# AQUIND Limited

# AQUIND INTERCONNECTOR

## Environmental Statement – Volume 3 – Appendix 16.2 - PEA / Phase 1 Habitat Survey Report

The Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation 5(2)(a)

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# EXECUTIVE SUMMARY

This report has been prepared on behalf of AQUIND Limited (the 'Applicant') to support an application (the 'Application') for a Development Consent Order ('DCO'). AQUIND Interconnector is a proposed electricity Interconnector between France and the UK. The Application for the DCO is made in respect of the UK elements of AQUIND Interconnector (referred to as the 'Proposed Development').

The Proposed Development is described in detail in Chapter 3 (Description of the Proposed Development) of the Environmental Statement Volume 1 (document reference 6.1.3).

This report assesses the value of the land within the Proposed Development for nature conservation and to identify any potential constraints. This assessment was completed through desk studies and field surveys in 2017, 2018 and 2019.

The desk study identified seven nationally designated sites within 2 km of the Survey Area (the 'Order Limits'), and eight European designated sites within 10 km. Seventeen Sites of Importance for Nature Conservation ('SINCs') and two designated as Roadside Verges of Ecological Importance ('RVEIs') are within 100 m of the Proposed Development.

Ancient Semi Natural Woodland listed on the National Inventory of Woodland and Trees is present adjacent to the Survey Area in the north section of the Proposed Development, around Lovedean Substation. Nine types of Priority Habitat are found within 100 m of the Survey Area comprising grazing marsh, mudflats, shingle, saline lagoons, deciduous woodland, lowland calcareous grassland, lowland acid grassland, lowland meadows and reedbeds.

Most of the Onshore Cable Corridor goes through urban areas within Portsmouth towards Waterlooville, largely covering urbanised habitats such as hardstanding and patches of amenity grassland. The north section of the Onshore Cable Corridor runs through lowland meadow grassland and arable land before reaching the proposed Converter Station at Lovedean. The Converter Station Area at the north of the Order Limits is situated on arable land and covers fields used for crops and pasture with bordering hedgerows.

# APPENDIX 16.2 – PEA / PHASE 1 HABITAT SURVEY REPORT

## 1.1. INTRODUCTION

### 1.1.1. PROPOSED DEVELOPMENT BACKGROUND

1.1.1.1. This report has been prepared on behalf of AQUIND Limited (the 'Applicant') to support an application (the 'Application') for a Development Consent Order ('DCO'). AQUIND Interconnector is a proposed electricity Interconnector between France and the UK. The Application for the DCO is made in respect of the UK elements of AQUIND Interconnector (referred to as the 'Proposed Development').

1.1.1.2. The Proposed Development is described in detail in Chapter 3 (Description of the Proposed Development) of the Environmental Statement Volume 1 (document reference 6.1.3).

### 1.1.2. ECOLOGICAL BACKGROUND

1.1.2.1. The Proposed Development, for purposes of this appraisal, has been split into three work areas for ease of ecological description, characterisation and constraint identification:

- Section 1 – The Converter Station Area. The northern section of the Proposed Development comprising: the Converter Station and associated equipment; the connection between the AC Cables and the National Electricity Transmission System (NETS) at Lovedean Substation; the AC Cable Corridor to accommodate the AC Cables and FOC between the Converter Station and Lovedean Substation; the HVDC Cables and FOC corridor from the Converter Station southwards; a Works Compound and Laydown Area; Access Road and associated haul roads; surface water drainage and associated attenuation ponds; landscape and ecology measures; utilities such as potable water, electricity and telecom; the compound comprising the Telecommunications Building(s) and associated equipment. the Access Road, the compound comprising the Telecommunications Building(s), security fencing, a Works Compound and Laydown Area, car park and laydown areas. This area lies within agricultural land on the edge of the town of Waterlooville, Hampshire. The area is mainly composed of arable land with hedgerows and small pockets of woodland, and residential development to the south-east.
- Sections 2 to 9 - The Onshore Cable Corridor. The Onshore Cable Corridor from the Converter Station Area at Lovedean to the Landfall at Eastney. Both local and

major roads will be used, passing areas of built up areas and arable habitats in Portsmouth area.

- Section 10 – Eastney (Landfall) - The Landfall is the area comprising the Transition Joint Bay, where the Onshore Cables are connected to the Marine Cables, and the Horizontal Directional Drilling ('HDD') works where the Marine Cables come ashore. The Landfall also comprises the Optical Regeneration Station(s) ('ORS'). This area comprises intertidal mud and sand, a sand/shingle beach with concrete erosion protection and a mosaic of habitats resulting from derelict developments on the landward side; disused buildings, scrub, rough grassland and bare ground. There is a caravan park to the west of the Landfall and Fort Cumberland to the east. The proposed Landfall is adjacent to Eastney Beach Site of Importance for Nature Conservation ('SINC'), Fort Cumberland SINC and Land West of Fort Cumberland SINC, comprising semi-improved grassland, coastal heathland, shingle and scrub habitats.

1.1.2.2. The land included within the Order Limits (Figure 1), delineating the potential extent of the proposed works, will hereinafter be referred to as 'the Survey Area'.

### 1.1.3. SCOPE OF REPORT

1.1.3.1. The aim of this report is to assess the value of the Survey Area for nature conservation and to identify any potential constraints to the Proposed Development. The objectives are to:

- to provide baseline ecological information about the Survey Area, with particular reference to whether legally protected and/or notable sites, species or habitats are present or likely to be present;
- to provide recommendations to enable compliance with relevant nature conservation legislation and planning policy; and if necessary,
- to identify the need for avoidance, mitigation, compensation or enhancement measures and/or further ecological surveys.

### 1.1.4. RELEVANT LEGISLATION AND POLICY

1.1.4.1. The appraisal has been compiled with reference to the following relevant nature conservation legislation, planning policy and the UK Biodiversity Framework from which the protection of sites, habitats and species is derived in England. The context and applicability of each item is explained as appropriate in the relevant sections of the report and additional details are presented in Appendix A.

- The Conservation of Habitats and Species Regulations 2017 as amended (Habitats Regulations);
- The Wildlife and Countryside Act 1981 (as amended) ('WCA');

- The Natural Environment and Rural Communities ('NERC') Act 2006;
- The Protection of Badgers Act 1992;
- The Hedgerows Regulations 1997; and
- The National Planning Policy Framework ('NPPF') 2019 (DCLG, 2019).

# 2. METHODS

## 2.1. OVERVIEW

2.1.1.1. This appraisal has been prepared with reference to current good practice guidance published by the Chartered Institute for Ecology and Environmental Management ('CIEEM') (CIEEM, 2016) (CIEEM, 2015), and Joint Nature Conservation Committee ('JNCC') (JNCC, 2010); and guidance contained in the British Standard - Code of Practice for Biodiversity and Development BS42020:2013 (BSI, 2013).

2.1.1.2. It comprised a desk study, followed by field surveys, and is based on the following data sources:

- Online data from www.natureonthemap.naturalengland.org.uk – statutory designated sites and important habitats;
- Ecological records from Hampshire Biodiversity Information Centre ('HBIC');
- Maps, aerial photography and LiDAR data – pre-survey site mapping and habitat classification; and
- Data collected during site surveys by ecologists.

## 2.2. DESK STUDY

2.2.1.1. The desk study was undertaken to review existing ecological baseline information available in the public domain and to obtain information held by relevant third parties. For the desk study exercise, records were collated for the 'Study Area', and consistent with current best practice guidance (CIEEM, 2016) (CIEEM, 2015). The Study Areas comprised the information from freely available online datasets maintained by Natural England, data requested from Hampshire Biodiversity Information Centre in October 2018, and Ordnance Survey maps:

- International-scale statutory designated wildlife sites[1] within a 10 km search radius from the Survey Area (Figure 16.1);
- National-scale statutory designated wildlife sites[2] within a 2 km search radius from the Survey Area (Figure 16.1);
- Non-statutory sites designated wildlife sites, Habitats of Principal Importance ('HPI')[3] and woodland listed on the Ancient Woodland Inventory[4] within a 100 m search radius from the Survey Area (Figure 16.2);
- Records of legally protected and notable species within a 1 km search radius from the Survey Area; and
- Records of bats within a 5 km search radius from the Survey Area.

2.2.1.2. Wide Study Areas were used for international and national-scale designated sites (10 km and 2 km respectively) due to the sensitivity of their qualifying features and the fact they often support species that are mobile and widely ranging species, such as birds.

2.2.1.3. For protected species records, Study Areas reflect the mobile nature of the species recorded, in particular bats which undertake nightly foraging trips, even across urban and developed area. Ponds and water courses were mapped within 250 m to inform the assessment of great crested newt habitat, this distance being that which these animals migrate between breeding ponds (Langton, 2001)[5].

## 2.3. HABITAT SURVEY

2.3.1.1. Due to the size and scale of the Survey Area, and access restrictions, habitats were pre-classified using a Geographic Information System ('GIS'), and the resulting model was used by surveyors in the field to determine the final classification of habitats within the landscape. The pre-classification model was based on a combination of spatial datasets including Ordnance Survey MasterMap data, Light Detection and Ranging (Lidar) data and multispectral aerial imagery.

[1] Special Areas of Conservation (SAC), Special Protection Areas (SPA) and internationally designated Ramsar sites
[2] Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR) and Local Nature Reserves (LNR).
[3] Mapped locations of HPI are usually not available, but HPI aligns in the most part with UKBAP habitats. Inventories of UKBAP habitat have been prepared by a variety of organisations and at a national (Natural England priority habitat inventory) and local scale (e.g. by local records centres). In some instances these are primarily based on aerial photograph analysis rather than field survey.
[4] The ancient woodland inventory in England lists areas over two hectares in size which have been continuously wooded since at least 1600.
[5] The distance at which most adult newts stay within from a breeding pond when spending time on land (Langton, 2001).

2.3.1.2. Initial field surveys were carried out in April 2017 in mild, dry weather conditions, where access was permitted. The survey was carried out by two ecologists who are both graduate members of CIEEM, with experience of carrying out PEAs in a variety of greenfield and brownfield sites. Pre-classified habitats were described and mapped into standard Phase 1 habitat classes following the JNCC methodology (JNCC, 2010); dominant plant species were recorded and habitats classified according to their specific vegetation types. Where appropriate, consideration was given to whether habitats qualify, or could qualify, as a Habitat of Principal Importance following habitat descriptions published by the Joint Nature Conservation Committee (JNCC Biodiversity Reporting and Information Group , 2008).

2.3.1.3. Further surveys were carried out in April 2018 and July 2019 following updates to the Proposed Development's design. Survey work was undertaken by experienced ecological surveyors who were members of CIEEM.

## 2.4. PROTECTED SPECIES ASSESSMENT

2.4.1.1. The potential for the Survey Area to support legally protected and notable species was assessed using the desk study results and combined with field observations during the habitat survey. The assessment of habitat suitability for protected and notable species was based on professional experience and judgement. This was supplemented by standard sources of guidance on habitat suitability assessment for key faunal groups including great crested newt (Gent, 2003) (English Nature, 2001); reptiles (Froglife, 1999); bats (Collins, 2016); badger (Harris S, 1991), (Roper, 2010); hazel dormouse (English Nature, 2006); otter (Chanin, 2003); and water vole (Dean, 2016).

## 2.5. PRELIMINARY EVALUATION

2.5.1.1. A preliminary evaluation of all ecological features within the Survey Area was undertaken with reference to guidance issued by CIEEM (CIEEM, 2016). In evaluating the relative importance of ecological features, the following factors were considered; nature conservation designations, species/habitat rarity, naturalness, fragility, connectivity to other habitats and relevant nature conservation aims and objectives for a given area as contained in national and local biodiversity action plans and planning policies.

## 2.6. NOTES AND LIMITATIONS

2.6.1.1. Every effort has been made to provide a comprehensive description of the Survey Area; however, the following specific limitations apply to this assessment:

- Ecological survey data is typically valid for up to 18 months unless otherwise specified, for example if conditions are likely to change more quickly due to ecological processes or anticipated changes in management. Beyond 18 months it is recommended an ecologist undertake a site visit and update desk study information (CIEEM, 2019).Therefore, Phase 1 surveys to important habitats and areas of potential permanent loss of features were repeated in 2019.
- Records held by local biological record centres and local recording groups are generally collected on a voluntary basis; therefore, the absence of records does not demonstrate the absence of species, it may simply indicate a gap in recording coverage.
- Due to access limitations, some parts of the Phase 1 habitat survey were carried out on publicly accessible land only. In these situations, broad habitats were mapped where visible from Public Rights of Way. Due to the use of pre-classification techniques it is considered that an accurate representation of habitat types has been recorded.
- A Phase 1 Survey is generally undertaken using a single visit to a defined Survey Area and therefore represents a snapshot only of all species potentially present. However, through use of desk study information to supplement site survey data, it is considered that an accurate assessment of the potential for the Survey Area to support protected species, or those of conservation concern, was possible. The Phase 1 habitat map has been reproduced from field notes and plans. Whilst this provides a sufficient level of detail to fulfil the requirements of a PEA, the maps are not intended to provide exact locations of key habitats.

# 3. RESULTS

## 3.1. DESIGNATED SITES

### 3.1.1. STATUTORY SITES

3.1.1.1. The desk study identified seven nationally designated sites within 2 km of the Survey Area, and eight European designated sites within 10 km. A description of European and National sites is detailed in Table 1 and 2 below and are shown in Figure 2.

**Table 1 - Statutory designated sites of European or International importance**

| Site Name | Distance (m) from Proposed Development | Description |
|---|---|---|
| **Solent Maritime SAC** | 0, partly overlapping | The SAC comprises a number of different estuary ecosystems on the south coast of England. Its qualifying features are three Habitats Directive Annexe 1 habitats which are primary reasons for selection (estuaries, *Spartina* swards, Atlantic salt meadows), and another seven Annexe 1 habitats which are present but not a primary reason for the site's selection. |
| **Solent & Isle of Wight Lagoons SAC** | ~ 304 | The SAC encompasses a series of Coastal lagoons, including percolation, isolated and sluiced lagoons, and includes marshes in the Keyhaven – Pennington area, at Farlington Marshes in Chichester Harbour, behind the sea-wall at Bembridge Harbour and at Gilkicker, near Gosport. The lagoons show a range of salinities and substrates, ranging from soft mud to muddy sand with a high proportion of shingle, which support a diverse fauna. |
| **Butser Hill SAC** | ~ 5612 | Butser Hill is situated on the east Hampshire chalk which forms part of the South Downs. Much of the site consists of sheep's-fescue – meadow oat-grass (*Festuca ovina – Helictotrichon pratense*) grassland, and has a range of slope gradients and aspects which influences vegetation composition. A particular feature is its lower plant assemblage; it has a rich lichen flora and also supports the distinctive association of leafy liverworts and mosses on north-facing chalk |

| Site Name | Distance (m) from Proposed Development | Description |
|---|---|---|
| | | slopes. This association is very rare in the UK and Butser Hill supports the largest known example. The site exhibits various transitions between semi-natural dry grassland, chalk heath, mixed scrub and yew *Taxus baccata* woods. |
| **South Wight Maritime SAC** | ~ 8137 | The South Wight Maritime SAC encompasses a range of reef types on the coast of the Isle of Wight. The site includes some of the most important subtidal chalk reefs in Britain, supporting a diverse range of species in the subtidal and intertidal. Faces and crevices on the limestone reefs and areas of large boulders provide a range of habitats for a number of marine species. Exposed bedrock is extensively bored by bivalves and sponges adding to habitat diversity. A number of nationally scarce seaweed biotopes are also present within the site, and rare fish species are often present in summer months. |
| **Chichester and Langstone Harbours SPA/Ramsar** | 0, partly overlapping | This site encompasses a wide area including two harbours located on the south coast of England in Hampshire and West Sussex. They are large, sheltered estuarine basins comprising extensive areas of sand and mudflat exposed at low tide. The mudflats are rich in invertebrates and also support extensive beds of algae, particularly *Enteromorpha* species, and eelgrass *Zostera* spp. The site is of particular value for water birds, especially in migration periods and winter. It also supports important colonies of breeding terns. |
| **Solent and Dorset Coast pSPA** | 0, adjacent | The proposal for Solent and Dorset Coast is to create a new SPA for internationally important populations of:<br>• common tern<br>• Sandwich tern<br>• little tern<br>This area is particularly important to these birds as much of the sea around their breeding colonies is the ideal habitat for plunge diving for food. |

| Site Name | Distance (m) from Proposed Development | Description |
|---|---|---|
| **Portsmouth Harbour SPA/Ramsar** | ~ 2200 | Portsmouth Harbour SPA, together with the adjacent Chichester and Langstone Harbours SPA, forms one of the most important sheltered intertidal areas on the south coast of England. It is composed of extensive intertidal mudflats and sandflats with seagrass beds, saltmarsh, shallow coastal waters, coastal lagoons and coastal grazing marsh. The estuarine sediments and areas of saltmarsh support rich populations of intertidal invertebrates, which provide an important food source for wintering birds, and also shelter roosting flocks, in particular black-tailed godwit *Limosa limosa*, dark-bellied brent goose *Branta bernicla bernicla*, dunlin *Calidris alpine* and red-breasted merganser *Mergus serrator*. |
| **Solent & Southampton Water SPA/Ramsar** | ~ 7100 | The site comprises a series of estuaries and harbours with extensive mud-flats and saltmarshes together with adjacent coastal habitats including saline lagoons, shingle beaches, reedbeds, damp woodland and grazing marsh. The mud-flats support beds of *Enteromorpha* spp. and *Zostera* spp. and have a rich invertebrate fauna that forms the food resource for the estuarine birds. In summer, the site is of importance for breeding seabirds, including gulls and four species of terns. In winter, it holds a large and diverse assemblage of waterbirds, including geese, ducks and waders. Dark-bellied brent goose *Branta b. bernicla* also feed in surrounding areas of agricultural land outside the SPA. |

**Table 2 – Statutory designated sites of national importance**

| Site Name | Distance (m) from Proposed Development | Description |
|---|---|---|
| **Langstone Harbour SSSI** | 0, partly overlapping | Langstone Harbour is a tidal basin which at high water resembles an almost land-locked lake. The harbour includes one of the largest areas of mixed saltmarsh on the south coast, and extensive cord-grass *Spartina anglica* marsh in an advanced state of degeneration, is among the twenty most important intertidal areas in Britain as a summer and autumn assembly ground for waders during the moult (when they require abundant high protein food) and as a post-moult wintering ground. |
| **Portsdown SSSI** | ~ 328 | Portsdown is an isolated east-west chalk hillside with a long south-facing escarpment. On the lower south-facing slopes raised beaches mark former sea levels and former wave erosion has removed Tertiary deposits and some of the chalk, leaving very steep slopes. Despite the absence of grazing and extensive disturbance, these slopes still support a rich chalk grassland flora and have a diverse insect fauna. |
| **Sinah Common SSSI** | ~ 957 | The site comprises a complex of maritime habitats which extend for over 2km eastwards from the south-western extremity of Hayling Island, Hampshire. Gunner Point at the western end contains the most extensive sand dunes and vegetated shingle beach in Hampshire. It supports shingle beach vegetation and grassland, dune heath, dune grassland, saltmarsh and open water communities. To the east of Gunner Point there is an extensive area of fragmented dune grassland and shingle. |
| **Catherington Down SSSI / LNR** | ~ 1140 | Catherington Down is an area of chalk grassland and narrow fringing woodland belts on predominantly west-facing downland slopes near the southern extent of the main Upper Chalk outcrop in Hampshire. About one-third of the area has rather less steep slopes, deeper soils and a turf dominated by coarse grasses. Development of scrub and incipient woodland is more apparent here. A belt of oak *Quercus robur* woodland forms the lower, woodland boundary, whilst part of the high, eastern edge is covered by a strip of oak standards over old hazel *Corylus avellana*. This latter woodland is separately fenced and has a typical spring woodland flora which |

| Site Name | Distance (m) from Proposed Development | Description |
|---|---|---|
| | | includes, locally associated with hazel, toothwort *Lathraea squamaria*. |
| **Farlington Marshes LNR** | ~ 50 | The site comprises flower-rich grazing marsh on the northern shore of Langstone Harbour between Portsmouth and Havant. Farlington is important for the bird populations that it supports, as well as being of importance to wild flowers and butterflies. It is managed by the Hampshire and Isle of Wight Wildlife Trust. |
| **Yeoll's Copse LNR** | ~ 900 | A woodland site with old coppiced sessile oak and wild service trees. Notable species include common cow wheat and butchers broom. |
| **The Kench, Hayling Island LNR** | ~ 1410 | A small area of inter-tidal mud and saltmarsh within Langstone Harbour. This shallow tidal inlet alongside Ferry Road on Hayling Island is used by birds as a feeding area while the tide is out and when it is high the shingle ridge between the inlet and the main harbour is used as a roost by waders. |

### 3.1.2. NON-STATUTORY SITES

3.1.2.1. The desk study identified 17 SINCs within 100 m of the Proposed Development, and these are detailed in Table 3. Two sites are also designated as RVEIs.

**Table 3 – Non-statutory designated sites**

| Site Name, Designation and reference | Distance (m) from Proposed Development | Habitats Present and Notable species |
|---|---|---|
| **Eastney Beach SINC** | Within the Proposed Development | Semi-natural coastal and estuarine habitats, including saltmarsh, intertidal mudflats, sand dunes, shingle, brackish ponds, grazing marsh and maritime grasslands.<br><br>Notable species: *Calystegia soldanella* (Sea Bindweed) [RDB - Vulnerable]; *Honckenya peploides* (Sea Sandwort) [CS]; *Raphanus raphanistrum* subsp. *maritimus* (Sea Radish) [CS] and *Rosa spinosissima* (Burnet Rose) [CS]. |

| Site Name, Designation and reference | Distance (m) from Proposed Development | Habitats Present and Notable species |
|---|---|---|
| **Land North West of Fort Cumberland SINC** | Immediately adjacent | Semi-improved grasslands which retain a significant element of unimproved grassland.<br>Grasslands which have become impoverished through inappropriate management but which retain sufficient elements of relic unimproved grassland to enable recovery. Notable species: *Cupido minimus* (Small Blue) [CS]; *Spiranthes spiralis* (Autumn Lady's-Tresses) [NI] |
| **Melville Road Verge SINC and RVEI** | Immediately adjacent | A mixture of grassland types, that support a notable species.<br>Notable species: *Raphanus raphanistrum* subsp. *maritimus* (Sea Radish) [CS]. |
| **Milton Locks SINC** | Within the Proposed Development | A small block of upper salt-marsh and associated rank grassland and coastal scrub that is unmanaged.<br>Notable species: *Sturnus vulgaris* (Starling) [Red list]; *Sea Radish* [CS] and *Passer domesticus* (House Sparrow) [s41]. |
| **Milton Common SINC** | Within the Proposed Development | Large area of grassland and scrub, which is reclaimed intertidal land. The Site supports five main habitats types – rough grassland, short grassland, coastal grassland, scrub and aquatic/swamp vegetation.<br>There is a high floral species diversity within the site, due to the varied habitat and size of the Site.<br>Notable species: *Lathyrus aphaca* (Yellow Vetchling) [RDB Vulnerable]; *Medicago polymorpha* (Toothed Medick) [NS]; *Bupleurum tenuissimum* (Slender Hair's Ear) [s41] and *Calamagrostis canescens* (Purple Small-Reed) [CR]. |
| **Great Salterns Lake SINC** | Immediately adjacent | Semi-natural coastal and estuarine habitats, including saltmarsh, intertidal mudflats, sand dunes, shingle, brackish ponds, grazing marsh and maritime grasslands.<br>Areas of open freshwater (e.g. lakes, ponds, canals, rivers, streams and ditches) which support outstanding assemblages of floating/submerged/emergent plant species, invertebrates, birds or amphibians. |

| Site Name, Designation and reference | Distance (m) from Proposed Development | Habitats Present and Notable species |
|---|---|---|
| | | Notable species: *Apium graveolens* (Wild Celery) [CS] |
| **Golf Course North of Burrfields Road SINC** | Immediately adjacent | The site is part of a golf course, and support a range of grassland habitats. The fairways and greens are amenity swards and many of the 'roughs' are improved and species-poor. However, there are many 'roughs' that support semi-improved grassland and coastal habitats.<br><br>Notable species: Quaking-grass; *Chamaemelum nobile* (Chamomile) [s41]; *Genista tinctoria* (Dyer's Greenweed) [IUCN NT]; *Ononis spinosa* (Spiny Restharrow) [CS]; *Ruscus aculeatus* (Butcher's-broom) [EU Dir Annex 5]; *Spergula arvensis* (Corn Spurrey) [IUCN NT] and *Trifolium fragiferum* (Strawberry Clover) [IUCN V]. |
| **Farlington Marshes SINC** | 43 m east | Semi-improved grasslands which retain a significant element of unimproved grassland.<br><br>Notable species: *Apium graveolens* (Wild Celery) [nHS]; *Carex divisa* (Divided Sedge) [s41]; *Hordeum marinum* (Sea Barley) [s41]; Inula crithmoides (Golden-Samphire) [NS]; *Lotus tenuis* (Narrow-Lvd Bird's-Foot-Trefoil) [nHR]; *Oenanthe lachenalii* (Parsley Water-Dropwort) [CS] |
| **Adjacent to Farlington Playing Fields SINC** | Immediately adjacent | Grasslands which have become impoverished through inappropriate management but which retain sufficient elements of relic unimproved grassland to enable recovery.<br><br>Semi-natural coastal and estuarine habitats, including saltmarsh, intertidal mudflats, sand dunes, shingle, brackish ponds, grazing marsh and maritime grasslands.<br><br>Notable species: *Carex divisa* (Divided Sedge); *Ononis spinosa* (Spiny Restharrow). |
| **East and West of Gilman Road SINC** | Immediately adjacent | The site comprises of a series of grasslands along Portsdown Hill. The majority of the site supports semi-improved chalk grassland. Majority of the grassland is herb-rich and diverse in chalk flora – with a total of 24 calcareous grassland indicator species noted.<br><br>Notable species: *Cruciata laevipes* (Crosswort) [IUCN NT]; *Euphorbia exigua* (Dwarf Spurge) [IUCN V]; *Fragaria vesca* (Wild Strawberry) [IUCN NT]; *Knautia* |

| Site Name, Designation and reference | Distance (m) from Proposed Development | Habitats Present and Notable species |
|---|---|---|
| | | *arvensis* (Field Scabious) [IUCN NT]; *Onobrychis viciifolia* (Sainfoin) [IUCN V]; *Plantago media* (Hoary Plantain) [IUCN NT] and *Spiranthes spiralis* Autumn Lady's-tresses [IUCN NT]. |
| **Farlington Avenue SINC and RVEI** | Immediately adjacent | Semi-improved grasslands which retain a significant element of unimproved grassland. High herb presence and 18 chalk grassland indicators, some at high frequency.<br>Notable species: *Campanula rotundifolia* (Harebell) [IUCN NT]. |
| **Meadow West of Farlington Avenue SINC** | Immediately adjacent | Grasslands which have become impoverished through inappropriate management but which retain sufficient elements of relic unimproved grassland to enable recovery. |
| **Land south of Portsdown Hill Road SINC** | Immediately adjacent | Semi-improved grasslands which retain a significant element of unimproved grassland.<br>Grasslands which have become impoverished through inappropriate management but which retain sufficient elements of relic unimproved grassland to enable recovery.<br>Notable species: *Cupido minimus* (Small Blue) [CS]; *Spiranthes spiralis* (Autumn Lady's-Tresses) [NI] |
| **Land south of Portsdown Hill Road SINC** | Immediately adjacent | Semi-improved grasslands which retain a significant element of unimproved grassland.<br>Grasslands which have become impoverished through inappropriate management but which retain sufficient elements of relic unimproved grassland to enable recovery.<br>Notable species: *Cupido minimus* (Small Blue) [CS]; *Spiranthes spiralis* (Autumn Lady's-Tresses) [NI] |
| **London Road Fen SINC** | Immediately adjacent | An area of wet broadleaved woodland and tall swamp/fen along a shallow valley between arable fields and allotments.<br>Notable species: *Valeriana dioica* (Marsh Valerian) [IUCN NT]. |

| Site Name, Designation and reference | Distance (m) from Proposed Development | Habitats Present and Notable species |
|---|---|---|
| **Kings Pond Meadow SINC** | Within the Proposed Development | Semi-improved grasslands which retains a significant element of unimproved grassland.<br>Notable species: None cited. |
| **Crabden's Copse SINC** | Immediately adjacent | Ancient semi-natural woodland.<br>Notable species: none cited. |
| **Crabden's Row SINC** | Immediately adjacent | Ancient semi-natural woodland.<br>Notable species: none cited. |

### 3.1.3. OTHER HABITATS OF CONSERVATION IMPORTANCE

3.1.3.1. Ancient Semi Natural Woodland listed on the National Inventory of Woodland and Trees is present adjacent to the Order Limits at Lovedean substation, which comprises Stoneacre Copse, Crabdens Row and Crabdens Copse.

3.1.3.2. Marrelsmoor Coppice is another area of Ancient Semi-Natural Woodland within 100 m of the Proposed Development, and is located along the Onshore Cable Corridor section.

3.1.3.3. Nine types of Priority Habitat are found within 100 m of the Proposed Development. Habitat types cover those associated with the coastline (grazing marsh, mudflats, shingle, saline lagoons). With other habitats including deciduous woodland, lowland calcareous grassland, lowland acid grassland, lowland meadows and reedbeds.

**Table 4 - Priority Habitats within 100m of the Proposed Development**

| Habitat Type | Description |
|---|---|
| **Coastal and flood plain grazing marsh** | Grazing marsh is defined as periodically inundated pasture, or meadow with ditches which maintain the water levels, containing standing brackish or fresh water. The ditches are especially rich in plants and invertebrates. Almost all areas are grazed and some are cut for hay or silage. Sites may contain seasonal water-filled hollows and permanent ponds with emergent swamp communities, but not extensive areas of tall fen species like reeds; although they may abut with fen and reed swamp communities. This habitat type occurs within the Survey Area and areas within 100 m from it. |
| **Coastal vegetated shingle** | Shingle is defined as sediment with particle sizes in the range 2–200 mm. It is a globally restricted coastal sediment type with few occurrences outside north-west Europe, Japan and New Zealand. Shingle beaches |

| Habitat Type | Description |
|---|---|
| | are widely distributed round the coast of the UK, where they develop in high energy environments. In England and Wales it is estimated that 30% of the coastline is fringed by shingle. However most of this length consists of simple fringing beaches within the reach of storm waves, where the shingle remains mobile and vegetation is restricted to temporary and mobile strandline communities. This habitat type occurs within the Survey Area and areas within 100 m from it. |
| **Deciduous woodland** | Lowland mixed deciduous woodland includes woodland growing on the full range of soil conditions, from very acidic to base-rich, and takes in most semi-natural woodland in southern and eastern England, and in parts of lowland Wales and Scotland. It thus complements the ranges of upland oak and upland ash types. It occurs largely within enclosed landscapes, usually on sites with well-defined boundaries, at relatively low altitudes, although altitude is not a defining feature. This habitat type occurs within the Survey Area and areas within 100 m from it. |
| **Lowland calcareous grassland** | Lowland calcareous grasslands are developed on shallow lime-rich soils generally overlying limestone rocks, including chalk. These grasslands are now largely found on distinct topographic features such as escarpments or dry valley slopes and sometimes on ancient earthworks in landscapes strongly influenced by the underlying limestone geology. More rarely, remnant examples occur on flatter topography such as in Breckland and on Salisbury Plain. They are typically managed as components of pastoral or mixed farming systems, supporting sheep, cattle or sometimes horses; a few examples are cut for hay. This habitat type occurs adjacent to the Survey Area and within 100 m from it. |
| **Lowland dry acid grassland** | Lowland acid grassland typically occurs on nutrient-poor, generally free-draining soils with pH ranging from 4 to 5.5 overlying acid rocks or superficial deposits such as sands and gravels. Definition of lowland acid grassland is problematical but here it is defined as both enclosed and unenclosed acid grassland throughout the UK lowlands (normally below c300 m). It covers all acid grassland managed in functional enclosures; swards in old and non-functional enclosures in the upland fringes, which are managed as free-range rough grazing in association with unenclosed tracts of upland, are excluded. This habitat type occurs adjacent to the Survey Area and within 100 m from it. |
| **Lowland meadows** | These are unimproved grasslands on well drained neutral soils in the lowlands. Most are on well-drained ground, with grassy swards and an abundance of herbs. Much less common are examples where the same species are accompanied by wetland herbs on ground which is wetter as a result of being flushed or periodically inundated. This habitat is scattered through the lowlands, with records also from low altitude sites |

| Habitat Type | Description |
|---|---|
| | in more generally upland areas in the Highlands and islands. This habitat occurs within the Survey Area and areas within 100 m from it. |
| **Mudflats** | Mudflats are sedimentary intertidal habitats created by deposition in low energy coastal environments, particularly estuaries and other sheltered areas. Their sediment consists mostly of silts and clays with a high organic content. Towards the mouths of estuaries where salinity and wave energy are higher the proportion of sand increases. Mudflats are intimately linked by physical processes to, and may be dependent on, other coastal habitats such as soft cliffs and saltmarshes. This habitat type occurs within the Survey Area and areas within 100 m from it. |
| **Reedbeds** | Reedbeds are wetlands dominated by stands of the common reed *Phragmites australis*, wherein the water table is at or above ground level for most of the year. They tend to incorporate areas of open water and ditches, and small areas of wet grassland and carr woodland may be associated with them. There are about 5,000ha of reedbeds in the UK, but of the 900 or so sites contributing to this total, only about 50 are greater than 20 ha, and these make a large contribution to the total area. Reedbeds are amongst the most important habitats for birds in the UK. This habitat type occurs within 100 m of the Survey Area. |
| **Saline lagoons** | Lagoons in the UK are essentially bodies, natural or artificial, of saline water partially separated from the adjacent sea. They retain a proportion of their seawater at low tide and may develop as brackish, full saline or hyper-saline water bodies. Lagoons can contain a variety of substrata, often soft sediments which in turn may support tasselweeds and stoneworts as well as filamentous green and brown algae. In addition, lagoons contain invertebrates rarely found elsewhere. They also provide important habitat for waterfowl, marshland birds and seabirds. This habitat type occurs within 100 m of the Survey Area. |

## 3.2. THE SOLENT WADERS AND BRENT GOOSE STRATEGY

3.2.1.1. The Solent Waders and Brent Goose Strategy ('SWBGS') is a conservation partnership, aiming to conserve the internationally important Brent Goose and wading bird populations within and around the SPAs and Ramsar wetlands of the Solent coast. The SWBGS provides a framework for identifying sites lying outside the physical boundaries of SPA/Ramsar sites but which are, or may be, used by bird species associated with the European sites. These sites are termed Functionally

Linked Land[6] and are considered functionally linked to designated land. Sites are detailed in Figure 1.

3.2.1.2. The relevance of the strategy is 'any impact on a wader roost or Brent Goose feeding site outside of the SPA/Ramsar site boundaries may be considered to have an effect on the international site itself. Where impacts cannot be avoided or satisfactorily reduced/mitigated, the competent authority will need to ascertain that the plan or Proposed Development will not have a negative impact on the designated populations, which would constitute an adverse effect on the integrity of the international site.'[6]

3.2.1.3. The principle aim of this Strategy is 'to inform decisions relating to strategic planning as well as individual development proposals, to ensure that sufficient feeding and roosting resources continue to be available and the integrity of the network of sites is restored and maintained, in order to ensure the survival of these coastal bird populations.'[7]

## 3.3. HABITAT SURVEY

3.3.1.1. The following Section (Tables 5, 6 and 7) summarises the broad habitat types identified using pre-classification mapping and recorded during the Phase 1 habitat survey. These are described in context of the three main elements of the Proposed Development (Eastney (Landfall); Onshore Cable Corridor; and Converter Station Area).

3.3.1.2. Habitats are mapped on Figure 3. A description of the dominant and notable species is provided below. Alpha-numeric codes used in this section cross-refer to the JNCC Phase 1 habitat survey classification. The order of the habitat descriptions below reflects their ordering in the Phase 1 habitat survey manual and does not reflect habitat importance.

**Table 5 – Eastney (Landfall) Habitat Descriptions**

| Habitat Type | JNCC Code | Description |
|---|---|---|
| **Scrub** | A2 | Scattered scrub was recorded both around Fraser Range and within Land West of Fort Cumberland SINC, which are present in the adjacent areas surrounding the Landfall. Common scrub species recorded include bramble *Rubus fruticosis* agg. and gorse *Ulex europaeus*. |

[6] http://publications.naturalengland.org.uk/publication/6087702630891520

[7] https://www.portsmouth.gov.uk/ext/documents-external/pln-local-dev-openspace-diversitysolentwader-brentgoose-strategy.pdf

| Habitat Type | JNCC Code | Description |
|---|---|---|
| **Semi-improved grassland** | B2.2 | The main areas of semi-improved, low nutrient grassland within the Landfall was recorded within Land West of Fort Cumberland SINC, with species including yellow rattle *Rhinanthus minor*, viper's bugloss Echium vulgare, kidney vetch *Anthyllis vulneraria* and bird's foot trefoil *Lotus corniculatus*. The SINC is also noted for the presence of dittander *Lepidium latifolium*, County scarce sea radish *Raphanus raphanistrum maritimus* and, of National Interest, autumn lady's-tresses *Spiranthes spiralis*. |
| **Intertidal – shingles/cobbles** | H1.2 | The beach at the Landfall generally comprises a long, wide and continuous shingle beach with associated promenade and parking, and landward development including barracks, a caravan park and disused military ranges. Colonising vegetation such as sea kale *Crambe maritima* and sea beet *Beta vulgaris* and fennel *Foeniculum vulgare* were recorded. Nationally scarce Nottingham catchfly *Silene nutans* is known to be present on more stable parts of the beach near the caravan park; however, was not recorded during the survey. Coastal vegetated shingle habitats qualify as a Habitat of Principal Importance. |
| **Amenity grassland** | J1.2 | The majority of amenity grassland present within the Landfall was recorded at Southsea Leisure Park, interspersed between static caravan plots. |
| **Built-up areas** | J3 | The Landfall and Onshore Cable Corridor passes through built up environs of a former military range, Fraser Range. This derelict nautical gunnery comprised a series of flat roofed structures and hardstanding, with scattered scrub and grassland colonising in dilapidated surfaces. |
| **Hard standing** | N/A | The majority of hard standing is present in Frasers Range. The Onshore Cable Corridor then follows the access track, which joins Fort Cumberland Road at the bareground carpark of Land West of Fort Cumberland SINC. At this point, the Onshore Cable Corridor passes the northern end of Melville Road, where the Road Verge is designated as a SINC for the presence of the County Scarce sea radish. |

**Table 6 - Onshore Cable Corridor Habitat Descriptions**

| Habitat Type | JNCC Code | Description |
|---|---|---|
| **Semi-natural broadleaved woodland** | A1.1.1 | A small area of semi-natural broadleaved woodland is present within the Survey Area at Milton Locks Nature Reserve, with species including hawthorn *Crataegus monogyna*, blackthorn *Prunus spinose*, white poplar *Prunus spinose* and oak *Quercus ilex.* |
| **Semi-natural coniferous woodland** | A2.1.2 | A small area of semi-natural coniferous woodland is present within the Survey Area to the north of Tudor Sailing Club. |
| **Scattered scrub** | A2.1.2 | Small areas of scattered scrub are present in locations across the Onshore Cable Corridor, most notably in Milton Common, Milton Locks Nature Reserve, and the Order Limits around allotments to the souths of Milton Locks Nature Reserve. This habitat is dominated by bramble *Rubus fruticosus*. |
| **Scattered trees** | A3.1 | Scattered trees were recorded along the Onshore Cable Corridor. Whilst the route is generally confined to the path of existing infrastructure, tree-lined roads were mainly noted at Bransbury Park, University of Portsmouth, Milton Park, Milton Common (SINC), Southsea Golf Course (SINC), Interchange Park and Airport Industrial Estate, Walton Road Industrial Estate, Mountbatten Business Park, Residential roads at Drayton, roads adjacent to Meadow west of Farlington Avenue (SINC) and tree lined roads at Widley. |
| **Semi-improved grassland** | B2.2 | Grassland fields were noted in association with, where the route leaves the B2150, Hambledon Road. Access to these fields was not possible at the time of survey; however, Priority Habitat records suggests that fields in this locality are lowland meadows with an affinity to MG5, unimproved neutral grassland. |
| **Running water** | G2 | The Onshore Cable Corridor crosses ditches containing running water, as the route diverts off Hambledon Road. This watercourse was not accessed at the time of survey as permission was not granted. From Ordnance Survey, the watercourse resembles an agricultural drain. |
| **Intertidal mud/sand** | H1.1 | Main areas of intertidal habitats that interface the proposed development are located within the Solent Maritime SAC, Chichester and Langstone Harbours Ramsar Site and Langstone Harbours SSSI. Although the route does not |

| Habitat Type | JNCC Code | Description |
|---|---|---|
| | | intersect this habitat, the cables follow the A2030 Eastern Road, which runs parallel to the intertidal habitats before crossing the harbour on an existing road bridge before joining the A27 Havant Bypass. Mudflats are exposed at low tide and are generally rich in invertebrates and may support important plant communities and bird assemblages. |
| **Arable** | J1.1 | The Onshore Cable Corridor crosses intensively farmed arable fields before reaching the proposed converter station location at Lovedean. Arable fields, at the time of survey, had recently been ploughed and drilled. |
| **Amenity grassland** | J1.2 | Amenity grassland, regularly mown grassland with a short sward and limited species diversity, is present along road verges and public spaces such as Farlington Playing Fields. |
| **Hedgerows** | J2 | The Onshore Cable Corridor crosses a series of hedgerows which have been assessed as being either species rich or species poor. These features are particularly prevalent at the Converter Station Area and the northern extent of the Onshore Cable Corridor. |
| **Built-up Areas** | J3 | The Onshore Cable Corridor is almost entirely urban with exception of the final leg of the route through an agricultural landscape before connecting with the proposed Converter station at Lovedean. The Onshore Cable Corridor follows built up, urban areas around Portsmouth, including Eastney, Milton, Ancorage Park, Drayton, Purbrook and Waterlooville. |
| **Hard standing** | N/A | The majority of the route is within hard standing areas of existing highways, including the A288, A2030, Farlington Avenue, B2177, A3, B2150, Milton Road, Lovedean Lane and Day Lane, as well as car parks. |
| **Allotments** | N/A | The Onshore Cable Corridor runs through an area of allotments situated to the south of Milton Locks Nature Reserve. |

**Table 7 - Converter Station Habitat Descriptions**

| Habitat Type | JNCC Code | Description |
|---|---|---|
| **Semi natural broadleaved woodland** | A1.1.1 | Parcels of semi natural broadleaved woodland are present to the east and south of the Converter Station Area. Dominant species include ash *Fraxinus excelsior*, hazel *Corylus avellana*, elder *Sambucus nigra* and beech *Fagus sylvatica*. A dense cover of ivy *Hedera* sp. was also recorded on the ground and on some trees, particularly on the embankments adjacent to the Converter Station Area to the south. In the woodland to the west, the ground flora comprised wood anemone *Anemone nemorosa*, ramsons *Allium ursinum* and bluebell *Hyacinthoides non-scripta*. |
| **Plantation woodland** | A1.1.2 | A stand of plantation woodland, comprised predominantly mature and semi mature sycamore *Acer pseudoplantanus* is present to the eastern extent of the Converter Station Area. A second parcel of this habitat was recorded to the west. Trees in this parcel had been recently planted |
| **Poor semi-improved neutral grassland** | B1.6 | Poor semi improved neutral grassland was recorded in three fields to the west and south of the Converter Station Area. Species present include red fescue *Festuca rubra*, Yorkshire fog *Holcus lanatus* perennial rye grass *Lolium perenne*, cocks foot *Dactylis glomerata*, and white clover *Trifolium repens*. Sward height was approximately 30cm. |
| **Improved grassland** | B4 | Improved grassland was present in fields to the west of the Converter Station Area. Horses were noted to be grazing in one field to the south. Dominant species are perennial rye grass, dock and sorrel *Rumex acetosa*. Sward height was approximately 20cm. |
| **Tall ruderal** | C3.1 | Tall ruderal vegetation is present in a number of locations, particularly along field boundaries. Species present include nettle *Urtica dioica,* dock *Rumex obtusifolius* and bramble *Rubus* sp. |
| **Arable** | J1 | Arable fields were noted to the north and south of the Converter Station Area. The fields to the north were ploughed; to the south recently planted crops were present. |
| **Species-poor hedgerow** | J2.2 | A number of hedgerows were present at the site, particularly marking field boundaries to the west. Dominant species include blackthorn *Prunus spinosa*, hawthorn *Crataegus monogyna*, bramble and hazel. Hedges to the north appeared recently managed. |

| Habitat Type | JNCC Code | Description |
|---|---|---|
| **Hedgerow with trees** | J2.3 | Hedgerows with trees were present to the north of the sites. Dominant species include oak *Quercus robur*, ash, elder, hawthorn, blackthorn and sycamore. |

## 3.4. PROTECTED AND NOTABLE SPECIES ASSESSMENT

3.4.1.1. The potential for the Survey Area to support legally protected species and notable species has been assessed using the results of the desk study and observations made during the field surveys of habitats across the Survey Area. Desk study records have only been considered if they relate to species that may be supported by habitats within the Survey Area.

3.4.1.2. Habitats present within the Survey Area are suitable for the following species; further consideration to the likelihood for these species to be present within the Survey Area is discussed in further detail below. The following species may occur within the Survey Area:

- Bats;
- Badger;
- Otter;
- Water vole;
- Dormouse;
- Other notable mammals (including hedgehog, brown hare, and common seal);
- Breeding birds;
- Wintering and passage birds;
- Reptiles;
- Great crested newt;
- Other amphibians; and
- Invertebrates.

### 3.4.2. BATS

3.4.2.1. The desk study returned records of eleven bat species within the Study Area, which comprised 588 individual bat records since 2000. This included records for serotine *Eptesicus serotinus*, brown long-eared *Plecotus auritus,* noctule *Nyctalus noctula*, common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus*,

Daubenton's Myotis *daubentonii*, Natterer's bat *Myotis natteri* and whiskered bat *Myotis mystacinus*. There were two records for Bechstein's bat *Myotis bechsteinii* and single records for Alcathoe bat *Myotis alcathoe* and parti-coloured bat *Vespertillio murinus*. The closest record to the Converter Station Area was a brown long-eared approximately 250 m to the north-east of the Order Limits.

3.4.2.2. Bechstein's bat are known within the Forest of Bere, a large area of ancient woodland and a Forestry Commission site 3 km southeast of Lovedean. The two records for Bechstein's bat from the desk study are from approximately 1.8 km east of the Survey Area to the east of the A3M to the east of Waterlooville and from Hayling Island, approximately 1.8 km to the east of the Survey Area.

3.4.2.3. Habitats in the Survey Area, including buildings and trees (both scattered and those occurring within woodland and hedgerows), have the potential to support roosting bats. In addition, linear features, such as the hedgerows and scattered tree lines which border the A2030 north of the Havant Bypass, London Road, Hambledon Road and Milton road, offer commuting habitat for bats. The woodland, improved grassland fields, golf course and urban areas adjacent to the Onshore Cable Corridor offer foraging habitat for bats.

3.4.2.4. Ancient woodlands surrounding Lovedean Substation and associated hedgerows are suitable to support roosting, foraging and commuting bat species, including Bechstein's bat.

### 3.4.3. BADGER

3.4.3.1. Converter Station Area No records of badger *Meles meles* were returned from the desk study within the vicinity of the Converter Station Area. Habitats including semi-natural [redacted]

3.4.3.2. [redacted]

**Onshore Cable Corridor and Eastney (Landfall)**

3.4.3.3. Four records of [redacted] were returned from the desk study with the most recent one recorded in 2009. These records are near to [redacted] and the [redacted]

3.4.3.4. Habitats near to the northern section of the Onshore Cable Corridor, including semi-natural woodland, scrub and hedgerows are suitable for supporting foraging and sheltering [redacted]. However, no badger signs have been identified during Phase 1 surveys along the Onshore Cable Corridor and overall there is limited suitable habitat within Order Limits.

### 3.4.4. OTTER

3.4.4.1. No records of otter were returned from the desk study. Suitable habitat for this species, including foraging, commuting, and sheltering habitat, is present in the Survey Area, particularly within the coastal area along the A2030 and the Farlington Marshes.

### 3.4.5. WATER VOLE

3.4.5.1. Fourty water vole *Arvicola amphibius* records were found within the Study Area during the desk study. The most recent record was reported in 2012, all are from Farlington Marshes.

3.4.5.2. There are waterbodies along the route which have the potential to provide suitable habitat for water voles. Signs of water vole have not been recorded phase 1 habitat surveys.

### 3.4.6. HAZEL DORMOUSE

**Converter Station Area**

3.4.6.1. One record of hazel dormouse *Muscardinus avellanarius* was returned within the vicinity of the Converter Station Area, from Stoneacre Copse in 2011. Habitats including semi-natural woodland and hedgerows are suitable for supporting foraging and sheltering habitat for hazel dormice.

**Onshore Cable Corridor and Eastney (Landfall)**

3.4.6.2. There are 13 records of hazel dormouse recorded along the route, the most recent record is from 2012. Habitats within the Survey Area, including the hedgerows, small and larger areas of woodland east of the A3 London road and north-west of Waterlooville, offer suitable foraging and sheltering habitat for dormice. Scrub habitats connected to these areas are also likely to offer suitable habitat for this species.

### 3.4.7. OTHER MAMMALS

3.4.7.1. The desk study returned records of other notable mammal species, including hedgehog *Erinaceus europaeus,* brown hare *Lepus europaeus*, and common seal *Phoca vitulnia*. Habitats within the Survey Area, including areas of woodland, hedgerow, semi-improved grassland, arable land, and coastal area offer suitable foraging and sheltering habitat for these species.

### 3.4.8. BREEDING BIRDS

3.4.8.1. The desk study returned 155 species of bird within the Study Area. Sixty-six of these species are listed under Schedule 1 of the Wildlife and Countryside Act 1981, including amongst others: little ringed plover *Charadrius dubius*, osprey *Pandion haliaetus*, common crossbill *Loxia curvirostra*, Dartford warbler *Sylvia undata*,

firecrest *Regulus ignicapilla*, kingfisher *Alcedo atthis*, hobby *Falco subbuteo*, barn owl *Tyto alba*, red kite *Milvus milvus,* bittern *Botaurus stellaris,* woodlark *Lullula arborea*. It should be noted that these records do not distinguish those species known to or likely to be breeding or those wintering or on passage.

3.4.8.2. Twenty-nine of the 155 species are listed as Priority Species on Section 41 of the NERC Act representing widespread but declining species such as cuckoo *Cuculus canorus* and yellowhammer *Emberiza citronella*.

**Converter Station Area**

3.4.8.3. The desk study returned records of peregrine *Falco peregrinus* (Schedule 1) and house sparrow *Passer domesticus* (Priority Section 41 species) to the south-west of the Converter Station Area.

3.4.8.4. Habitats in the vicinity of the converter station, including woodland, scrub and hedgerows are suitable to support a range of breeding birds.

**Onshore Cable Corridor and Eastney (Landfall)**

3.4.8.5. The desk study returned records of Schedule 1 species including Dartford Warbler *Sylvia undata* and black redstart *Phoenicurus ochruros*. Mediterranean gull *Larus melanocephalus*, common tern *Sterna hirundo*, sandwich tern *Sterna sandvicensis* and little tern *Sternula albifrons* have confirmed breeding records within Chichester and Langstone Harbours SPA but these are located over 500 m buffer from the Order Limits.

3.4.8.6. Habitats within the Survey Area, included woodland, scrub, hedgerow and coastal habitats are therefore likely to support a range of breeding birds.

### 3.4.9. WINTERING AND PASSAGE BIRDS

**Converter Station Area**

3.4.9.1. The desk study returned one notable record referring to wintering birds comprising a brambling *Fringilla montifringilla* to the south of the Converter Station Area. This species is listed on Schedule 1 of the WCA by virtue of its small breeding population in northern Scotland. It is however a widespread and relatively common winter visitor to the rest of the UK.

**Onshore Cable Corridor and Eastney (Landfall)**

3.4.9.2. There are a number of SPA and Ramsar sites adjacent to the Proposed Development where their qualifying features comprise the assemblage of wading and wintering birds present. Furthermore, several suitable fields exist across the Onshore Cable Corridor suitable to support roosting, loafing and foraging during high-tide.

### 3.4.10. REPTILES

3.4.10.1. Converter Station Area The desk study did not return any records of reptiles within the vicinity of the Converter Station Area. Habitats including grassland fields, woodland, hedgerows and logs piles and debris offer suitable hibernacula and foraging opportunities for the four common reptile species.

**Onshore Cable Corridor and Eastney (Landfall)**

3.4.10.2. The desk study returned records of three reptile species within the Study Area: common lizard *Zootoca vivipara* (nine records) and slow-worm *Anguis fragilis* (four records) and a single record of adder *Vipera berus* from Hayling Island. Common lizard records were along the route from Fort Cumberland, Farlington Marshes, including the playing fields, Portsmouth Golf Club and to the west of Denmead. Slow worm records were from Milton Common, Farlington Marshes and the Waterlooville area.

3.4.10.3. Habitats within the Survey Area, including tussock grassland and scattered scrubs in the Southsea beach, woodland and dense scrub west of the junction of the A3 with the B2177, the golf course north-east of the junction offer suitable habitat for common species of reptiles. Grassland fields and associated margins northeast of the B2150 present habitats suitable to support reptile species.

### 3.4.11. GREAT CRESTED NEWT

**Converter Station Area**

3.4.11.1. The desk study did not return any records of great crested newt within 250 m of the Converter Station Area and no water bodies have been identified in this area.

**Onshore Cable Corridor and Eastney (Landfall)**

3.4.11.2. The desk study returned nine records of great crested newt within the Study Area; the most recent record is from 2015 in the Purbrook area. Water bodies have been identified within 250 m of the Onshore Cable Corridor.

### 3.4.12. OTHER AMPHIBIANS

**Converter Station Area**

3.4.12.1. The desk study did not return records of other amphibians in the vicinity of the Converter Station Area. Terrestrial habitats could potentially support these species, but no water bodies were identified.

**Onshore Cable Corridor and Eastney (Landfall)**

3.4.12.2. The desk study returned two records of common toad *Bufo bufo*. This species is listed as a Priority Species in accordance with Section 41 of the NERC. Habitats along the route, including woodland, scrub, semi-improved grassland and coastal habitats are likely to support common toads.

### 3.4.13. INVERTEBRATES

#### Converter Station Area

3.4.13.1. The desk study did not return any invertebrate records from around the Converter Station Area. Habitats within the Survey Area including woodland, scrub and semi-improved grassland could support invertebrates.

#### Onshore Cable Corridor and Eastney (Landfall)

3.4.13.2. The desk study returned 947 invertebrate records, including records of species which are listed on Section 41 of the NERC Act. Sixteen records of stag beetle *Lucanus cervus* were returned concentrated around Drayton, Cosham and Widley.

3.4.13.3. Habitats within the Survey Area, including woodland, scrub, semi-improved grassland and inter-tidal habitats are likely to support invertebrates, including notable species.

### 3.4.14. INVASIVE NON-NATIVE SPECIES

3.4.14.1. Converter Station Area No invasive plant species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) were identified within the vicinity of the Converter Station Area.

#### Onshore Cable Corridor and Eastney (Landfall)

3.4.14.2. During field surveys a stand of Japanese knotweed *Reynoutria japonica* was identified along the boundary of allotments (approximate grid reference SZ 67299 99600). Japanese knotweed is listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended), which makes it an offence to cause to grown in the wild.

# 4. DISCUSSION AND EVALUATION

## 4.1. STATUTORY DESIGNATED SITES

4.1.1.1. The Habitats Regulations provide strict protection to sites of European and/or international importance. This includes requiring Proposed Developments or plans to be screened for likely significant effects upon SPA, SAC and candidate SACs ('cSACs'). Guidance also requires potential SPAs ('pSPAs') and Ramsars are subject to the same assessment. Therefore, due to the presence of Solent Maritime SAC, Chichester and Langstone Harbours SPA/Ramsar and Solent and Dorset Coast pSPA the Proposed Development must be screened by the Competent Authority, in this case the Local Planning Authority, to determine whether significant effects are likely to result. If the Competent Authority is unable to conclude that significant effects are not likely, the Proposed Development must be subject to additional assessment in accordance with the Habitats Regulations.

4.1.1.2. SSSIs are subject to strict protection under the Wildlife and Countryside Act 1981 (as amended). This requires landowners to maintain these sites in favourable condition and works within these sites are managed by the appropriate national statutory body via the consent process. Certain operations within SSSIs require consent; these are specific to each SSSI. The current Proposed Development does not directly affect any SSSIs, however construction effects may give rise to indirect impacts such as disturbance and habitat degradation. Pollution prevention controls and best-practice construction measures should be implemented through a Construction and Environment Management Plan to ensure mitigation is in place to ensure indirect effects to designated sites do not occur.

## 4.2. NON-STATUTORY DESIGNATED SITES

4.2.1.1. The Chichester Local Plan '…protects sites of biodiversity importance which contain wildlife or geological features that are of special interest.' In addition, East Hampshire District Council Local Plan C4 requires 'Where sites have been identified as having local nature conservation interest the Council will have full regard for their scientific significance and nature conservation value when assessing development proposals that may affect those sites.'

4.2.1.2. Seventeen SINCs have been identified within the Study Area, two of which are also designated a RVEIs. Where the Proposed development cannot avoid any SINCs, further detailed surveys may be required to inform an appropriate mitigation strategy to protect the site and to ensure important plant/animal assemblages are preserved/conserved/protected through translocation and reinstatement.

## 4.3. HABITATS

4.3.1.1. A number of habitats identified as HPI in accordance with S41 of the NERC Act 2006 have been identified within the Study Area. Under Section 40 of this legislation, every public body (including planning authorities) must, 'in exercising its functions, have regard so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity'.

4.3.1.2. The Landfall at Eastney may directly affect areas of Coastal Vegetated Shingle HPI. Coastal vegetated shingle habitats are extremely fragile and excavation and construction access is likely to degrade the site through loss of vegetation and incorrect reinstatement and management, resulting in lack of regeneration. The impacts on this habitat resulting from the Landfall will need to be further investigated once construction measures are known and the precise location is identified. Any Landfall design should avoid/minimise direct effects on this habitat and any work in this area should be carried out under an appropriate method statement, which should be informed by a detailed survey of the area.

4.3.1.3. The western sub-option of the Onshore Cable Corridor directly affects areas of unimproved grassland at Denmead Meadows, north of the B2150.

4.3.1.4. Lowland Mixed Deciduous Woodland habitats surround the existing National Grid Sub-station. The proposed Converter Station Area should seek to avoid these habitats and retain a c.15-30 m buffer from the boundary of any development. Any loss in Lowland Mixed Deciduous Woodland habitats should be adequately compensated through connected planting at an appropriate ratio to be agreed with the Local Planning Authority and Natural England. Where the Proposed Development affects areas of Lowland Mixed Deciduous Woodland, further quantification of the quality and type of woodlands to be lost may be required through NVC survey, which will inform an appropriate mitigation strategy for the habitat to be produced.

## 4.4. PROTECTED AND NOTABLE SPECIES

4.4.1.1. The results of the desk study, Phase 1 Habitat Survey and protected species assessment highlighted the potential presence of several protected species or species of conservation concern within the Survey Area, or within the immediate surroundings of the Survey Area. These include bats, badgers, dormice, water voles, otters, birds, reptiles, great crested newts, invertebrates and potentially controlled species (invasive plants). The legal protection afforded to these species is outlined below and, where appropriate, the requirement for further survey and/ or mitigation measures is identified.

### 4.4.2. BATS

4.4.2.1. All species of bats recorded within the UK are protected from killing, injury and disturbance[8] and their roosts protected from damage or destruction under the Habitats Regulations. Protection is also afforded under the Wildlife and Countryside Act 1981 (as amended) with respect to disturbance of individuals occupying places of rest or shelter and obstruction of access to these. Activities that would otherwise constitute an offence under this legislation may be licensed by Natural England for certain purposes.

4.4.2.2. Certain species of bats, including the Bechstein's bat, greater and lesser horseshoe bats, noctule bat, brown long-eared bat and soprano pipistrelle bat are also listed as Species of Principal Importance ('SPI') for the conservation of biodiversity in England in accordance with Section 41 of the NERC 2006. Section 40 obliges public bodies (including local planning authorities) to have regard for the conservation of biodiversity (including SPI) when discharging their duties (including determining planning applications).

4.4.2.3. Construction activities, if undertaken at night, may affect bats foraging and commuting within and adjacent to the Survey Area. This is most likely within the vicinity of hedgerows, watercourses and areas of woodland adjacent to the Proposed Development.

4.4.2.4. Where the Converter Station will be constructed, hedgerows, scrub and woodland might be damaged or remove for the purpose of the works. These may support suitable habitats for foraging and commuting bats, which would result in potential disturbance, fragmentation and severance effects.

4.4.2.5. There are a number of trees within the Survey Area which may be damaged or require removal to construct the Proposed Development. These trees may be suitable for supporting roosting bats. A large number of buildings are adjacent to the Proposed Development and some of these exhibit features as loft spaces, tiles (some of which are cracked / broken) which may support roosting bats. Considering the scale and nature of the proposed works, it is not anticipated that buildings will be directly affected or that bats potentially roosting within them will be disturbed. As the disturbance from the works relating to the Onshore Cable Corridor will be minimal and temporary, a 10 m buffer from the edge of a tree canopy to the works will be sufficient to ensure no bats or roosts will be disturbed. If there are any trees or woodlands within 10 m of the Onshore Cable Corridor, these should be assessed for bat potential. If it is not possible to avoid trees with potential for bats, surveys will be necessary to determine if bats are present.

[8] Disturbance is defined within the Habitats Regulations as that which is likely to impair a species ability to survive, breed or reproduce, hibernate or migrate or to significantly affect the local distribution or abundance of the species.

4.4.2.6. The following is recommended in respect of bats:

- Bat activity surveys to identify commuting routes and foraging areas where hedgerows, scrubs and woodlands will be damaged or removed during the construction of the Proposed Development. Activity surveys should be undertaken within the proposed permanent work areas associated with the Converter Station Area; and
- A survey to identify Potential Roost Features ('PRF') should be undertaken to those trees and/or buildings which will be removed, damaged or disturbed during construction of the Proposed Development. If it is not possible to avoid trees with potential for bats, surveys will be necessary to determine if bats are present. Tree climbing inspections and/or a series of dawn/dusk surveys, spread over a period of several weeks from May to September, may be required to inform specific mitigation and ensure that adverse effects on bats do not occur.

### 4.4.3. BADGER

4.4.3.1. The Protection of Badgers Act 1992 makes it illegal to wilfully kill, injure or take any badger, or attempt to do so. It also makes it an offence to intentionally or recklessly damage, destroy or obstruct access to any part of a badger sett. Activities that would otherwise constitute an offence under this legislation may be licensed by Natural England for certain purposes.

4.4.3.2. Due to the limitations of the survey undertaken (with some land parcels with denied access) it cannot be concluded that [redacted] are absent from within the [redacted] Where works is focused on roads, it is not likely that badger setts will be found or disturbed. However, where works where the converter station will be constructed, suitable habitats for [redacted]. The presence of workers and work activity may also discourage [redacted] from moving through the area, particularly if works are undertaken at night. The following is recommended in respect of badgers:

- A review of the proposed Converter Station Area should be undertaken. The review should assess the potential impact on known [redacted] to ascertain whether a licence would be required where disturbance or damage cannot be avoided. A [redacted] survey should be undertaken in this area and based on the results of this survey, appropriate mitigation for [redacted] will be designed; and
- Pre-construction checks should be undertaken for the Onshore Cable Corridor and Eastney (Landfall) for [redacted]. This should include verges and land 30 m from the boundary of proposed excavations and construction.

### 4.4.4. HAZEL DORMOUSE

4.4.4.1. Hazel dormice are protected from killing, injury and disturbance[8] and their places of rest or shelter (occupied habitat) protected from damage or destruction under the

Habitats Regulations. Protection is also afforded under the Wildlife and Countryside Act 1981 (as amended) with respect to disturbance of individuals occupying places of rest or shelter and obstruction of access to these. Activities that would otherwise constitute an offence under this legislation may be licensed by Natural England for certain purposes.

4.4.4.2. Hazel dormice are also listed as SPI in accordance with Section 41 of the NERC Act 2006. Public bodies have an obligation under Section 40 to have regard for these species when carrying out their functions.

4.4.4.3. The hedgerow, woodland, and scrub habitat within the Survey Area may support dormice. Land-take and vegetation removal north of the Survey Area required to facilitate the construction of the Proposed Development may affect these habitats and dormice if supported within them. The following is recommended in respect of dormice:

- Surveys to confirm presence or likely absence of dormice in areas where hedgerows, scrub or woodland will be affected or severed. Based on the results of this survey, appropriate mitigation for dormouse will be designed and the need for any licensing will be identified.

### 4.4.5. OTTER

4.4.5.1. The European otter is protected from killing, injury and disturbance[8] and its place of rest or shelter (holt) is protected from damage or destruction under the Habitats Regulations. Protection is also afforded under the Wildlife and Countryside Act 1981 (as amended) with respect to disturbance of individuals occupying places of rest or shelter and obstruction of access to these. Activities that would otherwise constitute an offence under this legislation may be licensed by Natural England for certain purposes.

4.4.5.2. Otters are also listed as SPI in accordance with Section 41 of the NERC Act 2006. Public bodies have an obligation under Section 40 to have regard for these species when carrying out their functions.

4.4.5.3. Otter may be present within the vicinity of the coastal area along the A2030 and the Farlington marshes. Works within the vicinity of these areas could disturb otters if a holt is present within the near vicinity of works. The presence of workers and work activity may also discourage otter from moving through the area, particularly if works are undertaken at night. It is however understood that the Onshore Cable Corridor will avoid any effects to these habitats. Should the route deviate from the existing road crossing, otter surveys may be required.

### 4.4.6. WATER VOLE

4.4.6.1. The water vole is protected from killing and injury and its place of rest or shelter (burrow) is protected from damage, destruction or obstruction under the Wildlife and

Countryside Act 1981 (as amended). Additional protection from disturbance is extended to individuals occupying places of rest or shelter. Activities that would otherwise constitute an offence under this legislation may be licensed by Natural England for certain purposes.

4.4.6.2. The water vole is also listed as SPI in accordance with Section 41 of the NERC Act 2006. Public bodies have an obligation under Section 40 to have regard for these species when carrying out their functions.

4.4.6.3. Water vole may be present within the vicinity of the unnamed watercourse north of the B2150 crossed by the Proposed Development, and the vicinity of the Farlington marshes. Works within the vicinity of the Farlington marshes will however be on roads and is not likely to disturb water vole and /or damage their burrows.

### 4.4.7. BREEDING BIRDS

4.4.7.1. Under the amendments to the Habitat Regulations (16th August 2012) Reg 9A(2) & (3) state that local authorities 'must take such steps in the exercise of their functions as they consider appropriate to contribute to…the preservation, maintenance and re-establishment of a sufficient diversity and area of habitat for wild birds in the UK including by means of the upkeep, management and creation of such habitat…'. The legislation continues to state that economic and recreation requirements must be taken into consideration in considering which measures are appropriate.

4.4.7.2. Under the Wildlife and Countryside Act 1981 (as amended) all wild birds are protected from killing and injury, and their nests and eggs protected from taking, damage and destruction whilst in use. Additional protection is extended to species listed under Schedule 1 of the Act, meaning it is also an offence to disturb these species at or near the nest, or whilst they have dependent young.

4.4.7.3. A large proportion of the Survey Area may support breeding birds, including areas of woodland, scrub, hedgerow, coastal areas and residential areas. Breeding birds may be affected by vegetation removal during construction, if undertaken during the bird breeding season (generally between March and August).

4.4.7.4. Construction adjacent to intertidal areas and surrounding Ramsar and SPA sites may give rise to disturbance effects on nesting birds such as common tern, little tern, Mediterranean gull, roseate tern and sandwich tern.

4.4.7.5. The following is recommended for birds:

- Assess the likelihood of disturbance, resulting from construction, of nesting bird species associated with European designated sites through a Habitat Regulations Screening Assessment;
- Clearance of suitable habitats should be undertaken outside of the bird breeding season (March-August) to avoid damaging or destroying nests and young. If clearance is required within this season, it should be checked by a suitably experienced ecologist and, if actives nests are found, vegetation left in-situ until young have fledged; and
- Based on the results of this survey, appropriate mitigation for birds will be designed.

### 4.4.8. WINTERING AND PASSAGE BIRDS

4.4.8.1. During the non-breeding season, the main impacts of construction is disturbance resulting in the interruption of foraging and, to a lesser extent, roosting. The extent to which disturbance affects the actual distribution of birds within a site will vary according to the species involved, the availability of other resources and the birds. There are a number of SPA and Ramsar sites adjacent to the Proposed Development where their qualifying features comprise the assemblage of wading and wintering birds present. Furthermore, a number of suitable fields exist across the Onshore Cable Corridor suitable to support roosting, loafing and foraging during high-tide.

- Undertake a winter bird survey to include the Landfall, the Onshore Cable Corridor where SPA, Ramsar sites and intertidal habitats are in close proximity, and identify potential high-tide roosting areas in close proximity to the Proposed Development where disturbance during construction may arise.

### 4.4.9. REPTILES

4.4.9.1. Native widespread reptile species (common lizard, adder, grass snake and slow worm) are partially protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). This includes protection from killing and injury.

4.4.9.2. All reptile species are also listed as SPI in accordance with Section 41 of the NERC Act 2006. Public bodies have an obligation under Section 40 to have regard for these species when carrying out their functions.

4.4.9.3. Habitats within the Survey Area, including tussocky grassland and scattered scrubs, woodland and dense scrub offer suitable habitat for common species of reptiles. However, construction activities in the Onshore Cable Corridor close to these areas will be restricted to roads and it is not anticipated that these habitats will be directly affected and reptiles supported within them will be disturbed.

4.4.9.4. The following is recommended for reptiles:

- Undertake a reptile survey of the Converter Station Area where suitable habitat exists for the four common reptile species; and
- Where the Proposed Development affects areas of rough grassland and edge habitats (outside of the Converter Station Area) suitable to support reptile species, clearance and excavation should be carried out under an appropriate method statement specifying displacement, reinstatement and other controls to safeguard the species.

### 4.4.10. GREAT CRESTED NEWT

4.4.10.1. Great crested newts are protected from killing, injury and disturbance[8] and their places of rest or shelter (occupied habitat) protected from damage or destruction under the Habitats Regulations. Protection is also afforded under the Wildlife and Countryside Act 1981 (as amended) with respect to disturbance of individuals occupying places of rest or shelter and obstruction of access to these. Activities that would otherwise constitute an offence under this legislation may be licensed by Natural England for certain purposes.

4.4.10.2. Great crested newts and common toad are also listed as SPI in accordance with Section 41 of the NERC Act 2006. Public bodies have an obligation under Section 40 to have regard for these species when carrying out their functions.

4.4.10.3. Great crested newts may be present within suitable terrestrial habitat within 250m of a breeding pond. The Rapid Risk Assessment has defined a GCN survey approach based on the likely impacts across the Onshore Cable Corridor, Landfall and Converter Station location; and the recommended approach for survey is as follows:

- For all components of the Proposed Development where an offence is likely, a Habitat Suitability Index Survey and eDNA survey for associated ponds within 250 m should be undertaken. The results of this assessment will determine whether further surveys or mitigation is required.
- For permanent works associated with the It is however understood that the Converter Station Area will avoid any effects to these habitats. triggering a likely offence, trapping surveys and a population size class assessment survey should be undertaken.

### 4.4.11. INVERTEBRATES

4.4.11.1. Notable terrestrial invertebrate species are likely to occur in HPI areas whilst notable macroinvertebrate species are likely to be present in intertidal habitats. Given the temporary nature of construction at the Landfall and Onshore Cable Corridor, it is unlikely that the conservation status of invertebrate species will be affected. Furthermore, it is understood that that the Onshore Cable Corridor is likely to remain within the existing road, thereby avoiding impacts on HPI and notable invertebrate species. Where information exists about the presence of notable invertebrates they

will be considered appropriately through the assessment of the Proposed Development.

## 4.5. FURTHER SURVEY/ASSESSMENT REQUIREMENTS

4.5.1.1. Potential ecological constraints for which further surveys/assessment are required to ensure legal and planning policy compliance are listed in Table 8.

AQUIND

**Table 8 - Key Ecological Constraints and Further Survey Requirements**

| Ecological Receptor | Potential Constraints | Further Requirements | Seasonal Constraints |
|---|---|---|---|
| **Statutory Designated Sites** | Solent Maritime SAC<br>Chichester and Langstone Harbours SPA/RAMSAR<br>Solent and Dorset Coast pSPA<br>SSSIs | Given the direct connectivity between the Proposed Development and the Natura 2000 sites, it is likely that the proposed works would be subject to Stage 1 (Screening for) Habitat Regulations Assessment. This would provide advice informing the Stage 1 Screening process of Appropriate Assessment, which would consider the effects of the Proposed Development on the conservation objectives and integrity of the Natura 2000 sites. In undertaking this, it would seek to identify the likely significant effects of the proposals, alone and in combination with other Proposed Developments or plans, within the area.<br>Once detailed design of the Onshore Cable Corridor in close proximity to the SSSIs are known, consultation to confirm the requirement of Natural England assent for the works, under Section 28H of the Wildlife and Countryside Act (as amended) should be undertaken. | Winter bird surveys should be undertaken to inform the HRA and Likely Significant Effects on Qualifying Features. Winter bird surveys should be undertaken between October and March. |
| **Non-Statutory Designated Sites** | SINCs and RVEIs | Due to the Proposed Development, directly and indirectly affecting a number of SINCs, consultation with Local Planning Authority is required to determine what mitigation measures are likely to be needed. Permission must be obtained from the Local Planning Authority prior to the works. All work directly or indirectly affecting SINCs should be in accordance with an appropriate Method Statement outlined within an Ecological Management Plan. Mitigations are likely to include the re-instatement of habitats, subject to further consultation. | Further botanical or species surveys may be required depending on the extent and nature of impacts on SINCs. Survey requirements and mitigation should be subject to consultation with the LPA once the final design options are known. |
| **Habitats** | Habitats of Principal Importance | An appropriate mitigation and reinstatement strategy should be designed for each location where the Proposed Development affects Habitats of Principal Importance. Depending on the local geology, existing habitats and land use, details of mitigation should be outlined within an Ecological Management Plan. This may include the compensation planting, transplant of existing habitats, topsoil strip and natural recolonisation or reseeding with a native species where appropriate. | Further botanical or species surveys may be required depending on the extent and nature of impacts on HPIs. Survey requirements and mitigation should be subject to consultation with the LPA once the final design options are known. |
| **Bats** | Bats may be roosting in buildings and trees present within and adjacent to the Proposed Development. | A survey to identify PRFs should be undertaken to those trees and/or buildings which will be removed, damaged or disturbed during construction of the Proposed Development. | Visual inspections can be done all year round.<br>Bat activity surveys around the proposed Converter Station should be undertaken between April and October. |

AQUIND

| Ecological Receptor | Potential Constraints | Further Requirements | Seasonal Constraints |
|---|---|---|---|
| | Bats are likely to be using ancient woodland habitats and associated hedgerows in proximity to the proposed Converter Station site. | Bat activity survey surrounding the proposed converter station location where woodlands and hedgerow habitats may be severed/disturbed. | Bat roost surveys, where required, should be undertaken during the bat active season, which falls between May and the end of September. |
| **Badger** | [redacted] in and around the proposed converter station location<br>[redacted] within proximity to the Onshore Cable Corridor | [redacted] to be undertaken at the proposed Converter Station location.<br>Pre-construction checks for [redacted] to be undertaken where construction extends into the roadside verges, fields and soft-standing areas. | [redacted] surveys can be undertaken at any time during the year. However, optimal times for [redacted] surveys are February to April and September to November. |
| **Otter** | Farlington Marshes | N/A unless works deviate from the road bridge in this location. | N/A |
| **Water Vole** | The route crosses one unnamed ditch north of the B2150 that may support water vole. | N/A unless works deviate from the road in this location. | N/A |
| **Hazel Dormouse** | Hazel dormouse may be present in hedgerows, scrub and woodland habitats where the Onshore Cable Corridor and proposed Converter Station are located. | Dormouse surveys should be undertaken of suitable habitat features that are directly affected or intersected by the Proposed Development.<br>Where small amounts of suitable dormouse habitat (hedgerows/bramble scrub) may be lost to the Proposed Development, given the temporary nature of the Onshore Cable Corridor installation, visual searches for nests and nuts should be undertaken.<br>Surveys will identify the need for a Natural England licence for the proposed works and appropriate mitigation to protect the species. | Nest tube surveys can be undertaken between May and will be checked up until and including November.<br>Nut searches can be undertaken between September and December. |
| **Breeding Birds** | Disturbance of breeding birds.<br>Damage and destruction of active nests. | Assess the likelihood of disturbance, resulting from construction, of nesting bird species associated with European designated sites through a Habitat Regulations Screening Assessment.<br>Clearance of suitable habitats should be undertaken outside of the bird breeding season to avoid damaging or destroying nests and young. If clearance is required within this season, it should be checked by a suitably experienced ecologist and, if actives nests are found, vegetation left in-situ until young have fledged. | Vegetation clearance should be undertaken outside of breeding bird season. The breeding bird season generally occurs between March and August. |
| **Wintering and Passage Birds** | Disturbance of important wintering bird assemblages associated with the neighbouring SPA and Ramsar | Six visits to be undertaken between October and March leaving at least ten days between each successive visit to the same site. A combination of recording the activity of | The winter bird survey season extends from October to March |

| Ecological Receptor | Potential Constraints | Further Requirements | Seasonal Constraints |
|---|---|---|---|
| | sites adjacent to the Proposed Development. | individual birds and counts of birds on the water/intertidal areas from the habitat edge will be undertaken. The wintering bird survey will focus on wetland sites, and will utilise the BTO's Wetland Bird Survey (WeBS) methodology.<br>Walkover surveys should be undertaken to identify high-tide roosting areas in and adjacent to the Proposed Development. Winter bird assemblages on these areas will be recorded and the habitat suitability will be mapped. | |
| **Reptiles** | Habitats within all areas surveyed are considered suitable for reptiles. Whilst the arable fields and urban environs have lower potential to support the species, other undisturbed fringe habitats and grassland areas are considered to be suitable. | Seven surveys visits to the Converter Station Area with survey of artificial refugia and visual observation of habitats and natural refugia present.<br>All vegetation and excavation works in habitats suitable to support reptiles should be carried out under an appropriate ecological method statement outlined in an Construction Management Plan. | Displacement methods and best practice measures including translocation should be undertaken during the active season (March to October) and in suitable weather conditions.<br>Surveys to be undertaken between April and September. |
| **Great Crested Newt** | Waterbodies within 250 m of the Proposed Development may support GCN. As such, there is a possibility species interchange may occur between terrestrial habitat areas within the Proposed Development areas and potential breeding ponds, which may result in disturbance and damage of potential resting places/shelter for the species. | For all parts of the Proposed Development where an offence is likely, Habitat Suitability Index Surveys and eDNA surveys should be undertaken for waterbodies within 250 m of the Proposed Development where access permitted.<br>These surveys will inform in full presence / absence and population estimate surveys are required. | eDNA surveys should be undertaken between April and end of June.<br>Presence / absence and population estimate surveys should be carried out between mid-March and June with at least half of these surveys during the period mid-April to mid-May. |
| **Invertebrates** | Important terrestrial invertebrate assemblages are likely to be present in areas of HPI and SINCs in close proximity to the Proposed Development. | N/A | N/A |

# REFERENCES


BSI. (2013). Biodiversity code of practice for planning and development: BS42020. .

Chanin, P. (2003). Monitoring the Otter Lutra lutra. *Conserving Natura 2000. Rivers Monitoring Series No. 10*. English Nature, Peterborough.

CIEEM. (2015). Guidelines for Ecological Report Writing.

CIEEM. (2016). Guidelines for Ecological Impact Assessment in the UK and Ireland, Terrestrial, Freshwater and Coastal. . CIEEM, Winchester.

CIEEM. (2016). Guidelines for Preliminary Ecological Appraisal.

CIEEM. (2019). On the Lifespan of Ecological Reports & Surveys. CIEEM, Winchester.

Collins, J. (2016). Bat Surveys for Professional Ecologists. *Good Practice Guidelines (3rd Edition)*. The Bat Conservation Trust.

Dean, M. S. (2016). The Water Vole Mitigation Handbook. *The Mammal Society Mitigation Guidance Series*. Eds. Fiona Matthews and Paul Chanin. The Mammal Society, London.

English Nature. (2001). Great Crested Newt Mitigation Guidelines.

English Nature. (2006). The Dormouse Conservation Handbook. 2nd Edition. Natural England.

Froglife. (1999). Reptile Survey: an introduction to planning, conducting and interpreting surveys for snake and lizard conservation. *Froglife Advice sheet 10*.

Gent, A. a. (2003). Herpetofauna Workers Manual.

Harris S, C. P. (1991). Surveying Badgers. *The Mammal*.

JNCC. (2010). Handbook for Phase 1 habitat survey – a technique for environmental audit.

JNCC and Defra (on behalf of the Four Countries' Biodiversity Group). (2012). UK Post-2010 Biodiversity Framework. Retrieved from http://jncc.defra.gov.uk/pdf/UK_Post2010_Bio-Fwork.pdf

JNCC Biodiversity Reporting and Information Group . (2008). UK Biodiversity Action Plan.

Langton, T. B. ( 2001). Great Crested Newt Conservation Handbook. *Froglife*.

Natural England. (2009). Protection of Badgers Act 1992 (as amended), Guidance on 'Current Use' in the definition of a Badger Sett WMLG17, . Natural England, Peterborough.

Roper, T. (2010). Badger. Harper Collins.

# Appendix A – Relevant Legislation and Planning Policy

# Appendix B – Figures

# Appendix A – Relevant Legislation and Planning Policy

# RELEVANT LEGISLATION AND PLANNING POLICY

## 1.1 THE WILDLIFE AND COUNTRYSIDE ACT 1981, (AS AMENDED) (WCA)

1.1.1.1 Protected birds, animals and plants are listed under Schedules 1, 5, 8 and 9 respectively of the WCA, a description of these Schedules and their meaning is provided below.

1.1.1.2 Under the WCA (England and Wales) all birds, their nests and eggs (with exception of species listed under Schedule 2) are protected by the WCA. It is an offence to:

- Intentionally kill, injure, or take any wild bird;
- take or destroy an egg of any wild bird; and
- damage or destroy the nest of any wild bird (whilst being built, or in use). Under the WCA the clearance of vegetation within the Survey Area boundary, or immediately adjacent to the Survey Area during the bird nesting season could result in an offence occurring by the disruption or destruction of nest sites. The bird breeding season can be taken to occur between March - August inclusive, although is subject to variations based on species, geographical and seasonal factors.

## 1.2 SCHEDULE 1

1.2.1.1 Birds listed under Schedule 1 of the WCA[1] are afforded additional protection with regard to intentional or reckless disturbance whilst nest-building, or at a nest containing eggs or young, or disturb the dependent young of such a bird.

[1] To view the current list of Schedule 1 listed birds visit: http://www.legislation.gov.uk/ukpga/1981/69/schedule/1 [Accessed 31/07/17].

## 1.3 SCHEDULE 5

1.3.1.1 Species listed in Schedule 5 can either be fully protected or be partially protected under Section 9, which makes it unlawful to intentionally:

- Part 1: kill, injure or take;
- Part 2: possess or control (live or dead animal, part or derivative);
- Part 4 (a): damage or destruct any structure used for shelter or protection;
- Part 4 (b): disturb them in a place of shelter or protection;
- Part 4 (c): obstruct access to place of shelter or protection;
- Part 5 (a): sell, offer for sale, possess or transport for the purpose of sale (live or dead animal, part or derivative);
- Part 5 (b): advertise for buying or selling.

## 1.4 SCHEDULE 8

1.4.1.1 The Act makes it an offence (subject to exceptions) to pick, uproot, trade in, or possess (for the purposes of trade) any wild plant listed in Schedule 8, and prohibits the unauthorised intentional uprooting of such plants.

## 1.5 SCHEDULE 9

1.5.1.1 Invasive species listed under Schedule 9 are prohibited from release into the wild and the Act prohibits planting or "causing to grow" in the wild of any plant species listed in Schedule 9. It should be noted that certain bird species listed on Schedule 1 of the WCA are also listed on Schedule 9 to prevent release of non-native and captive individuals, this includes barn owl, red kite, goshawk and corncrake.

## 1.6 NATURAL ENVIRONMENT AND RURAL COMMUNITIES (NERC) ACT 2006

1.6.1.1 Species and Habitats of Principal Importance in England and Wales are listed under Section 41 and Section 42 respectively of the NERC Act. The Section 41 and 42 lists detail species that are of principal importance for the conservation of biodiversity in England and Wales, and should be used to guide decision-makers such as local and regional authorities when implementing their duty to have regard for the conservation of biodiversity in the exercise of their normal functions – as required under Section 40 of the NERC Act 2006.

## 1.7 THE PROTECTION OF BADGERS ACT (1992)

1.7.1.1 It is an offence to wilfully take, kill, injure, possess or ill-treat a badger. Under the Act their setts are protected against intentional or reckless interference. Sett interference includes damaging or destroying a sett, obstructing access to any part of the sett, or

disturbance of a badger whilst it is occupying a sett. The Act defines a badger sett as 'any structure or place, which displays signs indicating the current use by a badger' and Natural England (NE) takes this definition to include seasonally used setts that are not occupied but that show sign of recent use by badgers (Natural England, 2009).

1.7.1.2 If impacts to badgers or their setts are unavoidable then authorised sett disturbance requires a licence.

## 1.8 THE UK POST-2010 BIODIVERSITY FRAMEWORK (2011-2020) (JNCC AND DEFRA, 2012)

1.8.1.1 This Framework lists the UK's most threatened species and habitats and sets out targets and objectives for their management and recovery. The UK Biodiversity Action Plan (BAP) process is delivered nationally, regionally and locally and should be used as a guide for decision-makers to have regards for the targets set by the framework and the goals they aim to achieve. The UK BAP has now been replaced by the UK Post-2010 Biodiversity Framework, however, it contains useful information on how to characterise important species assemblages and habitats which is still relevant (JNCC and Defra (on behalf of the Four Countries' Biodiversity Group), 2012)).

## 1.9 THE CONSERVATION OF HABITATS AND SPECIES REGULATIONS 2017 (AS AMENDED)

1.9.1.1 The EC Habitats Directive and EC Birds Directive is transposed into UK law via the Conservation of Habitats and Species Regulations 2017 (as amended), referred to as the Habitats Regulations. All species listed under Annex IV of the Habitats Directive require strict protection and are known as European Protected Species (EPS). Under Regulation 41 of the Habitats Regulations it is unlawful to:

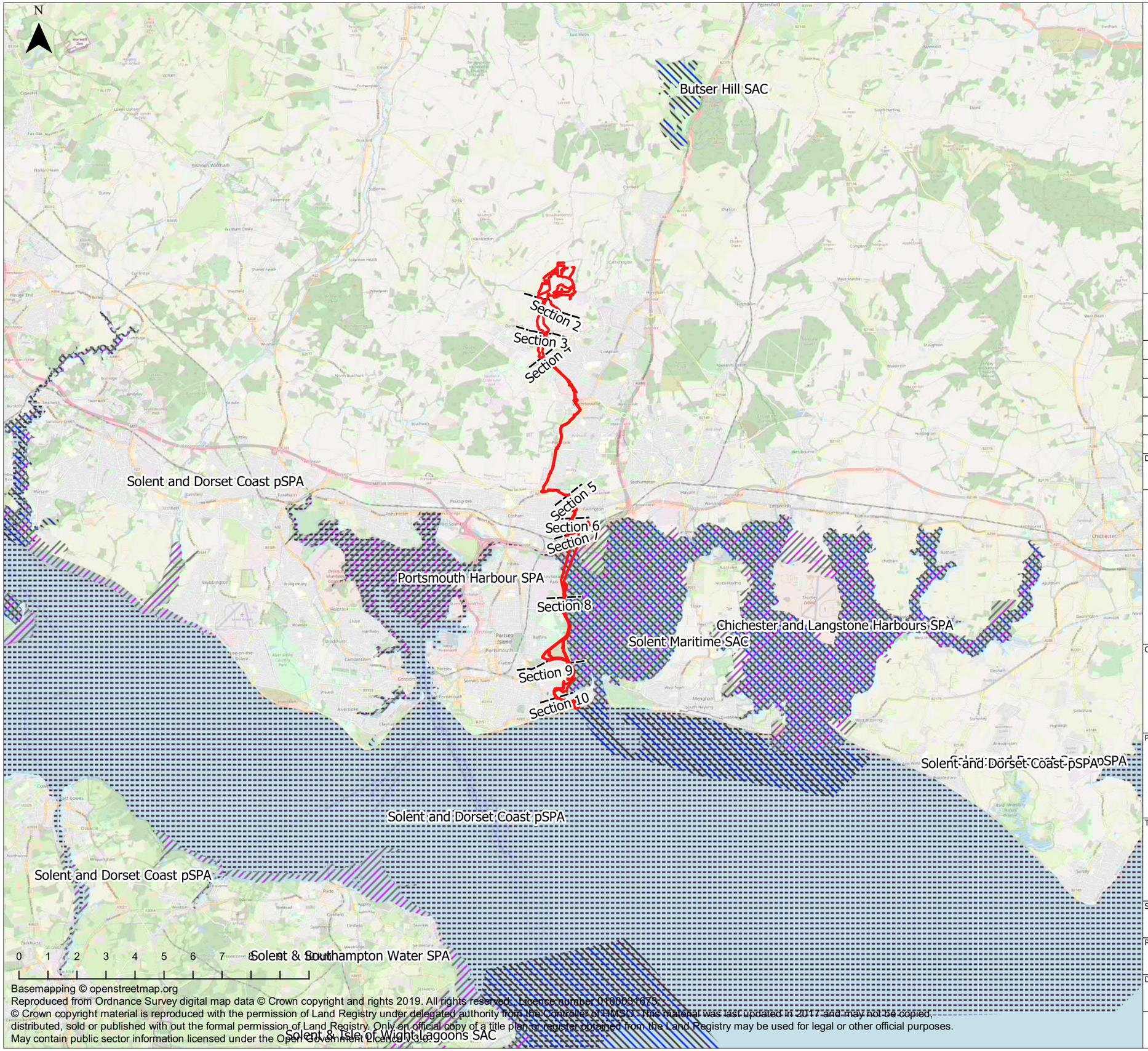
- Deliberately kill, capture or disturb;
- Deliberately take or destroy the eggs of; and
- Damage or destroy the breeding site/resting place of any species protected under this legislation.

1.9.1.2 If the Ecologist determines that impacts to an EPS are unavoidable then the works may need to be carried out under a site-specific mitigation licence from Natural England (NE) or Natural Resources Wales (NRW). Low Impact Class licences are also available in both England and Wales for bats and great crested newts. This enables Registered Low Impact Consultants to undertake certain low impact activities reducing the EPS application paperwork and process length.

1.9.1.3 Certain EPS are also listed under Annex II of the Habitats Directive and are afforded protection by the establishment of core areas of habitat known as Special Areas of

Conservation. This means these species are a relevant consideration in a Habitats Regulations Assessment (HRA).

# Appendix B – Figures




**Legend**

- Order Limits
- pSPAs
- SPAs
- SACs

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TITLE: Figure 16.1 - Statutory Designated Sites Sheet 1 of 2

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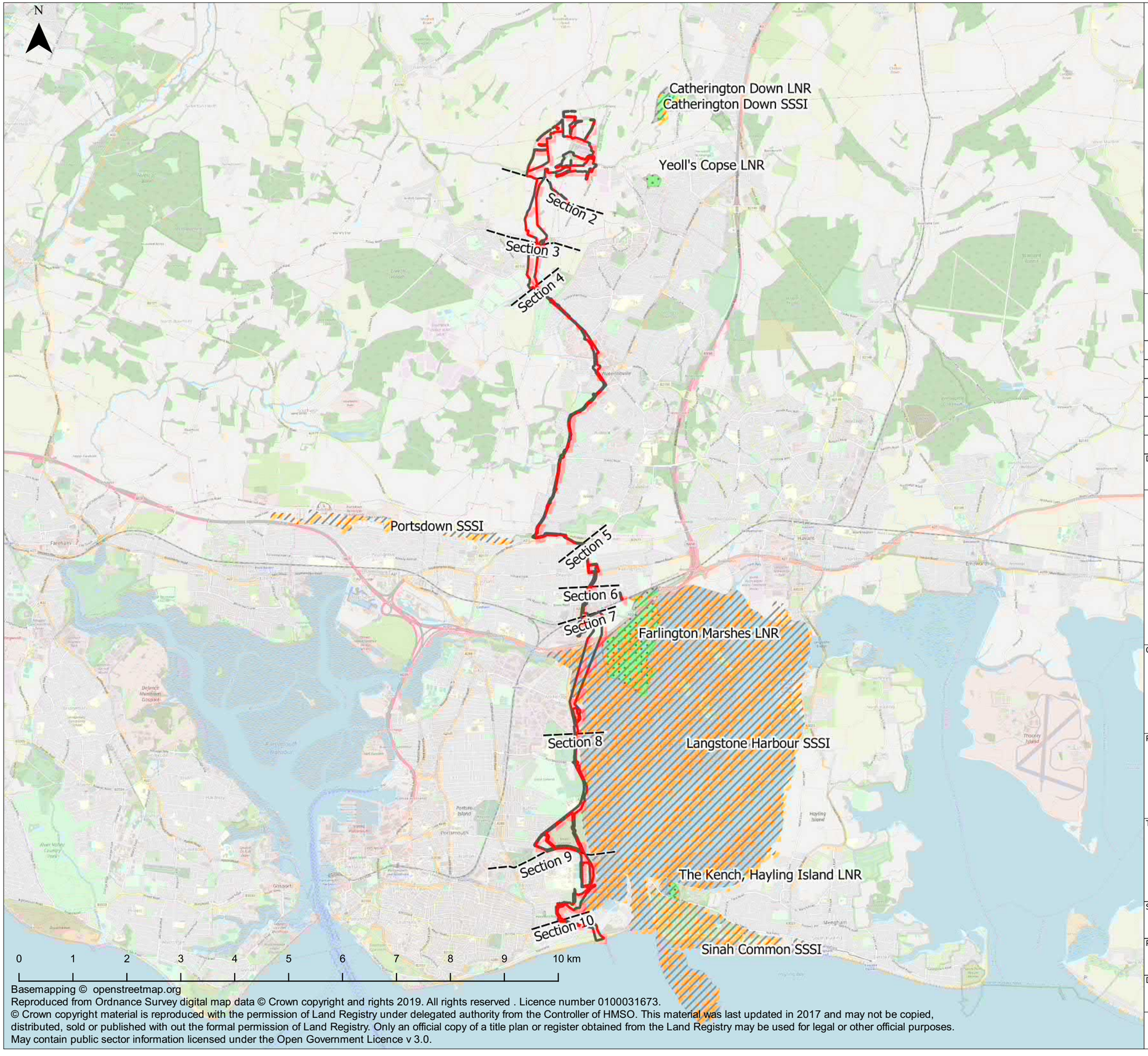


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**Legend**

- Order Limits
- SSSI
- LNR

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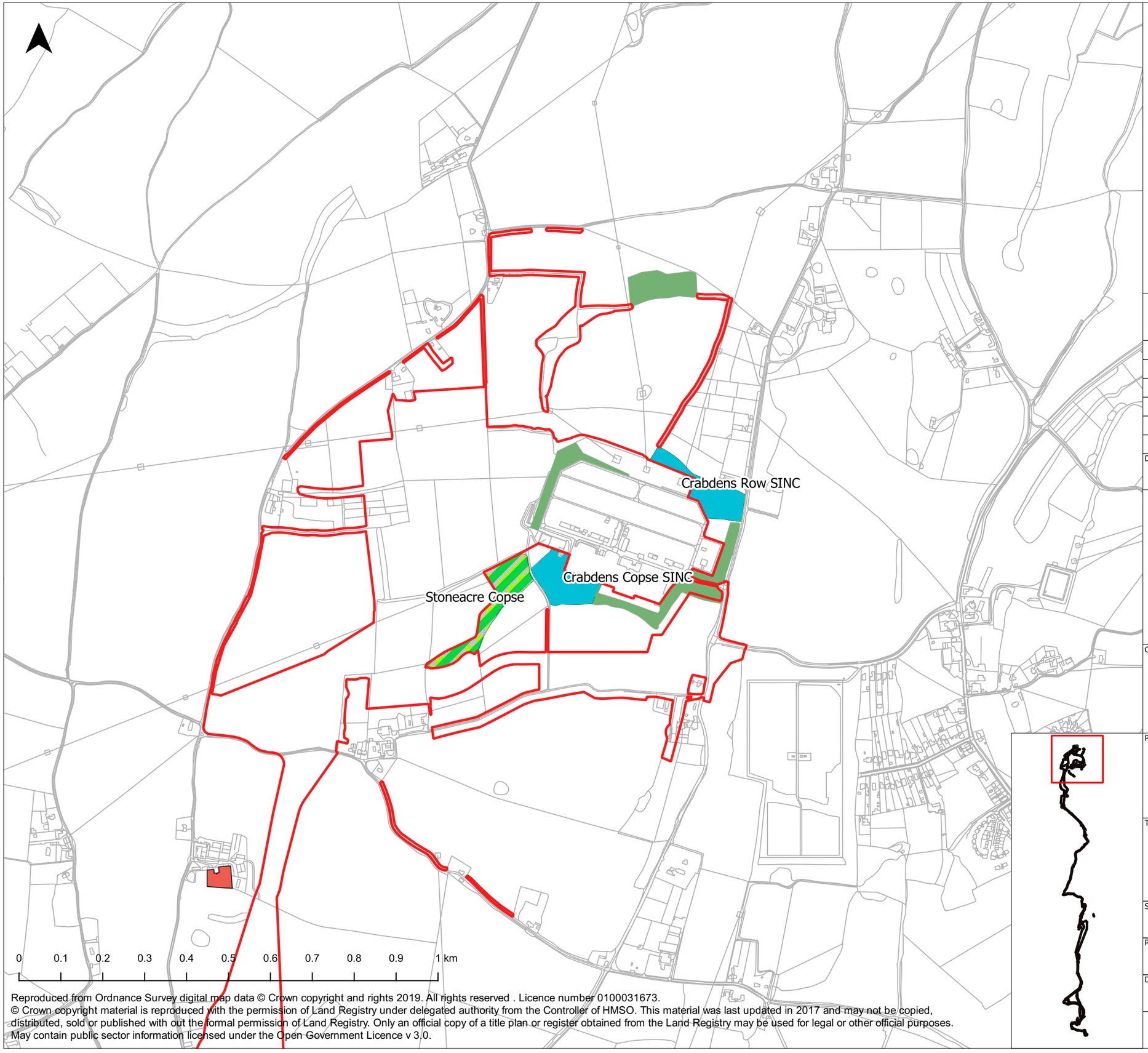


**Legend**

- Order Limits
- SINCs
- RVEIs
- Ancient Woodland

Priority Habitats

- Coastal and floodplain grazing marsh
- Coastal saltmarsh
- Coastal vegetated shingle
- Deciduous woodland
- Lowland dry acid grassland
- Lowland meadows
- Mudflats
- No main habitat but additional habitats present
- Reedbeds
- Saline lagoons

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TITLE: Figure 16.2 - Non-Statutory Designated Sites & Priority Habitats
Sheet 1 of 8

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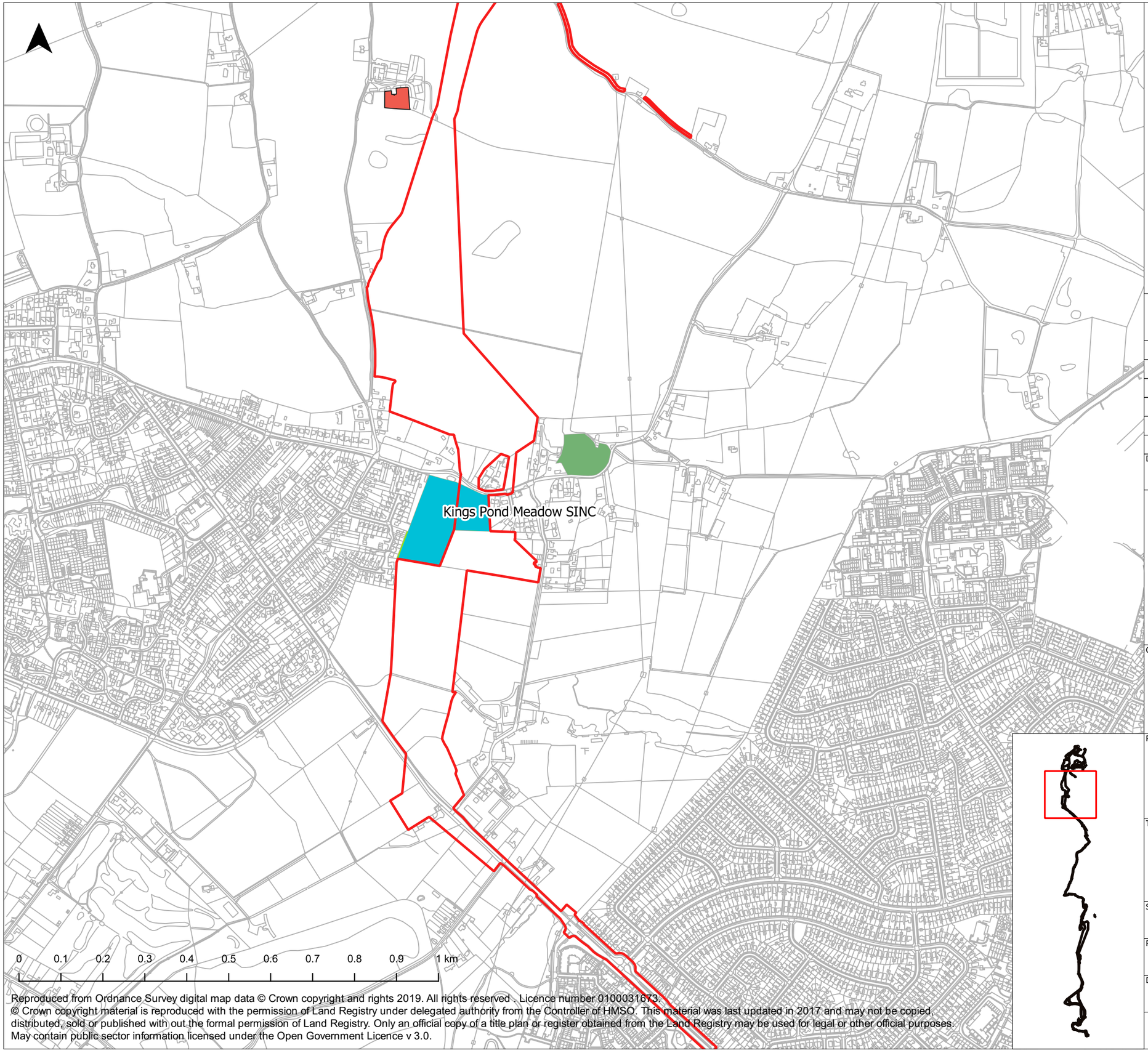




**Legend**

- Order Limits
- SINCs
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Sheet 2 of 8

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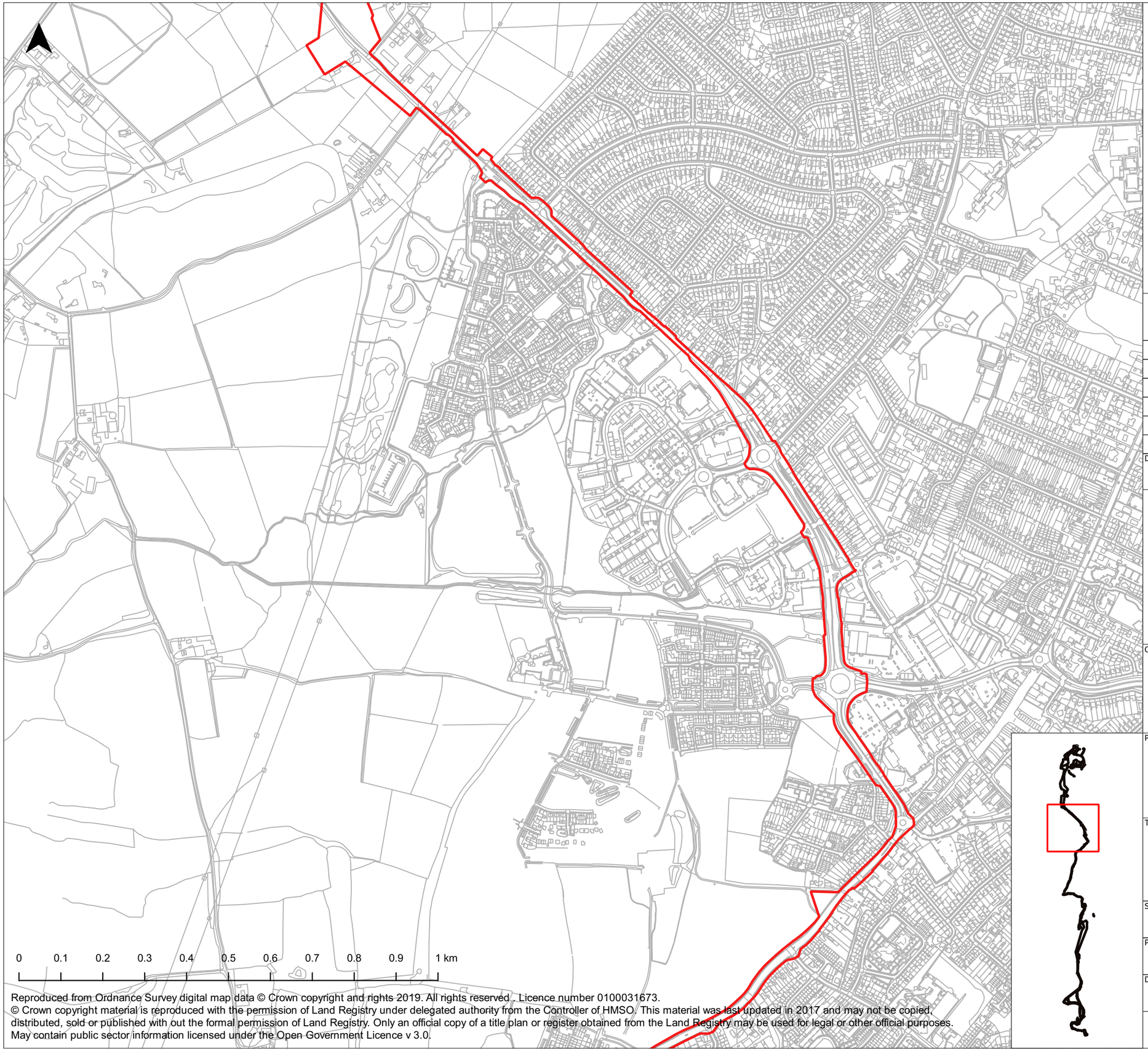




**Legend**

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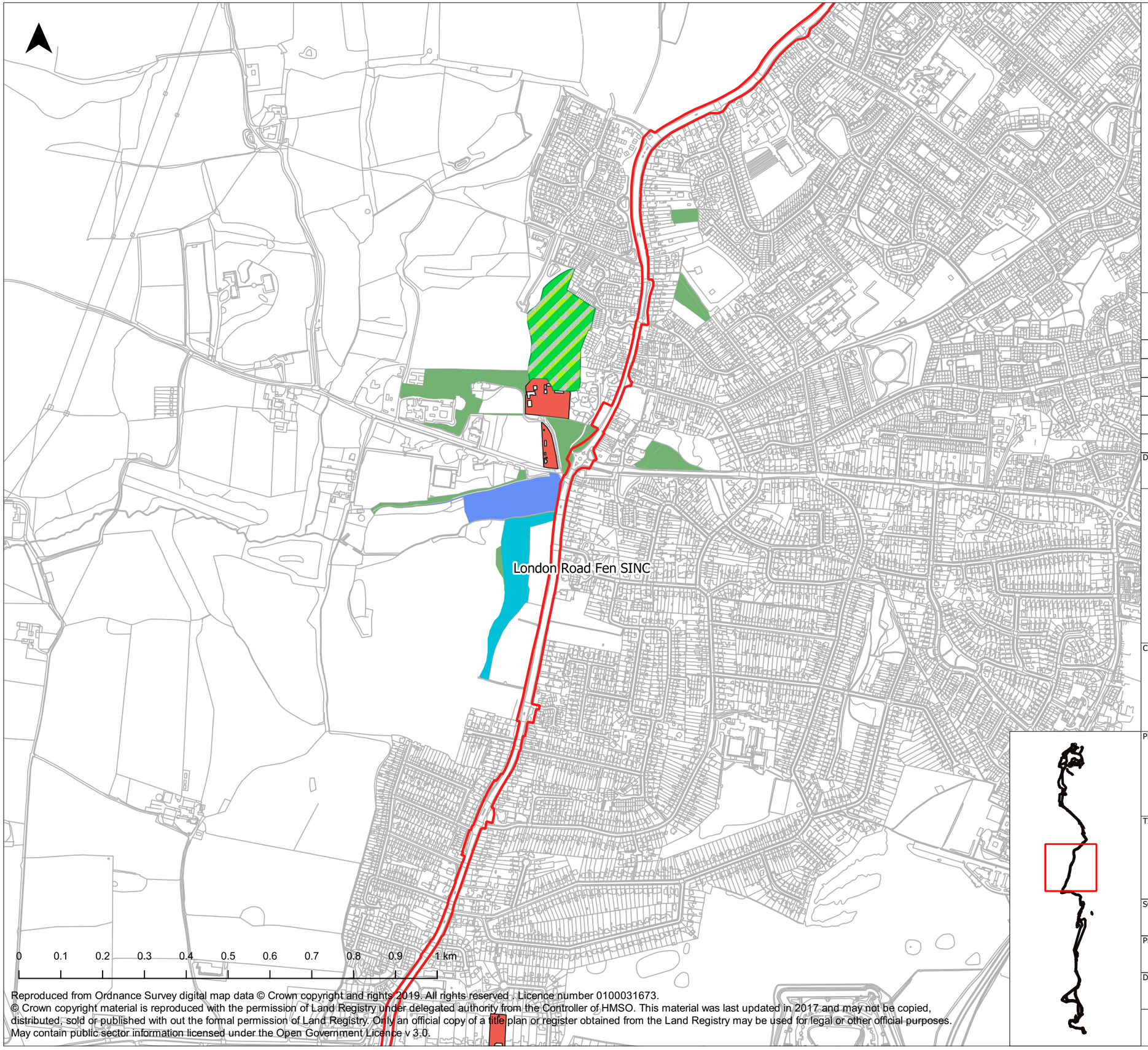


**Legend**

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Sheet 4 of 8

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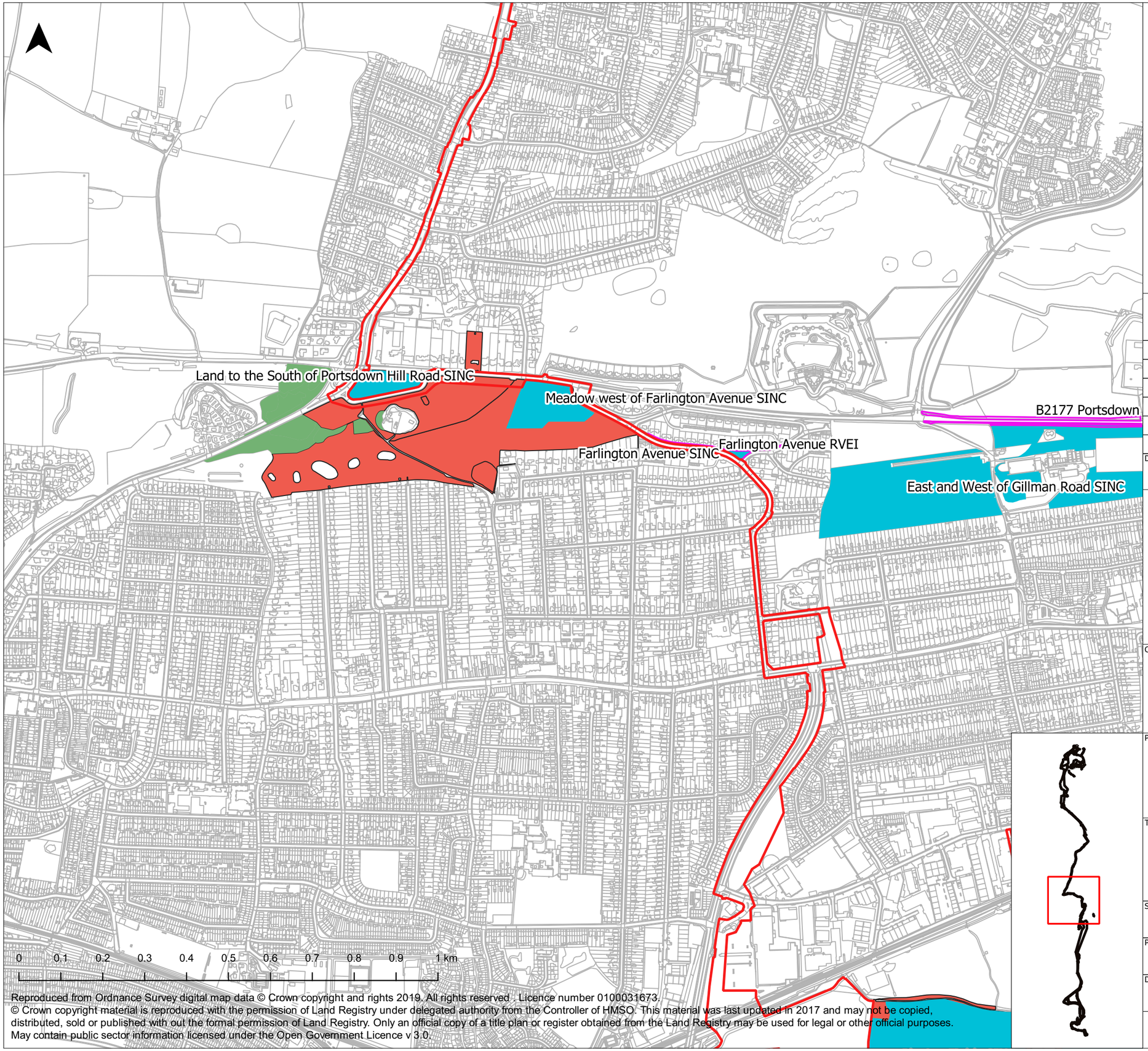






**Legend**

- Order Limits
- SINCs
- RVEIs
- Ancient Woodland

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TITLE: Figure 16.2 - Non-Statutory Designated Sites & Priority Habitats
Sheet 5 of 8

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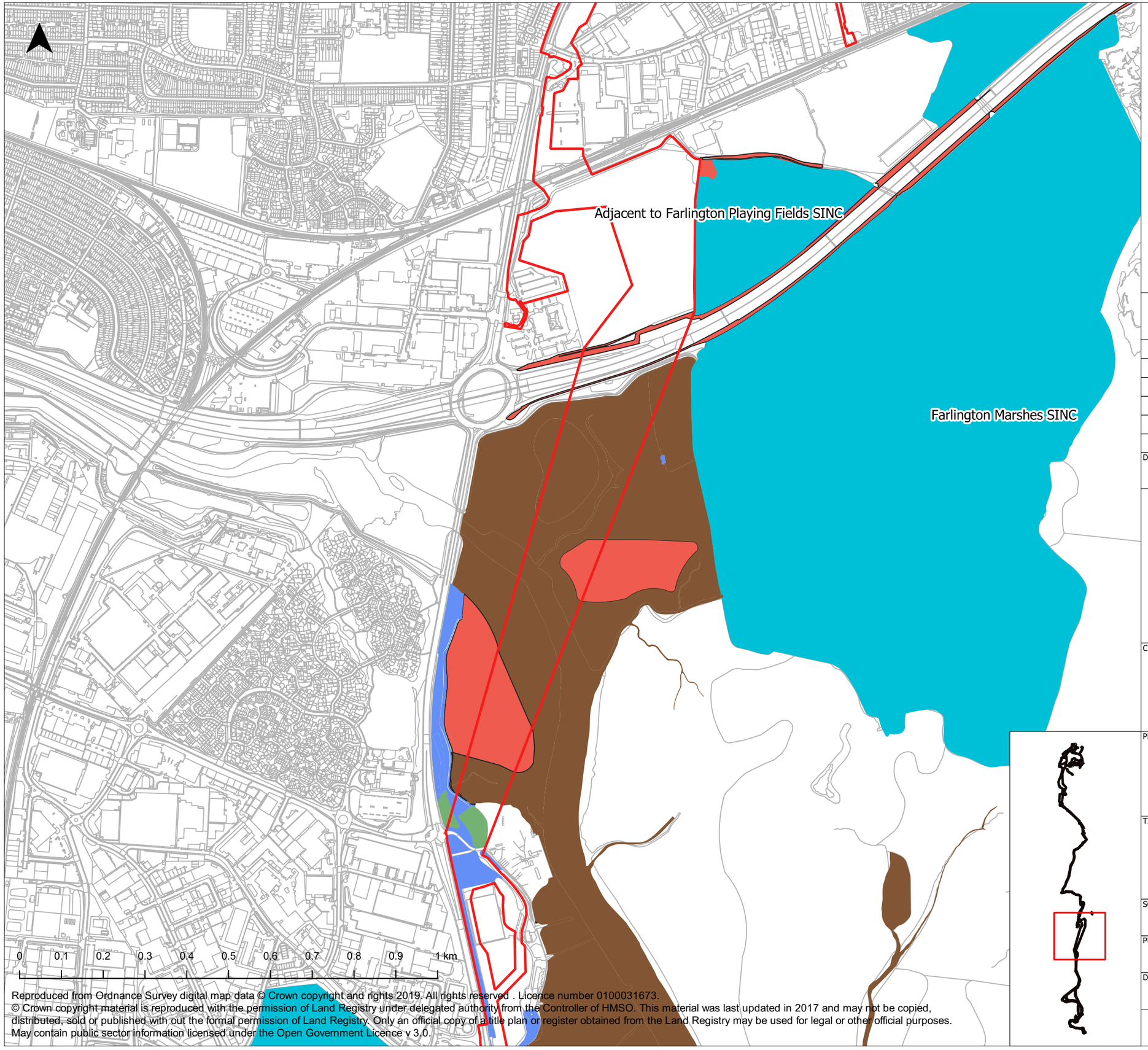


**Legend**

- Order Limits
- SINCs
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TITLE: Figure 16.2 - Non-Statutory Designated Sites & Priority Habitats
Sheet 6 of 8

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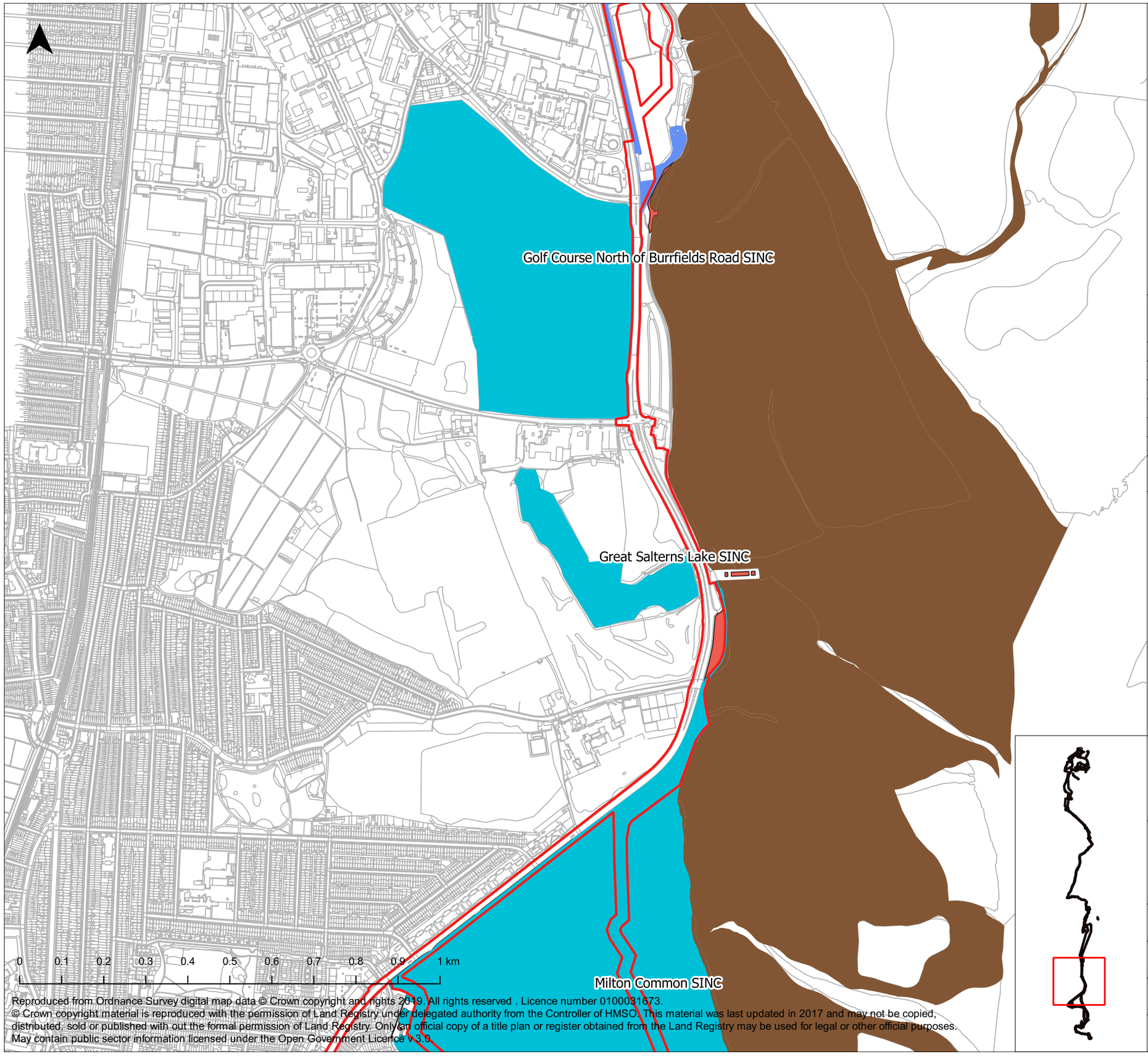




**Legend**

- Order Limits
- SINCs
- RVEIs
- Ancient Woodland

Priority Habitats

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Figure 16.2 - Non-Statutory Designated Sites & Priority Habitats
Sheet 7 of 8

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**Legend**

- Order Limits
- SINCs
- RVEIs
- Ancient Woodland

Priority Habitats

- Coastal and floodplain grazing marsh
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Sheet 8 of 8

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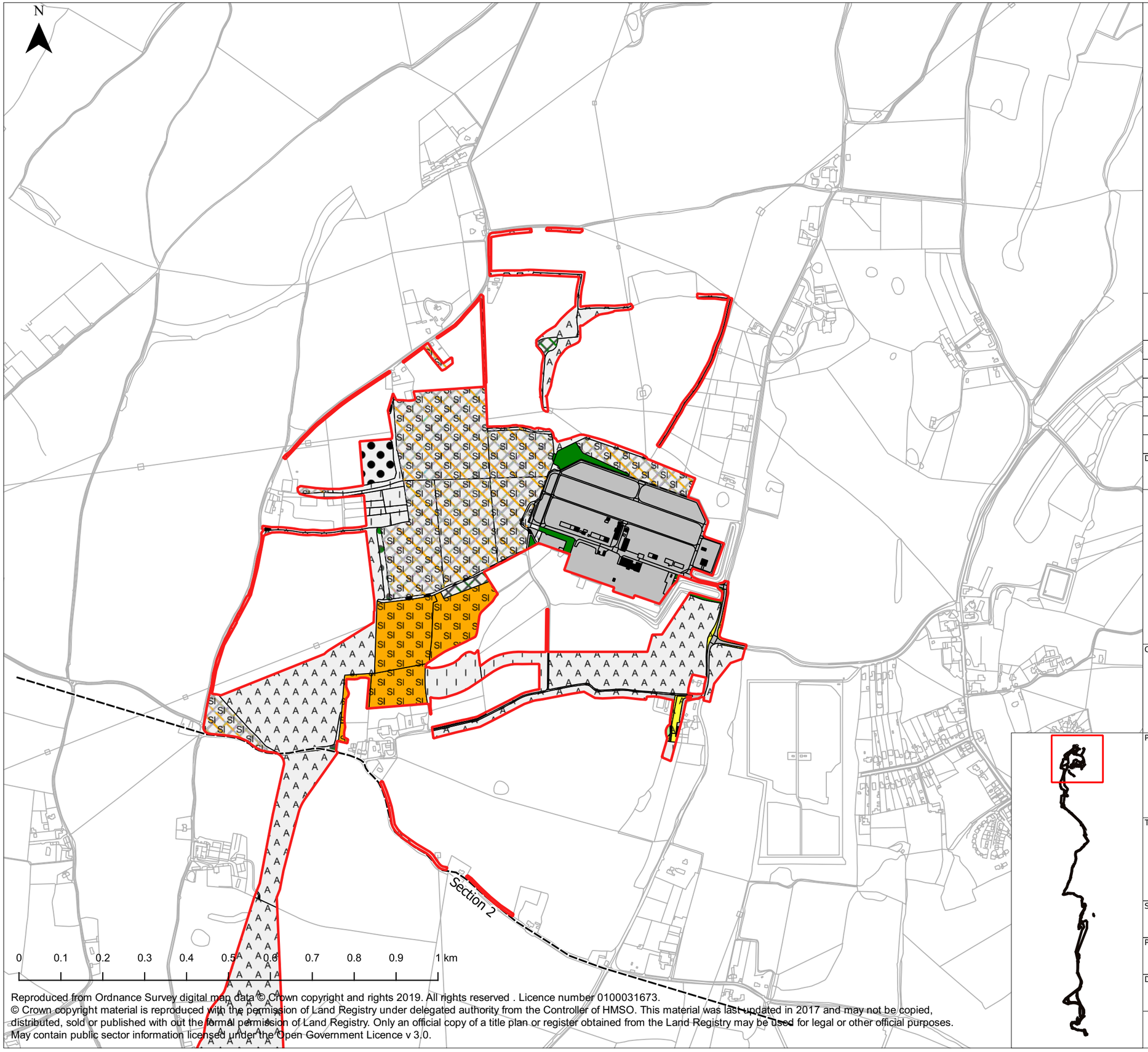


**Legend**

- Order Limits
- Broadleaved Woodland
- Coniferous Woodland
- Mixed Woodland
- Dense Scrub
- Scattered Scrub
- Scattered Broadleaved Trees
- Unimproved Neutral Grassland
- Semi-improved Neutral Grassland
- Semi-improved Calcarous Grassland
- Improved Grassland
- Marshy Grassland
- Species-poor Semi-improved Grassland
- Running Water
- Intertidal Mud and Sand
- Intertidal Shingle
- Intertidal Rocks/Boulders
- Saltmarsh
- Arable
- Amenity Grassland
- Introduced Shrub
- Seawall
- Buildings
- Bare Ground
- Hardstanding
- Railway Ballast
- Allotments

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TITLE: Figure 16.3 - Habitats
Sheet 1 of 8

| SCALE AT A3: | CHECKED: | | APPROVED: |
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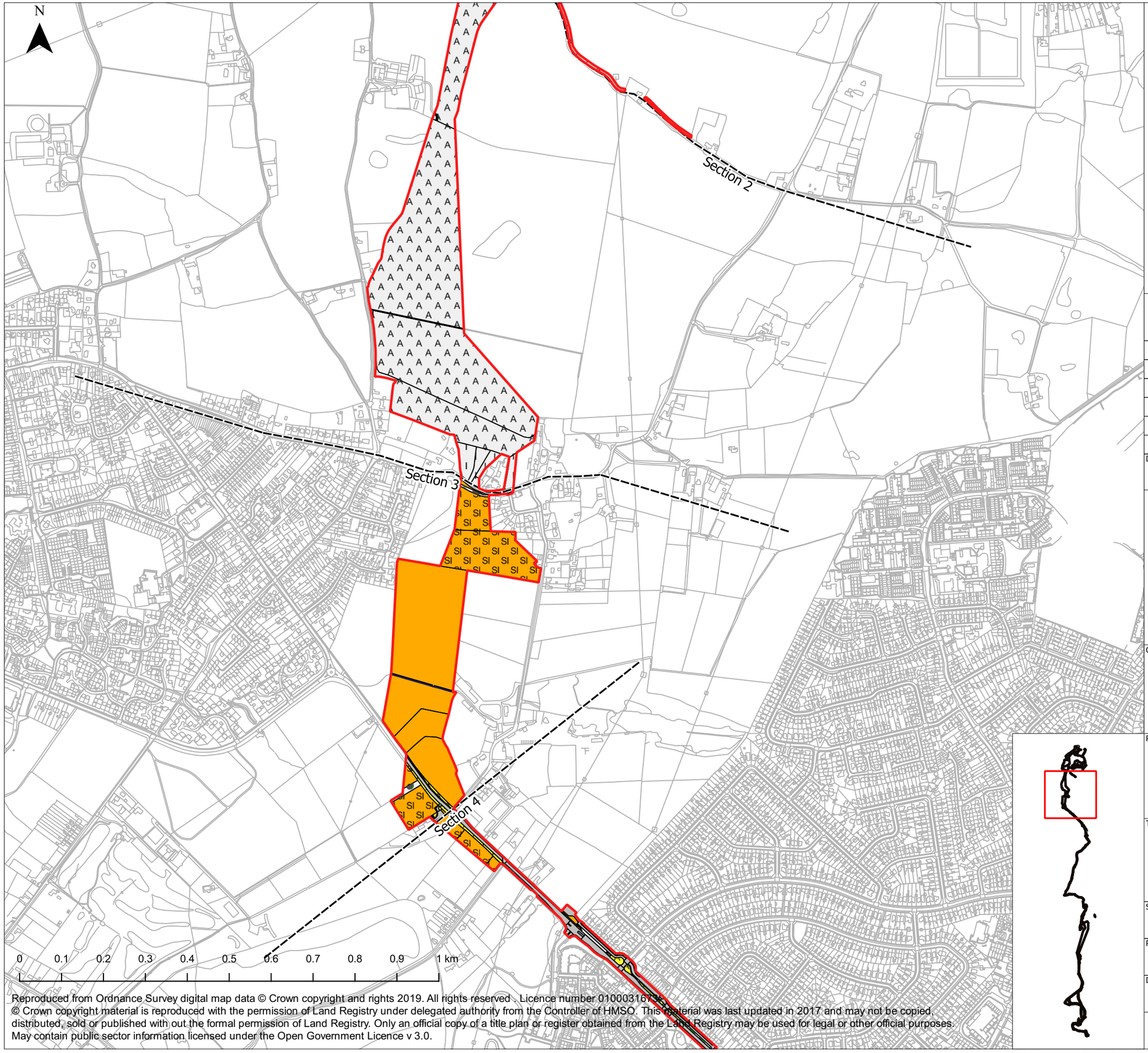




**Legend**

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- Broadleaved Woodland
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TITLE: Figure 16.3 - Habitats
Sheet 2 of 8

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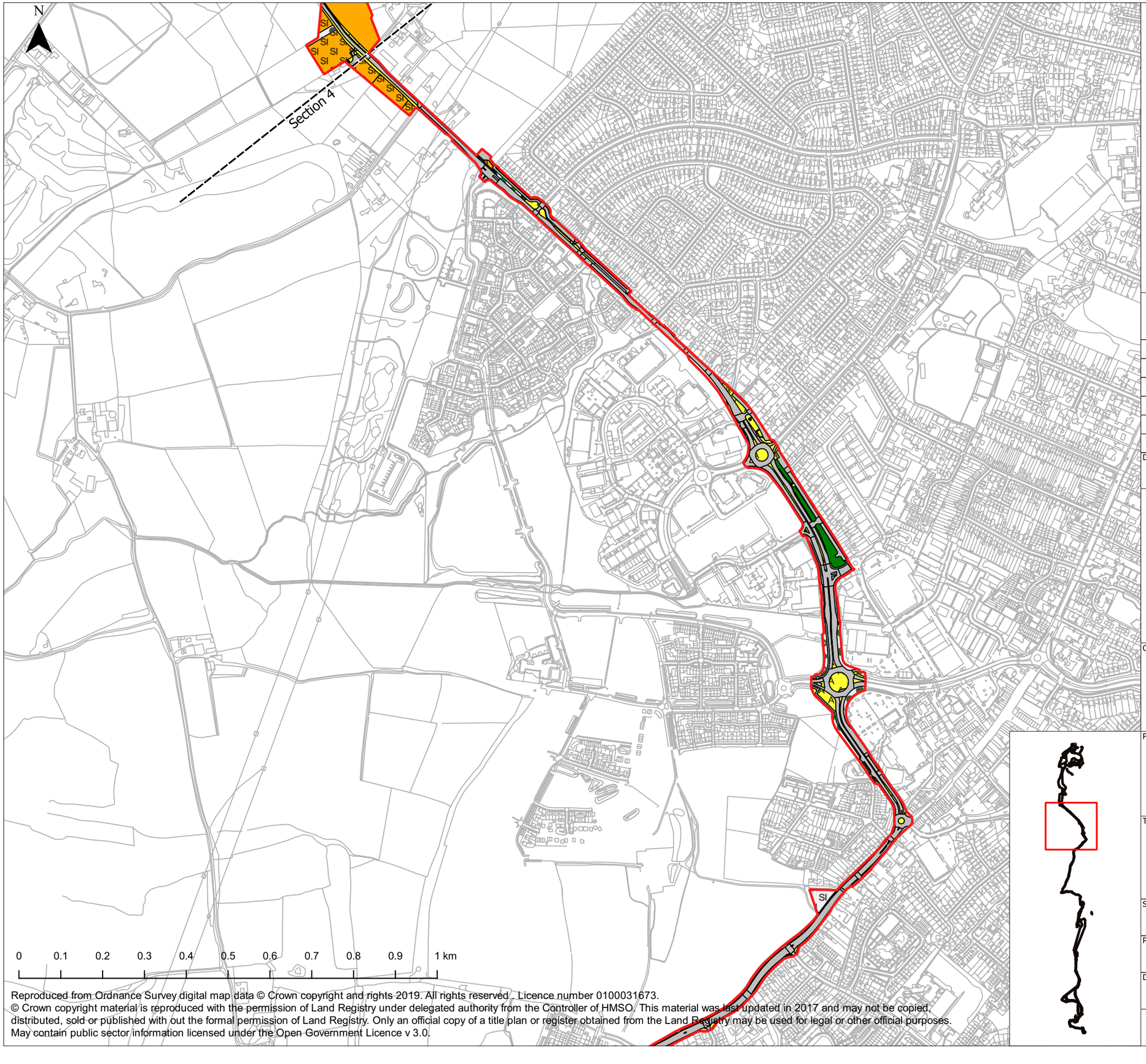




**Legend**

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Figure 16.3 - Habitats
Sheet 3 of 8

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Section 5

**Legend**

- Order Limits
- Broadleaved Woodland
- Coniferous Woodland
- Mixed Woodland
- Dense Scrub
- Scattered Scrub
- Scattered Broadleaved Trees
- Unimproved Neutral Grassland
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- Improved Grassland
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- Railway Ballast
- Allotments

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation 5(2)(l)

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TITLE: Figure 16.3 - Habitats
Sheet 4 of 8

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Section 5

Section 6

Section 7

0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1 km



**Legend**

- Order Limits
- Broadleaved Woodland
- Coniferous Woodland
- Mixed Woodland
- Dense Scrub
- Scattered Scrub
- Scattered Broadleaved Trees
- Unimproved Neutral Grassland
- Semi-improved Neutral Grassland
- Semi-improved Calcarous Grassland
- Improved Grassland
- Marshy Grassland
- Species-poor Semi-improved Grassland
- Running Water
- Intertidal Mud and Sand
- Intertidal Shingle
- Intertidal Rocks/Boulders
- Saltmarsh
- Arable
- Amenity Grassland
- Introduced Shrub
- Seawall
- Buildings
- Bare Ground
- Hardstanding
- Railway Ballast
- Allotments

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TITLE: Figure 16.3 - Habitats
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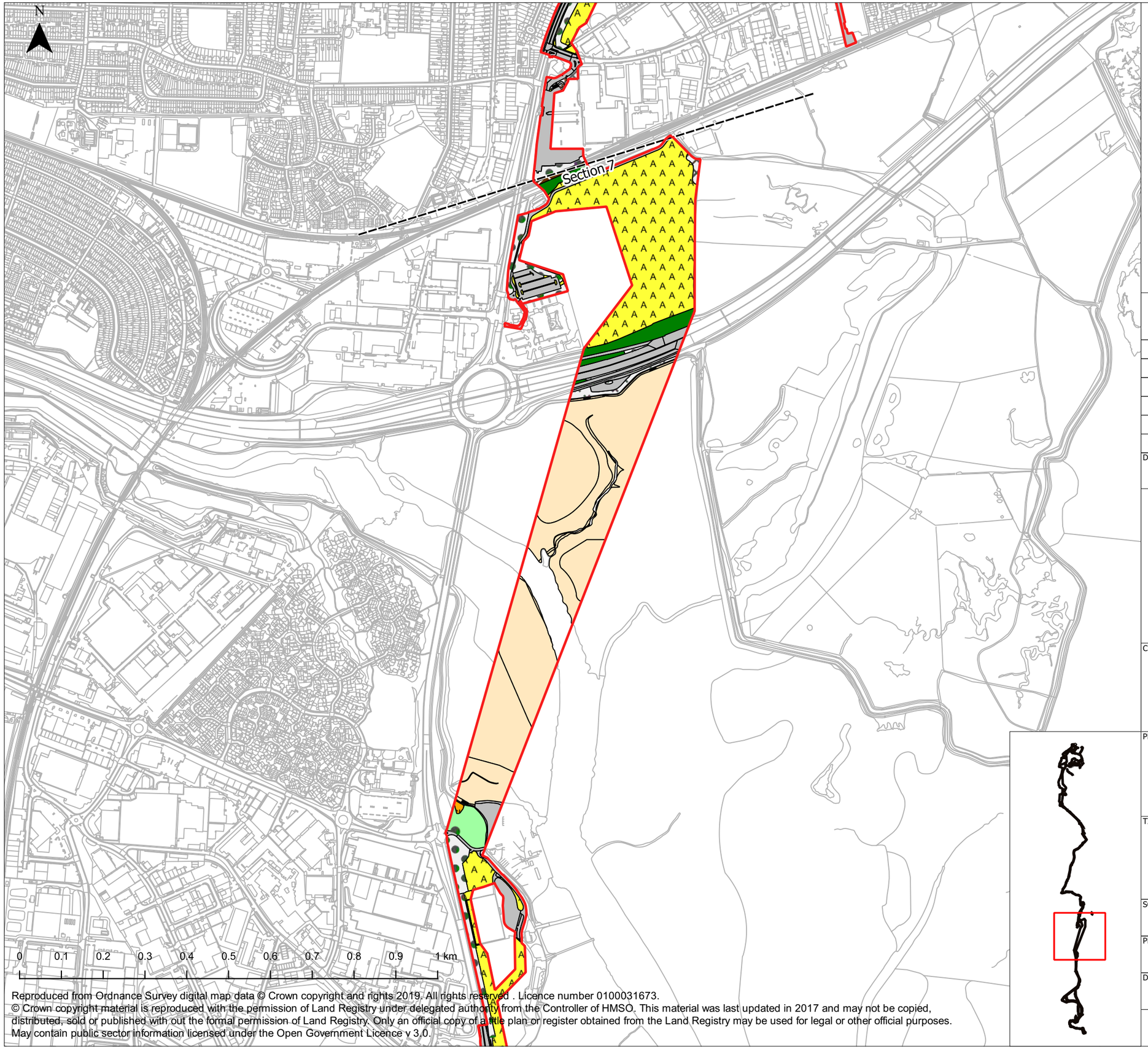


**Legend**

- Order Limits
- Broadleaved Woodland
- Coniferous Woodland
- Mixed Woodland
- Dense Scrub
- Scattered Scrub
- Scattered Broadleaved Trees
- Unimproved Neutral Grassland
- Semi-improved Neutral Grassland
- Semi-improved Calcarous Grassland
- Improved Grassland
- Marshy Grassland
- Species-poor Semi-improved Grassland
- Running Water
- Intertidal Mud and Sand
- Intertidal Shingle
- Intertidal Rocks/Boulders
- Saltmarsh
- Arable
- Amenity Grassland
- Introduced Shrub
- Seawall
- Buildings
- Bare Ground
- Hardstanding
- Railway Ballast
- Allotments

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TITLE: Figure 16.3 - Habitats
Sheet 6 of 8

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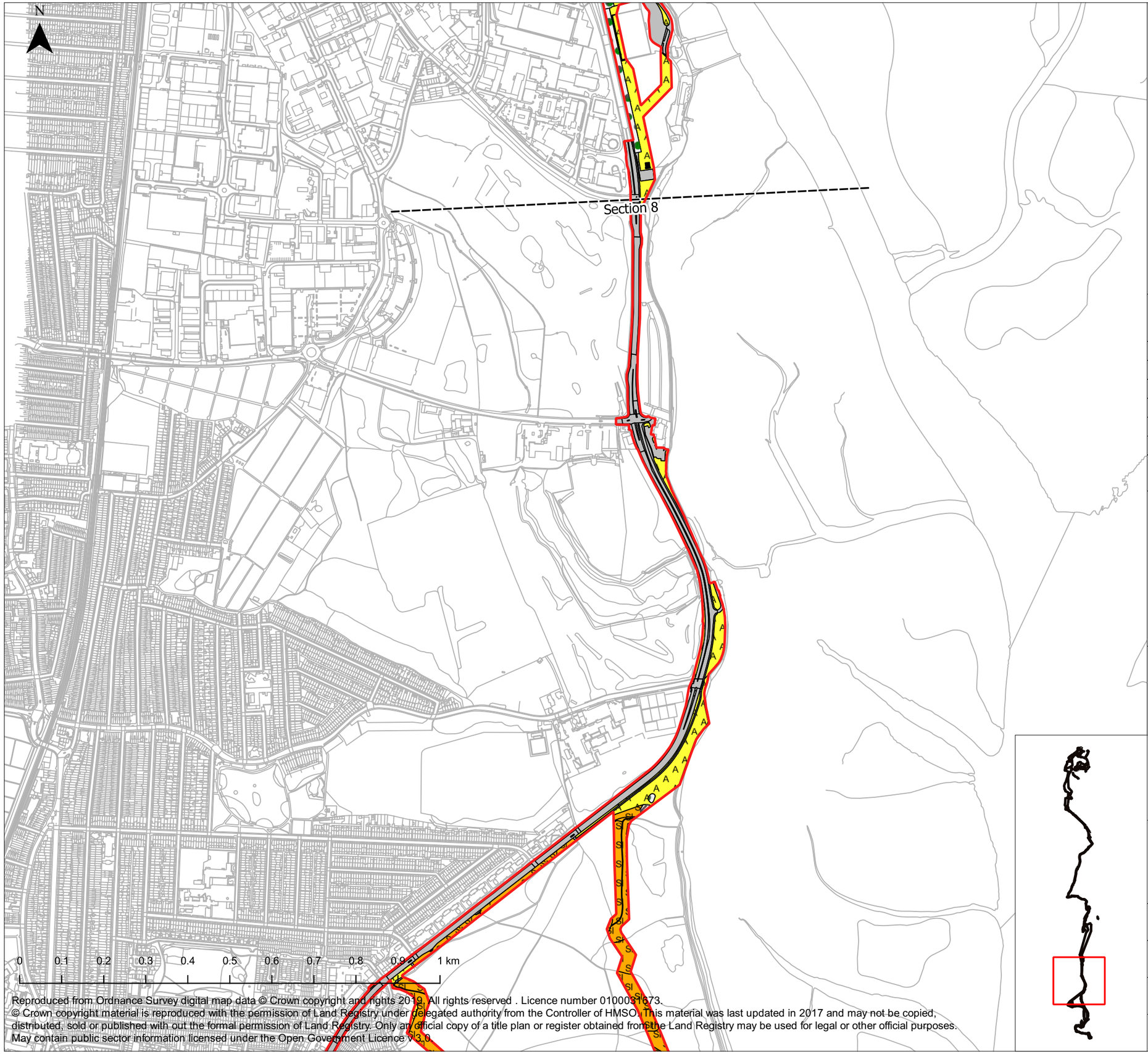




**Legend**

- Order Limits
- Broadleaved Woodland
- Coniferous Woodland
- Mixed Woodland
- Dense Scrub
- Scattered Scrub
- Scattered Broadleaved Trees
- Unimproved Neutral Grassland
- Semi-improved Neutral Grassland
- Semi-improved Calcarous Grassland
- Improved Grassland
- Marshy Grassland
- Species-poor Semi-improved Grassland
- Running Water
- Intertidal Mud and Sand
- Intertidal Shingle
- Intertidal Rocks/Boulders
- Saltmarsh
- Arable
- Amenity Grassland
- Introduced Shrub
- Seawall
- Buildings
- Bare Ground
- Hardstanding
- Railway Ballast
- Allotments

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TITLE: Figure 16.3 - Habitats
Sheet 7 of 8

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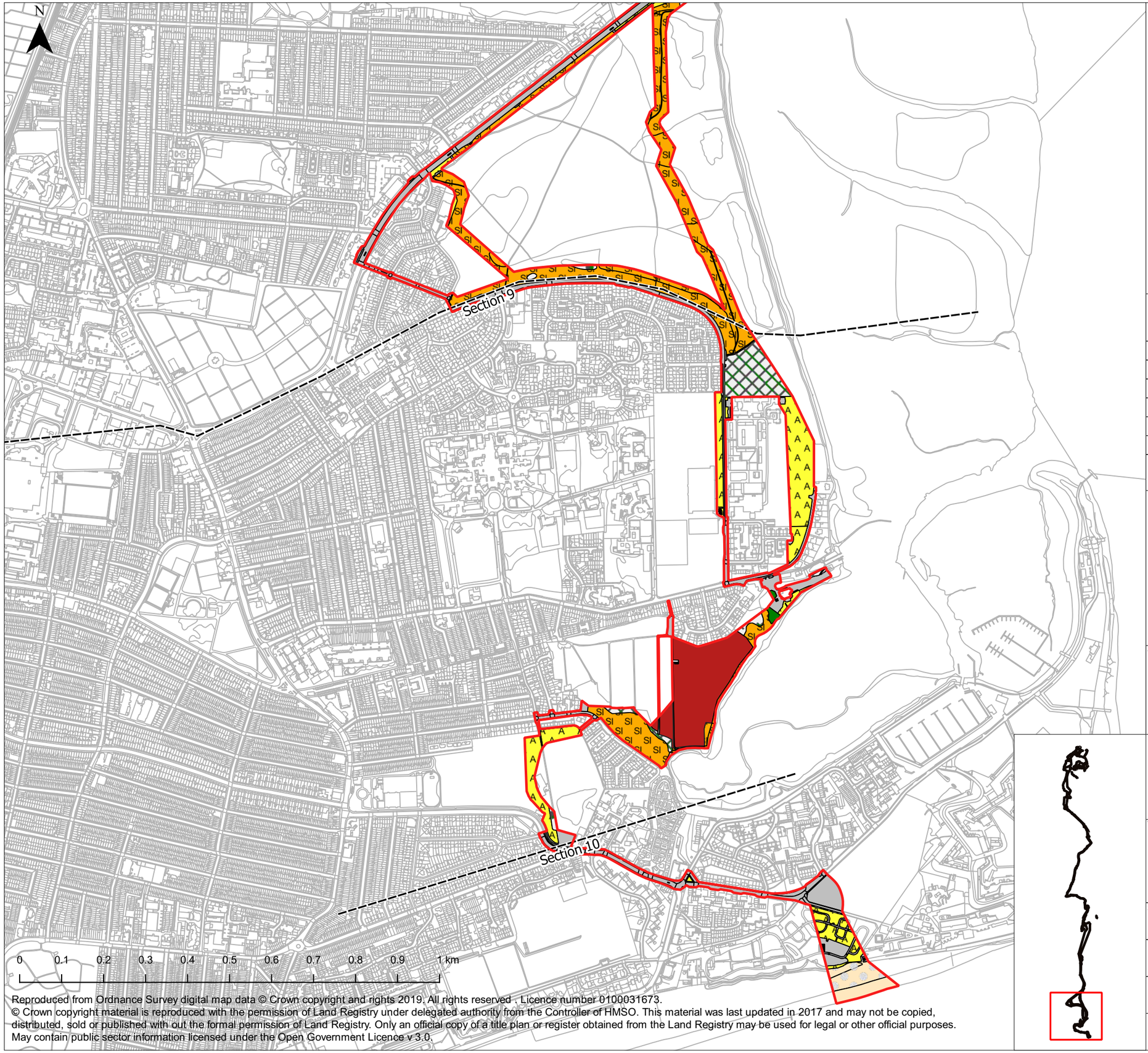




**Legend**

- Order Limits
- Broadleaved Woodland
- Coniferous Woodland
- Mixed Woodland
- Dense Scrub
- Scattered Scrub
- Scattered Broadleaved Trees
- Unimproved Neutral Grassland
- Semi-improved Neutral Grassland
- Semi-improved Calcarous Grassland
- Improved Grassland
- Marshy Grassland
- Species-poor Semi-improved Grassland
- Running Water
- Intertidal Mud and Sand
- Intertidal Shingle
- Intertidal Rocks/Boulders
- Saltmarsh
- Arable
- Amenity Grassland
- Introduced Shrub
- Seawall
- Buildings
- Bare Ground
- Hardstanding
- Railway Ballast
- Allotments

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TITLE: Figure 16.3 - Habitats
Sheet 8 of 8

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0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1 km



**Legend**

- Order Limits
- Species-rich Hedgerow
- Species-poor Hedgerow
- Defunct SR Hedge
- Defunct SP Hedge
- SR Hedge with Trees
- SP Hedge with Trees

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TITLE: Figure 16.4 - Hedgerows
Sheet 1 of 8

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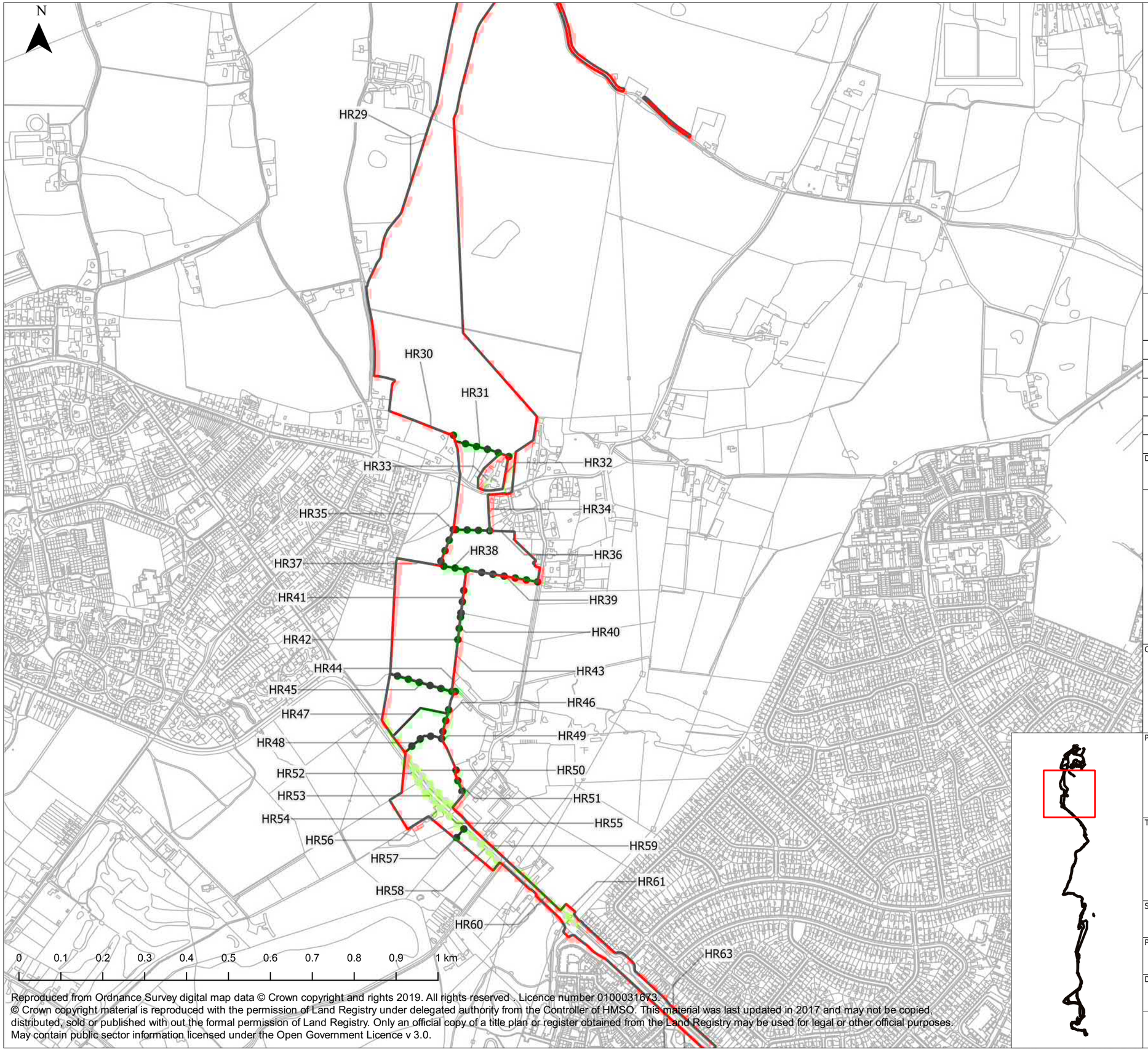




**Legend**

- Order Limits
- Species-rich Hedgerow
- Species-poor Hedgerow
- Defunct SR Hedge
- Defunct SP Hedge
- SR Hedge with Trees
- SP Hedge with Trees

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation 5(2)(l)

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TITLE: Figure 16.4 - Hedgerows
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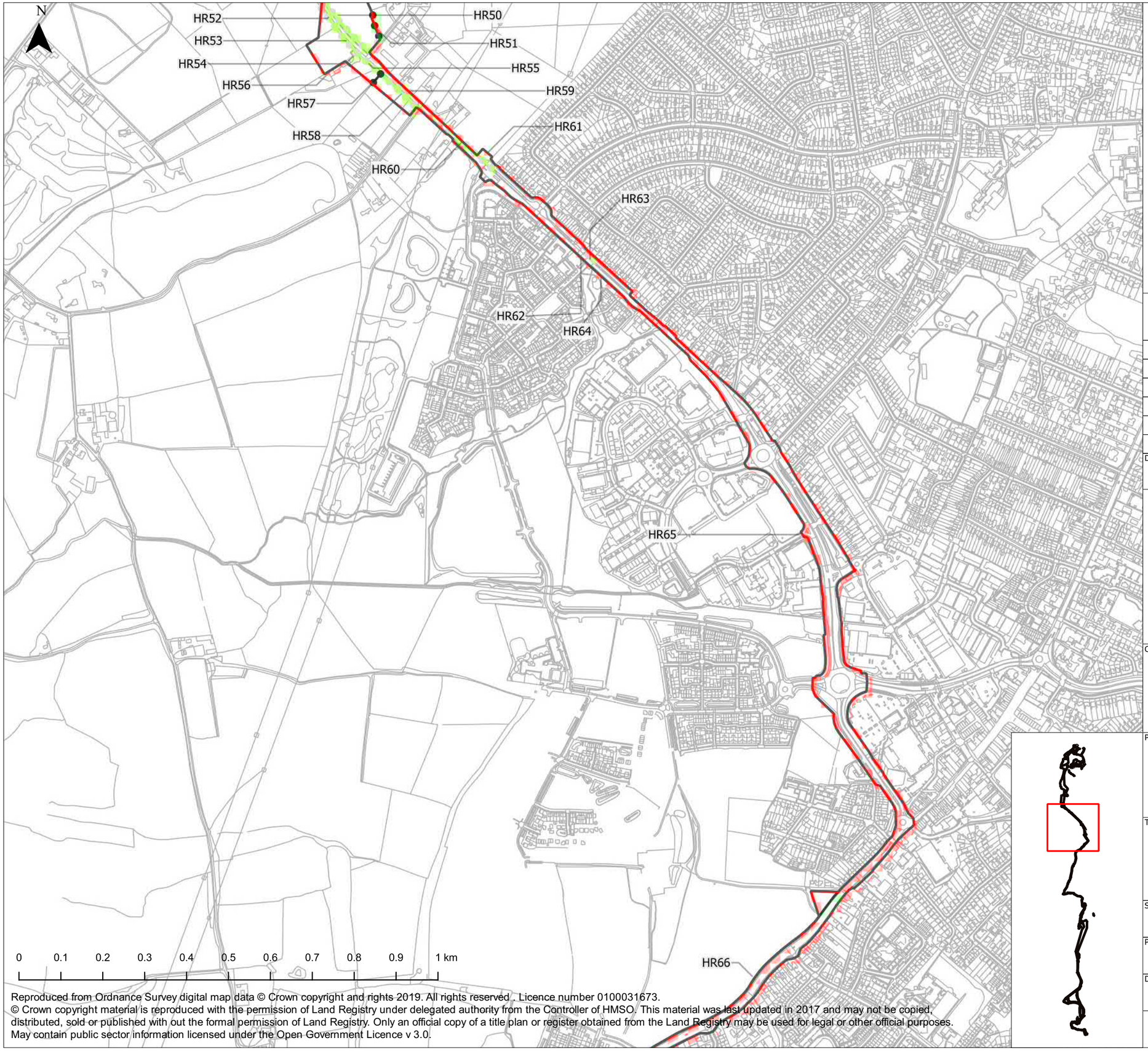






**Legend**

- Order Limits
- Species-rich Hedgerow
- Species-poor Hedgerow
- Defunct SR Hedge
- Defunct SP Hedge
- SR Hedge with Trees
- SP Hedge with Trees

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation 5(2)(l)

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Figure 16.4 - Hedgerows
Sheet 3 of 8

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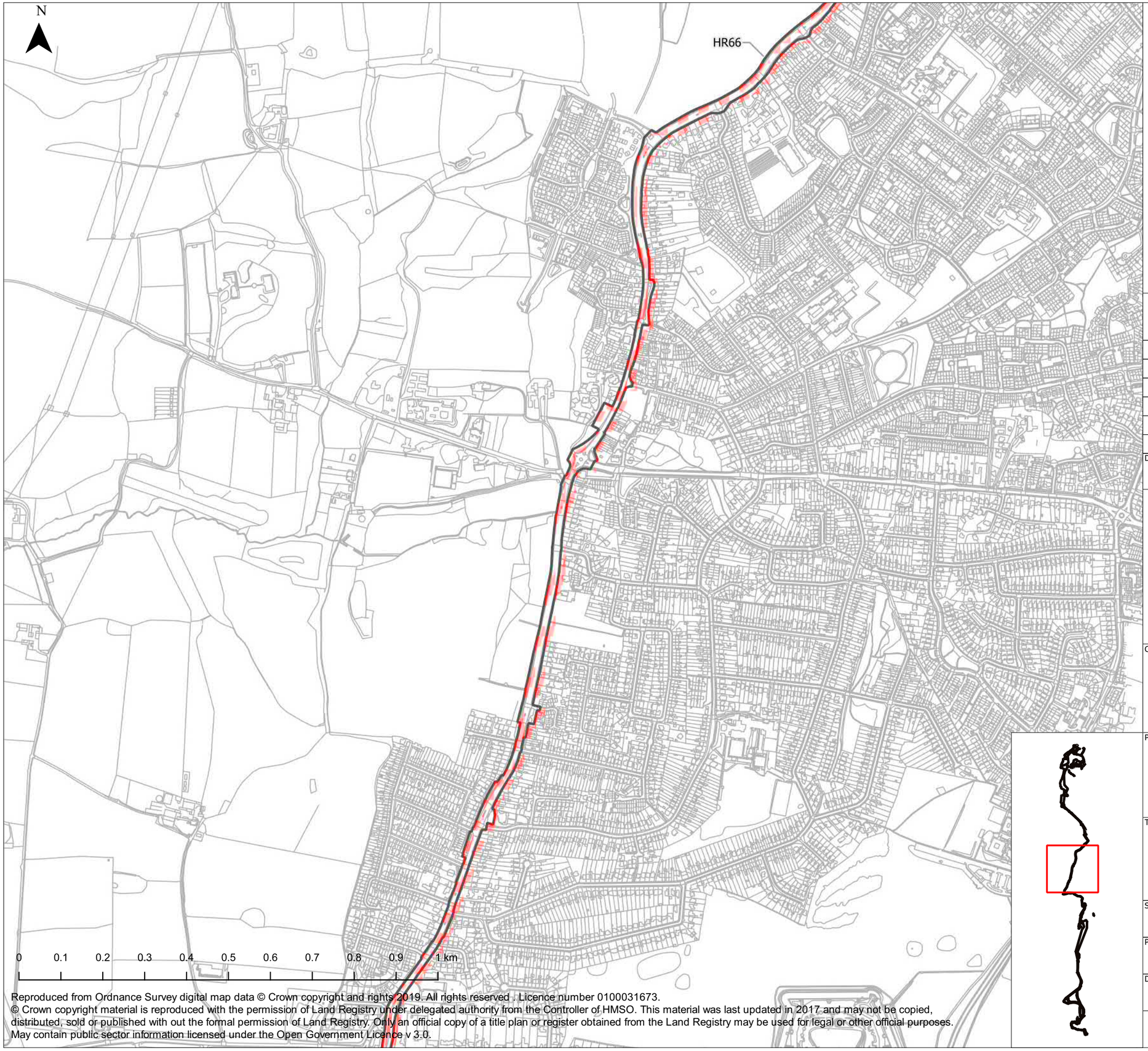




**Legend**

- Order Limits
- Species-rich Hedgerow
- Species-poor Hedgerow
- Defunct SR Hedge
- Defunct SP Hedge
- SR Hedge with Trees
- SP Hedge with Trees

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TITLE: Figure 16.4 - Hedgerows
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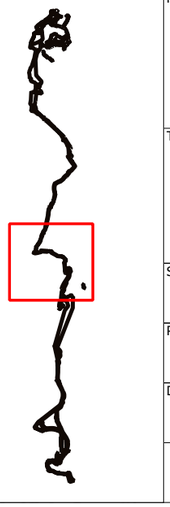

**Legend**

- Order Limits
- Species-rich Hedgerow
- Species-poor Hedgerow
- Defunct SR Hedge
- Defunct SP Hedge
- SR Hedge with Trees
- SP Hedge with Trees

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Figure 16.4 - Hedgerows
Sheet 5 of 8

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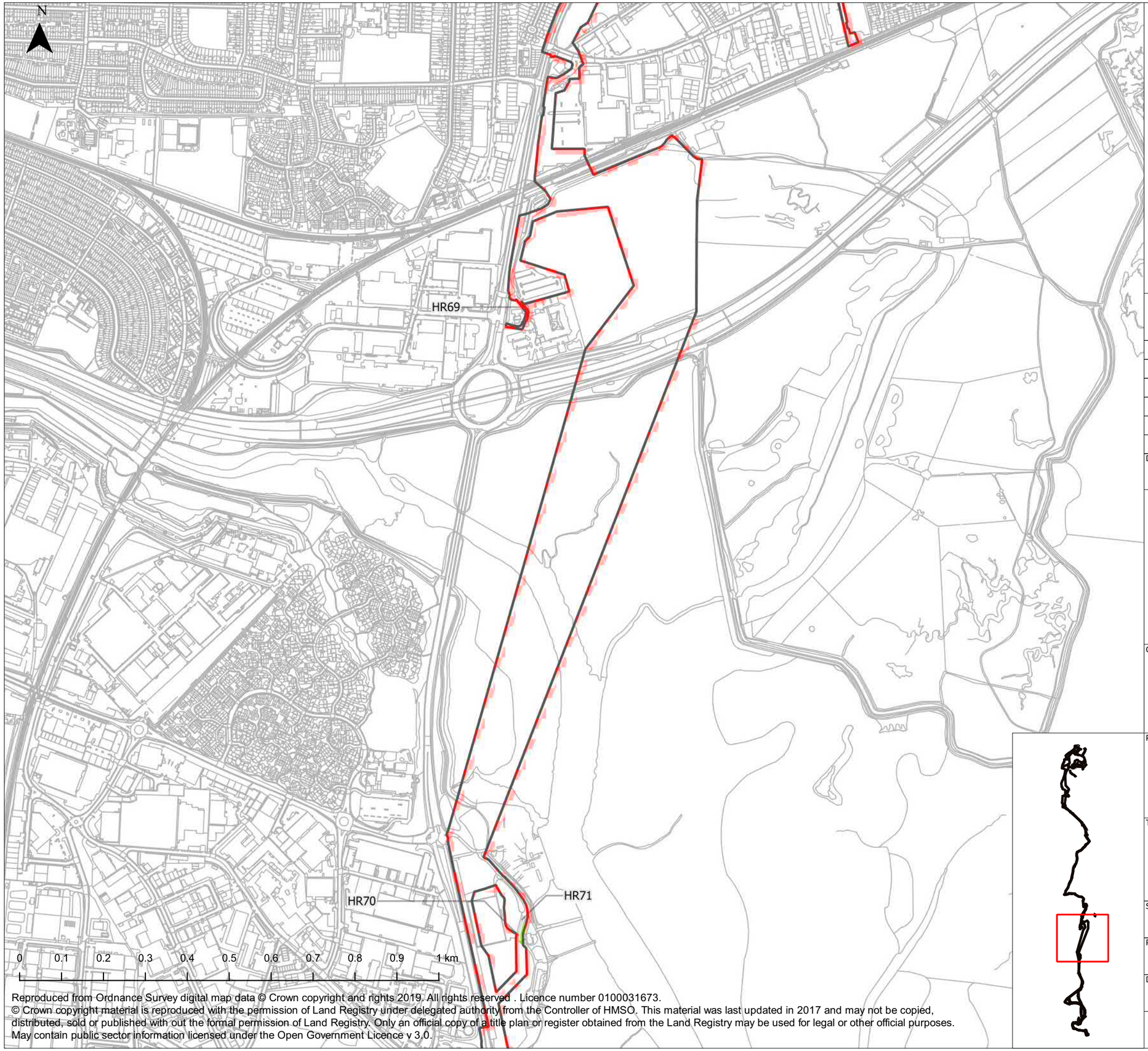


**Legend**

- Order Limits
- Species-rich Hedgerow
- Species-poor Hedgerow
- Defunct SR Hedge
- Defunct SP Hedge
- SR Hedge with Trees
- SP Hedge with Trees

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TITLE: Figure 16.4 - Hedgerows
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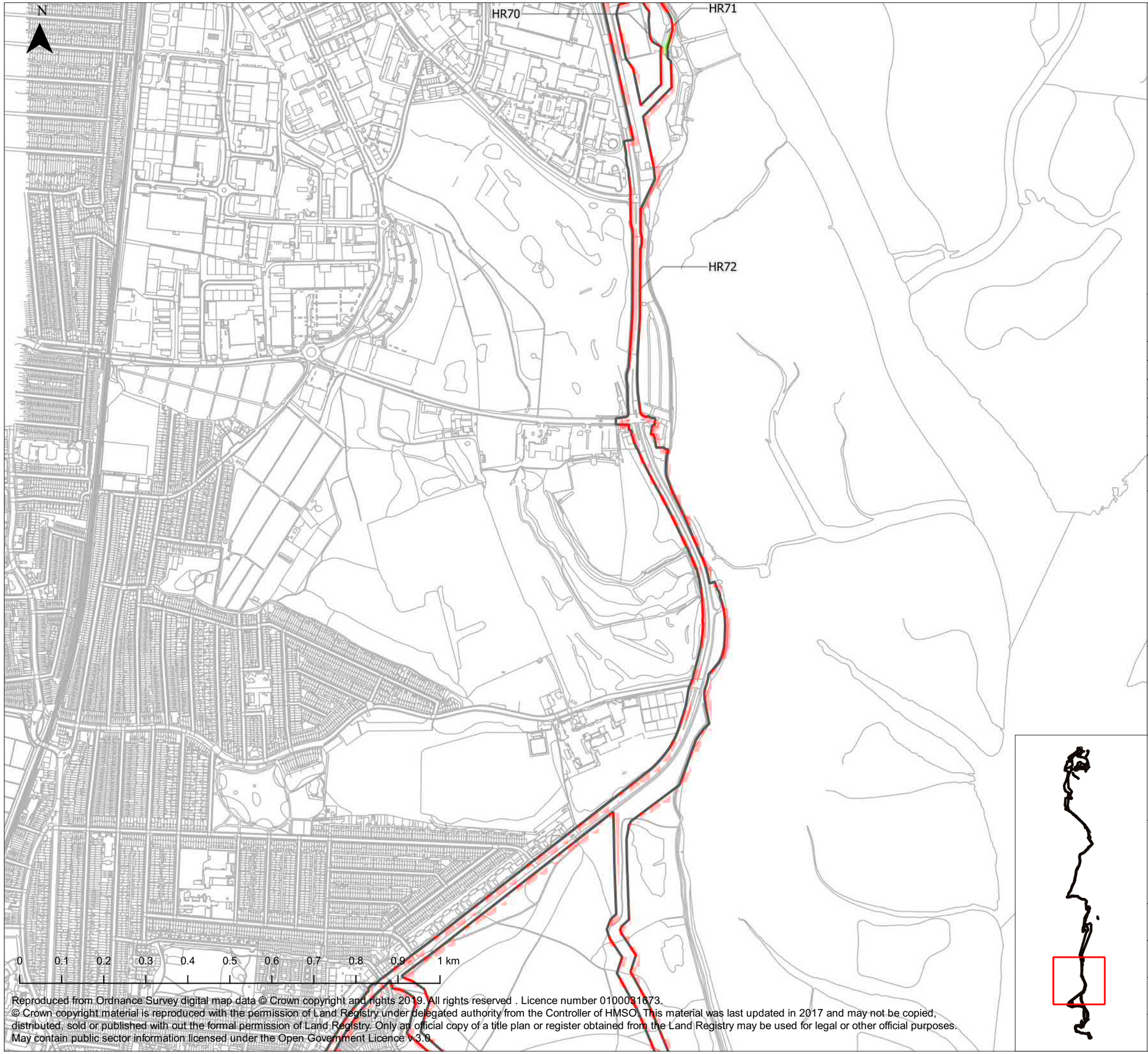




**Legend**

- Order Limits
- Species-rich Hedgerow
- Species-poor Hedgerow
- Defunct SR Hedge
- Defunct SP Hedge
- SR Hedge with Trees
- SP Hedge with Trees

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**Legend**

- Order Limits
- Species-rich Hedgerow
- Species-poor Hedgerow
- Defunct SR Hedge
- Defunct SP Hedge
- SR Hedge with Trees
- SP Hedge with Trees

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Sheet 8 of 8

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