



# **West Winch Housing Access Road**

# **Environmental Statement Chapter 8 Annex 8.1 Habitat Survey Report**

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Document Reference: NCC.3.08.04

Version Number: 001

Date: November 2023



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# 1 Introduction

## 1.1 Methodology

### Overview

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, 2017), and Joint Nature Conservation Committee (JNCC, 2010) in addition to guidance contained in the British Standard - Code of Practice for Biodiversity and Development BS42020:2013 (British Standards Institute, 2013).

### Habitat Survey

1.1.2 A habitat survey was carried out on 13 April and 14 May 2021. The survey covered the entire area within the (previous) Scheme Boundary presented in Appendix A, including boundary features, and immediate surrounds where accessible. Consideration was given to surrounding habitats using aerial photograph imagery.

1.1.3 The habitat survey was carried out by ecologists who have extensive experience of completing habitat assessments.

1.1.4 Habitats were described and mapped following the Professional Version 1.0 of UKHab using the following documents:

- UK Habitat Classification User Manual (UK Habitat Classification Working Group, 2018a)(hereafter 'UKHab User Manual');
- UK Habitat Classification Field Key (UK Habitat Classification Working Group, 2018b); and
- The UK Habitat Classification Habitat Descriptions Version 1.0 (UK Habitat Classification Working Group, 2018c); and
- UK Habitat Classification Basic Edition: Suggested Symbology for Maps (UK Habitat Classification Working Group, 2020).



1.1.5 The UK Habitat Classification Working Group describes UKHab as “...a unified and comprehensive approach to classifying habitats, designed to provide a robust technique for classifying and mapping British habitats”. The dominant plant species are recorded and habitats are classified according to their vegetation types. UKHab system comprises a principal hierarchy (the Primary Habitats) and non-hierarchical Secondary Codes. Primary Habitats include ecosystems (level 1), broad habitat types (level 2 and 3); more defined habitats, including habitats of principle importance (level 4); and further defined habitats, including Annex I habitats (level 5).

1.1.6 Secondary Codes are then used to provide more information on a habitat from the following categories:

- Mosaic habitats;
- Habitat complexities;
- Origin of habitat;
- Management;
- Land use;
- Environmental qualifiers;
- Hydrological regime; and
- Green infrastructure.

1.1.7 A single Primary Habitat is assigned to each polygon, line or point feature with generally a maximum of six Secondary Codes used. Habitats are described by the Primary Habitat first (e.g., w1h5 other woodland; mixed predominantly broadleaved) with Secondary Codes following (e.g., w1h5 36 57 other woodland; mixed predominantly broadleaved that is plantation with young trees - self set). Lowercase letters are used, with the levels 2 to 5 shown by the alphanumeric code and no commas are used between secondary codes as per the UKHab User Manual. For habitats of interest that were too small to map point features were used with Primary Habitats and Secondary Codes



where applicable. For this survey where possible, level 5 Primary Habitat codes were used for habitats.

1.1.8 Habitats were marked on a paper base map and were subsequently digitised using a Geographical Information System (GIS) (Appendix A). The habitat survey was repeated 07 June 2023 and 08 June 2023 as part of an update PEA survey. This survey was undertaken concurrently with a habitat condition assessment to inform the BNG Assessment for the Proposed Scheme. Where required, the survey information has been updated, including the GIS maps to ensure that habitat types and habitat areas are accurate to inform the ES and BNG Assessment.

1.1.9 The scientific names for plant species follow those in the New Flora of the British Isles (Stace, 2019).

#### Notes and limitations

1.1.10 Every effort has been made to provide a comprehensive description of the Proposed Scheme; however, the following specific limitations apply to this assessment:

- The field surveys was carried out over the period of two days focussing on different sections of the Scheme Boundary each visit, as such only a selection of all plant species that occur within the Scheme Boundary and identifiable in that season will have been recorded. However, for the purpose of a UKHab assessment it is considered an accurate assessment of habitat types and potential of the Proposed Scheme to support important or notable plant communities; and
- The UKHab map (Appendix A) has been reproduced from field notes, site photographs and aerial imagery. Whilst this provides a sufficient level of detail to fulfil the requirements of a UKHAB assessment, the maps are not intended to provide exact locations of key habitats. This map has been updated with the latest Scheme Boundary (October 2023) and where necessary have been drawn to a ESRI GIS topographical layer.



## 1.2 Results

### Habitat overview

1.2.1 The Scheme Boundary comprised a 64.94ha area.

### UKHAB classifications

1.2.2 A breakdown of the habitat types identified their areas within the Scheme Boundary each habitat type can be found in Table 1-1 for linear habitat features. Areas measurements are presented in hectares and lengths are presented in kilometres.

**Table 1-1 – UKHab areas**

<b>UK Habitat Classification</b>	<b>Habitat Code</b>	<b>Area/ Length</b>
Arable and horticulture	c1	1.42
<i>Arrhenatherum</i> neutral grassland	g3c5	1.11
Bramble Scrub	h3d	0.37
Building	u1b5	0.07
<i>Calamagrostis epigejos</i> grassland (Other neutral grassland)	g3c	0.27
Cereal crops	c1c	43.09
Dense scrub	h3	0.08
Developed land sealed surface	u1b	6.06
Eutrophic standing waters - Priority habitat pond	r1a 19	0.16
Hawthorn scrub	h3f	0.85
Mixed scrub	h3h	0.86
Dense scrub (willow)	h3	0.07



UK Habitat Classification	Habitat Code	Area/ Length
Modified grassland	g4	8.08
Mosaic of developed land - Vegetated garden	u1d	0.04
Other coniferous woodland	w2c	0.01
Other lowland mixed deciduous woodland	w1f7	5.54
Other neutral grassland	g3c	0.43
Other swamps	f2f	0.11
Wet woodland	w1d	0.31
<b>Total Area</b>	<b>Not applicable</b>	<b>68.94</b>
Hedgerow (priority habitat)	<b>h2a</b>	<b>1.66</b>

Other Lowland mixed deciduous woodland – w1f7

1.2.3 This habitat type comprised a 4.94ha area and was identified within the central habitat mosaic west of the A47. The structure and origin of the woodland was considered to be an immature self-seeded successional habitat that was less dense and more open within the west and north of this area, becoming closed canopy towards the eastern and southern extents. Pedunculate Oak *Quercus robur* was the dominant tree species throughout the majority of the woodland, with Goat Willow *Salix caprea* frequent in eastern sections bordering the CWS woodland where soil conditions were wetter. Towards the south of the woodland Silver Birch *Betula pendula* and occasional Hazel *Corylus avellana* were present. A shrub layer was largely absent, Hawthorn *Crataegus monogyna* and Bramble *Rubus fruticosus* was frequent at the periphery of the woodland as it graded towards a more open grassland habitat. Ground layer vegetation was variable, in the north of the woodland the more open canopy facilitated a grassy sward with False Oat-grass *Arrhenatherum elatius* the most abundant species. Where the canopy



was denser there were patches of bare ground, with Ground Ivy *Glechoma hederacea*, Nettle *Urtica dioica* and Common Cow Wheat *Melampyrum pratense* noted occasionally.

Other woodland; Broadleaved w1g and Other woodland; Mixed w1h – secondary code 36 plantation woodland

- 1.2.4 These habitats comprised a 2.04ha (w1g) and 1.27ha (w1h) area and were located within the north of the Scheme Boundary around the Hardwick roundabout and bordering the A47. The majority of this woodland was recently planted, with a typical mostly native species mix present including Pedunculate Oak, Hawthorn, Grey Willow *Salix cinerea*, Cherry *Prunus avium*, Silver Birch, and Scots Pine *Pinus sylvestris*. The density of planting and immaturity of the woodland resulted in a mostly absent shrub and ground layer.

Wet woodland w1d

- 1.2.5 A small 0.33ha area of this habitat type was identified to the south of the Hardwick roundabout within a poorly draining depression. Several large mature White Willows *Salix alba* dominated the canopy, with little shrub or ground layer present with occasional Hawthorn and immature Willow scrub. At the periphery of this habitat type species indicative of wet grassland / swamp and scrub type habitats were present, including Soft Rush *Juncus effusus* and Reed-canary Grass *Phalaris arundinacea* with standing water present.

Other coniferous woodland w2c – secondary code 36 plantation

- 1.2.6 A very small 0.04ha area of this woodland was present in a single block at the boundary of residential curtilage on the western side of the A10, consisting entirely of Leyland Cypress *Cupressus × leylandii*.

Dense scrub h3

- 1.2.7 This habitat type was present frequently across the central and northern sections within the Scheme Boundary comprising a 2.26ha area in total, bordering the A47 and the south of the Hardwick roundabout.





1.2.8 The scrub present within the habitat mosaic south of the Hardwick roundabout was variable in species composition and structure, fluctuating between dense and scattered structure. Hawthorn, Blackthorn *Prunus spinosa*, and Bramble formed the denser scrub blocks with Ash *Fraxinus excelsior*, Silver Birch, and Pedunculate Oak occasionally protruding. Immature Willow scrub was also frequent in wetter sections of the mosaic. Bramble with accompanying Nettle, was scattered regularly within this area.

1.2.9 A block of dense scrub on the western side of the A47 layby was more developed, with Blackthorn and Hawthorn dominating in turn with Pedunculate Oak, Grey Willow, and Ash. The understory was dominated by Bramble, with some areas of bare ground with Nettle occasionally.

#### Other swamps f2f

1.2.10 This habitat type was identified within the habitat mosaic south of the Hardwick roundabout and to the north of the central ecotone west of the A47, comprising an area of 0.28ha in total.

1.2.11 Within the habitat mosaic south of Hardwick roundabout this swamp habitat type consisted of patches dominated by Greater Pond Sedge *Carex riparia*, with occasional Reed Canary Grass, Bittersweet *Solanum dulcamara*, and False Fox Sedge *Carex otrubae*. Other patches were defined by patches of Soft Rush, amongst a sward of Meadow Foxtail *Alopercurus pratensis*, Yorkshire Fog *Holcus lanatus*, and Creeping Bent *Agrostis stolonifera*. Within this area there were several ponds, with other damp depressions that were dry at the time of survey that were recorded within this swamp habitat type. These were colonised Creeping Buttercup *Ranunculus repens*, Celery-leaved Buttercup *Ranunculus sceleratus*, Redshank *Persicaria maculosa*, Bulrush *Typha latifolia*, and Hard Rush *Juncus inflexus*.

#### Eutrophic standing waters

1.2.12 Several small and shallow ponds are present within the habitat mosaic south of the Hardwick roundabout, totalling a 0.13ha area. Bulrush was present frequently as emergent vegetation; other species present as partially



emergent or on the immediate banks included Greater Pond Sedge *Carex riparia* and Reed-canary Grass.

Other Neutral Grassland g3c (*Calamagrostis epigejos* dominant)

- 1.2.13 The patch defined as other neutral grassland vegetation within the northern section of the central ecotone west of the A47 was almost completely dominated by Wood Small-reed *Calamagrostis epigejos*. This area was significantly drier than the other swamp habitat areas, with a low diversity of companion species, including White Dead-nettle *Lamium album*, Cleavers *Galium aparine*, Nettle *Urtica dioica*, Oxford Ragwort *Senecio squalidus* and Common Ragwort *Senecio jacobaea*, with rare young individual Hawthorn plants. These associated species are not typical of wetland habitats but the dominance of Wood Small-reed may indicate localised and infrequent seasonal inundation.

Other neutral grassland g3c – secondary code 17 ruderal / ephemeral vegetation

- 1.2.14 An area within the habitat mosaic south of the Hardwick roundabout 0.24ha in size, this area was almost entirely dominated by Nettle, with no grass species present. Other species that were present in low abundance included Hemlock, Creeping Thistle and Teasel.

Arrhenatherum neutral grassland g3c5

- 1.2.15 This grassland type was identified frequently during the habitat survey and comprised a total area of 5.7ha.
- 1.2.16 The largest area of this habitat type was present within the central ecotone with woodland encroaching from the south, it was dominated by False Oat-grass with Cock's-foot *Dactylis glomerata* and Yorkshire Fog also abundant. Hairy Tare *Ervilla hirsuta* was abundant throughout the sward, with Hogweed *Heracleum sphondylium*, Cleavers, Ragwort, Creeping Buttercup, Tufted Vetch *Vicia cracca*, and Upright Hedge-parsley *Torilis japonica* as accompanying species. One Pyramidal Orchid *Anacamptis pyramidalis* plant was found within the sward at grid reference TF 63977 17191. At the edge of



encroaching woodland Pedunculate Oak and Hawthorn became more regularly interspersed within the sward. The structure of the grassland is unmanaged with generally tall / medium height grasses that are occasionally lightly browsed by deer.

- 1.2.17 This grassland habitat type was also present within the habitat mosaic south of the Hardwick roundabout, which features in the drier patches between wetland and scrub dominated areas. False Oat-grass was the most abundant grass species in the sward, with frequent Yorkshire Fog and Cock's-foot. Forb species recorded were indicative of unmanaged and disturbed ground, including Hemlock *Conium maculatum*, Teasel *Dipsacus fullonum*, Nettle, Creeping Buttercup, Field Bindweed *Convolvulus arvensis*, Ragwort, Smooth Tare *Erythronium tetraspermum*, and Creeping Thistle *Cirsium arvense*.
- 1.2.18 This habitat type was also recorded in areas to the south-west and west of the Hardwick roundabout, which had developed due to infrequent management. False Oat-grass was dominant, with Common Bent *Agrostis capillaris*, Red Fescue *Festuca rubra*, and Yorkshire Fog frequent, with Smaller Cat's-tail *Phleum bertolonii* occasional. Forb species were infrequent generally, those present included Dove's-foot Crane's-bill *Geranium molle*, Yarrow *Achillea millefolium*, Cleavers, and Ground Ivy *Glechoma hederacea*.
- 1.2.19 Two ditches within agricultural land north of rectory lane, one within the centre the other at the southern edge, both had a 1m strip of neutral grassland habitat associated with the upper banks. False Oat-Grass dominated both swards, with Yorkshire Fog and Cock's-foot also frequent. Black Grass *Alopecurus myosuroides* (a nutrient tolerant and herbicide resistant grass commonly associated with agricultural land as a weed) was present within the sward of the central ditch. Forbs shared between these ditches were typical of this habitat type, including Hogweed, Broad-leaved Dock *Rumex obtusifolius*, and Cleavers. Perennial Cornflower *Centaurea montana* was present as a single plant within the southern ditch, this plant is not considered native to the British Isles but has become established as it readily escapes from gardens.



1.2.20 A large field south of Rectory Lane was categorised within this neutral grassland habitat type, False Oat-grass was dominant, and the sward structure was homogenous throughout. Other grass species were present in patches including Yorkshire Fog and Red Fescue. Forb diversity and abundance was very low, with occasional Nettle, Hogweed, and White Dead-nettle.

1.2.21 Verges associated with Chequer's Lane were categorised within this habitat type, with False Oat-grass dominant, with Perennial Rye-grass *Lolium perenne*, Red Fescue, and Cock's-foot frequent. Forb species present included, Yarrow, Lesser Stitchwort *Stellaria graminea*, Goat's-beard *Tragopogon pratensis*, Meadow Buttercup *Ranunculus acris*, Hogweed, Bramble, and Self-heal *Prunella vulgaris*.

1.2.22 Towards the southern extent of the Scheme Boundary was an area of neutral grassland borders a drainage ditch amongst arable land. False Oat-grass was the dominant species within this area, with Common Couch *Elymus repens*, Cock's-foot, and Yorkshire Fog accompanying grass species. Forbs were in low diversity and abundance in this area which included Creeping Thistle, Field Horsetail *Equisetum arvense*, Barren Brome *Bromus sterilis*, and a single Bee Orchid *Ophrys apifera* plant.

Modified grassland g4

1.2.23 This habitat type, characterised by dominant (around 75%) palatable grass species, usually Perennial Rye-grass, was recorded regularly around managed areas of the Hardwick roundabout and other smaller areas within the Scheme Boundary totalling a 5.6ha area.

1.2.24 Short sward and regularly mown grassland within the soft landscaping associated with the Hardwick roundabout was categorised within this habitat type, with Perennial Rye-grass the dominant species with accompanying Red Fescue. Forb species present were indicative of this habitat type and management regime including, White Clover *Trifolium repens*, Dove's-foot



Crane's-bill, Spotted Medick *Medicago arabica*, Ribwort Plantain *Plantago lanceolata*, and Dandelion *Taraxacum agg.*

1.2.25 Other areas within the Scheme Boundary that contained this habitat type included verges along the A47 and along a track within the central section of the Scheme.

Cereal crops c1c

1.2.26 The southern section within the Scheme Boundary consists predominantly of intensive arable land comprising a 24.13ha area, managed for the production of cereal crops namely Wheat *Triticum sp.* Plant species associated with cultivated land i.e., arable weeds were recorded occasionally but were not present in significant diversity or abundance due to the intensive nature of the agricultural practice. Such species included Common Poppy *Papaver rhoeas*, Field Pennycress *Thlaspi arvense*, Corn Spurry *Spergula arvensis*, and Knotgrass.

Arable and horticulture c1 – secondary code 17 ruderal / ephemeral (fallow arable)

1.2.27 A 1.4ha area field within the southern extent of the Scheme Boundary was recorded as a fallow arable field, with approximately 50% bare ground cover with ruderal / ephemeral species colonising including, Small Nettle *Urtica urens*, Curled Dock *Rumex crispus*, Common Poppy, Common Mallow, and Scentless Mayweed *Tripleurospermum inodorum*. A number of Skylark *Alauda arvensis* were displaying over this area indicating they may use the fallow area for nesting.

Developed land – sealed surface u1b

1.2.28 An 8.64ha area of the Scheme Boundary consisted of hard standing, comprising tarmac roads i.e. A47, A10, Hardwick roundabout, Rectory Lane, Chequer's Lane etc.



## Buildings u1b5

1.2.29 Several buildings are currently included within the Scheme Boundary totally 0.12ha area.

### 1.3 References

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