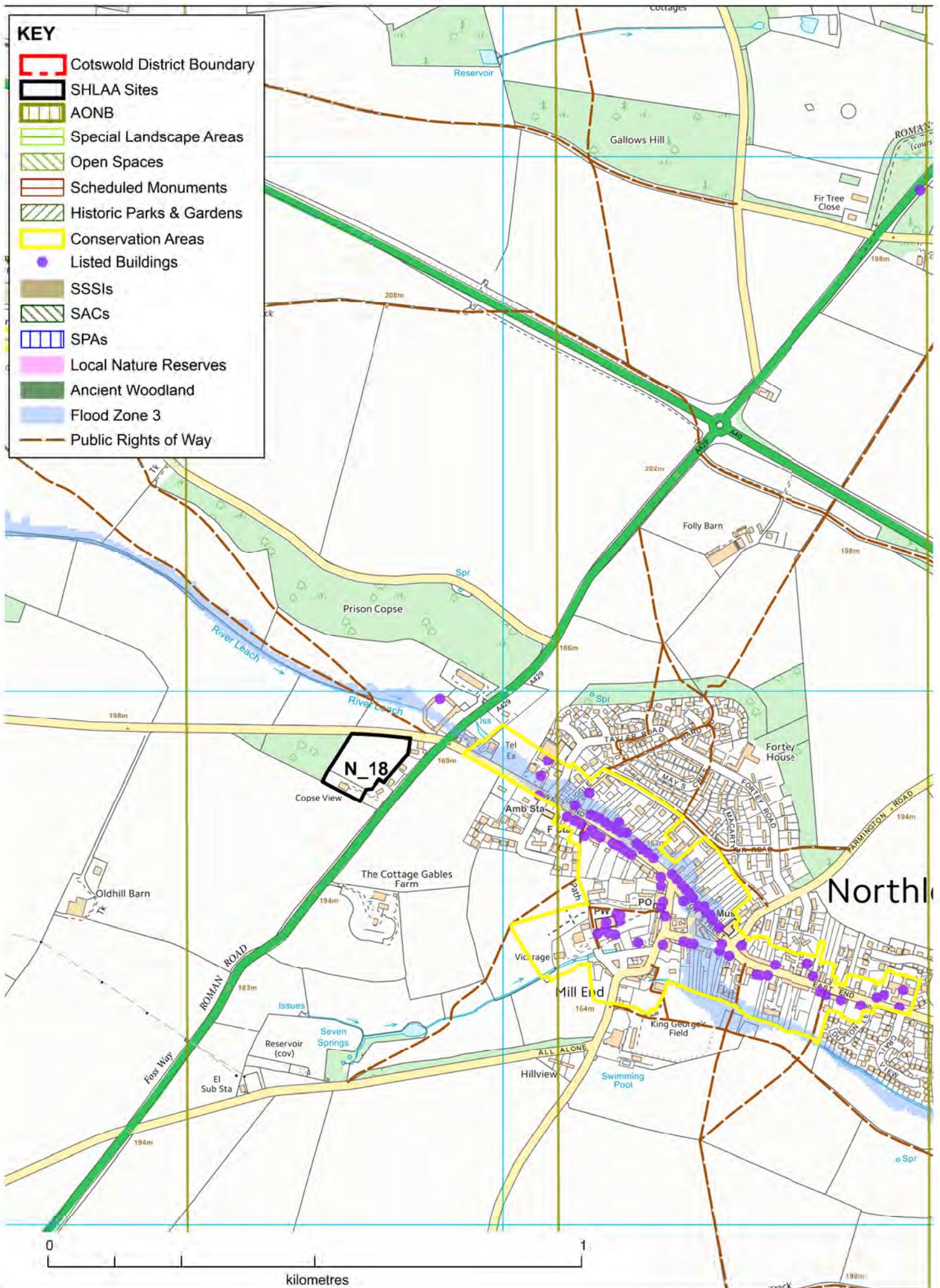
**Figure M/F/2 - MICKLETON
Housing Sites, Constraints and Designations**

Site Reference: MK_10	Settlement:	Mickleton
DESCRIPTION:		
<p>This site consists of a large flat arable field north west of the settlement core of Mickleton. On the south western edge, adjacent to quiet Broad Marston Road, there are the remnants of glasshouses and an overgrown area, both of which appear to have been associated with a plant nursery. Beyond the road to the west are an outgrown hedge and trees and a series of enclosures that appears to be part of a small holding which also includes glasshouses and a dwelling. The northern site boundary is a straight outgrown hedge with some trees. Beyond this is a narrow arable field bounded again with an outgrown hedge and trees, and beyond, rectilinear fields in open countryside. The eastern boundary of the site is an outgrown hedge and trees with a further field beyond bordering the Stratford Road and associated incremental linear development. To the south east, there is the village open space, playing field and playground and low 20c housing development bordering Back Lane. The latter forms the boundary of the Conservation Area with associated listed buildings. The southern corner of the site is bounded by the recently built primary school and housing which together make the site into an L-shape. A public footpath runs through the middle of the site, and along part of its south eastern boundary, linking the settlement with the wider countryside to the north.</p>		
LANDSCAPE SENSITIVITY:		
Evaluation:	Medium	
Justification:		
<p>This site is susceptible as it forms part of the wider open countryside to the north of the village allowing a small connection between the Conservation Area and the wider countryside in filtered views across the open space to the south. The site protrudes further north than other block development and so it would become a major extension to the settlement. It would also adversely affect views from the existing public rights of way as well as from the open space. It is unlikely to have adverse effects on the AONB which is some way to the south and east as it is on the opposite side of the village. The agricultural quality of the land may be an issue. However, there are strong boundaries to the north and south west and the adjoining development is 20th century development of limited intrinsic merit. If any development was allowed it should accommodate open space corridors which relate to the existing open space and to the existing public rights of way. It should also ensure that planting to the north is reinforced to minimise the effects on the wider landscape.</p>		
LANDSCAPE CONTEXT		
<i>National Character Area:</i>	Severn and Avon Vales	
<i>Landscape Character Type:</i>	19. Unwooded Vale	
<i>Landscape Character Area:</i>	Mickleton Vale Fringe	
<i>Historic Landscape Character:</i>	Regular enclosure largely ignoring former unenclosed cultivation patterns - long narrow fields	
CONSTRAINTS/DESIGNATIONS		
<i>Landscape:</i>	none	
<i>Historic:</i>	none	
<i>Biodiversity:</i>	none	
<i>Other (floodplain, PROWs):</i>	Public footpath running through the site	

9. Moreton-in-Marsh

Site Reference: M_61	Settlement:	Moreton-in-Marsh
DESCRIPTION:		
<p>The site is the western part of a small flat arable field lying between the recent North Cotswold Hospital and a garden centre in relatively discreet dark green cladding on the A429 Fosse Way southern approaches to the settlement. The hospital is currently quite visible from the south and from the rising ground to the west as mitigation has not fully established but the garden centre looks like agricultural buildings which is helpful. A low hedge separates the field from the road which is busy and, with the adjacent development, reduces the tranquillity of the site. There is no field boundary on the southern, eastern or western edges of the site although a low cut hedge lies further to the west and there is substantial planting to the north in the hospital site. A public footpath runs along the hedge to the west hedge linking the settlement with the landscape to the south. The site lies within the Cotswold AONB and an SLA lies to the east. The wooded hill slopes within the AONB lie a little way to the west and form the backcloth to the site.</p>		
LANDSCAPE SENSITIVITY:		
Evaluation:	High/medium	
Justification:		
<p>The site is susceptible to development for housing in respect of it being open to views within the AONB from the west including a footpath. Though set back from the A429 it clearly marks an extension of the residential settlement southwards contrasting with the uses either side. The garden centre has the appearance of an agricultural building complex and so fits in reasonably well into the countryside. The hospital has potential for significant screening as a building surrounded by grounds. This site is isolated from other residential development and lies in open countryside. Overall, it appears to be unsuitable for housing.</p>		
LANDSCAPE CONTEXT		
<i>National Character Area:</i>	Cotswolds	
<i>Landscape Character Type:</i>	Pastoral Lowland Vale	
<i>Landscape Character Area:</i>	Upper Evenlode Vale	
<i>Historic Landscape Character:</i>	Less irregular enclosure partly reflecting former unenclosed cultivation patterns	
CONSTRAINTS/DESIGNATIONS		
<i>Landscape:</i>	Cotswolds AONB Moreton-in-Marsh Surrounds SLA to the east	
<i>Historic:</i>	none	
<i>Biodiversity:</i>	none	
<i>Other (floodplain, PROWs):</i>	none	

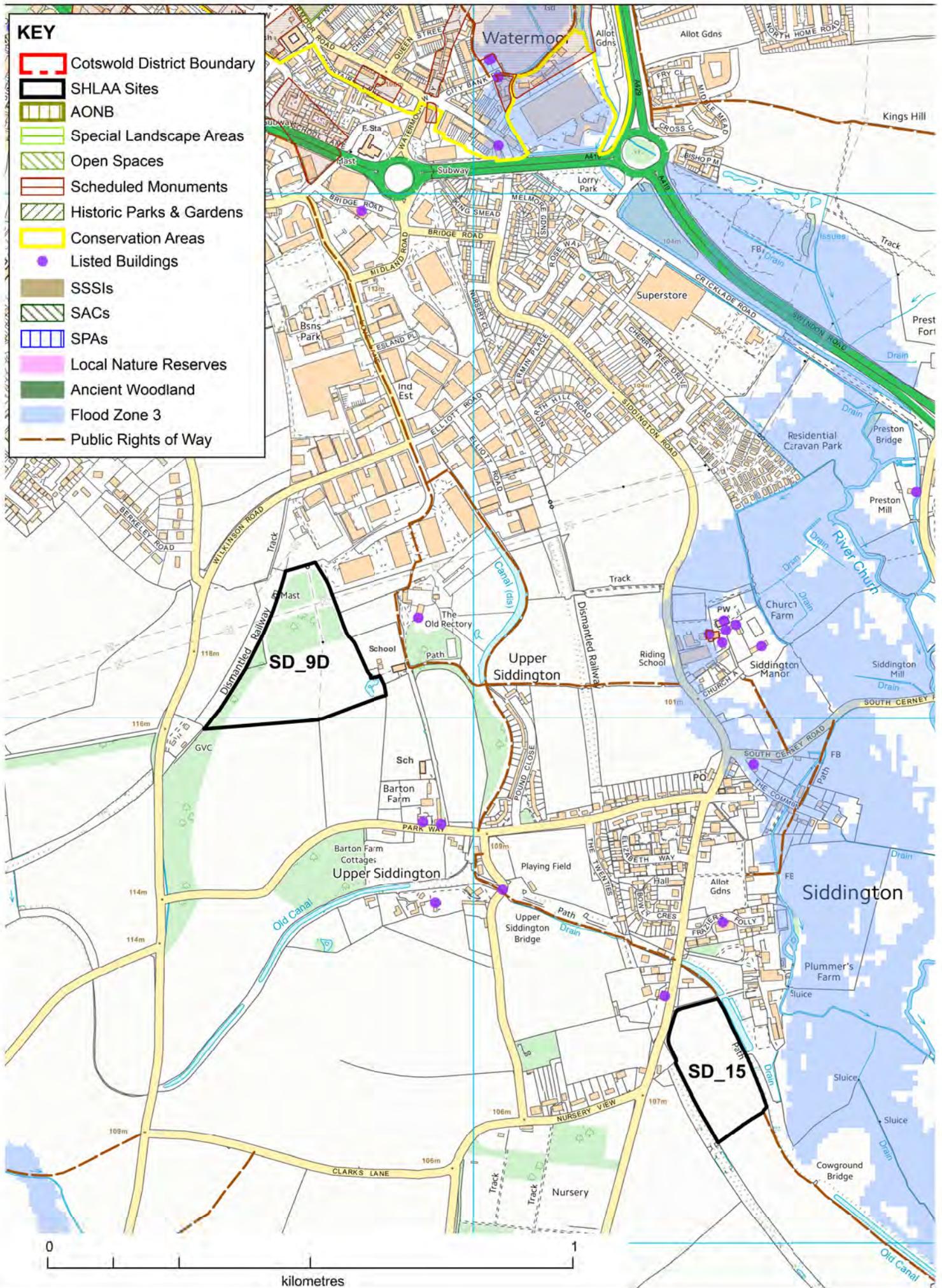
10. Northleach



**Figure N/F/2 - NORTHLEACH
 Housing Sites, Constraints and Designations**

Site Reference: N_18	Settlement:	Northleach
DESCRIPTION:		
<p>This site lies outside the settlement west of the Fosse Way, with a gap between the road and the settlement proper to the east. The site lies on the southern slopes of the River Leach valley bounded by linear incremental housing development on the Fosse Way itself and by a deciduous plantation to the west. Its southern boundary edge incorporating the 20th century dwelling, Copse View, bounds an arable field rising southwards to the plateau top. The listed old Prison/visitor centre lies to the north of the adjacent road. The valley bottom to the north is enclosed by the site and its valley sides and by woodland, Prison Copse. Two public footpaths run along it including Monarch's Way which has views towards the site as well as to Northleach and its church tower. There are also distant views to the site in juxtaposition with Northleach church tower from Hampnett Conservation Area and the Macmillan Way. The site lies in the Cotswolds AONB.</p>		
LANDSCAPE SENSITIVITY:		
Evaluation:	High	
Justification:		
<p>The susceptibility of this site to housing development lies in its location west of the Fosse Way significantly separated from the main part of Northleach, only associating with linear development. It is highly apparent from the Monarch's Way in a view which also includes the Northleach church tower and the prison which are interesting features. The value of the site is in its AONB designation and the juxtaposition with the listed prison which should be viewed as separate from the settlement. Housing development would significantly and obviously extend the settlement in this location, reinforcing incremental linear settlement, and would have a significant negative impact on the local landscape.</p>		
LANDSCAPE CONTEXT		
<i>National Character Area:</i>	Cotswolds	
<i>Landscape Character Type:</i>	10.High Wold Dip-Slope Valley	
<i>Landscape Character Area:</i>	Upper / Middle Leach Valley	
<i>Historic Landscape Character:</i>	Regular organised enclosure ignoring former unenclosed cultivation patterns	
CONSTRAINTS/DESIGNATIONS		
<i>Landscape:</i>	Cotswolds AONB	
<i>Historic:</i>	none	
<i>Biodiversity:</i>	none	
<i>Other (floodplain, PROWs):</i>	None on site, but Monarch's Way and Diamond Way PROWs to the north.	

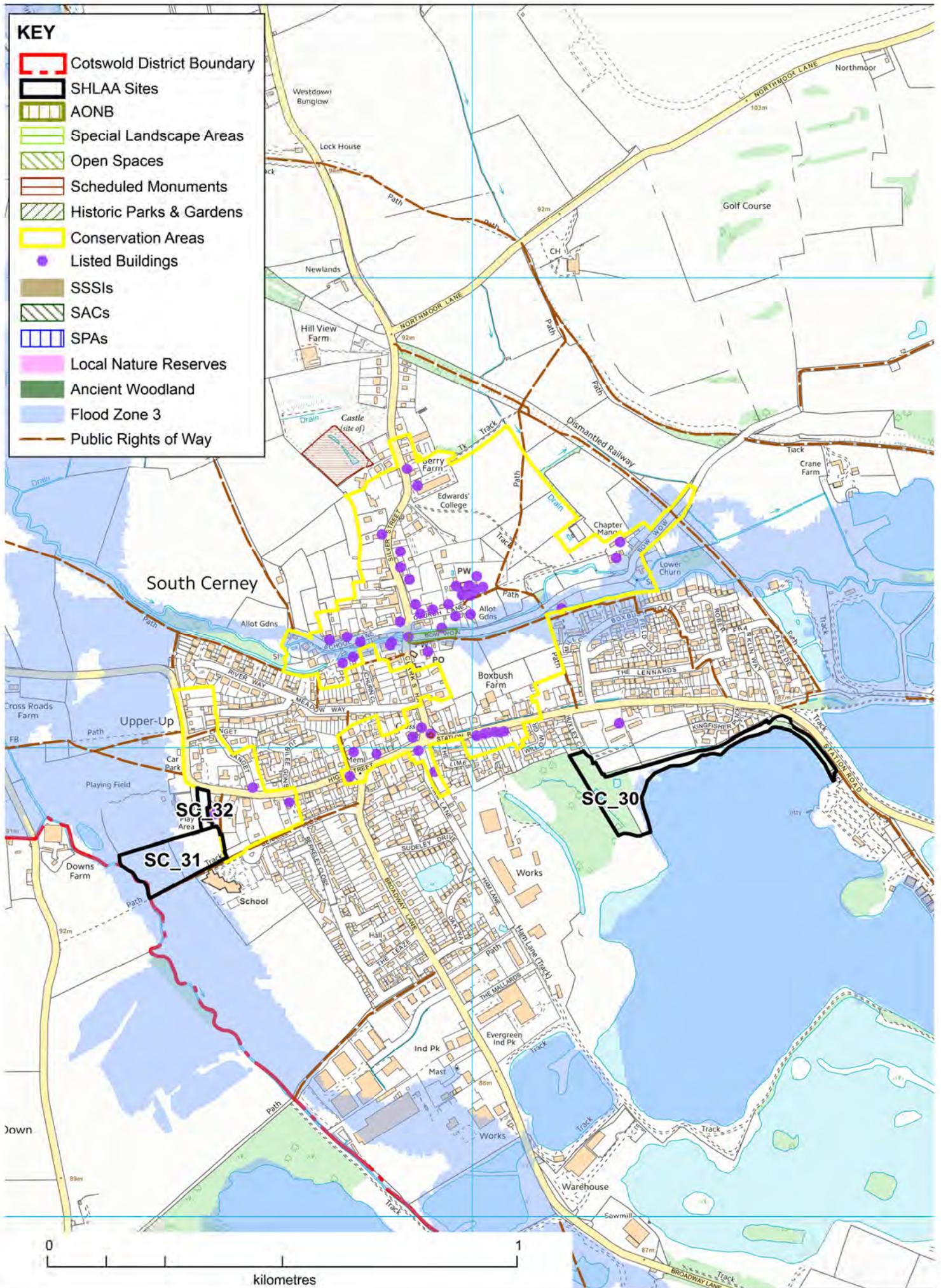
11. Siddington



Site Reference:SD_9D	Settlement:	Siddington
DESCRIPTION:		
<p>The site is part of a large, flat arable field on the western edge of Siddington, with extensive maturing woodland planting along its western and northern edges, consisting of a mixed deciduous tree belt of varying width, with denser woodland at the northern end either side of a line of pylons. Along its north western edge trees along the dismantled railway provide further screening. The southern boundary is a low hedge to the east and open to the rest of the field to the south which runs to a tall hedge and ditch along Park Way. Boundaries to adjacent sites to the east are all well treed or hedged. There is a pond adjacent to its boundary with SD_13 and the school buildings that lie within SD_13 and nearby. This is its closest point to the settlement - an area that is already distinct from the main part of the village. Love Lane commercial estate lies to the north. Its tranquillity is disturbed by traffic noise and pylons, but all views of the southern edge of Cirencester, including Love Lane, are well screened.</p>		
LANDSCAPE SENSITIVITY:		
Evaluation:	High/medium	
Justification:		
<p>The susceptibility of this site to development lies in its function in maintaining separation between Siddington and the southern edge of Cirencester and its contribution to the wider arable landscape of the Kemble Dipslope, although the dismantled railway and extensive woodland belt screen the area from the west. The planting belt in itself provides a valuable buffer and resource. The development would erode this separation which currently only has a few scattered buildings between Love Lane and the main bulk of Siddington. The south western edge of any development would be apparent in glimpse views as there is no current vegetated boundary. The site's value lies in its role as setting for one of the older parts of Siddington with its rural character.</p>		
LANDSCAPE CONTEXT		
<i>National Character Area:</i>	Cotswolds	
<i>Landscape Character Type:</i>	Dip Slope Lowland	
<i>Landscape Character Area:</i>	Kemble Dipslope	
<i>Historic Landscape Character:</i>	Existing settlement - present extent	
CONSTRAINTS/DESIGNATIONS		
<i>Landscape:</i>	none	
<i>Historic:</i>	none	
<i>Biodiversity:</i>	none	
<i>Other (floodplain, PROWs):</i>	none	

Site Reference: SD_15	Settlement:	Siddington
DESCRIPTION:		
<p>The site comprises of series of grazed horse paddocks on the south eastern edge of the settlement. The site is bounded by the remnant waterbodies of the Cotswold Canal with associated public footpath and mature trees on its eastern edge. To the west it is bounded by a dismantled railway with outgrown hedges on a slight embankment. To the south, there is an outgrown hedge with trees. To the north is the access from the Ashton Road to a traditional farm complex to the east. This is now used partly at least for horse-related activities with a manege. The settlement lies to the north with views into the site from the Ashton Road and the listed Greyhound pub. Sparse traditional roadside development lies to the east with the isolated Nursery View dwellings beyond. Open countryside surrounds the site to the south, south east and south west. Views are also possible directly into the site from the canal footpath which provides a very attractive link between the settlement and the countryside.</p>		
LANDSCAPE SENSITIVITY:		
Evaluation:	High/medium	
Justification:		
<p>The susceptibility of this site to development lies partly in its location as part of the open countryside south of the settlement, extending significantly beyond other development form and bounded by a rural farm complex to the east. The site is also highly visible from the Cotswold canal path which runs along a particularly attractive green corridor and from the listed Greyhound Pub. Whilst enclosed it would be a marked extension of the settlement and any development here is considered inappropriate.</p>		
LANDSCAPE CONTEXT		
<i>National Character Area:</i>	Upper Thames Clay Vales	
<i>Landscape Character Type:</i>	River Basin Lowland	
<i>Landscape Character Area:</i>	Somerford Keynes	
<i>Historic Landscape Character:</i>	Riverine pasture, probably meadows now largely enclosed.	
CONSTRAINTS/DESIGNATIONS		
<i>Landscape:</i>	none	
<i>Historic:</i>	none	
<i>Biodiversity:</i>	none	
<i>Other (floodplain, PROWs):</i>	PROW along eastern boundary, associated with former canal.	

12. South Cerney

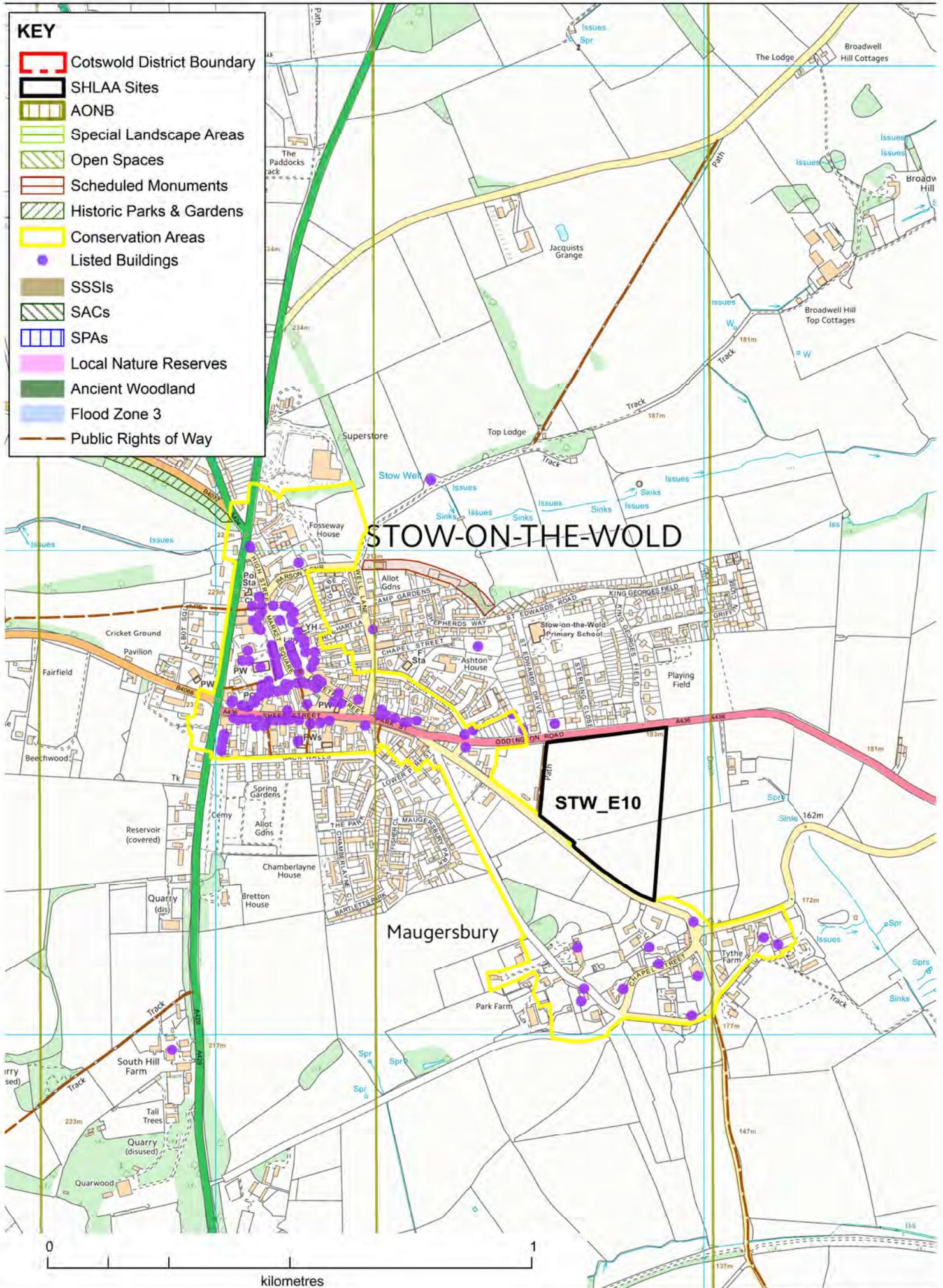


Site Reference: SC_30	Settlement:	South Cerney
DESCRIPTION:		
<p>This site consists of the flat vegetated edge of a flooded gravel pit which is now a recreational lake (16) forming part of the Cotswold Water Park. The edge is a combination of rough grass and water side trees and scrub, primarily willows. There is a larger area back from the water to the south west which includes some larger trees and rough vegetation. This area is accessed by Huxley Close from which a footpath runs around the back edge of the strip, linking to Station Road to the north east. This is separated by a fence from the water's edge which is used currently by coarse fishermen. To the north, the site is backed by a mature hedge and trees and paddocks associated with Cerney Court and also by recent two storey housing at Kingfisher Court to the north east. The lake is a key wildlife site.</p> <p>There are attractive views across the water to the other sides of the lake which is dominated by waterside vegetation. There appears to be relatively limited development around the edge when viewed from the accessible parts of the site with some lakeside development and sailing club apparent to the south east. However, housing development under construction east of Ham Lane to the south west is altering this balance, with part located around an inlet on the lake..</p>		
LANDSCAPE SENSITIVITY:		
Evaluation:	High/medium	
Justification:		
<p>The site is susceptible to development by reason of its relationship to the lake, contributing to the predominantly green and attractive edge, and possible ecological value of edge habitats. Lake 16 is a key wildlife site. The site acts as a positive setting to leisure in the area, as well as allowing some public access. There needs to be an appropriate balance between the soft edge and built form so the attractiveness and quiet character of the lake is not compromised. The development off Ham Lane, especially around Swan Close, has altered that balance to the extent that further lakeside development is undesirable. Therefore, only development of a very small part of this site may be acceptable in the south west part extending Huxley Close by upto three houses but retaining a substantial buffer of trees and other vegetation between the houses and the lake edge and with the development to the south. There should also be no development along the narrow parts of the site and this should be enhanced in terms of appropriate vegetation cover, access and management for wildlife. Public access between Huxley Close and Station Road should be maintained.</p>		
LANDSCAPE CONTEXT		
<i>National Character Area:</i>	Thames and Avon Vales	
<i>Landscape Character Type:</i>	River Basin Lowland	
<i>Landscape Character Area:</i>	Somerford Keynes	
<i>Historic Landscape Character:</i>	Active recreational site (<i>applies to the Water Park as a whole</i>)	
CONSTRAINTS/DESIGNATIONS		
<i>Landscape:</i>	none	
<i>Historic:</i>	none	
<i>Biodiversity:</i>	Lake 16 is a key wildlife site	
<i>Other (floodplain, PROWs):</i>	Flood zone 3 on the fringes of the waterbody. PROW (bridleway) along eastern boundary	

Site Reference: SC_31	Settlement:	South Cerney
DESCRIPTION:		
<p>This site consists of a medium-sized, flat field of horse pasture with remnant ridge and furrow on the western edge of the settlement. The western two thirds of the field are in the flood zone associated with a watercourse on the western boundary. The site has outgrown hedges on three boundaries with housing and a car park to the east which are in South Cerney Conservation Area. A public footpath runs along the eastern and southern edges. There is a 50m wide young tree plantation on the other side of the watercourse beyond which is open countryside. Tennis courts and playing fields lie to the north and a school lies to the south. This is a site of some but relatively low tranquillity, due to adjacent development.</p>		
LANDSCAPE SENSITIVITY:		
Evaluation:	Medium	
Justification:		
<p>The site is susceptible to development by reason of it lying predominantly in the flood zone and its unimproved pasture and ridge and furrow. Any development in the flood zone would also extend the settlement significantly to the west compared to development to the north and south and therefore is undesirable also for this reason. The value of the site lies in its juxtaposition with the Conservation Area. Normally it would be considered desirable to maintain the relationship between the Conservation Area and the countryside intact and there is merit in this approach. However, housing on the eastern third of the site, if at low density and carried out to a high standard with a positive edge to the west may be an appropriate intervention. The site is inappropriate for lower quality or high density development. However, any development should accommodate the PROW and may compromise the continued use of the horse pasture.</p>		
LANDSCAPE CONTEXT		
<i>National Character Area:</i>	Thames and Avon Vales	
<i>Landscape Character Type:</i>	River Basin Lowland	
<i>Landscape Character Area:</i>	Somerset Keynes	
<i>Historic Landscape Character:</i>	Existing settlement - present extent (<i>does not apply to this site</i>)	
CONSTRAINTS/DESIGNATIONS		
<i>Landscape:</i>	none	
<i>Historic:</i>	South Cerney Conservation Area on eastern boundary	
<i>Biodiversity:</i>	none	
<i>Other (floodplain, PROWs):</i>	Floodzone 3 covers over half the site. PROW (footpaths) lie along southern and eastern boundaries.	

Site Reference: SC_32	Settlement:	South Cerney
DESCRIPTION:		
<p>This site is located on the edge of the settlement as the High Street turns and enters the village next to the village playing fields and tennis courts. It is therefore very prominent and an important gateway site. It consists of a linear series of small enclosures, apparently associated with adjacent house gardens to the east. There are a few small trees and shrubs within the enclosures and they are bounded by high hedges to the north, west and south. The houses to the east vary in distance from the site, with Walnut House, a listed building, being very close. They are all in the South Cerney Conservation Area, and are very discreet in terms of appearance in the wider landscape/playing fields to the west. This is a site of some but relatively low tranquillity, due to adjacent development.</p>		
LANDSCAPE SENSITIVITY:		
Evaluation:	High/medium	
Justification:		
<p>The site is susceptible to development by reason of its location at the gateway to the village, adjacent to open playing fields and tennis courts, its value is as a setting to the Conservation Area and Walnut House. Normally it would be considered desirable to maintain the relationship between the Conservation Area and the countryside intact with these enclosures continuing to act as gardens to the discreet adjacent houses, and there is merit in this approach. If housing was allowed, it must be at a very low density of a maximum of two houses, avoiding affecting Walnut House's setting, and carried out to a high standard with a positive edge to the north and west.</p>		
LANDSCAPE CONTEXT		
<i>National Character Area:</i>	Thames and Avon Vales	
<i>Landscape Character Type:</i>	River Basin Lowland	
<i>Landscape Character Area:</i>	Somerset Keynes	
<i>Historic Landscape Character:</i>	Existing settlement - present extent (<i>does not apply to this site</i>)	
CONSTRAINTS/DESIGNATIONS		
<i>Landscape:</i>	none	
<i>Historic:</i>	Lies within South Cerney Conservation Area	
<i>Biodiversity:</i>	Stream course on western boundary may have some interest but not designated.	
<i>Other (floodplain, PROWs):</i>	none	

13. Stow-on-the-Wold



Site Reference: STW_E10	Settlement:	Stow-on-the Wold
DESCRIPTION:		
<p>This site lies on the elevated land on which Stow lies at the head of a tributary valley falling from west to east. It consists of the upper part of a large fallow field which is scrubbing up in places. It is also used for the annual Stow Horse Fair. The northern boundary is formed by the busy A436 which has a gappy outgrown hedge and estate housing beyond. The western boundary is formed by a hedgerow with dense mature trees, a public footpath and a rough field beyond running up to the settlement proper. To the south, the site is bounded by a hedge and a quiet lane that links Stow to the tranquil village of Maugersbury. To the south of this there is parkland of pasture and trees within the Stow-on-the-Wold Conservation Area. The eastern boundary runs across the field with no defining features. To the north it corresponds with the edge of the housing estate on the opposite side of the A436 and to the south it ends opposite a dwelling in Maugersbury. There are wide views to the east towards lower land and intervisibility with it. There are also views from the A436 close to the site, as well as from the lane to the south. The site is more tranquil closer to Maugersbury, away from the traffic on the A436. The site lies in the Cotswolds AONB.</p>		
LANDSCAPE SENSITIVITY:		
Evaluation:	High	
Justification:		
<p>This site is susceptible to development by reason of its location as an important open rural space and pasture between Stow and Maugersbury on the eastern approaches to the town and its openness to view to the east, without any boundary here or screening. Any development would erode the gap between the two distinctive settlements, and full development would join the settlements. This is highly inappropriate. The site's value is demonstrated by its location within the AONB and its significant contribution to the setting of the Conservation Area and approach to the settlement. Development here would extend the settlement out into open countryside and would be highly visible.</p>		
LANDSCAPE CONTEXT		
<i>National Character Area:</i>	Cotswolds	
<i>Landscape Character Type:</i>	15. Farmed Slopes	
<i>Landscape Character Area:</i>	Vale of Bourton Farmed Slopes	
<i>Historic Landscape Character:</i>	Less irregular enclosure partly reflecting former unenclosed cultivation patterns	
CONSTRAINTS/DESIGNATIONS		
<i>Landscape:</i>	Cotswolds AONB	
<i>Historic:</i>	Stow-on-the-Wold Conservation Area lies on the southern boundary. The former Grade II listed Board school lies across the A436 to the north.	
<i>Biodiversity:</i>	none	
<i>Other (floodplain, PROWs):</i>	none	

14. Tetbury

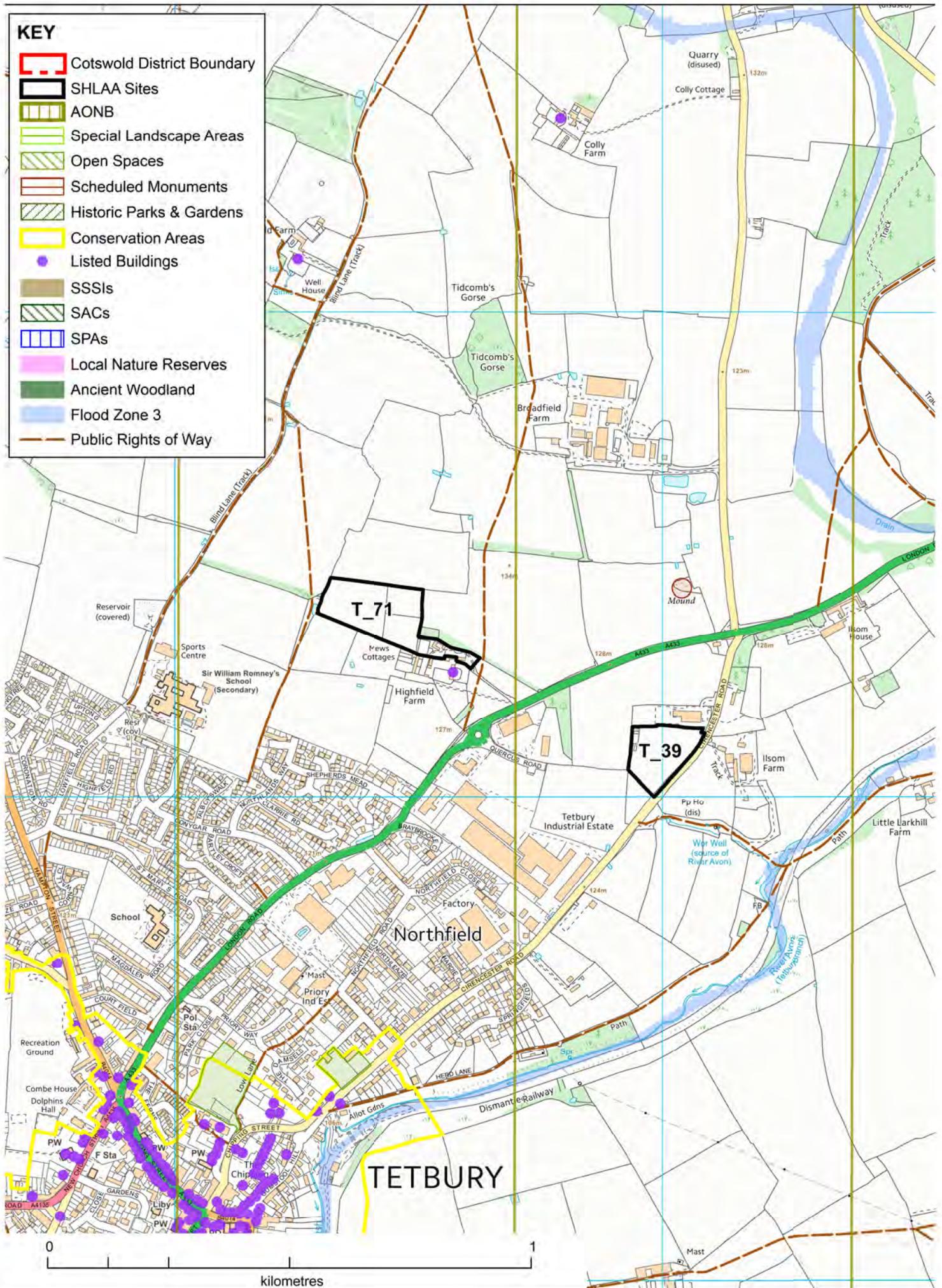


Figure T/F/2 - TETBURY
Housing Sites, Constraints and Designations

Site Reference: T_39	Settlement:	Tetbury
DESCRIPTION:		
<p>This site slopes gently to the south east on the northern edge of Tetbury and consists of a single medium-sized pasture field. It is bound by the Cirencester Road to the south with outgrown hedges and trees, a remnant field pond and countryside and a stone mason's yard beyond. To the north there is a discontinuous hedge and beyond a two-storey modern office building, a low building and associated parking. To the south is an open boundary to housing development under construction and an extension to Quercus Road serving the development and leading to the site. To the west there is an outgrown hedge with trees beyond which is a fallow site. Overall, the site is well screened and feels associated with development. There is a PROW to the south east but not within the site. The site lies in the Cotswolds AONB.</p>		
LANDSCAPE SENSITIVITY:		
Evaluation:	Medium/low	
Justification:		
<p>The susceptibility of this site to development is derived from its location on Cirencester Road with countryside to the south, its trees and hedges on this boundary and to the west, and the adjacent remnant pond. However, its immediate relationship is to the housing development site on its southern boundary and it is well screened especially to the south east. It has limited intrinsic value although its irregular shape is indicative of historic unenclosed cultivation patterns. Its defined road boundary may serve as a deterrent to further extension into open countryside. The value of the site is in its inclusion within the AONB but it does not conform to the defined qualities of the designation. Development here should be of the same low level as adjoining recent office/light industrial development or two storey housing.</p>		
LANDSCAPE CONTEXT		
<i>National Character Area:</i>	Cotswolds	
<i>Landscape Character Type:</i>	11. Dip-Slope Lowland	
<i>Landscape Character Area:</i>	South and Mid Cotswolds Lowland	
<i>Historic Landscape Character:</i>	Less irregular enclosure partly reflecting former unenclosed cultivation patterns	
CONSTRAINTS/DESIGNATIONS		
<i>Landscape:</i>	Cotswolds AONB	
<i>Historic:</i>	none	
<i>Biodiversity:</i>	none	
<i>Other (floodplain, PROWs):</i>	none	

Site Reference: T_71	Settlement:	Tetbury
DESCRIPTION:		
<p>This site lies on very gently sloping land on the northern edge of Tetbury on the northern/north western edge of the Highfield Farm complex. The eastern part of the site comprises a distinctive dwelling and curtilage adjacent to the listed Highfield Farm house, a horse manege and stables, and access which serves the Mews Cottages to the south. To the east, the main bulk of the site is a series of improved grazed horse paddocks. To the north and east of the paddocks there are outgrown hedges with tree planting, to the west there is an outgrown hedge and some trees around a remnant field pond, beyond which is a public footpath. To the south, there is a fenced boundary to fallow fields awaiting consented housing development. There is a young plantation to the east of the site on the northern boundary of the farm complex. Open countryside lies on the north, east and west with The Sir William Romney's School to the south east. The main view of the site is towards the distinctive dwelling on the eastern end of the site from the A433. This complements the farmhouse. There are also oblique glimpse views toward the site's eastern boundary from the road. The public footpath to the west and north east has views towards the site, mostly through trees. The rising land on the plateau and outgrown hedges means that there do not appear to be other views into the site. The site lies in the Cotswolds AONB.</p>		
LANDSCAPE SENSITIVITY:		
Evaluation:	Medium	
Justification:		
<p>The site is susceptible to development by reason of its location on the settlement edge, its current land use, its consistency with, and relationship to, the wider farmed landscape, and views from the PROW along its western boundary and from the A433. If developed it would definitely extend the perceived envelope of the town, although this would be less critical if development is carried out east of the Audi garage adjacent to the A433. The site's value is reflected in its AONB designation and the dwelling to the east contributes to the qualities and character of the area, and the setting of the listed farmhouse. If development is permitted, it would have to be accessed from the proposed new development to the south west and retain the character of the buildings surrounding the listed farmhouse to retain its integrity and character, especially when viewed from the south east. Also, the eastern boundaries should be reinforced and all vegetation along other boundaries should be conserved and managed as part of shared space to ensure their longevity.</p>		
LANDSCAPE CONTEXT		
<i>National Character Area:</i>	Cotswolds	
<i>Landscape Character Type:</i>	11. Dip-Slope Lowland	
<i>Landscape Character Area:</i>	South and Mid Cotswolds Lowland	
<i>Historic Landscape Character:</i>	Less irregular enclosure partly reflecting former unenclosed cultivation patterns	
CONSTRAINTS/DESIGNATIONS		
<i>Landscape:</i>	Cotswolds AONB	
<i>Historic:</i>	Grade II listed Highfield Farmhouse lies to the south.	
<i>Biodiversity:</i>	none	
<i>Other (floodplain, PROWs):</i>	none	

15. Willersey

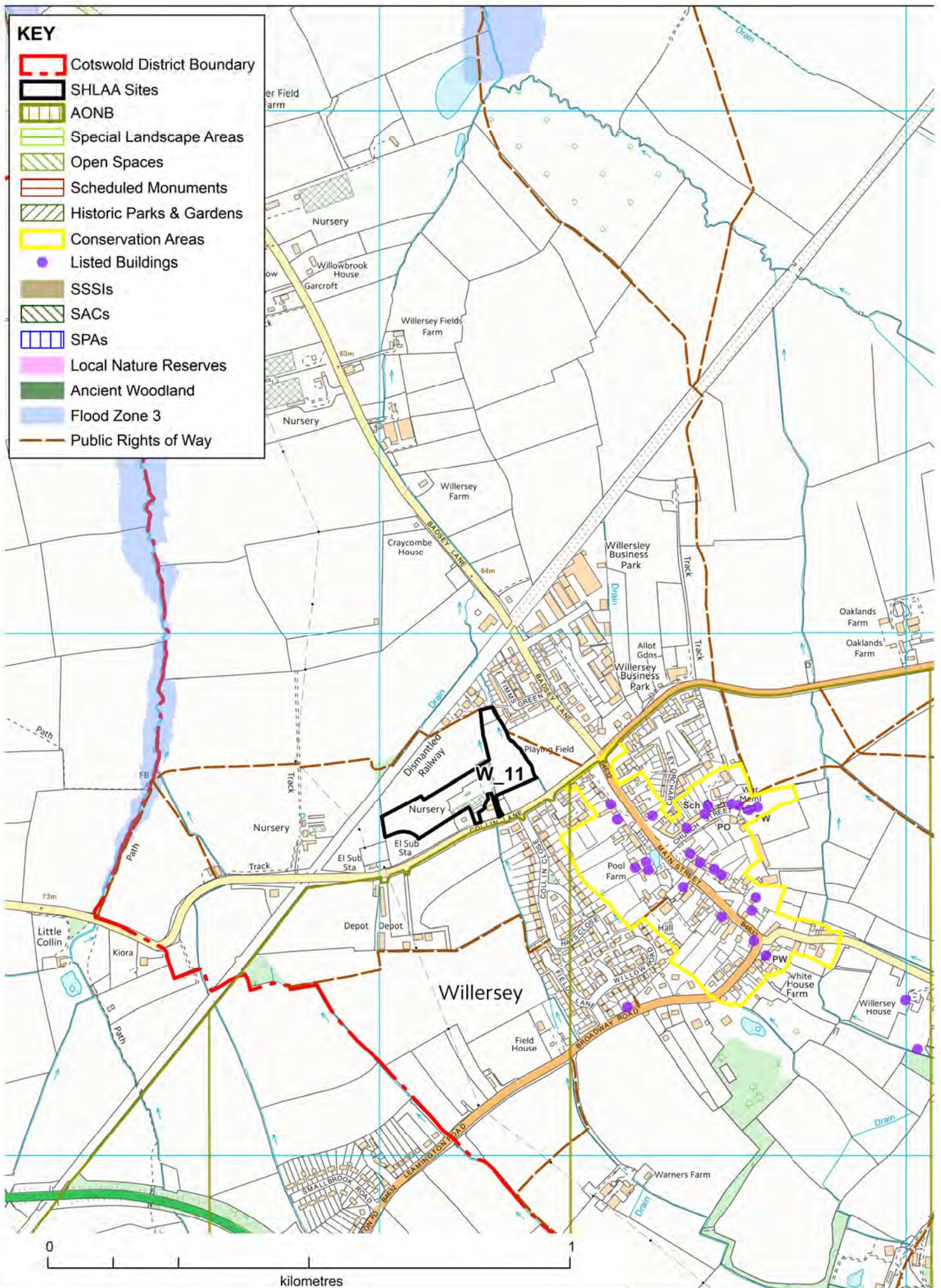


Figure W/F/2 - WILLERSEY
Housing Sites, Constraints and Designations

Site Reference: W_11	Settlement:	Willersey
DESCRIPTION:		
<p>The site lies on the western part of the settlement and consists of two parts. To the west, it comprises of part of a grass field, a plant nursery and a remaining shed on the north western edge of the settlement. A high cut thorn hedge runs along the southern boundary of the field with Collin Lane but the site itself is set back from this boundary. To the north, the site is separated by another grass field from the vegetated low dismantled railway which screens all views from the wider landscape in this direction. To the west, a dense conifer hedge separates it from an electricity sub-station and a depot lies to the south west. A high hedge runs on the eastern boundary, although there is a glimpse here of the roof of a building within the site. The site occupies flat land, with open pasture fields across Collin Lane. Although the site lies on the edge of the settlement, the dismantled railway is a strong boundary feature. The site is difficult to see into but any development on it would be visible from the south. It lacks tranquillity due to the sub-station, road and former use. This part of the site forms part of Zone W4.</p> <p>The eastern part of the site (also assessed as Zone W9) is a flat pasture (ridge and furrow) with housing on its northern boundary and to the north east, and across an open playing field with Badsey Lane as its eastern edge. The field is separated from the playing field by a small willow-lined watercourse. To the south there is a fenced boundary to three small pasture fields, with a tall hedge screening views in from Collin Lane, apart from a glimpse through a filed entrance. To the west, the site has views over a low hedge to an arable/grass field, with the low vegetation on the dismantled railway providing a screen to longer views, while views of the adjoining nursery and rest of the site are screened by a tall hedge and buildings.</p>		
LANDSCAPE SENSITIVITY:		
Evaluation:	Western part of site- Medium/low Eastern field- Medium	
Justification:		
<p>Western part- The site's susceptibility to development is in its visibility to Collin Lane and the AONB to the south, and any expansion here would be a significant extension to the settlement with a tenuous physical link to the existing edge. However, the site is set back from Collin Lane which may limit views from the road, depending on boundary treatment/management and mitigation. It is also screened from wider view to the north and west and its intrinsic sensitivity is limited.</p> <p>Eastern field- This site is of susceptibility to housing development due to very local issues, such as watercourses on two boundaries, a PROW along part of two boundaries and the remnant ridge and furrow on the site. However, within the context of the settlement, although it lies towards the edge of the settlement, there is housing or recreational facilities on three sides and just one field between it and the dismantled railway that provides such a strong north western boundary to Willersey. It lies outside the AONB, suggesting that it is not of high landscape value. It is a flat site, so housing within it would blend in to adjacent housing; separation could be maintained via the small pasture fields along its southern boundary and the roadside hedge. Care should be taken to ensure a good frontage along the eastern boundary, where it faces the playing field and the southern boundary. Care is also required to safeguard the watercourse and the riparian vegetation. Development here would have no impact on the wider landscape.</p>		
LANDSCAPE CONTEXT		
<i>National Character Area:</i>	Severn and Avon Vales	
<i>Landscape Character Type:</i>	Unwooded Vale	
<i>Landscape Character Area:</i>	Mickleton Vale Fringe	
<i>Historic Landscape Character:</i>	Less irregular enclosure partly reflecting former unenclosed cultivation patterns	
CONSTRAINTS/DESIGNATIONS		
<i>Landscape:</i>	none	

<i>Historic:</i>	none
<i>Biodiversity:</i>	watercourse along eastern and western boundaries
<i>Other (floodplain, PROWs):</i>	PROW on north eastern boundary