Habitats Directive Assessment for the Cottenham Village Design Statement SPD

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1 Executive Summary

This report is an Assessment of the Cottenham Village Design Statement Supplementary Planning Document, to meet the requirement of the Habitats Directive. It has been prepared by the Cottenham Village Design Group on behalf of South Cambridgeshire District Council as the relevant competent authority.

The Assessment provides a screening to examine whether the Cottenham Village Design Statement is likely to have any significant impacts on a Natura 2000 site, either alone or in combination with other projects and plans, in view of the site's conservation objectives. The Assessment:

- Provides details of the plan and its proposals;
- Identifies Natura 2000 sites and Ramsar sites (in accordance with PPS9 §6) within and outside the plan area that could potentially be affected by the Cottenham Village Design Statement;
- Identifies the characteristics of these sites and their conservation objectives; and
- Screens the plan, in combination with other relevant plans or projects, to identify any likely significant effects on the sites.

The Assessment has been undertaken following a precautionary approach in accordance with the Habitats Directive.

1.1 Outcome of Assessment

It can be objectively concluded that the Cottenham Village Design Statement SPD is not likely to have any significant effects on any Natura 2000 or Ramsar sites. There is therefore no requirement to proceed to the next stage of an Appropriate Assessment.

2 Introduction

This report is an Assessment of the Cottenham Village Design Statement Supplementary Planning Document [VDSSPD], to meet the requirement of the 'Habitats Directive' (92/43/EEC) [HD]. It has been prepared by the Cottenham Village Design Group (CVDG) on behalf of South Cambridgeshire District Council (SCDC) as the relevant competent authority.

2.1 The Requirement for Habitats Directive Assessment

[HD] sets out the requirement for Assessment of plans or projects affecting Natura 2000 sites. Article 6(3) establishes the requirement for Habitats Directive Assessment (HDA) and states:

> *"(3) Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans and projects, shall be subject to Appropriate Assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public."*

Article 6(4) goes on to discuss alternative solutions and compensatory measures. It states:

> *"(4) If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.*
>
> *Where the site concerned hosts a priority natural habitat type and/or a priority species, the only considerations which may be raised are those elating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest"*

2.2 What are Natura 2000 Sites?

Natura 2000 is a Europe-wide network of sites of international importance for nature conservation established under [HD]. This directive has been transposed into UK law as the Conservation (Natural Habitats, &c.) Regulations 1994 [HR] with amendments [HR2007] which came into force on 21st August 2007.

Natura 2000 sites include Special Areas of Conservation (SAC) and candidate Special Areas of Conservation (cSAC), which are designated under [HD], and Special Protection Areas (SPA) classified under the 'Birds Directive' (79/409/EEC) [BD].

In line with Government policy in [PPS9] §6, this assessment also relates to Ramsar sites although these are not strictly part of Natura 2000. These sites support internationally important wetland habitats and are listed under the Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention, 1971) [RAMSAR].

2.3 What is Habitats Directive Assessment?

Habitats Directive Assessment (HDA) is an assessment of the potential effects of a proposed plan or project which is not necessary for the management of the site and which is likely to have a significant effect on one or more Natura 2000 sites in view of the site's conservation objectives.

There are four stages to the HDA process set out in the European Commission guidance 'Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC' [HDGUIDE]. Article 6(3) of [HD] relates to Stages 1 to 3 and Article 6(4) to Stage 4, as follows:

- **First stage – Screening**
  The process which identifies the likely impacts upon a Natura 2000 site of a project or plan, either alone or in combination with other projects or plans, and considers whether these impacts are likely to be significant.
- **Second stage – Appropriate Assessment**
  The consideration of the impact on the integrity of the Natura 2000 site of the project or plan, either alone or in combination with other projects or plans, with respect to the site's structure and function and its conservation objectives. Additionally, where there are adverse impacts, an assessment of the potential mitigation of those impacts.
- **Third stage – Assessment of alternative solutions**
  The process which examines alternative ways of achieving the objectives of the project or plan that avoid adverse impacts on the integrity of the Natura 2000 site.
- **Fourth stage – Compensatory measures**
  An assessment of compensatory measures where, in the light of an assessment of imperative reasons of overriding public interest, it is deemed that the plan should proceed.

If it is concluded at the screening stage that there will be no significant impacts, there is no need to carry out subsequent stages. This Screening Report addresses the First Stage only of the HDA process.

2.4 What is a Significant Effect on a Natura 2000 Site?

A judgement of the significance of effects on a Natura 2000 site should be undertaken in relation to the designated interest features and conservation objectives of the Natura 2000 site (see §6 and §7) using sound judgement, and with a scientific basis where available. If insufficient information is available to make a clear judgement, it should be assumed that a significant effect is possible in line with the precautionary principle:

> *"Prudent action that avoids the possibility of irreversible environmental damage in situations where the scientific evidence is inconclusive but the potential damage could be significant"*

2.5 Structure of the HDA Report

The key sections of this HDA report are:

§3 Description of the Cottenham Village Design Statement SPD

§4 Description of the relevant plans and projects to be considered 'in combination'

§5 HDA Screening Methodology **–** sets out the approach used and specific tasks undertaken

§6 Natura 2000 and Ramsar sites potentially affected by the Cottenham Village Design Statement SPD **–** identifies and describes the Natura 2000 and Ramsar sites that could potentially be affected by the Cottenham Village Design Statement SPD, including describing the conservation objectives for each site and the potential sensitivities of the sites to adverse effects

§7 Screening Assessment of the Cottenham Village Design Statement SPD **–** considers whether there are likely to be any significant effects of the Cottenham Village Design Statement SPD, alone or in combination with other relevant plans and projects, on Natura 2000 and Ramsar sites

§8 Consultations

§9 Conclusions, summarises the findings of the HDA Screening

3 Description of the Cottenham Village Design Statement SPD

The Local Development Framework (LDF) comprises a number of Development Plan Documents (DPDs) and Supplementary Planning Documents (SPDs) that set out policies and proposals for the development and use of land in the district. The LDF includes a vision of the future of South Cambridgeshire, and objectives and targets which developments must meet to secure that vision. Planning applications and other decisions are determined in accordance with it.

[VDSSPD] covers Cottenham Parish in the district of South Cambridgeshire. It conforms to the Core Strategy DPD [CSDPD] and Development Control Policies DPD [DCPDPD]. Its guidelines refine and elaborate policies in these two DPDs, taking relevant policies and adding local emphasis and detail. It is not directly connected to or necessary for the management of Natura 2000 or Ramsar sites.

[VDSSPD] describes Cottenham as it is today, and highlights the qualities valued by its residents. It has been written by Cottenham residents so that local knowledge, views and ideas may contribute to the growth and prosperity of the village, and to the high quality of its environment. The aim is to ensure that further development and change, based on a considered understanding of the village's past and present, will contribute positively to the future of Cottenham and protect and enhance its special nature.

The Statement is arranged in sections (Community, Economy, Landscape and Wildlife, Settlement, Buildings, Highways and Street Furniture) with each containing descriptive text followed by a series of numbered guidelines. These guidelines represent the key points that users of the document are encouraged to take into account when planning or implementing development or change. The policy elements can be summarised as follows:

Policy Elements	**Summary**
Community	Local advice should be sought by developers and planners.
Economy	Businesses within the village are encouraged, but commercial properties should be appropriate for their context.
Landscape & Wildlife	New developments on the edge of or outside the village framework require special care concerning their effect on the landscape, and habitats for wildlife should be protected and enhanced.
Settlement	Cottenham has distinctive patterns of construction that should be retained by any new developments, and open space provision needs to be improved.
Buildings	New buildings and maintenance need to respect their context, although appropriate contemporary architecture is encouraged.
Highways	Traffic through the village is a problem; safety needs to be improved and better facilities are required for cyclists and pedestrians.
Street Furniture	Metalwork should be kept simple and lighting should be muted.

The main policy elements that have potential to impact on the nature conservation interest of sites are those relating to highways.

4 Description of the Relevant Plans and Strategies to be considered 'In Combination'

[VDSSPD] will supplement [CSDPD] and [DCPDPD] to provide policies against which development proposals within the parish of Cottenham will be determined. As an SPD it does not allocate land for development ([PPS12] §2.43), so it will not in itself have any effect on European sites. However, in the context of the wider planning framework side-effects from development in Cottenham might still have effects beyond the parish boundary.

[CSDPD] plans for the development proposed in [RPG6], and subsequently the Cambridgeshire and Peterborough Structure Plan 2003 [CPSP].

The East of England Plan [RSS14], that will replace [RPG6], is currently at an advanced stage of preparation, having reached the modifications stage. It incorporates and carries forward the requirements of [RPG6] and [CPSP] for the Cambridge Sub-Region for the period to 2016. This plan has been subject to an initial HDA [RSS14HDA], which concluded that the plan will not have a likely significant effect on Natura 2000 and Ramsar sites, and hence Appropriate Assessment is not required for any of the policies in the RSS. This initial HDA states that the reasons for this include:

- The policies will not result in any development;
- The policies make provision for development, but the exact location is to be selected following the consideration of options in lower tier plans (i.e. by local development plans, programmes and strategies);
- The policy concentrates the development in urban areas away from Natura 2000 and Ramsar sites;
- The policies specifically state that development should avoid any adverse effects on the integrity of Natura 2000 or Ramsar sites;
- Policy ENV3 states that local planning authorities should 'ensure that … development does not have adverse effects on the integrity of sites of European or international importance'; and
- Generic provisions have been made within the policies in the RSS (e.g. Policy ENV3) supported by more specific provisions to ensure that the integrity of Natura 2000 and Ramsar sites are not adversely affected by development (Policies SS9, E7, C2, and WAT2).

In the light of objections raised that challenge the findings of the [RSS14HDA], the Government Office has commissioned a new HDA of [RSS14] which is in progress and its findings will not be known for some time. However, the RSS is a higher order spatial plan and a finer grain Assessment is required of the [VDSSPD] as a Local Development Document where more specific guidelines are included. However, the initial HDA of the RSS may give some indication of potential impacts of the plan on European sites, both alone and in combination with other plans that will also be implementing the policies of the RSS.

The Core Strategy Habitats Directive Assessment [CSHDA] and the Development Control Policies Habitats Directive Assessment [DCPHDA] both conclude that they are not likely to have any significant effects on any Natura 2000 or Ramsar sites, and that there was no requirement to proceed to stage two of an Appropriate Assessment.

This Screening Assessment focuses on the 'in-combination' effects of [VDSSPD] with other LDF level plans, including the district LDFs of nearby authorities and minerals and waste plans for both Cambridgeshire itself and for nearby authorities.

The plans considered in the Screening Assessment are listed below. A brief summary of each plan is set out in §10.

District-wide plans for South Cambridgeshire:

- South Cambridgeshire Core Strategy DPD 2007 [CSDPD] and Development Control Policies DPD 2007 [DCPDPD]

County-wide plans affecting South Cambridgeshire:

- Cambridgeshire and Peterborough Waste Local Plan 2003 [CPWLP]
- Cambridgeshire Aggregates (Minerals) Local Plan 1991 [CALP]
- Cambridgeshire and Peterborough Minerals and Waste Preferred Options 2006 [CPMWPO]
- Cambridgeshire Local Transport Plan 2006-2011 [CLTP]

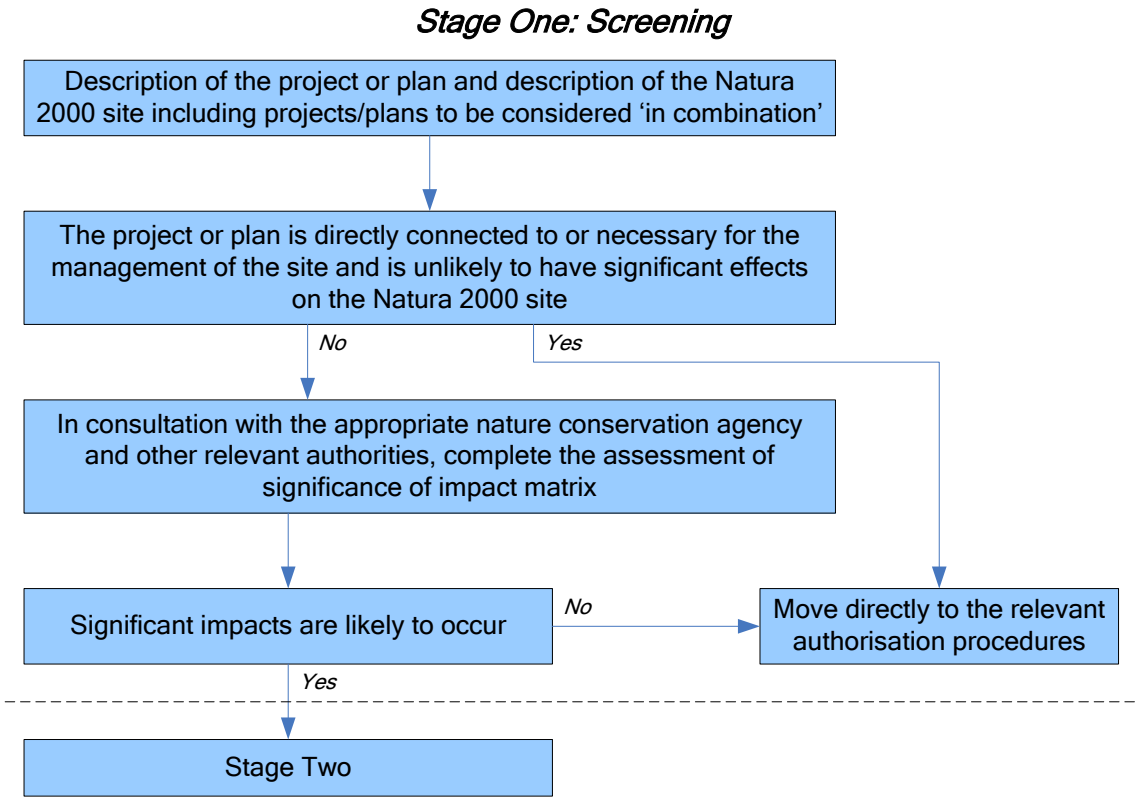
Other plans for areas outside of South Cambridgeshire:

- Cambridge City Council Local Plan 2006 [CCCLP]
- Huntingdonshire Local Plan 1995 [HLP]
- Huntingdonshire Core Strategy Issues and Options 2007 [HCSIO] and Development Control Policies DPD Issues and Options 2007 [HDCPIO]
- East Cambridgeshire District Local Plan 2000 [ECDLP], Core Strategy Preferred Options Report 2006 [ECCSPO] and Proposals Section Issues and Options 2006 [ECPSIO]
- Fenland District-Wide Local Plan 1993 [FDLP] and Core Strategy and Development Policies Preferred Options 2006 [FCSDPPO]
- North Hertfordshire District Local Plan No. 2 with Alterations 1996 [NHDLP] and Core Strategy and Development Control Policies Options Paper 2005 [NHCSDCPO]
- Mid Bedfordshire Local Plan 2005 [MBLP] and Core Strategy Issues and Options 2006 [MBCSIO]
- Forest Heath Local Plan 1995 [FHLP], Core Strategy Preferred Options 2006 [FHCSPO] and Site Specific Issues and Options 2006 [FHSSIO]
- St. Edmundsbury Borough Local Plan 2006 [SEBLP]
- King's Lynn and West Norfolk Local Plan 1998 [KLWNLP] and Core Strategy Preferred Options Paper 2006 [KLWNCSPO]
- Bedfordshire and Luton Minerals and Waste Local Plan 2005 [BLMWLP]
- Bedfordshire and Luton Minerals Development Plans Issues and Options Consultation Paper 2006 [BLMDPIO]
- Hertfordshire Minerals Local Plan 2007 [HMLP]
- Hertfordshire Waste Local Plan 1999 [HWLP]

- Hertfordshire Minerals and Waste DPDs Issues and Options [HMWIO] and Waste Core Strategy Preferred Options 2007 [HWCSPO]
- Suffolk Minerals Local Plan 1999 [SMLP], Minerals Core Strategy Issues and Options 2006 [SMCSIO] and Minerals Specific Site Allocations Issues and Options 2007 [SMSSAIO]
- Suffolk Waste Local Plan 2006 [SWLP]
- Bedford Borough Local Plan 2006 [BLP] and Core Strategy and Rural Issues Plan Submission 2006 [BCSRIP]
- Milton Keynes Local Plan 2005 [MKLP]
- Buckinghamshire Minerals and Waste Local Plan 2006 [BMWLP]
- Milton Keynes Waste DPD Submission 2007 [MKW]
- Milton Keynes Minerals Local Plan 2006 [MKMLP]
- Norfolk Waste Local Plan 2000 [NWLP]
- Norfolk Minerals Local Plan 2004 [NMLP]

5 HDA Screening Methodology, sets out the Approach Used and Specific Tasks Undertaken

The HDA of the [VDSSPD] has been undertaken in line with [HDGUIDE], and seeks to meet the requirements of [HD]:



The tasks undertaken in preparing this HDA Screening Report are:

- **Task 1: Identification of the Natura 2000 and Ramsar sites which may be affected by [VDSSPD] and the factors contributing to and defining the integrity of these sites**

  An initial investigation was undertaken to identify Natura 2000 sites and Ramsar sites within South Cambridgeshire and those outside the district with potential to be affected by [VDSSPD]. This involved use of GIS data as well as consultation with the Natural England Four Counties team. In line with the precautionary approach, sites at significant distances from Cottenham were included in the study. The Natura 2000 and Ramsar sites identified as potentially affected by [VDSSPD] are identified in §6. The attributes which contribute to and define the integrity of these sites were identified and described (including the conservation objectives). Information was appropriate to inform a screening decision.

- **Task 2: Completion of the Habitats Directive Assessment Screening Matrix for the [VDSSPD], including 'Assessment of Significance of Effects'**

  A Habitats Directive Assessment Screening Matrix was completed for [VDSSPD], which looked at each European site in turn and included an 'Assessment of Significance of Effects', and is found in §7. The screening gives particular consideration to the possible effects of [VDSSPD] on features contributing to the integrity of the Natura 2000 and Ramsar sites (e.g. increased disturbance, changes in water quality, etc). A risk-based approach involving application of the precautionary principle was adopted in the assessment of likely effects, such that an assessment of 'no significant effect' was only made where it was considered unlikely, based on current knowledge and information available, that [VDSSPD] could have a significant effect on the integrity of the Natura 2000 / Ramsar site. The examination of potential effects involved an examination of potential 'in combination' effects of the [VDSSPD] and other plans and projects.

6 Natura 2000 and Ramsar Sites Potentially Affected by the Cottenham Village Design Statement SPD

There is only one Natura 2000 site within South Cambridgeshire District:

- Eversden and Wimpole Woods SAC.

However there are a number of other sites within the surrounding districts, which have been considered as part of this Assessment, because of their proximity to Cottenham and/or the nature of their conservation interest:

- Devil's Dyke SAC
- Fenland SAC
- Ouse Washes SAC and SPA
- Portholme SAC

Candidate SACs and potential SPAs should be considered in the same way as if they had already been classified or designated. There are no relevant sites.

For the purposes of this Assessment, Ramsar sites are included although they are not Natura 2000 sites. This does not introduce any additional sites, but two of the sites listed above are also Ramsar sites:

- Fenland (Woodwalton Fen, Chippenham Fen, Wicken Fen)
- Ouse Washes

Natural England confirmed that this list was comprehensive for the purposes of HDA (by letter 9th November 2006).

The conservation objectives for each SPA or SAC are designed to ensure that the qualifying interest of each site is maintained in the long term. Whilst these are specific to each site, there are some general principles including:

- To maintain the population of the habitat/species as a viable component of the site;
- To maintain the distribution of the habitat/species within the site;
- To maintain the distribution and extent of habitats supporting the species;
- To maintain the structure, function and supporting processes of habitats supporting the species; and
- To ensure that there is no significant disturbance of the species.

For Ramsar sites the main aims are to promote the conservation of the wetland to avoid deterioration of the wetland habitats of Ramsar interest and significant disturbance of associated species.

Details of the European Sites being assessed, and their relevant conservation objectives, are provided in §11 of this assessment. Maps of the sites are attached in §12.

7 Screening Assessment of the Cottenham Village Design Statement SPD

There are a wide range of potential impacts of development plans on designated sites, but the impacts examined can be summarised as:

- Land take by developments;
- Impact on protected species found within but which travel outside the protected sites may be relevant where development could result in effects on qualifying interest species within the Natura 2000 or Ramsar site, for example through the loss of feeding grounds for an identified species.
- Increased disturbance, for example from recreational use resulting from new housing development and/or improved access due to transport infrastructure projects;
- Changes in water availability, or water quality as a result of development and increased demands for water treatment, and changes in groundwater regimes due to increased impermeable areas;
- Changes in atmospheric pollution levels due to increased traffic, waste management facilities etc. Pollution discharges from developments such as industrial developments, quarries and waste management facilities.

An HDA Screening Matrix, including an ‘Assessment of Significance of Effects’, is contained in §13. This assesses the potential impacts of [VDSSPD] as set out above on the conservation interests of European sites, taking account of the policy elements of the plan.

8 Consultations

Natural England has been consulted on the HDA report. They responded as follows:

> *"With respect to available guidance and incorporating the appropriate revisions highlighted here, we consider the documentation has been well prepared and I can confirm that Natural England considers the screening process has been prepared in accordance with the current requirements of the Habitats Regulations.*
>
> *It is noted that the Cottenham Village Design Statement does not propose any new development. Natural England considers it is unlikely that such Village Design Statements will result in any significant impacts on Natura 2000 or Ramsar sites.* ***Natural England therefore support the conclusion that this SPD is unlikely to have significant impacts upon the European Sites located within and in the vicinity of South Cambridgeshire District and Cambridge City, and that an Appropriate Assessment is therefore not required for this document.*** *"*

9 Conclusions

[VDSSPD] has been assessed to determine whether there are likely to be any significant effects arising from the plan, in accordance with [HD] Articles 6(3) and (4). The assessment draws on work done for the HDAs of [CSDPD] and [DCPDPD]. This is primarily because [VDSSPD] has negligible effects beyond the impacts assessed in the HDAs of the DPDs with which it conforms.

The HDA has:

- Provided details of the plan and its proposals;
- Identified European Sites within and outside the plan area that may potentially be affected by [VDSSPD];
- Identified the characteristics of these European sites and their conservation objectives; and
- Tested the plan, in combination with other relevant plans or programmes, to identify any significant impacts on the European Sites.

It can be objectively concluded that [VDSSPD] is not likely to have any significant effects on any Natura 2000 or Ramsar sites. There is therefore no requirement to proceed to the next stage of an Appropriate Assessment.

10 Summary of Other Relevant Plans and Strategies

Other Relevant Plans and Strategies	Summary
District-wide plans for South Cambridgeshire	
[CSDPD] and [DCPDPD]	Plan for the development proposed in [RPG6] and subsequently [RSS14] to provide 20,000 dwellings during the period 1999 to 2016. These are preferentially sited on the edge of Cambridge and in the new town of Northstowe.
County-wide plans affecting South Cambridgeshire	
[CPWLP]	Aims to provide a sustainable strategy and policy framework for waste management in Cambridgeshire and Peterborough. Includes site specific proposals for waste management facilities.
[CALP]	Sets policies for working minerals and safeguarding mineral deposits.
[CPMWPO]	(1) A draft Core Strategy DPD to guide the spatial strategy vision for the future of mineral extraction and the delivery of high quality sustainable waste management facilities. (2) A draft Site Allocations DPD with proposed allocations for waste management facilities and minerals workings. The documents have been subject to a Habitats Directive Assessment, which found there were likely to be no significant effects that could not be overcome by mitigation measures through policies in the plan.
[CLTP]	The Local Transport Plan 2006-2011 for Cambridgeshire sets out how Government capital funding allocated for transport will be spent, and how this will be used to meet local and national targets.
Other plans for areas outside South Cambridgeshire	
[CCCLP]	The land use strategy up to 2016 focuses growth in Cambridge on the Station area and four urban extensions comprising mixed use centres to the north, south, west and east of the City as a focus for future employment and residential expansion, connected to each other and to the City Centre by high quality public transport (includes sites that extend into South Cambridgeshire).
[HLP]	The Local Plan 1995 provided for development up to 2006, and focused development onto larger settlements.

Other Relevant Plans and Strategies	Summary
[HCSIO] and [HDCPIO]	The Core Strategy will set the framework for how Huntingdonshire will develop up to 2021. It will contain strategic policies to manage growth and guide new development. The Development Control Policies DPD will set out local policies for managing development in Huntingdonshire. The policies in this document will be used to assess and determining applications for development in the district and cover topic areas including climate change, housing, economic development, quality of life and the environment.
[ECDLP], [ECCSPO] and [ECSPIO]	The Local Plan 2000 concentrates growth in housing, employment and service provision within Ely, Soham and Littleport, including the reuse of previously developed sites. Elsewhere within the District, growth will be limited and is likely to take the form of meeting existing commitments and allocations and, where appropriate, the infilling or redevelopment of sites within the built framework. The Core Strategy aims to provide for growth in a sustainable manner, planning for 8600 dwellings 2001 to 2021, while the Proposals Section DPD will allocate sites for housing, employment and other land uses and contain site specific policies.
[FDLP] and [FCSDPPO]	The Local Plan 1993 concentrates growth in housing, employment and service provision within existing centres, an aim which is continued in the Core Strategy, when planning for the additional 4120 dwellings needed to meet the requirements of [RSS14].
[NHDLP] and [NHCSDCPO]	The Local Plan 1996 seeks to restrain development pressures, maintain the existing pattern of settlements and countryside, and enhance the character of existing land uses in urban and rural areas.
[MBLP] and [MBCSIO]	The Local Plan directs housing and economic development to within and adjoining the main urban areas, and in the strategic transportation corridors South West of Bedford and in East Bedfordshire. The Core Strategy Issues and Options explores how housing and jobs required in the area should be accommodated.
[FHLP], [FHCSPO] and [FHSSIO]	The Local Plan and the LDF Preferred Options focus development on existing towns. The Site Specific Policies and Allocations DPD will determine development boundaries for towns and villages and allocate sites for the required range of land-use and scale of development outlined in the Core Strategy.
[SEBLP]	The Local Plan 1993 concentrates growth in housing, employment and service provision within existing urban areas.
[KLWNLP] and [KLWNCSPO]	The Borough has to accommodate growth of 12,000 houses to be built up to 2021. The Preferred Options document aims to accommodate this development sustainably.

Other Relevant Plans and Strategies	Summary
[BLMWLP]	Sets policies regarding proposals for minerals extraction and waste sites, and allocates sites.
[BLMDPIO]	Sets policies regarding proposals for minerals extraction and waste sites, and allocates sites.
[HMLP]	Sets policies regarding proposals for minerals extraction, and allocates sites.
[HWLP]	Sets policies regarding proposals for waste sites, and allocates sites.
[HMWIO] and [HWCSPO]	Sets policies regarding proposals for minerals extraction and waste sites, and allocates sites. The Waste Core Strategy sets out the spatial vision and strategic objectives for waste planning in the county. This will contain core policies needed to implement the overall objectives and covers the period to 2020.
[SMLP], [SMCSIO] and [SMSSAIO]	Sets policies regarding proposals for minerals extraction, and allocates sites. The Core Strategy sets out the key elements of minerals planning framework for the county based on an agreed vision followed by aims and strategic objectives. The document also contains a suite of generic development control policies. The site allocations document looks at 25 potential sites for new minerals and waste developments.
[SWLP]	Sets policies regarding proposals for waste, and allocates sites.
[BLP] and [BCSRIP]	The local plan plans for 6349 new dwellings as well as other development. LDF provides a strategy for future development, principally in urban areas of key growth areas.
[MKLP]	Includes new development on the edge of Milton Keynes.
[BMWLP]	Sets policies regarding proposals for waste, and allocates sites.
[MKW]	Sets policies regarding proposals for waste.
[MKMLP]	Sets policies regarding proposals for minerals extraction, and allocates sites.
[NWLP]	Sets policies regarding proposals for waste, and allocates sites.
[NMLP]	Sets policies regarding proposals for minerals extraction, and allocates sites.

11 Information on the Natura 2000 Sites

11.1 Eversden and Wimpole Woods

11.1.1 Designation and Code

Special Area of Conservation (SAC) – UK0030331

SSSI boundary is the same as the SAC.

11.1.2 Location

The site is located in South Cambridgeshire District. The site is located close to Wimpole Park.

Grid ref: TL 340526

Area: 66.48 ha.

11.1.3 Primary reason for selection of the site

Presence of colony of Barbastelle bats *Barbastella barbastellus* for which it is considered to be one of the best areas in UK.

11.1.4 Conservation objective

To maintain, in favourable condition, the habitats for the population of Barbastelle bats.

11.1.5 General Site characteristics

Broadleaved deciduous woodland (100%)

Soil and geology – Basic, Clay

Geomorphology and Landscape – Lowland

11.1.6 Species

Barbastella barbastellus bats. This is one of the UK's rarest mammals. The species is protected on Schedule 5 of the Wildlife and Countryside Act 1981 [WCA].

11.1.7 Site Description

The site comprises a mixture of ancient coppice woodland (Eversden Wood) and high forest woods likely to be of more recent origin (Wimpole Wood). A colony of barbastelle bats is associated with the trees in Wimpole Woods. These trees are used as a summer maternity roost where the female bats gather to give birth and rear their young. Most of the roost sites are within tree crevices. The bats also use the site as a foraging area. Some of the woodland is also used as a flight path when bats forage outside the area.

Eversden Wood is a species-rich example of ancient ash (*Fraxinus excelsior*), field maple (*Acer campestre*), dog's mercury (*Mercurialis perennis*) woodland and one of the largest remaining sites of this type on the Cambridgeshire chalky boulder-clay.

The woodland is predominantly relict coppice of ash and field maple over an understorey of hazel (*Corylus avellana*) with aspen (*Populus tremula*), birch (*Betula sp*) and small-leaved elm (*Ulmus minor*) also locally dominant.

The ground flora is characterised by dog's mercury and bluebell (*Hyacinthoides non-scripta*), and the damp soil conditions are reflected in the local abundance of associated plants such as meadowsweet (*Filipendula ulmaria*) and tufted hair-grass (*Deschampsia cespitosa*). Many herbs typical of old woodlands are present including yellow archangel (*Galeobdolon luteum*), wood anemone (*Anemone nemorosa*) and the nationally scarce oxlip (*Primula elatior*) a species largely confined to damp chalky boulder-clay woods of eastern England. Other locally uncommon plants represented include herb-Paris (*Paris quadrifolia*), and, particularly on the drier wood banks, pignut (*Conopodium majus*) and hairy wood-rush (*Luzula pilosa*).

The woodland rides provide additional habitat diversity and support herbs such as ragged-Robin (*Lychnis flos-cuculi*) and false fox-sedge (*Carex otrubae*).

11.1.8 Management and ownership

The primary management principles used for this site are those that maintain a regime of minimum management with little disturbance in order to protect the roosting sites in the woodland for the barbastelle bats.

Wimpole Woods is owned and managed by the National Trust and their management is aimed at maintaining and where possible, enhancing the barbastelle population.

Eversden Wood is privately owned and the current management is considered compatible with the use of this wood as a foraging area / flight path by barbastelles.

11.1.9 Access

There is public access to the woods. Public rights of way go through both areas of woodland.

Wimpole Wood is near to Wimpole Park where the National Trust provide car parking for visitors to their estate. This is around 1km as the crow flies from the start of the woodland. There is also a minor road that runs between Wimpole and Eversden Woods and this provides very limited on road parking available closer to Eversden Wood but still some 500m away. This is not signposted as available for parking.

11.1.10 Current condition

Natural England produced a conditions report on Eversden and Wimpole Wood SSSI in 2007 [CREWW] and found that the site is meeting 100% its PSA targets.[1] The area is 100% favourable.[2]

Barbastelle bats require minimal disturbance within 2 km of their roost. They can forage up to 20km from their roosts but more typically venture around 6-8km. Barbastelle bats' foraging routes radiate out from their roosting sites using a limited number of main routes, which split

[1] PSA target – the Government's Public Service Agreement (PSA) target to have 95% of the SSSI area in favourable or recovering condition by 2010.

[2] Favourable condition means that the SSSI land is being adequately conserved and is meeting its conservation objectives.

into major limbs and then into small branches.[3] The main area of importance for them is shown on proposals map 1 in the Biodiversity Strategy [BS] published by South Cambridgeshire District Council in August 2006. It reflects the landscape and habitat of known value to bats, and also where survey effort has been deployed to date.

11.1.11 Vulnerability

The current use of the woods, including public access, is considered compatible with the barbastelle interest and should not affect the barbastelle population or their roosts.

[3] Greenaway F (2004) Advice for the management of flightlines and foraging habitats of the barbastelle Bat Barbastella barbastellus, English Nature Research Report 657 [ENR657].

11.2 Devil's Dyke

11.2.1 Designation and Code

Special Area of Conservation (SAC) – UK0030037

11.2.2 Location

The site is located in East Cambridgeshire district and also extends into Forest Heath district in Suffolk.

Grid ref: TL 611622

Area: 8.02 ha.

11.2.3 Primary reason for selection of the site

Semi-natural dry grasslands and scrubland facies, on calcareous substrates (*Festuco-Brometalia*); important orchid sites.

11.2.4 Conservation Objective

To maintain in favourable condition unimproved calcareous grassland with particular reference to semi-natural dry grasslands and scrubland facies on calcareous substrates (CG3 and CG5 grassland) and *Himantoglossum hircinum* lizard orchid.

11.2.5 General site characteristics

Dry grassland. Steppes (100%)

Soil and geology – Basic, Limestone

Geomorphology and landscape – Lowland

11.2.6 Species

CG3 *Bromopsis erecta*

CG5 *Bromopsis erecta – Brachypodium pinnatum* calcareous grasslands

Himantoglossum hircinum – lizard orchid

Pulsatilla vulgaris - Pasque flower

11.2.7 Site Description

This section is the most species rich of the Devil's Dyke which as a whole stretches from the Fen Edge at Reach ending at Ditton Green. The section that is identified as a SAC is adjacent to Newmarket Heath. Devil's Dyke consists of a mosaic of CG3 *Bromopsis erecta* and CG5 *Bromopsis erecta – Brachypodium pinnatum* calcareous grasslands.

It is the only known UK semi-natural dry grassland site for lizard orchid *Himantoglossum hircinum*. Lizard orchid is nationally rare (i.e. occurring in 15 or fewer 10x10 km squares) and is vulnerable in Great Britain. It is restricted to calcareous grasslands and dunes in southern England.

11.2.8 Management and ownership

The dyke is in private ownership. There is a Devil's Dyke Restoration Project set up which is a partnership scheme involving Natural England, English Heritage, Cambridgshire Wildlife Trust and Cambridgshire County Council working with landowners and managers and local people. The aim of this project is to restore the dyke and there is an management plan. The species rich calcareous grassland requires active management without which it rapidly becomes dominated by rank grasses which leads to the encroachment of scrub over time. Traditional management is by grazing.

The Paque flower is a speciality of the dyke and a Local Species Action Plan has been produced for this plant.

11.2.9 Access

There is a public right of way running along the dyke. There is parking available at the July Race course, Newmarket.

11.2.10 Current condition

As grazing declined in the early part of the twentieth century scrub has encroached on to many areas of the dyke. In the SAC area there had been some scrub encroachment on the southern part of the site and some clearance work has been undertaken. A survey carried out by Natural England in May 2002 assessed this section of the dyke as being in favourable condition. The site is meeting 100% of its PSA targets.

11.2.11 Vulnerability

Although some clearance work has been undertaken there will need to be control over any regrowth of scrub and any weediness of this section.

11.3 Fenland

11.3.1 Designation and Code

Special Area of Conservation (SAC) – UK 0014782

There are three fens that together form the Fenland SAC

1. Wicken Fen
2. Chippenham Fen
3. Woodwalton Fen

Each site is also a Ramsar site.

11.3.2 Location

Wicken Fen and Chippenham Fen are in East Cambridgeshire District;
Woodwalton Fen is in Huntingdonshire District.

Grid ref:	Wicken Fen	TL 555700
	Chippenham Fen	TL 648697
	Woodwalton Fen	TL 230840
Area:	618.64 ha.	

11.3.3 Primary reason for selection of site for SAC

Molinia meadows on calcareous peaty or clayey-silt-laden soils (*Molinion caeruleae*) – considered to be one of the best areas in UK.

Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae* – considered to be rare as its total extent in the UK is estimated to be less than 1,000 ha; considered to be one of the best areas in UK.

11.3.4 Conservation objective

To maintain in favourable condition:

- *Molinia* meadows on chalk and clay (*Eu-Molinion* community)
- Calcareous fens with *Cladium mariscus* (great fen sedge) and species of the *Caricion davallianae* vegetation community.

To maintain in favourable condition the habitats for the population of spined loach and great crested newts.

11.3.5 General site characteristics

Bog. Marshes. Water fringed vegetation. Fens (70%)

Broadleaved deciduous woodland (20%)

Inland water body (standing water, running water) (5%)

Other arable land (5%)

Soil and geology – Basic, peat

Geomorphology – Floodplain, Lowland

11.3.6 Species

Molinion caeruleae

Cladium mariscus

Caricion davallianae

Cobitis taenia (Spined loach)

Triturus cristatus (Great crested newt)

11.3.7 Current conditions

The fenland grasslands are dependent upon traditional management practices of cutting and grazing by livestock. In recent decades scrub and woodland have spread at the expense of fen vegetation. Appropriate water management is vital to maintenance of the special feature. The three constituent sites are all National Nature Reserves and the site management plans include actions to address this problem.

Each of the sites that together form the Fenland SAC are individually described in the following sections.

11.4 Fenland: 1. Wicken Fen

11.4.1 Location

This site is in East Cambridgeshire District.

Area: 254 ha.

11.4.2 Reason for Ramsar allocation

- Criterion 1 – One of the most outstanding remnants of East Anglian peat fens. The area is one of the few which has not been drained. Traditional management has created a mosaic of habitats from open water to sedge and litter fields.
- Criterion 2 – The site supports one species of British Red Data Book plant – fen violet *Viola persicifolia* which survives at only two other sites in Britain. It contains eight nationally scarce plants and 121 British Red Data Book invertebrates.

11.4.3 Site description

This site is a marginal remnant of the original peat fenland of the East Anglian basin. It has been preserved as a flood catchment area, and its water level is controlled by sluice gates.

The original peat fen lies to the north of Wicken Lodge. The site here supports fen communities of carr and sedge. The carr scrub is largely of alder buckthorn *Frangula alnus*, buckthorn *Rhamnus catharticus* and sallow over a sparse vegetation of fen plants and including marsh fen *Thelypteris palustris*. The more open areas of sedge fen are typically of tall grasses, saw sedge *Cladium mariscus*, purple moor grass *Molina caerulea*, sedges *Carex* spp and rushes *Juncus* spp.

Nationally important higher plants include *Viola persicifolia, Lathyrus palustris, Myriophyllum verticillatum, Oenanthe fluviatilis* and milk parsley *Peucedanum palustre*.

To the south of the Wicken Lode, the area is of rough pasture land, reedbed and pools which are attractive to breeding wetland birds and to wintering wildfowl, the area being subject to winter flooding.

The dykes, abandoned claypits and other watercourses carry a great wealth of aquatic plants. Many, such as greater spearwort *Ranunculus flammula* and lesser water-plantain *Baldellia ranunculoides,* are now uncommon elsewhere.

11.4.4 Management and ownership

The site is owned by the National Trust and managed by a local management committee, which reports to the East Anglian Regional Office of the National Trust.

The continuation of the historic systems of management and the effective monitoring and maintenance of water levels underlies the Fen's ecology and are crucial for the success of all other management practices. The Fen is artificially protected from drying out by a water-retaining membrane.

11.4.5 Access

There is a visitor centre and shop, nature trails, three hides and 16km of walking routes. Entry is by permit only to help control visitor numbers. Visitors are also managed by 'zoning' parts of

the Fen near the entrance, leaving the more remote parts of the site relatively undisturbed. The Fen is open throughout the year from dawn to dusk.

11.4.6 Current conditions

Natural England has produced a report about the condition of the SSSI in 2007 [CRWF]. Only 35% of the site is meeting PSA targets. 53% is unfavourably declining.

11.4.7 Vulnerability

The reason for the adverse conditions is related to inappropriate water levels in the fen, marsh and swamp areas.

Work carried out in the nearby river system to prevent flooding in the 1960s means that the site no longer receives the amount of winter water it did in the past. This has brought about a lowering of the water table over the past 40 years [RISWF].

11.5 Fenland: 2. Chippenham Fen

11.5.1 Location

This site is in East Cambridgeshire District.

Area: 112 ha.

11.5.2 Reason for Ramsar allocation

- Criterion 1 – A spring-fed calcareous basin mire with a long history of management which is partly reflected in the diversity of the present-day vegetation.
- Criterion 2 – The invertebrate fauna is very rich partly due to the transitional position between Fenland and Breckland. The species list is very long, including many rare and scarce invertebrates characteristic of ancient fenland sites in Great Britain.
- Criterion 3 – The site supports diverse vegetation types, rare and scarce plants. The site is the stronghold of Cambridge milk parsley *Selinum carvifolia.*

11.5.3 Site description

The site comprises areas of tall and often rich fen, fen grassland and basic flush that have developed over shallow peat soils. The site also contains calcareous grassland, neutral grassland, woodland, mixed scrub and open water.

The site is in a shallow peat-filled depression underlain by a thick layer of marl which rises to the surface in places. The fen is fed by rainfall and springs from the chalk aquifer. There are several ponds on the site and a system of dykes take water from the springs, in the south of the reserve, to the Chippenham River, near its northern boundary.

The areas of tall fen are dominated by a mosaic of saw sedge *Cladium mariscus* and reed *Phragmites australis* are present with abundant purple moor grass *Molinia caerulea*. A rich fen has developed in mown areas supporting the nationally rare *Selinum carvifolia*. In one area this merges into a species rich basic flush where black bog rush *Schoenus nigricans* becomes abundant. Dense and scattered scrub has developed. There are areas of chalk grassland that grade into the fen grassland. The damp neutral grassland meadows are developing a fen meadow flora. The ditches support a rich aquatic flora.

The water level is controlled within a series of ditches.

Because the fen contains such a wide range of habitats it supports a wide variety of breeding bird species, including hobby, short eared owl, nightingale and several species of warbler. It also forms the winter roosting for hen harriers.

11.5.4 Management and ownership

Both the site and surrounding areas are privately owned. Part of the site is under unspecified tenure. The site is mainly used for nature conservation

The site is actively managed by Natural England through regular cutting and grazing with cattle. Encroaching scrub is being removed to restore fen where appropriate. A water compensation scheme has been instituted to ameliorate the effects of water abstraction. The Environment Agency monitors groundwater changes in the aquifer.

11.5.5 Access

There are rights of way across the site. Access away from the paths is by permit only. The nearest car parking is in the villages of Fordham and Chippenham.

There is a low level of usage by local inhabitants using the rights of way through the middle of the site according to the Ramsar information sheet [RISCF]. Few people apply for permits for recreational purposes; they are mainly requested by naturalists.

11.5.6 Current conditions

For reporting purposes the SSSI is divided into 17 units. 85.41% of the area is meeting the PSA target.

Chippenham Fen NNR has suffered from a changed hydrological regime due to abstraction from the underlying chalk aquifer. This problem is being addressed through supply of supplementary water together with a programme of vegetation and invertebrate population monitoring. This project is being taken forward by Natural England, the Environment Agency and Anglian Water Services Ltd.

11.5.7 Vulnerability

There is considerable pressure in the region from the water abstraction that may affect the local springs and aquifer. Persistent drought is a potential threat as seven of nine years in the recent past have received well below average rainfall for the region (Report dated 2002).

The habitats within the site are highly sensitive to inorganic fertilisers and pesticides, applications of which should be avoided both within the site itself and in adjacent surrounding areas.

11.6 Fenland: 3. Woodwalton Fen

11.6.1 Location

This fen is in Huntingdonshire District.

Area: 229.7 ha.

11.6.2 Reason for Ramsar allocation

- Criterion 1 – The site is within an area of one of the remaining parts of East Anglia which has not been drained.
- Criterion 2 – The site supports two species of British Red Data Book plants – fen violet and fen woodrush.

11.6.3 Site description

This fen holds a range of wetland plant communities once characteristic of large areas of the East Anglian fens. The site was once a raised bog associated with the former Whittlesey Mere and was dug for peat in the late 19th century when most of the acidic peat was removed, exposing the underlying fen peat. The vegetation of the area today largely reflects this historical use of the site. The open fen and swamp communities represented are of several types. A relict of the acid peat holds stands of purple moor-grass *Molinia caerulea* with ling *Calluna vulgaris*, bog myrtle *Myrica gale*, tormentil *Potentilla erecta* and the saw sedge *Cladium mariscus*. A further swamp community is dominated by purple small-reed *Calamagrostis epigejos*. Mixed fen covers a significant part of the site. This vegetation community is floristically rich and contains species such as meadow rue *Thalictrum flavum*, yellow iris *Iris pseudacorus*, swamp meadow-grass *Poa palustris* and great water dock *Rumex hydrolapathum*. Rare fen plants such as the fen woodrush *Luzula pallescens* and fen violet *Viola persicifolia* occur.

Of particular note is the network of ditches on the site and these hold many water plants which are now relatively uncommon in Britain including bladderwort *Urticularia vulgaris* and water violet *Hottonia palustris*. In addition, two meres have been dug in order to increase the area of standing water on the site and these have proved valuable for aquatic plant and animal communities. Further habitats of significance on the site include marshy grassland, birch and alder woodland and fen carr. The carr is varied in composition and contains willow *Salix* spp., blackthorn *Prunus spinosa*, birch *Betula spp*. and guelder rose *Viburnum opulus*.

The whole site is a patchwork of wetland communities, providing a habitat for many uncommon plant and insect species – a number of which are confined to East Anglia.

11.6.4 Management and ownership

The site was purchased by the Hon. Charles Rothschild in 1910 and donated to the Society for the Promotion of Nature Reserves (now the Royal Society for Nature Conservation) in 1919. Since the 1950s the pro-active management of the site has sought to reverse the drying out process and therefore conserve this crucial fenland habitat. The site is leased from the Wildlife Trust by Natural England.

The effective monitoring and maintenance of water levels underlies the Fen ecology and is crucial for the success of all other management practices. A Water Level Management Plan

has been implemented and the site is flooded in winter in time of high water flows, thus protecting low-lying farmland. However, as a consequence, nutrient levels in the water can be high due to agricultural run off. Water inflows and outflows are strictly controlled. In the 1980s clay sealed banks were constructed around the perimeter of the reserve. This isolated water levels on the fen from that of the surrounding area.

The Great Fen project aims to link this nature reserve with Holme Fen.

11.6.5 Access

Parking is limited at this site – some being available alongside the Great Raveley Drain. There are three marked trails around the fen following the rides. There are no public rights of way across the reserve but visitors are allowed access to the site. There is restricted access to some areas of the site and no dogs are allowed on to any part of the site.

11.6.6 Current condition

Woodwalton Fen takes water in the summer months from the surrounding drains. In the winter months the fen is designed to be used as a flood storage area, although this occurs infrequently. In both these circumstances the water entering the Fen is high in nutrients from agricultural run off. It is intended to undertake research to investigate what effects the flooding may be having on the site's interests.

Considerable work has been undertaken to help progress the reed beds towards favourable conditions including annual cutting and installation of windpump to control water levels. Further scrub removal is programmed to be carried out. Major scrub clearance and coppice management work is to be completed by 2008.

11.6.7 Vulnerability

The area is meeting 100% of the PSA target. The quality of the water from the agricultural run off needs to be monitored.

11.7 Ouse Washes

11.7.1 Designation and Code

Special Area of Conservation (SAC), Special Protection Area (SPA) and Ramsar Site – UK0013011.

The boundaries of the Ramsar site as extended are coincident with those of the Ouse Washes SSSI.

11.7.2 Location

This site is located in East Cambridgeshire, Fenland and West Norfolk Districts.

Grid reference:	TL 498895	
Area:	2,403 ha.	(Ramsar site and SSSI)
	311.35 ha.	(SAC site)

11.7.3 Primary reason for selection of this site as SAC

Spined loach *Cobitis taenia* – This site is one of only four known outstanding localities in the UK.

11.7.4 Conservation objective

To maintain, in favourable condition, the habitats for the populations of Annexe 1 species (Bewick's swan, whooper swan, hen harrier, spotted crake, and ruff) migratory species of European importance (wigeon, gadwall, pintail, shoveler, pochard and black-tailed godwit) and wintering waterfowl assemblage of European importance, with particular reference to grassland / marshy grassland with ditches and open water.

Also to maintain in favourable condition the habitat for spined loach.

11.7.5 General site characteristics

Inland water bodies (standing water, running water) (50%)

Bogs. Marshes. Water fringed vegetation. Fens (20%)

Improved grassland (30%)

11.7.6 Site Description

The Ouse Washes represent spined loach populations within the River Ouse catchment. The Counter Drain with its clear water and abundant macrophytes is particularly important and a healthy population of spined loach is known to occur.

The site is an area of seasonally flooded washlands habitat managed in a traditional agricultural manner. The washlands support nationally and internationally important numbers of wintering waterfowl and nationally important numbers of breeding waterfowl. The site is also of note for the large area of unimproved neutral grassland communities, which it holds, and for the richness of the aquatic flora within the associated watercourses.

11.7.7 Reasons for identification as a Ramsar Site

The Ouse Washes Ramsar site and its proposed extension is a wetland of major international importance comprising seasonally flooded washlands, which are agriculturally managed in a traditional manner. It provides breeding and winter habitats for important assemblages of wetland bird species, particularly wildfowl and waders.

- Ramsar Criterion 1a – The site qualifies by being a particularly good representative example of a natural or near-natural wetland characteristic of its biogeographical region. It is one of the most extensive areas of seasonally flooding washland of its type in Britain, and the wetland has high conservation value for many plant and animal groups.
- Ramsar Criterion 2a – The site qualifies by supporting a number of rare species of plants and animals. The site holds several nationally scarce plants, including the whorled water-milfoil *Myriophyllum verticillatum*, greater water parsnip *Sium latifolium*, river water-dropwort *Oenanthe fluviatilis*, fringed water-lily *Nymphoides peltata*, long stalked pondweed *Potamogeton praelongus*, hair-like pondweed *Potamogeton trichoides*, grass-wrack pondweed *Potamogeton compressus*, tasteless water-pepper *Polygonum mite*, small water-pepper *Polygonum minus* and marsh dock *Rumex palustris*. Invertebrate records indicate that the site holds a good relict fenland fauna for several groups, reflecting the diversity of wetland habitats. Two rare Red Data Book insects have been recorded, the large darter dragonfly *Libellula fulva* and the riffle beetle *Oulimnius major*.
- Ramsar Criterion 2a – The Ouse Washes also qualifies by supporting a diverse assemblage of rare breeding waterfowl associated with seasonally flooding wet grassland. This includes breeding migratory waders of lowland wet grassland: oystercatcher *Haematopus ostralegus*, redshank *Tringa totanus*, snipe *Gallinago gallinago*, ruff *Philomachus pugnax*, lapwing *Vanellus vanellus*, and black-tailed godwit *Limosa limosa*, and a diverse assemblage of breeding wildfowl with mute swan *Cygnus olor*, shelduck *Tadorna tadorna*, gadwall *Anas strepera*, teal *A. crecca*, mallard *A. platyrynchos*, pintail *A. acuta*, garganey *A. querquedula*, shoveler *A. clypeata*, pochard *Aythya ferina*, tufted duck *Aythya fuligulaa*, moorhen *Gallinula chloropus* and coot *Fulica atra* occurring regularly. Many of these species are rare and much restricted in Britain and the European Union owing to habitat loss and degradation. The site thus has an important role in maintaining the ranges of several of these species, which have been affected by changes in habitat elsewhere in Britain. Breeding gadwall, mallard, garganey *A. querquedula*, shoveler and bar-tailed godwit are all present in nationally important numbers.
- Ramsar Criterion 5 – The Ouse Washes qualifies as a wetland of international importance by virtue of regularly supporting over 20,000 waterfowl, with an average peak count of 60,950 birds recorded in the five winter periods 1986/7 to 1990/91.
- Ramsar Criterion 6 – The Ouse Washes also qualifies by supporting, in winter, internationally important populations of the following species (figures given are average peak counts for the five winter period 1986/87 - 1990/91): 4,980 Bewick's swan *Cygnus columbarius bewickii* (29% of the north-west European wintering population); 590 whooper swans *Cygnus Cygnus* (3% of the international population); 38,000 wigeon *Anas penelope* (5% of the north-west European population); 4,100 teal *A. crecca* (1% of NW European); 1,450 pintail *Anas acuta* (2% NW European); and 750 shoveler *Anas clypeata* (2% of NW European). Also notable are the following nationally important wintering populations: 270 cormorant *Phalacrocorax carbo* (2% of the British wintering

population); 490 mute swan *Cygnus olor* (3% of British); 320 gadwall *Anas strepera* (5% of British); 2,100 pochard *Aythya ferina* (4% of British); 860 tufted duck *Aythya fuligula* (1% of British); and 2,320 coot *Fulica atra*.

During severe winter weather elsewhere, the Ouse Washes can assume even greater national and international importance as wildfowl and waders from many other areas arrive, attracted by the relatively mild climate, compared with continental European areas, and the abundant food resources available.

The continued international importance of this site is dependant on the maintenance of a winter flooding regime and a high, but controlled summer water table.

11.7.8 Reasons for identification as a Special Protection Area

The Ouse Washes Ramsar site and the Special Protection Area is a wetland of major international importance comprising seasonally flooded washlands, which are agriculturally managed in a traditional manner. It provides breeding and winter habitats for important assemblages of wetland bird species, particularly wildfowl and waders.

The boundaries of the Special Protection Area are coincident with those of the Ouse Washes SSSI, apart from the exclusion of a section of the Old Bedford River in the north of the SSSI.

The Ouse Washes qualifies under Article 4.1 of [BD] by supporting, in summer, a nationally important breeding population of ruff *Philomachus pugnax*, an Annex 1 species. In recent years an average of 57 individuals has been recorded, a significant proportion of the British population.

The site also qualifies under Article 4.1 by regularly supporting internationally or nationally important wintering populations of three Annex 1 species. During the five year period 1986/87 to 1990/91, the following average peak counts were recorded: 4,980 Bewick's swan *Cygnus columbarius bewickii* (29% of the north-west European wintering population, 70% of the British wintering population), and 590 whooper swans *Cygnus Cygnus* (3% of the international population, 10% of British). In addition, between 1982 and 1987 an average of 12 wintering hen harrier *Circus cyaneus* was recorded, representing 2% of the British wintering population.

The Ouse Washes qualifies under Article 4.2 by supporting, in summer, in recent years, nationally important breeding populations of five migratory species: 111 pairs of gadwall *Anas strepera* (20% of the British breeding population); 850 pairs of mallard *Anas platyrhynchos* (2% of British); 14 pairs of garganey *Anas querquedula* (20% of British), 155 pairs of shoveler *A. clypeata* (12% of British), and 26 pairs of black-tailed godwits *Limosa limosa* (44% of British).

The site further qualifies under Article 4.2 as a wetland of international importance by virtue of regularly supporting over 20,000 waterfowl, with an average peak count of 60,950 birds recorded in the five winter period 1986/87 to 1990/91. This total included internationally or nationally important wintering populations of the following migratory waterfowl (figures given are average peak counts for the five winter period 1986/87 - 1990/91): 270 cormorant *Phalacrocorax carbo* (2% of the British wintering population); 490 mute swan *Cygnus olor* (3% of British); 38,000 wigeon *Anas penelope* (5% of the north-west European population, 15% of British); 320 gadwall *Anas strepera* (5% of British); 4,100 teal *A. crecca* (1% of NW European, 4% of British); 1,450 pintail *Anas acuta* (2% NW European, 6% of British); 750 shoveler *Anas clypeata* (2% of NW European, 8% of British); 2,100 pochard *Aythya ferina* (4% of British): 860 tufted duck *Aythya fuligula* (1% of British); and 2,320 coot *Fulica atra* (1% of British).

The site also qualifies under Article 4.2 by virtue of regularly supporting, in summer, a diverse assemblage of the breeding migratory waders of lowland wet grassland including: oystercatcher *Haematopus ostralegus*, redshank *Tringa totanus*, snipe *Gallinago gallinago*, ruff *Philomachus pugnax,* lapwing *Vanellus vanellus*, and black-tailed godwit *Limosa limosa*; and a diverse assemblage of breeding wildfowl with mute swan *Cygnus olor*, shelduck *Tadorna tadorna*, gadwall *Anas strepera*, teal *A. crecca*, mallard *A. platyrhynchos*, pintail *A. acuta*, garganey *A. querquedula*, shoveler *A. clypeata*, pochard *Aythya farina*, tufted duck *Aythya fuligula*, moorhen *Gallinula chloropus* and coot *Fulica atra* occurring regularly. Many of these species are rare and much restricted in Britain and the European Union owing to habitat loss and degradation. The site thus has an important role in maintaining the ranges of several of these species, which have been affected by changes in habitat elsewhere in Britain.

During severe winter weather elsewhere, the Ouse Washes can assume even greater national and international importance as wildfowl and waders from many other areas arrive, attracted by the relatively mild climate compared with continental European areas, and the abundant food resources available.

The continued international importance of this site is dependant on the maintenance of a winter flooding regime and a high but controlled summer water table.

11.7.9 Management and ownership

Given the extent of the Ouse Washes there are a number of management techniques that need to be carried out in the washes. Wetland grassland requires active management if it is to retain its conservation interest. This has traditionally been done by grazing. Partial winter flooding is required to maintain suitable habitat conditions for wintering birds. A mosaic of winter flooded grassland and permanently un-flooded grassland is desirable. Ditches are artificial habitats created by land drainage – if left unmanaged silt accumulates in the bottom of the ditches leading to the loss the range of aquatic plants and animals colonising the ditches. There needs to be a rotation undertaken on ditch management. Also the level of water in the ditches and its quality needs to be regulated to maintain the optimum level for the plant and animal community. All the habitats are highly sensitive to inorganic fertilisers and pesticides.

11.7.10 Access

There is a network of public rights of way in the Washes. The RSPB manage a nature reserve at Welches Dam where there is a visitor centre and a number of bird hides. The WWT manage a nature reserve at Welney, Norfolk, also with a centre and hides.

11.7.11 Current condition

Assessment work was carried out in 2003 and at this time many of the units that comprise the Washes were in an unfavourable state. Only 13% of the site meets the PSA target. The water quality regularly fails to meet total phosphorus target of 0.1mg/l. Until this can be remedied the site will continue to remain unfavourable.

11.7.12 Vulnerability

Two independent and parallel rivers comprise the SAC. The Counter Drain / Old Bedford (known also as the outer river) drains adjacent farmland. The Old Bedford / Delph (known also as the inner river) is sourced by the River Great Ouse. During the winter and increasingly during the spring and summer months as well, the inner river takes flood-water from the Great

Ouse, and therefore has an important flood defence function. Issues of concern relate to water quantity, water quality, salinity, turbidity and sediment.

The need to ensure there is sufficient water for the rivers is addressed through the Water Level Management Plan agreed by the Environment Agency and partner organisations. The outer river is also a source of water for nearby arable land forming spray irrigation, but this abstraction is unmetered for the most part. Abstraction of water from the Great Ouse system to Essex via the Ely-Ouse Transfer Scheme is monitored through the Denver License Variation. Other proposals for water abstraction, e.g. to Rutland Water by Anglian Water, have been the subject of assessment, but there are no current proposals.

Water quality is a major issue of concern. Increases in two plant nutrients - nitrogen and particularly phosphorus (thought to be derived from sewage treatment works) - are leading to changes in the macrophyte communities, shown by a decline in species diversity and the loss of species together with an increase in species tolerant of eutrophic conditions. This is particularly apparent in the inner river. There is evidence that agricultural inputs are a minor component. In addition, blanket-weed (aquatic algae) poses problems to navigation and angling, leading to issues of timing and frequency of aquatic weed-cutting. Water quality issues are currently the subject of debate between the Environment Agency and English Nature. Three sewage treatment works in the Great Ouse will be covered by the Urban Waste Water Directive [UWWD], but there remain more than 90 smaller works. These will be subject to the Review of Consents to be undertaken by the Environment Agency within the next four years. A case could be prepared and submitted to OFWAT and the Water Industries AMP 4 Programme commencing 2005, in order to strip phosphates from all relevant sewage treatment works in the system.

In addition, flood water draining off the adjacent Ouse Washes into the inner river can be of a very poor quality (particularly in warm weather) leading to problems of deoxygenation with resultant fish-kills. The frequency of increased spring and summer flooding on the Ouse Washes is currently being studied to ascertain ways of ameliorating its effects.

Saline intrusion through the northernmost tidal lock gate may be contributing to an increase in salinity levels of the outer river.

Conditions must be applied to planning permissions for gravel extraction from quarries near to the SAC, to ensure that drainage water from de-watering and washings does not affect the turbidity and sediment levels in the outer river.

11.8 Portholme

11.8.1 Designation and Code

Special Area of Conservation (SAC) – UK0030054.

11.8.2 Location

This site is within Huntingdonshire District.

Grid reference: TL 237708

Area: 91.93 ha.

11.8.3 Primary reason for selection of this site

Lowland hay meadows MG4 *Alopecurus pratensis, Sanguisorba officinalis* – considered to be one of the best areas in UK.

11.8.4 Conservation objectives

To maintain in favourable condition the lowland hay meadow.

11.8.5 General site characteristics

Humid grassland (100%)

Soil and geology – Alluvial, Neutral

Geomorphology and landscape – Floodplain, Lowland

11.8.6 Species

Alopecurus pratensis

Sanguisorba officinalis

Fritillaria meleagris

Libellula fulva

11.8.7 Site Description

It is the largest surviving traditionally managed meadow in the UK with an area of 104 ha. of alluvial flood meadow (7% of the total UK resource). It is almost completely surrounded by water. There has been a long history of favourable management on traditional lines as a ‘lammas’ meadow and very little of the site has suffered from agricultural improvement, and so it demonstrates good conservation of structure and function. It supports a small population of fritillary (*Fritillaria meleagris*). Watercourses on the periphery of the site have populations of some uncommon invertebrates including one dragonfly which is of a nationally restricted distribution.

The grassland communities are characterised by the presence of such grasses as Yorkshire fog *Holcus lanatus*, yellow oat-grass *Trisetum flavescens*, meadow foxtail *Alopecurus pratensis*, and meadow fescue *Festuca pratensis*. The range of herbs present, typical of such meadows, includes lady’s bedstraw *Galium verum*, pepper-saxifrage *Silaum silaus* and great

burnet *Sanguisorba officinalis*. A number of locally rare and one nationally rare plant are also present.

Channels of the River Ouse surround the meadow, and the Alconbury Brook is close by. These water bodies are important for dragonflies (*Odonata*) in particular the restricted dragonfly *Libellula fulva*.

Large flocks of waders use this site in winter.

11.8.8 Management and ownership

The London Anglers Association owns the site and is advised on the management of the site by Natural England.

Neutral grassland requires active management if it is to retain its conservation interest. In order to maintain a species rich sward, each year's growth of vegetation must be removed; otherwise the sward becomes progressively dominated by tall and vigorous grasses. These, together with an associated build up of dead plant matter, suppress less vigorous species and reduce the botanical diversity of the site.

The traditional management of this site, which still continues, is by cutting for hay followed by grazing of the aftermath in later summer until the autumn. In winter and early spring Portholme is inundated by floodwaters. This provides natural fertilising of the soil and it is this seasonal flooding coupled with the traditional management that maintains the diversity of the natural plant communities.

Part of the site is subject to a Countryside Stewardship agreement aimed at maintaining the alluvial flood meadow. The Environment Agency has produced a Water Level Management plan, which aims to maintain the current water level management regime in the long term and recommends improvements in data collection on water levels and flooding frequency. This was subsequently incorporated in the Environment Agency's Upper Ouse and Bedford Ouse Catchment Abstraction Management Strategy [UOBOCAMS].

In the past MAFF had sponsored dipwell monitoring of the meadows. Water table levels are vital to the management of this site. Currently no monitoring is being carried out. Anglian Water Services (AWS) is required to produce a statutory water company drought plan under the requirements of the new s39B of the Water Industry Act 1991 [WIA] as introduced by the Water Act 2003 [WA]. For each site, potential changes arising from the drought actions have been identified and the existence and adequacy of current monitoring programmes has been provisionally assessed. For the most part, existing monitoring is adequate for monitoring the effects of the drought actions. In relation to Portholme it recommends in the 2006 Drought Plan [AWSDP] the following:

> *"One site (Portholme Meadow) has been monitored in the past and this work is probably sufficient to determine a baseline. However, no monitoring is currently being undertaken. Previous modelling studies suggest that reductions in river water levels are likely to be very small and are therefore unlikely to have any effect on riparian water table levels in adjacent meadows or water levels in adjacent gravel pits."*

11.8.9 Access

There are three main entrances to the meadow and visitors can walk around the site on the extensive footpaths, which lead off the main entrances. The footpaths form a triangle across the meadow and each footpath is approximately 1.6km in length.

11.8.10 Current condition

The units of the site were assessed in June 2005 and 2006 and it was found to have inappropriate cutting / mowing regimes and inappropriate weed control. The site was not meeting the PSA target at all. 90.92% of the area was seen to be in unfavourable decline. Overall the sward composition and structure were well within the criteria recommended for MG4 grassland. However, the unit failed on the frequency of *Rumex crispus*.

11.8.11 Vulnerability

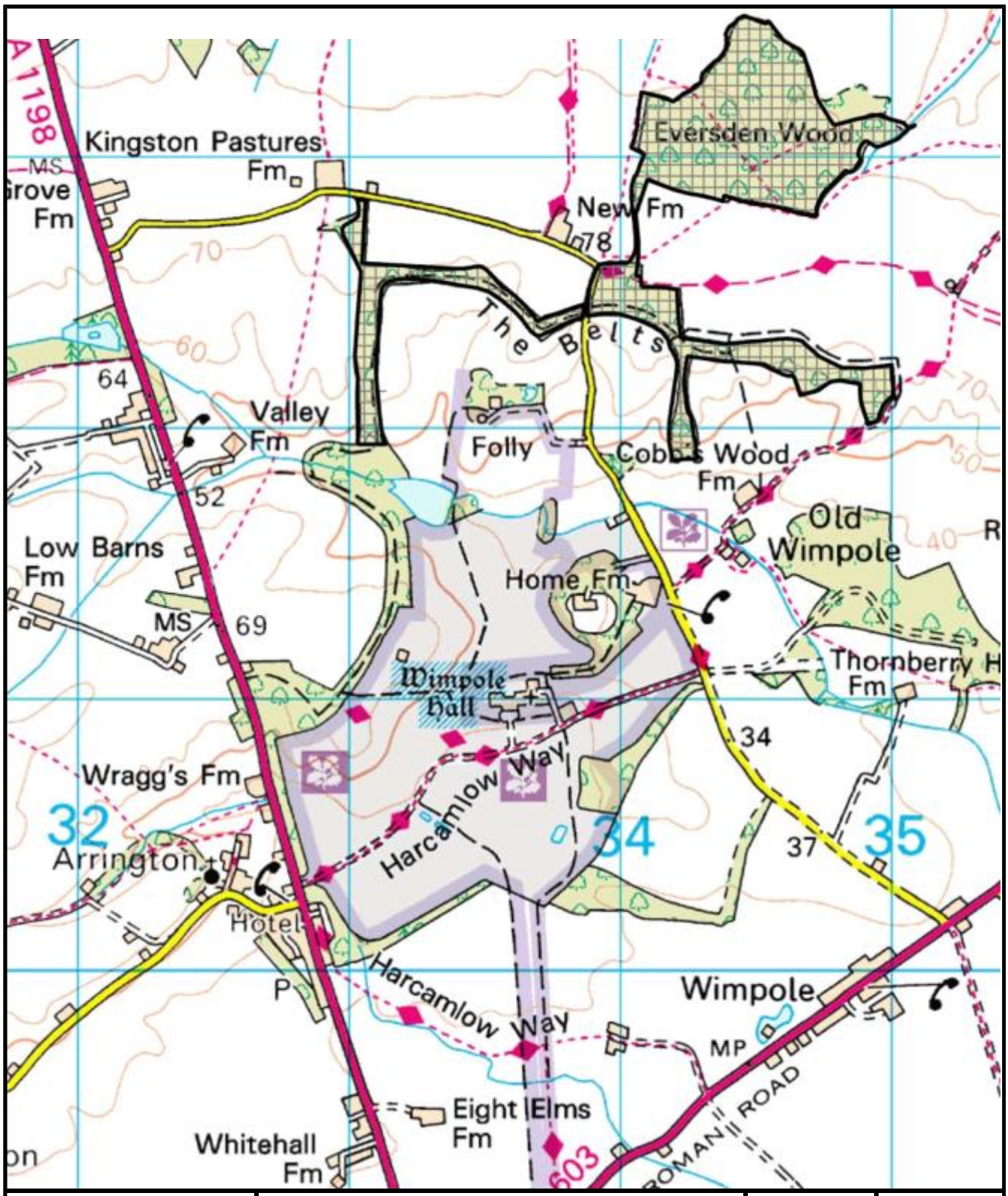
Without a controlled management plan the site will not retain its conservation interest.

12 Maps

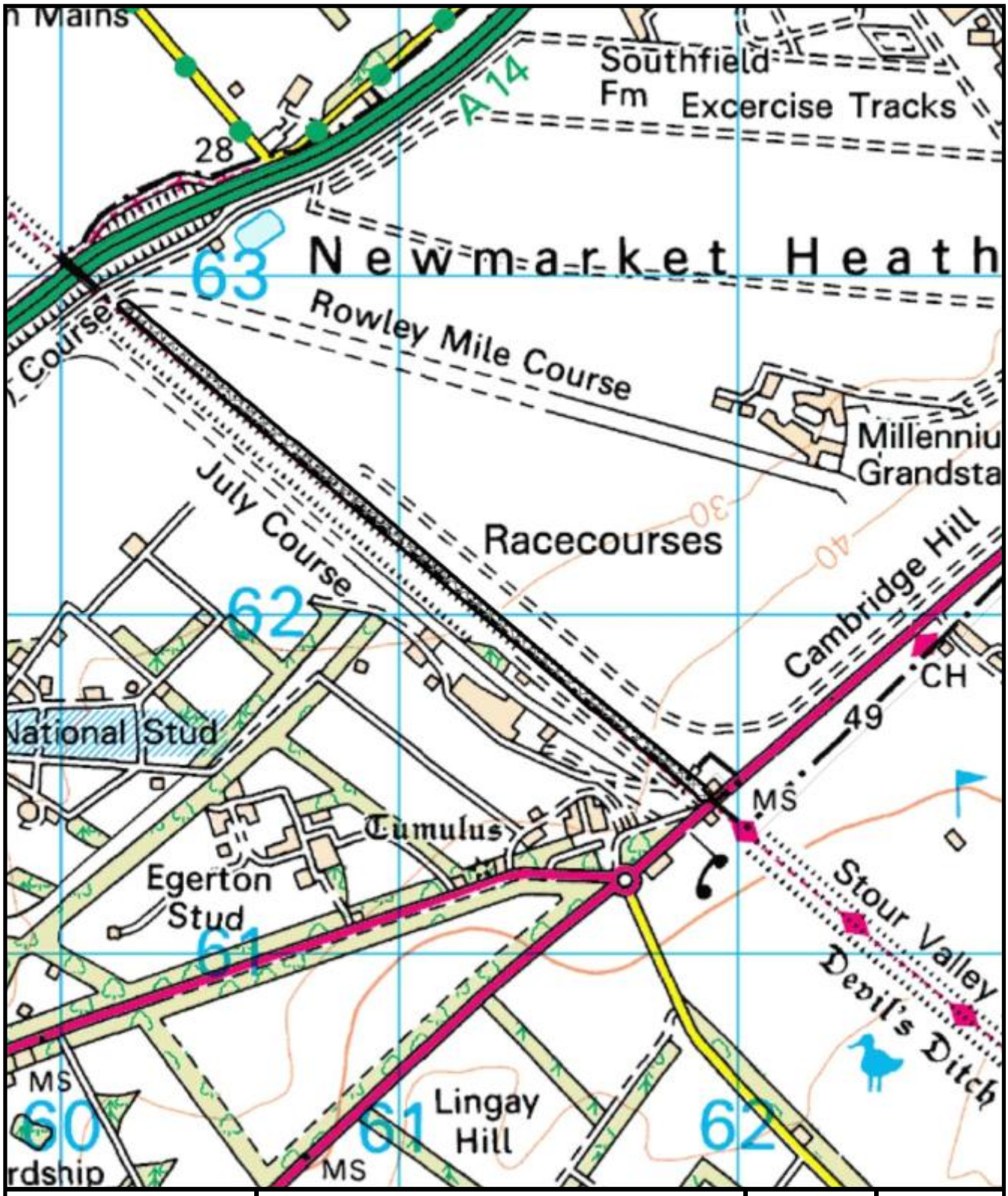
12.1 Natura 2000 Site Maps

The following maps show each of the Natura 2000 sites identified as being relevant for this Habitats Directive Assessment.

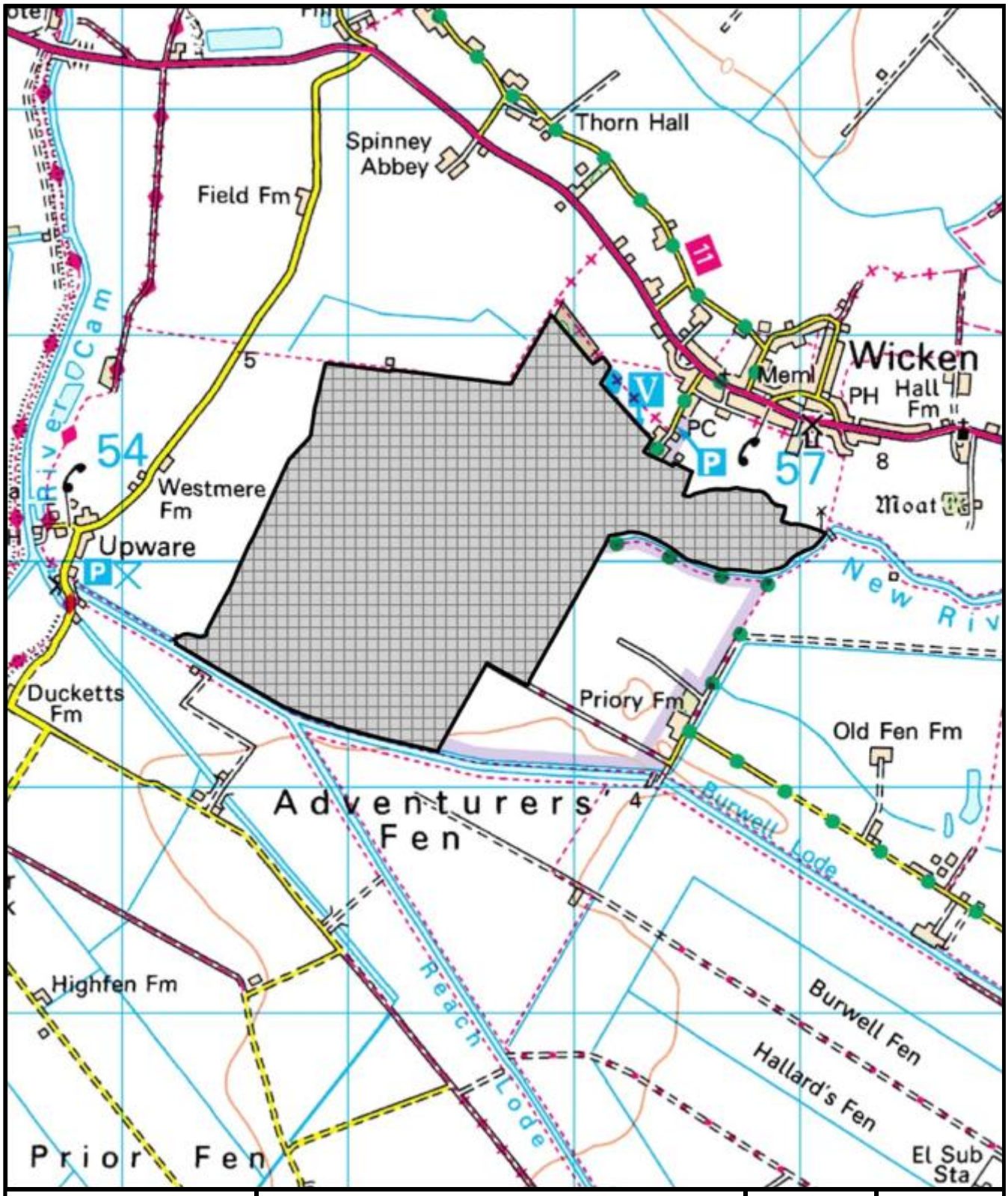
12.1.1 Eversden and Wimpole Woods (SAC)



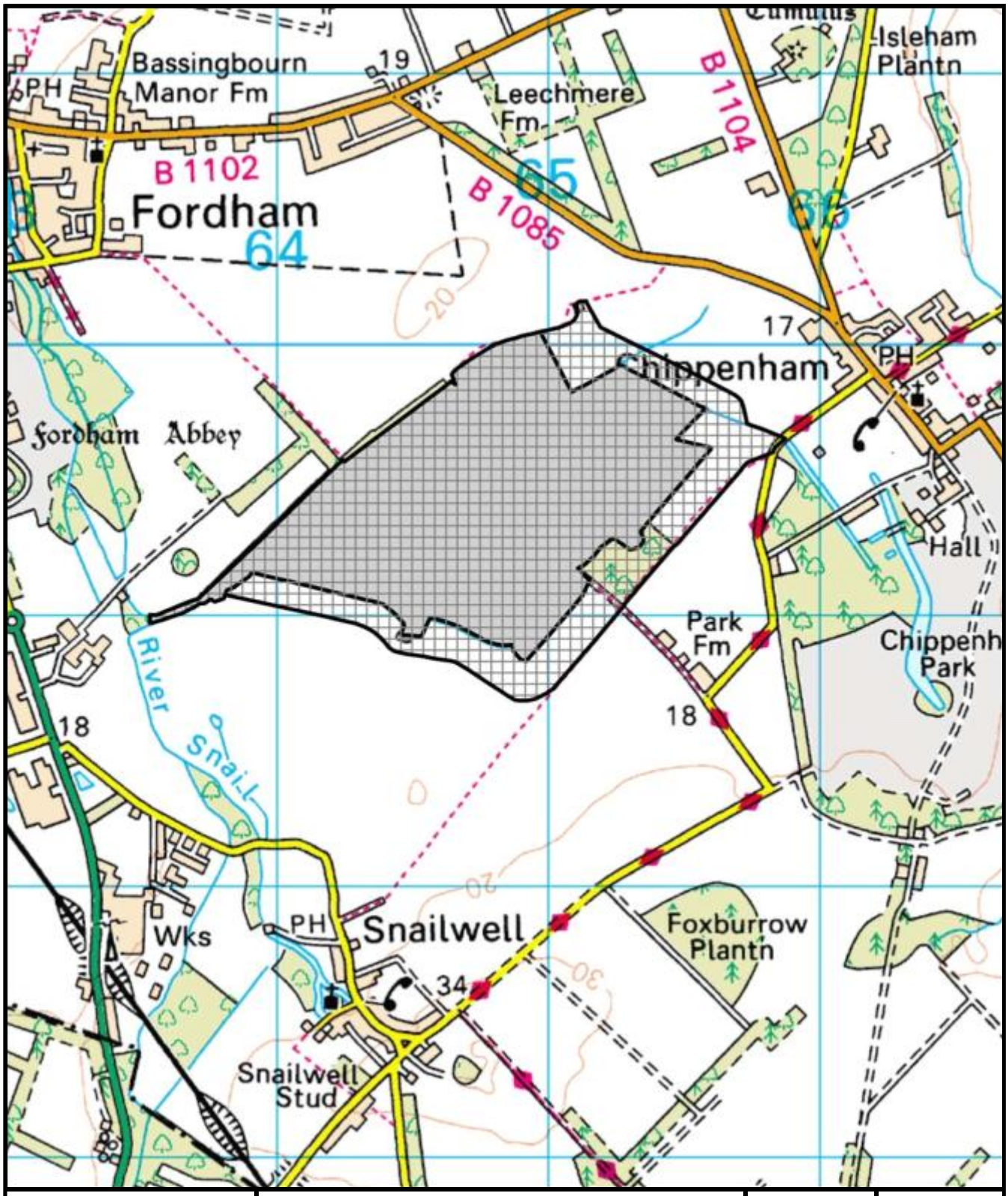
12.1.2 Devil's Dyke (SAC)



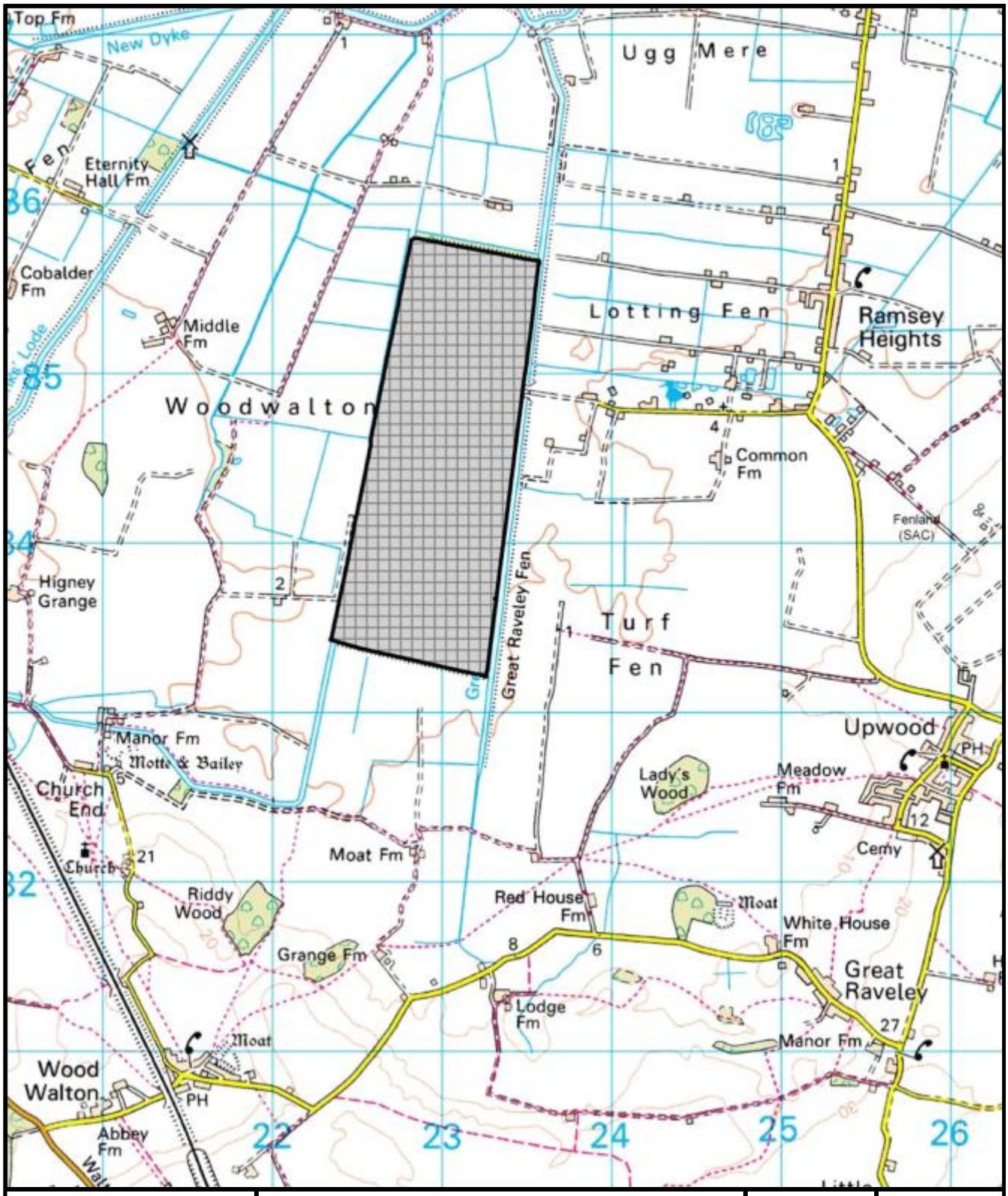
12.1.3 Fenland (SAC) and Wicken Fen (Ramsar)



12.1.4 Fenland (SAC) and Chippenham Fen (Ramsar)



12.1.5 Fenland (SAC) and Woodwalton Fen (Ramsar)



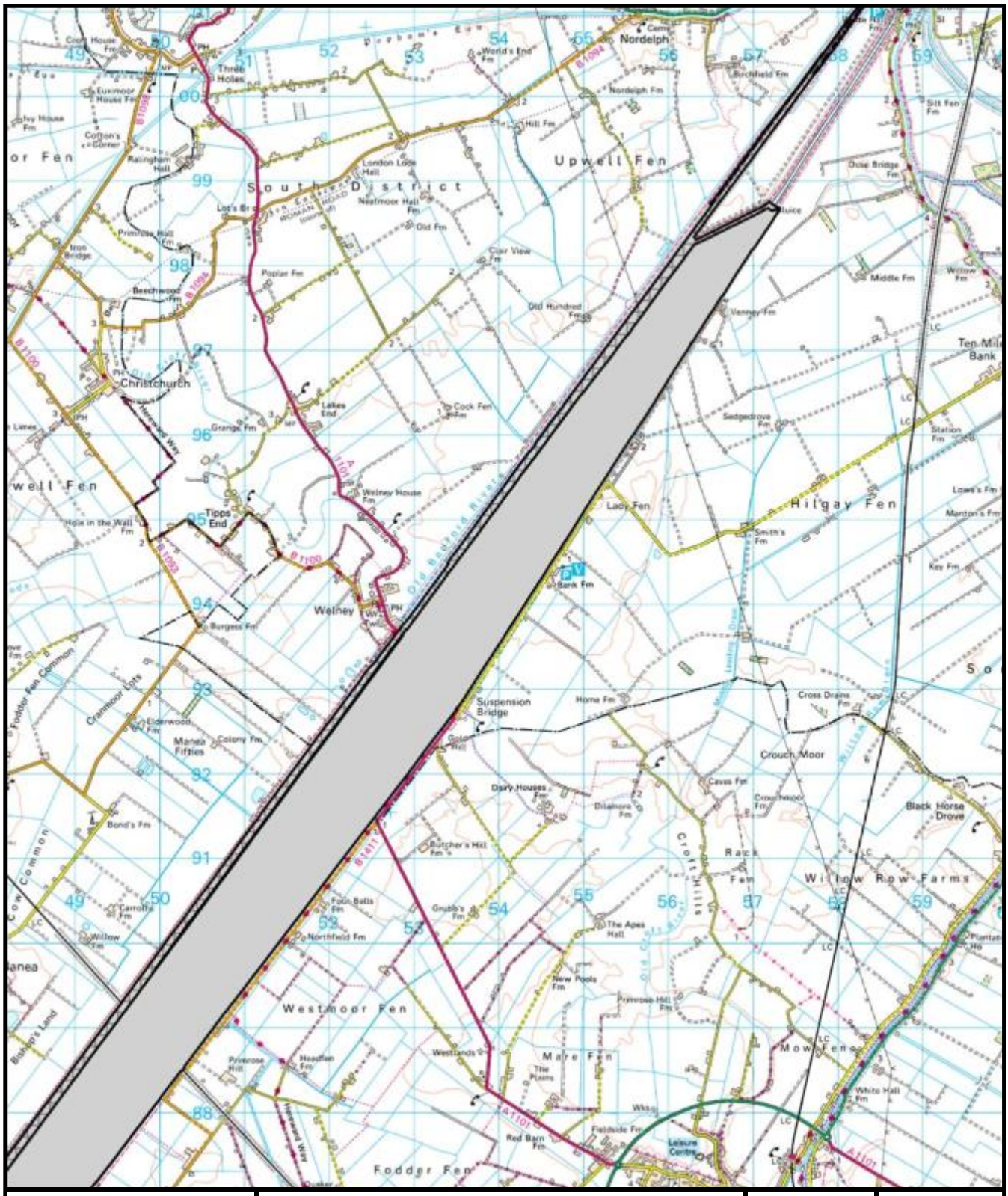
NORTH

Special Area of Conservation

Ramsar

SCALE 1:4,000 | DATE: 18/01/07

12.1.6 Ouse Washes (SAC, SPA and Ramsar) – North

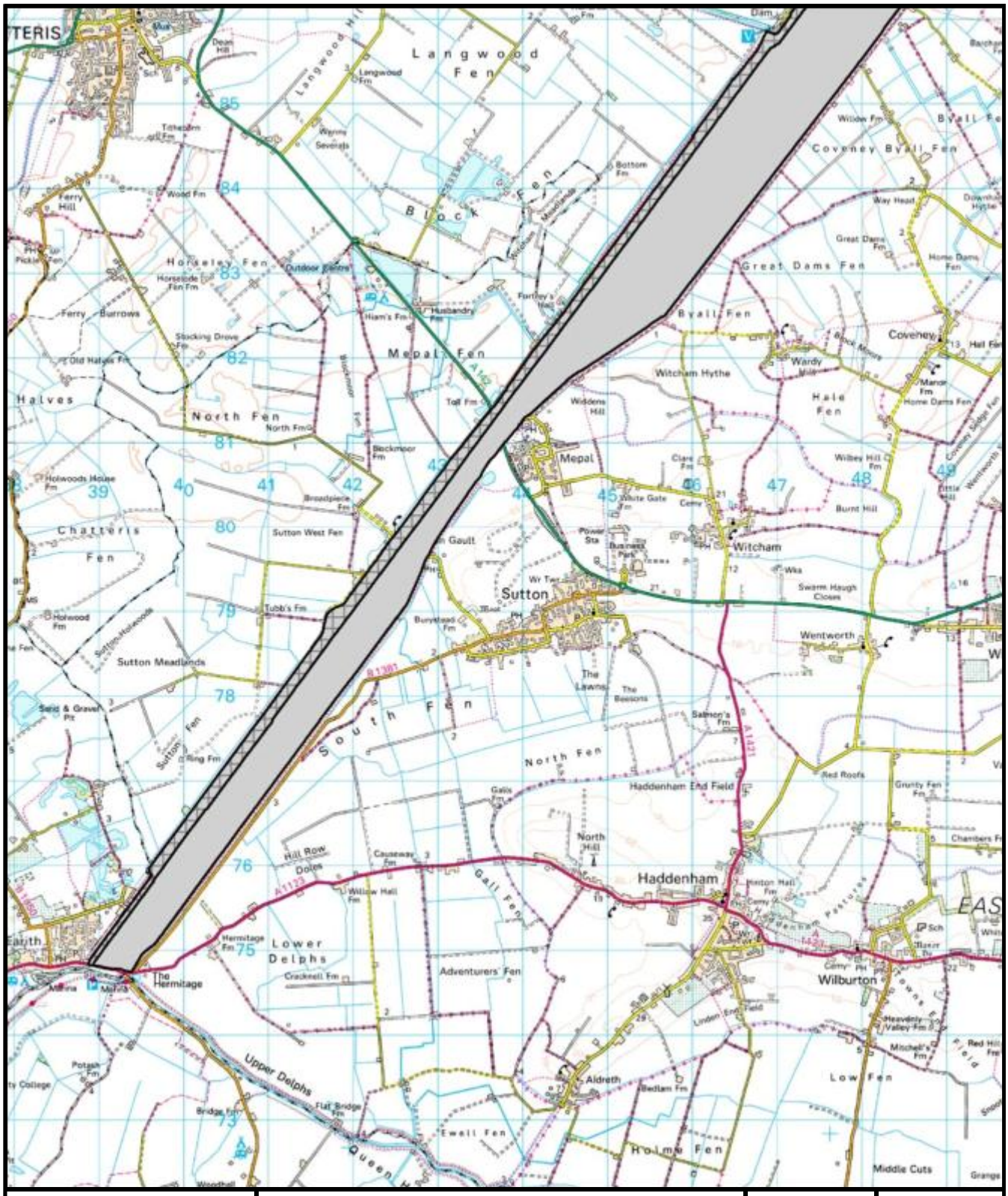


Special Area of Conservation

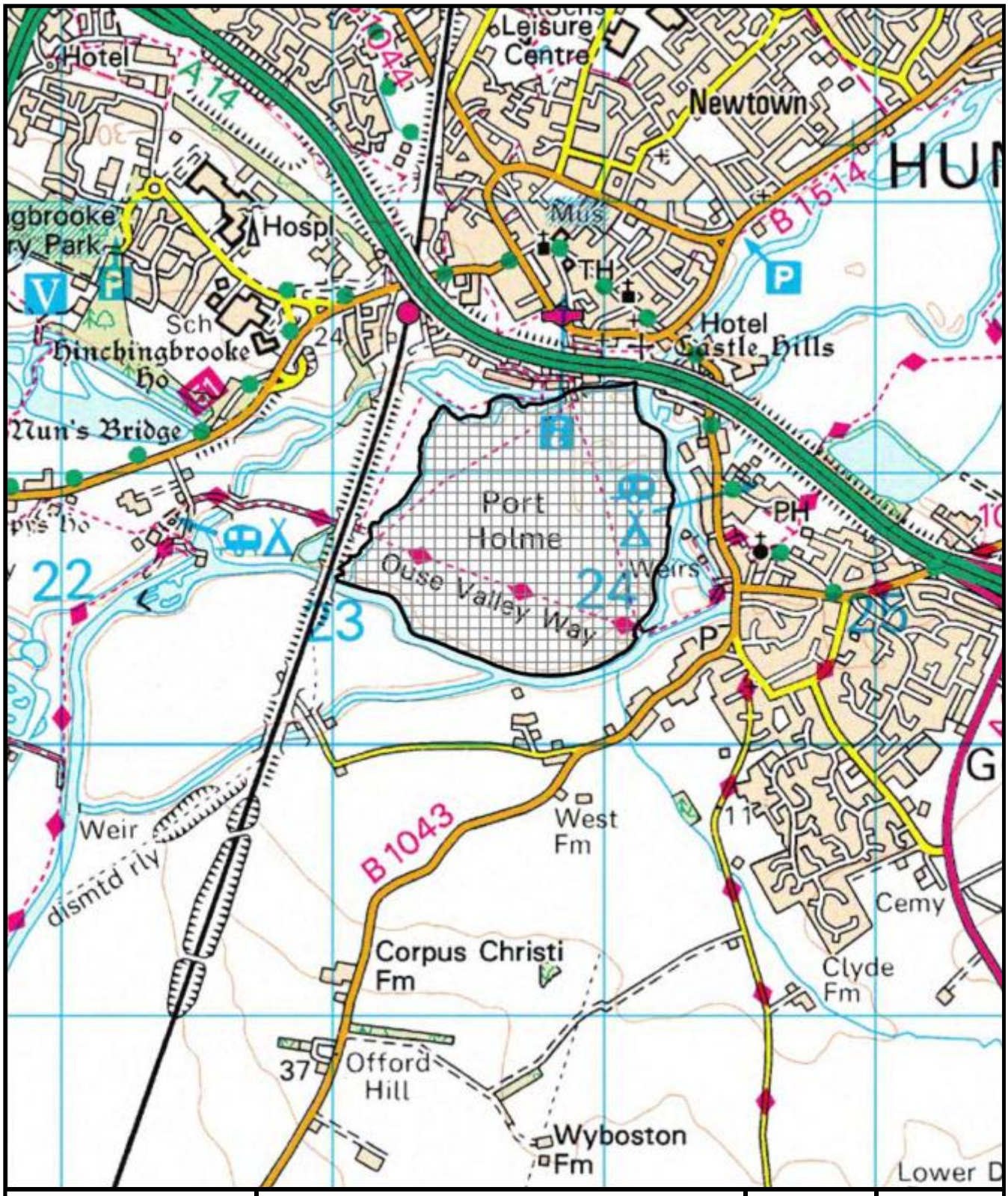
Ramsar and Special Protection Area

SCALE 1:8,000 | DATE: 18/01/07

12.1.7 Ouse Washes (SAC, SPA and Ramsar) – South



12.1.8 Portholme (SAC)



NORTH

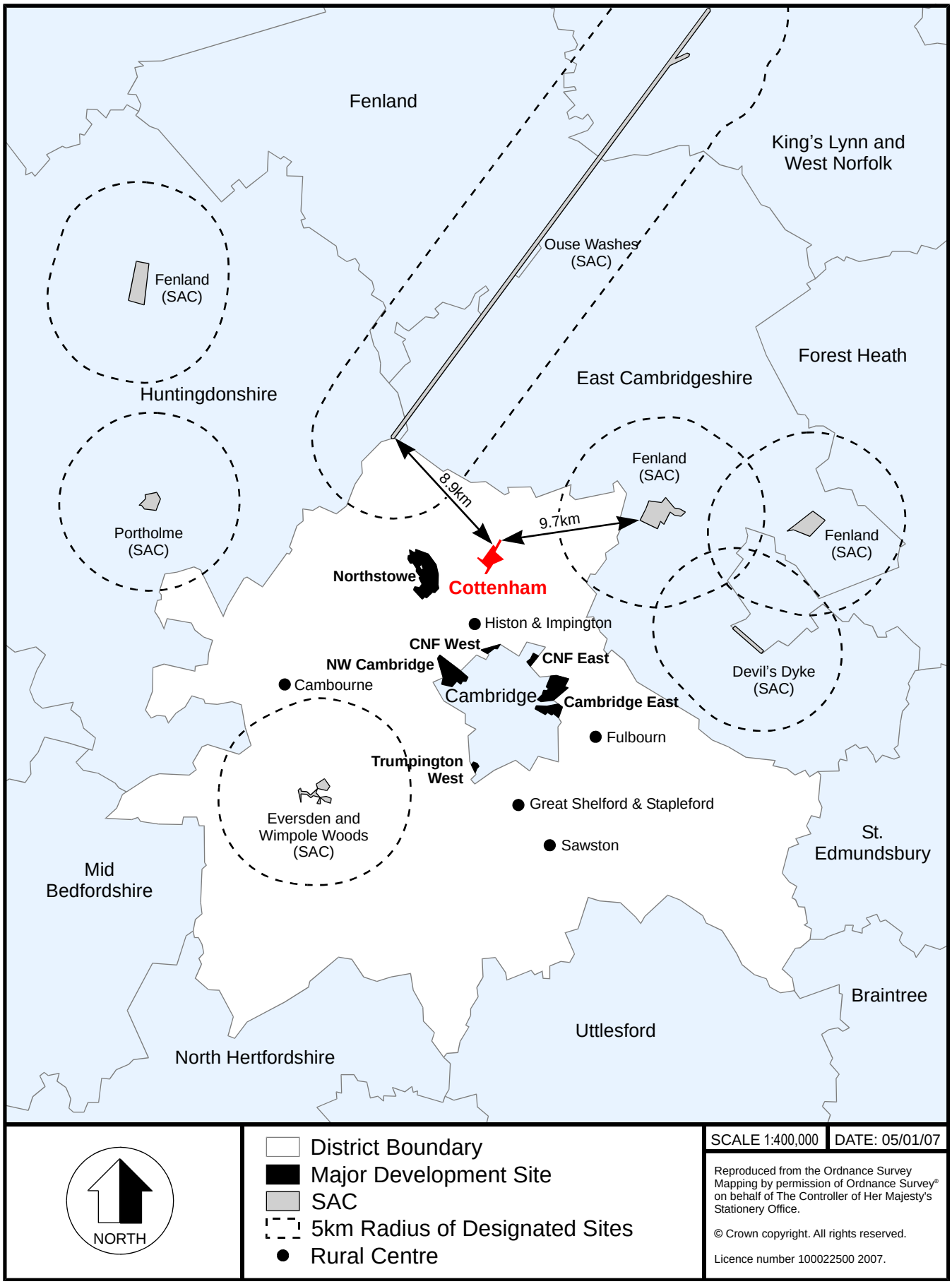
Special Area of Conservation

SCALE 1:2,500 | DATE: 18/01/07

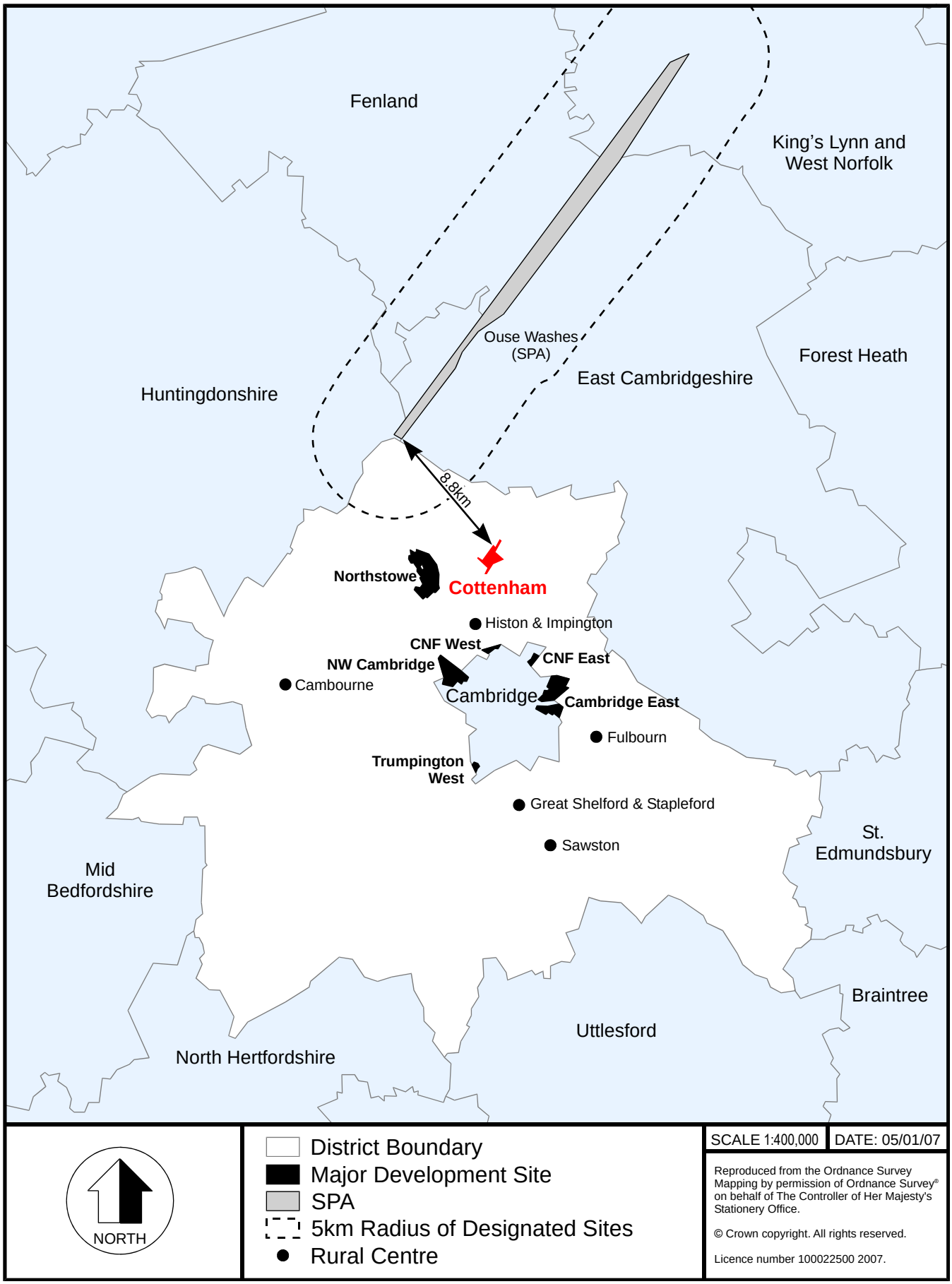
12.2 SAC, SPA and Ramsar Sites in Relation to Cottenham

The following maps show the extent of SAC sites, SPA sites and Ramsar sites in relation to Cottenham and the major development sites within South Cambridgeshire District. A 5km radius around each designated site is also illustrated.

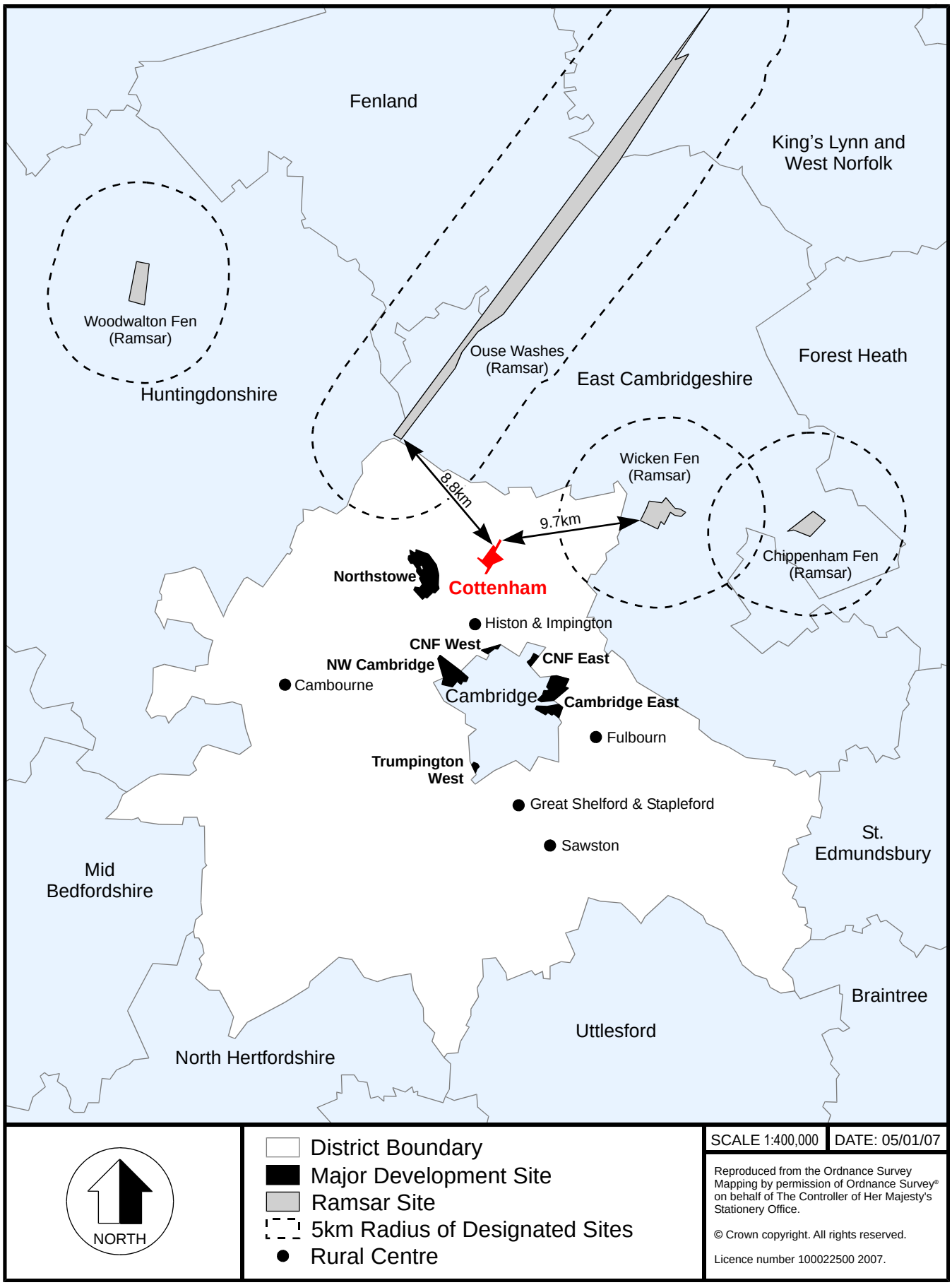
12.2.1 Special Areas of Conservation (SAC)



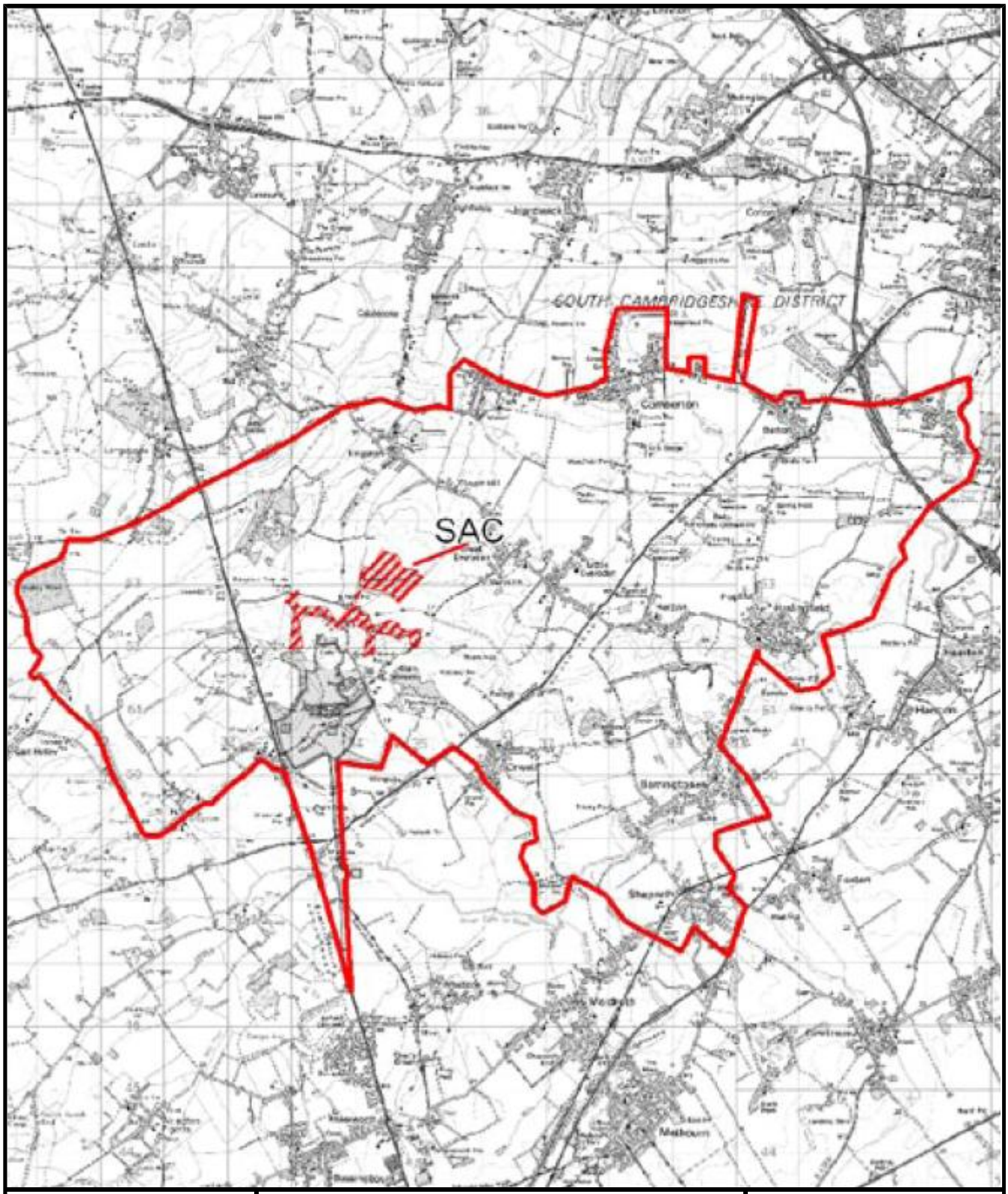
12.2.2 Special Protection Areas (SPA)



12.2.3 Ramsar Sites



12.3 Barbastelle Bat Area for Eversden and Wimpole Woods SAC



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13 Habitats Directive Assessment Screening Matrix

13.1 Screening Matrix for Eversden and Wimpole Woods SAC

Name, location and summary of conservation objectives of Natura 2000 site	**Eversden and Wimpole Woods** (Grid Reference TL 340526) **Reason for designation as SAC** – Presence of colony of Barbastelle bats (*Barbastella barbastellus*). These woods comprise a mixture of ancient coppice woodland (Eversden Wood) and high forest woods likely to be of more recent origin (Wimpole Woods). A colony of barbastelle bats is associated with the trees in Wimpole Woods. These trees are used as a summer maternity roost where the female bats gather to give birth and rear their young. Most of the roost sites are within tree crevices. The bats also use the site as foraging area. Some of the woodland is also used as a flight path when bats forage outside the site. This is one of the UK's rarest mammals. The site is located in South Cambridgeshire District.

Are there other projects or plans that together with [VDSSPD] could affect Eversden and Wimpole Woods?	[VDSSPD] will not itself result in any development. There are other plans in the South Cambridgeshire LDF, including various Area Action Plans for the urban extensions to Cambridge and the new settlement of Northstowe, and the Site Specific Policies DPD [SSPDPD], which could theoretically indirectly affect the site. These plans provide detail to the framework provided in [CSDPD], including allocations of land for development; and all development management in South Cambridgeshire will be exercised in the context of [DCPDPD]. Other relevant plans: [CPWLP], [CPMWPO], [CLTP], [BLMWLP], [BLMDPIO], [HMLP], [HWLP], [HMWIO], [HLP], [HCSIO], [NHDLP], [NHCSDCPO], [MBLP], [MBCSIO].

The assessment of significance of effects:

Nature of potential impact	**How [VDSSPD] (alone or in combination with other plans) is likely to affect the European site**	**Why these effects are not considered significant**
Land Take by Development	The South Cambridgeshire Local Development Framework does not propose any development that will take land from Wimpole and Eversden Woods or result in the direct fragmentation of habitats. No other plans propose development that would take land from this site.	There are no guidelines in [VDSSPD] or other plans which directly impact on the woods.
Impact on protected species outside the protected sites	Eversden and Wimpole Woods are home to the Barbastelle Bat. The bats can forage up to 20km from their roosts but more typically venture around 6-8km. Barbastelle bats require minimal disturbance within 2km of their roost. The main 'area of importance' for the bats has been examined in [BS], and is shown on the map in §12.3. Like the major developments identified in [CSDPD], Cottenham does not fall within either the area of minimal disturbance or the main 'area of importance'. [CPMWPO] proposes an extension to Barrington Quarry, which lies within the 'area of importance'. The Initial Appropriate Assessment of that plan suggests that all potential adverse impacts could be mitigated through policies in the plan itself. Although outside the 'area of importance', the closest area of new development is at Cambourne, which is a previously planned new settlement of 3,300 dwellings that is 6km from the woods and had outline planning permission in 1993. More than 2,000 dwellings have already been completed. [CSDPD] proposes that the village is built out at current minimum densities of 30dph, which would generate an additional 700 dwellings within	The woods are relatively isolated, and not located near to any of the locations for major development. The closest major development will be one of the urban extensions proposed to Cambridge. These are not specified in [CSDPD], but [CPSP] identifies the Cambridge Southern Fringe and North West Cambridge as two locations for development. An Area Action Plan [CSFAAP] has been submitted for the former and is at the Issues and Options stage [NWCAAPIO] for the latter. These are over 8km distant. The new town of Northstowe is over 13km distant. They are all some distance from the 'area of importance' identified in [BS]. The woods are also some distance from any villages where small-scale windfall development could take place under the rural settlement policies of [CSDPD]. However, any such development would be within village frameworks and would not involve the use of greenfield land in the countryside. In the case of Cottenham the woods are 16km away, so the [VDSSPD] guidelines will not have any impact on the

Nature of potential impact	How [VDSSPD] (alone or in combination with other plans) is likely to affect the European site	Why these effects are not considered significant
	the existing planned footprint.	Barbastelle bats. Development proposed at Cambourne will take place within the existing planned footprint, which also lies outside the 'area of importance' identified in [BS], and therefore there will be no additional impact.
Recreational Pressure and Disturbance	Increasing the dwelling stock in the district by 20,000 dwellings could increase demand for countryside recreation. However, no major proposals in [CSDPD] or any other plan are within 5km of the site. Notwithstanding this, Wimpole Wood, and even more so Eversden Wood, does not attract a large number of visitors. Its remoteness, relative to major centres of population (existing and proposed), limits its attractiveness compared to other available rural locations. The closest major development location is over 8km distant and the closest development is at Cambourne, which is 6km away. The recreation role of the woods is as part of a country walk of some distance, using footpaths passing through the woods as part of the wider countryside footpath network. By virtue of their form and character, together with their relative inaccessibility from car parking or public transport facilities, they are not areas that people would be likely to make a visit for picnics or informal play. Access to the sites is mainly from the car park at Wimpole Hall. While the start of path through Wimpole Wood is only around 1km as the crow files from the car park, a walking route is likely to be nearer double this, which, taking account uneven terrain, is likely to be more than a half hour walk. The majority of visitors to Wimpole Hall are	[RSS14HDA] states that in drawing up local development plans, consideration should be given to proposals for housing in areas where Natura 2000 and Ramsar sites fall within a 5km radius of the proposed Key Centres for Development and Change to reduce the risk of recreational disturbance effects to Natura 2000 and Ramsar sites from walkers, dogs, cats and other recreational uses that can result from additional housing and associated development. There are not likely to be any significant effects using this test as no development is within this distance. Notwithstanding, according to the Natura 2000 Data, the current use of the woods, including public access, is considered compatible with the barbastelle bats' interest and should not affect the barbastelle population or their roosts. The existing rights of way through the woods allow for some limited access to the woods but the bats roost in the trees, foraging at sunset/night so are not disturbed by day visitors and numbers will continue to be limited due to the woods' relative inaccessibility both from centres of population and from car parking close

Nature of potential impact	How [VDSSPD] (alone or in combination with other plans) is likely to affect the European site	Why these effects are not considered significant
	likely to focus their visit on the Hall, model farm, and the landscaped parkland, which includes attractive features such as two lakes, a Chinese Bridge and a hilltop folly, rather than this peripheral woodland walk. This applies to an even greater extent to Eversden Wood, which is not shown on the Wimpole Walks leaflet produced by the National Trust. A walk of around 3km from the NT car park is likely to be required to reach the woods. There is very limited parking available on the roadside near to Eversden Wood (perhaps one or two cars). This is still over 700m from the main part of the wood. There are other countryside access opportunities, existing or proposed, available in more accessible locations to the major centres of population. This includes both new and planned facilities in other DPDs of the South Cambridgeshire LDF for the major developments and in [CCCLP] for the urban extensions to Cambridge. These are specifically designed to provide a countryside recreation experience, and will continue to be the focus for that use by existing and new communities, rather than more remote locations such as Wimpole and Eversden Woods. This is particularly demonstrated by the Cambridgeshire Horizons Green Infrastructure Strategy [CHGIS] and the South Cambridgeshire Recreation Study [SCRS], which take forward the proposals of [CPSP]. It is not considered that the level of public use of the woods will increase greatly as a result of [VDSSPD].	to the woods. In view of the limited additional recreational use of the woods that will occur, there are not considered to be any likely significant effects.
Water Quantity and Quality	Not relevant for the conservation objectives of this site.	Not relevant.

Nature of potential impact	How [VDSSPD] (alone or in combination with other plans) is likely to affect the European site	Why these effects are not considered significant
Changes in Pollution Levels	The level of development proposed by [CSDPD] could result in increased levels of atmospheric pollution, through the emissions created by development or from the car journeys generated. [CSDPD] focuses development on to Cambridge and areas accessible by public transport, providing access to jobs and services by means other than the car. This will help to minimise levels of car use and corresponding pollution. While the actual impact of [CSDPD] on air quality alone or in combination with other plans is difficult to quantify, the location of the site is not in close proximity to the major developments proposed or major transport routes. [VDSSPD] does not propose any new development, but does encourage a reduction in car journeys by promoting walking or cycling, both within Cottenham village and to surrounding employment centres, services and leisure sites. Objective ST/i of [CSDPD] is to positively protect and enhance biodiversity in the district. Policy NE/7 of [DCPDPD] states that development will not be permitted that would have an adverse impact either directly or indirectly on a site of biodiversity importance. This will include sites of European importance. Policy NE/16 addresses issues of air quality. [CPMWPO] proposes an extension to Barrington Quarry, some 4km from the site. The Initial Appropriate Assessment suggests that all potential adverse impacts could be mitigated through policies in the plan itself. The quarry is downwind of the SAC in terms of the prevailing winds from the southwest. Preferred Option MW36	As the site is not in close proximity to the major developments proposed or major transport routes, and is even further from Cottenham, it is not considered that there is likely to be any significant impact on their nature conservation objectives. There are also general policy requirements in the LDF to the effect that development does not harm the identified European Sites and to address air quality.

Nature of potential impact	How [VDSSPD] (alone or in combination with other plans) is likely to affect the European site	Why these effects are not considered significant
	proposes that new minerals and waste development will be permitted where emissions will be minimised. MW40 proposes that new minerals and waste development will only be permitted where there will be no likely significant adverse impacts on sites of nature conservation importance.	

Agencies consulted	Natural England
Response to Consultation	Natural England support the conclusion that this SPD is unlikely to have significant impacts upon the European Sites located within and in the vicinity of South Cambridgeshire District and Cambridge City.

Overall Conclusions
[VDSSPD], alone and in combination with other South Cambridgeshire LDDs and other relevant plans, was assessed for its impact on Eversden and Wimpole Woods and it was concluded that there are no likely significant effects on the conservation objectives of the site.

13.2 Screening Matrix for Devil's Dyke SAC

Name, location and summary of conservation objectives of Natura 2000 site	**Devil's Dyke** (Grid Reference TL611622) **Reasons for designation as SAC** – Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*). Devil's Dyke consists of a mosaic of calcareous grasslands (CG3 *Bromopsis erecta* and CG5 *Bromopsis erecta* – *Brachypodium pinnatum*). It is the only known UK semi-natural dry grassland site for lizard orchid (*Himantoglossum hircinum*). The site is located in East Cambridgeshire District.
Are there other projects or plans that together with [VDSSPD] could affect Devil's Dyke?	[VDSSPD] will not itself result in any development. There are other plans in the South Cambridgeshire LDF, including various Area Action Plans for the urban extensions to Cambridge and the new settlement of Northstowe, and the [SSPDPD], which could theoretically indirectly affect the site. These plans provide detail to the framework provided in [CSDPD], including allocations of land for development; and all development management in South Cambridgeshire will be exercised in the context of [DCPDPD]. Other relevant plans: [CPWLP], [CPMWPO], [CLTP], [SMLP], [SMCSIO], [SWLP], [CCCLP], [ECDLP], [ECCSPO], [FHLP], [FHCSPO], [SEBLP].

The assessment of significance of effects:

Nature of potential impact	**How [VDSSPD] (alone or in combination with other plans) is likely to affect the European site**	**Why these effects are not considered significant**
Land Take by Development	The South Cambridgeshire Local Development Framework does not propose any development that will take land from Devil's Dyke or result in the direct fragmentation of habitats. No other plans propose development that would take land from this site.	There are no guidelines in [VDSSPD] or other plans which directly impact on Devil's Dyke.
Impact on protected species outside the protected site	The conservation objectives relate to species of plant within the grassland.	The protected species are confined to the protected site, which is outside the scope of [VDSSPD].
Recreational Pressure and Disturbance	Increasing the dwelling stock in the district by 20,000 dwellings could increase demand for countryside recreation. However, no major proposals in [CSDPD] or any other plan are within 5km of the site, and the closest part of Cottenham is 11km away. Devil's Dyke is accessed via a long distance footpath that runs the length of the dyke. There is parking available at the July Race Course, Newmarket. Devil's Dyke is over 10km from the development proposed at Cambridge East. It is not considered that the level of public use of the Devil's Dyke footpaths will increase greatly as a result of [VDSSPD]. There are other countryside access opportunities, existing or proposed, available in more accessible locations to the major centres of population. This includes both new and planned facilities in other DPDs of the South Cambridgeshire LDF for the major developments and in [CCCLP] for the urban extensions to Cambridge. These are specifically designed to provide a countryside	[RSS14HDA] states that in drawing up local development plans, consideration should be given to proposals for housing in areas where Natura 2000 and Ramsar sites fall within a 5km radius of the proposed Key Centres for Development and Change to reduce the risk of recreational disturbance effects to Natura 2000 and Ramsar sites from walkers, dogs, cats and other recreational uses that can result from additional housing and associated development. There are not likely to be any significant effects using this test as no development is within this distance. Notwithstanding, the impact of public access is not listed in the vulnerabilities relating to the site. In view of the limited additional recreational use that will occur of the site, as a result of [VDSSPD] alone or in combination with other plans, there are not considered to be any likely

Nature of potential impact	How [VDSSPD] (alone or in combination with other plans) is likely to affect the European site	Why these effects are not considered significant
	recreation experience, and will continue to be the focus for that use by existing and new communities, rather than more remote locations such as Devil's Dyke. This is particularly demonstrated by [CHGIS] and [SCRS], which take forward the proposals of [CPSP].	significant effects.
Water Quantity and Quality	Not relevant for the conservation objectives of this site.	Not relevant.
Pollution Levels Changes in	The level of development proposed by [CSDPD] could result in increased levels of atmospheric pollution, through the emissions created by development or from the car journeys generated. [CSDPD] focuses development on to Cambridge and areas accessible by public transport, providing access to jobs and services by means other than the car. This will help to minimise levels of car use and corresponding pollution. While the actual impact of [CSDPD], alone or in combination with other plans, on air quality is difficult to quantify, the location of the site is not in close proximity to the major developments proposed. It is adjacent to the A14, but this is at roughly right angles to the road and therefore only a limited part of the dyke is close to a major transport route. The policies of [CSDPD] endeavour to limit traffic as part of development proposals and the overall strategy has the objective of reducing commuting to Cambridge from outside by focusing major development in and on the edge of Cambridge and in the new town of Northstowe to the north west of Cambridge. As such, it is considered that there are not likely to be any significant increases in traffic using this part of the A14 in this location as a result of [CSDPD]. [VDSSPD] does not propose any new development, but	As the site is not in close proximity to either Cottenham or the major developments proposed, it is not considered that there is likely to be any significant impact on their nature conservation objectives. There are also general policy requirements in the LDF to the effect that development does not harm the identified European Sites and to address air quality. There are not likely to be any significant impacts from additional traffic using the part of the A14 crossing the site as a result of [VDSSPD], either on its own or in conjunction with [CSDPD].

Nature of potential impact	How [VDSSPD] (alone or in combination with other plans) is likely to affect the European site	Why these effects are not considered significant
	does encourage a reduction in car journeys by promoting walking or cycling, both within Cottenham village and to surrounding employment centres, services and leisure sites. Objective ST/i of [CSDPD] is to positively protect and enhance biodiversity in the district. Policy NE/7 of [DCPDPD] states that development will not be permitted that would have an adverse impact either directly or indirectly on a site of biodiversity importance. This will include sites of European importance. Policy NE/16 addresses issues of air quality.	

Agencies consulted	Natural England
Response to Consultation	Natural England support the conclusion that this SPD is unlikely to have significant impacts upon the European Sites located within and in the vicinity of South Cambridgeshire District and Cambridge City.

Overall Conclusions
[VDSSPD], alone and in combination with other South Cambridgeshire LDDs and other relevant plans, was assessed for its impact on Devil's Dyke and it was concluded that there are no likely significant effects on the conservation objectives of the site.

13.3 Screening Matrix for Fenland SAC and Ramsar Sites

Name, location and summary of conservation objectives of Natura 2000 site	**Fenland – comprises three sites:** • **Wicken Fen** • **Chippenham Fen** • **Woodwalton Fen** **Reason for designation as SAC** – a) *Molinia* meadow on calcareous, peaty or clayey silt laden soils (*Molinion caerulae*) b) Calcareous fens with *Cladium mariscus* and species of *Caricion davallianae* c) Significant presence of spined loach (*Cobitis taenia*) d) Presence of great crested newts (*Triturus cristatus*) Fenland contains, particularly at Chippenham Fen, one of the most extensive examples of the tall herb-rich East Anglian type of fen-meadow (*Molinia caerulea – Cirsium dissectum*). It is important for the conservation of the geographical and ecological range of the habitat type, as this type of fen-meadow is rare and ecologically distinctive to East Anglia. The individual sites within Fenland each hold large areas of calcareous fens, with a long and well-documented history of regular management. There is a full range from species-poor *Cladium*-dominated fen to species-rich fen with a lower proportion of *Cladium* and containing such species as black bog-rush (*Schoenus nigricans*), tormentil (*Potentilla erecta*) and meadow thistle (*Cirsium dissectum*). There are good transitions to purple moor-grass (*Molinia caerulea*) and rush pastures, all set within a mosaic of reed beds and wet pastures.

	The fens also support a significant presence of spined loach (*Cobitis taenia*) and great crested newts (*Triturus cristatus*). The three separate Fenland sites are some distance apart. Each site is therefore assessed separately. Each site is also a Ramsar site and the summary of conservation objectives of each site under this designation is given below.

13.3.1 Fenland – Wicken Fen – SAC and Ramsar site

Name, location and summary of conservation objectives of Ramsar site	**Wicken Fen** (Grid Reference TL 555700) **Reason for designation as Ramsar site** – One of the most outstanding remnants of East Anglian peat fens. Supports one species of British Red Data Book plant fen violet *Viola persicifolia,* which survives at only two other sites in Britain. It contains eight nationally scarce plants and 121 British Red Data Book invertebrates. This is located in East Cambridgeshire District.
Are there other projects or plans that together with [VDSSPD] could affect Wicken Fen?	[VDSSPD] will not itself result in any development. There are other plans in the South Cambridgeshire LDF, including various Area Action Plans for the urban extensions to Cambridge and the new settlement of Northstowe, and the [SSPDPD], which could theoretically indirectly affect the site. These plans provide detail to the framework provided in [CSDPD], including allocations of land for development; and all development management in South Cambridgeshire will be exercised in the context of [DCPDPD]. Other relevant plans: [CPWLP], [CPMWPO], [CLTP], [SMLP], [SMCSIO], [SWLP], [CCCLP], [ECDLP], [ECCSPO], [FHLP], [FHCSPO], [SEBLP].

The assessment of significance of effects:

Nature of potential impact	**How [VDSSPD] (alone or in combination with other plans) is likely to affect the European site**	**Why these effects are not considered significant**
Land Take by Development	The South Cambridgeshire Local Development Framework does not propose any development that will take land from Wicken Fen or result in the direct fragmentation of habitats. No other plans propose development that would take land from this site.	There are no guidelines in [VDSSPD] or other plans which directly impact on Wicken Fen.
Impact on protected species outside the protected sites	The conservation objectives relate to plant species and communities, invertebrates, great crested newts and spined loach. The development of land in locations identified by [CSDPD] will not have a significant impact on species listed as important to the integrity of the site. [VDSSPD] does not propose any development, so similarly will not have a significant effect.	The site is 10km from Cottenham, so it is not considered that there is likely to be a significant effect from the [VDSSPD], alone or in combination with other plans.
Recreational Pressure and Disturbance	Increasing the dwelling stock in the district by 20,000 dwellings could increase demand for countryside recreation. However, no major proposals in [CSDPD] or any other plan are within 5km of the site. It is not considered that the level of public use of Wicken Fen will increase greatly as a result of [VDSSPD]. In any event, access away from public rights of way is by permit only and can therefore be controlled. There are other countryside access opportunities, existing or proposed, available in more accessible locations to the major centres of population. This includes both new and planned facilities in other DPDs of the South Cambridgeshire LDF for the major developments and in [CCCLP] for the urban extensions to Cambridge. These are specifically designed to provide a countryside recreation experience, and will continue to be the focus for	[RSS14HDA] states that in drawing up local development plans, consideration should be given to proposals for housing in areas where Natura 2000 and Ramsar sites fall within a 5km radius of the proposed Key Centres for Development and Change to reduce the risk of recreational disturbance effects to Natura 2000 and Ramsar sites from walkers, dogs, cats and other recreational uses that can result from additional housing and associated development. There are not likely to be any significant effects using this test as Cottenham and all proposed development sites are beyond this distance. Notwithstanding, public access to Wicken Fen is managed by the National Trust. There is a visitor centre and shop, nature trails, three hides and

Nature of potential impact	How [VDSSPD] (alone or in combination with other plans) is likely to affect the European site	Why these effects are not considered significant
	that use by existing and new communities, rather than more remote locations such as Wicken Fen. This is particularly demonstrated by [CHGIS] and [SCRS], which take forward the proposals of [CPSP].	16km of walking routes. Entry is by permit only to help control visitor numbers. Visitors are also managed by 'zoning' parts of the Fen near the entrance, leaving the more remote parts of the site relatively undisturbed. The site is 10km from Cottenham and over 12km from the nearest major development proposed at Northstowe. The impact of public access is not listed in the vulnerabilities relating to the site.
Water Quantity and Quality	Development could theoretically have an impact on water quantity, through run off from development sites or water use. It could also have an impact on water quality, through additional waste products produced. Strict policies for the control of flood risk are included in the Local Development Framework. The principle of new developments not exceeding undeveloped rates for site run off is now central to Planning Policy Statement 25: Development and Flood Risk [PPS25]. Policy NE/11 of [DCPDPD] includes a general requirement for development not to increase flood risk in other areas due to additional run off. The Area Action Plans include more detailed drainage policies. Policy NS/21 of the adopted Northstowe Area Action Plan [NAAP] sets detailed requirements for a strategic sustainable drainage system to drain the town, including a requirement to restrict surface water run off to no greater than if the site were undeveloped. [CSFAAP] and the Submission Cambridge East Area Action Plan [CEAAP] both require the preparation of a strategic surface water drainage scheme, to ensure surface water run off is addressed in a sustainable manner.	Policies in the LDF as a whole address both run off and wastewater flood risk and require that there are no unacceptable impacts, including impacts on designated sites. As such, the plan is not likely to result in significant impacts on the nature conservation objectives. The Environment Agency also has an important role in regulating proposals for wastewater treatment and drainage. These are also governed by [HD] and [UWWD]. The quality of water released from wastewater treatment works is also a matter for regulation by the Environment Agency. The impact of [VDSSPD] guidelines is not considered likely to be significant on the site.

Nature of potential impact	How [VDSSPD] (alone or in combination with other plans) is likely to affect the European site	Why these effects are not considered significant
	There is also a general requirement to use SUDS wherever practicable ([DCPDPD], NE/11). SUDS employ a whole suite of techniques to effectively manage drainage at source including dry ditches (swales), retention/attenuation ponds, and integrated constructed wetlands, all of which aim to detain run off and release it slowly into watercourses or to ground. Source control techniques such as the use of porous (as opposed to impermeable) paving and 'green roofs', which allow rainwater re-use, are also possible. These techniques reduce the likelihood of flash flooding and result in greatly improved water quality. Policy NE/10 of [DCPDPD] also requires that the drainage of roads and hard surfaced areas used by vehicles to utilise trapped gullies, petrol/oil interceptors, or other suitable methods of pollution control. With regard to any impact of supplying water to new development, water companies have planned for new resources and infrastructure within their water resources plans submitted in 2004. The plans show how firms intend to supply sufficient water to meet customers' needs while protecting and enhancing the environment. The plans cover the period up to 2030 (i.e. beyond the 2016 housing growth set out in [CSDPD]). In particular, the Cambridge Water Company Water Resources Plan [CWCWRP] anticipates sufficient supply beyond 2030, including taking account of the growth taking place as a result of the Government's Communities Plan [SCP]. The majority of additional water supply is anticipated to come from existing licences. (Source: Maintaining Water Supply – Environment Agency July 2004 [MWS].)	

Nature of potential impact	How [VDSSPD] (alone or in combination with other plans) is likely to affect the European site	Why these effects are not considered significant
	The need for new development of any new water resources will also be linked to demand management and increasing efficiency of water use. Both [DCPDPD] and the Area Action Plans include requirements for water conservation strategies to be provided as part of new development proposals. [HD] aims to ensure biodiversity through the conservation, maintenance and restoration of natural habitats, flora and fauna at designated Natura 2000 sites. While the site description identifies water levels as a vulnerability, abstraction can take place or continue only if it is shown that it does not adversely affect the site's ecological integrity. (Source: The Cam and Ely Ouse Catchment Abstraction Management Strategy – Environment Agency March 2007 [CEOCAMS].) The water level problems identified as a vulnerability of the site primarily relate to its relationship with the river Cam and issues caused by flood protection measures local to the site introduced in the 1960's.	
Changes in Pollution Levels	The level of development proposed by [CSDPD] could result in increased levels of atmospheric pollution, through the emissions created by development or from the car journeys generated. [CSDPD] focuses development on to Cambridge and areas accessible by public transport, providing access to jobs and services by means other than the car. This will help to minimise levels of car use and corresponding pollution. While the actual impact of [CSDPD] on air quality is difficult to quantify, the location of the site is not in close proximity to the major developments proposed or major	As the site is not in close proximity to the major developments proposed, and is even further from Cottenham, there are likely to be no significant impacts on their nature conservation objectives. There are also general policy requirements in the LDF to the effect that development does not harm the identified European Sites and to address air quality.

Nature of potential impact	How [VDSSPD] (alone or in combination with other plans) is likely to affect the European site	Why these effects are not considered significant
	transport routes. [VDSSPD] does not propose any new development, but does encourage a reduction in car journeys by promoting walking or cycling, both within Cottenham village and to surrounding employment centres, services and leisure sites. Objective ST/i of [CSDPD] is to positively protect and enhance biodiversity in the district. Policy NE/7 of [DCPDPD] states that development will not be permitted that would have an adverse impact either directly or indirectly on a site of biodiversity importance. This will include sites of European importance. Policy NE/16 addresses issues of air quality.	

Agencies consulted	Natural England
Response to Consultation	Natural England support the conclusion that this SPD is unlikely to have significant impacts upon the European Sites located within and in the vicinity of South Cambridgeshire District and Cambridge City.

Overall Conclusions
[VDSSPD], alone and in combination with other DPDs in the LDF and other relevant plans, was assessed for its impact on Wicken Fen and it was concluded that there are no likely significant effects on the conservation objectives of the site.

13.3.2 Fenland – Chippenham Fen – SAC and Ramsar Site

Name, location and summary of conservation objectives of Ramsar site	**Chippenham Fen** (Grid Reference TL 648697) **Reason for designation as Ramsar site** – A spring-fed calcareous basin mire with a long history of management, which is partly reflected in the diversity of the present-day vegetation. The invertebrate fauna is very rich partly due to the transitional location of the site between Fenland and Breckland. The species list is very long, including rare and scarce plants and many rare and scarce invertebrates characteristic of ancient fenland sites in Great Britain. The site is the stronghold of Cambridge milk parsley *Selinum carvifolia*. This is located in East Cambridgeshire District.
Are there other projects or plans that together with [VDSSPD] could affect Chippenham Fen?	[VDSSPD] will not itself result in any development. There are other plans in the South Cambridgeshire LDF, including various Area Action Plans for the urban extensions to Cambridge and the new settlement of Northstowe, and the [SSPDPD], which could theoretically indirectly affect the site. These plans provide detail to the framework provided in [CSDPD], including allocations of land for development; and all development management in South Cambridgeshire will be exercised in the context of [DCPDPD]. Other relevant plans: [CPWLP], [CPMWPO], [CLTP], [SMLP], [SMCSIO], [SWLP], [CCCLP], [ECDLP], [ECCSPO], [FHLP], [FHCSPO], [SEBLP].

The assessment of significance of effects:

Nature of potential impact	How [VDSSPD] (alone or in combination with other plans) is likely to affect the European site	Why these effects are not considered significant
Land Take by Development	The South Cambridgeshire Local Development Framework does not propose any development that will take land from Chippenham Fen or result in the direct fragmentation of habitats. No other plans propose development that would take land from this site.	There are no guidelines in [VDSSPD] or other plans which directly impact on Chippenham Fen.
Impact on protected species outside the protected sites	The conservation objectives relate to plant species and communities, invertebrates, great crested newts and spined loach. Due to the distance of the site from proposed development areas in the District there is likely to be no significant effect.	Due to the distance and the nature of locations proposed for development, it is also not considered there will be any impact on breeding bird species associated with the fen. [VDSSPD] alone or in combination with other plans is also considered not likely to have a significant impact on species listed as important to the integrity of the site.
Recreational Pressure and Disturbance	Increasing the dwelling stock in the district by 20,000 dwellings could increase demand for countryside recreation. However, no major proposals in [CSDPD] or any other plan are within 5km of the site. Both the site and surrounding areas are privately owned. Part of the site is under unspecified tenure. The site is mainly used for nature conservation. There are rights of way across the site. Access away from the paths is by permit only. The nearest car parking is in the villages of Fordham or Chippenham. There is a low level of usage by local inhabitants using the rights of way through the middle of the site according to the Ramsar information sheet. Few people apply for permits for recreational purposes: they are mainly requested by naturalists. The site is over 15km from the development proposed at Cambridge East.	[RSS14HDA] states that in drawing up local development plans, consideration should be given to proposals for housing in areas where Natura 2000 and Ramsar sites fall within a 5km radius of the proposed Key Centres for Development and Change to reduce the risk of recreational disturbance effects to Natura 2000 and Ramsar sites from walkers, dogs, cats and other recreational uses that can result from additional housing and associated development. There are not likely to be any significant effects using this test as no development is within this distance. It is not considered that the level of public use of Chippenham Fen will increase greatly as a result

Nature of potential impact	How [VDSSPD] (alone or in combination with other plans) is likely to affect the European site	Why these effects are not considered significant
	There are other countryside access opportunities, existing or proposed, available in more accessible locations to the major centres of population. This includes both new and planned facilities in other DPDs of the South Cambridgeshire LDF for the major developments and in [CCCLP] for the urban extensions to Cambridge. These are specifically designed to provide a countryside recreation experience, and will continue to be the focus for that use by existing and new communities, rather than more remote locations such as Chippenham Fen. This is particularly demonstrated by [CHGIS] and [SCRS], which take forward the proposals of [CPSP].	of [VDSSPD] alone or in combination with other plans and that there will therefore be no likely significant effects on the site.
Water Quantity and Quality	Development could theoretically have an impact on water quantity, through run off from development sites or water use. It could also have an impact on water quality, through additional waste products produced. However, the fen is some distance from developments proposed in [CSDPD], and is not located on a watercourse utilised to drain the District. Strict policies for the control of flood risk are included in the Local Development Framework. The principle of new developments not exceeding undeveloped rates for site run off is now central to [PPS25]. Policy NE/11 of [DCPDPD] includes a general requirement for development not to increase flood risk in other areas due to additional run off. The Area Action Plans include more detailed drainage policies. Policy NS/21 of [NAAP] sets detailed requirements for a strategic sustainable drainage system to drain the town, including a requirement to restrict surface water run off to no greater than if the site were undeveloped. [CSFAAP] and [CEAAP] both require	Policies in the LDF as a whole address both run off and wastewater flood risk and require that there are no unacceptable impacts, including impacts on designated sites. As such, the plan is not likely to result in significant impacts on the nature conservation objectives. The Environment Agency also has an important role in regulating proposals for wastewater treatment and drainage. They are also governed by [HD], and [UWWD]. The quality of water released from wastewater treatment works is also a matter for regulation by the Environment Agency. The impact of [VDSSPD] alone or in combination with other plans is not considered likely to be significant on the site.

Nature of potential impact	How [VDSSPD] (alone or in combination with other plans) is likely to affect the European site	Why these effects are not considered significant
	the preparation of a strategic surface water drainage scheme, to ensure surface water run off is addressed in a sustainable manner. There is also a general requirement to use SUDS wherever practicable ([DCPDPD], NE/11). SUDS employ a whole suite of techniques to effectively manage drainage at source including dry ditches (swales), retention/attenuation ponds, and integrated constructed wetlands, all of which aim to detain run off and release it slowly into watercourses or to ground. Source control techniques such as the use of porous (as opposed to impermeable) paving and 'green roofs', which allow rainwater re-use, are also possible. These techniques reduce the likelihood of flash flooding and result in greatly improved water quality. Policy NE/10 of [DCPDPD] also requires that the drainage of roads and hard surfaced areas used by vehicles to utilise trapped gullies, petrol/oil interceptors, or other suitable methods of pollution control. With regard to any impact of supplying water to new development, water companies have planned for new resources and infrastructure within their water resources plans submitted in 2004. The plans show how firms intend to supply sufficient water to meet customers' needs while protecting and enhancing the environment. The plans cover the period up to 2030 (i.e. beyond the 2016 housing growth set out in [CSDPD]). In particular, [CWCWRP] anticipates sufficient supply beyond 2030, including taking account of the growth taking place as a result of [SCP]. The majority of additional water supply is anticipated to come from existing licences. (Source: [MWS].) The need for new development of any new water	

Nature of potential impact	How [VDSSPD] (alone or in combination with other plans) is likely to affect the European site	Why these effects are not considered significant
	resources will also be linked to demand management and increasing efficiency of water use. Both [DCPDPD] and the Area Action Plans include a requirement for water conservation strategies to be provided as part of new development proposals. [HD] aims to ensure biodiversity through the conservation, maintenance and restoration of natural habitats, flora and fauna at designated Natura 2000 sites. While the site description identifies water levels as a vulnerability, abstraction can take place or continue only if it is shown that it does not adversely affect the site's ecological integrity. (Source: [CEOCAMS].)	
Changes in Pollution Levels	The level of development proposed by [CSDPD] could result in increased levels of atmospheric pollution, through the emissions created by development or from the car journeys generated. [CSDPD] focuses development on to Cambridge and areas accessible by public transport, providing access to jobs and services by means other than the car. This will help to minimise levels of car use and corresponding pollution. While the actual impact of [CSDPD] alone or in combination with other plans on air quality is difficult to quantify, the location of the site is not in close proximity to the major developments proposed or major transport routes. [VDSSPD] does not propose any new development, but does encourage a reduction in car journeys by promoting walking or cycling, both within Cottenham village and to surrounding employment centres, services and leisure sites.	As the site is not in close proximity to the major developments proposed, it is not considered that there is likely to be any significant impact on their nature conservation objectives from [VDSSPD], alone or in combination with other plans. There are also general policy requirements in the LDF to the effect that development does not harm the identified European Sites and to address air quality.

Nature of potential impact	How [VDSSPD] (alone or in combination with other plans) is likely to affect the European site	Why these effects are not considered significant
	Objective ST/i of [CSDPD] is to positively protect and enhance biodiversity in the district. Policy NE/7 of [DCPDPD] states that development will not be permitted that would have an adverse impact either directly or indirectly on a site of biodiversity importance. This will include sites of European importance. Policy NE/16 addresses issues of air quality.	

Agencies consulted	Natural England
Response to Consultation	Natural England support the conclusion that this SPD is unlikely to have significant impacts upon the European Sites located within and in the vicinity of South Cambridgeshire District and Cambridge City.

Overall Conclusions
[VDSSPD], alone and in combination with other DPDs in the LDF and other relevant plans, was assessed for its impact on Chippenham Fen and it was concluded that there are no likely significant effects on the conservation objectives of the site.

13.3.3 Fenland – Woodwalton Fen – SAC and Ramsar site

Name, location and summary of conservation objectives of Ramsar site	**Woodwalton Fen** (Grid Reference TL 230840) **Reason for designation as Ramsar site** – The site is within an area of one of the remaining parts of East Anglia that has not been drained. The site supports two species of British Red Data Book plants – fen violet and fen wood rush. This is located in Huntingdonshire District.
Are there other projects or plans that together with [VDSSPD] could affect Woodwalton Fen?	[VDSSPD] will not itself result in any development. There are other plans in the South Cambridgeshire LDF, including various Area Action Plans for the urban extensions to Cambridge and the new settlement of Northstowe, and the [SSPDPD], which could theoretically indirectly affect the site. These plans provide detail to the framework provided in [CSDPD], including allocations of land for development; and all development management in South Cambridgeshire will be exercised in the context of [DCPDPD]. Other relevant plans: [CPWLP], [CPMWPO], [CLTP], [HLP], [HCSIO], [FDLP], [FCSDPPO].

The assessment of significance of effects:

Nature of potential impact	**How [VDSSPD] (alone or in combination with other plans) is likely to affect the European site**	**Why these effects are not considered significant**
Land Take by Development	The South Cambridgeshire Local Development Framework does not propose any development that will take land from Woodwalton Fen or result in the direct fragmentation of habitats. No other plans propose development that would take land from this site.	There are no guidelines in [VDSSPD] or other plans which directly impact on Woodwalton Fen.
Impact on protected species outside the protected sites	The conservation objectives relate to plant species and communities, great crested newts and spined loach. Due to the distance of the site from proposed development areas in the District there is likely to be no significant effect.	The site is over 25km from Cottenham, so it is not considered that there is likely to be a significant effect from [VDSSPD], alone or in combination with other plans.
Recreational Pressure and Disturbance	Increasing the dwelling stock in the district by 20,000 dwellings could increase demand for countryside recreation. However, no major proposals in [CSDPD] or any other plan are within 5km of the site. Parking is limited at this site – some being available alongside the Great Raveley Drain. There are three marked trails around the fen following the rides. There are no public rights of way across the reserve but visitors are allowed access after obtaining a permit from English Nature. The site is over 20km from the development proposed at Northstowe. There are other countryside access opportunities, existing or proposed, available in more accessible locations to the major centres of population. This includes both new and planned facilities in other DPDs of the South Cambridgeshire LDF for the major developments and in [CCCLP] for the urban extensions to Cambridge. These	[RSS14HDA] states that in drawing up local development plans, consideration should be given to proposals for housing in areas where Natura 2000 and Ramsar sites fall within a 5km radius of the proposed Key Centres for Development and Change to reduce the risk of recreational disturbance effects to Natura 2000 and Ramsar sites from walkers, dogs, cats and other recreational uses that can result from additional housing and associated development. There are not likely to be any significant effects using this test as Cottenham and all proposed development sites are beyond this distance. Notwithstanding, public access away from public rights of way across the reserve is by permit only and therefore controlled. The impact of public access is not listed in the

Nature of potential impact	How [VDSSPD] (alone or in combination with other plans) is likely to affect the European site	Why these effects are not considered significant
	are specifically designed to provide a countryside recreation experience, and will continue to be the focus for that use by existing and new communities, rather than more remote locations such as Woodwalton Fen. This is particularly demonstrated by [CHGIS] and [SCRS], which take forward the proposals of [CPSP]. It is considered that the level of public use of Woodwalton Fen will not increase greatly as a result of [VDSSPD].	vulnerabilities relating to the site.
Water Quantity and Quality	Development could theoretically have an impact on water quantity, through run off from development sites or water use. It could also have an impact on water quality, through additional waste products produced. However, the fen is a considerable distance from developments proposed in [CSDPD], and is not located on a watercourse utilised to drain the District. Strict policies for the control of flood risk are included in the Local Development Framework. The principle of new developments not exceeding undeveloped rates for site run off is now central to [PPS25]. Policy NE/11 of [DCPDPD] includes a general requirement for development not to increase flood risk in other areas due to additional run off. The Area Action Plans include more detailed drainage policies. Policy NS/21 of [NAAP] sets detailed requirements for a strategic sustainable drainage system to drain the town, including a requirement to restrict surface water run off to no greater than if the site were undeveloped. [CSFAAP] and [CEAAP] both require the preparation of a strategic surface water drainage scheme, to ensure surface water run off is addressed in a sustainable manner.	Policies in the LDF as a whole address both run off and wastewater flood risk and require that there are no unacceptable impacts, including impacts on designated sites. As such, the plan is not likely to result in significant impacts on the nature conservation objectives. The Environment Agency also has an important role in regulating proposals for wastewater treatment and drainage. They are also governed by [HD], and [UWWD]. The quality of water released from wastewater treatment works is also a matter for regulation by the Environment Agency. The impact of [VDSSPD] alone or in combination with other plans is not considered likely to be significant on the site.

Nature of potential impact	How [VDSSPD] (alone or in combination with other plans) is likely to affect the European site	Why these effects are not considered significant
	There is also a general requirement to use SUDS wherever practicable ([DCPDPD], NE/11). SUDS employ a whole suite of techniques to effectively manage drainage at source including dry ditches (swales), retention/attenuation ponds, and integrated constructed wetlands, all of which aim to detain run off and release it slowly into watercourses or to ground. Source control techniques such as the use of porous (as opposed to impermeable) paving and 'green roofs', which allow rainwater re-use, are also possible. These techniques reduce the likelihood of flash flooding and result in greatly improved water quality. Policy NE/10 of [DCPDPD] also requires that the drainage of roads and hard surfaced areas used by vehicles to utilise trapped gullies, petrol/oil interceptors, or other suitable methods of pollution control. With regard to any impact of supplying water to new development, water companies have planned for new resources and infrastructure within their water resources plans submitted in 2004. The plans show how firms intend to supply sufficient water to meet customers' needs while protecting and enhancing the environment. The plans cover the period up to 2030 (i.e. beyond the 2016 housing growth set out in [CSDPD]). In particular, [CWCWRP] anticipates sufficient supply beyond 2030, including taking account of the growth taking place as a result of [SCP]. The majority of additional water supply is anticipated to come from existing licences. (Source: [MWS].) The need for new development of any new water resources will also be linked to demand management and increasing efficiency of water use. Both [DCPDPD] and the Area Action Plans include a requirement for water conservation strategies to be provided as part of new	

Nature of potential impact	How [VDSSPD] (alone or in combination with other plans) is likely to affect the European site	Why these effects are not considered significant
	development proposals. [HD] aims to ensure biodiversity through the conservation, maintenance and restoration of natural habitats, flora and fauna at designated Natura 2000 sites. While the site description identifies water levels as a vulnerability, abstraction can take place or continue only if it is shown that it does not adversely affect the site's ecological integrity. (Source: [CEOCAMS].)	
Changes in Pollution Levels	The level of development proposed by [CSDPD] could result in increased levels of atmospheric pollution, through the emissions created by development or from the car journeys generated. [CSDPD] focuses development on to Cambridge and areas accessible by public transport, providing access to jobs and services by means other than the car. This will help to minimise levels of car use and corresponding pollution. While the actual impact of [CSDPD] alone or in combination with other plans on air quality is difficult to quantify, the location of the site is not in close proximity to the major developments proposed or major transport routes. [VDSSPD] does not propose any new development, but does encourage a reduction in car journeys by promoting walking or cycling, both within Cottenham village and to surrounding employment centres, services and leisure sites. Objective ST/i of [CSDPD] is to positively protect and enhance biodiversity in the district. Policy NE/7 of [DCPDPD] states that development will not be permitted that would have an adverse impact either directly or	As the site is not in close proximity to the major developments proposed, it is not considered that there is likely to be any significant impact on their nature conservation objectives. There are also general policy requirements in the LDF to the effect that development does not harm the identified European Sites and to address air quality.

Nature of potential impact	How [VDSSPD] (alone or in combination with other plans) is likely to affect the European site	Why these effects are not considered significant
	indirectly on a site of biodiversity importance. This will include sites of European importance. Policy NE/16 addresses issues of air quality.	

Agencies consulted	Natural England
Response to Consultation	Natural England support the conclusion that this SPD is unlikely to have significant impacts upon the European Sites located within and in the vicinity of South Cambridgeshire District and Cambridge City.

Overall Conclusions
[VDSSPD], alone and in combination with other DPDs in the LDF and other relevant plans, was assessed for its impact on Woodwalton Fen and it was concluded that there are no likely significant effects on the conservation objectives of the site.

13.4 Screening Matrix for Ouse Washes SAC, SPA and Ramsar site

Name, location and summary of conservation objectives of Natura 2000 and Ramsar site	**The Ouse Washes** (Grid Reference TL498895) The Ouse Washes is a wetland of major international importance comprising seasonally flooded washlands which are agriculturally managed in a traditional manner. It provides breeding and winter habitats for important assemblages of wetland bird species, particularly wildfowl and waders. **Reason for designation as a SAC** – Significant presence of spined loach (*Cobitis taenia*) populations within the River Ouse catchment. The Counter Drain, with its clear water and abundant macrophytes, is particularly important, and a healthy population of spined loach is known to occur. **Reason for designation as SPA** – The Ouse Washes is a wetland of major international importance comprising seasonally flooded washlands which are agriculturally managed in a traditional manner. It provides breeding and winter habitats for important assemblages of wetland bird species, particularly wildfowl and waders.

	Reason for designation as Ramsar site – a) Particularly good example of a natural or near-natural wetland characteristic of its biogeographical region. b) The site supports a number of rare species of plants and animals. c) The site supports a diverse collection of rare breeding waterfowl associated with seasonally flooding wet grassland. d) The Washes are of international importance by virtue of regularly supporting over 20,000 waterfowl. e) The Washes are important internationally for supporting certain species in winter. The boundaries of the SPA and Ramsar site vary slightly from those of the Ouse Washes SAC. The Ouse Washes are primarily located in East Cambridgeshire District, and King's Lynn and West Norfolk District.
Are there other projects or plans that together with [VDSSPD] could affect the Ouse Washes?	[VDSSPD] will not itself result in any development. There are other plans in the South Cambridgeshire LDF, including various Area Action Plans for the urban extensions to Cambridge and the new settlement of Northstowe, and the [SSPDPD], which could theoretically indirectly affect the site. These plans provide detail to the framework provided in [CSDPD], including allocations of land for development; and all development management in South Cambridgeshire will be exercised in the context of [DCPDPD]. Other relevant plans: [CPWLP], [CPMWPO], [CLTP], [CCCLP], [HLP], [HCSIO], [FDLP], [FCSDPPO], [KLWNLP], [KLWNCSPO].

The assessment of significance of effects:

Nature of potential impact	**How [VDSSPD] (alone or in combination with other plans) is likely to affect the European site**	**Why these effects are not considered significant**
Land Take by Development	The South Cambridgeshire Local Development Framework does not propose any development that will take land from the Ouse Washes or result in the direct fragmentation of habitats. No other plans propose development that would take land from this site.	There are no guidelines in [VDSSPD] or other plans which directly impact on the Ouse Washes.
Impact on protected species outside the protected sites	The nature of the locations proposed for development by [CSDPD], and their location relative to the Washes, means that land take is not likely to have a significant impact on species associated with the integrity of the Ouse Washes. [VDSSPD] does not propose any development, so similarly will not have a significant effect.	The site is 9km from Cottenham, so [VDSSPD] alone or in combination with other plans will not be likely to have a significant impact on species listed as important to the integrity of the site.
Recreational Pressure and Disturbance	Increasing the dwelling stock in the district by 20,000 dwellings could increase demand for countryside recreation. However, no major proposals in [CSDPD] or any other plan are within 5km of the site. There is a network of public rights of way in the Washes. The RSPB manage a nature reserve at Welches Dam with a visitor centre and a number of bird hides. The WWT manage a nature reserve at Welney, Norfolk also with a centre and hides. The nearest point on the Washes is over 7km from the development proposed at Northstowe. There are other countryside access opportunities, existing or proposed, available in more accessible locations to the major centres of population. This includes both new and planned facilities in other DPDs of the South Cambridgeshire LDF for the major developments and in [CCCLP] for the urban extensions to Cambridge. These are specifically designed to provide a countryside	[RSS14HDA] states that in drawing up local development plans, consideration should be given to proposals for housing in areas where Natura 2000 and Ramsar sites fall within a 5km radius of the proposed Key Centres for Development and Change to reduce the risk of recreational disturbance effects to Natura 2000 and Ramsar sites from walkers, dogs, cats and other recreational uses that can result from additional housing and associated development. There are not likely to be any significant effects using this test as no development is within this distance. It is not considered that the level of public use of the Ouse Washes will increase greatly as a result of [VDSSPD]. Notwithstanding, the impact of public access is not listed in the vulnerabilities

Nature of potential impact	How [VDSSPD] (alone or in combination with other plans) is likely to affect the European site	Why these effects are not considered significant
	recreation experience, and will continue to be the focus for that use by existing and new communities, rather than more remote locations such as the Ouse Washes. This is particularly demonstrated by [CHGIS] and [SCRS], which take forward the proposals of [CPSP]. [CPMWPO] proposes an Earith/Mepal Action Area Plan, Wimblington Sand and Gravel Extraction, Needingworth Minerals Safeguarding Area, and a Cottenham Minerals Safeguard Area. Possible impacts from noise of traffic and operation of plant could create a potential disturbance. However, the Habitats Directive Assessment of that plan suggests that all potential adverse impacts could be mitigated through policies in the plan itself.	relating to the site.
Water Quantity and Quality	Development could theoretically have an impact on water quantity, through run off from the sites or water use. It could also have an impact on water quality, through additional waste products produced. The majority of South Cambridgeshire drains into the River Great Ouse catchment. The Ouse Washes (SAC and Ramsar) form part of this river system. The Swavesey Drain tributary, which drains the northwest part of the District, joins the Great Ouse upstream of the Washes. This drain is also utilised by the Uttons Drove wastewater treatment works, which could potentially be utilised to serve Northstowe. Seasonal flooding plays an important role in the integrity of the Ouse Washes. Policies in the LDF as a whole address both run off and wastewater flood risk and require that there are no unacceptable impacts, including impacts on designated sites. The Environment Agency also has an important role in regulating proposals for wastewater treatment and	Given all the policy requirements of the LDF, taken together with the requirements of other legislation, it is considered that the implementation of [VDSSPD] alone or in combination with other plans is not likely to result in significant impacts on the site.

Nature of potential impact	How [VDSSPD] (alone or in combination with other plans) is likely to affect the European site	Why these effects are not considered significant
	drainage. They are also governed by [HD] and [UWWD]. The quality of water released from wastewater treatment works is also a matter for regulation by the Environment Agency. The Great Ouse, including the Ouse Washes, has been identified as a Eutrophic Sensitive Area. (Eutrophication occurs where the nutrient richness of the water causes excess growth and decay of algae and other plants, leading to a lack of oxygen. This can be detrimental to wildlife.) Larger sewage treatment works discharging into a sensitive area must meet the Directive's standards for removal of nutrients, unless it is demonstrated that this will have no effect on the degree of eutrophication. A review of the capacity at sewage treatment works in the East of England region (Halcrow, 2006), indicates that any new development draining to Uttons Drove sewage treatment works may result in an increased flood risk in the Swavesey Internal Drainage Board area, as opposed to the Great Ouse itself. The report recommended further investigation into the effect of increased effluent discharge on the receiving watercourses. The LDF includes policies that take account of this. In particular, [NAAP] policy NS/21 requires sufficient sewage treatment capacity to be in place prior to any phase of development, and that treated water does not exacerbate flooding in any receiving watercourse. A more general policy of requiring water supply, sewerage and land drainage systems infrastructure prior to development is also included in [DCPDPD] (Policy NE/9). It should also be noted that the scale of water release from this source, in comparison with total flows in the Ouse, is not significant. Strict policies for the control of flood risk are included in the Local Development Framework. The principle of new	

Nature of potential impact	How [VDSSPD] (alone or in combination with other plans) is likely to affect the European site	Why these effects are not considered significant
	developments not exceeding undeveloped rates for site run off is now central to [PPS25]. Policy NE/11 of the [DCPDPD] includes a general requirement for development not to increase flood risk in other areas due to additional run off. The Area Action Plans include more detailed drainage policies. Policy NS/21 of [NAAP] sets detailed requirements for a strategic sustainable drainage system to drain the town, including a requirement to restrict surface water run off to no greater than if the site were undeveloped. [CSFAAP] and [CEAAP] both require the preparation of a strategic surface water drainage scheme, to ensure surface water run off is addressed in a sustainable manner. There is also a general requirement to use SUDS wherever practicable ([DCPDPD], NE/11). SUDS employ a whole suite of techniques to effectively manage drainage at source including dry ditches (swales), retention/attenuation ponds, and integrated constructed wetlands, all of which aim to detain run off and release it slowly into watercourses or to ground. Source control techniques such as the use of porous (as opposed to impermeable) paving and 'green roofs', which allow rainwater re-use, are also possible. These techniques reduce the likelihood of flash flooding and result in greatly improved water quality. Policy NE/10 of [DCPDPD] also requires that the drainage of roads and hard surfaced areas used by vehicles to utilise trapped gullies, petrol/oil interceptors, or other suitable methods of pollution control. With regard to any impact of supplying water to new development, water companies have planned for new resources and infrastructure in their water resources plans submitted in 2004. The plans show how firms intend to	

Nature of potential impact	How [VDSSPD] (alone or in combination with other plans) is likely to affect the European site	Why these effects are not considered significant
	supply sufficient water to meet customers' needs while protecting and enhancing the environment. The plans cover the period up to 2030 (i.e. beyond the 2016 housing growth set out in [CSDPD]). In particular, [CWCWRP] anticipates sufficient supply beyond 2030, including taking account of the growth taking place as a result of [SCP]. The majority of additional water supply is anticipated to come from existing licences. (Source: [MWS].) The need for new development of any new water resources will also be linked to demand management and increasing efficiency of water use. Both [DCPDPD] and the Area Action Plans include a requirement for water conservation strategies to be provided as part of new development proposals. [HD] protects biodiversity by conservation, maintenance and restoration of natural habitats, flora and fauna at designated Natura 2000 sites. Abstraction can take place or continue only if it is shown that it does not adversely affect the site's ecological integrity. (Source: [CEOCAMS].) [CPMWPO] proposes an Earith/Mepal Action Area Plan, Wimblington Sand and Gravel Extraction, Needingworth Minerals Safeguarding Area, and a Cottenham Minerals Safeguard Area, which could have an impact on hydrology and water resources. The Habitats Directive Assessment of that plan suggests that all potential adverse impacts could be mitigated through policies in the plan itself.	
Changes in Pollution Levels	The level of development proposed by [CSDPD] could result in increased levels of atmospheric pollution, through the emissions created by development or from the car journeys generated.	As the site is not in close proximity to the major developments proposed, it is not considered that there is likely to be any significant impact on their nature conservation objectives from [VDSSPD] alone or in combination with other

Nature of potential impact	How [VDSSPD] (alone or in combination with other plans) is likely to affect the European site	Why these effects are not considered significant
	[CSDPD] focuses development on to Cambridge and areas accessible by public transport, providing access to jobs and services by means other than the car. This will help to minimise levels of car use and corresponding pollution. While the actual impact of [CSDPD] on air quality is difficult to quantify, the location of the site is not in close proximity to the major developments proposed or major transport routes. Objective ST/i of [CSDPD] is to positively protect and enhance biodiversity in the district. Policy NE/7 of [DCPDPD] states that development will not be permitted that would have an adverse impact either directly or indirectly on a site of biodiversity importance. This will include sites of European importance. Policy NE/16 addresses issues of air quality. [VDSSPD] does not propose any new development, but does encourage a reduction in car journeys by promoting walking or cycling, both within Cottenham village and to surrounding employment centres, services and leisure sites. [CPMWPO] proposes an Earith/Mepal Action Area Plan, Wimblington Sand and Gravel Extraction, Needingworth Minerals Safeguarding Area, and Cottenham Minerals Safeguard Area, which could have an impact on emissions. The Habitats Directive Assessment of that plan suggests that all potential adverse impacts could be mitigated through policies in the plan itself.	plans. There are also general policy requirements in the LDF to the effect that development does not harm the identified European Sites and to address air quality.

Agencies consulted	Natural England
Response to Consultation	Natural England support the conclusion that this SPD is unlikely to have significant impacts upon the European Sites located within and in the vicinity of South Cambridgeshire District and Cambridge City.

Overall Conclusions
[VDSSPD], alone and in combination with other DPDs in the LDF and other relevant plans, was assessed for its impact on the Ouse Washes and it was concluded that there are no likely significant effects on the conservation objectives of the site.

13.5 Screening Matrix for Portholme SAC

Name, location and summary of conservation objectives of Natura 2000 site	**Portholme** (Grid Reference TL237708) **Reason for designation as SAC** – Best example of lowland hay meadows in eastern England. (MG4 *Alopecurus pratensis-Sanguisorba officinalis*.) This site is over 90 hectares in size. It is the largest surviving traditionally managed meadow in the UK of alluvial flood meadow (7% of the total UK resource). There has been a long history of favourable management and very little of the site has suffered from agricultural improvement, and so it demonstrates good conservation of structure and function. It supports a small population of fritillary (*Fritillaria meleagris*). The site is located in Huntingdonshire District.
Are there other projects or plans that together with [VDSSPD] could affect Portholme?	[VDSSPD] will not itself result in any development. There are other plans in the South Cambridgeshire LDF, including various Area Action Plans for the urban extensions to Cambridge and the new settlement of Northstowe, and the [SSPDPD], which could theoretically indirectly affect the site. These plans provide detail to the framework provided in [CSDPD], including allocations of land for development; and all development management in South Cambridgeshire will be exercised in the context of [DCPDPD]. Other relevant plans: [CPWLP], [CPMWPO], [CLTP], [HLP], [HCSIO].

The assessment of significance of effects:

Nature of potential impact	How [VDSSPD] (alone or in combination with other plans) is likely to affect the European site	Why these effects are not considered significant
Land Take by Development	The South Cambridgeshire Local Development Framework does not propose any development that will take land from Portholme or result in the direct fragmentation of habitats. No other plans propose development that would take land from this site.	There are no guidelines in [VDSSPD] or other plans which directly impact on Portholme.
Impact on protected species outside the protected sites	The conservation objectives relate to species of plant within the hay meadow. Due to the distance of the site from the District there will be no effect. The development of land in locations identified by [CSDPD] alone or in combination with other plans will not have a significant impact on species listed as important to the integrity of the site. [VDSSPD] does not propose any development, so similarly will not have a significant effect.	Due to the distance and the nature of locations proposed for development, it is also not considered there will be any impact on insect and bird species integral to the site. [VDSSPD] alone or in combination with other plans is not likely to have a significant impact on specifies listed as important to the integrity of the site.
Recreational Pressure and Disturbance	Increasing the dwelling stock in the district by 20,000 dwellings could increase demand for countryside recreation. However, no major proposals in [CSDPD] or any other plan are within 5km of the site. There are footpaths through the site. However, it is over 15km from the nearest major development, proposed at Northstowe. There are other countryside access opportunities, existing or proposed, available in more accessible locations to the major centres of population. This includes both new and planned facilities in other DPDs of the South Cambridgeshire LDF for the major developments and in [CCCLP] for the urban extensions to Cambridge. These are specifically designed to provide a countryside	[RSS14HDA] states that in drawing up local development plans, consideration should be given to proposals for housing in areas where Natura 2000 and Ramsar sites fall within a 5km radius of the proposed Key Centres for Development and Change to reduce the risk of recreational disturbance effects to Natura 2000 and Ramsar sites from walkers, dogs, cats and other recreational uses that can result from additional housing and associated development. There are not likely to be any significant effects using this test as no development is within this distance. Notwithstanding, it is not considered that the level of public use of Portholme will increase

Nature of potential impact	How [VDSSPD] (alone or in combination with other plans) is likely to affect the European site	Why these effects are not considered significant
	recreation experience, and will continue to be the focus for that use by existing and new communities, rather than more remote locations such as Portholme. This is particularly demonstrated by [CHGIS] and [SCRS], which take forward the proposals of [CPSP].	greatly as a result of [VDSSPD]. Also, the impact of public access is not listed in the vulnerabilities relating to the site.
Water Quantity and Quality	Development could theoretically have an impact on water quantity, through run off from the sites or water use. It could also have an impact on water quality, through additional waste products produced. However, the impact of [CSDPD] proposals is not considered significant.	New development proposed in the District is located too far to be likely to have significant effects on the hay meadows and is located down stream on the River Ouse catchment.
Changes in Pollution Levels	The level of development proposed by [CSDPD] could result in increased levels of atmospheric pollution, through the emissions created by development or from the car journeys generated. [CSDPD] focuses development on to Cambridge and areas accessible by public transport, providing access to jobs and services by means other than the car. This will help to minimise levels of car use and corresponding pollution. While the actual impact of [CSDPD] on air quality is difficult to quantify, the location of the site is not in close proximity to the major developments proposed. [CSDPD] endeavours to limit traffic as part of development proposals and the overall strategy has the objective of reducing commuting to Cambridge from outside by focusing major development in and on the edge of Cambridge and in the new town of Northstowe to the north west of Cambridge. As such, it is considered that there are not likely to be any significant increases in traffic using this part of the A14 in this location as a result of [CSDPD]. Notwithstanding, while the site is close to the A14,	As the site is not in close proximity to the major developments proposed, it is not considered that there is likely to be any significant impact on their nature conservation objectives from [VDSSPD] alone or in combination with other plans. There are also general policy requirements in the LDF to the effect that development does not harm the identified European Sites and to address air quality.

Nature of potential impact	How [VDSSPD] (alone or in combination with other plans) is likely to affect the European site	Why these effects are not considered significant
	improvements are proposed to the A14 to be implemented by 2015 which involve a rerouting of the road some distance to the south of Huntingdon. This will remove the currently high traffic levels from the vicinity of the site and is likely to result in an improvement in pollution levels near the site. [VDSSPD] does not propose any new development, but does encourage a reduction in car journeys by promoting walking or cycling, both within Cottenham village and to surrounding employment centres, services and leisure sites. Objective ST/i of [CSDPD] is to positively protect and enhance biodiversity in the district. Policy NE/7 of [DCPDPD] states that development will not be permitted that would have an adverse impact either directly or indirectly on a site of biodiversity importance. This will include sites of European importance. Policy NE/16 addresses issues of air quality.	

Agencies consulted	Natural England
Response to Consultation	Natural England support the conclusion that this SPD is unlikely to have significant impacts upon the European Sites located within and in the vicinity of South Cambridgeshire District and Cambridge City.

Overall Conclusions
[VDSSPD], alone and in combination with other DPDs in the LDF and other relevant plans, was assessed for its impact on Portholme and it was concluded that there are no likely significant effects on the conservation objectives of the site.

13.6 Data Collected to Carry Out the Assessment

Who carried out the assessment?	Sources of data	Level of assessment completed	Where can the full results of the assessment be accessed and viewed
Committee members of the Cottenham Village Design Group guided by officers of South Cambridgeshire District Council with the assistance of Natural England.	Consultation with Natural England.	Desktop study. South Cambridgeshire is confident with the results of the assessment.	South Cambridgeshire District Council offices and online at www.scambs.gov.uk/ldf.

14 Abbreviations

AWS	Anglian Water Services
cSAC	candidate Special Area of Conservation
CVDG	Cottenham Village Design Group
DPD	Development Plan Document
HDA	Habitats Directive Assessment
LDF	Local Development Framework
MAFF	Ministry of Agriculture Fisheries and Food
NNR	National Nature Reserve
OFWAT	Office of Water Services
PSA	Public Service Agreement
RSPB	Royal Society for the Protection of Birds
RSS	Regional Spatial Strategy
SAC	Special Area of Conservation
SCDC	South Cambridgeshire District Council
SPA	Special Protection Areas
SPD	Supplementary Planning Document
SSSI	Site of Special Scientific Interest
WWT	Wildfowl and Wetlands Trust

15 Document References

[AWSDP] Environmental Monitoring Plan for Drought Plan 2006
(produced by Anglian Water Services)
http://www.anglianwater.co.uk/assets/DDP%20App2.pdf

[BCSRIP] Bedford Borough Core Strategy and Rural Issues Plan Development Plan Document, Submission Version
(produced by Bedford Borough Council)
http://www.bedford.gov.uk/GetResource.aspx?file=CSRIP%20Submission%20Version%20July%202006.pdf

[BD] Council Directive 79/409/EEC of 2 April 1979 on the conservation of wild birds
http://ec.europa.eu/environment/nature/nature_conservation/eu_nature_legislation/birds_directive/index_en.htm

[BLMDPIO] Bedfordshire and Luton Minerals Development Plans Issues and Options Consultation Paper 2006
(produced by Bedfordshire County Council and Luton Borough Council)
http://www.bedfordshire.gov.uk/Resources/PDF/I/Issues%20and%20options%20paper%20part%201.pdf

[BLMWLP] Bedfordshire and Luton Minerals and Waste Local Plan 2005
(adopted January 2005 by Bedfordshire County Council and Luton Borough Council)
http://www.bedfordshire.gov.uk/EnvironmentAndPlanning/MineralsAndWastePolicyAndPlanning/BedfordshireAndLutonMineralsAndWasteLocalPlan2000-2015.aspx

[BLP] Bedford Borough Local Plan 2006
(adopted October 2002 by Bedford Borough Council)
http://www.forms.bedford.gov.uk/planning/LocalPlan03/index.html

[BMWLP] Buckinghamshire Minerals and Waste Local Plan 2004-2016
(adopted April 2006 by Buckinghamshire County Council)
http://www.buckscc.gov.uk/bcc/get/assets/docs/strategic_planning/waste_mineral_plans/mw_adoption_draft.pdf

[BS] Biodiversity Strategy –
A Vision for the Conservation of the District's Biodiversity 2006-2009
(adopted August 2006 by South Cambridgeshire District Council)
http://www.scambs.gov.uk/Environment/Conservation/biodiversity.htm

[CALP] Cambridgeshire Aggregates (Minerals) Local Plan 1991
(produced by Cambridgeshire County Council)
http://www.cambridgeshire.gov.uk/environment/planning/policies/minerals+local+plan.htm

[CCCLP] Cambridge City Council Local Plan 2006
(produced by Cambridge City Council)
http://www.cambridge.gov.uk/ccm/content/preview/policy-and-projects/local-plan-2006.en

[CEAAP] Cambridge East Area Action Plan
(submitted January 2006 jointly by Cambridge City Council
and South Cambridgeshire District Council)
http://www.scambs.gov.uk/documents/retrieve.htm?pk_document=904898

[CEOCAMS] The Cam and Ely Ouse Catchment Abstraction Management Strategy
(issued March 2007 by the Environment Agency)
http://publications.environment-agency.gov.uk/pdf/
GEAN0207BLUY-e-e.pdf?lang=_e

[CHGIS] Cambridgeshire Horizons Green Infrastructure Strategy
http://www.cambridgeshirehorizons.co.uk/doclib/
260873_GREEN_INFRAST_BRO_2.pdf

[CLTP] Cambridgeshire Local Transport Plan 2006-2011
(produced by Cambridgeshire County Council)
http://www.cambridgeshire.gov.uk/transport/strategies/local/ltp_2006.htm

[CPMWPO] Cambridgeshire and Peterborough Minerals and Waste Preferred Options
2006
(produced by Cambridgeshire County Council and Peterborough City Council)
http://www.cambridgeshire.gov.uk/environment/planning/policies/minerals/
plansupportingdocs

[CPSP] Cambridgeshire and Peterborough Structure Plan 2003
(produced by Cambridgeshire County Council and Peterborough City Council)
http://www.cambridgeshire.gov.uk/environment/planning/policies/
structure+plan.htm

[CPWLP] Cambridgeshire and Peterborough Waste Local Plan 2003
(produced by Cambridgeshire County Council and Peterborough City Council)
http://www.cambridgeshire.gov.uk/environment/planning/policies/
waste+local+plan.htm

[CREWW] Condition Report for Eversden and Wimpole Wood SSSI 2007
(produced by Natural England)
http://www.english-nature.org.uk/special/sssi/
sssi_details.cfm?sssi_id=1000416

[CRWF] Condition Report for Wicken Fen SSSI 2007
(produced by Natural England)
http://www.english-nature.org.uk/Special/sssi/
sssi_details.cfm?sssi_id=1003251

[CSDPD] Core Strategy Development Plan Document
(adopted January 2007 by South Cambridgeshire District Council)
http://www.scambs.gov.uk/documents/retrieve.htm?pk_document=905183

[CSFAAP] Cambridge Southern Fringe Area Action Plan
(submitted January 2006 by South Cambridgeshire District Council)
http://www.scambs.gov.uk/documents/retrieve.htm?pk_document=904899

[CSHDA] Core Strategy Development Plan Document Habitats Directive Assessment
(produced by South Cambridgeshire District Council)
http://www.scambs.gov.uk/documents/retrieve.htm?pk_document=905181

[CWCWRP] Cambridge Water Company Water Resources Plan
http://www.cambridge-water.co.uk/community/resource_plan.asp

[DCPDPD] Development Control Policies Development Plan Document
(adopted July 2007 by South Cambridgeshire District Council)
http://www.scambs.gov.uk/documents/retrieve.htm?pk_document=905680

[DCPHDA] Development Control Policies Habitats Directive Assessment
(produced by South Cambridgeshire District Council)
http://www.scambs.gov.uk/documents/retrieve.htm?pk_document=905691

[ECCSPO] East Cambridgeshire Core Strategy Preferred Options Report April 2006
(produced by East Cambridgeshire District Council)
http://www.eastcambs.gov.uk/docs/publications/devservices/cspor.pdf

[ECDLP] East Cambridgeshire District Local Plan
(produced by East Cambridgeshire District Council)
http://www.eastcambs.gov.uk/docs/publications/devservices/localplan.pdf

[ECPSIO] East Cambridgeshire Issues and Options Papers – Proposals Section
(produced by East Cambridgeshire District Council)

Housing Sites
http://www.eastcambs.gov.uk/docs/publications/devservices/hsop.pdf

Employment Sites
http://www.eastcambs.gov.uk/docs/publications/devservices/esop.pdf

Retail Sites
http://www.eastcambs.gov.uk/docs/publications/devservices/rsop.pdf

Gypsy and Traveller Sites
http://www.eastcambs.gov.uk/docs/publications/devservices/gsop.pdf

[ENR657] English Nature Research Report 657: Advice for the Management of Flightlines and Foraging Habitats of the Barbastelle Bat Barbastella Barbastellus
http://www.english-nature.org.uk/pubs/publication/PDF/657.pdf

[FCSDPPO] Fenland Core Strategy and Development Policies Preferred Options 2006
(produced by Fenland District Council)
http://www.fenland.gov.uk/ccm/content/development-policy/ldf/core-stratergy-developmenmt-polices-document-final.en

[FDLP] Fenland District-Wide Local Plan 1993
(adopted August 1993 by Fenland District Council)
http://www.fenland.gov.uk/assets/localplan/

[FHCSPO] Forest Heath Core Strategy Preferred Options
(produced by Forest Heath District Council)
http://forest-heath.jdi-consult.net/ldf/readdoc.php?docid=144

[FHLP] Forest Heath Local Plan 1995
(adopted December 1995 by Forest Heath District Council)
http://www.forest-heath.gov.uk/NR/rdonlyres/679518CB-55E6-4DF5-804B-2B6E95FC2EDF/0/LocalPlan1995.pdf

[FHSSIO] Forest Heath Site Specific Issues and Options 2006
(produced by Forest Heath District Council)
http://forest-heath.jdi-consult.net/ldf/readdoc.php?docid=145

[HCSIO] Huntingdonshire Core Strategy 2007 Issues and Options
(produced by Huntingdonshire District Council)
http://www.huntsdc.gov.uk/NR/rdonlyres/
051CDF23-5578-47DE-A598-890826ECF805/0/
core_strategy_2007_issues_and_options.pdf

[HD] Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora
http://ec.europa.eu/environment/nature/nature_conservation/
eu_nature_legislation/habitats_directive/index_en.htm

[HDCPIO] Huntingdonshire Development Control Policies Development Plan Document Issues and Options
(produced by Huntingdonshire District Council)
http://www.huntsdc.gov.uk/NR/rdonlyres/
FEF8E0F9-F40E-48FA-AC69-3A3657B95134/0/
dc_policies_dpd_final_version.pdf

[HDGUIDE] Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites: Methodological Guidance on the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC
http://ec.europa.eu/environment/nature/nature_conservation/
eu_nature_legislation/specific_articles/art6/pdf/natura_2000_assess_en.pdf

[HLP] Huntingdonshire Local Plan 1995
(produced by Huntingdonshire District Council)
http://applications.huntsdc.gov.uk/applications/planning%20documents/
local_plan_1995/

[HMLP] Hertfordshire Minerals Local Plan Review 2002-2016
(adopted March 2007 by Hertfordshire County Council)
http://www.hertsdirect.org/yrccouncil/hcc/env/hdp/mineralsandwaste/
mineralslocalplan/mlpadoptionmarch2007/

[HMWIO] Hertfordshire Minerals and Waste DPDs Issues and Options
(produced by Hertfordshire County Council; not available online)

[HR] The Conservation (Natural Habitats, &c.) Regulations 1994
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[HR2007] The Conservation (Natural Habitats, &c.) (Amendment) Regulations 2007
Statutory Instrument 2007 No. 1843
http://www.opsi.gov.uk/si/si2007/20071843.htm

[HWCSPO] Hertfordshire Waste Core Strategy Preferred Options 2007
(produced by Hertfordshire County Council)
http://www.hertsdirect.org/infobase/docs/pdfstore/
wastecorestratprefoptions.pdf

[HWLP] Hertfordshire Waste Local Plan 1995-2005
(adopted January 1999 by Hertfordshire County Council)
http://enquire.hertscc.gov.uk/buildingfutures/wlp1999.pdf

[KLWNCSPO] King's Lynn and West Norfolk Core Strategy Preferred Options Paper 2006
(produced by the Borough Council of King's Lynn and West Norfolk)
http://www.west-norfolk.gov.uk/Default.aspx?page=23374

[KLWNLP] King's Lynn and West Norfolk Local Plan
(adopted November 1998 by the Borough Council of King's Lynn and West Norfolk)
http://online.west-norfolk.gov.uk/local_plan/plan_index.htm

[MBCSIO] Mid Bedfordshire Core Strategy Issues and Options 2006
(produced by Mid Bedfordshire District Council)
http://www.midbeds.gov.uk/Images/finaldraft%20issues%20and%20options%20feb06_tcm5-12575.pdf

[MBLP] Mid Bedfordshire Local Plan 2005
(adopted December 2005 by Mid Bedfordshire District Council)
http://www.midbeds.gov.uk/Planning/LDF/Interactive_Local_Plan.aspx

[MKLP] Milton Keynes Local Plan 2001-2011
(adopted December 2005 by Milton Keynes Council)
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[MKMLP] Milton Keynes Minerals Local Plan 2001-2011
(produced by Milton Keynes Council)
http://www.milton-keynes.gov.uk/local_plan_review/DisplayArticle.asp?ID=22888

[MKW] Milton Keynes Waste Development Plan Document Submission 2007-2026
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http://www.milton-keynes.gov.uk/local_plan_review/documents/MK_Waste_Development_Plan_Document_Submission.pdf

[MWS] Maintaining Water Supply
(issued July 2004 by the Environment Agency)
http://publications.environment-agency.gov.uk/pdf/GEHO0704BLUV-e-e.pdf?lang=_e

[NAAP] Northstowe Area Action Plan
(adopted by South Cambridgeshire District Council July 2007)
http://www.scambs.gov.uk/documents/retrieve.htm?pk_document=905692

[NHCSDCPO] North Hertfordshire Core Strategy and Development Control Policies Options Paper 2005
(produced by North Hertfordshire District Council)
http://www.north-herts.gov.uk/options_paper_final.pdf

[NHDLP] North Hertfordshire District Local Plan No. 2 with Alterations
(adopted April 1996 by North Hertfordshire District Council)
http://www.north-herts.gov.uk/index/planning/planning_policy_and_projects/local_plan.htm

[NMLP] Norfolk Minerals Local Plan
(adopted January 2004 by Norfolk County Council)
http://www.norfolk.gov.uk/consumption/idcplg?IdcService=SS_GET_PAGE&ssDocName=NCC039342

[NWCAAPIO] North West Cambridge Area Action Plan Issues and Options Report
(issued September 2006 jointly by Cambridge City Council
and South Cambridgeshire District Council)
http://www.scambs.gov.uk/documents/retrieve.htm?pk_document=904924

[NWLP] Norfolk Waste Local Plan
(adopted December 2000 by Norfolk County Council)
http://www.norfolk.gov.uk/consumption/idcplg?IdcService=SS_GET_PAGE&nodeId=3395

[PPS9] Planning Policy Statement 9: Biodiversity and Geological Conservation
(issued by the Department for Communities and Local Government)
http://www.communities.gov.uk/publications/planningandbuilding/planningpolicystatement12

[PPS12] Planning Policy Statement 12: Local Development Frameworks
(issued by the Department for Communities and Local Government)
http://www.communities.gov.uk/publications/planningandbuilding/planningpolicystatement4

[PPS25] Planning Policy Statement 25: Development and Flood Risk
(issued by the Department for Communities and Local Government)
http://www.communities.gov.uk/publications/planningandbuilding/pps25floodrisk

[RAMSAR] Convention on Wetlands of International Importance
especially as Waterfowl Habitat
(The Ramsar Convention on Wetlands, 1971 amended 1982 and 1987)
http://www.ramsar.org/key_conv_e.htm

[RISCF] Ramsar Information Sheet UK11014: Chippenham Fen
(produced by the Joint Nature Conservation Committee)
http://www.jncc.gov.uk/pdf/RIS/UK11014.pdf

[RISWF] Ramsar Information Sheet UK11077: Wicken Fen
(produced by Joint Nature Conservation Committee)
http://www.jncc.gov.uk/pdf/RIS/UK11077.pdf

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Regional Planning Guidance for East Anglia to 2016
(produced by the Government Office for the East of England November 2000)
http://www.gos.gov.uk/goee/docs/193657/193668/Regional_Spacial_Strategy/Regional_Planning_Guidance_1.pdf

[RSS14] East of England Plan: Draft revision to the Regional Spatial Strategy (RSS) for the East of England
(produced by the East of England Regional Assembly)
http://www.eera.gov.uk/category.asp?cat=452

[RSS14HDA] East of England Regional Spatial Strategy Habitats Directive Assessment (produced by the East of England Regional Assembly) http://www.gos.gov.uk/goee/docs/193657/193668/Part1 (part 1) http://www.gos.gov.uk/goee/docs/193657/193668/Part2 (part 2)

[SCP] Sustainable Communities Plan: Building for the Future (issued February 2003 by the Office of the Deputy Prime Minister) http://www.communities.gov.uk/publications/communities/sustainablecommunitiesbuilding

[SCRS] South Cambridgeshire Recreation Study: Audit and Assessment of Need for Outdoor Playspace and Informal Open Space in South Cambridgeshire (produced June 2005 by South Cambridgeshire District Council) http://www.scambs.gov.uk/Environment/Planning/DistrictPlanning/LocalDevelopmentFramework/Archive/RecreationStudy.htm

[SEBLP] St Edmundsbury Borough Local Plan 2016 (adopted June 2006 by St Edmundsbury Borough Council) http://www.stedmundsbury.gov.uk/sebc/live/localplan/

[SMCSIO] Suffolk Minerals Core Strategy Issues and Options 2006 (produced by Suffolk County Council) http://www.suffolk.gov.uk/Environment/MineralsAndWastePlanning/MineralsPlanning/MineralsCoreStrategy.htm

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[SSPDPD] Site Specific Policies Development Plan Document (submitted January 2006 by South Cambridgeshire District Council) http://www.scambs.gov.uk/documents/retrieve.htm?pk_document=904901

[SWLP] Suffolk Waste Local Plan 2006 (adopted February 2006 by Suffolk County Council) http://www.suffolk.gov.uk/Environment/MineralsAndWastePlanning/WastePlanning/

[UOBOCAMS] The Upper Ouse and Bedford Ouse Catchment Abstraction Management Strategy (produced March 2005 by the Environment Agency) http://www.environment-agency.gov.uk/regions/anglian/1274735/310323/

[UWWD] Council Directive 91/271/EEC of 21 May 1991 concerning urban waste-water treatment http://ec.europa.eu/environment/water/water-urbanwaste/index_en.html

[VDSSPD] Cottenham Village Design Statement SPD
(produced by the Cottenham Village Design Group)
http://www.cvdg.org/designstatementspd.pdf

[WA] Water Act 2003
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[WCA] Wildlife and Countryside Act 1981
http://www.jncc.gov.uk/page-3614

[WIA] Water Industry Act 1991
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