

Land at College Road, Campdown

ECOLOGICAL APPRAISAL

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Dandara Southern Ltd.

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EXECUTIVE SUMMARY

Contents	Summary
Site Location	The site is shown in Figure 1 and comprises approximately 26.6 hectares of land consisting of a series of large, connected fields with areas of scrub and hedgerow. The site was formerly heavily grazed but, following the removal of livestock from the site (approximately 2019), the site vegetation has become more overgrown.
Proposals	The proposed development plans for the site include the creation of 628 residential properties, with associated landscaping, public open space, allotments, sustainable drainage systems (SuDS) and access routes.
Scope of this Survey(s)	The scope of the survey was to conduct a Preliminary Ecological Appraisal informed by a desk-based study and an extended Phase 1 habitat survey of the site. The desk-based study used online resources and information sourced from the Local Ecological Records Centre (LERC).
Results and Evaluation	The survey has found that: • The site is in close proximity to Chichester and Langstone Harbours Ramsar and SPA, Solent Maritime SAC, Solent & Isle of Wight Lagoons SAC and Portsmouth Harbour Ramsar and SPA. It supports functionally linked habitat for Chichester and Langstone Harbours SPA used by dark-bellied brent geese and curlew. • The site boundary includes a small portion of Littlepark Wood (West) SINC (although no works are proposed). • Habitats recorded include semi-improved neutral grassland, hedgerows, semi-natural broadleaved woodland and dense scrub. • The semi-improved neutral grassland, dense scrub, scattered trees and hedgerows are of Local importance. Semi-natural woodland associated with the Littlepark Wood SINC have a County level of importance. • The site supports foraging and commuting bats, hazel dormice, common reptiles and is likely to support common and widespread nesting birds and invertebrates.
Recommendations	Proposals include: • Compensation for the loss of functionally linked habitat for overwintering birds associated with Chichester and Langstone Harbours SPA. • Construction and operational drainage strategies to avoid the risk of pollution of European sites. • Financial contribution to the Solent Recreation Mitigation Strategy. • Purchase of nutrient credits to achieve nutrient neutrality. • Habitat enhancement and creation to mitigate the loss of grassland and scrub habitats. • European Protected Species Mitigation licence for hazel dormice with detailed method statement, to ensure retention of vegetation and connectivity throughout the site and beyond. This must be obtained prior to commencement of any works on site.

	• A reptile translocation to the retained habitat in the north of the site. • A pre-commencement survey for badgers, trees for new potential bat roosting features and Schedule 9 invasive non-native plant species. • Any vegetation removal must take place outside of the nesting bird season (1st March to 31st August) and in line with the dormouse mitigation strategy. • In line with national and local planning policy the site will be enhanced for biodiversity. Measures include bat and bird boxes, native species planting, creation of species rich grasslands and addition of habitat piles and hibernacula for reptiles.
Conclusion	The proposed recommendations and mitigation would allow compliance with national and local planning policy. Regular liaison with the Local Planning Authority will be necessary to progress the scheme.

1.0 INTRODUCTION

1.1 BACKGROUND

Tetra Tech was commissioned by Dandara Southern Ltd. in June 2022 to undertake an Ecological Appraisal (EA) of Land at College Road, Campdown, hereafter referred to as “the site”.

This report has been prepared by Senior Ecologist John Simper, BSc, MSc, MCIEEM.

1.2 SITE DESCRIPTION

The site is located approximately 2.5 km west of Havant and is centred on Ordnance Survey (OS) National Grid Reference SU 69069 06995. The A3 is situated immediately adjacent to the eastern boundary of the site, whilst Portsmouth Golf Club and the urban area of Widley are found to the west. To the north lies a college and block of deciduous woodland, and to the south lies the outer reaches of the city of Portsmouth, with Langstone Harbour beyond.

The site is shown in Figure 1 and comprises approximately 26.6 hectares of land consisting of a series of large, connected fields of semi-improved neutral grassland, with areas of scrub, hedgerows, and small areas of broadleaved woodland. The site was formerly grazed but, following the removal of livestock from the site, is now largely overgrown with a long sward and some scrub encroachment.

1.3 DEVELOPMENT PROPOSALS

The proposed development plans for the site include the creation of 628 dwellings, community centre, allotments, public open space including play areas, new junction to College Road, related internal access roads, footways and cycleways, pumping station and drainage basins.’

1.4 PURPOSE OF REPORT

The purpose of this report is to:

- Undertake a desk study to obtain existing information on statutory and non-statutory sites of nature conservation interest and relevant records of protected/notable species within the site and its zone of influence.
- Present the results of an extended Phase 1 Habitat Survey, involving a walkover of the site to record habitat types and dominant vegetation, including any invasive species and evidence of protected fauna or habitats capable of supporting such species.
- Evaluate potential ecological receptors on site and within the zone of influence; identify any constraints to the sites development and make any recommendations for further surveys, mitigation or enhancement.

The details of this report will remain valid for a period of eighteen months from the date of the survey (18th January 2024), after which the validity of this assessment should be reviewed to determine whether further updates are necessary. The recommendations within this report should be reviewed (and reassessed if necessary) should there be any changes to the red line boundary or development proposals which this report was based on.

Scientific names are provided at the first mention of each species and common names (where appropriate) are then used throughout the rest of the report for ease of reading.

2.0 METHODOLOGY

2.1 HISTORIC SURVEYS

Previous reports relevant to the site have undertaken by WYG (now Tetra Tech). These reports include.

- Ecological Appraisal (WYG, 2019)
- Bat activity and emergence / return surveys (WYG, 2019)
- Hazel dormouse presence/likely absence (WYG, 2019)
- Wintering bird surveys (WYG, 2019).

Resurveys for bats and hazel dormice were carried out during 2022-2023, which were prepared concurrently with this report and are referred to here (Tetra Tech, 2023a; Tetra Tech, 2023b). The site was also revisited to enable a more recent habitat assessment to be carried out in June 2022 (this report), which triggered the need for reptile surveys due to a change in habitat management; these were also carried out in 2022 (Tetra Tech, 2023c). Additional winter bird surveys have been undertaken in the winter of 2022/23 by Wild New Forest (Wild New Forest, 2023).

2.2 DESK STUDY

The desktop study comprised two elements:

- A data search obtained from the Hampshire Biodiversity Information Centre (HBIC) on 6th February 2023.
- Online element including a search using Multi Agency Geographic Information for the Countryside (MAGIC) (<https://magic.defra.gov.uk>) website and Ordnance Survey (OS) and Aerial Imagery (<https://www.bing.com/maps>).

The geographical extent of the search area was related to the significance of sites and species and potential zones of influence. For this site the following search areas were considered appropriate:

- 10 km for sites of International Importance (e.g. Special Areas of Conservation (SAC), Special Protection Area (SPA), Ramsar sites);
- 2 km for sites of National or Regional Importance (e.g. Sites of Special Scientific Interest (SSSI), protected or otherwise notable species and non-statutory designated sites of County Importance (e.g. Local Wildlife Sites (LWS));
- 2 km for biological records; and
- 1 km for ancient woodland and mapped priority habitats.

The data search did not cover Tree Preservation Orders (TPOs); or Conservation Areas designated for their special architectural and historic interest.

2.3 FIELD SURVEYS

The following methodologies have been used to identify the ecological receptors present on or near the site and which are relevant to the proposed development.

2.3.1 Habitats

An extended Phase 1 habitat survey was undertaken on the site on 18th July 2022 by Tetra Tech Senior Ecologist John Simper; BSc, MSc, MCIEEM. The weather conditions were hot and sunny with a light breeze during the survey

The vegetation and broad habitat types within the site were recorded using the Phase 1 categories (JNCC, 2016), with the sites suitability to support notable flora assessed according to the Chartered Institute of Ecology and Environmental Management guidelines (CIEEM, 2017). Dominant plant species were recorded for each habitat present using standard nomenclature (Stace, 2019).

2.3.2 Protected and Notable Species

The site was inspected for evidence of, and its potential to support, protected or notable species, especially those listed under the Schedule 2 of the Habitat Regulations 2017 (as amended), Schedule 5 of the Wildlife and Countryside Act (W&CA) 1981 (as amended), the Countryside Rights of Way (CROW) Act 2000, those given extra protection under the Natural Environment and Rural Communities (NERC) Act 2006, and species included in the Hampshire LBAP.

The presence of some species was determined using standard best practice guidance and are listed below.

Badger

The site was surveyed for evidence of badger *Meles meles* setts or other badger activity such as paths, latrines or signs of foraging. Methodologies used and any setts recorded were classified according to published criteria (Harris, et al., 1989).

Hazel Dormouse

The site was surveyed for its suitability to support hazel dormouse *Muscardinus avellanarius* based on best practice guidance (Bright, et al., 2006).

Bats

Roosting Bats – Buildings / Structures / Trees

Any suitable buildings, structures or trees on site were assessed from the ground for their suitability to support breeding, resting and hibernating bats using survey methods based on the BCT *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (Collins, 2016) – hereafter referred to as the 'BCT Guidelines'.

Foraging / Commuting Bats

Potential habitat for foraging and commuting bats were assessed on site according to the BCT Guidelines.

Birds

Bird Species identified at the time of survey were noted and nesting birds recorded as seen. An assessment of habitats was undertaken to determine the likely value to breeding and foraging birds.

Great Crested Newt and Widespread Amphibians

The site was appraised for its suitability to support great crested newts *Triturus cristatus* (GCN) based on guidance outlined in the *Herpetofauna Workers' Manual* (Gent & Gibson, 2003) and the *Great Crested Newt Conservation Handbook* (Langton, et al., 2001). This appraisal also considered waterbodies within 500m of the site and their potential to be used for breeding newts. Each pond was assessed using the Habitat Suitability Index (HSI) (Oldham, et al., 2000) which assigns a value to the pond calculated from 10 pre-identified features. The HSI value gives a correlation of likely use by GCN and below 0.46 the waterbody is considered to have less likelihood of GCN presence however this metric is a guide and should be assessed on a site-by-site basis as waterbodies with low HSI have been known to support GCN.

Habitat suitability and evidence of other common amphibians was recorded on site where relevant.

Reptiles

The site was appraised for its suitability to support reptiles using guidance outlined in the Herpetofauna Workers' Manual (Gent & Gibson, 2003).

Invertebrates

The site habitats were appraised for suitability to support assemblages of invertebrates and commented on in the report as appropriate.

Other Species

The site was also appraised for its suitability to support other protected or notable fauna with regard to the Guidelines for Preliminary Ecological Appraisal (CIEEM, 2017) and BS42020:2013 Biodiversity – Code of Practice for Planning and Development (BSI, 2013). Evidence of any current or historical presence of such species was recorded.

Invasive Species

Evidence of species listed on Schedule 9 of the Wildlife and Countryside Act (1981) as amended, were recorded as seen.

Scoped Out

Protected species including otter *Lutra lutra*, water vole *Arvicola amphibius* and white-clawed crayfish *Austropotamobius pallipes* have been scoped out of this report due to the absence of suitable water courses on or within close proximity to the site. These species are therefore not discussed further within this report.

2.4 LIMITATIONS

Any absence of desk study records cannot be relied upon to infer absence of a species/habitat as the absence of records may be a result of under-recording within the given search area.

To determine presence or likely absence of protected species usually requires multiple visits at suitable times of the year. The survey reported upon here assessed the potential of the site to support species of note, which are considered to be of principal importance for the conservation of biodiversity with reference to those given protection under UK or European wildlife legislation, from only a single visit. Whilst normally this is conducted ahead of any further survey work to confirm the presence / likely absence of such species from site, this report was conducted in line with the further protected species surveys and therefore considers them in parallel. This reduces the impacts of missing protected species and habitats as multiple site visits were able to simultaneously confirm the presence / likely absence of these species.

3.0 RESULTS & EVALUATION

3.1 PROTECTED SITES

European designated sites identified within 10 km of the proposed development are presented in Table 1 with the designation, qualifying features and proximity from the development site also indicated. Details of Nationally designated sites, including SSSIs, and local non-designated sites within 2 km and obtained from the HBIC are also included.

Table 1. Statutory and non-statutory designated sites identified during the desk study

Site Name	Designation	Distance and direction from Site	Reasons for designation
Chichester and Langstone Harbours	SPA	1.2 km S	The large, sheltered estuarine basins comprise of extensive sandflats and mudflats exposed at low tide. The two harbours are joined by a stretch of water that separates Hayling Island from the mainland. Tidal channels drain the basin and penetrate inland. The mudflats are rich in invertebrates and also support extensive beds of algae, especially, eelgrasses <i>Zostera</i> spp. and <i>Enteromorpha</i> species. This site supports breeding little tern <i>Sterna albifrons</i> and sandwich tern <i>Sterna sandvicensis</i>; on passage little egret <i>Egretta garzetta</i>; overwintering bar-tailed godwit <i>Limosa lapponica</i> and little egret <i>Egretta garzetta</i>. The site also supports the migratory species of ringed plover <i>Charadrius hiaticula</i>, black-tailed godwit <i>Limosa limosa islandica</i>, dark-bellied brent goose <i>Branta bernicla bernicla</i>, dunlin <i>Calidris alpina</i>, grey plover <i>Pluvialis squatarola</i>, redshank <i>Tringa totanus</i> and ringed plover <i>Charadrius hiaticula</i>. The area also regularly supports an assemblage of at least 20,000 waterfowl.
Solent Maritime	SAC	1.2 km S	Sea inlets, tidal rivers, estuaries, mud flats, sand flats, lagoons (including saltwork basins), salt marshes, salt pastures, salt steppes.
Solent & Isle of Wight Lagoons	SAC	2.6 km S	The Solent on the south coast of England encompasses a series of Coastal lagoons , including percolation, isolated and sluiced lagoons. The site includes a number of lagoons in the 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 including large populations of three notable species: the nationally rare foxtail stonewort <i>Lamprothamnium papulosum</i> , the nationally scarce lagoon sand

Site Name	Designation	Distance and direction from Site	Reasons for designation
			shrimp <i>Gammarus insensibilis</i> , and the nationally scarce starlet sea anemone <i>Nematostella vectensis</i> .
Portsmouth Harbour	Ramsar	4.1 km SW	A large, industrialised estuary consisting of a saltmarsh, vast expanses of mudflats, and tidal creeks on the south coast. The mudflats, supporting extensive beds of eelgrass, green algae, and sea lettuce, provide feeding grounds for internationally important numbers of wintering dark-bellied brent geese. A unique and high-quality flora and fauna occur at the site. Nationally important numbers of grey plover, dunlin, and black-tailed godwit are supported. Set in an urban area, there is a major port facility, and large-scale military activities occur at the site.
Portsmouth Harbour	SPA	4.1 km SW	Portsmouth Harbour qualifies under Article 4.2 of the Birds Directive by supporting internationally or nationally important wintering populations of the following species: • 2,290 dark-bellied brent geese (1.3% of the north-west European population and 2.5% of the British wintering population) • 100 red-breasted merganser <i>Mergus serrator</i> (1% of British) • 70 black-tailed godwit (over 1% of British) • 8,010 dunlin (over 1% of British)
Langstone Harbour SSSI	SSSI	1.3 km S	Intertidal habitat as well as areas above high water important as roosting sites for wintering birds. Considered to be suffering adverse impacts due to rising sea level which will be significantly reducing the extent of habitat exposed at low tide and hence reducing the value of the area of the area for birds.
Chichester Harbour	SSSI	1.3 km S	Chichester Harbour is a large estuarine basin in which at low water extensive mud and sandflats are exposed, drained by channels which unite to make a common exit to the sea. The site is of particular significance for wintering wildfowl and waders and also breeding birds both within the Harbour and in the surrounding permanent pasture fields and woodlands. There is a wide range of habitats which have important plant communities.
Littlepark Wood (West)	SINC	Adjacent to north eastern boundary of the site	Ancient semi-natural woodland with hazel dormouse.

Site Name	Designation	Distance and direction from Site	Reasons for designation
Portsmouth City Golf Course Copse	SINC	Adjacent to southern boundary of the site	Woodland also noted for presence of fly orchid <i>Ophrys insectifera</i> .
Littlepark Wood (East)	SINC	0.1 km E	Ancient semi-natural woodland.
Gundymoor Wood (Main)	SINC	0.1 km N	Ancient semi-natural woodland.
Camp Down Grassland Remnants	SINC	0.1 km S	Grassland.
Field East of Farlington Redoubt (North)	SINC	0.2 km S	Semi-improved grassland with significant areas of unimproved grassland.
Portsmouth Golf Course East	SINC	0.2 km SW	Semi-improved grassland with significant areas of unimproved grassland.
Johnston's Coppice	SINC	0.3 km N	Ancient woodland supporting hazel dormouse.
Fields off Havant Road	SINC	0.3 km S	Designated for hosting dark-bellied brent goose and dwarf spurge <i>Euphorbia exigua</i> .
Gundymoor Wood (West)	SINC	0.4 km N	Ancient semi-natural woodland.
Meadow Adjacent to Johnston's Copse	SINC	0.4 km N	Ancient semi-natural woodland with hazel dormouse.
Fort Purbrook Paddock 4 (Havant)	SINC	0.4 km S	Semi-improved grassland with significant areas of unimproved grassland.
Fort Purbrook Paddock 3 (Havant)	SINC	0.5 km SW	Species rich grassland.
Hulbert Road Meadow	SINC	0.6 km N	Fen.
East and West of Gillman Road	SINC	0.6 km S	Semi-improved grassland with- corn parsley <i>Petroselinum segetum</i> and flattened meadow-grass <i>Poa compressa</i> .
Fort Purbrook Paddock 1 (Havant)	SINC	0.6 km SW	Species rich grasslands with small blue <i>Cupido minimus</i> and autumn lady's-tresses <i>Spiranthes spiralis</i> .

Site Name	Designation	Distance and direction from Site	Reasons for designation
Fort Purbrook Paddock 2 (Havant)	SINC	0.6 km SW	Species rich grassland with autumn lady's-tresses.
Portsmouth Golf Course West	SINC	0.6 km W	Species rich grasslands.
Land to the north of Portsdown Hill Road	SINC	0.7 km SW	Species rich grasslands with small blue and autumn lady's-tresses.
Neville's Park Areas 4-10	SINC	0.8 km NE	Woodland with meadow brome <i>Bromus commutatus</i> .
Field to West of Gillman Road	SINC	0.8 km SW	Species rich grassland.
Land to the South of Portsdown Hill Road	SINC	0.9 km SW	Unimproved grassland.
Fort Purbrook	SINC	0.9 km SW	Species rich grasslands with sainfoin and autumn lady's-tresses.
Purbrook Park Wood	SINC	0.9 km W	Ancient woodland
Sandy Dell	SINC	0.9 km W	Ancient woodland.
Stakes Coppice Remnant 2	SINC	1.0 km N	Woodland.
Stakes Coppice Remnant 6	SINC	1.0 km N	Ancient semi-natural woodland.
Neville's Park West Wood	SINC	1.0 km N	Woodland.
Neville's Park East Wood	SINC	1.1 km N	Ancient semi-natural woodland
Newlease Copse, Havant	SINC	1.1 km NW	Woodland
Forty Acres Farm B	SINC	1.1 km S	Noted for dark-bellied brent goose.
Farlington Marshes Grassland (North-East)	SINC	1.1 km S	Agriculturally unimproved grassland and coastal grazing marsh.
Birkdale Avenue	SINC	1.1 km SW	Lowland calcareous grassland.
Farlington Avenue	SINC	1.2 km SW	Species rich grasslands.

Site Name	Designation	Distance and direction from Site	Reasons for designation
Neville's Park Areas 2 & 3	SINC	1.3 km NE	Agriculturally unimproved grassland.
Bushy Lease	SINC	1.3 km NE	Ancient semi-natural woodland.
Farlington Marshes	SINC	1.3 km S	Semi-improved grassland with significant areas of unimproved grassland with species including wild celery <i>Apium graveolens</i> ; divided sedge; sea barley; golden-samphire; narrow-leaved bird's-foot-trefoil and parsley water-dropwort.
Stakes Coppice Remnant 5	SINC	1.5 km N	Ancient semi-natural woodland.
Meadow west of Farlington Avenue	SINC	1.5 km SW	Species rich grasslands.
Frank's Coppice	SINC	1.7 km N	Woodland.
Stakes Coppice Remnant 4		1.7 km N	Woodland.
Stakes Coppice Remnant 7	SINC	1.7 km N	Woodland.
Stakes Coppice Remnant 1	SINC	1.7 km NW	Woodland.
London Road Fen	SINC	1.7 km W	Semi-natural woodland and fens

Ancient Woodland and Priority Habitats

Areas of priority habitats have been identified via the MAGIC search within 1km. This included areas of ancient deciduous woodland adjacent and just inside the north-east boundary of the site, associated with Littlepark Wood SINC, and deciduous woodland to the south of the site associated with Portsmouth City Golf Course Copse SNCI.

3.2 HABITATS

The following habitats, listed in Table 2, have been identified through our assessment. A Phase 1 habitat map can be found in Figure 2, with detailed Target Notes and Photographic Plates included in Appendix B, as appropriate.

Table 2. Habitats

Habitat	Result	Importance assessment
Semi-improved neutral grassland	Much of the site was dominated by ungrazed semi-improved grassland (TN1), including an abundance of cock's foot <i>Dactylis glomerata</i> , Yorkshire fog <i>Holcus lanatus</i> , red fescue <i>Festuca rubra</i> , creeping buttercup <i>Ranunculus</i>	Negligible importance. This is a very common habitat type locally and

Habitat	Result	Importance assessment
	<i>repens</i> , common fleabane <i>Pulicaria dysenterica</i> and creeping thistle <i>Cirsium arvense</i> . The sward was long in all areas and parts of the south of the site was wetter with flushes present and marshy grassland species including soft rush <i>Juncus effusus</i> and lesser spearwort <i>Ranunculus flammula</i> scattered within.	nationally and is not considered a Habitat of Principal Importance (HPI) nor is it listed as a Hampshire priority habitat.
Dense scrub	Dense scrub was located in patches throughout the site (TN2), predominantly in the centre of the site as well as dominating some of the boundaries where the hedgerows had been left unmanaged and had grown out. The scrub was dominated by hawthorn <i>Crataegus monogyna</i> , bramble <i>Rubus fruticosus</i> with goat willow <i>Salix caprea</i> , bracken <i>Pteridium aquilinum</i> , common nettle <i>Urtica dioica</i> , buddleia <i>Buddleja davidii</i> , blackthorn <i>Prunus spinosa</i> and teasel <i>Dipsacus fullonum</i> present.	Negligible importance. This is a common habitat type locally and nationally and is not considered a Habitat of Principal Importance (HPI) nor is it listed as a Hampshire priority habitat.
Scattered trees	Scattered semi-mature field maple <i>Acer campestre</i> trees were located within the centre of the site (TN3). A number of mature and semi-mature trees were located within the boundaries of the site over areas of old hedgerows and scrub. Other species included ash <i>Fraxinus excelsior</i> , horse chestnut <i>Aesculus hippocastanum</i> and elder <i>Sambucus nigra</i> .	Negligible importance. This is a common habitat type locally and nationally and is not considered a Habitat of Principal Importance (HPI) nor is it listed as a Hampshire priority habitat.
Hedgerows	Unmanaged hedgerows (TN4) dominated by species such as hawthorn and field maple <i>Acer campestre</i> lie off site adjacent to the site boundary, in particular to the east of the site. A defunct hedgerow was found to be present along the western boundary of the site (TN5).	County level of importance. Hedgerows are a priority habitat in Hampshire and whilst these are species poor, they are broad in many places and provide structural connectivity throughout the site and beyond.
Semi-natural broadleaved woodland	A small part of site included SINC woodland associated with Littlepark Wood (West) (TN6) – this was dominated by pedunculate oak with a hawthorn understorey. A small area of this woodland type was also present in the south-eastern corner, connected to the Portsmouth City Golf Course Copse SINC.	County level of importance. The northern woodland is part of an ancient woodland SINC. The other woodlands on and adjacent to the site are also deciduous, semi-natural woodlands. Both woodland types are county and national HPis.

3.3 PROTECTED AND NOTABLE SPECIES

Data obtained from HBIC confirmed the presence of several protected and notable species within 2km of the site. Site relevant data are discussed in **Error! Not a valid bookmark self-reference.** below. For species with legal protection arising from persecution, such as badgers, some details are purposefully omitted, but can be provided on request to inform the masterplan.

Table 3. Protected and notable species site assessment

Species	Legal protection	Result	Importance assessment
Badger	Protection of Badgers Act 1992; Wildlife and Countryside Act 1981 (as amended) Schedule 6.	HBIC returned no records of badgers from within 2km of the site. No evidence of badgers was found during the 2017 survey (WYG, 2017b) nor during the 2022 resurvey visit. The site is, however, suitable for foraging badgers and the areas of dense scrub and the boundary habitats offer potential sett building locations, in particular the woodland to the north.	Negligible importance. No evidence of badger was recorded on site in 2017 or 2022.
Hazel Dormouse	Conservation of Habitats and Species Regulations 2017 Schedule 2; Wildlife and Countryside Act 1981 (as amended) Schedules 5 & 6; Natural Environment and Rural Communities 2006 Section 41.	HBIC returned three records of hazel dormice within 2 km of the site. The nearest record was within Littlepark Wood, a portion of which is included within the northern site boundary. The hedgerows, woodland and dense scrub on site are suitable for the species and are connected to known populations of the species. Hazel dormice are therefore considered likely to be present on site. A hazel dormouse survey undertaken by WYG in 2017 found a single dormouse nest within the hedgerow along the western boundary (WYG, 2017c). Surveys were repeated in 2022-2023, with dormice found throughout the eastern, southern and northern boundaries of the site (Tetra Tech, 2023b).	County level of importance. Dormice were recorded within the site boundary in both surveys and were assumed to be present within all connecting habitats across the site, excepting the isolated patches within the centre of the site. As Hampshire contains 10% of the UK's population of dormice, this indicates the site to be at the county level of significance for this species.

Species	Legal protection	Result	Importance assessment
Bats	Conservation of Habitats and Species Regulations 2017 Schedule 2; Wildlife and Countryside Act 1981 (as amended) Schedules 5 & 6; Natural Environment and Rural Communities 2006 Section 41.	HBIC returned numerous records of bats within a 2 km radius of the site, with records of 10 different species in total. Species recorded within the last 10 years include common pipistrelle <i>Pipistrellus pipistrellus</i>, soprano pipistrelle <i>Pipistrellus pygmaeus</i>, Brandt's bat <i>Myotis brandtii</i>, whiskered bat <i>Myotis mystacinus</i>, brown long-eared <i>Plecotus auritus</i>, noctule <i>Nyctalus noctula</i>, Natterer's bat <i>Myotis nattereri</i>, serotine <i>Eptesicus serotinus</i> and Alcaethoe bat <i>Myotis alcathoe</i> and another unidentified myotis species <i>Myotis</i> sp. A series of bat activity surveys undertaken by WYG in 2017 found relatively low levels of bat activity surveys across the site with no bats recorded roosting in trees within the south-west of the site (WYG, 2017a). However, surveys repeated in 2022 found the site to be more important for bats at this time (Tetra Tech, 2023a). <u>Roosting bats</u> In 2017, there were a number of mature and semi mature trees on site that exhibited features such as cracks and crevices in the limbs that could support roosting bats. No signs of roosting bats, such as droppings, staining or scratch marks were identified during ground level assessments or during tree climbing inspections, carried out in 2017. The 2022 emergence surveys noted a likely absence of bats within the southern trees identified previously as low potential to host roosting bats. <u>Foraging and commuting bats</u> The site comprised a matrix of habitats including hedgerows, semi-improved grassland, scattered trees and dense scrub, which provided suitable habitat for foraging and commuting bats and connectivity to the wider area. In addition, suitable off-site habitat surrounded the site, particular in the woodland habitat of Littlepark Wood to the north of the site. The 2017 survey recorded low levels of widespread species on site. The 2022 activity surveys recorded mainly common pipistrelle, alongside low and individual passes from soprano pipistrelle, barbastelle, serotine,	Local level of importance in 2017 and increased to County level of importance in 2022.

Species	Legal protection	Result	Importance assessment
		noctule, Natterer's bat and Myotis species. Activity was broadly spread across the site, with foraging and commuting bats utilising the linear, tree-lined boundaries for their routes.	
Birds	Wildlife and Countryside Act 1981 (as amended).	HBIC provided 1309 records of birds, those protected under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) within 2 km of the site. Species likely to be found on site are the following Red Listed Birds of Conservation Concern (BoCC), herring gull <i>Larus argentatus</i>, lapwing <i>Vanellus vanellus</i>, hobby <i>Falco subbuteo</i>, mistle thrush <i>Turdus viscivorus</i>, curlew <i>Numenius arquata</i>, barn owl <i>Tyto alba</i>, cuckoo <i>Cuculus canorus</i>, house sparrow <i>Passer domesticus</i>, starling <i>Sturnus vulgaris</i>, linnet (<i>Carduelis cannabina</i>), swallow (<i>Hirundo rustica</i>), dunnoek (<i>Prunella modularis</i>, bullfinch <i>Pyrrhula pyrrhula</i> and house martin <i>Delichon urbicum</i>. The site lies within 1.3 km of Chichester and Langstone Harbours SPA and has been a foraging area for wintering dark bellied brent geese and curlew in the past. As the site is now no longer grazed it is now far less suitable for the species (although the southern part of the site has been cut in winter in recent years to maintain suitability). Winter bird surveys undertaken by WYG in 2015/16 and 2016/17 found up to 54 dark bellied brent geese and up to 103 curlew were utilising the site. Use of the site has declined in recent years with surveys by Wild New Forest (2023) between 2020 – 2023 recording a maximum of five curlew on three occasions in winter 2020/21 and two on one occasion in winter 2022/23. Brent geese were recorded only once in December 2022 with a flock landing briefly before leaving the site again. Fields within the site are listed as both primary and secondary support areas for brent geese and waders as part of the Solent Waders and Brent Goose Strategy (SWBGS) (Fields H03A, H125, H113 and H106).	Nationally important for over-wintering birds.

Species	Legal protection	Result	Importance assessment
GCN and Widespread Amphibians	GCN: Conservation of Habitats and Species Regulations 2017 Schedule 2; Wildlife and Countryside Act 1981 (as amended) Schedules 5; Natural Environment and Rural Communities 2006 Section 41.	HBIC returned no records of GCN within 2 km of the site. Additionally, there are no records of GCN survey licence returns within 2 km of the site on MAGIC. In 2017, an assessment was carried out to determine suitability for GCN and widespread amphibians. No suitable water bodies for GCN were recorded on site and the was assessed as having negligible suitability for the species. Two waterbodies were identified from online mapping within Portsmouth Golf Course to the south west of the site which could not be accessed. These, like the site, are isolated from other waterbodies or habitat in the wider area by roads and built development in all directions. The 2022 re-visit noted that terrestrial habitat suitability was improved on site, however there was no improvement in the wider habitat availability or connectivity and no records local to the site (including the NBN Gateway).	Negligible importance. The site was previously unsuitable and the immediate area (including the site and golf course) remains isolated in the landscape. There are no records within 2km of the site and therefore GCN are considered likely to be absent from the site. Precautionary measures will be incorporated into the reptile mitigation strategy, including a requirement to cease works if GCN are identified on site during construction.
Reptiles	<i>Smooth snake and sand lizard</i>: Conservation of Habitats and Species Regulations 2017 Schedule 2; Wildlife and Countryside Act 1981 (as amended) Schedules 5; Natural Environment and Rural Communities 2006 Section 41. <i>Adder, grass snake, slow worm and common lizard</i>: Wildlife and Countryside	HBIC returned 1 record of a slow worm <i>Anguis fragilis</i> from within 2 km of the site from the last ten years. In 2017, the high levels of grazing on site classified the site on the whole to be of low potential for supporting reptiles. However, the 2022 re-survey noted the change of management, with grassland and scrub then providing higher suitability for these species (widespread reptiles only). No reptile surveys were carried out in 2017 but were completed in 2022. A good population of common lizard and a low population of slow worm were recorded in 2022.	Negligible importance in 2017 (WYG, 2017b) and Local level of importance in 2022. The 2022 population levels of common lizard were good, making the site significant for this species at the Local level of importance.

Species	Legal protection	Result	Importance assessment
	Act 1981 (as amended) Schedules 5; Natural Environment and Rural Communities 2006 Section 41.		
Invertebrates	Some invertebrates are protected under Conservation of Habitats and Species Regulations 2017 and Wildlife and Countryside Act 1981 (as amended). Many invertebrates are also listed as rare and most threatened species under Section 41 of the Natural Environment and Rural Communities Act (2006).	HBIC provided over 90 invertebrate species within 2km of the site, including stag beetle <i>Lucanus cervus</i>, box bug <i>Gonocerus acuteangulatus</i>, dingy skipper <i>Erynnis tages</i>, white admiral <i>Limenitis camilla</i>, grayling <i>Hipparchia semele</i>, chalkhill blue <i>Polyommatus coridon</i>, cinnabar <i>Tyria jacobaeae</i> and garden tiger <i>Arctia caja</i>. The site comprises a matrix of habitats that may support a large number of invertebrate species. These habitats are however widespread and common within the area, and throughout Great Britain and there was no significant value identified for the notable species recorded within the data search.	Negligible importance. It is considered unlikely that the site supports an important population of notable invertebrates, but the widespread habitats recorded on site are suitable for a range of common invertebrates.
Invasive species	Wildlife and Countryside Act 1981 (as amended) Schedule 9; Environmental Protection Act 1990.	No invasive species were recorded during the site visit.	Negligible importance. None found on site during either survey.

4.0 RECOMMENDATIONS

4.1 MITIGATION AND FURTHER SURVEY

All of the works outlined below in Table 4 should be assumed as likely requirements for the pre-planning stage to inform a planning application, unless otherwise stated.

Please note that the further survey work that would be required, based on the habitats and historical data on site, have already been carried out so no further survey work is recommended here beyond pre-commencement checks.

Table 4. Mitigation and Further Survey / Assessment

Ecological Receptor	Further survey / Assessment	Mitigation required	Opportunity for enhancement
Designated sites	The proximity of the Chichester and Langstone Harbours Ramsar and SPA, Solent Maritime SAC, Solent & Isle of Wight Lagoons SAC and Portsmouth Harbour Ramsar and SPA to the site, means that it is necessary for the proposed development to take into consideration the potential effects on European Sites, which will be detailed in a shadow Habitats Regulation Assessment (sHRA). The development proposals are within 2km of Langstone Harbour SSSI. The potential impacts will be mitigated by the same measures established following the sHRA. Natural England has identified that there is the potential for nutrients arising from increased wastewater from residential development to affect the qualifying features of European designated sites in the Solent (Natural England, 2020). The site is in the surface water catchment for the East Hampshire Rivers Catchment Area which has a downstream hydrological connection with the coastal international	Compensation for the loss of functionally linked habitat for overwintering birds associated with Chichester and Langstone Harbours SPA. Construction and operational drainage strategies to avoid the risk of pollution of European sites. Financial contribution to the Solent Recreation Mitigation Strategy. Purchase of nutrient credits to achieve nutrient neutrality.	N/A

Ecological Receptor	Further survey / Assessment	Mitigation required	Opportunity for enhancement
	designated sites described in this report. A Nutrient Balancing Assessment will therefore be required due to the site's proximity to Internationally designated sites. Part of the site includes Littlepark West SINC - although within the site boundary this area will not be impacted by the proposed development. The site also borders Portsmouth City Golf Course Copse SINC. Due to a lack of access from the site to this SINC, there are not expected to be any negative impacts arising from the development proposals. Similarly, there are not expected to be any impacts to any other SINC's resulting from the proposals,		
Habitats	Semi-improved grassland, dense scrub, scattered trees, hedgerows and semi-natural broadleaved woodland was assessed as being locally important due to its potential for foraging and breeding fauna.	General best practice construction methods and current best practice guidance for pollution prevention (PPG6: prevent pollution) will be adhered to. Woodland, dense scrub and hedgerows will be retained wherever possible. Landscape proposals include habitat compensation including grassland, scrub, tree and hedgerow planting.	New landscaping will comprise native species, including pollen-rich flower planting and native trees and shrubs. Addition of new native habitats within the site (these enhancements will be quantified with the use of a BNG metric).
Badger	A pre-commencement badger survey is required in order to assess future impacts.	There is the potential for badger to access the site from the wider landscape. Care should be given during construction to ensure no harm comes to any nearby badgers using the site to forage or commute.	A diverse planting scheme creating areas of species rich grassland and native trees will provide further foraging opportunities for badgers by

Ecological Receptor	Further survey / Assessment	Mitigation required	Opportunity for enhancement
		Efforts will be made to avoid mammals becoming trapped in excavations or pipework by installing ladders and covering excavations overnight where possible.	providing a more diverse habitat.
Hazel Dormouse	Dormice are using the site's boundary vegetation as resting places and foraging links.	Woodland, scrub and hedgerows will be retained wherever possible and no fragmentation of the habitats on site will occur. Any works which will involve removal of woody vegetation will be carried out following a detailed method statement forming part of a Natural England European Protected Species (EPS) mitigation licence.	Dormice will benefit from the addition of a greater diversity of native trees and shrubs into the planting scheme, specifically in areas adjacent to the existing site boundaries The provision of nest boxes (approximately 50) will provide additional nesting habitat within the corridor the site provides, to benefit populations in Littlepark Wood and the wider area, and to enable monitoring as per the licence conditions of the required EPS mitigation licence.
Bats	Large trees within the boundaries and woodland are likely to have features suitable for roosting bats and will need further assessment if they are to be impacted by the proposals. Any plans to remove trees or works such as crown reduction or limb removal should be reviewed by a suitably qualified ecologist.	As good practice, measures to minimise impacts on bats potentially foraging / commuting on site will be implemented through lighting design to minimise impacts in line with the Institution Lighting Professional (ILP) 'Bats and artificial lighting in the UK' guidance note 8 (ILP and Bat Conservation Trust, 2018). Any	General enhancements will include roosting opportunities for bats within new buildings and existing trees on site (300 bat boxes with a mix of tree and building-mounted boxes), and a wildlife friendly native landscaping scheme to offer increased foraging potential

Ecological Receptor	Further survey / Assessment	Mitigation required	Opportunity for enhancement
	Areas of grassland and field boundaries provide suitable habitat for foraging and commuting bats. The site also includes large areas which are of lower suitability to support foraging bats in the form of industrial and hardstanding areas of hard standing. A whole site has been assessed as having moderate potential for roosting and commuting bats. As such, monthly bat activity surveys incorporating manual transect and automated detector surveys may be required from May- October to characterise the bat use of the site.	external lighting will be designed to meet several criteria to ensure that the environmental effects of artificial lighting are managed to a high standard with limited impacts to the existing tree-lined corridors and woodland areas, where practicable, to provide dark commuting and foraging areas for bats. A sensitive lighting strategy will include the following: • Use of Light Emitting Diode (LED) lighting which emits little UV light, and these lamps can be programmed to switch off, or dim at certain times; • Use of 'warm white' as opposed to 'cool white' lighting which has less of an impact on invertebrates; • The lights being directional with light spillage avoided. Hoods / cowls can be used to direct light below the horizontal plane (ideally at an angle less than 70 degrees); • Lights designed to be as low to the ground as possible (specifically not above 8 m); and • Lights to be switched off from an hour before sunset (particularly during the months of April to	for bats on the site. This will be especially effective around the proposed SUDs ponds on site.

Ecological Receptor	Further survey / Assessment	Mitigation required	Opportunity for enhancement
		October, inclusive when bats are active), or at least, designed to be motion activated.	
Birds	Woodland, scrub and hedgerows, grassland and trees offer potential nesting places for nesting birds. The removal of vegetation should take place outside of the bird nesting season (1st March to 31st August). Where this is not possible, a pre-works check by a suitably qualified ecologist will be conducted to assess the presence or absence of nests within 24 hours of the works commencing. If active nests are found, a suitable buffer will be retained around the nest until all checks have fledged (to be confirmed by a suitably qualified ecologist). The site has been known to be used by wintering brent geese and waders in previous years (although it is now largely unsuitable due to changes in grassland management. Given the data available on the site no further surveys are considered necessary – impacts will be further assessed as part of the sHRA process (discussed above).	Mature trees, hedgerows, woodland and scrub will be retained where possible to provide nesting and foraging habitat for birds. The removal of vegetation will take place outside of the bird nesting season (1st March to 31st August). Where this is not possible, a pre-works check by a suitably qualified ecologist will be conducted to assess the presence or absence of nests within 24 hours of the works commencing. If active nests are found, a suitable buffer will be retained around the nest until all checks have fledged (to be confirmed by a suitably qualified ecologist).	A range of bird boxes will be installed to enhance the site for nesting birds, both within the retained boundary vegetation and within the newly built houses. Boxes will include 75 sparrow terraces, 75 swift bricks/boxes, 25 closed-fronted boxes and 75 open-fronted boxes.
Reptiles	The site has confirmed presence of widespread reptile species, specifically a good population of common lizards and a low population of slow-worms.	Reptiles will be translocated from areas that will be excavated into retained habitats (site boundaries, northern areas of the site). Reptile fencing will be required to ensure animals cannot enter/re-enter within the development footprint during the construction phase.	The proposals will create new areas of suitable habitat within landscaped open space and provide suitable refuge and hibernation sites in the form of habitat piles and hibernacula.

Ecological Receptor	Further survey / Assessment	Mitigation required	Opportunity for enhancement
Invertebrates	The site is likely to provide habitat for a range of widespread invertebrate species; however, further surveys were not considered as the habitats were widespread and common in the surrounding landscape.	N/A	The inclusion of a range of native species within planting schemes will enhance the site for invertebrates. The provision of areas of species rich grassland wood also be highly beneficial for invertebrates.
Invasive species	No invasive species were recorded on site. However, a pre-commencement survey would be required to identify any that had become established in the interim between the EA and works starting. Should any Schedule 9 species be identified on site at this time, contractors licensed to remove such species must be used prior to working on site.	N/A	Landscape proposals will ensure use of native species whenever possible (avoiding all Schedule 9 or known invasive species) to ensure no introduction of non-natives and invasives into Littlepark Wood or other neighbouring areas.

5.0 CONCLUSIONS

A Shadow Habitat Regulations Assessment (SHRA) will be required to address potential significant effects on Habitat Sites in the development zone of influence, in accordance with the Habitats Directive 1992 (as amended).

There is the potential for works to affect Chichester and Langstone Harbours Ramsar and SPA, Solent Maritime SAC and Isle of Wight Lagoons SAC as the site is within the East Hampshire Rivers Catchment. This catchment has a downstream hydrological connection with the described designated sites. A SHRA may be required to assess any likely significant effects on these European designated sites. Any development that results in a net increase in the population served by a wastewater system will need to demonstrate 'nutrient neutrality' as a method of avoiding any adverse effects on the integrity of these sites. A Nutrient Neutrality assessment will be required in order for the proposals to demonstrate 'nutrient neutrality' as a method of minimising the impacts of nutrient pollution upon the internationally designated sites.

The site has the potential to support a number of protected species including roosting, hibernating and foraging/commuting bats, dormice and reptiles.

Proposals include:

- Compensation for the loss of functionally linked habitat for overwintering birds associated with Chichester and Langstone Harbours SPA.
- Construction and operational drainage strategies to avoid the risk of pollution of European sites.
- Financial contribution to the Solent Recreation Mitigation Strategy.
- Purchase of nutrient credits to achieve nutrient neutrality.
- Habitat enhancement and creation to mitigate the loss of grassland and scrub habitats.
- European Protected Species Mitigation licence for hazel dormice with detailed method statement, to ensure retention of vegetation and connectivity throughout the site and beyond. This must be obtained prior to commencement of any works on site.
- A reptile translocation to the retained habitat in the north of the site.
- A pre-commencement survey for badgers, trees for new potential bat roosting features and Schedule 9 invasive non-native plant species.
- Any vegetation removal must take place outside of the nesting bird season (1st March to 31st August) and in line with the dormouse mitigation strategy.
- In line with national and local planning policy the site will be enhanced for biodiversity. Measures include bat and bird boxes, native species planting, creation of species rich grasslands and addition of habitat piles and hiberacula for reptiles.

Provided the measures within this report for further survey and mitigation can be adopted, it is anticipated that a design could be brought forward for this site that would be compliant with current local and national biodiversity planning policy.

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FIGURES

Figure 1 – Site Location Plan

Figure 2 – Phase 1 Habitat Map



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Site Location Plan

Campdown

Dandara Southern Ltd.



Legend

Site Boundary

Notes:

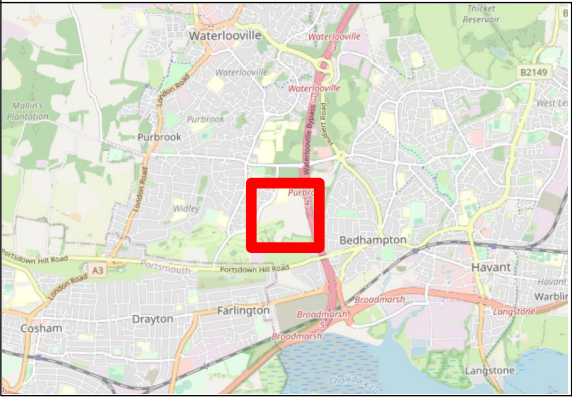
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Office: Southampton

Figure No. 1
Revision No. A

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10 January 2023
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Southampton
Hampshire, SO30 2AF



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Phase 1 Habitat Plan

Campdown

Dandara Southern Ltd.



Legend

- Site Boundary
- Broadleaved woodland - semi-natural
- Scrub - dense/continuous
- Neutral grassland - semi-improved
- Defunct hedge - native species-poor
- Target note
- Scattered tree

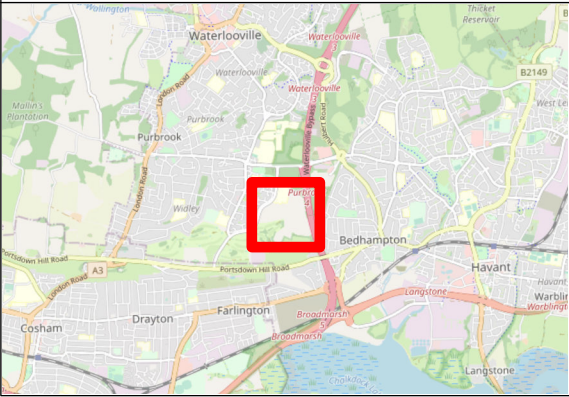
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Figure No. 2
Revision No. B

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APPENDIX A – REPORT CONDITIONS

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The report refers, within the limitations stated, to the environment of the site in the context of the surrounding area at the time of the inspections’. Environmental conditions can vary and no warranty is given as to the possibility of changes in the environment of the site and surrounding area at differing times. No investigative method can eliminate the possibility of obtaining partially imprecise, incomplete or not fully representative information. Any monitoring or survey work undertaken as part of the commission will have been subject to limitations, including for example timescale, seasonal and weather-related conditions. Actual environmental conditions are typically more complex and variable than the investigative, predictive and modelling approaches indicate in practice, and the output of such approaches cannot be relied upon as a comprehensive or accurate indicator of future conditions. The “shelf life” of the Report will be determined by a number of factors including; its original purpose, the Client’s instructions, passage of time, advances in technology and techniques, changes in legislation etc. and therefore may require future re-assessment.

The whole of the report must be read as other sections of the report may contain information which puts into context the findings in any executive summary.

Tetra Tech reserves the right to share this Report and any related materials, surveys, drawings and/or documents at any time with the relevant Local Ecological Records Centre (LREC), any relevant statutory body or any equivalent organisation as Tetra Tech may reasonably require from time-to-time.

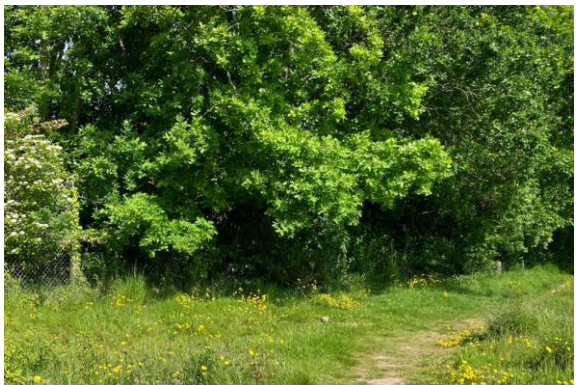
The performance of environmental protection measures and of buildings and other structures in relation to acoustics, vibration, noise mitigation and other environmental issues is influenced to a large extent by the degree to which the relevant environmental considerations are incorporated into the final design and specifications and the quality of workmanship and compliance with the specifications on site during construction. Tetra Tech accept no liability for issues with performance arising from such factors.

APPENDIX B –TARGET NOTES & SURVEY DATA

Target Notes

Target Note	Description	Photographic Plates
TN1	<u>Semi-improved neutral grassland</u> Dominant habitat across the site which was ungrazed/uncut at the time of the survey. Parts of the south of the site were wetter in nature, although were largely dry at the time of the survey. Cock's-foot <i>Dactylis glomerata</i> – Abundant Yorkshire Fog <i>Holcus lanatus</i> – Abundant Red fescue <i>Festuca rubra</i> – Abundant Creeping buttercup <i>Ranunculus repens</i> – Abundant Common fleabane <i>Pulicaria dysenterica</i> – Abundant Creeping thistle <i>Cirsium arvense</i> – Abundant Broad-leaved dock <i>Rumex obtusifolius</i> – Frequent Meadow buttercup <i>Ranunculus acris</i> – Abundant Common nettle <i>Urtica dioica</i> – Occasional Soft rush <i>Juncus effusus</i> Occasional Lesser spearwort <i>Ranunculus flammula</i> – Occasional Common sorrel <i>Rumex acetosa</i> – Occasional Field bindweed <i>Convolvulus arvensis</i> – Occasional Hoary Willowherb <i>Epilobium parviflorum</i> – Occasional	

TN2	<u>Dense scrub</u> Scattered locations around the site within the centre of the fields and around the boundaries. This included an overgrown hedgerow (formerly assessed as hedgerow in 2019). Hawthorn <i>Crataegus monogyna</i> – Dominant Blackthorn <i>Prunus spinosa</i> – Frequent Bramble <i>Rubus fruticosus</i> - Frequent Elder <i>Sambucus nigra</i> – Occasional Stinging nettle <i>Urtica dioica</i> - Frequent	
TN3	<u>Scattered trees</u> Scattered trees were found in the boundaries of the site and within hedgerows. English oak <i>Quercus robur</i> – Occasional Ash <i>Fraxinus excelsior</i> – Occasional Field maple <i>Acer campestre</i> – Occasional Hawthorn <i>Crataegus monogyna</i> - Occasional	
TN4	<u>Hedgerows</u> H1 – Species poor hedgerows Unmanaged hedgerows that were reverting to scrub were found off-site adjacent to the field boundaries (excepting the northern and southern boundaries where woodland adjoined the site). Hawthorn <i>Crataegus monogyna</i> – Frequent Blackthorn <i>Prunus spinosa</i> – Frequent Field maple <i>Acer campestre</i> – Occasional English oak <i>Quercus robur</i> – Occasional H2 – Defunct species poor hedgerow A defunct and fragmented hedgerow that was heavily cut to approximately 1m in height was recorded along the western boundary, along College Road. Hawthorn <i>Crataegus monogyna</i> – Dominant	

	Bramble <i>Rubus fruticosus</i> – Frequent Common nettle <i>Urtica dioica</i> - Frequent	
TN5	<u>Semi-natural broadleaved woodland</u> Little Park Wood (West) SINC: SU 69183 07300 An area of good quality woodland with mature English oak trees and understorey dominated by hawthorn, which was present along the northern boundary of the site (north-eastern section). A footpath ran through the edge of the woodland from the west towards the south-east. Further semi-natural broadleaved woodland patches were present at the southern boundary of the site on areas adjacent to the golf course and connecting to the A3 road corridor. Species in those patches were similar to those within the northern woodland and field margins.	

APPENDIX C – KEY LEGISLATION

Habitats Directive

The Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora, or the 'Habitats Directive', is a European Union directive adopted in 1992 in response to the Bern Convention. Its aims are to protect approximately 220 habitats and 1,000 species listed in its several Annexes.

In the UK, the Habitats Directive is transposed into national law via the Conservation of Habitats and Species Regulations 2017 (as amended) in England and Wales, and via the Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 (as amended) in Northern Ireland.

Birds Directive

The EC Directive on the Conservation of Wild Birds (79/409/EEC) or 'Birds Directive' was introduced to achieve favourable conservation status of all wild bird species across their distribution range. In this context, the most important provision is the identification and classification of Special Protection Areas (SPAs) for rare or vulnerable species listed in Annex 1 of the Directive, as well as for all regularly occurring migratory species, paying particular attention to the protection of wetlands of international importance.

Conservation of Habitats and Species Regulations 2017 (as amended)

Regulations place a duty on the Secretary of State to propose a list of sites which are important for either habitats or species (listed in Annexes I or II of the Habitats Directive respectively) to the European Commission. These sites, if ratified by Ministers, are then designated as Special Protection Areas (SPAs) within six years. Public bodies must also help preserve, maintain and re-establish habitats for wild birds.

The 2018 amendments mainly related to the impact of the *People Over Wind* decision and some implications arising for neighbourhood plan development and a range of other planning tools including Local Development Orders and Permission in Principle – see here for full details:

<https://www.legislation.gov.uk/uksi/2018/1307/note/made>

The 2019 amendments related to the EU exit. Most of these changes involved transferring functions from the European Commission to the appropriate authorities in England and Wales. All other processes or terms in the 2017 Regulations remain unchanged and existing guidance is still relevant. The obligations of a competent authority in the 2017 Regulations for the protection of sites or species do not change.– see here for full details:

<https://www.legislation.gov.uk/ukdsi/2019/9780111176573>

The Regulations make it an offence to deliberately capture, kill, disturb or trade in the animals listed in Schedule 2, or pick, uproot, destroy, or trade in the plants listed in Schedule 5.

Wildlife & Countryside Act 1981 (as amended)

This is the principal mechanism for the legislative protection of wildlife in the UK. This legislation is the chief means by which the 'Bern Convention' and the Birds Directive are implemented in the UK. Since it was first introduced, the Act has been amended several times.

The Act makes it an offence to (with exception to species listed in Schedule 2) intentionally:

- kill, injure, or take any wild bird;
- take, damage or destroy the nest of any wild bird while that nest is in use; or
- take or destroy an egg of any wild bird.

Or to intentionally do the following to a wild bird listed in Schedule 1:

- disturbs any wild bird while it is building a nest or is in, on or near a nest containing eggs or young; or
- disturbs dependent young of such a bird.

In addition, the Act makes it an offence (subject to exceptions) to:

- intentionally or recklessly kill, injure or take any wild animal listed on Schedule 5;
- interfere with places used for shelter or protection, or intentionally disturbing animals occupying such places; and
- The Act also prohibits certain methods of killing, injuring, or taking wild animals.

Finally, the Act also makes it an offence (subject to exceptions) to: intentionally pick, uproot or destroy any wild plant listed in Schedule 8, or any seed or spore attached to any such wild plant; unless an authorised person, intentionally uproot any wild plant not included in Schedule 8; or sell, offer or expose for sale, or possess (for the purposes of trade), any live or dead wild plant included in Schedule 8, or any part of, or anything derived from, such a plant.

Following all amendments to the Act, Schedule 5 'Animals which are Protected' contains a total of 154 species of animal, including several mammals, reptiles, amphibians, fish and invertebrates. Schedule 8 'Plants which are Protected' of the Act, contains 185 species, including higher plants, bryophytes and fungi and lichens. A comprehensive and up-to-date list of these species can be obtained from the JNCC website.

Part 14 of the Act makes unlawful to plant or otherwise cause to grow in the wild any plant which is listed in Part II of Schedule 9.

It is recommended that plant material of these species is disposed of as bio-hazardous waste, and these plants should not be used in planting schemes.
Protection of Badgers Act 1992
The Act imposes a classification of soil and other waste containing viable propagules of invasive non-native plant species as controlled waste. This has been applied to Japanese Knotweed <i>Reynoutria japonica</i> , with the result that waste containing this species must be disposed of in accordance with the duty of care set out in section 34 of the Act.
Protection of Badgers Act 1992
The main legislation protecting badgers in England and Wales is the Protection of Badgers Act 1992 (the 1992 Act). Under the 1992 Act it is an offence to: wilfully kill, injure, take or attempt to kill, injure or take a badger; dig for a badger; interfere with a badger sett by, damaging a sett or any part thereof, destroying a sett, obstructing access to a sett, causing a dog to enter a sett or disturbing a badger while occupying a sett. The 1992 Act defines a badger sett as: "any structure or place which displays signs indicating current use by a badger".
Natural Environment and Rural Communities Act 2006
Section 41 (S41) of this Act requires the Secretary of State to publish a list (in consultation with Natural England) of Habitats and Species which are of Principal Importance for the conservation of biodiversity in England. The S41 list is used to guide decision-makers such as public bodies including local and regional authorities, in implementing their duty under Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006, to have regard to the conservation of biodiversity in England, when carrying out their normal (e.g. planning) functions. The S41 list includes 65 Habitats of Principal Importance and 1,150 Species of Principal Importance.
Hedgerow Regulations 1997
The Hedgerow Regulations were made under Section 97 of the Environment Act 1995 and came into force in 1997. They introduced new arrangements for local planning authorities in England and Wales to protect important hedgerows in the countryside, by controlling their removal through a system of notification. Important hedgerows are defined by complex assessment criteria, which draw on biodiversity features, historical context and the landscape value of the hedgerow.
Birds of Conservation Concern
This is a review of the status of all birds occurring regularly in the United Kingdom. It is regularly updated and is prepared by leading bird conservation organisations, including the British Trust for Ornithology (BTO), Joint Nature Conservation Committee (JNCC) and The Royal Society for the Protection of Birds (RSPB). The latest report was produced in 2015 (Eaton <i>et al</i> , 2015) and identified 67 red list species, 96 amber species, and 81 green species. The criteria are complex, but generally: Red list species are those that have shown a decline of the breeding population, non-breeding population or breeding range of more than 50% in the last 25 years. Amber list species are those that have shown a decline of the breeding population, non-breeding population or breeding range of between 25% and 50% in the last 25 years. Species that have a UK breeding population of less than 300 or a non-breeding population of less than 900 individuals are also included, together with those whose 50% of the population is localised in 10 sites or fewer and those whose 20% of the European population is found in the UK. Green list species are all regularly occurring species that do not qualify under any of the red or amber criteria are green listed.
Global IUCN Red List
The International Union for Conservation of Nature (IUCN) Threatened Species was devised to provide a list of those species that are most at risk of becoming extinct globally. It provides taxonomic, conservation status and distribution information about threatened taxa around the globe. The system catalogues threatened species into groups of varying levels of threat, which are: Extinct (EX), Extinct in the Wild (EW), Critically Endangered (CE), Endangered (EN), Vulnerable (VU), Near Threatened (NT), Least Concern (LC), Data Deficient (DD), Not Evaluated (NE). Criteria for designation into each of the categories is complex, and consider several principles.
Local Biodiversity Action Plan (LBAP)
Local Biodiversity Action Plans (LBAP) identify habitat and species conservation priorities at a local level (typically at the County level), and are usually drawn up by a consortium of local Government organisations and conservation charities. Some LBAP's may also include Habitat Action Plans (HAP) and/or Species Action Plans (SAP), which are used to guide and inform the local decision making process.
Wild Mammals (Protection) Act 1996
This Act offers protection to all wild species of mammals, irrespective of other legislation, and focussed on animal welfare, rather than conservation. Unless covered by one of the exceptions, a person is guilty of an offence if he mutilates, kicks, beats, nails or otherwise impales, stabs, burns, stones, crushes, drowns, drags or asphyxiates any wild mammal with intent to inflict unnecessary suffering. It's application is typically restricted to preventing deliberate harm to wildlife (in general) during construction works etc.