

Rampion 2 Wind Farm

Category 6: Environmental Statement

Volume 4, Appendix 22.2: Terrestrial ecology desk study

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1. Introduction

- 1.1.1 The “*Biodiversity and Geological Conservation*” section of Overarching National Policy Statement for Energy (EN 1) (Department of Energy and Climate Change, 2011) outlines the expectations of the United Kingdom (UK) Government regarding the consideration of biodiversity. Paragraph 5.3.3 recommends that Rampion Extension Development Limited (RED) (“the Applicant”) should ensure that details of “*internationally, nationally and locally designated sites of ecological or geological conservation importance, on protected species and on habitats and other species identified as being of principal importance for the conservation of biodiversity*” are provided to inform a proportionate assessment of the effects of a project (in this case Rampion 2 Offshore Wind Farm, hereafter referred to as ‘Rampion 2’ or the ‘Proposed Development’).
- 1.1.2 The purpose of this Appendix is to present the results of a desk study undertaken to identify statutory and non-statutory sites designated for their nature conservation importance, Habitats and Species of Principal Importance in England, and other legally protected, notable and controlled species relevant to the onshore (landward of mean high water springs (MHWS)) elements of Rampion 2.
- 1.1.3 The results of this desk study have been used to support the Environmental Impact Assessment (EIA) process and the Habitats Regulations Assessment (HRA) for Rampion 2. This Appendix should be read in conjunction with **Chapter 22: Terrestrial ecology and nature conservation, Volume 2** of the ES (Document Reference 6.2.22).



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2. Study Area

- 2.1.1 This desk study is based on the onshore elements of the proposed Development Consent Order (DCO) Order Limits as described in **Section 1.2** of **Chapter 1: Introduction** of the ES (Document Reference 6.2.1).
- 2.1.2 The 'Study Area' for this desk study comprises:
- Land within the proposed DCO Order Limits (see **Chapter 4: The Proposed Development, Volume 2** of the ES (Document Reference 6.2.4));
 - areas of search (measured from the proposed DCO Order Limits) for sites designated for their nature conservation interest at the international / national site network, national and local levels;
 - an area of search for legally protected and notable ecological features; and
 - an area of search for any legally controlled species.
- 2.1.3 The extent of the areas of search (see **Table 3-1**) were determined based on best practice guidance and a high-level overview of the types of ecological features present, and the potential effects that could occur (see **Figures 22.2.1 - 22.2.3**).

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3. Methodology

3.1.1 Data on internationally, nationally and locally designated sites for nature conservation, legally protected, notable and controlled species and habitats (see **Table 3-1** and **Table 3-2** for details) were obtained through data requests to a range of nature conservation organisations and interrogation of publicly available databases. These data sources are:

- A27 Arundel Bypass Environmental Assessment Report, Highways England (2019) (online reports interrogated May 2023);
- British Trust for Ornithology (BTO) – Wetland Bird Survey (WeBS) information (database interrogated May 2023);
- Mid Arun Valley Environmental Survey 2017 and 2018 (MAVES) (online reports interrogated May 2023);
- Multi Agency Geographic Information for the Countryside (MAGIC) database (interrogated May 2023) (Department for Environment, Food and Rural Affairs (Defra), n.d.);
- National Biodiversity Network (NBN) Gateway (interrogated May 2023);
- Royal Society for the Protection of Birds (RSPB) (through data request in 2021);
- South Downs National Park Authority (SDNPA) (provided through technical engagement);
- Sussex Biodiversity Records Centre (SxBRC) (through data request in May 2023); and
- Sussex Ornithological Society (SOS) (through data requests in 2021 and 2022).

Table 3-1 Key sources of terrestrial ecology and nature conservation sites

Ecological Feature	Example / Definition	Coverage of Study Area
Statutory sites designated under international conventions or the	Special Areas of Conservation (SAC), candidate SAC (cSAC), Special Protection Areas (SPA), proposed SPA,	SACs and possible ² SACs were searched for inside and within 12km of the proposed DCO Order Limits to reflect recommendations in the Draft Sussex Bat Special Area of Conservation: Planning and

² MAGIC (Defra, n.d.) identifies possible SACs as a category, as opposed to candidate SACs. Possible SACs are sites that have been identified but have not been submitted to the European Commission for designation (cSACs are the same except they have been submitted but are not yet designated). There are no cSACs currently for the UK – possible SACs were included to ensure completeness.

Ecological Feature	Example / Definition	Coverage of Study Area
Habitats Regulations¹	Ramsar sites and proposed Ramsar sites.	<p>Landscape Enhancement Protocol. (also known as the “<i>Draft Sussex Bat SAC Protocol</i>”) (SDNPA & Natural England 2018).</p> <p>SPAs, proposed SPAs, Ramsar sites and proposed Ramsar sites were searched for inside and within 10km of the proposed DCO Order Limits reflecting the upper foraging distances of dark-bellied brent geese <i>Branta bernicla bernicla</i> (Summers & Critchley, 1990) and Bewick’s swan <i>Cygnus columbianus bewickii</i> (Robinson <i>et al.</i> 2004) from roost locations. These species were identified as the species with the largest foraging distances for terrestrial habitats for any SPA features within the wider area.</p>
Statutory sites designated under national legislation	Sites of Special Scientific Interest (SSSIs), National Nature Reserves (NNRs) and Local Nature Reserves (LNRs)).	<p>SSSIs with bats listed on the citation were searched for inside and within 12km of the proposed DCO Order Limits.</p> <p>NNRs and all other SSSIs were searched for inside and within 5km of the proposed DCO Order Limits following precedent for other large infrastructure projects.</p> <p>LNRs were searched for within 1km of the proposed DCO Order Limits reflecting the purpose of their designation.</p>
Locally designated sites	In Sussex, these are termed as Local Wildlife Sites (LWS) and notable road verges (NRV).	LWS and NRV were searched for inside and within 5km of the proposed DCO Order Limits.
Habitats of Principal Importance (HPI) and Species of	HPIs and SPIs, species recorded on The International Union for Conservation of Nature	HPI and SPI, Red listed species and Legally protected species were searched for inside and within 5km

¹ Sites (for example, SPAs and SACs) that were formerly termed European sites are referred to within this Appendix as constituents of the national site network reflecting the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.

Ecological Feature	Example / Definition	Coverage of Study Area
Principal Importance (SPI)³, Red listed species and legally protected species.	(IUCN) Red List of Threatened Species and/or local Red Lists ⁴ for the UK or relevant sub-units (for example, regions or counties) and legally protected habitats and species include those listed on Schedules 1, 5 and 8 of the Wildlife and Countryside Act 1981 (those included on Schedules 2 and 5 of the Habitats Regulations. Badger and Hedgerows are provided protection under the Protection of Badgers Act 1992 and the Hedgerows Regulations 1997 respectively.	<p>of the proposed DCO Order Limits unless otherwise specified.</p> <p>Ornithological data provided by SOS is supplied by tetrad (a square containing four Ordnance Survey 1km grid squares). Data for all tetrads that are within or overlap with the Scoping Boundary⁵ have been obtained.</p> <p>Data on stone curlew <i>Burhinus oedicephalus</i> and lapwing <i>Vanellus vanellus</i> nesting locations and habitat creation measures (for example, stone curlew plots) supplied by the RSPB within the Scoping Boundary⁵ and within a 500m buffer of it.</p> <p>Summary WeBS data available from the BTO was obtained for all count sectors within the Scoping Boundary⁵ or within 1km of it at the closest point.</p>
Legally controlled species	Legally controlled species include those listed on Schedule 9 of the WCA Wildlife and Countryside Act 1981 (as amended).	Legally controlled species searched for inside the proposed DCO Order Limits and within 5km of it.
Bat roosting locations	Bat roosting locations are considered separately from other species records in	Bat roosting locations were searched for inside and within 5km of the proposed DCO Order Limits.

³ Habitats and Species of Principle Importance covered under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006.

⁴ The IUCN red list provides taxonomic, conservation status and distribution information on taxa that have been globally evaluated using the IUCN Red List Categories and Criteria. This system is designed to determine the relative risk of extinction, and the main purpose of the IUCN Red List is to catalogue and highlight those taxa that are facing a higher risk of global extinction - those listed as Critically Endangered, Endangered and Vulnerable (IUCN, 2021).

⁵ A wider area for bird records was searched to inform the Scoping Report (Rampion Extension Development Limited (RED), 2020). Given the structure of the data (provided as tetrads), it has not been tailored to the proposed DCO Order Limits however it is considered to be representative given the mobile nature of birds.

Ecological Feature	Example / Definition	Coverage of Study Area
	accordance with guidance (Collins, 2016).	
Waterbody locations	Waterbodies may support species within the groups listed above (for example legally protected great crested newts).	Waterbody locations were searched for inside the proposed DCO Order Limits and within 250m of it.

Table 3-2 Sources of desk study data

Source	Summary of information provided
A27 Bypass Environmental Assessment Report (Highways England, 2019)	Data on legally protected and notable flora and fauna inside the proposed DCO Order Limits and within 5km of it.
Wetland Bird Survey Reports	Core count data (yearly peaks) for WeBS count sites within the proposed DCO Order Limits and within 1km of it.
MAGIC (Defra, n.d.)	Data on the location of statutorily designated sites, data from the Ancient Woodland and Priority Habitat Inventories, granted European Protected Species Licence locations (2013 to 2023) within 100m of the proposed DCO Order Limits and great crested newt eDNA survey outcomes from 2017-2019 effort by Natural England for district licensing purposes [accessed May 2023].
MAVES	Report data on legally protected and notable flora and fauna within the proposed DCO Order Limits and within 5km of it.
NBN Gateway	Information on legally protected and notable flora and fauna was interrogated within the proposed DCO Order Limits and within 500m of it.
RSPB	Data on stone curlew and lapwing breeding within the Scoping Boundary ⁵ and within 500m of it and location of habitat creation (for example, stone curlew plots) within this area.
SDNPA	Data on legally protected and notable fauna in the South Downs National Park, and information on the Sussex Study Area monitoring project on impacts of farming on flora and fauna of arable land inside the proposed DCO

Source	Summary of information provided
SxBRC	Order Limits and within 5km of it (provided as personal comments from ranger staff in 2021).
SOS	Data on sites designated for nature conservation, priority habitats and legally protected and notable flora and fauna. Data on species listed on Schedule 1 of the Wildlife & Countryside Act 1981 (as amended) and notable bird species within tetrads that overlap with the Scoping Boundary ⁵ . Additional information requested on lapwing nesting habitat and Bewick's swan foraging habitat locations.

3.1.2 In addition, a local resident provided field observations for the Cowfold Stream and surrounding area when within and close to the proposed DCO Order Limits.

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4. Results

4.1 Statutory designated sites of nature conservation

- 4.1.1 Statutory designated sites of nature conservation were identified from datasets available from MAGIC (Defra, n.d.) (a service managed by Natural England).
- 4.1.2 A total of six international / national site network sites are present within the areas of search identified in **Table 4-1**. There are a number of overlapping designations (for example the same geographic area is both a Ramsar site and an SPA) meaning that these six sites equate to four distinct geographical locations. None of these sites are within the proposed DCO Order Limits.
- 4.1.3 In addition, there are 14 SSSIs and one LNR identified within the relevant areas of search identified in **Table 4-1**. Climping Beach SSSI and West Beach LNR (overlapping designations) are within the proposed DCO Order Limits and Amberley Mount to Sullington Hill SSSI is directly adjacent to the proposed DCO Order Limits.
- 4.1.4 **Figure 22.2.1** illustrates the locations of international / national site network sites, whilst **Figure 22.2.2** shows the locations of sites designated via national legislation.

Table 4-1 Details of statutory designated sites of nature conservation

Site name	Designated features	Distance and direction from the proposed DCO Order Limits
International / national site network sites		
Arun Valley Ramsar site (overlaps with Arun Valley SAC, Arun Valley SPA, Amberley Wild Brooks SSSI, Waltham Brooks SSSI and Pulborough Brooks SSSI)	<ol style="list-style-type: none"> 1) Qualifies under Ramsar criterion 2 for seven wetland invertebrate species listed on the British Red Data Book, four nationally rare and four nationally scarce plant species; 2) Qualifies under Ramsar criterion 3 for a diverse and rich ditch flora; and 3) Qualifies under Ramsar criterion 5 for its assemblage of wintering waterfowl. 	4.8km north-west
Arun Valley SAC (overlaps with Arun Valley Ramsar site, Arun Valley SPA,	<ol style="list-style-type: none"> 1) Ramshorn snail <i>Anisus vorticulus</i>. 	4.8km north-west

Site name	Designated features	Distance and direction from the proposed DCO Order Limits
Amberley Wild Brooks SSSI, Waltham Brooks SSSI and Pulborough Brooks SSSI)		
Arun Valley SPA (overlaps with Arun Valley SAC, Arun Valley Ramsar site, Amberley Wild Brooks SSSI, Waltham Brooks SSSI and Pulborough Brooks SSSI)	1) Bewick's swan (non-breeding); and 2) Waterfowl assemblage (non-breeding): including shoveler <i>Anas clypeata</i> , teal <i>Anas crecca</i> , wigeon <i>Anas penelope</i> and Bewick's swan.	4.8km north-west
Duncton to Bignor Escarpment SAC	1) Asperulo-Fagetum beech forests.	8.3km north-west
Solent and Dorset Coast SPA	1) Sandwich tern <i>Sterna sandvicensis</i> (breeding); 2) Common tern; and 3) Little tern.	1.0km south-west
The Mens SAC	1) Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (Quercion robori-petraeae or Ilici-Fagenion); and 2) Barbastelle <i>Barbastella barbastellus</i> .	11.2km north-west
National sites		
Amberley Mount to Sullington Hill SSSI⁶	3) CG2 – <i>Festuca ovina</i> – <i>Avenula pratensis</i> lowland calcareous grassland; 4) CG3 – <i>Bromus erectus</i> lowland calcareous grassland; 5) Juniper <i>Juniperus communis</i> ; 6) Fly honeysuckle <i>Lonicera xylosteum</i> ; and 7) Adonis blue butterfly <i>Polyommatus bellargus</i> .	Adjacent to the proposed DCO Order Limits

⁶ Amberley Mount to Sullington Hill SSSI and Arundel Park SSSI are also identified as groundwater dependent terrestrial ecosystems in **Chapter 26: Water environment, Volume 2** of the ES (Document Reference: 6.2.26).

Site name	Designated features	Distance and direction from the proposed DCO Order Limits
Amberley Wild Brooks SSSI	<ol style="list-style-type: none"> 1) Redshank <i>Tringa tetanus</i> (breeding); 2) Bewick's swan (non-breeding); 3) Shoveler (non-breeding); 4) Teal (non-breeding); 5) Breeding bird assemblage – mixed lowland damp grassland, woodland 6) Invertebrate assemblage; 7) Lowland ditch system; 8) Outstanding dragonfly assemblage; 9) True fox-sedge <i>Carex vulpine</i>; 10) Cut-grass <i>Leersia oryzoides</i>; 11) S3 – <i>Carex paniculate</i> swamp; 12) S5 – <i>Glyceria maxima</i> swamp; 13) S7 – <i>Carex acutiformis</i> swamp; 14) Variety of wintering bird species; and 15) Vascular plant assemblage. 	4.8km north-west
Arun Banks SSSI	<ol style="list-style-type: none"> 1) <i>Schoenoplectus lacustris</i> sub-species <i>tabernaemontani x triqueter</i>; 2) W5 – <i>Alnus glutinosa</i> – <i>Carex paniculate</i> woodland; and 3) W6 – <i>Alnus glutinosa</i> – <i>Urtica dioica</i> woodland. 	2.8km north-west
Arundel Park SSSI	<ol style="list-style-type: none"> 4) Breeding bird assemblage – mixed: scrub, woodland; 5) CG2 <i>Festuca ovina</i> – <i>Avenula pratensis</i> lowland calcareous grassland; 6) CG3 – <i>Bromus erectus</i> lowland calcareous grassland; 7) Invertebrate assemblage; 8) Field cricket <i>Gryllus campestris</i>; and 9) Cut-grass. 	2.3km north-west
Chanctonbury Hill SSSI	<ol style="list-style-type: none"> 1) Breeding bird assemblage – mixed: lowland damp grassland, woodland; 2) CG2 – <i>Festuca ovina</i> – <i>Avenula pratensis</i> lowland calcareous grassland; 3) CG3 – <i>Bromus erectus</i> lowland calcareous grassland; 4) Great crested newt; and 	0.7km south-east

Site name	Designated features	Distance and direction from the proposed DCO Order Limits
	5) W12 – <i>Fagus sylvatica</i> – <i>Mercurialis perennis</i> woodland.	
Chantry Mill SSSI	1) EA – Aptian – Albian.	0.7km north-west
Cissbury Ring SSSI	1) Breeding bird assemblage – mixed: scrub, woodland; 2) CG1 – <i>Festuca ovina</i> – <i>Carlina vulgaris</i> lowland calcareous grassland; 3) CG2 – <i>Festuca ovina</i> – <i>Avenula pratensis</i> lowland calcareous grassland; 4) CG3 – <i>Bromus erectus</i> lowland calcareous grassland; 5) CG4 – <i>Brachypodium pinnatum</i> lowland calcareous grassland; and 6) Adonis blue butterfly.	2.4km south-east
Climping Beach SSSI (overlaps with West Beach LNR)	1) Sanderling <i>Calidris alba</i> ; 2) SD1 – <i>Rumex crispus</i> – <i>Glaucium flavum</i> shingle community; 3) SD7 – <i>Ammophila Arenaria</i> – <i>Festuca rubra</i> semi-fixed dune community; and 4) SD8 – <i>Festuca rubra</i> – <i>Galium verum</i> fixed dune grassland.	Within proposed DCO Order Limits
Fairmile Bottom SSSI	1) Silver-washed fritillary <i>Argynnis paphia</i> , calcareous grassland, woodland.	4.5km north-west
Horton Clay Pit SSSI	1) ED – Aptian – Albian.	4.2km south-east
Hurston Warren SSSI	1) H2 – <i>Calluna vulgaris</i> – <i>Ulex minor</i> heath; 2) M1 – <i>Sphagnum auriculatum</i> bog pool community; and 3) M16 – <i>Erica tetralix</i> – <i>Sphagnum compactum</i> wet heath.	4km north-west
Parham Park SSSI	1) Combinations of species – lichens; 2) Invertebrate assemblage; 3) W10 – <i>Quercus robur</i> – <i>Pteridium aquilinum</i> – <i>Rubus fruticosus</i> woodland;	2.6km north-west

Site name	Designated features	Distance and direction from the proposed DCO Order Limits
	4) W14 – <i>Fagus sylvatica</i> – <i>Rubus fruticosus</i> woodland; and 5) W15 – <i>Fagus sylvatica</i> – <i>Deschampsia flexuosa</i> woodland.	
Sullington Warren SSSI	1) Breeding bird assemblage – mixed; scrub, woodland; and 2) H2 – <i>Calluna vulgaris</i> – <i>Ulex minor</i> heath.	0.7km north-west
West Beach LNR (overlaps with Climping Beach SSSI)	1) Sand flats, tide line, shingle, sand dunes and related fauna (part of Climping Beach SSSI).	Within proposed DCO Order Limits

4.2 Non-statutory designated sites of nature conservation

4.2.1 Non-statutory designated sites of nature conservation were identified within data provided by SxBRC.

4.2.2 **Table 4-2** provides the details of the LWS that are within the proposed DCO Order Limits and within 5km of it. There are four non-designated sites located fully or partially within the proposed DCO Order Limits, with a further 46 non-designated sites within 5km of it (see **Figure 22.2.3**).

Table 4-2 Details of non-statutory designated sites of nature conservation within 5km of the proposed DCO Order Limits

Site name	Description ⁷	Distance and direction from the proposed DCO Order Limits
Littlehampton Golf Course & Atherington Beach LWS	Littlehampton Golf Course is of outstanding importance botanically. Although much of its grassland has been improved there are patches of species-rich turf. The southern edge of the golf links includes an area of dry dune grassland, adjacent to the sand dune	Within the proposed DCO Order Limits

⁷ Description is copied from the summary provided on the designation information provided for each site by SxBRC.

Site name	Description ⁷	Distance and direction from the proposed DCO Order Limits
Elmer Rocks LWS	system of Climping Beach SSSI. The site also includes an area of vegetated shingle beach, a nationally uncommon habitat.	Within proposed DCO Order Limits (below mean low water springs (MLWS))
Sullington Hill LWS	This stretch of the South Downs escarpment supports moderately species-rich chalk grassland on north and east-facing slopes. Some areas are maintained by grazing while others are no longer grazed and have become heavily scrub-invaded. The site includes small areas of semi-natural woodland.	Within the proposed DCO Order Limits.
Bines Green LWS	Bines Green is an area of common land that straddles the B2135 road. It is damp, unimproved, neutral grassland of considerable botanical interest with a small, overgrown pond to the west of the road.	Within the proposed DCO Order Limits (circa 10m ² of an existing surfaced track only)
Warningcamp Hill and New Down LWS	The steep, north-west facing slope of New Down supports herb-rich chalk grassland with extensive patches of burnet rose <i>Rosa pimpinellifolia</i> , an uncommon plant in West Sussex. Warningcamp Hill supports a very large population of the rare small-flowered buttercup <i>Ranunculus parviflorus</i> . The site also includes an old chalk pit and a small area of ancient, semi-natural woodland.	Adjacent to proposed DCO Order Limits (operational access only)

Site name	Description ⁷	Distance and direction from the proposed DCO Order Limits
Long Furlong and Church Hill LWS	Long Furlong is a steep north and west-facing slope between the A280 and Clapham Woods, supporting rich chalk grassland and scrub. Church Hill is a complex mosaic of chalk grassland, species-rich scrub and woodland. Long Furlong and Church Hill form a large piece of contiguous habitat, so have been included as one site.	Adjacent to the proposed DCO Order Limits
Clapham Wood LWS	Clapham Wood is an extensive, ancient semi-natural woodland on the undulating dip slope of the South Downs. The ground flora is rich and includes a number of interesting species. The wood was moderately affected by the storm of October 1987 and unfortunately several large blocks of woodland were subsequently cleared for pasture. Much of the wood is not managed but some areas are still coppiced. Clapham Woods is an ancient woodland of County-wide importance.	0.4km south-east
Heath Common LWS	This site has moderately rich remnants of wet and dry heath, several ponds and some relics of ancient base-rich woodland rich in lichens and ferns. In recent years, the Sandgate Conservation Society has done excellent work in the management of this area as a nature reserve.	0.5km north
Poling Copse LWS	Poling Copse is a large block of ancient, semi-natural woodland on the Coastal Plain south of the South Downs, just to the east of Arundel. It consists predominantly of Oak-Hazel woodland, a type typical of base-poor soils in the area. Sycamore woodland dominates on South Fields – a section which has probably regenerated on an old field.	0.5km north
Kithurst Hill LWS	This site lies on the steep, north-facing escarpment of the South Downs. Most of it is wooded. The lower slopes consist of	0.6km north-west

Site name	Description ⁷	Distance and direction from the proposed DCO Order Limits
Washington Chalk Quarry LWS	<p>ancient semi-natural woodland, mostly of ash and hazel. It is of interest for its epiphytic bryophytes. There are small areas of open grassland with species-rich swards.</p> <p>This area of open downland and scattered scrub lies at the western end of Chanctonbury Hill. It includes a collection of disused chalk pits which now support species-rich grassland. The flora and butterflies are both of great interest. Part of the site has recently been fenced and sheep grazing reinstated. The South Downs Way runs through the site.</p>	0.7km south
Conyers Bank LWS	<p>Conyers Bank is a small, isolated field of unimproved chalk grassland on a steep, north-facing hillside. Situated above the floodplain of the River Arun, it is surrounded by semi-natural woodland and improved water meadows. The site has a rich flora.</p>	0.9km north-west
River Adur Water Meadows & Wyckham Wood LWS	<p>Wyckham Wood, one of the few woodlands on the floodplain of the River Adur is of particular importance on account of its heronry. The water meadows have mostly been improved but some of the ditches are of great botanical interest. This wetland area is also of importance to birds and dragonflies.</p>	0.9km south-east
Arun Valley, Watersfield to Arundel Local Wildlife Site (LWS)	<p>This section of the River Arun and its floodplain forms an extensive tract of wetland, a nationally declining habitat. There is a good network of ditches, some of which are very important botanically. The site is important for birds, dragonflies, water beetles, snails, and plants, and supports many rare and declining species. The unimproved meadows of Watersfield Brooks are of great botanical interest.</p>	1.1km west
Wiston Ponds LWS	<p>This is a well-established pond within the grounds of Wiston Park. It is surrounded by</p>	1.4km south-east

Site name	Description ⁷	Distance and direction from the proposed DCO Order Limits
The Gallops & No Man's Land LWS	trees and scrub and has well-developed marginal vegetation. Good populations of amphibians use this pond and also it supports a number of interesting bird species.	2.0km south
Titnore & Goring Woods Complex LWS	Contains a diversity of habitats including calcareous grassland, broadleaved woodland, rank grassland and dense scrub all in close proximity. Accessible to the public and adjacent to a local school.	2.2km south-east
America & Gratwicke's Wood LWS	An oak, ash, hazel woodland lying on the Weald Clay with wet areas supporting alder and aspen. The managed coppice provides a varied structure and together with paths and rides provides good habitats for birds and insects. The ground flora is rich, and the trees and shrubs include wild service and Midland hawthorn.	2.2km north
Middleton Shingle LWS	The site consists of a strip of vegetated shingle along the seafront at Middleton-on-Sea with a large population of Sea Radish <i>Raphanus raphanistrum ssp. Maritimus</i> , a plant that occurs in only three other sites in Sussex. The strip of vegetated shingle is backed by regularly mown grass and then housing.	2.2km west
Binsted Wood Complex LWS	Binsted Wood is a complex of woodland sites which includes Hundredhouse Copse in the west and Stewards Copse to the east. There is a mixture of ancient woodland, recent woodland, conifer plantation, species rich pasture and old tracks and shaws. The mix of habitats and geology gives rise to a very rich and diverse flora. The paths and rides are especially species rich and	2.3km north-west

Site name	Description ⁷	Distance and direction from the proposed DCO Order Limits
Capite Wood LWS	Scotland Lane supports an outstanding wet ride flora that includes at least 11 species of sedge including Long-stalked Yellow-sedge <i>Carex viridula</i> ssp. <i>brachyrhyncha</i> , a county rarity at its only recorded West Sussex location. This is the largest block of ancient semi-natural woodland south of the South Downs in Sussex.	2.3km north
The Sanctuary, High Salvington LWS	This is a large area of very diverse woodland comprising both broadleaved ancient semi-natural woodland and re-planted areas of coniferous and deciduous trees. The woodland has two small streams, species rich rides, wet flushes, banks, ditches, and a varied topography. It has suffered extensive storm damage and there is abundant deadwood. The woodland is rich in bryophytes.	2.3km south-east
Walden Close Meadow LWS	The site consists of a south-facing coombe and slope, located on the edge of High Salvington. The north and west part of the site is a mosaic of species-rich scrub, secondary woodland, and chalk grassland, which is managed bird sanctuary. The rest is open, herb-rich grassland. The site represents a scarce habitat in the Borough. Meadow Clary <i>Salvia pratensis</i> , a Red Data Book species, occur here in one of only two sites in West Sussex.	2.4km north-west
Highdown Hill and the Miller's Tomb LWS	This site consists of a large meadow alongside the A272 and a small meadow to the north. Both fields are cut for hay and have species-rich swards. The smaller meadow is notably rich in invertebrates.	2.5km south-east
West Wantley Farm Meadow LWS	Species rich relatively unimproved chalk grassland and scrub with botanical and faunal interest	2.5km north-west

Site name	Description ⁷	Distance and direction from the proposed DCO Order Limits
Steyning Coombe & Steyning Round Hill LWS	<p>ponds with notable populations of rare thistle. The site has a very large population of Meadow Thistle <i>Cirsium dissectum</i> which is very scarce in West Sussex.</p> <p>Steyning Coombe and Steyning Round Hill are both important areas of unimproved downland on the escarpment above Steyning. Together these areas are extremely diverse, having steep slopes facing all directions, both short herb-rich sward and tall ungrazed sward, open grassland, and grassland with scattered scrub. The rich flora and invertebrate fauna includes several rare plants, snails and butterflies.</p>	2.6km south-east
Henfield Common LWS	<p>The site is a registered common; one of three commons around Henfield. It is of great importance for wildlife as it encompasses a mosaic of species-rich grassland, woodland and a reedbed, together with small areas of marshy grassland and heath. The site is being actively managed to enhance its value for wildlife.</p>	2.6km south-east
Peppering Down LWS	<p>A species-rich strip of chalk grassland on a west-facing slope. There is a fair amount of scrub at the top of the slope in the south-east corner of the site.</p>	2.8km north
Old Deer Park LWS	<p>This site which lies in an old deer park, south of Leonardslee Gardens, is one of the best surviving relics of the formerly vast St. Leonard's Forest. In addition to moderately species-rich dry and wet heath, there is a very interesting bog. The ancient parkland trees have a fine assemblage of woodland epiphytic lichens. Today the park is grazed by a herd of wallabies.</p>	2.8km north
Rewell Wood Complex LWS	<p>Rewell Wood is a large ancient woodland complex. It has a diversity of habitats</p>	2.9km north-west

Site name	Description ⁷	Distance and direction from the proposed DCO Order Limits
Broadmare Common LWS	including ancient semi-natural woodland, worked Sweet Chestnut coppice, conifer plantation, Beech plantation and species-rich chalk grassland. Wide rides and glades support a rich flora and butterfly fauna. The disused gravel pits are of entomological importance.	3.0km south-east
Worthing & Hill Barn golf courses LWS	These sites consist of unimproved chalk and neutral grassland with areas of scrub and woodland with high botanical interest and rare butterflies.	3.0km south-east
Peppering Farm Dew Pond LWS	Peppering Farm dewpond is a small dried-up dewpond, situated adjacent to a main track on the Downs and surrounded by arable. The area supports an exceptionally rich downland flora, including many uncommon plants. It is maintained by a small band of volunteers with permission from the estate and farmer. The major task is the removal of scrub, mainly Gorse and Hawthorn.	3.2km north-west
Kneppmill Pond, the River Adur & Lancing Brook LWS	The site is a registered common, located close to Henfield. It consists of herb-rich damp grassland with areas of tall herbs and some scrub and woodland. It has a small pond in the western corner.	3.5km north-west
Ham Farm Wood LWS	This site is an ancient woodland in urban area with botanical, ornithological and recreational value.	3.5km south-east

Site name	Description ⁷	Distance and direction from the proposed DCO Order Limits
Ferring Rife and Meadows LWS	Rife with rough grassland banks and notable population of nationally rare snail.	3.6km south
The Downs Link, Nutham Wood & Greatsteeds Farm Meadow LWS	The Downs Link, a dismantled railway line, has developed into an interesting moderately species-rich belt of shrubs. This supports a large colony of the rare Brown Hairstreak butterfly. A number of important wildlife sites lie adjacent to the old railway, notably a small, herb-rich meadow and small, stream-side, ancient semi-natural woodlands. Nutham Wood, in particular, has a very rich ground flora.	3.7km north-west
The Hanger LWS	Two main types of wood are present within this gill woodland site. Alder occurs along the streams and extends up the lower slopes in parts, with oak, hazel and ash on the upper slopes and the flat ground above. The wood supports a wide range of woodland plants, mosses and liverworts, a good bird community and a number of uncommon butterflies.	3.8km north-east
Hooklands Farm Meadow LWS	Hooklands Farm meadow is an excellent example of unimproved, damp grassland. It is very species-rich and supports plants typical of damp and slightly acidic soils. The site is surrounded by mature hedgerows and a stream runs through the meadow, creating a damp flush around an old pond in the south of the area.	3.8km north-west
Hoe Wood LWS	This ancient woodland is dominated by Oak, with frequent ash and birch over hazel coppice. It has a good assemblage of woodland plants and supports a diverse community of birds. The site includes a lake which boasts significant numbers of dragonfly and damselfly species as well as providing for good populations of amphibians. Also include is an unimproved meadow.	3.8km south-east

Site name	Description ⁷	Distance and direction from the proposed DCO Order Limits
Offington Cemetery	This site is an unimproved herb rich chalk grassland with areas of scrub in urban area, providing refuge for wildlife and botanical interest.	4.0km south-east
Boyds Wood & Furzefield Copse LWS	Boyds Wood and Furzefield Copse are two botanically rich woodlands just outside the village of Nuthurst. They encompass a range of woodland types, both ancient semi-natural and more recent broadleaved plantation. Boyds Wood includes a particularly interesting stream valley or gill woodland.	4.0km north-west
Tenants Hill and Reservoirs LWS	This site is a species rich unimproved chalk grassland, scrub and dewpond with exceptional botanical interest.	4.1km south-east
Tottington Wood LWS	This wood is situated just north of the South Downs. It consists typically of scattered Oak and Ash standards over mainly Hazel and some Ash coppice. It supports a very species-rich ground flora and a good number of bryophytes have been recorded. There are species-rich rides and several small streams.	4.2km south-east
Oreham Common LWS	The site is a registered common, located close to Henfield. It consists of herb-rich damp grassland with areas of tall herbs and some scrub and woodland. It has a small pond in the western corner.	4.2km south-east
Pond Lye LWS	This site includes a pond with extensive areas of sedge swamp around the margins and a species-rich neutral grassland. A number of locally uncommon plants are found in the meadow. The pond is of great ornithological importance, particularly for its breeding birds.	4.3km east
Amberley Chalkpits & Hacketts Copse LWS	Amberley Chalkpits and the adjoining woodland contain a huge variety of habitats spanning the succession from bare chalk and spoil heaps to deciduous woodland.	4.4km north-west

Site name	Description ⁷	Distance and direction from the proposed DCO Order Limits
	The varied aspects of the chalk pits add to the range of microhabitats present. The site has an extremely rich flora and fauna including typical chalk downland species and many rarities. The site is also of geological importance.	
Monkmead Woods LWS	This is an area of wet heath, dry heath and woodland on the south west edge of West Chiltington Common, between Storrington and Pulborough. The site has scarce plants, a rare fungus and nearby sites have a very rare dragonfly that could colonise this site if management was appropriate.	4.4km north-west
Goring and Ferring Gap LWS	Arable fields, broadleaved plantation woodland, semi-improved neutral, and amenity, grassland. Noted for gull and wader roost.	4.5km south-east
Part of Wiggonholt Common LWS	This site is a habitat mosaic of dry heathland, semi natural woodland and acid grassland with botanical interest and notable rarity.	4.6km north-west

4.2.3 SxBRC also returned 34 records of notable road verges within 5km of the proposed DCO Order Limits, the locations of which are shown within **Figure 22.2.3**.

4.3 Habitats

Habitats of Principal Importance and Ancient Woodland

- 4.3.1 Habitats listed on the Ancient Woodland Inventory and the Priority Habitats Inventory (MAGIC website, Defra, n.d.) were identified during the desk study.
- 4.3.2 Habitats within the proposed DCO Order Limits and within 500m of it identified from the Priority Habitats and Ancient Woodland Inventories are provided in **Table 4-3**, and their distribution shown on **Figure 22.2.4a-d** and **Figure 22.2.5a-d**.

Table 4-3 Priority Habitat and Ancient Woodland Inventory information

Habitat type	Listing	Area within proposed DCO Order Limits (ha)	Area within proposed DCO Order Limits plus 500m (ha)
Coastal and floodplain grazing marsh	Priority habitat inventory	17.19	375.70
Coastal vegetated shingle	Priority habitat inventory	2.17	8.55
Deciduous woodland	Priority habitat inventory	27.81	1240.15
Lowland calcareous grassland	Priority habitat inventory	4.67	110.41
Good quality Semi-improved grassland	Priority habitat inventory	37.29	341.92
Maritime Cliff and slope	Priority habitat inventory	0.31	6.35
No main habitat but additional habitats present	Priority habitat inventory	0.07	107.74
Ancient semi-natural woodland	Ancient woodland inventory	7.19	105.44
Ancient replanted woodland	Ancient woodland inventory	4.83	276.62
Coastal saltmarsh	Priority habitat inventory	0.00	0.72
Coastal sand dune	Priority habitat inventory	0.00	18.69
Lowland dry acid grassland	Priority habitat inventory	0.00	0.10
Lowland fens	Priority habitat inventory	0.00	0.12
Lowland heath	Priority habitat inventory	0.00	0.14
Mudflats	Priority habitat inventory	0.00	1.50

Habitat type	Listing	Area within proposed DCO Order Limits (ha)	Area within proposed DCO Order Limits plus 500m (ha)
Traditional orchard	Priority habitat inventory	0.00	3.41

Waterbodies

4.3.3 A total of 17 waterbodies have been identified within the proposed DCO Order Limits, with a further 264 within 250m of it. Waterbodies become more common in areas north and east of Washington; shape and size vary, although there are no particularly large waterbodies (for example, large drinking water reservoirs) with the vast majority being less than a hectare in extent. [Figures 22.7.2a to p](#), within [Appendix 22.7: Great Crested Newt environmental DNA survey report 2021-2023, Volume 4](#) of the ES (Document Reference 6.4.22.7) show the distribution of the waterbodies.

Vascular plants

4.3.4 A total of 1,360 records of vascular plants of 194 species that are legally protected or notable (some at a county level only) were identified within 5km of the proposed DCO Order Limits. Of these, 15 records of eight species were from within the proposed DCO Order Limits, comprising:

- One record of strawberry clover *Trifolium fragiferum* (GB Red List (2004); vulnerable, England Red List (2014); vulnerable, at Atherington, National Grid Reference (NGR) TQ00A;
- Two records of hound's-tongue *Cynoglossum officinale* (Red List GB (2004); Near Threatened). One record within Angmering Park at NGR TQ00T and one at TQ 0929 1199;
- One record of common valerian *Valeriana officinalis* (England Red List (2014): Near threatened) at NGR TQ 119131;
- Six records of yellow horned-poppy *Glaucium flavum* (Red List England (2014); near threatened). All records were from Climping Beach, with two records within Climping Beach SSSI;
- Two records of dune fescue *Vulpia fasciculata* (Nationally Scarce (Joint Nature Conservation Committee, 2018), Sussex Rare). Both records were from Climping Beach, one within the SSSI at NGR TQ 01374 01008, one outside, at NGR TQ 01293 00987;
- One record of stiff saltmarsh-grass *Puccinellia rupestris* (Nationally Scarce, Sussex Rare), recorded at NGR TQ 0102 0094;
- One record of bulbous Meadow-grass *Poa bulbosa* (Nationally Scarce, Sussex Rare) recorded at NGR TQ 0119 0096; and

- One record of musk stork's-bill *Erodium moschatum*: (Sussex Rare) at NGR TQ 01440 01026.

4.3.5 Records of vascular plants within 5km of the proposed DCO Order Limits include⁸:

- Six species listed on Schedule 8 of the Wildlife and Countryside Act 1981 (as amended) including: Alpine catchfly *Silene suecica*, bluebell *Hyacinthoides non-scripta*, cut-grass *Leersia oryzoides*, holly-leaved naiad *Najas marina*, Jersey cudweed *Helichrysum luteoalbum* and monkey orchid *Dracula simia*;
- 23 species listed as SPI; basil thyme *Clinopodium acinos*, chalk eyebright *Euphrasia pseudokernerii*, chamomile *Chamaemelum nobile*, common juniper *Juniperus communis* subsp. *communis*, corn buttercup *Ranunculus arvensis*, cornflower *Centaurea cyanus*, cut-grass *Leersia oryzoides*, divided sedge *Carex divisia*, English sticky eyebright *Euphrasia officinalis* subsp. *anglica*, field fleawort *Tephrosia integrifolia* subsp. *integrifolia*, fly orchid *Ophrys insectifera*, frog orchid *Dactylorhiza viridis*, grape-hyacinth *Muscari neglectum*, greater water-parsnip *Sium latifolium*, holly-leaved naiad *Najas marina*, lesser butterfly-orchid *Platanthera bifolia*, marsh stitchwort *Stellaria palustris*, monkey orchid *Orchis simia*, musk orchid *Herminium monorchris*, purple milk-vetch *Astragalus danicus*, sharp-leaved pondweed *Potamogeton acutifolius*, tubular water-dropwort *Oenanthe fistulosa* and white helleborine *Cephalanthera damasonium*;
- 64 threatened species (Critically Endangered, Endangered and Vulnerable) in England and/or Great Britain (Stroh et al., 2014; Cheffings et al., 2005);
- 11 nationally rare species;
- 44 nationally scarce species; and
- 109 Sussex rare species.

MAVES Ecological Survey Reports 2017 and 2018⁹

- 4.3.6 Thirteen notable vascular plants species (including two Red List England (2014): Vulnerable), and three notable fungal species (one SPI and two Sussex rare) were recorded during surveys undertaken on behalf of MAVES. In addition, six noteworthy local and/or uncommon vascular plants were recorded in the area. Specific locations are not provided.

⁸ Vascular plants are grouped according to the highest level of legislative or conservation status afforded to each species, however, may be listed under multiple criteria (for example, Cornflower is listed as an SPI and as a Sussex rare species).

⁹ The Mid Arun Valley Ecological Report update 2018 - [RPS Report \(aruncountryside.org\)](https://www.aruncountryside.org)

4.4 Fauna (excluding birds)

Mammals, reptiles and amphibians

- 4.4.1 Records of legally protected and notable species were provided directly by SxBRC. Further information was gathered from the NBN Gateway, A27 Arundel Bypass Environmental Assessment Report, MAVES and MAGIC (Defra, n.d.).
- 4.4.2 Summary details of mammals, amphibians and reptiles within the proposed DCO Order Limits and within 5km of it are provided in **Table 4-4**. The summary details are of records provided by SxBRC, these have been reconciled where possible with other data sources where a high degree of overlap can be recognised.

Table 4-4 Summary of legally protected and notable species (mammals, reptiles and amphibians)

Species	No. of records	Date range of records	Distance and direction from the proposed DCO Order Limits
Adder <i>Vipera berus</i>	61	2013-2022	0.4km north
Alcathoe bat <i>Myotis alcathoe</i>	42 (Not including roost records)	2014-2021	Adjacent to proposed DCO Order Limits
Alcathoe bat <i>Myotis alcathoe</i>	Two roost records	May 2021	3.2km north-west
Badger <i>Meles meles</i>	Present throughout proposed DCO Order Limits – individual records not provided due to confidentiality		
Bat (unspecified species)	128 (not including roost records)	2013-2022	0.3km north-west
Bat (unspecified species)	11 roost records: one “maternity roost”, two “hibernacula roosts”, four “unspecified roosts”, two “unspecified roosts with droppings” and two records of “droppings”	2013-2021	██████████
██████████ ██████████ ██████████	74 (not including roost record)	2013-2021	Adjacent to proposed DCO Order Limits
██████████ ██████████ ██████████	One roost record. One adult male roosting.	May 2019	4.5km south-east

Species	No. of records	Date range of records	Distance and direction from the proposed DCO Order Limits
██████████ ██████████	60 (not including roost records)	2015-2021	0.1km north-east
Bechstein's bat <i>Myotis bechsteinii</i>	Four roost records. Each roost had one juvenile female present	2015-2019	2.4km north-west
Brandt's bat <i>Myotis brandtii</i>	11 (no records of roosts)	2015-2021	2.6km north-west
Brown hare <i>Lepus europaeus</i>	89	2013-2022	Within proposed DCO Order Limits
Brown long-eared bat <i>Plecotus auritus</i>	283 (not including roost records)	2013-2022	Within proposed DCO Order Limits
Brown long-eared bat <i>Plecotus auratus</i>	42 roost records: Three "maternity roosts", one "maternity roost with droppings", two "hibernacula roosts", two "feeding roosts", 24 "unspecified roosts", five "unspecified roosts with droppings" and five records of "droppings"	2013-2022	██████████
Common lizard <i>Zootoca vivipara</i>	135	2013-2022	50m north
Common pipistrelle <i>Pipistrellus pipistrellus</i>	330 (not including roost records)	2013-2022	Adjacent to the proposed DCO Order Limits
Common pipistrelle <i>Pipistrellus pipistrellus</i>	63 roost records: Five "maternity roosts", one "feeding roost", 49 "unspecified roosts"; four "unspecified roosts with droppings" and four records of "droppings"	2013-2022	██████████ ██████████ ██████████
Common toad <i>Bufo bufo</i>	117	2013-2022	0.1km north-west

Species	No. of records	Date range of records	Distance and direction from the proposed DCO Order Limits
Daubenton's bat <i>Myotis daubentonii</i>	92 records (not including roost records)	2013-2022	0.1km south
Daubenton's bat <i>Myotis daubentonii</i>	13 roost records: Three "maternity roosts", five "hibernacula roost/unspecified roost" and five "hibernacula roosts"	2013-2019	██████████
Eptesicus Bat species	Seven (no records of roosts)	2018	1km west
Grass snake <i>Natrix helvetica</i>	113	2013-2022	0.3km north
Great crested newt (GCN) <i>Triturus cristatus</i>	155	2013-2022	Within proposed DCO Order Limits
Greater horseshoe bat <i>Rhinolophus ferrumequinum</i>	Two (no records of roosts)	2019 – 2021	3.9km north-west
Harvest mouse <i>Micromys minutus</i>	14	2015-2020	0.1km east
Hazel dormouse <i>Muscardinus avellanarius</i>	143	2013-2022	0.2km south
Hedgehog <i>Erinaceus europaeus</i>	423	2013-2022	0.1km north-west
Leisler's bat <i>Nyctalus leisleri</i>	13 (no records of roosts)	2018-2020	1km west
Myotis bat (unspecified species)	103 (not including roost records)	2013-2022	0.1km north-west
Myotis bat (unspecified species)	Four roost records: three "unspecified roosts", one record of "droppings"	2016-2019	2.0km north-east

Species	No. of records	Date range of records	Distance and direction from the proposed DCO Order Limits
Nathusius' pipistrelle <i>Pipistrellus nathusii</i>	22 (no records of roosts)	2014-2021	0.1km east
Natterer's bat <i>Myotis nattereri</i>	168 records (not including roost records)	2013-2021	Adjacent to proposed DCO Order Limits
Natterer's bat <i>Myotis nattereri</i>	18 roost records: Two " <i>maternity roosts</i> ", six " <i>hibernacula roosts</i> ", six " <i>hibernacula roosts; unspecified roosts</i> ", two " <i>unspecified roosts</i> ", one " <i>unspecified roost with droppings</i> " and one record of " <i>droppings</i> ".	2013-2020	██████████
Noctule <i>Nyctalus noctula</i>	105 (not including roost records)	2013-2022	20m north-east
Noctule <i>Nyctalus noctula</i>	3 roost records: two " <i>unspecified roosts</i> ", one " <i>unspecified roost with droppings</i> "	2016-2021	0.2km north
Nyctalus species	Nine (no records of roosts).	2018-2021	1km west
Otter <i>Lutra lutra</i>	Historic records only (from the NBN Gateway) most recent record 2011	1964-2011	1km north
Pipistrelle bats (species unspecified)	41 records (not including roost records)	2014-2022	0.2km east
Pipistrelle bats (species unspecified)	12 roost records: one " <i>maternity roost; feeding roost</i> ", one " <i>feeding roost</i> ", four " <i>unspecified roosts</i> ", four " <i>unspecified roosts with droppings</i> " and two records of " <i>droppings</i> "	2013-2019	██████████

Species	No. of records	Date range of records	Distance and direction from the proposed DCO Order Limits
Polecat <i>Mustela putorius</i>	22	2014-2022	Within proposed DCO Order Limits
Sand lizard <i>Lacerta agilis</i>	Four	2014-2018	0.1km south-west
Serotine <i>Eptesicus serotinus</i>	108 (not including roost records)	2013-2022	Adjacent to proposed DCO Order Limits
Serotine <i>Eptesicus serotinus</i>	15 roost records: one “maternity roost; feeding roost”, one “maternity roosts with droppings”, one “maternity roost”, one “feeding roost”, seven “unspecified roosts”, three “unspecified roosts with droppings” and one record of “droppings”	2013-2019	██████████
Slow worm <i>Anguis 35ragilis</i>	224	2013-2022	Within proposed DCO Order Limits
Soprano pipistrelle <i>Pipistrellus pygmaeus</i>	298 (not including roost records)	2013-2022	30m north-east
Soprano pipistrelle <i>Pipistrellus pygmaeus</i>	45 roost records: One record of “maternity roost; mating/swarming site; droppings”, two records of “maternity roost; droppings”, two records of “maternity roost”, one record of “hibernacula roost”, 37 records of “unspecified roosts” and two records of “unspecified roost with droppings”	2013-2022	██████████
Water vole <i>Arvicola amphibius</i>	227	2013-2022	Within proposed DCO Order Limits

Species	No. of records	Date range of records	Distance and direction from the proposed DCO Order Limits
Whiskered bat <i>Myotis mystacinus</i>	76 (not including roost records)	2014-2021	0.7km west
Whiskered bat <i>Myotis mystacinus</i>	Three roost records: one “maternity roost”, one “unspecified roost” and one record of “droppings”	2017-2019	██████████
Whiskered bat / Brandt’s bat <i>Myotis brandtii</i>	23 (not including roost records)	2013-2022	Adjacent to proposed DCO Order Limits
Whiskered bat / Brandt’s bat <i>Myotis brandtii</i>	Five roost records: three records of “hibernacula roost; unspecified roost” and two records of “unspecified roost”	2014-2019	0.7km south

4.4.3 The data show that the majority of the protected and notable species listed in **Table 4-4** are widespread and occur in a number of locations. As would be expected from the area the majority of species identified are commonly associated with woodland, grassland or aquatic habitats. **Figure 22.8.13** within **Appendix 22.8: Passive and active bat activity report, Volume 4** of the ES (Document Reference 6.4.22.8) provides the distribution of bat records provided by SxBRC. **Figure 22.12.3** within **Appendix 22.12: Reptile survey, Volume 4** of the ES (Document Reference 6.4.22.12) shows the distribution of records of herptiles. **Figures 22.11.1a to c. 22.11.2 and 22.11.3** within **Appendix 22.11: Badger, otter & water vole survey, Volume 4 report** of the ES (Document Reference 6.4.22.11) provides the distribution of mammal records (excluding bats) provided by SxBRC.

4.4.4 A search of the MAGIC website (Defra, n.d.) for granted European Protected Species Licences (EPSL) within 100m of the proposed DCO Order Limits, extended to 500m for Great Crested Newt returned five granted licences between 2013 and 2023. **Table 4-5** below summarises these licences.

Table 4-5 Summary of granted European Protected Species Licences 2013-2023, taken from MAGIC website (Defra, n.d.)

Species	Licence Summary	Licence number	Distance and direction from proposed DCO Order Limits
GCN	Damage or destruction of resting place	2014-1948-EPS-MIT-1	Within proposed DCO Order Limits
GCN	Damage or destruction of resting place	2016-24405-EPS-MIT-1	25m south
Common Pipistrelle	Destruction of resting place	2017-32179-EPS-MIT-1	70m west
GCN	Damage or destruction of resting place	2014-1236-EPS-MIT-1	125m north
GCN	Damage or destruction of resting place	2014-3421-ESP-MIT-1	130m east

Invertebrates

4.4.5 A total of 18,493 records of 692 species of invertebrates were returned by SxBRC within 5km of the proposed DCO Order Limits, with particular emphasis on lepidoptera and coleoptera. Of these, 10 records of eight species were identified within the proposed DCO Order Limits, including:

- one record of a stag beetle *Licanus cervus* (Habitats Directive Annex II, Wildlife and Countryside Act 1981 Schedule 5, nationally scarce, Sussex rare);
- one record of several chalk hill blue *Polyommatus coridon* (Red List GB (2001): Nationally Threatened);
- one record of brown hairstreak *Thecla betulae* (SPI);
- one record of white admiral *Limenitis Camilla* (SPI);
- one record of a beetle *Harpalus attenuates* (Nationally scarce, Sussex rare);
- three records of a beetle *Psilothrix viridicoerulea* (Sussex rare);
- one record of a beetle *Cryptocephalus aureolus* (Sussex rare); and
- one record of a beetle *Olibrus Corticalis* (Sussex rare).

- 4.4.6 Four species of invertebrate that are of particular interest due to being listed as Annex II species¹⁰ have been identified within the Study Area (all except a single record of Stag beetle are outside of the proposed DCO Order Limits), these are:
- Desmoulin's whorl snail *Vertigo moulinsiana* (one record);
 - Jersey tiger *Euplagia quadripunctaria* (38 records);
 - Southern damselfly *Coenagrion mercurial* (two records); and
 - Stag beetle *Lucanus cervus* (272 records).
- 4.4.7 There are 46 species of butterfly considered to be on the "Sussex list" (Butterfly Conservation Sussex Branch¹¹, 2023) with records of 15 of these species provided for the Study Area including 11 records of Swallowtail, which is listed on WCA Sch.5 and is considered Near Threatened on Red list GB (2001) and Sussex county rare. There were nine records of large tortoiseshell, a species not considered within the Sussex list due to rarity. Large tortoiseshell is listed on WCA Sch. 5 and is considered Regionally Extinct on Red list GB (2001) and Sussex rare.

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- 4.4.8 Additional records within 5km of the proposed DCO Order Limits were obtained for the A27 Arundel Bypass Project (Highways England, 2019), identified the presence of the following:
- amphibians: one pond with significant numbers of common toad;
 - badger: present – individual records not provided due to confidentiality;
 - bat roosts: six alcathe bat, two barbastelle bat, five Bechstein's bat, seven brown long-eared bat, five common pipistrelle, one Daubenton's bat, six Natterer's bat, four soprano pipistrelle, four whiskered bat, and three unknown bat species;
 - dormouse: presence recorded across seven sites with a peak count of two;
 - invertebrates: 41 terrestrial species regarded as notable across 15 sites, and three aquatic species regarded as notable across five sites;
 - otter: signs recorded across three ponds and six ditches in the form of potential holts and laying up sites;
 - reptiles: one adder, 12 grass snakes, 68 common lizards and 157 slow worms across 10 sites; and
 - water vole: signs recorded across four ponds and 37 ditches in the form of latrines, feeding remains, pathways, splashing sounds and burrows.

¹⁰ The Conservation of Habitats and Species Regulations 2017 (also known as the Habitats Regulations). A4 = Annex IV species. A2 = Annex II species.

¹¹ Sussex branch of Butterfly Conservation identify records of 52 species with seven considered to be rare or occasional visitors only

MAVES Ecological Survey Reports 2017 and 2018

- 4.4.9 A review of the 2017 and 2018 MAVES ecological survey reports identified the presence of the following protected and/or notable species within 5km of the proposed DCO Order Limits, to the east and south of Arundel:
- Amphibians: widespread common toad records including more than 1,000 individuals breeding within Madonna Pond in 2017;
 - Badger: present – individual records not provided due to confidentiality;
 - Bats: records of 13 species of bat, including Bechstein’s and barbastelle. Eight of these species may have maternity colonies within the Binstead Woods Complex, including Bechstein’s and alcatheo. A total of four alcatheo roosts and three Bechstein’s roosts have been recorded;
 - Dormouse: eleven dormouse nests were recorded within Binstead Woods Complex and connected habitat, including a record of 16 dormice within one box;
 - Invertebrates: 30 butterfly species including purple emperor *Apatura iris*, dingy skipper *Erynnis tages*, white admiral *Limenitis camilla* and purple hairstreak *Favonius quercus*; 40 species of moth including seven SPI; 17 species of dragonfly and damselfly; and 230 species of beetle including stag beetle and one Red Data Book species and ten nationally scarce species. Specific survey work in 2016 / 2017 recorded 29 nationally scarce species, three SPI and six Red Data Book species;
 - Mammals (excluding bats): records of the SPIs brown hare, hedgehog and harvest mouse;
 - Reptiles: four records of adder and numerous records of common lizard, grass snake and slow worm; and
 - Water vole: signs including burrows, feeding remains, latrines and footprints within the vicinity of Binstead Rife.

4.5 Ornithological records

Overview

- 4.5.1 Ornithology records were provided by SOS for all tetrads that are within or overlap with the Scoping Boundary⁵ and from the RSPB. Further information was gathered from SxBRC and the BTO website (<https://www.bto.org/our-science/projects/wetland-bird-survey/data> [accessed May 2023]).
- 4.5.2 **Table 4-6** provides details of breeding Schedule 1 birds of the Wildlife and Countryside Act 1981, compiled by SOS in the last 10 years. Thirteen species of Schedule 1 of the Wildlife and Countryside Act 1981 were identified as breeding in the area, with some of these being relatively frequent and widespread, whilst others have only been noted occasionally.

Table 4-6 Schedule 1 breeding bird records 2013-2023, data provided by SOS

Species	No. of records	Notes
Quail <i>Coturnix coturnix</i>	4	All records from Wepham and Burpham area.
Garganey <i>Anas querquedula</i>	3	The locations were associated with the Arundel Wildfowl and Wetlands Trust (WWT) reserve and the Henfield Levels.
Mediterranean gull <i>Larus melanocephalus</i>	11	The records are all reported from the Arundel WWT reserve.
Goshawk <i>Accipiter gentilis</i>	1	Record from woodland between Crabtree and Bolney.
Marsh harrier <i>Circus aeruginosus</i>	3	The records are all reported from the Arundel WWT reserve.
Red kite <i>Milvus milvus</i>	44	Observations across a wide area including Angmering, Amberley and Burpham.
Barn owl <i>Tyto alba</i>	120	Observations across a wide area including Burpham, Partridge Green, Henfield, Steyning, Twineham Green and Sayers Common.
Kingfisher <i>Alcedo atthis</i>	12	Observations all linked to the Arun Valley.
Hobby <i>Falco Subbuteo</i>	7	Observations widely spread from Angmering, Burpham and Twineham Green.
Peregrine <i>Falco peregrinus</i>	42	Observations widely spread including around Washington, Storrington, Arundel, Wepham Down and Twineham.
Woodlark <i>Lullula arborea</i>	2	Both records were from Twineham Grange.
Cetti's warbler <i>Cettia cetti</i>	336	Widespread across the area within the Scoping Boundary ⁵ .
Firecrest <i>Regulus ignicapillus</i>	53	Records reported in the Arundel area, Chanctonbury Ring and woodland around Angmering.

4.5.3 SOS also provided extensive records of birds listed as SPI (including breeding and non-breeding records) recorded in the last ten years. A total of 23,792 records of 38 species were received; these records are summarised in **Table 4-7**.

Table 4-7 Records of species of principal importance from Sussex Ornithological Society

Species	Number of records
Bewick's swan	352
Bittern	25
Black-tailed godwit	52
Bullfinch	899
Common cuckoo	366
Common scoter	69
Corn bunting	501
Dark-bellied brent goose	129
Duncock	2,609
Eurasian Curlew	73
European greater white-fronted goose	10
Grasshopper warbler	27
Greater scaup	8
Grey partridge	633
Hawfinch	189
Hen harrier	249
Herring gull	2,851
House sparrow	1,525
Lesser redpoll	133
Lesser spotted woodpecker	23
Linnet	1,336
Marsh tit	297
Nightjar	4
Northern lapwing	2,487
Reed bunting	1,612

Species	Number of records
Ring ouzel	95
Skylark	1,483
Song thrush	2,195
Spotted flycatcher	123
Starling	1,983
Stone curlew	6
Tree pipit	31
Tree sparrow	1
Turtle dove	180
Woodlark	3
Wood warbler	9
Yellow wagtail	142
Yellowhammer	1,082

- 4.5.4 RSPB supplied one record of displaying stone curlew recorded in the last 10 years within the Scoping Boundary⁵. This record was in the area between Amberley and Burpham, in arable habitat.
- 4.5.5 RSPB supplied 194 records of breeding lapwing recorded in the last ten years including adults nesting, displaying and feeding and chicks and juveniles. Birds were noted in both grassland and arable habitats and were widespread across the area. SOS provided a further 323 breeding records of lapwing in the last ten years, many of these records are associated with the Wildfowl and Wetlands Trust reserve at Arundel. The tetrads that are known to support breeding lapwing are shown on [Figure 22.13.3](#) within [Appendix 22.13: Breeding bird survey, Volume 4](#) of the ES (Document Reference 6.4.22.13).
- 4.5.6 A local resident living in the vicinity of the Cowfold Stream provided records of breeding nightingale in areas of scrub adjacent to the watercourse and within the wider flood zone.
- 4.5.7 The BTO have five WeBS count sites (see [Table 4-8](#)) in the proposed DCO Order Limits or within 1km of it that have been counted consistently between 2014/15 and 2020/21. These count sites support large numbers of birds over the winter and passage periods. Wildfowl including gadwall and shelduck, whilst waders such as lapwing, black-tailed godwit, grey plover, ringed plover and sanderling are common. The presence of certain species changes with the location and type of habitat present in each count site.

4.5.8 **Table 4-8** shows the peak annual counts (taken from WeBS data) between 2014/15 and 2020/21 for species notified on the Arun Valley SPA or Arun Valley Ramsar, and Pagham Harbour SPA / Ramsar designation that are likely to occur onshore. Tern species associated with the Pagham Harbour designations have been discounted from these tables as they do not occur during the winter months (during WeBS counts) and do not utilise onshore habitats that will be affected by the development.

Table 4-8 Summary of WeBS records showing peak annual counts 2014/15 – 2020/21 of species notified within the Arun Valley SPA or Arun Valley Ramsar and Pagham Harbour SPA / Ramsar designations.

Species	Count Site	Species peak count
Bewick's swan	Climping	0
Dark-bellied brent goose	Climping	1,400
Shoveler	Climping	0
Teal	Climping	0
Wigeon	Climping	0
Ruff	Climping	0
Bewick's swan	River Arun – Arundel to Littlehampton	11
Dark-bellied brent goose	River Arun – Arundel to Littlehampton	0
Shoveler	River Arun – Arundel to Littlehampton	3
Teal	River Arun – Arundel to Littlehampton	33
Wigeon	River Arun – Arundel to Littlehampton	160
Ruff	River Arun – Arundel to Littlehampton	1
Bewick's swan	Arun Valley	30
Dark-bellied brent goose	Arun Valley	0
Shoveler	Arun Valley	404
Teal	Arun Valley	2,157
Wigeon	Arun Valley	5,048
Ruff	Arun Valley	12
Bewick's swan	Henfield Rye Farm	0

Species	Count Site	Species peak count
Dark-bellied brent goose	Henfield Rye Farm	0
Shoveler	Henfield Rye Farm	240
Teal	Henfield Rye Farm	300
Wigeon	Henfield Rye Farm	200
Ruff	Henfield Rye Farm	4
Bewick's swan	Henfield Brooks	4
Dark-bellied brent goose	Henfield Brooks	0
Shoveler	Henfield Brooks	11
Teal	Henfield Brooks	123
Wigeon	Henfield Brooks	410
Ruff	Henfield Brooks	0

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4.5.9 Additional records obtained for the A27 Arundel Bypass project by Highways England, when within 5km of the proposed DCO Order Limits, identified the presence of one active barn owl roost.

MAVES Ecological Survey Reports 2017 and 2018

4.5.10 A review of the 2017 and 2018 MAVES ecological survey reports identified the presence of the following within the MAVES study area¹²:

- Wildlife and Countryside Act 1981 Schedule 1: nine species;
- BoCC¹³ Red Listed: 21 species;
- BoCC Amber Listed: 21 species; and
- Seventeen bird species have Biodiversity Actions Plans.

¹² Only summary information on the birds recorded as part of the MAVES ecological assessment is available within these reports. These results cannot be extrapolated further.

¹³ Birds of Conservation Concern (BoCC) 5 – Stanbury *et al.*, 2021.

4.6 Legally controlled species

Overview

- 4.6.1 Records of non-native invasive species that are listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) were returned by SxBRC within 5km of the proposed DCO Order Limits.
- 4.6.2 For the purposes of this Appendix, invasive species records have been divided into botanical and faunal records. Only records above MHWS are here reported. A total of 219 botanical records of 24 species and 9,213 faunal records of 22 species were identified. Of these, three floral species and five faunal species were recorded within the proposed DCO Order Limits. These records have been summarised in **Table 4-9** below.

Table 4-9 Legally controlled species within 5km of the proposed DCO Order Limits

Species	No. of records	Date range of records	Distance and direction from the proposed DCO Order Limits
Flora			
Canadian waterweed <i>Elodea canadensis</i>	7	2013-2022	1.9km north-west
Cotoneaster sp.	6	2014-2021	0.02km north
Curly waterweed <i>Lagarosiphon major</i>	4	2014-2016	2.2km south-east
False Virginia creeper <i>Parthenocissus inserta</i>	3	2013-2015	2.2km north-west
False-acacia <i>Robinia pseudoacacia</i>	2	2013-2017	3.2km north
Few-flowered garlic <i>Allium paradoxum</i>	4	2013-2019	0.6km south-east
Floating pennywort <i>Hydrocotyle ranunculoides</i>	1	2014	0.1km north-west

Species	No. of records	Date range of records	Distance and direction from the proposed DCO Order Limits
Giant hogweed <i>Heracleum mantegazzianum</i>	1	2014	Within proposed DCO Order Limits
Hybrid knotweed <i>Fallopia japonica x sachalinensis</i> = <i>F. x bohemica</i>	1	2013	0.1km south
Himalayan balsam <i>Impatiens glandulifera</i>	35	2013-2022	0.2km north-west
Himalayan cotoneaster <i>Cotoneaster simonsii</i>	4	2013-2018	0.3km east
Japanese knotweed <i>Fallopia japonica</i>	20	2013-2020	0.1km south
Japanese rose <i>Rosa rugosa</i>	8	2014-2019	Within proposed DCO Order Limits
Montbretia <i>Crocsmia pottsii x aurea</i> = <i>C. x crocosmiiflora</i>	22	2013-2019	0.03km east
New Zealand pygmyweed <i>Crassula helmsii</i>	8	2013-2022	Within proposed DCO Order Limits
Nuttall's waterweed <i>Elodea nuttallii</i>	3	2014-2020	2.8km south-east
Parrot's-feather <i>Myriophyllum aquaticum</i>	2	2015-2020	2.5km north-west
<i>Rhododendron ponticum</i>	26	2013-2021	0.02km north
Three-cornered garlic <i>Allium triquetrum</i>	22	2013-2022	0.01km north-east
Tibetan Cotoneaster <i>Cotoneaster conspicuus</i>	2	2013-2014	0.3km north-east

Species	No. of records	Date range of records	Distance and direction from the proposed DCO Order Limits
Variegated yellow archangel <i>Lamiastrum galeobdolon subsp. argentatum</i>	11	2013-2018	0.03km east
Virginia creeper <i>Parthenocissus quinquefolia</i>	3	2016-2017	0.8km north
Wall cotoneaster <i>Cotoneaster horizontalis</i>	23	2013-2021	0.02km north-west
Yellow Azalea <i>Rhododendron luteum</i>	1	2015	3.4km north-west
Fauna			
American mink <i>Neovison vison</i>	24	2014-2022	1.9km south-east
Bar-headed goose <i>Anser indicus</i>	66	2013-2021	0.01km south
Barnacle goose <i>Branta leucopsis</i>	123	2013-2021	Within proposed DCO Order Limits
Black swan <i>Cygnus atratus</i>	52	2014-2022	Within proposed DCO Order Limits
Canada goose <i>Branta canadensis</i>	5,397	2013-2022	Within proposed DCO Order Limits
Chinese muntjac <i>Muntiacus reevesi</i>	2	2015-2019	3.5km north-west
Egyptian goose <i>Alopochen aegyptiacus</i>	1648	2013-2022	Within proposed DCO Order Limits
Emperor goose	2	2019	2.4km north-west

Species	No. of records	Date range of records	Distance and direction from the proposed DCO Order Limits
European pond terrapin <i>Emys orbicularis</i>	1	2013	4.9km south
Golden pheasant <i>Chrysolophus pictus</i>	1	2015	4km west
Grey squirrel <i>Sciurus carolinensis</i>	215	2013-2022	Within proposed DCO Order Limits
Lesser Canada goose <i>Branta canadensis subsp. parvipes</i>	10	2014-2015	2.4km north-west
Mandarin duck <i>Aix galericulata</i>	1587	2013-2022	0.7km east
Marsh frog <i>Pelophylax ridibundus</i>	4	2013-2020	3.9km south-east
New Zealand flatworm <i>Arthurdendyus triangulatus</i>	1	2014	1.8km north-west
Red-crested pochard <i>Netta rufina</i>	24	2014-2019	0.8km north-west
Ring-necked parakeet <i>Psittacula krameri</i>	33	2013-2022	0.03km west
Ruddy duck <i>Oxyura jamaicensis</i>	9	2013-2021	2.4km north-west
Ruddy shelduck <i>Tadorna ferruginea</i>	6	2014-2019	2.4km north-west
Snow goose <i>Chen caerulescens</i>	1	2018	4km north-west

Species	No. of records	Date range of records	Distance and direction from the proposed DCO Order Limits
Wall lizard <i>Podarcis muralis</i>	2	2013-2014	1.4km west
Wood duck <i>Aix sponsa</i>	5	2014-2020	2.4km north-west

MAVES Ecological Survey Reports 2017 and 2018

- 4.6.3 A review of the 2017 and 2018 MAVES ecological survey reports identified records of rhododendron within 5km of the proposed DCO Order Limits.

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5. Glossary

Table 5-1 Glossary of terms and abbreviations

Term (acronym)	Definition
BoCC	Birds of Conservation Concern
BTO	British Trust for Ornithology
cSAC	candidate Special Area of Conservation
DCO	Development Consent Order
Environmental Impact Assessment (EIA)	The process of evaluating the likely significant environmental effects of a proposed project or development over and above the existing circumstances (or 'baseline').
EPSL	European Protected Species Licences
Habitats Regulation Assessment (HRA)	The assessment of the impacts of implementing a plan or policy on a European Site, the purpose being to consider the impacts of a project against conservation objectives of the site and to ascertain whether it will adversely affect the integrity of the site.
Habitats Regulations	EC Council Directive 92/43/EEC, known as the Habitats Directive, was transposed in the UK by the Habitats Regulations 1994 (as amended). The Habitats Regulations apply to UK land and territorial waters and act to ensure biodiversity of natural habitats and of wild flora and fauna through a range of measures including designation of SACs.
HPI	Habitats of Principal Importance
IUCN	International Union for Conservation of Nature
LNR	Local Nature Reserve
Local Wildlife Site (LWS)	Local Wildlife Sites are non-statutory designations conferred by local planning authorities and given weight through local planning policy. These sites are selected through a selection of criteria (criteria are area dependent) aimed at identifying "substantive nature conservation value".
m	metres
MAVES	Mid-Arun Valley Environmental Survey
NBN	National Biodiversity Network

Term (acronym)	Definition
NERC Act	Natural Environment and Rural Communities Act
NNR	National Nature Reserve
NPS	National Policy Statement
NRV	Notable Road Verges
RSPB	Royal Society for the Protection of Birds
Scoping Report	A report that presents the findings of an initial stage in the Environmental Impact Assessment process.
SDNPA	South Downs National Park Authority
Site of Special Scientific Interest (SSSI)	Sites designated at the national level under the Wildlife & Countryside Act 1981 (as amended). They are a series of sites that are designated to protect the best examples of significant natural habitats and populations of species.
SOS	Sussex Ornithological Society
Special Area of Conservation (SAC)	International designation implemented under the Habitats Regulations for the protection of habitats and (non-bird) species. Sites designated to protect habitats and species on Annexes I and II of the Habitats Directive. Sufficient habitat to maintain favourable conservation status of the particular feature in each member state needs to be identified and designated.
SPA	Special Protection Areas
SPI	Species of Principal Importance
SxBRC	Sussex Biodiversity Records Centre
The Applicant	Rampion Extension Development Limited (RED)
The Proposed Development	The development that is subject to the application for development consent, as described in Chapter 4: The Proposed Development, Volume 2 of the ES (Document Reference: 6.2.4).
UK	United Kingdom
WeBS	Wetland Bird Survey

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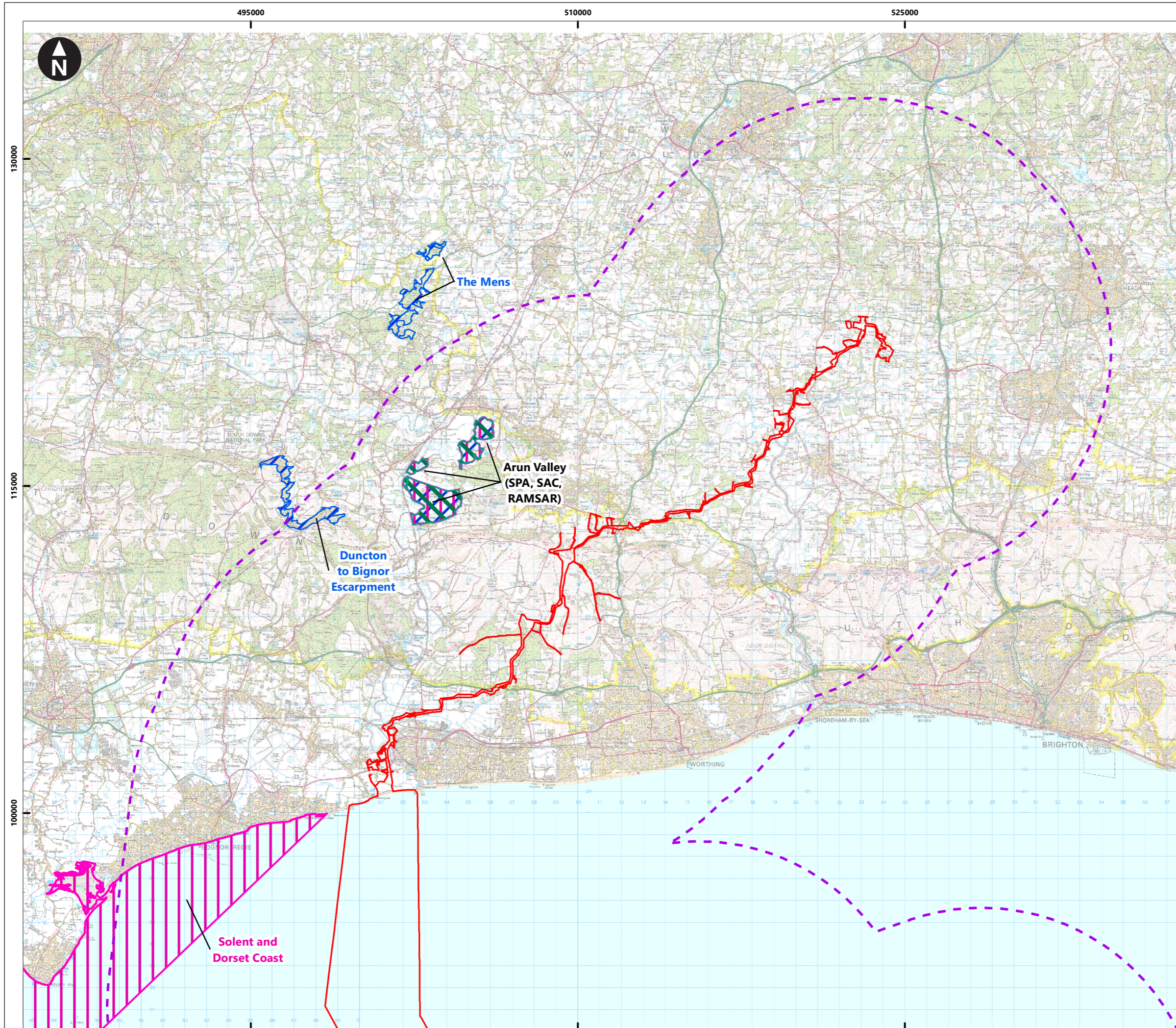
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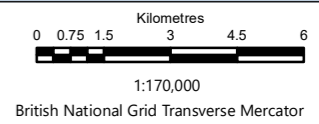
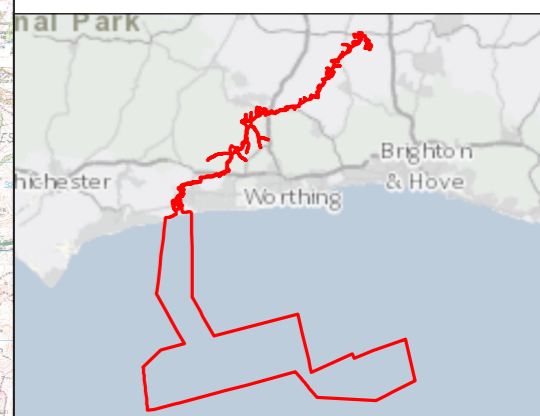
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 Ordnance Survey 0100031673

Key

-  Proposed DCO Order Limits
-  10km Buffer
-  RAMSAR
-  Special Protection Areas (SPA)
-  Special Areas of Conservation (SAC)



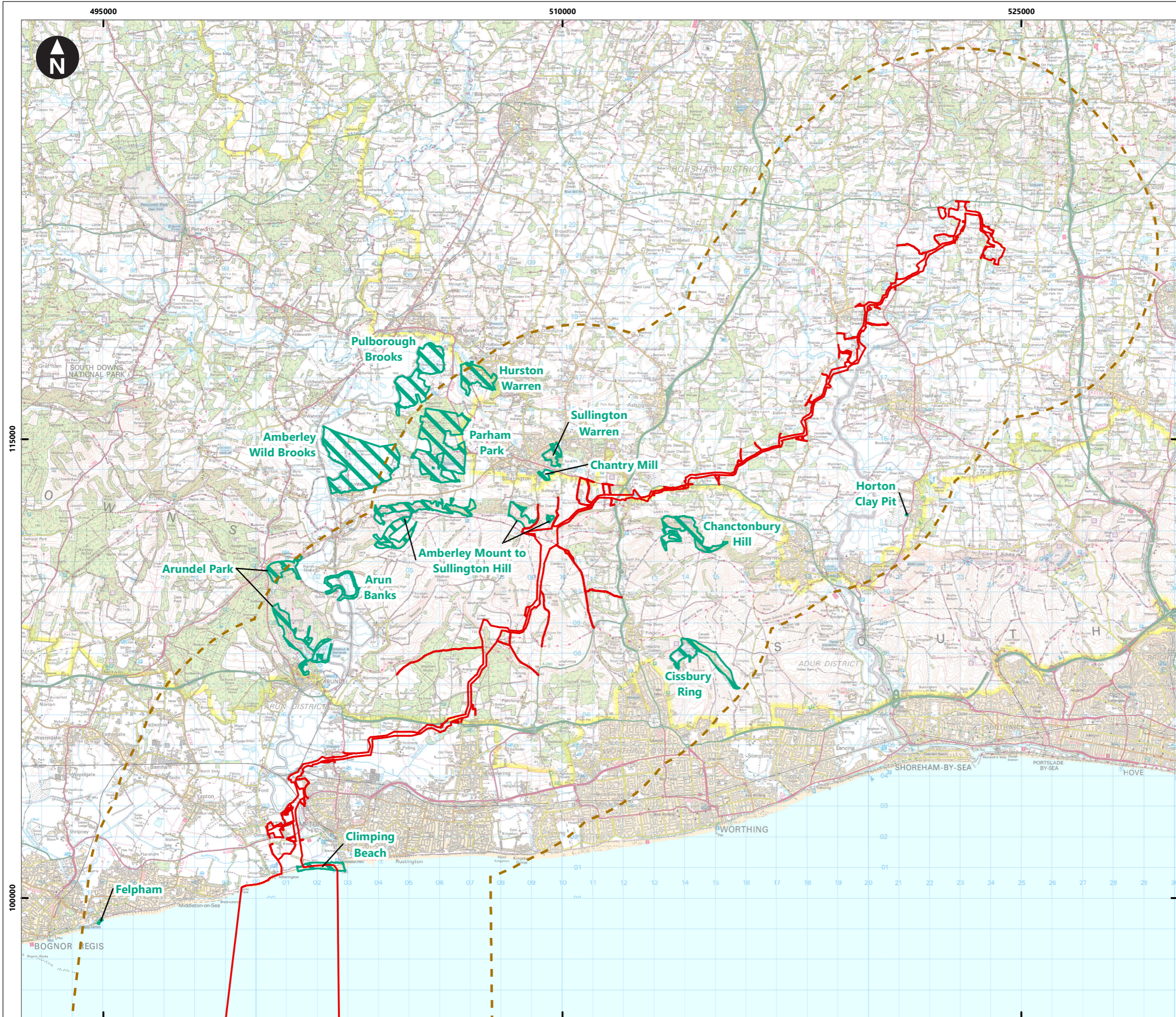
Rampion Extension Development



Rampion 2 Offshore Wind Farm
 Figure 22.2.1 Internationally Designated sites within 10km of the proposed DCO Order Limits

Terrestrial ecology desk study
 Environmental Statement

System Identifier: 42285-WSPE-ES-ON-FG-OO-8727				Version: 1.0
Company: WSP	Drawn By: HADJE	Chk/Prvd: SUTET	Drawn Date: 28/07/2023	Status: FINAL



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Key

- Proposed DCO Order Limits
- 5km buffer
- Site of Special Scientific Interest (SSSI)

0 0.5 1 2 3 4
 Kilometres
 1:120,000
 British National Grid Transverse Mercator

Rampion Extension Development

Rampion 2 Offshore Wind Farm

Figure 22.2.2 Nationally designated sites within 5km of the proposed DCO Order Limits

Terrestrial ecology desk study

Environmental Statement

System Identifier: 42285-WSPE-ES-ON-FG-OO-8673		Version: 1.0
Company: WSP	Drawn By: HADJE	Chk/Prvrd: SUTET
Drawn Date: 24/07/2023	Status: FINAL	

510000

525000

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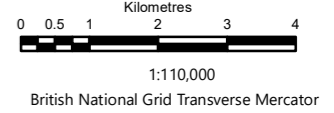
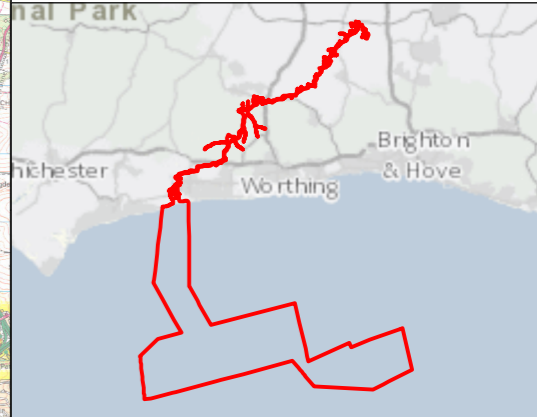
115000

100000



Key

-  Proposed DCO Order Limits
-  5km buffer
-  Notable road verges
-  Local Wildlife Sites (LWS)



Rampion Extension Development



Rampion 2 Offshore Wind Farm

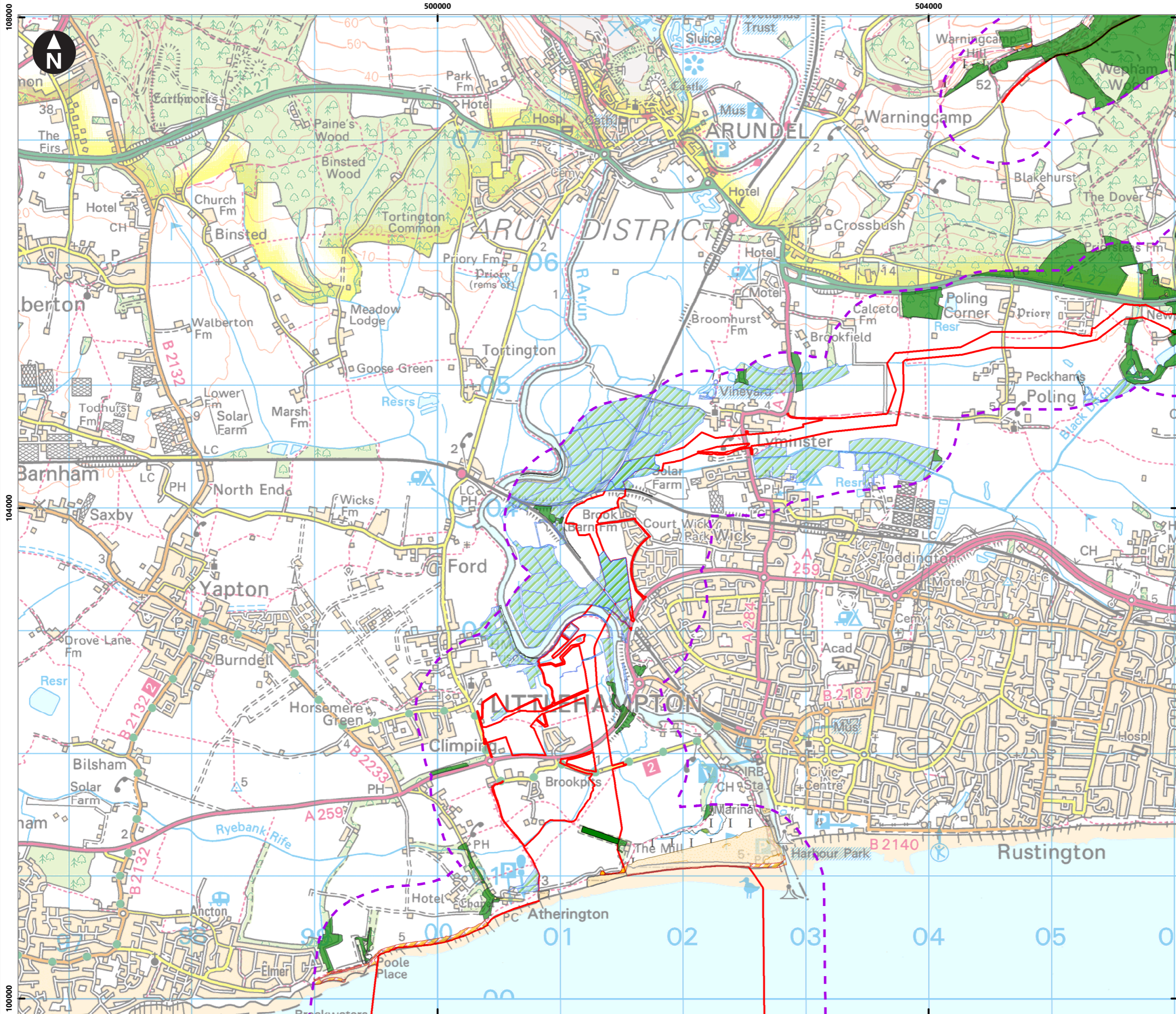
Figure 22.2.3 Non designated sites within 5km of the proposed DCO Order Limits

Terrestrial ecology desk study

Environmental Statement

System Identifier:		Version:
42285-WSP-ES-ON-FG-OO-7363		1.0

Company:	Drawn By:	Chk/Prvd:	Drawn Date:	Status:
WSP	HADJE	SUTET	28/07/2023	FINAL



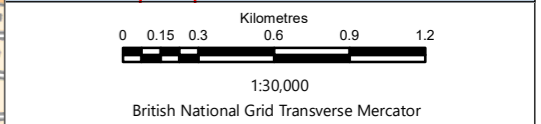
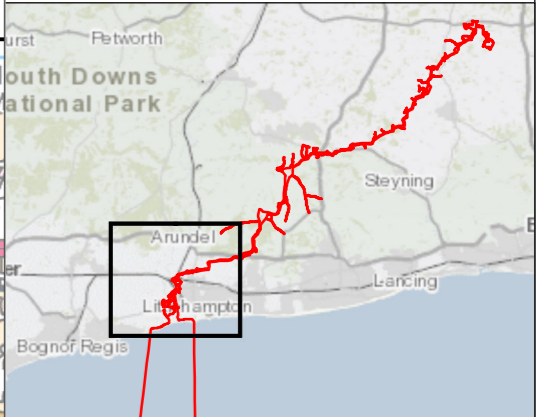
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Key

- Proposed DCO Order Limits
- 500m buffer

Priority habitat types

- Coastal and floodplain grazing marsh
- Coastal saltmarsh
- Coastal sand dunes
- Coastal vegetated shingle
- Deciduous woodland
- Good quality semi improved grassland
- Lowland calcareous grassland
- Lowland dry acid grassland
- Lowland fens
- Lowland heathland
- Maritime cliff and slope
- Mudflats
- No main habitat but additional habitats present
- Traditional orchard



Rampion Extension Development



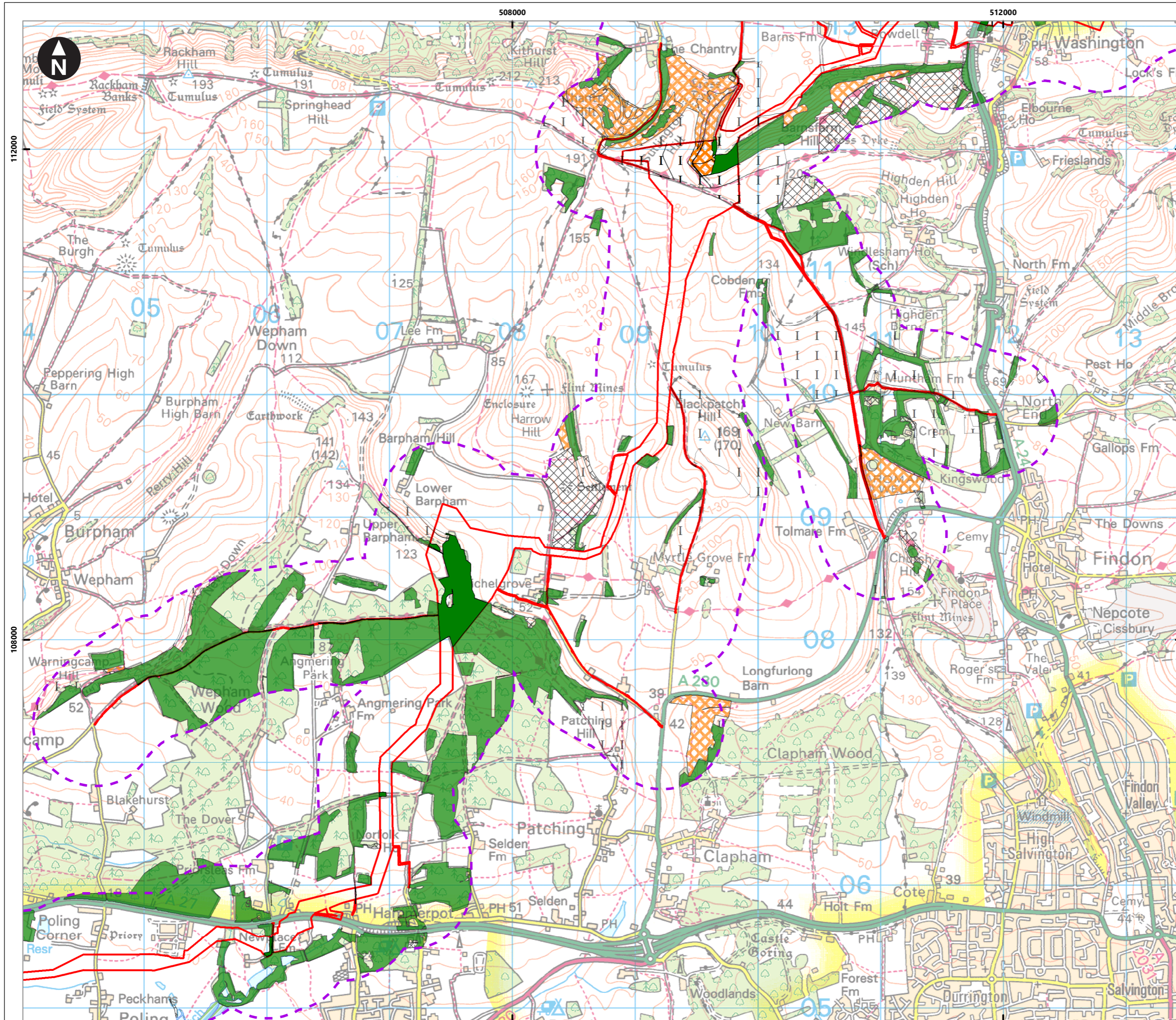
Rampion 2 Offshore Wind Farm

Figure 22.2.4a Priority Habitats within 500m of the proposed DCO Order Limits

Terrestrial ecology desk study

Environmental Statement

System Identifier: 42285-WSP-ES-ON-FG-OO-4749		Version: 1.0
Company: WSP	Drawn By: HADJE	Chk/Prvd: SUTET
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Key

- Proposed DCO Order Limits
- 500m buffer

Priority habitat types

- Coastal and floodplain grazing marsh
- Coastal saltmarsh
- Coastal sand dunes
- Coastal vegetated shingle
- Deciduous woodland
- Good quality semi improved grassland
- Lowland calcareous grassland
- Lowland dry acid grassland
- Lowland fens
- Lowland heathland
- Maritime cliff and slope
- Mudflats
- No main habitat but additional habitats present
- Traditional orchard

South Downs National Park

0 0.15 0.3 0.6 0.9 1.2
 Kilometres
 1:30,000
 British National Grid Transverse Mercator

Rampion Extension Development

Rampion 2
 WIND FARM

Rampion 2 Offshore Wind Farm

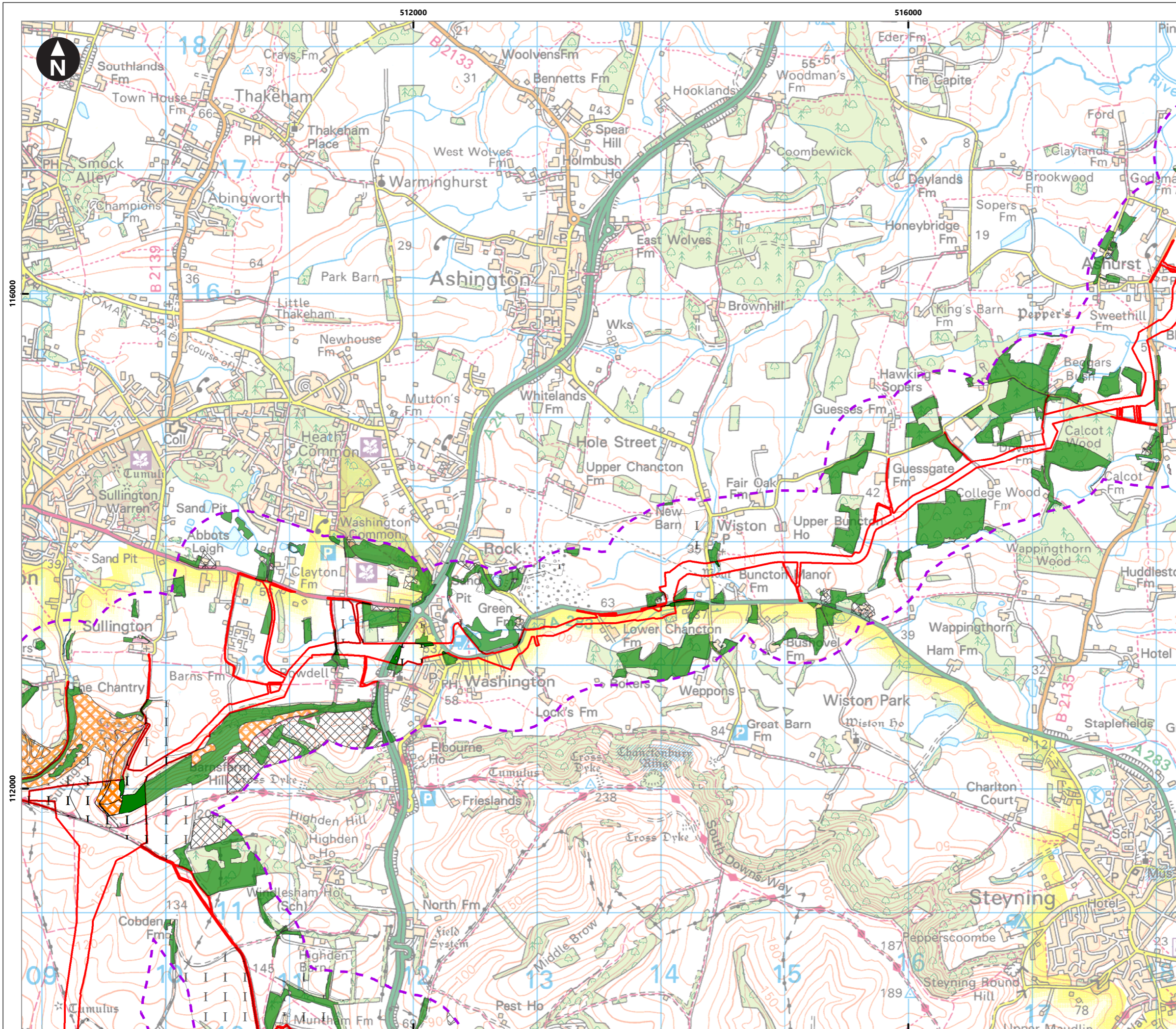
Figure 22.2.4b Priority Habitats within 500m of the proposed DCO Order Limits

Terrestrial ecology desk study

Environmental Statement

System Identifier: 42285-WSP-ES-ON-FG-OO-4749
 Version: 1.0

Company: WSP
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 Chk/Prvrd: SUTET
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 Ordnance Survey 0100031673

Key

- Proposed DCO Order Limits
- 500m buffer

Priority habitat types

- Coastal and floodplain grazing marsh
- Coastal saltmarsh
- Coastal sand dunes
- Coastal vegetated shingle
- Deciduous woodland
- Good quality semi improved grassland
- Lowland calcareous grassland
- Lowland dry acid grassland
- Lowland fens
- Lowland heathland
- Maritime cliff and slope
- Mudflats
- No main habitat but additional habitats present
- Traditional orchard

South Downs National Park

0 0.15 0.3 0.6 0.9 1.2
 Kilometres
 1:30,000
 British National Grid Transverse Mercator

Rampion Extension Development

Rampion 2 Offshore Wind Farm

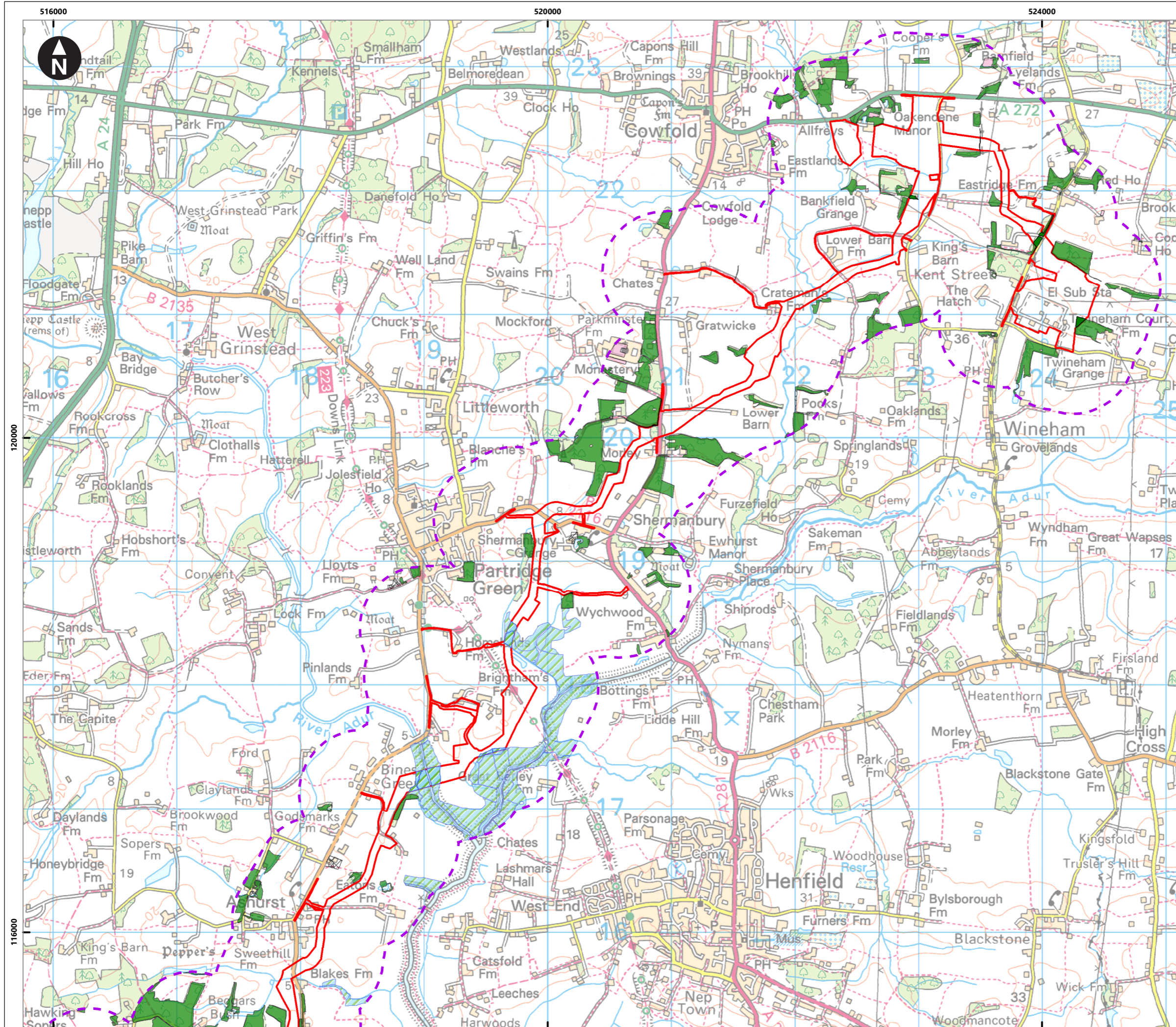
Figure 22.2.4c Priority Habitats within 500m of the proposed DCO Order Limits

Terrestrial ecology desk study

Environmental Statement

System Identifier: 42285-WSP-ES-ON-FG-OO-4749 Version: 1.0

Company: WSP	Drawn By: HADJE	Chk/Prvrd: SUTET	Drawn Date: 24/07/2023	Status: FINAL
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Key

- Proposed DCO Order Limits
- 500m buffer

Priority habitat types

- Coastal and floodplain grazing marsh
- Coastal saltmarsh
- Coastal sand dunes
- Coastal vegetated shingle
- Deciduous woodland
- Good quality semi improved grassland
- Lowland calcareous grassland
- Lowland dry acid grassland
- Lowland fens
- Lowland heathland
- Maritime cliff and slope
- Mudflats
- No main habitat but additional habitats present
- Traditional orchard

0 0.15 0.3 0.6 0.9 1.2
 Kilometres
 1:30,000
 British National Grid Transverse Mercator

Rampion Extension Development

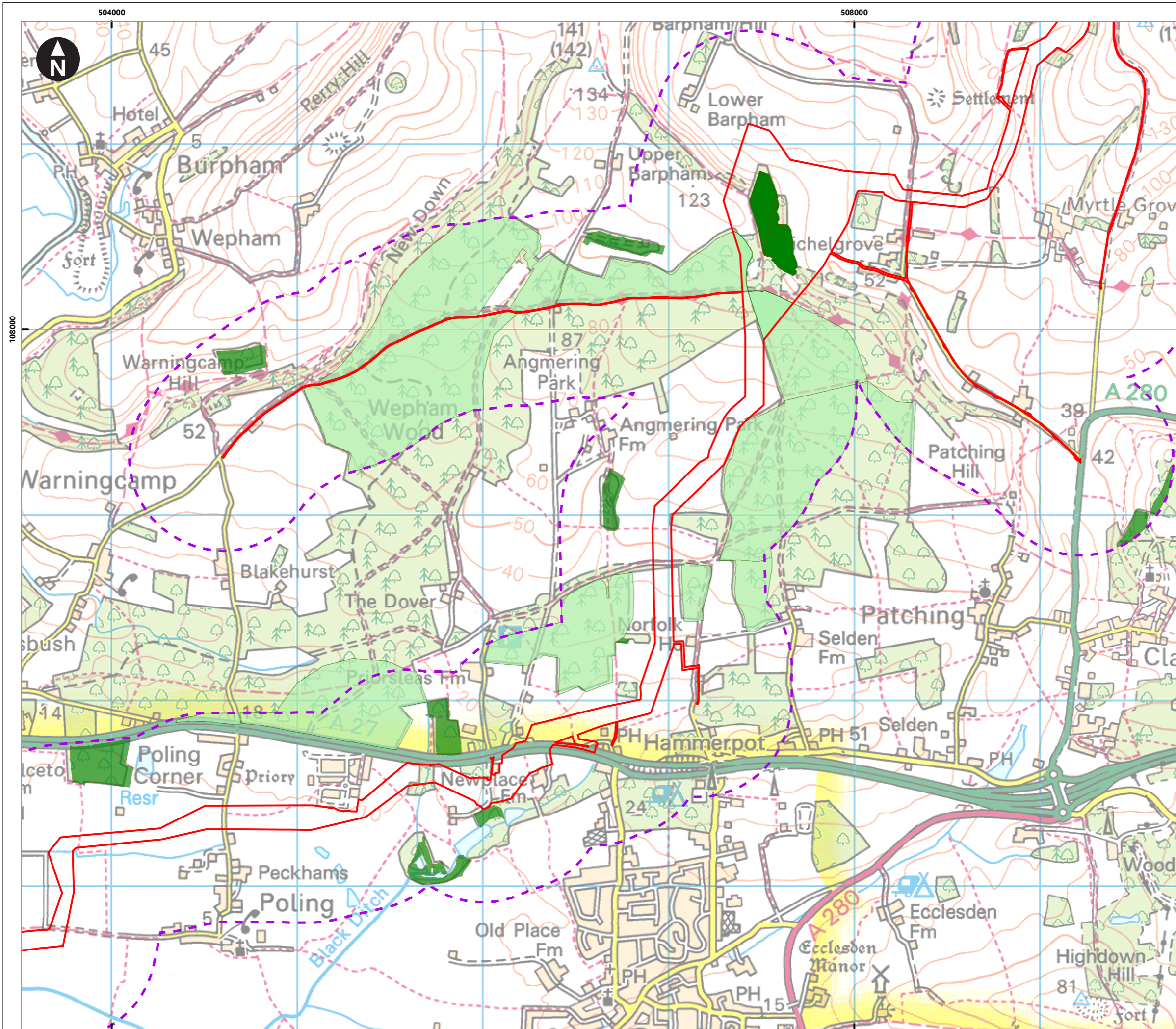
Rampion 2 Offshore Wind Farm

Figure 22.2.4d Priority Habitats within 500m of the proposed DCO Order Limits

Terrestrial ecology desk study

Environmental Statement

System Identifier: 42285-WSP-ES-ON-FG-OO-4749		Version: 1.0
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Key

- Proposed DCO Order Limits
- 500m buffer

Ancient woodland type

- Ancient & Semi-Natural Woodland
- Ancient Replanted Woodland

Rampion Extension Development

Rampion 2 Offshore Wind Farm

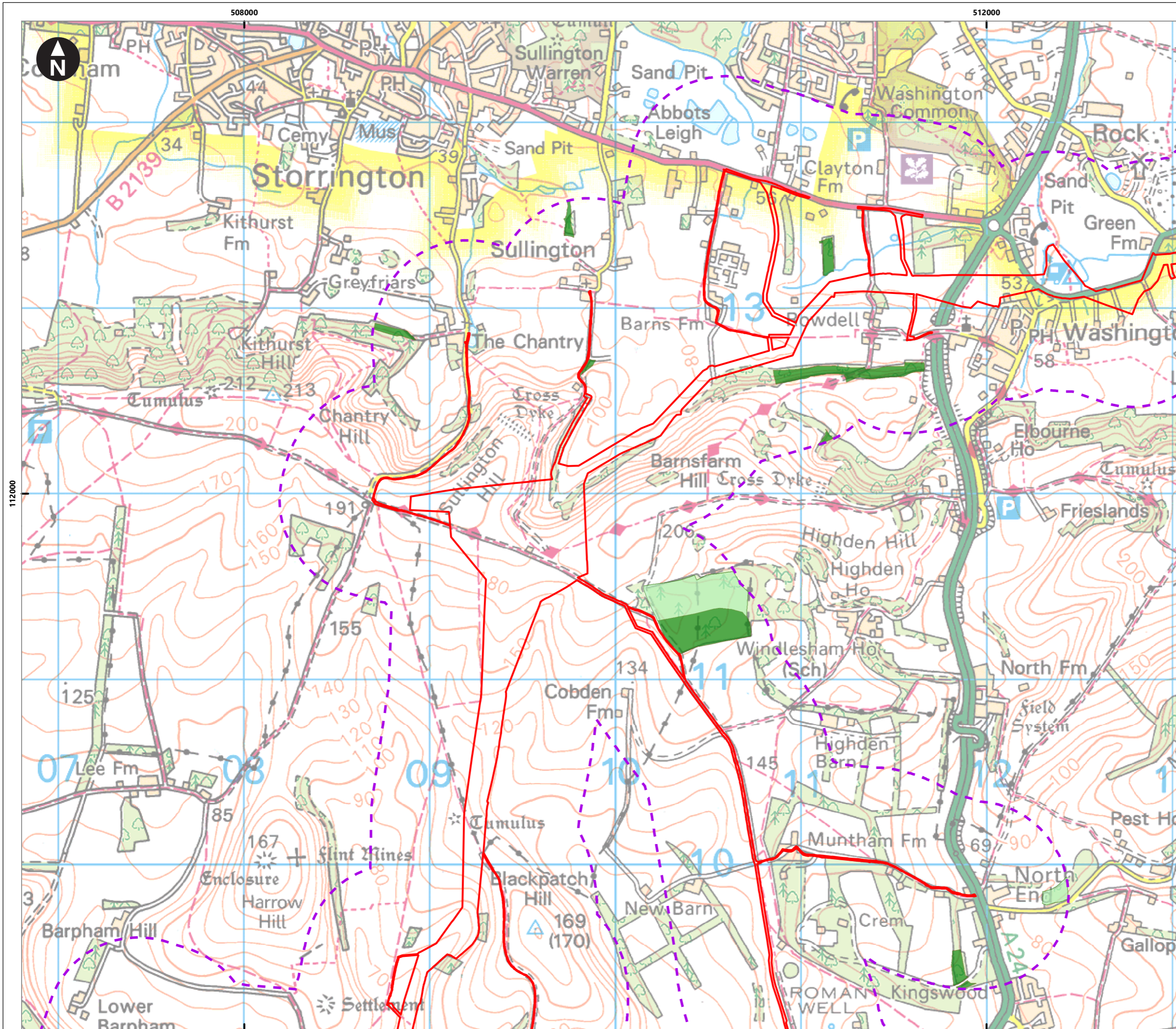
Figure 22.2.5a Ancient woodland and ancient replanted woodland within 500m of the proposed DCO Order Limits

Terrestrial ecology desk study

Environmental Statement

System Identifier: 42285-WSP-ES-ON-FG-OO-5531		Version: 1.0
Company: WSP	Drawn By: HADJE	Chk/Prvrd: SUTET
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0 0.1 0.2 0.4 0.6 0.8 Kilometres
 1:20,000
 British National Grid Transverse Mercator



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Key

- Proposed DCO Order Limits
- 500m buffer

Ancient woodland type

- Ancient & Semi-Natural Woodland
- Ancient Replanted Woodland

Rampion Extension Development

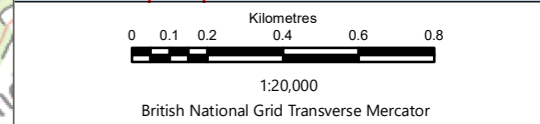
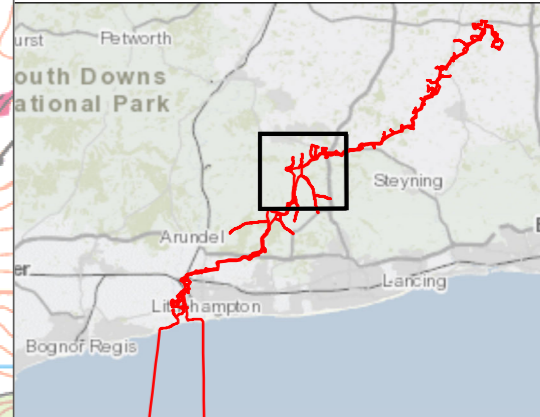
Rampion 2 Offshore Wind Farm

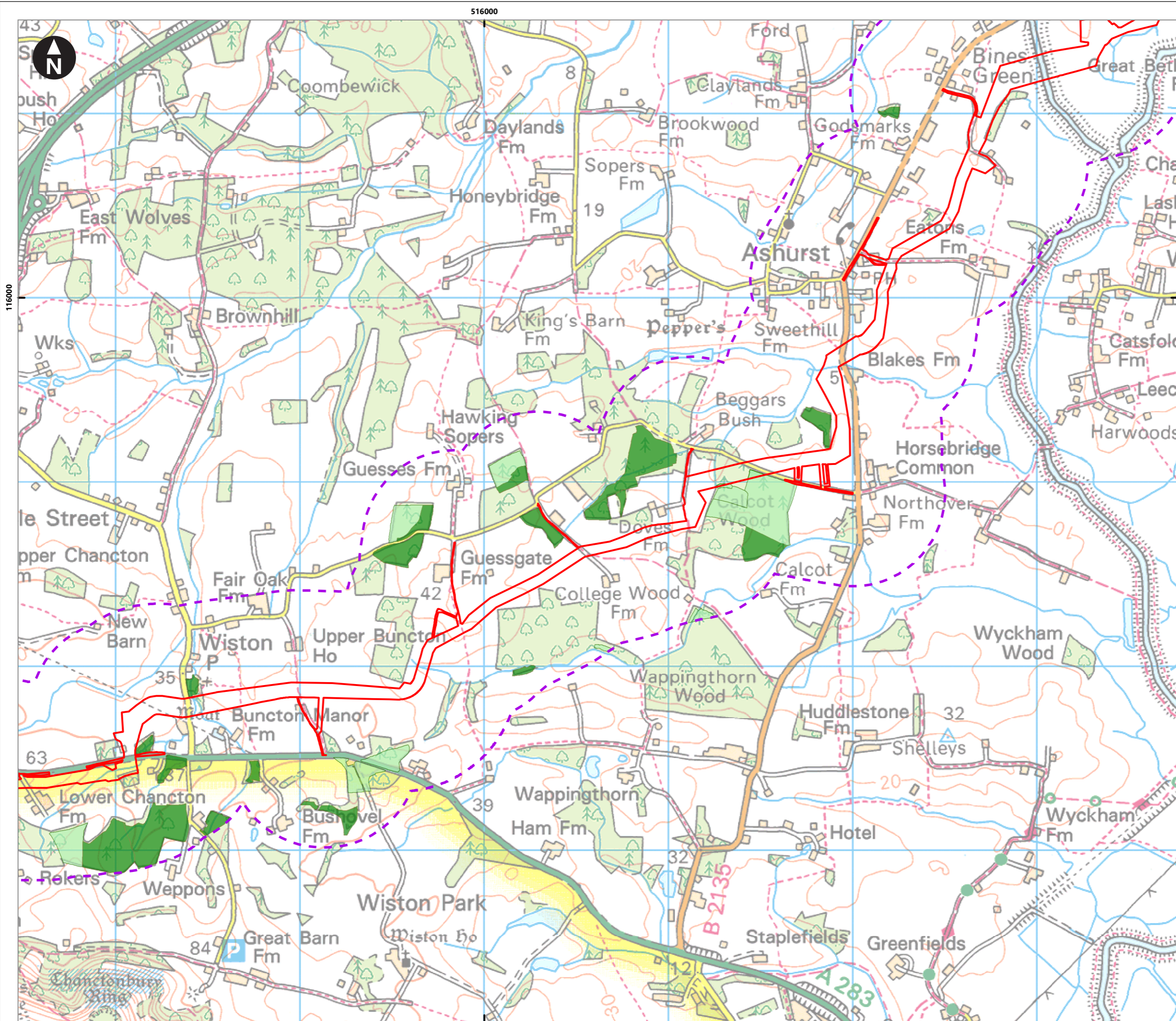
Figure 22.2.5b Ancient woodland and ancient replanted woodland within 500m of the proposed DCO Order Limits

Terrestrial ecology desk study

Environmental Statement

System Identifier: 42285-WSP-ES-ON-FG-OO-5531	Version: 1.0			
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Key

- Proposed DCO Order Limits
- 500m buffer

Ancient woodland type

- Ancient & Semi-Natural Woodland
- Ancient Replanted Woodland

0 0.1 0.2 0.4 0.6 0.8
 Kilometres
 1:20,000
 British National Grid Transverse Mercator

Rampion Extension Development

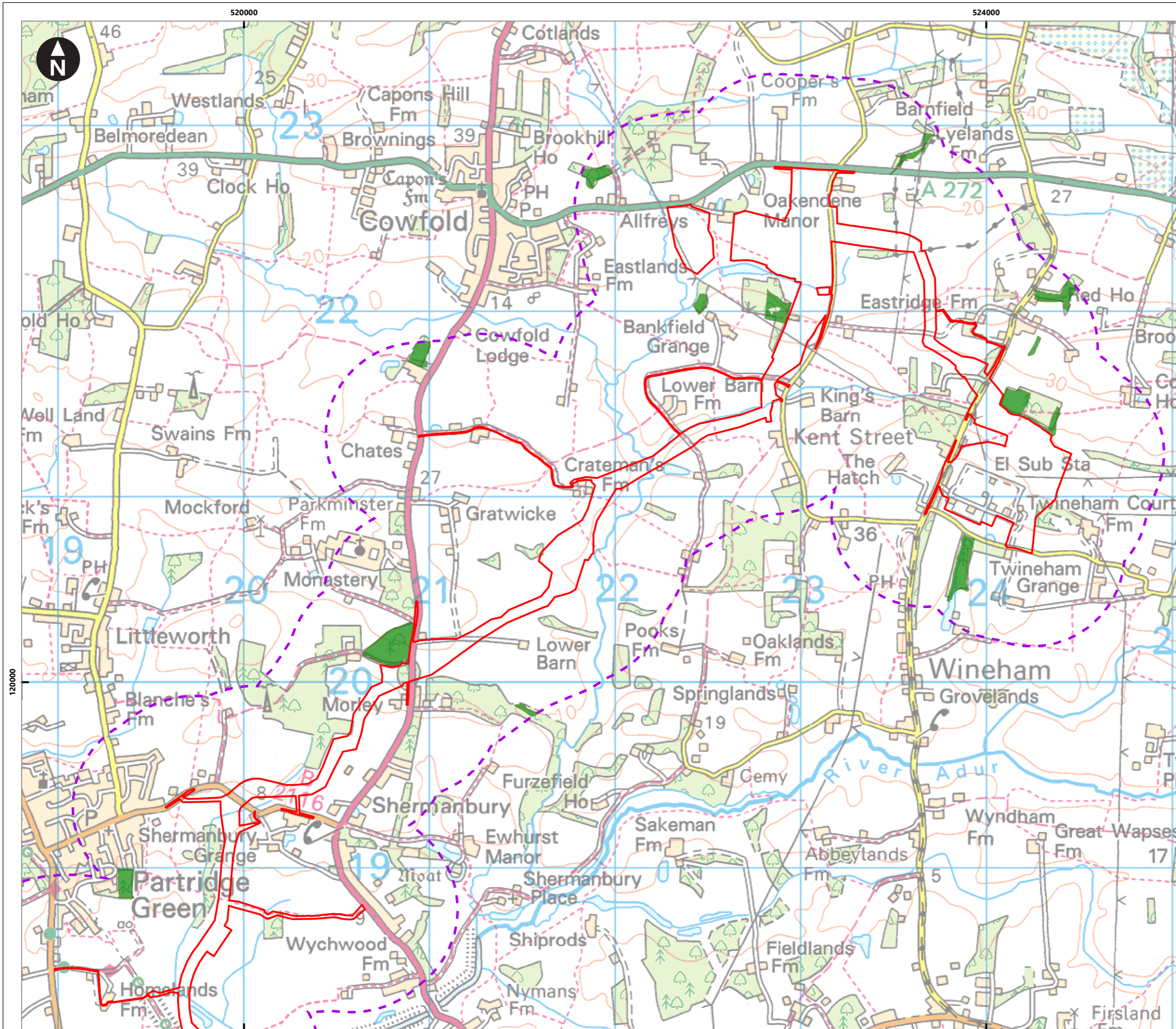
Rampion 2 Offshore Wind Farm

Figure 22.2.5c Ancient woodland and ancient replanted woodland within 500m of the proposed DCO Order Limits

Terrestrial ecology desk study

Environmental Statement

System Identifier: 42285-WSP-ES-ON-FG-OO-5531	Version: 1.0			
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Ordnance Survey 0100031673

Key

- Proposed DCO Order Limits
- 500m buffer

Ancient woodland type

- Ancient & Semi-Natural Woodland
- Ancient Replanted Woodland

0 0.1 0.2 0.4 0.6 0.8
Kilometres
1:20,000
British National Grid Transverse Mercator

Rampion Extension Development

Rampion 2 Offshore Wind Farm

Figure 22.2.5d Ancient woodland and ancient replanted woodland within 500m of the proposed DCO Order Limits

Terrestrial ecology desk study

Environmental Statement

System Identifier: 42285-WSP-ES-ON-FG-OO-5531		Version: 1.0
Company: WSP	Drawn By: HADJE	Chk/Prvrd: SUTET
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