

Project		7758.2 Woking Football Club		Building reference		Building 16	
Surveyor		6		Date		08/07/2019	
Survey no		1		Survey start/end times		21:05-22:48	
Sunset/rise time		21:18		Equipment reference		Batlogger 25	
Surveyor-Easting, Northing		500507	157364	Surveyor location		South-east of B16	
General weather conditions		Overcast, muggy, mild					
Temperature (start and end)	21	Cloud cover (0-8)	8	Wind (Beaufort 0-12)	1	Rain (0-5)	0
Species - (CP=common pipistrelle, SP=soprano pipistrelle, LE=long-eared, N=Noctule, S=Serotine, M=Myotis, U=Unknown)							
Activity type - (E = Emergence, R = Return to roost, C = Commuting, F = Foraging, S = Socialising)							
Time	Species	Number of bats	Seen/not seen (S/NS)	Activity type	Direction of flight	Notes (inc map ref)	
22:01	SP	1	S	F	N-S	Flying between the buildings	
22:08	N	1	NS	C	-	distant	
22:11	CP	1	S	C	NE		
22:14	CP	1	NS	C	-		
22:16	CP	1	NS	F	-	Foraging pass	
22:19	SP	1	NS	F	-	Distant, brief	
22:23	CP	1	NS	C	-	distant	
22:26	CP	1	NS	C	-	Distant	
22:27	CP	1	NS	F	-	Repeat passes	
22:30	CP	1	NS	F	-	Repeat passes	
22:32	CP	1	S	C	S	Between buildings, the repeat passes not seen	
22:33	SP	1	-	-	-		

Project		7758.2 Woking Football Club		Building reference		Building 16	
Surveyor		6		Date		08/07/2019	
Survey no		1		Survey start/end times		21:05-22:48	
Sunset/rise time		21:18		Equipment reference		Batlogger 25	
Surveyor-Easting, Northing		500507	157364	Surveyor location		South-east of B16	
General weather conditions		Overcast, muggy, mild					
Temperature (start and end)	21	Cloud cover (0-8)	8	Wind (Beaufort 0-12)	1	Rain (0-5)	0
Species - (CP=common pipistrelle, SP=soprano pipistrelle, LE=long-eared, N=Noctule, S=Serotine, M=Myotis, U=Unknown)							
Activity type - (E = Emergence, R = Return to roost, C = Commuting, F = Foraging, S = Socialising)							
Time	Species	Number of bats	Seen/not seen (S/NS)	Activity type	Direction of flight	Notes (inc map ref)	
22:40	CP	1	NS	C			

Project		7758.2 Woking Football Club		Building reference		Building 16	
Surveyor		7		Date		08/07/2019	
Survey no		1		Survey start/end times		21:05-22:48	
Sunset/rise time		21:18		Equipment reference		Batlogger 13	
Surveyor-Easting, Northing		500520	157383	Surveyor location		North-east of B16	
General weather conditions		Mild, still, dry					
Temperature (start and end)	19	Cloud cover (0-8)	8	Wind (Beaufort 0-12)	2	Rain (0-5)	0
Species - (CP=common pipistrelle, SP=soprano pipistrelle, LE=long-eared, N=Noctule, S=Serotine, M=Myotis, U=Unknown)							
Activity type - (E = Emergence, R = Return to roost, C = Commuting, F = Foraging, S = Socialising)							
Time	Species	Number of bats	Seen/not seen (S/NS)	Activity type	Direction of flight	Notes (inc map ref)	
21:24	N	1	NS	C	-		
21:42	CP	1	NS	-	-		
21:46	CP	2	NS	C/F	-	Faint, some activity heard but not recorded on detector	
21:50	CP	1	S	F	N	Between buildings S to N, then E. Then very faint activity until 21:58	
21:52	CP	2	NS				
21:56	CP	2	NS	-	-	On sound analysis	
22:01	CP	1	NS	C/F	-	Until 22:09	
22:02	SP	1	NS	C	-		
22:02	CP	1	NS	-	-	On sound analysis	
22:08	N	1	NS	-	-		
22:12	CP	1	S	C	NW	Between buildings S to NW	
22:17	CP	1	S	C	SE	N to SE, over building B14	

Project		7758.2 Woking Football Club		Building reference		Building 16	
Surveyor		7		Date		08/07/2019	
Survey no		1		Survey start/end times		21:05-22:48	
Sunset/rise time		21:18		Equipment reference		Batlogger 13	
Surveyor-Easting, Northing		500520	157383	Surveyor location		North-east of B16	
General weather conditions		Mild, still, dry					
Temperature (start and end)	19	Cloud cover (0-8)	8	Wind (Beaufort 0-12)	2	Rain (0-5)	0
Species - (CP=common pipistrelle, SP=soprano pipistrelle, LE=long-eared, N=Noctule, S=Serotine, M=Myotis, U=Unknown)							
Activity type - (E = Emergence, R = Return to roost, C = Commuting, F = Foraging, S = Socialising)							
Time	Species	Number of bats	Seen/not seen (S/NS)	Activity type	Direction of flight	Notes (inc map ref)	
22:25	CP	1	NS	-	-		
22:27	CP	1	NS	C	-		
22:28	CP	1	NS	-	-		
22:33	CP	1	NS	C	-		
22:38	CP	1	NS	-	-		
22:40	SP	1	NS	-	-		
22:44	CP	1	NS	-	-		

Dawn Re-entry Survey Results – 02/08/2019

Project		7758.2 Woking Football Club		Building reference		Building 16	
Surveyor		1		Date		02/08/2019	
Survey no		2		Survey start/end times		03:56/05:43	
Sunset/rise time		05:28		Equipment reference		Batlogger 25	
Surveyor-Easting, Northing		500518	157382	Surveyor location		North-east of Building 16	
General weather conditions		Mild, clear skies, still					
Temperature (start and end)	18-17	Cloud cover (0-8)	0	Wind (Beaufort 0-12)	0	Rain (0-5)	0
Species - (CP=common pipistrelle, SP=soprano pipistrelle, LE=long-eared, N=Noctule, S=Serotine, M=Myotis, U=Unknown)							
Activity type - (E = Emergence, R = Return to roost, C = Commuting, F = Foraging, S = Socialising)							
Time	Species	Number of bats	Seen/not seen (S/NS)	Activity type	Direction of flight	Notes (inc map ref)	
04:03	SP	1	NS	C	N/A	Heard not seen	
04:19	SP	1	NS	F, S	N/A	Heard not seen, social calls	
04:39	SP	1	S	C	W to E	Over buildings	
04:47	SP	1	S	FR	Circling then to E	Over buildings	

Project		7758.2 Woking Football Club		Building reference		Building 16	
Surveyor		2		Date		02/08/2019	
Survey no		2		Survey start/end times		03:56/05:43	
Sunset/rise time		05:28		Equipment reference		Batlogger 21	
Surveyor-Easting, Northing		500507	157365	Surveyor location		South-east of Building 16	
General weather conditions		Clear skies, no recent rainfall					
Temperature (start and end)	17 - 16	Cloud cover (0-8)	0	Wind (Beaufort 0-12)	0	Rain (0-5)	0
Species - (CP=common pipistrelle, SP=soprano pipistrelle, LE=long-eared, N=Noctule, S=Serotine, M=Myotis, U=Unknown)							
Activity type - (E = Emergence, R = Return to roost, C = Commuting, F = Foraging, S = Socialising)							
Time	Species	Number of bats	Seen/not seen (S/NS)	Activity type	Direction of flight	Notes (inc map ref)	
04:03	SP	1	NS	C	N/A		
04:19	SP	1	NS	C	N/A		
04:28	CP	1	NS	C	N/A		
04:35	CP	1	S	F	E	Foraging south-west of building B18, repeat passes.	
04:43	CP	1	S	F	E	Foraging south-west of building B18 repeat passes.	
04:52	SP	1	NS	C	N/A		

Appendix 4: Legislation

Important Notice: This section contains details of legislation applicable in Britain only (i.e. not including the Isle of Man, Northern Ireland, the Republic of Ireland or the Channel Islands) and is provided for general guidance only. While every effort has been made to ensure accuracy, this section should not be relied upon as a definitive statement of the law.

NATIONAL LEGISLATION AFFORDED TO BAT SPECIES

The objective of the EC Habitats Directive⁸ is to conserve the various species of plant and animal which are considered rare across Europe. The Directive is transposed into UK law by The Conservation of Habitats and Species Regulations 2017 (formerly The Conservation (Natural Habitats, &c.) Regulations 2010 (as amended) and The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 (as amended).

The Wildlife and Countryside Act 1981 (as amended) is a key piece of national legislation which implements the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and implements the species protection obligations of Council Directive 2009/147/EC (formerly 79/409/EEC) on the Conservation of Wild Birds (EC Birds Directive) in Great Britain.

Explanatory notes relating to all bat species protected under The Conservation of Habitats and Species Regulations 2017 are given below.

- In the Directive, the term ‘deliberate’ is interpreted as being somewhat wider than intentional and may be thought of as including an element of recklessness.
- The Conservation of Habitats and Species Regulations 2017 does not define the act of ‘migration’ and therefore, as a precaution, it is recommended that short distance movement of animals for e.g. foraging, breeding or dispersal purposes are also considered.
- In order to obtain a European Protected Species Mitigation (EPSM) licence, the application must demonstrate that it meets all of the following three ‘tests’: i) the action(s) are necessary for the purpose of preserving public health or safety, or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequence of primary importance for the environment; ii) that there is no satisfactory alternative and iii) that the action authorised will not be detrimental to the maintenance of the species concerned at a favourable conservation status in their natural range.

⁸ Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora

All species of bat are fully protected under The Conservation of Habitats and Species Regulations 2017 through their inclusion on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species (all bats)
- Deliberate disturbance of bat species as:
 - a) to impair their ability:
 - (i) to survive, breed, or reproduce, or to rear or nurture young;
 - (ii) to hibernate or migrate³
 - b) to affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place
- Keeping, transporting, selling, exchanging or offering for sale whether live or dead or of any part thereof.

Bats are also currently protected under the Wildlife and Countryside Act 1981 (as amended) through their inclusion on Schedule 5. Under this Act, they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection
- Selling, offering or exposing for sale, possession or transporting for purpose of sale.

How is the legislation pertaining to bats liable to affect development works?

An EPSM licence issued by the relevant countryside agency (e.g. Natural England) will be required for works liable to affect a bat roost or for operations likely to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (survive, breed, rear young and hibernate). The licence is to allow derogation from the relevant legislation but also to ensure appropriate mitigation measures be put in place and their efficacy to be monitored.

Though there is no case law to date, the legislation may also be interpreted such that, in certain circumstances, important foraging areas and/or commuting routes can be regarded as being afforded *de facto* protection, for example, where it can be proven that the continued usage of such areas is crucial to maintaining the integrity and long-term viability of a bat roost⁹.

⁹ Garland & Markham (2008) Is important bat foraging and commuting habitat legally protected? Mammal News, No. 150. The Mammal Society, Southampton.

Appendix 5: Assessment Criteria for Preliminary Roost Assessments

ASSESSMENT CRITERIA – PRELIMINARY ROOST ASSESSMENT – STRUCTURES

The potential for structures to support roosting bats, ranging from negligible to the presence of a confirmed roost, is assessed using the findings of the survey and the desk study. The following criteria were used to determine the level of potential of the buildings for roosting bats:

- **Negligible potential** – While presence cannot be absolutely discounted there were no significant visible features that could be used by bats for roosting.
- **Low** – Small number of potential roosting features such as could be utilised by individual opportunistic roosting bats. Site situated within isolated habitat that could be used by foraging bats but which is not connected by prominent linear features such as woodland edge, hedgerows and tree lines.
- **Moderate** – Several potential roosting features in the buildings or other structures. There is surrounding habitat such as woodland, scattered trees, hedgerows suitable to support foraging and roosting bats. The site is connected with the wider landscape by linear features such as woodland edge, hedgerows and tree lines that could be used by commuting bats.
- **High** – Buildings or other structures, such as mines, caves, tunnels, ice houses and cellars, with numerous features of potential significance for roosting bats. Surrounding landscape has high value habitat for roosting, foraging and commuting that is contiguous with on-site habitats. The site is connected with the wider landscape by strong linear features and may be close to known roosts or other potentially valuable habitat resources.
- **Confirmed roost** – Evidence indicates a building or other structure is used by bats, for example:
 - bats seen roosting or observed flying from a roost or freely in the habitat;
 - droppings, carcasses, feeding remains;
 - bats heard ‘chattering’ inside on a warm day or at dusk.

ASSESSMENT CRITERIA – GROUND LEVEL ROOST ASSESSMENT – TREES

All trees that may have a level of potential for a roost are assessed using the Cowan Scale (Cowan, 2006). The following values are assigned in considering the availability of suitable features for roosting bats:

- **0 – negligible potential** – No visible features that could be used by bats for roosting
- **1 – low potential** – One or two minor features, possible associated with feeding or night-time roosts, such as:

- sparse ivy *Hedera helix*;
- minor branch splits or fissures;
- small areas of loose bark;
- features less than ten years old.
- **2 – moderate potential** – Features that may provide a more secure site for individuals or small groups of bats, such as:
 - dense ivy;
 - significant branch splits;
 - small cavities such as woodpecker holes;
 - features present for between 10 and 30 years.
- **3 – high potential** – Features of particular significance, suitable for high priority roost such as maternity roosts and likely to be used by larger groups of bats, such as:
 - features that provide rare or uncommon conditions in the local area;
 - large cavities or extensive branch or trunk splits;
 - multiple features in the same tree;
 - features present for more than 30 years that could have been used by several generations of bats.
- **4 – confirmed roost** – Evidence indicating use by bats, such as:
 - droppings, carcasses, feeding remains;
 - bats heard ‘chattering’ inside on a warm day or at dusk;
 - bats seen roosting or observed flying from a feature.

Appendix 6: Standard Guidance for Mitigation, Compensation and Enhancement

Bat tubes, bat bricks and bat boxes

To compensate for the loss of roosts used by crevice dwelling species or to provide enhancement measures thought should be given to utilising proprietary products from recognised manufacturers such as: Bird Brick Houses, The Nest Box Company, Schwegler, Habibat, Causa and Vincent. Bat tubes and integrated bat bricks are artificial roost features that can be incorporated into building structures. Bat boxes are generally fitted externally to mature trees or structures. The site's value to bats could be enhanced by installing any of these features. Any bat tubes and bat bricks used for enhancement would need to be in addition to any required to compensate for the loss of the roosts.

Bat tubes, bat bricks or bat boxes should be located at least 5m above ground level facing southeast – southwest and to allow for clear flight paths and should not be directly lit by artificial lighting. Bat boxes should be woodcrete designs as they are long lasting compared to wooden boxes and insulate occupants from extremes of temperature and condensation.

Breathable roof membrane

Breathable roof membranes (BRMs) have been shown to entangle roosting bats, leading to mortality, sometimes of entire colonies. Therefore it is recommended that only bitumen roofing felt that does not contain polypropylene filaments (e.g. bitumen felt type 1F) should be used to reduce the risk of bat mortality.

Bats and lighting

While different species of bat react differently to night time lighting, research has found that bats overall are sensitive to artificial lighting. Excessive and/or poorly directed lighting may delay bats in emerging from their roosts; shortening the time available for foraging, as well as causing bats to move away from suitable foraging grounds and drinking resources, movement corridors or roosting sites, to alternative dark areas (Jones, 2000). Artificial lighting is also thought to increase the chance of predation, as many avian predators will hunt bats (Institute of Lighting Professionals, 2018).

To minimise indirect impacts from lighting associated with the proposed development it is recommended that artificial lighting is only directed where necessary for health and safety reasons. Lighting should not illuminate any features of value to bats, or suspected or confirmed bat roosting sites. Habitats which are likely to support bats and which could be affected by newly proposed lighting include woodland, mature trees, hedgerows, scrub, ponds, lakes, ditches, streams, canals, rivers, rough grassland and buildings (typically pre

1970's or in disrepair). Lighting should only be used for the period of time for which it is required (Jones, 2000).

This can be achieved by following accepted best practice (Fure, 2006; Institute of Lighting Engineers 2009; Bat Conservation Trust 2011; Stone 2013; Bat Conservation Trust 2014; Institute of Lighting Professionals, 2018):

- Where appropriate, professional lighting designers should be consulted, and the need for quantitative lighting measurements should be considered;
- Lighting mitigation should be based on robust baseline surveys of bat behaviour and existing light levels on site wherever possible;
- The level of artificial lighting including flood lighting should be kept to an absolute minimum;
- Where this does not conflict with health and safety and/or security requirements, the site should be kept dark during peak bat activity periods (0 to 1.5 hours after sunset and 1.5 hours before sunrise);
- Variable lighting regimes (VLR) can be utilised to lower lighting levels during periods of low human activity (e.g 00:30-05:30);
- Lighting required for security or safety reasons should use a lamp of no greater than 2000 lumens (150 Watts) and should comprise sensor-activated lamps;
- Use narrow-spectrum light sources that peak higher than 550 nanometres, avoiding lights with UV, white and blue wavelengths;
- Lights utilising LED technology are the preferred option as these lights do not emit on the UV spectrum, are easily controllable in terms of direction/spill and can be turned on and off instantly;
- A 'warm white' spectrum LED light (ideally <2700 Kelvin) should be used over 'cool white' to reduce blue light component;
- Avoid the use of sodium or metal halide lamps, these gas lamps require a lengthy period in which to turn off and the diffuse nature of the light emitted makes light spillage a significant problem.
- Lights required for night time deliveries or security patrols could be set to activate with pressure activated sensors set into the ground;
- Lighting should be directed to where it is needed to minimise light spillage. This can be achieved by limiting the height of the lighting columns and by using as steep a downward angle as possible and/or a shield/hood/cowl/baffle/louvre that directs the light below the horizontal plane and restricts the lit area;

- Usually using lower lighting columns and increasing the spacing between them reduces light intensity and spill;
- Plant vegetation to form light barriers and dark corridors. Use close-boarded fencing to screen light until vegetation matures. Dark corridors should be well connected to commuting routes;
- Artificial lighting should not directly illuminate any confirmed or potential bat roosting features or habitats of value to commuting/foraging bats. Similarly, any newly planted linear features or compensatory bat roosting features should not be lit;
- The use of reflective surfaces under lights should be avoided;
- Consider the use of 'smart glass' or automatic blinds where windows and glass facades cannot be avoided; and
- Create new habitat as alternative bat flightpaths if the effects of light cannot be properly mitigated for.

Planting for wildlife - foraging and commuting habitats for bats

Landscaping should be designed with input from an ecologist. This would ensure that foraging habitat is retained and enhanced for bats.

It is acknowledged that using native species in planting schemes attracts insects and provides a potential food source for bats (BCT, Undated). Landscaping proposals should seek to enhance the value of the site for foraging and commuting bats.

Any new planting schemes should comprise native plant species that will attract insects and provide a potential food source for bats throughout the bat activity period (spring to autumn). Suitable tree and shrub species include silver birch *Betula pendula*, hazel *Corylus avellana*, oak *Quercus spp.*, alder *Alnus glutinosa*, honeysuckle *Lonicera periclymenum*, dog rose *Rosa canina*, guelder-rose *Viburnum opulus*, hawthorn *Crataegus monogyna* and elder *Sambucus nigra* (JNCC, 2001; BCT, Undated). Ideally any new planting schemes should seek to create a gradation of vegetation types that include native trees and shrubs and tall grasses and herb species. A graded planting scheme would provide a suitably diverse and sheltered habitat for insects and should maximise the value of these habitats for foraging bats. These elements in combination would very effectively ensure that the favourable conservation status of the bat species would be maintained and enhanced as a result of the proposed development.



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Annex 8: Great Crested Newt Report

Woking Football Club

Great Crested Newt Survey

Report for Woking Football Club

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	Appendix 3: Environmental DNA Survey -Nature Metrics Report	17

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Executive Summary

The Ecology Consultancy was commissioned by Woking Football Club to conduct Habitat Suitability Index (HSI) assessments and an eDNA survey of ponds within 500 metres of the proposed development at Woking Football Club. These were conducted to inform the requirement for further great crested newt surveys.

The main findings of the survey work were as follows:

- The data search returned four records of great crested newt from within 2 kilometre (km) of the survey site. The most recent record dates from 2016 and the records are to an accuracy of 1km only, from within the grid squares TQ0055, TQ0056, TQ0156 and SU9856 (The Ecology Consultancy, 2019).
- The proposed development site included suitable terrestrial habitats for great crested newt, comprising the boundary hedgerows and areas of scrub and introduced shrub. These habitats offered foraging, commuting, refuge and hibernation opportunities for great crested newts.
- One pond is located within 500m of the proposed works area (Appendix 1, Figure 1) and was assessed using the Habitat Suitability Index (HSI) methodology outlined in National Amphibian and Reptile Recording Scheme (NARRS 2009, based on Oldham *et al.*, 2000) on 15 April 2019. The pond is located approximately 30 metres (m) east of the site boundary (The Ecology Consultancy, 2019) and was calculated to have poor habitat suitability and therefore low probability of great crested newt occurrence.
- An eDNA survey was undertaken on 15 April 2019 following methodology accepted by Natural England (Biggs *et al.*, 2014), which returned a negative result.
- Great crested newts were considered likely to be absent from the terrestrial habitats on-site. No further survey or mitigation in respect of this species is required.

1 Introduction

BACKGROUND

- 1.1 The Ecology Consultancy was commissioned by Woking Football Club to undertake Habitat Suitability Index (HSI) assessment and an environmental DNA (eDNA) survey for great crested newt on a pond located approximately 30 metres (m) to the east of the site boundary of land at Cardinal Court, off Kingfield Road, Woking (hereafter referred to as 'the site').
- 1.2 A Preliminary Ecological Appraisal carried out by The Ecology Consultancy in February 2019, identified suitable refuge and foraging habitat on land at Cardinal Court, Woking, and off-site waterbodies suitable for breeding within a commutable distance of the site boundary (The Ecology Consultancy, 2019). There are no ponds on site.

SCOPE OF THE REPORT

- 1.3 This report provides an assessment of the presence/likely absence of great crested newts in ponds within 500m¹ of the site boundary. Where applicable, any potentially significant ecological constraints that may affect the proposals, such as seasonal constraints and the need to apply for a European Protected Species Mitigation (EPSM) licence prior to the commencement of works are also discussed together with detailed recommendations for habitat mitigation measures that should be followed prior to, during and post development.

SITE CONTEXT AND STATUS

- 1.4 The proposed development site is approximately 5 hectares (ha) in size and is centred on Ordnance Survey National Grid reference TQ 00574 57329 . The site lies off Kingfield Road, in Woking, Surrey. The site is not subject to any statutory or non-statutory nature conservation designations. The site is currently occupied by a football stadium (Woking Football Club); a collection of large-footprint, low-rise buildings, including the Woking Snooker Centre; David Lloyd Leisure Centre (including tennis courts), Woking Gymnastics Club; car parking; and a small number of residential properties (81 Westfield Avenue, Hoe View, Park View and 1-6 Kingfield Road) situated in the north of the site. The site is bordered by playing fields to the south, and residential dwellings

¹ Great crested newts typically use a network of ponds for breeding each year and guidelines state that animals may travel up to 500m to commute between ponds and terrestrial habitat (English Nature, 2001)

and gardens to north, east and west. The wider landscape comprises further residential dwellings and urban areas. Hoe Stream Site of Nature Conservation Importance (SNCI) and associated greenspace is located to the west of Sycamore Avenue, and a waterbody surrounded by woodland habitats is located adjacent to the east of the site.

DEVELOPMENT PROPOSAL

- 1.5 The Proposed Development comprises the redevelopment of the site, following the demolition of all existing buildings and structures, to provide a replacement stadium with ancillary facilities, including flexible retail, hospitality and community spaces, independent retail floorspace (Classes A1/A2/A3), a medical centre (Class D1) and vehicle parking, plus residential accommodation comprising of 1,048 dwellings (Class C3) within 5 buildings of varying heights of between 3 and 10 storeys (and undercroft and part basement levels) on the south and west sides of the site, together with provision of new accesses from Westfield Avenue to car parking, associated landscaping and the provision of a detached residential concierge building (Leach Rhodes Walker Architects, 2019).

2 Legislation

2.1 The great crested newt *Triturus cristatus* receives full protection under The Conservation of Habitats and Species Regulations 2017 through their inclusion on Schedule 2. This legislation prohibits:

- Deliberate killing, injuring or capturing
- Deliberate disturbance:
 - a) to impair their ability:
 - (i) to survive, breed, or reproduce, or to rear or nurture young;
 - (ii) in the case of animals of a hibernating or migratory species, to hibernate or migrate
 - b) to affect significantly the local distribution or abundance of the species
- Deliberate taking or destroying of the eggs
- Damage or destruction of a breeding site or resting place
- Keeping, transporting, selling, exchanging or offering for sale whether live or dead or of any part thereof.

2.2 The great crested newt is also currently listed on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Under this Act, they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection
- Selling, offering or exposing for sale, possession or transporting for purpose of sale.

2.3 A European Protected Species Mitigation (EPSM) licence issued by the relevant countryside agency (i.e. Natural England) will be required for works liable to affect the breeding sites or resting places of great crested newts protected under The Conservation Habitats and Species Regulations 2017. A licence will also be required for operations liable to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, rear young and hibernate). The licences are to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored.

3 Methodology

HABITAT SUITABILITY INDEX ASSESSMENT

3.1 All waterbodies within 500m of the site boundary were identified from an Ordnance Survey map and ground truthing surveys, with further clarification from the previous Ecological Appraisal report (The Ecology Consultancy, 2019). Ponds and waterbodies within 500m considered to be separated from the site by a significant barrier to dispersal of great crested newt were not included for further survey.

3.2 A survey was conducted of one pond located within 500m of the site (Appendix 1, Figure 1). The survey was carried out in order to collect data with which to calculate a Habitat Suitability Index (HSI) score for the pond. The pond was visited on the 15 April 2019 and environmental data collected using the methods described in the National Amphibian and Reptile Recording Scheme (NARRS, 2009 based on Oldham *et. al.*, 2000).

3.3 The HSI assessment methodology uses ten key habitat criteria and was based on the assumption that habitat quality determines great crested newt population size (Oldham *et. al.*, 2000). The criteria are as follows:

- SI1 = geographic location;
- SI2 = pond area;
- SI3 = pond permanence;
- SI4 = water quality;
- SI5 = pond shading;
- SI6 = number of waterfowl;
- SI7 = occurrence of fish;
- SI8 = pond density;
- SI9 = proportion of 'newt friendly' habitat; and
- SI10 = macrophyte (aquatic plant) content.

3.4 The HSI score is a geometric mean and is derived using the following equation:

$$HSI = (SI_1 * SI_2 * SI_3 * SI_4 * SI_5 * SI_6 * SI_7 * SI_8 * SI_9 * SI_{10})^{1/10}$$

3.5 The results of the HSI calculation were compared to categorised HSI scores used by the National Amphibian and Reptile Recording Scheme (Oldham *et al.*, 2000) to identify the probability of a pond supporting great crested newts. The five categories are summarised in Table 1 below and survey data is provided in Appendix 3.

Table 1: HSI Categories

Habitat Quality	HSI Score
Poor	Below 0.5
Below average	0.5-0.59
Average	0.6-0.69
Good	0.7-0.79
Exceptional	Above 0.8

(Extracted from Oldham *et al.*, 2000)

ENVIRONMENTAL DNA SURVEY

3.6 The eDNA survey was undertaken on 15 April 2019 by Demian Lyle, an experienced ecologist who holds a Natural England great crested newt class licence for survey. The survey followed the methodology set out in 'Technical advice note for field and laboratory sampling of great crested newt environmental DNA' (Biggs *et al.*, 2014), which is an appendix of the report published by Defra into eDNA testing for great crested newts, and is the only methodology accepted by Natural England for this technique.

3.7 The pond held water at the time of the survey (see Appendix 1 – Figure 1 for the location). The eDNA survey included the following sampling information:

- Site name;
- Nearest settlement;
- County;
- Time between receipt of sampling kit and date of sampling;
- Date of sampling;
- Personnel collecting sample;
- Ordinance Survey grid reference (12 figures);
- Percentage of pond perimeter accessible for survey;

- Data on inflows (and whether these were wet or dry at time of survey);
- Data on any great crested newts recorded on survey; and
- Information on any difficulties experienced during sample collection.

3.8 Using the current guidance, the following methodology for the sampling procedure for eDNA analysis was applied in the field:

- Twenty samples of 30ml each were taken from around the pond, as equally spaced as possible. The locations of the samples were chosen to sample the entire margin of the pond, with areas targeted where there may be newt egg laying and/or displaying activities;
- The sample ladle was stirred gently in the pond before the sample was retrieved in order to mix the water column, with care being taken not to stir up the sediment;
- All 20 samples were emptied into a Whirl-Pack bag, which was then sealed and mixed for 10 seconds;
- Upon mixing, approximately 15ml of the sample was transferred from the Whirl-Pack bag into each of the six sterile tubes, which contained 35ml of ethanol to preserve the eDNA, using a sterile pipette. The sample was stirred between filling each tube to homogenize the water;
- Once filled to 50ml, each tube was mixed for 10 seconds to mix the sample and preservative; and
- Samples were returned to the refrigerator and stored at 2-4°C.

3.9 The following precautions were adhered to, which ensured that no cross contamination of samples occurred:

- Sterile gloves were worn by all surveyors at all times during the sampling process;
- Gloves were replaced with a new pair of gloves between sample collection from the pond and pipetting into the sub-sampling tubes; and
- Samples were collected without the surveyor entering the water (i.e. the surveyors stood on the pond bank or edge).

3.10 The Ecology Consultancy works in partnership with Nature Metrics Ltd eDNA testing service. The samples were analysed by Nature Metrics Ltd following Natural England's published protocol (Biggs *et al.*, 2014).

LIMITATIONS

- 3.11 It should be noted that, whilst every effort has been made to provide a comprehensive description of the site, no investigation can ensure the complete characterisation and prediction of the natural environment. It is considered that this report accurately reflects the habitats present, their biodiversity values and the potential of the site to support great crested newts.
- 3.12 Approximately 50% of the pond perimeter could not be accessed to collect samples due to the depth of the water and no/limited bank. Despite this it is considered that sufficient coverage of the pond was sampled to provide a valid result.

4 Survey Results

DESK STUDY

- 4.1 The closest EPSM licence for great crested newts to the site was 2014-2994-EPS-MIT located 2.5km to the north-east. This licence was granted for the damage and destruction of a resting place, between September 2014 and May 2015.
- 4.2 The data search returned a total of four desk study records for great crested newt within 2km of the site. The most recent record dates from 2016 and the records are to an accuracy of 1km only, from within the grid squares TQ0055, TQ0056, TQ0156 and SU9856.

HABITAT SUITABILITY INDEX ASSESSMENT

- 4.3 Full tabulated results for the HSI of the surveyed waterbody is provided in Appendix 2 of this report. A short description of the waterbody is provided below.

Pond 1 – Poor suitability

- 4.4 Pond 1 (Appendix 2, Table 1) was located approximately 30m from the eastern site boundary. It was located within a suburban greenspace, with trees and scrub surrounding the pond on all sides. It was a large, deep pond, measuring approximately 2750m² in area. The pond had approximately 1% macrophyte cover and the margins were 30% shaded by surrounding scrub and trees. Waterfowl were likely present, with duck and geese recorded, and fish are considered possible. The water quality was poor, dominated by leaf litter.
- 4.5 The calculated HSI score for this pond was **0.40** which equates to a **poor** suitability and therefore **low** probability of great crested newts being present (Oldham *et. al.*, 2000).

ENVIRONMENTAL DNA SURVEY

- 4.6 The pond to the east of the site (Pond 1) returned a negative result for the eDNA analysis (see Appendix 3 for the report returned from Nature Metrics). It is therefore taken that great crested newt is likely to be absent from the off-site pond.

5 Conclusions and Recommendations

CONCLUSIONS

- 5.1 The results of the HSI Assessment indicate that Pond 1 located approximately 30m east of the site has low suitability to support great crested newt. The environmental DNA survey indicates that great crested newts are likely to be absent from the pond.
- 5.2 It can therefore be concluded that the terrestrial habitats on site are unlikely to support great crested newts in their terrestrial phase. As such no further survey or mitigation is required for this species.

RECOMMENDATIONS

- 5.3 Whilst the site was considered unlikely to support great crested newt, if any unexpected discoveries of this species are made on site during the proposed works, then all activities in the immediate vicinity should be halted and further advice sought from a suitably qualified ecologist.

References

- Amphibian and Reptile Groups of the UK (May 2010) ARG Advice Note 5- Great Crested Newt Habitat Suitability Index
- Beebe, T. & Griffiths, R. (2000). *Amphibians and Reptiles – A Natural History of the British Herpetofauna*. HarperCollins, London.
- Biggs J, Ewald N, Valentini A, Gaboriaud C, Griffiths RA, Foster J, Wilkinson J, Arnett A, Williams P and Dun F. (2014) *Analytical and methodological development for improved surveillance of the great crested newt. Appendix 5. Technical advice note for field and laboratory sampling of great crested newt (Triturus cristatus) environmental DNA*. Freshwater Habitats Trust, Oxford.
- Buckley J. & Inns H., (1998). Chapter 2: *Field identification, sexing and aging, in Herpetofauna Worker's Manual*, Gent T. and Gibson S., Joint Nature Conservation Committee, Peterborough.
- English Nature (2001) *Great crested newt mitigation guidelines*. English Nature, Peterborough
- Gent, T. & Gibson, S. (2003). *Herpetofauna Workers Manual*. Joint Nature Conservancy Council, Peterborough UK.
- Griffiths R. & Inns H. (1998). Chapter 1: *Surveying, in Herpetofauna Worker's Manual*, Gent T. and Gibson S., Joint Nature Conservation Committee, Peterborough.
- Herpetofauna Groups of Britain and Ireland (HGBI) (1998). *Evaluating local mitigation/translocation programmes: Maintaining Best Practice and lawful standards*. HGBI advisory notes for Amphibian and Reptile Groups (ARGs). HGBI, c/o Froglife, Halesworth. Unpubl.
- Her Majesty's Stationary Office (1981) *The Wildlife and Countryside Act (WCA)* (as amended).
- Her Majesty's Stationary Office (2000) *The Countryside and Rights of Way Act (CRoW)*.
- Her Majesty's Stationary Office (2017) *The Conservation of Habitats and Species Regulations 2017*.
- Langton, T.E.S., Beckett, C.L, and Foster, J.P. (2001), *Great Crested Newt Conservation Handbook*, Froglife, Halesworth.
- Leach Rhodes Walker Architects (2019). *Cardinal Court inc. Woking Football Club: Masterplan Ground Floor Plan*. 7884_L(00)89_K. Date drawn 23.010.19.
- Natural England (2001). *Great Crested Newt Mitigation Guidelines*. Natural England, Peterborough, UK.
- Natural England (2019). *Great crested newts: district level licensing schemes*. Available online: <https://www.gov.uk/government/publications/great-crested-newts-district-level-licensing-schemes>

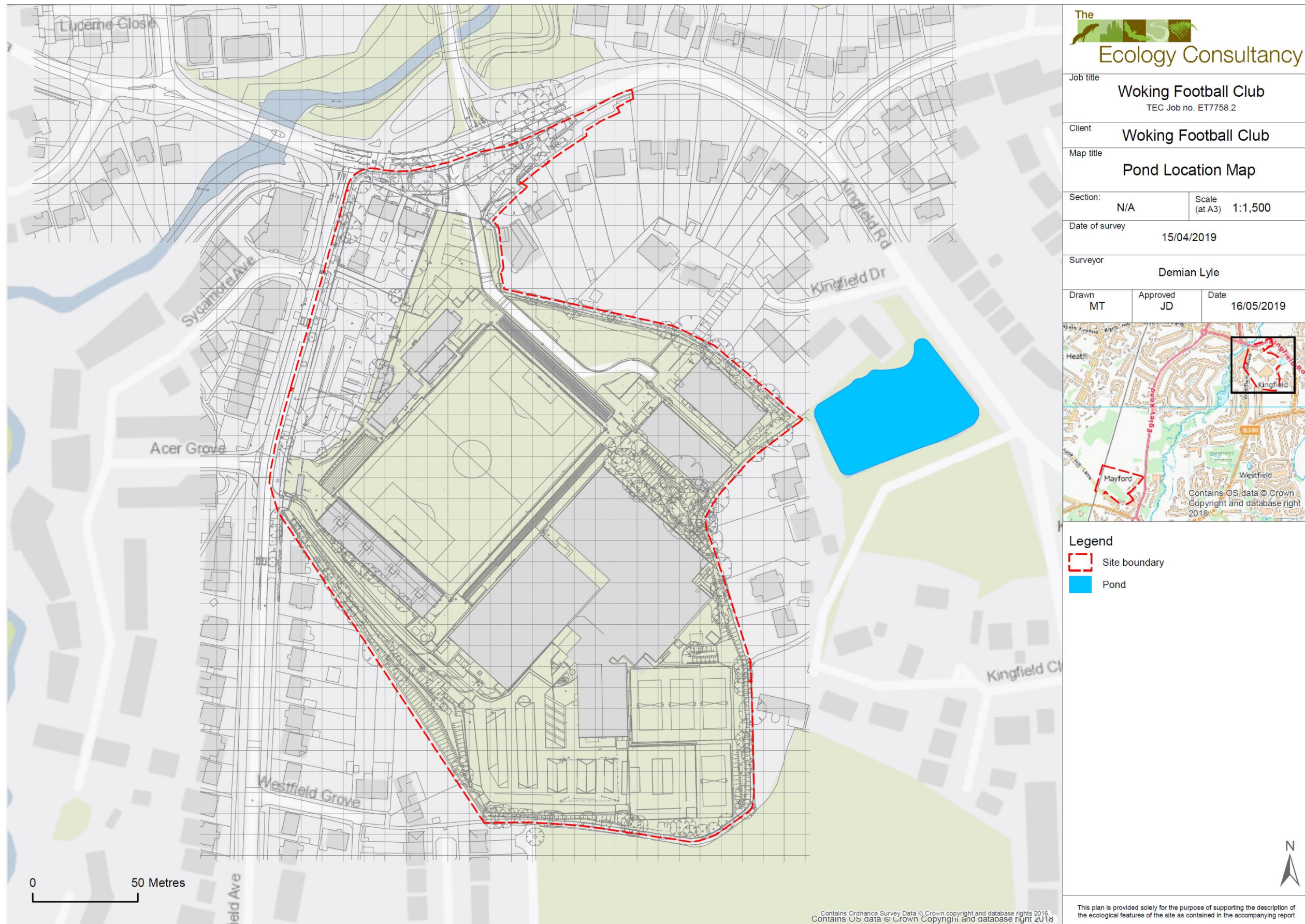
Nature Metrics (2019). Great Crested Newt eDNA Results. Report 19039-TEC-DL-1. Order number TEC-19010-DL.

Oldham R.S., Keeble J., Swan M.J.S. & Jeffcote M. (2000). *Evaluating the suitability of habitat for the Great Crested Newt (Triturus cristatus)*. Herpetological Journal 10 (4), 143-155.

The Ecology Consultancy (2019). Cardinal Court, *Woking: Preliminary Ecological Appraisal*. Report for Woking Football Club. Reference 7758. V3.0


Appendix 1: Pond Location Map

Figure 1: Pond location map.



Appendix 2: Habitat Suitability Index Assessment Results

Table 1: Habitat Suitability Index assessment for Pond 1

Pond Number: 1	
Grid reference: TQ 00749 57358	
Pond location: 30m east	
Pond Description	
A large pond with deep water, poor water quality as a result of leaf litter. Ducks and geese present.	

Pond 1 HSI Assessment Results

	SI value	
SI1. Map location	A	1.0
SI2. Surface area (m ²)	2,750	N/A
SI3. Desiccation rate	Never dries	0.9
SI4. Water quality	Poor	0.33
SI5. Shade % of margin shaded 1m from bank	30%	1.00
SI6. Waterfowl	Major	0.01
SI7. Fish population	Possible	0.67
SI8. Pond density number of ponds within 1km	4	0.69
SI9. Terrestrial habitat	Moderate	0.67
SI10. Macrophyte cover %	1%	0.35
	HSI score	0.40
	Pond suitability	Poor

Appendix 3: Environmental DNA Survey -Nature Metrics Report

Report: 19039-TEC-DL-1 Order number: TEC-19010-DL

Great Crested Newt eDNA Results

Company: The Ecology Consultancy
 Contact: Demian Lyle
 Project code | Task code: Kingfield Road, Woking - 7758.2 | 2019 GCN eDNA - 7758.2
 Date of Report: 26 April 2019
 Number of samples: 1

Thank you for sending your sample for analysis by NatureMetrics. Your sample has been processed in accordance with the protocol set out in Appendix 5 of Biggs et al. (2014).

DNA was precipitated via centrifugation at 14,000 x g and then extracted using Qiagen Blood and Tissue extraction kits.

qPCR amplification was carried out in 12 replicates per sample, using the primers and probe described by Biggs et al. (2014), in the presence of both positive and negative controls.

Results indicate GCN absence in 'K1'. All controls performed as expected and so the results are conclusive.

Results are based on the samples as supplied by the client to the laboratory. Incorrect sampling methodology may affect the results. Note that a negative result does not preclude the presence of Great Crested Newts at a level below the limits of detection.

Sample	Pond ID	Arrived	Inhibition	Degradation	Score	GCN status
275	'K1'	17-Apr	No	No	0	Negative

End of report

Report issued by: Dr. Cuong Tang
 Contact: ct@naturemetrics.co.uk | 01491 829042



NatureMetrics Ltd, CABI site, Bakeham Lane, Egham, Surrey, TW20 9TY

Understanding your results

- Positive:** GCN DNA has been detected in this sample, meaning that at least one of the 12 replicates has amplified. Remember that this is not a quantitative test, so you should not interpret a high eDNA score (e.g. 12/12) as necessarily indicating a larger population of GCN than a low eDNA score (e.g. 1/12).
- Negative:** No GCN DNA has been detected in this sample, and the internal and external controls worked as expected. This tells us that if there had been GCN DNA in the sample, we would have detected it, so we can be confident in its absence from the sample provided. Samples marked as 'Negative after dilution' are those where inhibition was detected (when the marker added in the lab fails to amplify) but overcome by diluting the DNA. Inhibition can be caused by certain chemicals or organic compounds that may be present in the water sample.
- Inconclusive:** No GCN DNA was detected in the sample, but the internal controls failed to amplify as expected. This means that any GCN DNA in the sample might also have failed to amplify properly, so we cannot have confidence in this negative result. Inconclusive results can be caused by degradation of the DNA (when the DNA marker contained in the ethanol in the kits fails to amplify) or by inhibition of the reaction (when the marker added in the lab fails to amplify) caused by certain chemicals or organic compounds that may be present in the water sample.



NatureMetrics Ltd, CABI site, Bakeham Lane, Egham, Surrey, TW20 9TY



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Annex 9: Heritage Statement



Woking Football Club Woking Surrey, GU22

Heritage Statement

NGR TQ 00555 57343

Sign-off history

issue no.	issue date	prepared by	reviewed by	approved by	reason for issue
1	01/05/2019	Alicia Vickers Heritage Consultant	Sam Abelman Lead Consultant Built Heritage	Chris Thomas Project Manager	First issue for client review
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Note: site outlines may appear differently on some figures owing to distortions in historic maps. North is approximate on early maps.

Executive summary

Woking Football Club has commissioned MOLA to carry out a historic environment assessment in advance of proposed redevelopment of an area of land located in Woking, which is currently occupied by a football stadium; a collection of large-footprint, low-rise buildings; car parking; and a number of small residential properties situated in the north of the site ('the site'). The site is off Kingfield Road in the Borough of Woking in Surrey.

The scheme comprises the redevelopment of the site, following the demolition of all existing buildings and structures, to provide a replacement stadium with ancillary facilities, including flexible retail, hospitality and community spaces, independent retail floorspace (Classes A1/A2/A3), a medical centre (Class D1) and vehicle parking, plus residential accommodation comprising of 1,048 dwellings (Class C3) within 5 buildings of varying heights of between 3 and 10 storeys (and undercroft and part basement levels) on the south and west sides of the site, together with provision of new accesses from Westfield Avenue to car parking, associated landscaping and the provision of a detached residential concierge building (the 'Proposed Development').

This desk-based study assesses the possible impacts of the Proposed Development on built heritage assets in and around the site. Although below ground heritage assets (historic structures) are not discussed in detail, they have been noted where they assist in the archaeological interpretation of the site. Built heritage assets that may be affected by the Proposed Development comprise:

- **Ashwood, Ashwood Road, Grade II;**
- **Howards Farm, Stockers Lane, Grade II;**
- **The Old Oak Cottage, 17, Vicarage Road, Grade II;**
- **The Old Cricketers and Cricketers Cottage, Westfield Common, Grade II;**
- **Dormer Cottage and Garage, Bonsey Lane, Grade II;**
- **April Cottage, Guildford Road, Grade II;**
- **Church of St Mary Of Bethany, York Road, Grade II;**
- **Elmbridge Cottage, Kingsfield Road, Grade II;**
- **Laurel Cottage, 6, Stockers Lane, Grade II;**
- **12 High Street, Grade II;**
- **34 High Street, Grade II;**
- **The Old Cottage (29 High Street), Grade II; and**
- **Hale Lodge, Grade II.**

The site is approximately 900m from the historic centre of Old Woking and there are no Scheduled Ancient Monuments recorded within the study area. The site remained undeveloped until the current football stadium was built in the early 20th century.

This assessment has found that the Proposed Development would have a positive effect in built heritage terms on both the site itself with a neutral impact on the identified listed buildings.

While the scale, form, function and massing of the Proposed Development are largely in keeping with guidelines set out in both Borough of Woking's Local Development Scheme and Surrey's Local Strategic Statement, continued discussion with the local authority to ensure a sufficiently sympathetic façade/materiality to the Proposed Development, chiefly at the Westfield Avenue and Kingfield Road frontages. Care should also be taken in the development of the proposals to ensure the height and form of the development do not impose on the streetscape more broadly. No further archaeological survey is recommended.



Fig 1 Site Location Plan.

1 Introduction

1.1 Origin and scope of the report

- 1.1.1 Woking Football Club has commissioned MOLA to carry out a historic environment assessment in advance of proposed redevelopment of an area of land located in Woking, which is currently occupied by a football stadium; a collection of large-footprint, low-rise buildings; car parking; and a number of small residential properties situated in the north of the site ('the site'). The site is off Kingfield Road in the Borough of Woking in Surrey (NGR TQ 00555 57343). This desk-based study assesses the impact of the scheme on built heritage assets.
- 1.1.2 The scheme comprises the redevelopment of the site, following the demolition of all existing buildings and structures, to provide a replacement stadium with ancillary facilities, including flexible retail, hospitality and community spaces, independent retail floorspace (Classes A1/A2/A3), a medical centre (Class D1) and vehicle parking, plus residential accommodation comprising of 1,048 dwellings (Class C3) within 5 buildings of varying heights of between 3 and 10 storeys (and undercroft and part basement levels) on the south and west sides of the site, together with provision of new accesses from Westfield Avenue to car parking, associated landscaping and the provision of a detached residential concierge building (the 'Proposed Development').
- 1.1.3 This desk-based study assesses the impact of the Proposed Development on buried heritage assets (archaeological remains). It forms a technical appendix in support of an Environmental Statement, assessing the impact of the Proposed Development on the historic environment. It will enable the archaeological advisors to the local planning authority (LPA) to formulate an appropriate response in the light of the impact on any known or possible heritage assets. These are parts of the historic environment which are considered to be significant because of their historic, evidential, aesthetic and/or communal interest.
- 1.1.4 The assessment has been carried out in accordance with the requirements of the National Planning Policy Framework (NPPF) (MHCLG 2012, 2019; see section 3 of this report) and to standards specified by the Chartered Institute for Archaeologists (CIfA Dec 2014a, 2014b), Historic England (EH 2008, 2015), and the Greater London Archaeological Advisory Service (GLAAS 2014). Under the 'Copyright, Designs and Patents Act' 1988 MOLA retains the copyright to this document.
- 1.1.5 Note: within the limitations imposed by dealing with historical material and maps, the information in this document is, to the best knowledge of the author and MOLA, correct at the time of writing. Further archaeological investigation, more information about the nature of the present buildings, and/or more detailed proposals for redevelopment may require changes to all or parts of the document.

1.2 Heritage assets

- 1.2.1 The site contains no designated heritage assets, though it is located in the proximity of thirteen Grade II-listed buildings:
- **Ashwood, Ashwood Road, Grade II (NHL 1259356);**
 - **Howards Farm, Stockers Lane, Grade II (NHL 1236804);**
 - **The Old Oak Cottage, 17, Vicarage Road, Grade II (NHL 1236811);**
 - **The Old Cricketers and Cricketers Cottage, Westfield Common, Grade II (NHL 427914);**
 - **Dormer Cottage and Garage, Bonsey Lane, Grade II (NHL 1442260);**
 - **April Cottage, Guildford Road, Grade II (NHL 1044729);**
 - **Church of St Mary Of Bethany, York Road, Grade II (NHL 1236965);**
 - **Elmbridge Cottage, Kingsfield Road, Grade II (NHL 1236576);**
 - **Laurel Cottage, 6, Stockers Lane, Grade II (NHL 1264366);**

- 12 High Street (NHL 1044732);
- 34 High Street (NHL 1044688);
- The Old Cottage, 29 High Street (NHL 1044731); and
- Hale Lodge (NHL 1274853).

- provide recommendations for further assessment where necessary of the historic assets affected, and/or mitigation aimed at reducing or removing completely any adverse impacts upon buried heritage assets and/or their setting.



Fig 2 Historic environment features map (in closest proximity to the site).

1.3 Aims and objectives

1.3.1 The aim of the assessment is to:

- identify the presence of any known or potential buried heritage assets that may be affected by the Proposed Development;
- describe the significance of such assets, as required by national planning policy (see section 3.3 for planning framework and section 2.2 for methodology used to determine significance);
- assess the likely impacts upon the significance of the assets arising from the Proposed Development; and

2 Methodology and sources consulted

2.1 Baseline

- 2.1.1 The baseline for this assessment has been determined primarily through desk-based research into designated and undesignated heritage assets on and near the site of the Proposed Development. It has been confirmed and extended by a site visit by a MOLA Built Heritage Consultant.
- 2.1.2 The following are the principal sources consulted:
- MOLA - in-house Geographical Information System (GIS) with statutory designations GIS data;
 - Historic England - information on statutory designations including scheduled monuments and listed buildings, along with identified Heritage at Risk;
 - The London Society Library - published histories and journals;
 - London Metropolitan Archives - historic maps and published histories;
 - Groundsure - historic Ordnance Survey maps from the first edition (1860-70s) to the present day, and Goad fire insurance maps;
 - Hollybrook - architectural drawings (Leach Rhodes Walker Architects/2018); and
 - Internet - web-published material including LPA local plan, and information on conservation areas and locally listed buildings.

2.2 Significance

- 2.2.1 The assessment considers all structures on or near the site of a proposed development to have potential significance as heritage assets. From this start position, the values and significance of each asset will be determined using criteria set out in Historic England (formerly English Heritage)'s *Conservation Principles, Policies and Guidance* (EH 2008). All structures with a level of significance as heritage assets will be discussed in the report and included as material considerations in the assessment. Structures of negligible value and significance as heritage assets will not be assessed further and will generally be excluded from the report except where there is a need for explanation of their exclusion from the assessment, such as being part of the site.
- 2.2.2 For each built heritage asset to be considered, a description will be provided leading to a statement of significance for that asset. Section 3 sets out the criteria used to determine the significance of heritage assets. This is based on four values set out in Historic England's *Conservation Principles, Policies and Guidance* (EH 2008), and comprise evidential, historical, aesthetic and communal value. The report assesses the likely presence of such assets within (and beyond) the site, factors which may have compromised buried asset survival (i.e. present and previous land use), as well as possible significance.
- 2.2.3 The significance of the asset is derived from its historical, evidential, communal and aesthetic values, these in turn derived from the building's fabric, design, landscape and history.
- 2.2.4 In the case of Conservation Areas, the significance will be primarily found in their character assessments and those aspects of the historic built environment that make positive contributions to them.
- 2.2.5 The methodology for assessing the setting of designated heritage assets follows best practice as covered in Historic England's Good Practice Advice (GPA) document 3 (HE 2017). The basis for this methodology is set out below:
- All heritage assets have significance, some of which have particular significance and are designated. The contribution made by their setting to their significance also varies.
- Although many settings may be enhanced by development, not all settings have the same capacity to accommodate change without harm to the significance of the heritage asset or the ability to appreciate it. This capacity may vary between designated assets of the same grade or of the same type or according to the nature of the change. It can also depend on the

location of the asset: an elevated or overlooked location; a riverbank, coastal or island location; or a location within an extensive tract of flat land may increase the sensitivity of the setting (i.e. the capacity of the setting to accommodate change without harm to the heritage asset's significance) or of views of the asset. This requires the implications of development affecting the setting of heritage assets to be considered on a case-by-case basis.

- 2.2.6 GPA3 sets out this methodology in stages, or steps:
- Step 1 - identify the asset(s) likely to be affected and the extent of setting;
 - Step 2 - assess how and to what degree the setting makes a contribution to the significance of the assets;
 - Step 3 - assess the effect of the proposed development on the significance of the asset;
 - Step 4 - seek to maximise enhancement and minimise harm; and
 - Step 5 - document and monitor outcomes.
- 2.2.1 'Significance' lies in the value of a heritage asset to this and future generations because of its heritage interest, which may be archaeological, architectural, artistic or historic. Archaeological interest includes an interest in carrying out an expert investigation at some point in the future into the evidence a heritage asset may hold of past human activity, and may apply to standing buildings or structures as well as buried remains. Known and potential heritage assets within the site and its vicinity have been identified from national and local designations, HER data and expert opinion. The determination of the significance of these assets is based on statutory designation and/or professional judgement against four values (EH 2008):
- Evidential value:* the potential of the physical remains to yield evidence of past human activity. This might take into account date; rarity; state of preservation; diversity/complexity; contribution to published priorities; supporting documentation; collective value and comparative potential;
- Aesthetic value:* this derives from the ways in which people draw sensory and intellectual stimulation from the heritage asset, taking into account what other people have said or written;
- Historical value:* the ways in which past people, events and aspects of life can be connected through heritage asset to the present, such a connection often being illustrative or associative;
- Communal value:* this derives from the meanings of a heritage asset for the people who know about it, or for whom it figures in their collective experience or memory; communal values are closely bound up with historical, particularly associative, and aesthetic values, along with and educational, social or economic values.
- 2.2.2 Table 1 outlines the significance of designated and non-designated heritage assets.

Heritage asset description	Significance
World heritage sites Scheduled monuments Grade I and II* listed buildings Historic England Grade I and II* registered parks and gardens Protected Wrecks Heritage assets of national importance	Very high (International/ national)
Historic England Grade II registered parks and gardens Conservation areas Designated historic battlefields Grade II listed buildings Burial grounds Protected heritage landscapes (e.g. ancient woodland or historic hedgerows) Heritage assets of regional or county importance	High (national/ regional/ county)
Heritage assets with a district value or interest for education or cultural appreciation Locally listed buildings.	Medium (District)
Heritage assets with a local (i.e. parish) value or interest for education or cultural appreciation.	Low (Local)
Historic environment resource with no significant value or interest.	Negligible
Heritage assets that have a clear potential, but for which current knowledge is insufficient to allow significance to be determined.	Uncertain

2.3 Impact

- 2.3.1 Impacts are those actions associated with the Proposed Development with potential to alter the significance of a heritage asset through affecting the values that contribute to it.
- 2.3.2 For each built heritage asset, the potential impacts of demolition and construction will be assessed in terms of how they may alter these values and, by extension, significance of each.
- 2.3.3 For Conservation Areas, the assessment will focus on the preservation and/or enhancement of their historic character.

2.4 Conclusions and Recommendations

- 2.4.1 The built heritage assessment will conclude with a list of impacts, potentially ranging from major adverse to major positive, on built heritage assets in the baseline.
- 2.4.2 This list is primarily intended to inform mitigation, whether through design or ameliorative archaeological recording of assets in advance of their alteration.

3 Policy baseline

3.1 Introduction

- 3.1.1 There is potential for the Proposed Development to impact on the significance of designated and undesignated built heritage assets and Conservation Areas. These impacts will likely take the form of demolition or other physical alteration to buildings, demolition and new construction that may alter the setting of designated heritage assets, and demolition and new construction that may affect the character and setting of Conservation Areas.
- 3.1.2 The following lays out the general criteria upon which the Proposed Development will be assessed. The full policy framework can be found in Section 3.3.

3.2 Statutory protection

Listed Buildings and Conservation Areas

- 3.2.1 The *Planning (Listed Buildings and Conservation Areas) Act 1990* sets out the legal requirements for the control of development and alterations which affect buildings, including those which are listed or in conservation areas. Buildings which are listed or which lie within a Conservation Area are protected by law. Grade I are buildings of exceptional interest. Grade II* are particularly significant buildings of more than special interest. Grade II are buildings of special interest, which warrant every effort being made to preserve them.

3.3 National Planning Policy Framework

- 3.3.1 The Government issued the *National Planning Policy Framework (NPPF)* in March 2012 (MHCLG 2012) and supporting *Planning Practice Guidance* in 2014 (MHCLG 2014). The 2012 NPPF was revised and a new NPPF published in July 2018, with minor revisions in February 2019 (MHCLG 2019).

Conserving and enhancing the historic environment

- 3.3.2 The NPPF section concerning “Conserving and enhancing the historic environment” (section 12 of the NPPF 2012) has been replaced by NPPF 2018 Section 16 (unchanged in February 2019), reproduced in full below:

Para 184. Heritage assets range from sites and buildings of local historic value to those of the highest significance, such as World Heritage Sites which are internationally recognised to be of Outstanding Universal Value. These assets are an irreplaceable resource, and should be conserved in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life of existing and future generations.

Para 185. Plans should set out a positive strategy for the conservation and enjoyment of the historic environment, including heritage assets most at risk through neglect, decay or other threats. This strategy should take into account:

- a) the desirability of sustaining and enhancing the significance of heritage assets, and putting them to viable uses consistent with their conservation;
- b) the wider social, cultural, economic and environmental benefits that conservation of the historic environment can bring;
- c) the desirability of new development making a positive contribution to local character and distinctiveness; and
- d) opportunities to draw on the contribution made by the historic environment to the character of a place.

Para 186. When considering the designation of conservation areas, local planning authorities should ensure that an area justifies such status because of its special architectural or historic interest, and that the concept of conservation is not devalued through the designation of areas that lack special interest.

Para 187. Local planning authorities should maintain or have access to a historic environment record. This should contain up-to-date evidence about the historic environment in their area and be used to:

- a) assess the significance of heritage assets and the contribution they make to their environment; and
- b) predict the likelihood that currently unidentified heritage assets, particularly sites of historic and archaeological interest, will be discovered in the future.

Para 188. Local planning authorities should make information about the historic environment, gathered as part of policy-making or development management, publicly accessible.

Proposals affecting heritage assets

Para 189. In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance. As a minimum the relevant historic environment record should have been consulted and the heritage assets assessed using appropriate expertise where necessary. Where a site on which development is proposed includes, or has the potential to include, heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation.

Para 190. Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise. They should take this into account when considering the impact of a proposal on a heritage asset, to avoid or minimise any conflict between the heritage asset's conservation and any aspect of the proposal.

Para 191. Where there is evidence of deliberate neglect of, or damage to, a heritage asset, the deteriorated state of the heritage asset should not be taken into account in any decision.

Para 192. In determining applications, local planning authorities should take account of:

- a) the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation;
- b) the positive contribution that conservation of heritage assets can make to sustainable communities including their economic vitality; and
- c) the desirability of new development making a positive contribution to local character and distinctiveness

Considering potential impacts

Para 193. When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation (and the more important the asset, the greater the weight should be). This is irrespective of whether any potential harm amounts to substantial harm, total loss or less than substantial harm to its significance.

Para 194. Any harm to, or loss of, the significance of a designated heritage asset (from its alteration or destruction, or from development within its setting), should require clear and convincing justification. Substantial harm to or loss of:

- a) grade II listed buildings, or grade II registered parks or gardens, should be exceptional;
- b) assets of the highest significance, notably scheduled monuments, protected wreck sites, registered battlefields, grade I and II* listed buildings, grade I and II* registered parks and gardens, and World Heritage Sites, should be wholly exceptional.

Para 195. Where a proposed development will lead to substantial harm to (or total loss of significance of) a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or total loss is necessary to achieve substantial public benefits that outweigh that harm or loss, or all of the following apply:

- a) the nature of the heritage asset prevents all reasonable uses of the site; and
- b) no viable use of the heritage asset itself can be found in the medium term through appropriate marketing that will enable its conservation; and
- c) conservation by grant-funding or some form of not for profit, charitable or public ownership is demonstrably not possible; and
- d) the harm or loss is outweighed by the benefit of bringing the site back into use.

Para 196. Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal including, where appropriate, securing its optimum viable use.

Para 197. The effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that directly or indirectly affect non-designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset.

Para 198. Local planning authorities should not permit the loss of the whole or part of a heritage asset without taking all reasonable steps to ensure the new development will proceed after the loss has occurred.

Para 199. Local planning authorities should require developers to record and advance understanding of the significance of any heritage assets to be lost (wholly or in part) in a manner proportionate to their importance and the impact, and to make this evidence (and any archive generated) publicly accessible. However, the ability to record evidence of our past should not be a factor in deciding whether such loss should be permitted.

Para 200. Local planning authorities should look for opportunities for new development within Conservation Areas and World Heritage Sites, and within the setting of heritage assets, to enhance or better reveal their significance. Proposals that preserve those elements of the setting that make a positive contribution to the asset (or which better reveal its significance) should be treated favourably.

Para 201. Not all elements of a Conservation Area or World Heritage Site will necessarily contribute to its significance. Loss of a building (or other element) which makes a positive contribution to the significance of the Conservation Area or World Heritage Site should be treated either as substantial harm under paragraph 195 or less than substantial harm under paragraph 196, as appropriate, taking into account the relative significance of the element affected and its contribution to the significance of the Conservation Area or World Heritage Site as a whole.

Para 202. Local planning authorities should assess whether the benefits of a proposal for enabling development, which would otherwise conflict with planning policies but which would secure the future conservation of a heritage asset, outweigh the disbenefits of departing from those policies.

3.4 Surrey County Council

Strategic planning policy

3.4.1 The draft interim Local Strategic Statement (LSS) for Surrey is not a statutory document, but is intended to set out a consensus around common objectives and priorities through an overarching spatial planning vision for the county covering the period 2016 - 2031. It is a key tool to help councils manage growth sustainably and provides important evidence to demonstrate that cooperation on strategic matters is an integral part of their Local Plan preparation. It is informed by existing and new evidence developed to support Local Plan preparation by the borough, district and county councils.

3.4.2 A strategic objective of the interim LSS includes;

Objective 4: Supporting environmental sustainability, natural resource management and conserving and enhancing the character and quality of the countryside and openness of the Green Belt - Local planning authorities will work together and with partners to invest in natural capital, avoid adverse effects on the environment, improve resilience to climate change and protect heritage assets to support economic prosperity and the wellbeing of residents.

3.5 Woking Core Strategy

Woking Local Development Document

3.5.1 The overarching strategies and policies for Woking area are contained within the Woking Local Development Document (October 2012).

3.5.2 Policy CS20: Heritage and Conservation relates to heritage assets and archaeology:

New development must respect and enhance the character and appearance of the area in which it is proposed whilst making the best use of the land available. New development should also make a positive contribution to the character, distinctiveness and significance of the historic environment, including heritage assets at risk through neglect, decay or other threats.

The heritage assets of the Borough will be protected and enhanced in accordance with relevant legislation and national guidance as set out in the National Planning Policy Framework. The definition of what comprises the heritage assets of the Borough is included in the Glossary and also where relevant

identified on the Proposals Map.

There will be a presumption against any development that will be harmful to a listed building. Alterations and extensions to listed buildings must respect the host building in terms of scale, design, use of materials, retention of the structure and any features of special historic or architectural importance. Planning applications will be refused for any alteration or extension to a listed building that will not preserve the building or its setting. A listed building consent will be required for any development that will affect a statutory listed building.

3.6 Commentary on Policy

3.6.1 It is considered that the proposal takes due regard of and complies with all relevant national policy and advice.

3.6.2 It is considered that the Proposed Development is in accordance with local policy as it will:

- Conserve and enhance the historic environment of the Borough;
- Not cause harm to listed buildings;
- Ensure that its height and design is compatible with the setting of the identified heritage assets and no strategic views will be affected; and
- Will improve the overall character and quality of the area.

3.6.3 There are no further policies regarding new development in the vicinity of heritage items.

4 Built Heritage Baseline

4.1 Site development

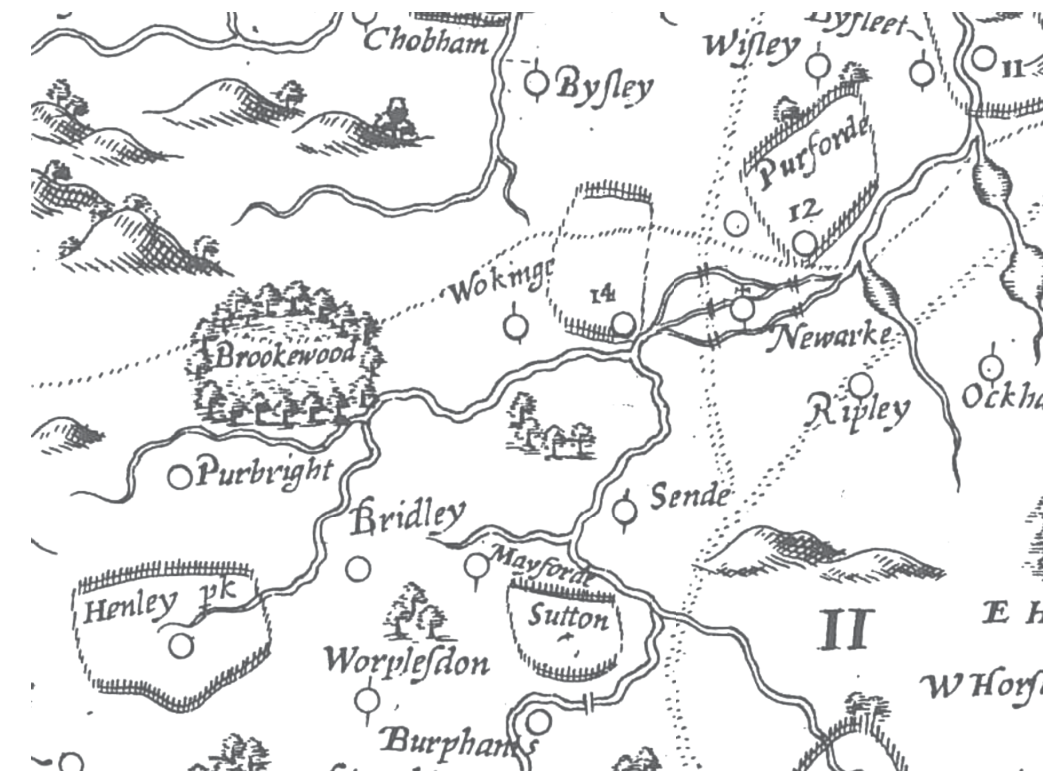


Fig 3 John Norden's 250 years of map making in the County of Surrey, sheet no. 3b, 1594.

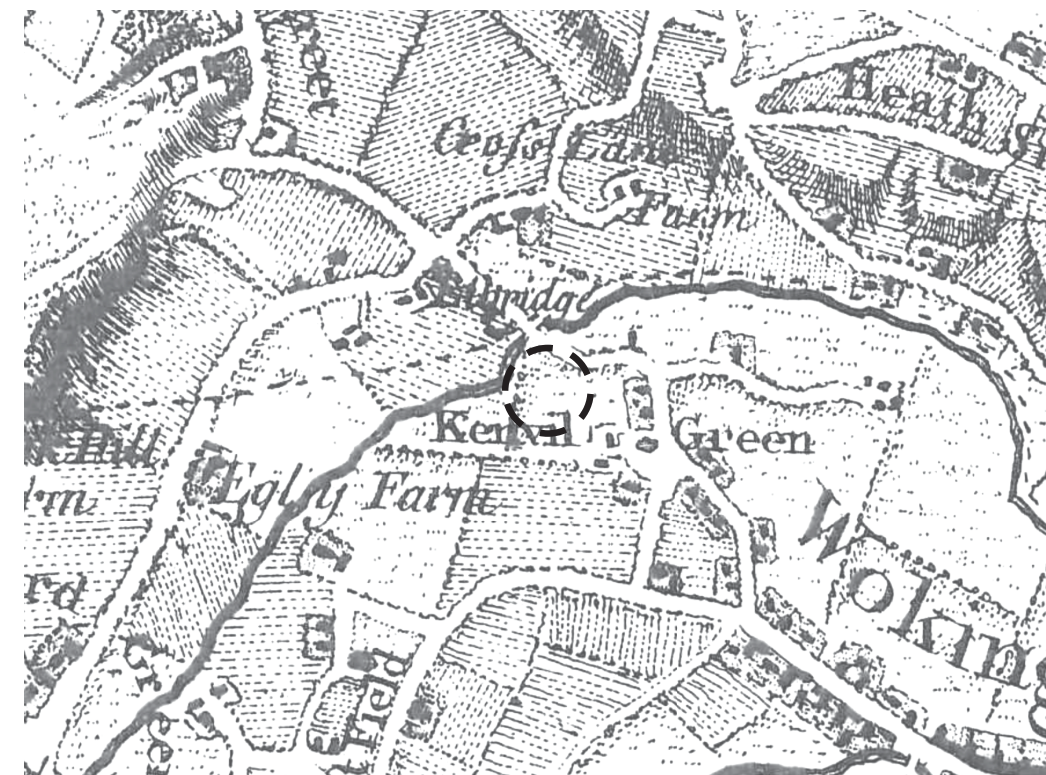


Fig 4 John Roque's map of Surrey, 1768.

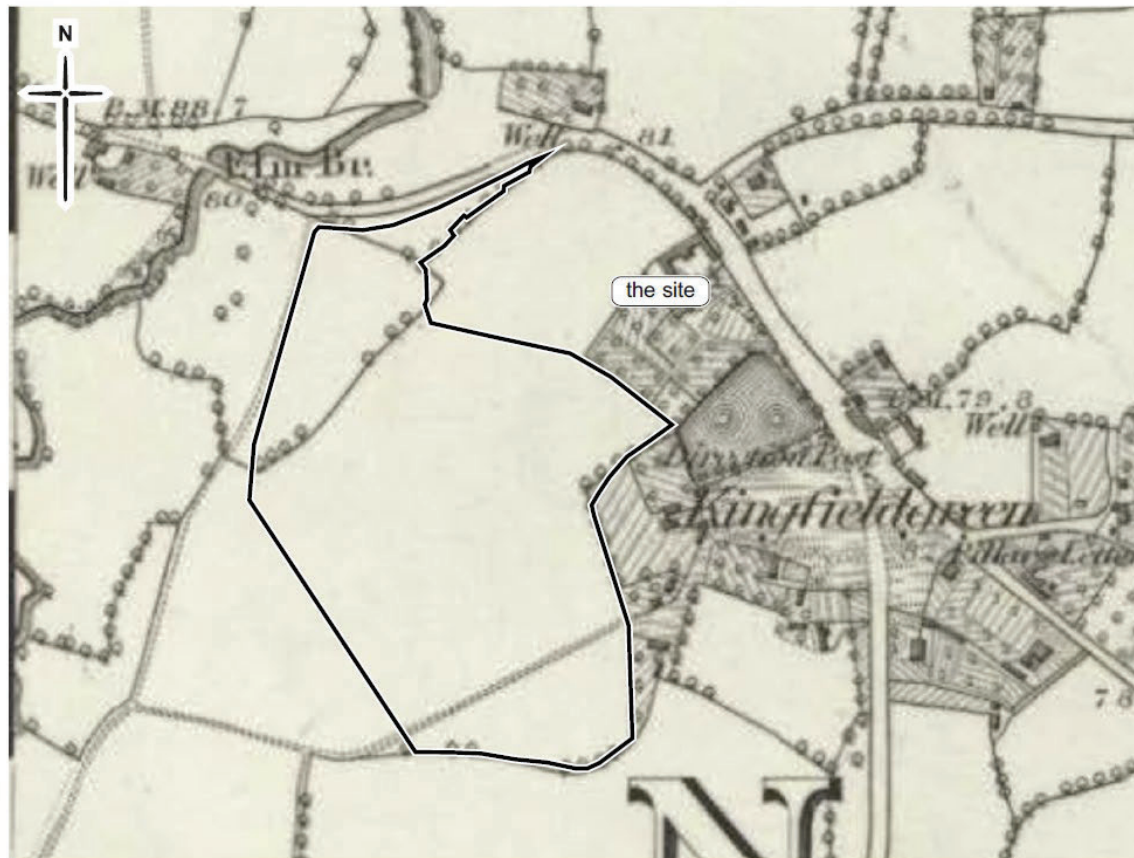


Fig 5 Ordnance Survey 1st edition 6":mile map of 1872/3 (not to scale).

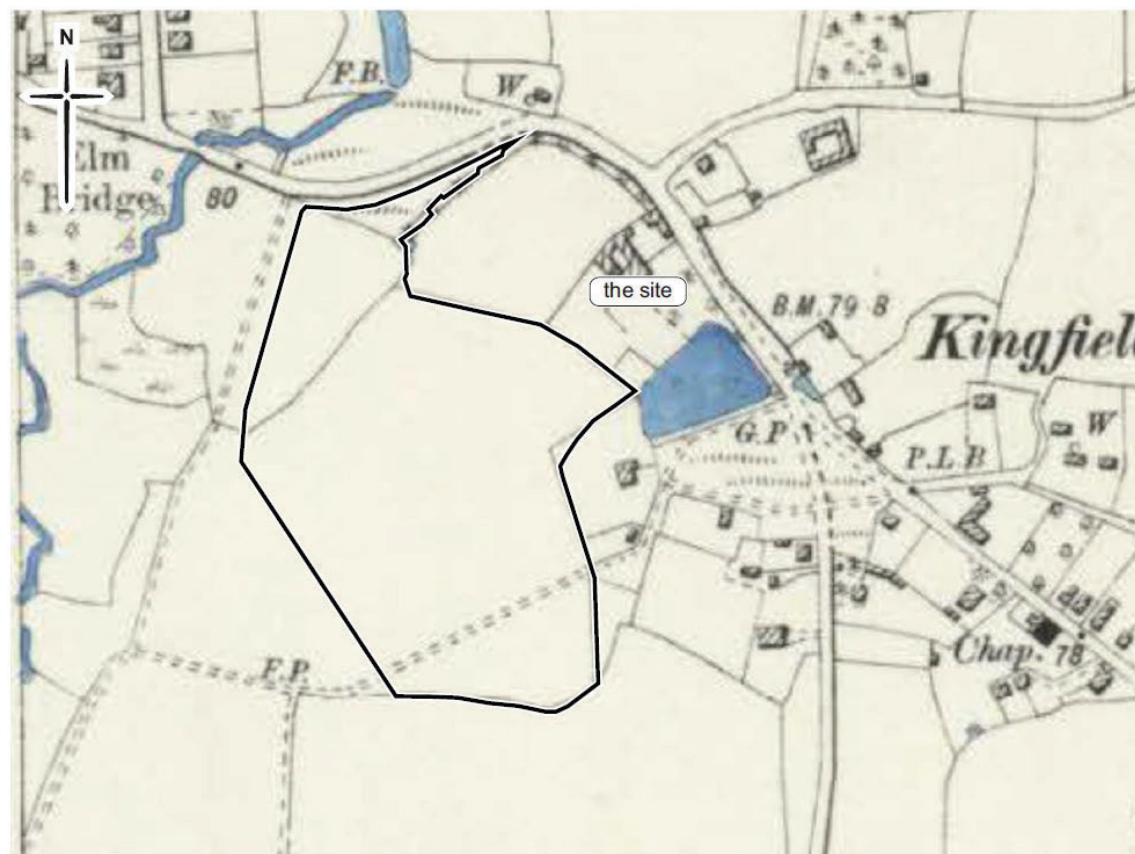


Fig 6 Ordnance Survey 2nd edition 6":mile map of 1897(not to scale).

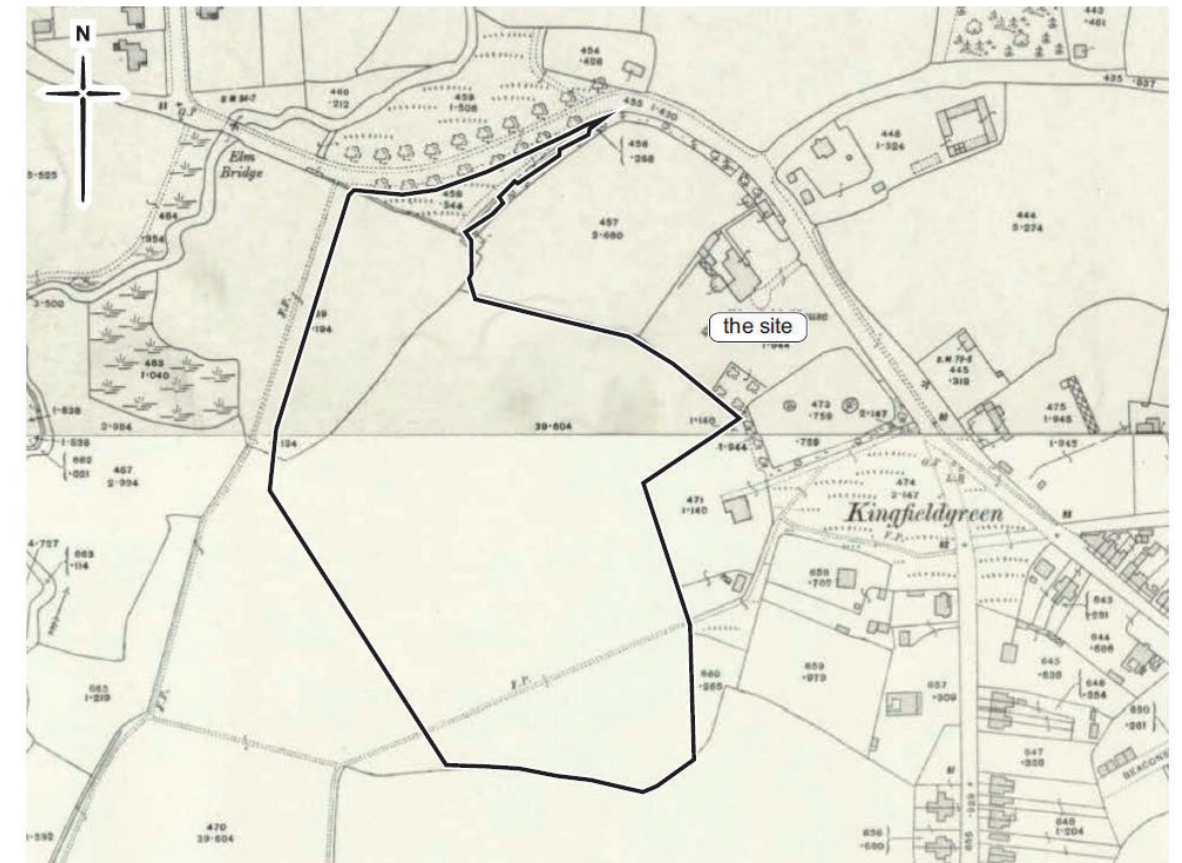


Fig 7 Ordnance Survey 3rd edition 25":mile map of 1914 (not to scale).

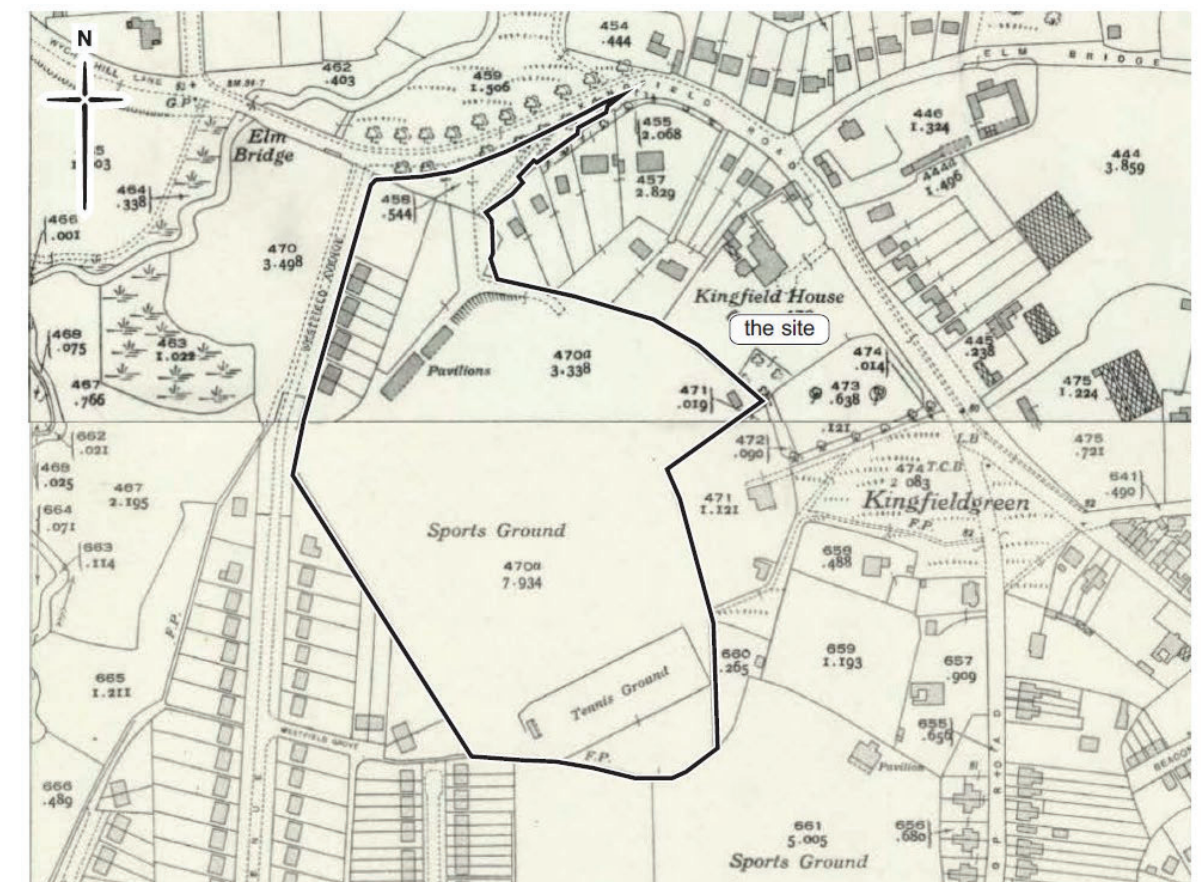


Fig 8 Ordnance Survey 25":mile map of 1935/6 (not to scale).

- 4.1.1 John Norden's map of 1594 (Fig 3) is small scale which depicts the site area as open fields to the north of the River Wey. The earliest map depicting the Manor of Woking is that by John Remnant of 1719 (not reproduced due to poor quality). It shows the site in the west of the manor.
- 4.1.2 John Roque's map of Surrey of 1768 (Fig 4) adds a little further detail to the area. The site is still undeveloped just to the south of a main road and the Stanford Brook. A number of settlements and farms are shown but all some distance from the site.
- 4.1.3 The Ordnance Survey (OS) 1st edition 6":mile map of 1872/3 (Fig 5) is the first to show the area in greater detail, confirming Roque's indication of open fields. A field boundary aligned north-east, south-west is shown within the northern third of the site and a footpath, also aligned north-east, south-west is shown in the southern third of the site. Market gardening is shown around Kingfield green adjoining the east of the site. Open fields are shown surrounding the remainder of the site.
- 4.1.4 No change within the site is shown on the OS 2nd edition 6":1mile map of 1897 (Fig 6) and the OS 3rd edition 25":mile map of 1914 (Fig 7). The mapping shows that while the settlement of Kingfield green to the east has grown, it has done so relatively slowly over the forty-year period between maps.
- 4.1.5 An eleven acre site was obtained in 1921 to provide a secure home for the football club and "The Woking Football and Sports Ground Ltd" set up to manage the site. An agreement was entered into with an option to purchase Kingfield for £150 per acre plus an additional sum payable to the tenant as compensation for the loss of crops. Work started on levelling the ploughed field, constructing the new grandstand and raising banking for spectators.
- 4.1.6 The OS 25":mile map of 1935/6 (Fig 8) shows that a sports ground has been constructed in the centre of the site; tennis courts, pavilions/stands to the south; and semi-detached housing fronting Westfield Avenue in the north-western corner of the site.
- 4.1.7 More recent mapping (which has not been reproduced due to being of poor quality) shows that the pavilions/stands have been extended and additional building development to the north and south of the stadium has been constructed.



Fig 9 Kingfield in 1931 - Woking v Portland in the FA Amateur Cup (Woking FC)

4.2 Site description

- 4.2.1 The site is currently occupied by a football stadium (Woking Football Club); a collection of large-footprint, low-rise buildings, including the Woking Snooker Centre; David Lloyd Leisure Centre (including tennis courts), Woking Gymnastics Club; car parking; and a small number of residential properties situated in the north of the site.



Fig 10: The site looking south from Kingfield Road entrance.



Fig 11: The pitch and Leslie Gosden stand.



Fig 12: Westfield Avenue car park.



Fig 13: Westfield Avenue residential housing.



Fig 14: David Lloyd gym and parking.

4.3 Nearby heritage assets

4.3.1 The nearest heritage assets to the site are as follows:

Name and Address of Designated Asset	Grade	Listing	Approximate Distance from the Site
ASHWOOD, ASHWOOD ROAD	Grade II	1259356	990m
HOWARDS FARM, STOCKERS LANE	Grade II	1236804	434m
THE OLD OAK COTTAGE, 17, VICARAGE ROAD	Grade II	1236811	547m
THE OLD CRICKETERS AND CRICKETERS COTTAGE, WESTFIELD COMMON	Grade II	427914	804m
DORMER COTTAGE AND GARAGE, BONSEY LANE	Grade II	1442260	655m
APRIL COTTAGE, GUILDFORD ROAD	Grade II	1044729	390m
CHURCH OF ST MARY OF BETHANY, YORK ROAD	Grade II	1236965	750m
ELMBRIDGE COTTAGE, KINGSFIELD ROAD	Grade II	1236576	208m
LAUREL COTTAGE, 6, STOCKERS LANE	Grade II	1264366	423m
12 HIGH STREET	Grade II	1044732	668m
34 HIGH STREET	Grade II	1044688	756m
THE OLD COTTAGE, 29 HIGH STREET	Grade II	1044731	798m
HALE LODGE	Grade II	1274853	875m

4.3.2 The following Conservation Areas have been identified as having their boundaries within 1000m of study are):

- Ashwood Road/Heathside Park Road;
- Mount Hermon; and
- Old Woking.



Fig 15: Grade II Elmbridge Cottage, Kingsfield Road.

5 Statement of significance

5.1 Introduction

- 5.1.1 In accordance with the NPPF, this is followed by a statement on the likely potential and significance of buried heritage assets within the site, derived from current understanding of the baseline conditions, past impacts, and professional judgement.

5.2 Buildings on site

- 5.2.1 The existing buildings on site are functional, modern buildings which have no heritage significance or particular architectural qualities of note.

5.3 Nearby heritage assets

- 5.3.1 The heritage assets within the study area are Grade II-listed and thus are heritage assets of **high** significance.
- 5.3.2 Using the same criteria for assessment and inclusion, the Conservation Areas are additionally identified as are heritage assets of **high** significance.

6 Proposed Development

6.1 Proposals

- 6.1.1 The Proposed Development comprises 'Redevelopment of the site, following the demolition of all existing buildings and structures, to provide a replacement stadium with ancillary facilities, including flexible retail, hospitality and community spaces, independent retail floorspace (Classes A1/A2/A3), a medical centre (Class D1) and vehicle parking, plus residential accommodation comprising of 1,048 dwellings (Class C3) within 5 buildings of varying heights of between 3 and 10 storeys (and undercroft and part basement levels) on the south and west sides of the site, together with provision of new accesses from Westfield Avenue to car parking, associated landscaping and the provision of a detached residential concierge building.'



Fig 16: Proposed stadium and residential blocks (Leach Rhodes Walker Architects – October 2019).



Fig 17: CGI View Looking South (Leach Rhodes Walker-October 2019).

7 Impact of Proposed Development

7.1 Impact on site

- 7.1.1 The site will have a highly visible location and the Proposed Development will result in prominent buildings in the area. It will physically transform a noticeable extent of the townscape area which currently accommodates buildings of utilitarian design, poor quality public realm features and surface treatments.
- 7.1.2 The nearest heritage asset (Grade II Elmbridge Cottage) is separated via mature boundary planting and the A247 (Kingfield Road). Its setting being already impacted by the busy Kingfield Road and surrounding suburban contemporary infill developments.
- 7.1.3 The proposed residential blocks utilise a choice of materials which include a palette of brickwork that complements the existing buildings in the surrounding environment. The demolition and replacement of the existing stadium, in addition to the five-part residential development consisting of separate building components of varying heights and associated landscaping would present a **positive** effect on the site itself. This stems from the addition of new buildings of improved materiality and general design. Rebuilding the stadium alongside residential development presents the opportunity to provide interesting contemporary urban design.
- 7.1.4 The Proposed Development would cause no adverse material or negative visual impact on the listed buildings within the study area, thereby contributing a **neutral** impact. The bulk, elevational design and height of the stadium and residential development would additionally present **neutral** impact on the identified Conservation Areas that have boundaries within the study area. Views toward and from the Conservation Areas are unaffected. Potential harm may also be mitigated via use of materials which complement and enhance the local character of the neighbouring surrounds.

8 Conclusion and recommendations

- 8.1.1 This assessment has found that the Proposed Development would have a **neutral** effect in built heritage terms on both the site itself and the Conservation Area, with a **neutral** material impact on the nearby listed buildings and Conservation Areas. The Proposed Development would present a **positive** effect on the site itself in terms of contemporary design and providing public benefits. Therefore, no recommendations are required.

9 Bibliography

9.1 Published and documentary sources

- Arnold P, 2009 *Woking Palace: Henry VIII's Royal Palace. The official guide to the Palace, fourth edition*
- Briggs R J S Woking Hundred: Testing Baxter's model of land tenure and royal patronage in the early English kingdom, <http://surreymedieval.wordpress.com>
- Cifa [Chartered Institute for Archaeologists] 2014a, *Standards and guidance for commissioning work or providing consultancy advice on archaeology and the historic environment*, Published December 2014, Reading
- Cifa [Chartered Institute for Archaeologists] 2014b, *Standards and guidance for the archaeological investigation and recording of standing buildings or structures*, Published December 2014, Reading
- Cifa [Chartered Institute for Archaeologists] 2017, *Standards and guidance for historic environment desk-based assessment*, Published December 2014, updated January 2017, Reading
- Crosby, A 2003 *A History of Woking*
- MHCLG [Department of Communities and Local Government], March 2012 *National Planning Policy Framework*
- MHCLG [Department of Communities and Local Government], March 2014 *Conserving and Enhancing the Historic Environment: Planning Practice Guide*
- Domesday Book, A Complete Translation*, eds Williams, A. and Martin, G.H. 1992, 2002. London: Penguin Books.
- EH [English Heritage], 2008 *Conservation principles, policies and guidance*. Swindon
- HE [Historic England] 2015a, *The Setting of Heritage Assets – Historic Environment Good Practice Advice in Planning: 3. Historic England in collaboration with the Historic Environment Forum*, second edition, Historic England July 2015.
- HE [Historic England] 2015b *Managing Significance in Decision-Taking in the Historic Environment – Historic Environment Good Practice Advice in Planning: 2. Historic England in collaboration with the Historic Environment Forum*, second edition, Historic England July 2015.
- HE [Historic England] 2017 *Conservation Principles for the Sustainable Management of the Historic Environment*, Consultation Draft, 10th November 2017
<https://content.historicengland.org.uk/content/docs/guidance/conservation-principles-consultation-draft.pdf>
- Humphery-Smith C, 1984 *The Phillimore Atlas and Index of Parish Registers*.
- Jomas Associates Limited 2018 *Desk Study/Preliminary Risk Assessment for Woking Football Club*
- Jomas Associates Limited 2019a *Preliminary Exploratory Hole Logs (BH1 – BH2) for Woking Football Club*
- Jomas Associates Limited 2019b *Preliminary Exploratory Hole Logs (BH3 – BH4) for Woking Football Club*
- MHCLG [Ministry of Housing, Communities and Local Government], 2019 *National Planning Policy Framework*, revised February 2019
- 'Parishes: Woking', in *A History of the County of Surrey: Volume 3*, ed. H E Malden (London, 1911), pp. 381-390. *British History Online* <http://www.britishhistory.ac.uk/vch/surrey/vol3/pp381-390> [accessed 15 April 2019]
- Palmer, M 1991 *Surrey Investigations-Woking*. Surrey County Council
- Smith, G 2005 *Surrey Placenames*. Loughborough
- Woking Borough Council 2012 *Woking Core Strategy, October 2012*

9.2 Other Sources

British Geological Survey online historic geology borehole data and digital drift and solid geology data
Historic England designation data
Groundsure historic Ordnance Survey mapping
Surrey County Council Historic Environment Record

9.3 Cartographic sources

John Norden's 250 years of map making in the County of Surrey, sheet 3b, 1594
John Rocque's map of Surrey, 1768

Ordnance Survey maps

Ordnance Survey 1st edition 6" map (1872/3)
Ordnance Survey 2nd edition 6" map (1897)
Ordnance Survey 3rd edition 6" map (1914)
Ordnance Survey 25" map (1935/6)

Engineering/Architects drawings

Leach Rhodes Walker, Proposed Ground Floor (Colour), drg no. 7884-L(00)79B, 1:500 @ A1, 12/04/2019

Woods Hardwick; Woking Football Club and David Lloyd Gym, Woking Topographic Survey sheet 1 of 3, drg no. 0189-7-851A, 1:200 at A0, 26/09/2018

Woods Hardwick, Woking Football Club and David Lloyd Gym, Woking Topographic Survey sheet 2 of 3, drg no. 0189-7-852A, 1:200 at A0, 26/09/2018

Woods Hardwick, Woking Football Club and David Lloyd Gym, Woking Topographic Survey sheet 3 of 3, drg no. 0189-7-853A, 1:200 at A0, 26/09/2018

Annex 10: Updated Preliminary Ecological Appraisal

Woking Football Club, Woking Preliminary Ecological Appraisal Report for Woking Football Club

Job Number	7758			
Author	Gemma Watkinson MBiolSci (Hons) ACIEEM			
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LIABILITY

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NOTE

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Summary of key issues

The Ecology Consultancy was commissioned to carry out a Preliminary Ecological Appraisal (PEA), comprising a Phase 1 habitat survey, protected species assessment and ecological evaluation of land at Kingfield Road, Woking, to be known as Woking Football Club. The main findings of the PEA are as follows:

- The proposed development site comprised an existing football club, buildings associated with the football club and gym and leisure facilities, semi-detached and detached residential dwellings, hardstanding, scrub and introduced shrub, amenity grassland and scattered trees.
- The site is not subject to any statutory or non-statutory nature conservation designations. There are statutory designated sites within a 2km radius, the closest being White Rose Lane Local Nature Reserve (LNR) located approximately 815 metres to the east of the site. The nearest non-statutory designated site, Hoe Stream Site of Nature Conservation Importance (SNCI), is located approximately 30m north-west of the site.
- The habitats present within the proposed development site are considered to be of site value only. They are unlikely to support any rare species, or diverse assemblages or large populations of any noteworthy species.
- **Bats** – Four buildings with potential features with suitability to support roosting bats were identified on site, assessed as having low potential for roosting bats. In order to comply with legislation, further survey in the form of a Preliminary Roost Assessment is required to determine if any bats are using these buildings for roosting. This will be followed by emergence surveys if required, to be carried out during the active bat season (May – August). There were no trees with features suitable to support roosting bats recorded on site. The existing hedgerow and areas of introduced shrub on the site boundaries have the potential to support commuting and foraging bats, and provide a potential commuting and foraging corridor for bats through the landscape. These habitats should be retained within the development and enhanced where possible. Throughout the construction works and post development, appropriate lighting should be used to avoid light spill onto any retained or new commuting and foraging habitats.
- **Great crested newt** – habitats with potential to support great crested newt during their terrestrial phase were present on site, and there is a pond located approximately 30m to the east of the site. In order to comply with legislation, further survey work will be required to establish the presence/ absence of great crested newt on site. A Habitat Suitability Index (HSI) assessment can be carried out at any time, followed by an eDNA survey (mid

April – end of June) on the pond. If the eDNA survey result is positive for great crested newts, then population estimate surveys will be required (mid March – mid June). There is an option to avoid further surveys by following the Woking District Licensing Scheme, whereby a payment is made to contribute to strategic enhancements in the borough.

- **Reptiles** - The site contains suitable habitat to support widespread reptile species such as slow-worm, but these are limited to the areas of introduced shrub and scrub. Further surveys will not be required, but precautionary working practices must be adopted to ensure legal compliance for widespread reptile species.
- **Breeding birds** – breeding birds are likely to be present on site in the scattered trees, introduced shrub and scrub areas. In order to comply with legislation, vegetation removal should take place September to February inclusive which is outside of the main bird breeding season. Where removal outside the nesting season is not possible a check for nesting birds prior to vegetation clearance must be undertaken by an experienced ecologist and, if any nests are found, the nests must be protected until such time as the young have left the nest.
- Recommendations to enhance the biodiversity value of the development comprise inclusion of biodiverse roofs, Sustainable Drainage Systems (SuDS), wildlife planting, flowering lawn mix for any areas of amenity grassland, nesting features for birds and roosting features for bats.

1 Introduction

BACKGROUND TO COMMISSION

- 1.1 The Ecology Consultancy was commissioned by Woking Football Club in February 2019, to carry out a Preliminary Ecological Appraisal (PEA) of existing buildings and areas of land at Kingfield Road, Woking, in Surrey, to be known as Woking Football Club. The appraisal was carried out in order to provide ecological information to inform a planning application for the redevelopment of the site. This appraisal considers land within the site boundary (hereon referred to as 'the site') as indicated on the plan provided by the client (Leach Rhodes Walker Architects, 2018).

SCOPE OF THE REPORT

- 1.2 The aim of this appraisal is to provide baseline ecological information about the site. This will be used to identify any potential ecological constraints associated with the development and/or to identify the need for additional survey work to further evaluate any impact that may risk contravention of legislation or policy relating to protected species and nature conservation. Where necessary, avoidance, mitigation/compensation and/or enhancement measures have been recommended to ensure compliance.
- 1.3 This appraisal is based on the following information sources:
 - a desk study of the site and land within a 2 kilometre (km) surrounding radius;
 - a Phase 1 habitat survey (JNCC, 2010) of the site to identify and map the habitats present;
 - a protected species assessment of the site to identify features with potential to support legally protected species; and
 - an evaluation of the site's importance for nature conservation.
- 1.4 This appraisal has been prepared with reference to best practice guidance published by the Chartered Institute for Ecology and Environmental Management (CIEEM, 2017).
- 1.5 The survey, assessment and report were conducted and written by Gemma Watkinson MBiolsci ACIEEM, an Ecologist with over three years' experience who is competent in carrying out Phase 1 habitat surveys and protected species assessments.

SITE CONTEXT AND STATUS

1.6 The proposed development site is approximately 5 hectares (ha) in size and is centred on Ordnance Survey National Grid reference TQ 00574 57329. The site lies off Kingfield Road, in Woking, Surrey. The site is not subject to any statutory or non-statutory nature conservation designations. The site is currently occupied by a football stadium (Woking Football Club); a collection of large-footprint, low-rise buildings, including the Woking Snooker Centre; David Lloyd Leisure Centre (including tennis courts), Woking Gymnastics Club; car parking; and a small number of residential properties (81 Westfield Avenue, Hoe View, Park View and 1-6 Kingfield Road) situated in the north of the site. The site is bordered by playing fields to the south, and residential dwellings and gardens to north, east and west. The wider landscape comprises further residential dwellings and urban areas. Hoe Stream Site of Nature Conservation Importance (SNCI) and associated greenspace is located to the west of Sycamore Avenue, and a waterbody surrounded by woodland habitats is located adjacent to the east of the site.

DEVELOPMENT PROPOSALS

1.7 The Proposed Development comprises the redevelopment of the site, following the demolition of all existing buildings and structures, to provide a replacement stadium with ancillary facilities, including flexible retail, hospitality and community spaces, independent retail floorspace (Classes A1/A2/A3), a medical centre (Class D1) and vehicle parking, plus residential accommodation comprising of 1,048 dwellings (Class C3) within 5 buildings of varying heights of between 3 and 10 storeys (and undercroft and part basement levels) on the south and west sides of the site, together with provision of new accesses from Westfield Avenue to car parking, associated landscaping and the provision of a detached residential concierge building (Leach Rhodes Walker Architects, 2019).

RELEVANT LEGISLATION AND PLANNING POLICY

1.8 The following key pieces of nature conservation legislation are relevant to this appraisal. A more detailed description of legislation is provided in Appendix 5:

- The Conservation of Habitats and Species Regulations 2017 (commonly referred to as the Habitats Regulations);
- Wildlife and Countryside Act 1981 (as amended);
- Natural Environment and Rural Communities Act 2006;
- Protection of Badgers Act 1992; and

- Wild Mammals (Protection) Act 1996.

1.9 The National Planning Policy Framework (NPPF) (Ministry of Housing, Communities and Local Government, 2019) requires local authorities to avoid and minimise impacts on biodiversity and, where possible, to provide net gains in biodiversity when taking planning decisions.

1.10 Other planning policies at the local level which are of relevance to this development include the adopted Woking Borough Core Strategy (2012). Further information is provided in Appendix 5.

2 Methodology

DESK STUDY

2.1 The following data sources were reviewed to provide information on the location of statutory designated sites¹, non-statutory designated sites², legally protected species³, Species and Habitats of Principal Importance⁴ and other notable species⁵ and notable habitats⁶ that have been recorded within a 2km radius of the site. The search for statutory internationally designated sites was extended to include sites within a 5km radius of the site:

- Surrey Biodiversity Information Centre (SBIC), the local Biological Records Centre, principally for species records and information on non-statutory sites;
- MAGIC (<http://www.magic.gov.uk/>) - the Government's on-line mapping service; and
- Ordnance Survey mapping and publicly available aerial photography.

2.2 The full data search results are not presented in the report. However, relevant records provided by the desk study are provided in Section 3 of this report. Records for relevant protected or noteworthy species have been used to inform the assessment of the potential for protected species at the site and to provide a preliminary view of the site's ecological value.

HABITAT SURVEY

2.3 A habitat survey of the site was carried out on the 19 February 2019 in mild (13°C), sunny and dry conditions with a gentle breeze and 2/8 cloud cover. It covered the entire site including boundary features. Habitats were described and mapped following

standard Phase 1 habitat survey methodology (JNCC, 2010). Habitats were marked on a paper base map and subsequently digitised using ESRI ArcGIS software. Habitats were also assessed against descriptions of Habitat of Principal Importance (HPI) as set-out by the JNCC (BRIG, 2008)⁷.

- 2.4 Records for dominant and notable plants are provided, as are incidental records of birds and other fauna noted during the course of the habitat survey.
- 2.5 Common names are used where widely accepted – for amphibians, birds, fish, mammals, reptiles and vascular plants. Scientific names are provided for other groups but at first mention only if there is also an accepted common name.
- 2.6 The site was also surveyed for the presence of invasive plant species as defined by Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). However, detailed mapping of such species is beyond the scope of this commission and the locations on the habitat plan are indicative only.
- 2.7 Target notes are used to provide information on specific features of ecological interest (e.g. a badger sett) or habitat features that were too small to be mapped.

PROTECTED AND INVASIVE SPECIES ASSESSMENT

- 2.8 The suitability of the site for legally protected species was assessed on the basis of relevant desk study records⁸ combined with field observations from the habitat survey. The likely value of habitat for protected species occurrence was ranked on a scale from 'negligible' to 'present' as described in Table 2.1.
- 2.9 The assessment of habitat suitability for protected or notable species was based on professional judgement drawing on experience of carrying out surveys of a large number of urban and rural sites and best practice survey guidance on habitat suitability and identifying field signs. Further information is provided in CIEEM's Sources of Survey Methods⁹.

¹ Statutory designations include Special Areas of Conservation (SAC), Special Protection Areas (SPA), Ramsar sites, National Nature Reserves (NNR), Sites of Special Scientific Interest (SSSI) and Local Nature Reserves (LNR).

² Non-statutory sites are designated by local authorities (e.g. Sites of Importance for Nature Conservation or Local Wildlife Sites).

³ **Legally protected species** include those listed in Schedules 1, 5 or 8 of the Wildlife and Countryside Act 1981; Schedule 2 of the Conservation of Habitats and Species Regulations 2017; or in the Protection of Badgers Act 1992 (as amended).

⁴ **Species of Principal Importance** are those listed on Section 41 of the Natural Environment and Rural Communities Act, 2006.

⁵ **Notable species** include Species of Principal Importance under the Natural Environment and Rural Communities Act 2006; Local Biodiversity Action Plan (LBAP) species; Birds of Conservation Concern (Eaton *et al.*, 2015); and/or Red Data Book/nationally notable species (JNCC, undated).

⁶ **Notable habitats** include Habitats of Principal Importance under the Natural Environment and Rural Communities Act, 2006; those included in an LBAP; Ancient Woodland Inventory sites; and Important Hedgerows as defined by the Hedgerow Regulations 1997.

⁷ Data required to confirm that certain habitats (including rivers and ponds) meet criteria for Habitats of Principal Importance is beyond that obtained during a Phase 1 habitat survey. In these cases the potential for such habitats to meet relevant criteria is noted but further surveys to confirm this assessment may be recommended

⁸ Primarily dependent on the age of the records, distance from the site and types of habitats at the site.

⁹ <http://www.cieem.net/sources-of-survey-methods-sosm->

Table 2.1: Protected species assessment categories

Category	Description
Present	Presence confirmed from the current survey or by recent, confirmed records.
High	Habitat present provides all of the known key requirements for a given species/species group. Local records are provided by desk study. The site is within or close to a national or regional stronghold for a particular species. Good quality surrounding habitat and good connectivity.
Moderate	Habitat present provides all of the known key requirements for a given species/species group. Several desk study records and/or site within national distribution and with suitable surrounding habitat. Factors limiting the likelihood of occurrence may include small habitat area, barriers to movement and disturbance.
Low	Habitat present is of relatively poor quality for a given species/species group. Few or no desk study records. However, presence cannot be discounted on the basis of national distribution, nature of surrounding habitats or habitat fragmentation.
Negligible	Habitat is either absent or of very poor quality for a particular species or species group. There were no desk study records. Surrounding habitat unlikely to support wider populations of a species/species group. The site may also be outside or peripheral to known national range for a species.

2.10 The findings of this assessment establish the need for protected species surveys that are required to achieve compliance with relevant legislation. Surveys are commonly required for widespread species such as bats, great crested newt, reptiles and badger; but may be necessary for other species if suitable habitat is present.

2.11 Surveys may be required where a site is judged to be of low suitability for a particular species/species group. However, in some cases there may be opportunities to comply with legislation, without further survey, through precautionary measures prior to and during construction.

SITE EVALUATION

2.12 The site’s ecological value has been evaluated broadly following guidance issued by the Chartered Institute of Ecology and Environmental Management (CIEEM, 2018) which ranks the nature conservation value of a site according to a geographic scale of reference: international, national, regional, county/metropolitan, district/borough, local/parish or of value at the site scale. In evaluating the nature conservation value of the site the following factors were considered: nature conservation designations; species/habitat rarity; naturalness; fragility and connectivity to other habitats.

DATA VALIDITY AND LIMITATIONS

2.13 Every effort has been made to provide a comprehensive description of the site, however, the following limitations apply to this assessment.

- The protected species assessment provides a preliminary view of the likelihood of protected species occurring on the site. It should not be taken as providing a full and definitive survey of any protected species group. Additional surveys may be recommended if on the basis of the preliminary assessment or during subsequent surveys it is considered reasonably likely that protected species may be present.
- The ecological evaluation is preliminary and may change subject to the findings of further ecological surveys (should these be required).
- Even where data for a particular species group is provided in the desk study, a lack of records for a defined geographical area does not necessarily mean that there is a lack of ecological interest, the area may simply be under-recorded.
- Where only four figure grid references are provided for protected species by third parties, the precise location of species records can be difficult to determine and they could potentially be present anywhere within the given 1km x 1km square. Equally six figure grid references may be accurate to the nearest 100m only.
- The Phase 1 habitat survey does not constitute a full botanical survey or provide accurate mapping of invasive plant species. The survey was not completed within the optimal season for identifying plants.
- Ecological survey data is typically valid for two years unless otherwise specified.

2.14 Despite these limitations, it is considered that this report accurately reflects the habitats present, their biodiversity values and the potential of the site to support protected and notable species.

3 Results

DESIGNATED SITES

Statutory designated nature conservation sites

3.1 The proposed development site is not subject to any statutory nature conservation designations. There are two European designated statutory sites within a 5km radius of the site, the closest of which is Thames Basin Heaths Special Protection Area (TBH SPA), approximately 3.1km north-west. There are three nationally designated statutory sites within a 2km radius of the site. The closest statutory site to the proposed development site is White Rose Lane Local Nature Reserve (LNR) located approximately 815 metres (m) to the north-east (see Table 3.1).

Table 3.1: Statutory Designated Sites

Site Name	Distance from site and orientation	Reason for designation
White Rose Lane (LNR)	815m north-east	Damp alder woodland beside the Hoe Stream. Wildlife observed within the site includes owls, bats, deer, frogs and various species of rare fungi.
Mayford Meadows (LNR)	860m south-west	Wetland management has encouraged the establishment of a rich, wet grassland flora and numerous trees have been coppiced and pollarded in order to enhance its biodiversity interest and provide suitable habitats for water vole.
Smart's and Prey Heaths Site of Special Scientific Interest (SSSI)	2km south-west	The site consists of a mosaic of heathland habitats including wet and dry heath, scrub and fringing woodland. The heathland supports characteristic heathland birds, including occasional breeding nightjar. The heathlands are predominantly damp, the sward being dominated by ling heather, cross-leaved heath, and purple moor grass. Other plants include creeping willow, dwarf gorse, deergrass, and long-leaved and round-leaved sundews.
Thames Basin Heaths Special Protection Area (TBH SPA)	3.1km north-west	The site consists of tracts of heathland, scrub and woodland. Less open habitats of scrub, acidic woodland and conifer plantations dominate, within which are scattered areas of open heath and mire. The site supports important breeding populations of a number of birds of lowland heathland, especially Nightjar and Woodlark, both of which nest on the ground, often at the woodland/heathland edge, and Dartford Warbler, which often nests in gorse. Scattered trees and scrub are used for roosting. Together with the nearby Wealden Heaths SPA and Ashdown Forest SPA, the Thames Basin Heaths form part of a complex of heathlands in southern England that support important breeding bird populations

Table 3.1: Statutory Designated Sites

Site Name	Distance from site and orientation	Reason for designation
Thursley, Ash, Pirbright & Chobham Special Area of Conservation (SAC)	4.5km south-west	This site represents lowland northern Atlantic wet heaths, and contains several rare plants, including great sundew, bog hair-grass, bog orchid and brown beak-sedge. There are transitions to valley bog and dry heath. Thursley Common is an important site for invertebrates, including the nationally rare white-faced darter, and the site supports an important assemblage of animal species including European nightjar, Dartford warbler, sand lizard and smooth snake.

Non-statutory designated nature conservation sites

3.2 The proposed development site is not subject to any non-statutory nature conservation designation. There are nine non-statutory sites, designated as Sites of Nature Conservation Interest (SNCI) within 2km of the site. The closest is Hoe Stream SNCI, located approximately 30m north-west of the Woking Football Club site, separated from the site by Kingfield Road and Westfield Avenue. A summary of the non-statutory sites located within 2km of the site is presented in Table 3.2 below.

Table 3.2: Non-Statutory Designated Sites

Site Name	Distance from site and orientation	Reason for designation
Hoe Stream SNCI	30m north-west	The stream is important in the Borough and provides a valuable link and habitat corridor for the SNCI sites in the Hoe Valley SNCI corridor.
Mayford Meadows SNCI	500m south-west	The site includes marsh, swamp, fen, scrub, woodland and mesotrophic grassland. It supports a range of wetland habitats and is an important site for invertebrates (nationally scarce invertebrates are present) and passerines of damp meadows.
Barnsbury Meadow & Bonsey Lane Woods (including school) SNCI	740m south-east	The site contains wet grassland, broadleaved wet and dry woodland. The site forms an important part of a corridor of sites along the Hoe Valley, and is important for its habitat diversity including wet grassland and wet woodland. It supports an important invertebrate site and good populations of warblers and other passerines of damp meadows. The site has been identified as having potential to support otter.
Mill Moor SNCI	850m south-east	The site is situated on the floodplain of the River Wey, largely composed of semi-improved mesotrophic grassland, including central stands of wet grassland. Two ponds are present on site, and the site was selected for its species-rich wetland and ponds. Past records include at least 19 species typical of grassland of conservation interest in Surrey including 7 on the current draft Surrey Rare Plant Register. Although a recent survey has found it

Table 3.2: Non-Statutory Designated Sites

Site Name	Distance from site and orientation	Reason for designation
		to have declined, with appropriate management it is thought that the site could regain some of its lost species.
Westfield Common SNCI	1km south-east	The site contains woodland, scrub, wetland, grassland and ponds. It supports nationally scarce plant species, and there are records of great crested newt in two of the ponds. There are species rich areas of wet woodland, drains and ponds. This area has been selected for inclusion within the improvement plan for great crested newts in Woking Borough (ADAS, 2016).
River Wey – Woking SNCI (including Pyrford Place Lake)	1.3km south-east	A good quality river of county importance supporting a high density of invertebrates and water voles. The pond supports a range of species with a high diversity of aquatic species. It is also a good bird and amphibian site.
Basingstoke Canal SNCI	1.4km north	Important for aquatic plants and invertebrates, supporting nationally scarce and regionally rare species.
Hoe Stream Fields, Hoe Valley SNCI	1.8km east	Wet marshy grassland either side of the Hoe Stream. The site was selected for its Floodplain Grazing Marsh habitat. 14 species typical of grasslands of conservation interest in Surrey were recorded. Its position is important forming part of a larger area of wetland habitat as it is one of a number of sites along the Hoe Stream Valley.
Woodham Common SNCI	2km north	The site contains semi-natural woodland and remnant heathland. The site was selected as a significant area of relict heath with some significant areas of heath present and a good potential for heathland regeneration in some areas. Species recorded include deergrass, round-leaved sundew and common cottongrass confined to this part of Surrey. The site has an abundance of wood ant. The site's position is very important with Horsell Common SSSI to the west and New Zealand Golf Course SNCI to the east.

Habitat inventories and landscape-scale conservation initiatives

Ancient woodland

3.3 There are three areas of ancient semi-natural woodland identified within 2km of the site, the closest of which is located approximately 1.4km north-west of the site. There are no ancient woodland sites identified on or adjacent to the proposed development site.

Habitats of Principal Importance

3.4 There are no Habitats of Principal Importance (HPI) identified on or adjacent to the site on MAGIC's Priority Habitat Inventory. A search of MAGIC's Priority Habitat Inventory also revealed the presence of four HPI habitat types within 2km of the survey area:

Lowland Heathland, Deciduous Woodland, Traditional Orchard, Wood-pasture and Parkland.

3.5 There are no records of veteran trees, Tree Preservation Orders or Conservation Area restrictions on site (The Ecology Consultancy, 2019).

PHASE 1 HABITAT SURVEY

Overview

3.6 The proposed development site comprises hardstanding, existing buildings, amenity grassland, introduced shrub, continuous scrub, and bare ground.

3.7 Phase 1 habitat types on site are mapped in Figure 1 (Appendix 1), areas are given in Table 3.3. A description of dominant and notable species and the composition of each habitat is provided below.

Table 3.3: Phase 1 Habitat Areas

Phase 1 Habitat	Extent (ha)	%
Hard standing	2.49	50
Buildings	1.17	23
Amenity grassland	0.88	18
Introduced shrub	0.24	5
Continuous scrub	0.16	3
Bare ground / subsite	0.03	1
Total	4.97	100

Habitat description

Buildings

3.8 There are several existing buildings on site including domestic dwellings, leisure facilities and football stands. The buildings are described in Table 3.4 below:

Table 3.4: Woking Football Club site, Woking - building descriptions

Building number	Description	Potential roosting features
1	Gym building constructed of profile metal sheeting, with pitched or flat roofs of profile metal sheeting. Building 1 (B1) also had some timber cladding on the lower part of the eastern elevation, functioning as a screen.	None

Table 3.4: Woking Football Club site, Woking - building descriptions

Building number	Description	Potential roosting features
2	Lower brick cavity wall, with the upper wall formed of profile metal sheeting and PVC windows. The pitched roof is of profile metal sheeting.	None
3	Two-storey building formed of cavity brick walls, with a hipped roof of concrete tiles, which were all seen to be tight, with tight ridge tiles. There was also a flat roof present on the single-storey section of the building at the south-west, with timber soffit boxes which were in good condition. No gaps noted around the PVC windows.	None
4	This is a small timber spa room, that looks to be new and in excellent condition. There were no gaps noted in the timber soffits, and the pitched roof with felt covering was in good condition.	None
5	A leisure facility building constructed of profile metal sheeting, with flat roof of profile metal sheeting.	None
6	A leisure facility building constructed of profile metal sheeting, with pitched roof of profile metal sheeting. It had a single-storey extension on the north-western elevation (B8).	None
7	This was a prefabricated portacabin, adjacent to the gym buildings. There were no gaps noted within the construction of the portacabin.	None
8	An extension to B6, with rendered brick walls, and timber windows, timber barge boards, no gaps noted, and a roof covering of profile metal sheeting.	None
9	A leisure facility building constructed of profile metal sheeting, with pitched roof of profile metal sheeting.	None
10	A pair of semi-detached dwellings, constructed of brick cavity walls, with a pitched roof and concrete tiles (Appendix 3, Photograph 1). There were hanging tiles beneath the first-floor bay windows on the north-eastern elevation and south-western elevations. There were PVC windows. There were PVC windows and also dormer windows in the roof covering, and a mono-pitched single storey extension on the south-western elevation.	Yes – hanging tiles, possible loft void
11	A pair of semi-detached dwellings, constructed of brick cavity walls, with a pitched roof and concrete tiles (Appendix 3, Photograph 1). There were hanging tiles beneath the first-floor bay windows on the north-eastern elevation and south-western elevations. There was a flat roof single-storey extension on the south-western elevation	Yes – hanging tiles, loft void
12	A two-storey dwelling constructed of cavity brick walls, and a pitched roof of concrete tiles with dormer windows (Appendix 3, Photograph 2).	Yes – possible loft void
13	This building was part of the football club. It was constructed of walls with a timber cladding, supporting a pitched roof with corrugated fibre-cement tiles. There were timber framed windows on the north-western elevation of the building, and the building was generally in good condition, with no gaps noted.	None
14	This was a single storey building with timber cladding walls supporting a mono-pitch roof of profile metal sheeting, and timber barge boards on the north-western elevation with no gaps noted beneath. There were PVC windows on the north-western elevation, and football stands on the south-eastern elevation, with a roof canopy of profile metal sheeting.	None

Table 3.4: Woking Football Club site, Woking - building descriptions

Building number	Description	Potential roosting features
15	This was a prefabricated portacabin within the football club. There were no gaps noted within the construction of the portacabin.	None
16	Building 16 was a single storey building, L shape on plan, with cavity brick walls supporting a hipped roof of concrete tiles. Some lifted and some missing tiles were noted (Appendix 1, target note 5; Appendix 3, Photograph 3).	Yes – slipped and missing tiles
17	A ticket gate constructed of blockwork walls supporting a hipped roof of concrete tiles, with no gaps noted.	None
18	A grounds-keeper's store constructed of blockwork walls supporting a flat roof of felt, with no gaps noted.	None
Football stands	The football stands had a profile metal mono-pitched roofing, with blockwork lower walls, with no gaps noted within the construction.	None
Garden sheds	There were also two timber sheds located adjacent to the eastern boundary of the site. These were in a poor state of repair, with one of the sheds having a large hole where the roof covering and wall meet, allowing potential access into the shed. The interior of the shed was accessed and found to be very cobwebby (Appendix 3, Photograph 4).	None

Hardstanding and bare earth

3.9 There were large areas of bare earth located in the middle of the site, between the leisure facility buildings and the football club. The majority of the areas around the existing buildings comprised hardstanding used for car parking, and the sports pitches to the south-east were also formed of hardstanding. Occasional ruderal species were recorded on the areas of bare earth and hardstanding, including herb Robert, Yorkshire-fog, common nettle, ash saplings, red dead-nettle, mugwort and fleabane species.

Amenity grassland

3.10 The largest area of amenity grassland was located in the centre of the site, forming the football pitch at the football club, dominated by perennial rye-grass.

3.11 There were also several smaller areas of amenity grassland located in the gardens of the domestic dwellings in the north-east of the site, along Kingfield Road at the north of the site and also adjacent to the south-eastern boundary of the site. These areas were frequently managed with a short sward, had frequent fescue species and daisy, with occasional creeping buttercup, cat's-ear, dandelion, and bent species, with cleavers, yarrow, groundsel, ribwort plantain, red dead-nettle, thyme-leaved speedwell,

common mouse-ear, bittercress, spurge species, dove's-foot crane's-bill, common ragwort and ivy-leaved speedwell all recorded rarely (Appendix 3, Photograph 5).

Introduced shrub

3.12 The tall vegetation on the northern, eastern and south-eastern boundaries of the site comprised *Leylandii* and laurel, with occasional pine, elder and butterfly-bush also recorded. These areas were very shaded, and the ground flora was limited to ivy, cleavers, bramble, prickly sow-thistle and red dead-nettle on the edges.

3.13 Planters around the leisure facility buildings included palm species and bamboo species, rose species and apple species.

Continuous scrub

3.14 There was an area of bramble scrub located around the scattered trees at the east of the site, between the leisure centre buildings, on a large bund of soil (Appendix 1, TN6; Appendix 3, Photograph 6).

Scattered trees

3.15 Scattered trees located across the site include a mature pedunculate oak (Appendix 1, TN2), mature ash (Appendix 1, TN5) and semi-mature oak species, goat willow, poplar species and crack willow. Several semi-mature London plane were located along Kingfield Road at the north of the site.

Hedgerow

3.16 The north-eastern boundary of the site was formed of an outgrown hedgerow containing *Leylandii*, hazel, garden privet, laurel, elder, dog rose, ivy, hawthorn, horse-chestnut, ash and sycamore (Appendix 3, Photograph 7).

PROTECTED AND INVASIVE SPECIES ASSESSMENT

3.17 The potential for the site to support protected species has been assessed using criteria provided in Table 3.3, based on the results of the desk study and observations made during the site survey of habitats at the site. Other legally protected species are not referred to as it is considered that the site does not contain habitats that would be

suitable to support them. The following species/species groups are potentially present at the site:

- bats;
- great crested newt;
- breeding birds;
- reptiles; and
- badger.

3.18 The table also summarises relevant legislation and policies relating to protected and invasive species. Key pieces of statute are summarised in Section 1 and set-out in greater detail in Appendix 5.

Table 3.3: Protected and Invasive Species Assessment

Habitat/species	Status ^{10, 11}	Likelihood of occurrence
Bats	HR WCA S5	<p>The data search returned 17 records of bats within 2km of the site. The most recent records include common pipistrelle, natterer's bat, whiskered bat and brown long-eared bat in 2008, soprano pipistrelle and noctule bat in 2010, and Daubenton's bat in 2003.</p> <p>Roosting - buildings</p> <p>LOW: The majority of the existing buildings on site were constructed of profile metal sheeting and other materials that did not offer any potential roosting features for bats. B16 had a hipped roof with many slipped and missing tiles, potentially leading into a roof void. B10 and B11 had hanging tiles on the exterior of the building, and B11 is likely to have a loft void. Although no slipped or missing tiles were noted during the walkover survey, a full inspection of the building was not carried out. A potential roof void is present in B12.</p> <p>Roosting - trees</p> <p>NEGLECTIBLE: The majority of the scattered trees on the site were semi-mature and no trees were noted with any features suitable to support roosting bats.</p> <p>Foraging – habitats</p> <p>MODERATE: The majority of the habitats present on site would not provide foraging opportunities for bats within the local area, and is restricted to the areas of introduced shrub and scattered trees on the boundaries of the site, the area of scrub between the buildings, and the outgrown hedgerow on the north-eastern boundary. These boundary habitats provide a potential commuting corridor for bats through the landscape, linking suitable foraging habitats such as the large waterbody north-east of the site and the Hoe Stream SNCI at the south-west.</p> <p>There are buildings on site with potential to support roosting bats. Therefore, bats will be considered further in this report.</p>
Great crested newt	HR WCA S5	<p>LOW: There are five waterbodies within 500m of the survey site; a large waterbody located approximately 30m east of the site, three waterbodies located 145m, 200m, and 210m south-east of the site, to the east of Westfield Avenue, and one pond approximately 250m north of the site, to the north of Kingfield Road.</p> <p>The data search returned four records of great crested newt from within 2km of the survey site. The most recent record dates from 2016 and the records are to an accuracy of 1km only, from within the grid squares TQ0055, TQ0056, TQ0156 and SU9856. There are no water</p>

¹⁰ The following abbreviations have been used to signify the legislation regarding different species: HR = Conservation of Habitats and Species Regulations 2017; WCA S1 = Schedule 1 of the Wildlife and Countryside Act 1981 (as amended); WCA S5 = Schedule 5 of the Wildlife and Countryside Act 1981 (as amended); WCA S9 = Schedule 9 of the Wildlife and Countryside Act 1981 (as amended); PBA = Protection of Badgers Act, 1992.

¹¹ The following abbreviations have been used to signify the policy of conservation assessments applying to notable species: SPI = Species of Principal Importance under the NERC Act 2006; LBAP = Local Biodiversity Action Plan species; BoCC = Birds of Conservation Concern - amber list / red list (Eaton *et al.*, 2015); and/or RD/NN = red data book/nationally notable species (JNCC, undated).

Table 3.3: Protected and Invasive Species Assessment

Habitat/species	Status 10, 11	Likelihood of occurrence
		<p>bodies on site, and suitable terrestrial habitats for great crested newt are restricted to the boundary hedgerows and areas of scrub and introduced shrub. The waterbody located approximately 30m north-east of the site is surrounded by suitable terrestrial vegetation, which links with the introduced shrub and outgrown hedgerow on the north-eastern and eastern boundaries of the site. The site is located approximately 500m north of Westfield Common, where there is a known metapopulation of great crested newts (RSK ADAS Ltd, 2016). Although not directly connected to the site, there are many private gardens that could create corridors for movements across the suburban landscape.</p> <p>Given that the waterbody adjacent to the north-east of the site has potential to support breeding great crested newts and there is suitable terrestrial habitat on site which is connected to this pond, this species is considered further in this report.</p>
Reptiles	WCA S5	<p>LOW: The data search returned 8 records of widespread reptile species including grass snake, slow worm and common lizard within 2km of the site. Slow-worm has been recorded most recently in 2016 and grass snake and common lizard in 2015. The data search returned no records for rare reptile species (sand lizard, smooth snake) and there are not considered to be any suitable habitats for these species on site.</p> <p>Habitats on site considered suitable to provide refuge for reptiles are limited to the area of bramble scrub and introduced shrub on the boundaries of the site. These habitats would be suitable to provide cover for reptiles, but they are small and isolated by unsuitable habitats such as hardstanding and amenity grassland. The Hoe Stream SNCI to the south-west of the site provides a potential commuting corridor for widespread reptile species, but Westfield Avenue may act as a barrier against dispersal by widespread reptile species onto the survey site, and the site has very limited connectivity to suitable habitats for these species.</p> <p>Considering the above, there is low potential that reptiles occur at the site and as such they are considered further in this report.</p>
Breeding birds	WCA S5	<p>MODERATE: The scrub, introduced shrub and scattered trees on site all have potential to support breeding by widespread bird species. Several common bird species were observed during the habitat survey: blackbird, great tit, blue tit, and wood pigeon.</p> <p>There were no suitable features to support nesting birds noted on any of the existing buildings.</p> <p>Several Species of Principal Importance (SPI) are listed in the data search as occurring within 2km of the site; Kingfisher, peregrine, dunnock, linnet and nightjar. However, there are not considered to be any suitable habitats on site to support these species, with the exception of dunnock.</p> <p>It is likely that breeding birds will occur at the site and as such they are considered further in Section 4 of this report.</p>
Badger	PBA	<p>NEGLIGIBLE: An active mammal hole was recorded on site (Appendix 1, TN1; Appendix 3, Photograph 8), within the area of introduced shrub on the eastern boundary of the site. There was a large spoil heap with prints outside the entrance to the hole, but these were not characteristic of badger, and were characteristic of domestic cat (Appendix 3, Photograph 9). The hole did not have the characteristic</p>

Table 3.3: Protected and Invasive Species Assessment

Habitat/ species	Status 10, 11	Likelihood of occurrence
		<p>shape of a badger sett hole, and is not considered to be used by this species. A further disused mammal hole and 2 active rabbits burrows were also noted in this area. The potential foraging areas for badger would be limited to the areas of introduced shrub and amenity grass. No signs of badger such as latrines, runs or signs of foraging were recorded on site.</p> <p>There were no records of badger provided within the data search, and given the lack of definitive field evidence for this species and the relatively isolated location of the site, with fences on the boundaries of the site, it is unlikely that this species is found on site.</p> <p>As a fox was also seen on site during the survey, there is potential for there to be an active fox den within the burrows noted on site.</p> <p>Considering the above, there is negligible potential that badger may occur at the site and as such they are not considered further in this report.</p>
Invasive species	WCA S9	<p>LIKELY ABSENT: There were no invasive species listed on Schedule 9 of the Wildlife and Countryside Act identified on site during the survey.</p> <p>The desk study returned no records for invasive species within 2km of the site.</p> <p>As invasive species listed on Schedule 9 have not been recorded on site, these species are not discussed further in this report.</p>

NATURE CONSERVATION EVALUATION

- 3.19 The proposed development site is not subject to any nature conservation designations. It contains small areas of common and widespread habitats. The hedgerow on the north-eastern boundary of the site is a HPI and a habitat listed as a priority habitat for Surrey (Surrey Nature Partnership, 2018). Mature trees are also present on site, which have aesthetic value for the local area.
- 3.20 The site is situated within a suburban area, and the closest designated site is Hoe Stream SNCI located approximately 30m north-east of the site. The boundary habitats provide a potential commuting corridor for bats and other wildlife through the landscape, and connectivity to open countryside habitats, including the Hoe Stream SNCI.
- 3.21 The habitats on site were suitable for a range of note-worthy species, including SPI and priority species for Woking borough, as reported in the desk study or recorded during the survey, as follows:
- bats;
 - great crested newt;
 - slow-worm, grass snake and other widespread species of reptile;
 - dunnock, song thrush, and other widespread but declining species of birds that are also species of conservation concern¹²; and
 - hedgehog.
- 3.22 The habitats on the proposed development site are considered to be of site value only, with the exception of the hedgerow which would be of borough value. It is unlikely that the site would support rare species, or diverse assemblages or large populations of any noteworthy species.
- 3.23 Records for soprano pipistrelle and other species of bat were provided in the desk study, which are SPIs. It is not possible to confirm the value of bat populations that may be present at the site unless further surveys have been undertaken. Precautionary measures for foraging and commuting bats are provided in Section 4.
- 3.24 The existing introduced shrub and outgrown hedgerow on the boundaries of the site have a screening function and may also function as a green corridor for wildlife to cross

¹² Birds of Conservation Concern - amber list / red list (Eaton *et al.*, 2015);

the landscape. The landscaping will also contribute to other ecosystem services such as storm water attenuation and flood alleviation.

4 Potential Impacts and Recommendations

4.1 This section summarises the potential impacts on habitats and notable species that may be present at the site. The impact assessment is preliminary and further detailed assessment and surveys will be required to assess impacts and design suitable mitigation, where appropriate.

4.2 The following key ecological issues have been identified:

- habitat suitable for roosting, foraging and commuting bats is present - further survey work will be required to determine the use of the site by roosting bats;
- habitat suitable for terrestrial great crested newt is present on site – further survey work will be necessary to determine whether this species is considered likely to be present on site;
- habitat suitable for widespread reptiles is present – precautionary working measures must be undertaken to protect widespread reptile species;
- habitat suitable for mammals such as fox, rabbit and hedgehog is present on the site – measures must be taken to avoid killing or injuring mammals as detailed in the Wild Mammals (Protection) Act 1996;
- habitat suitable for breeding birds is present – measures must be taken to avoid killing birds or destroying their nests during vegetation clearance;
- habitats suitable for SPIs is present including hedgehog – these habitats should be retained on site where possible or replaced within the development with measures taken to continue accommodating these species on site post-development;
- a range of measures should be undertaken for ecological enhancement of the site within the development plan in line with national and local policy.

CONSTRAINTS AND MITIGATION/COMPENSATION

Designated Nature Conservation Sites

4.3 No direct impacts are envisaged on statutory or non-statutory designated sites due to the distance of the site from any designated site. However, the inclusion of residential housing within the development may cause an increase in recreational pressure on the nearby Thames Basin Heaths SPA. The proposed development is located within 5km of this SPA, and within the zone of influence (ZOI) (Guildford Borough Council, 2017). The developer will need to make the appropriate payment into SANG provision. The Draft Site Allocations Habitat Regulations Assessment (AECOM, 2018) concludes that

there will be no likely significant effects on European sites as a result of recreational pressure or air quality derived from the Site Allocations. It confirms that each site allocation has sufficient Suitable Alternative Natural Greenspace (SANG) capacity to serve the increased population.

Habitats

- 4.4 The existing outgrown hedgerow with native species on the north-eastern boundary should be retained within the development, as hedgerows are listed as a priority habitat for Woking Borough (Surrey Nature Partnership, 2018). Impacts on this habitat should be avoided during development in line with national and local policy.
- 4.5 The areas of introduced shrub on the site boundaries which form a green corridor should also be retained on site where possible, to retain the commuting corridor for wildlife around the site. Where this is not possible, compensatory replacement habitat of equivalent but ideally greater value should be included within the designs for the new development, with at least twice the area being lost to be planted, to account for the time required for trees and shrubs to grow.
- 4.6 Scattered trees on site and along Kingfield Road should also be retained and protected within the development where possible. The current proposals include the removal of existing trees from site. Each tree removed should be replaced on site with at least two comparable trees. Environmental best practice measures, in accordance with British Standards Institution (2012) guidelines, should be implemented during the management works to protect trees.

Bats

- 4.7 All British species of bat are listed on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of the Conservation of Habitats and Species Regulations 2017. Under this legislation it is an offence to deliberately capture, kill, disturb and damage or destroy a bat roost. Some species of bat are also Species of Principal Importance for Woking Borough (Surrey Nature Partnership, 2018).
- 4.8 Buildings B10, B11, B12 and B16 have features with the potential to support roosting bats. These buildings will be removed in the current proposals for the site. Further survey is required to determine the presence/likely absence of roosting bats in these buildings as outlined below to comply with legislation.

- 4.9 A Preliminary Roost Assessment (PRA) is required for the four buildings (B10, B11, B12 and B16) to identify the presence of a roost in line with best practice (Collins, 2016) and comply with legislation in relation to bats. The PRA should comprise an internal inspection (at any time), followed by presence/likely absence surveys if required, to be carried out between May and August. Should a bat roost be present, a licence from Natural England and a mitigation strategy may be required.
- 4.10 The existing areas of introduced shrub and outgrown hedgerow on the boundaries of the site that form a green corridor around the site, linking green areas should be retained within the development. The current proposals for the site retain much of the existing boundary planting, and the proposed landscaping on the boundaries of the site should include species that are of value to foraging bats.
- 4.11 It is also recommended that measures are implemented to avoid night-time lighting of features that could provide important flight lines and foraging habitats for bats, such as the introduced shrub and outgrown hedgerow on the boundaries of the site. Further advice on the locations and appropriate methods for controlling light emissions should be sought when commissioning the bat surveys listed above.

Great crested newt

- 4.12 Great crested newts are protected under the Conservation of Habitats and Species Regulations 2017 and the Wildlife and Countryside Act 1981 (as amended).
- 4.13 Great crested newt has been recorded within 2km of the site, and there is a waterbody located approximately 30m east of the site. The hedgerows, scrub and introduced shrub habitats within the proposed development area are suitable to support great crested newt during their terrestrial phase. There is a risk of an offence occurring through the removal of suitable habitat on site. The Great Crested Newt Rapid Risk Assessment tool¹³ result was 'amber: offence' likely, due to the removal of suitable habitats from the site (e.g. area of bramble scrub) that are within 100m of a potential breeding pond.
- 4.14 Further survey work should be carried out to determine the presence of great crested newt within the pond to the east of the site. A Habitat Suitability Index (HSI) assessment and an environmental DNA survey should be completed on this pond during mid-April – end of June. However, it is recommended that this survey is carried out as soon as

¹³ <https://www.gov.uk/government/publications/great-crested-newts-apply-for-a-mitigation-licence> - Method Statement template for great crested newt mitigation licence.

possible within the survey window, to allow for further population estimate surveys to be completed during the great crested newt survey season (mid-March – mid June) if the eDNA test shows a positive result for great crested newt.

- 4.15 If great crested newts are confirmed to be present, a European Protected Species Mitigation (EPSM) licence may be required. The findings and mitigation measures required may impose timing and methodological restrictions on works, to ensure the works proceed lawfully.
- 4.16 There is an option to avoid further surveys by following the Woking District Licensing Scheme, whereby a payment is made to contribute to strategic enhancements in the borough. Developers interested in taking part in the project should email the green infrastructure team on green@woking.gov.uk¹⁴.

Widespread reptiles

- 4.17 Widespread reptiles are protected under the Wildlife and Countryside Act 1981 (as amended). The site contains some suitable habitat to support widespread reptile species, such as the continuous scrub which under the current proposals will be lost from the site. The majority of the habitats present on site are unsuitable to support reptiles. Consequently there is limited potential for reptiles to be present at the site and any populations present are likely to be small and comprised of widespread species such as slow-worm.
- 4.18 It is not necessary to carry out reptile surveys but precautionary working practices are required to protect any reptiles using the site (should they be present), and to comply with legislation. Areas of shrubs and scrub that may provide cover or hibernation sites must be carefully removed by hand and with hand-held tools. Prior to this, a suitably experienced ecologist will carry out a hand search of suitable habitat, and any possible refugia for reptiles will be moved. The vegetation clearance will comprise the clearance of vegetation above ground level, to a minimum height of 10 centimetres (cm), in the direction of retained habitat. This will encourage reptiles to be displaced to adjacent retained habitats. After 24 hours, vegetation clearance to ground level will be undertaken in the same direction. Any vegetation of value to breeding birds should be removed outside of the main breeding bird season, otherwise this work should be carried out when reptiles are active i.e. March to September.

Breeding birds

- 4.19 All wild birds and their nests are protected under the Wildlife and Countryside Act 1981 (as amended). The existing scattered trees, introduced shrub and scrub vegetation on site have potential to support widespread species of breeding bird.
- 4.20 Any tree and vegetation removal work should be carried out September to February inclusive, to avoid any potential offences relating to breeding birds during their main breeding season (Newton *et al.*, 2011).
- 4.21 If vegetation removal during the breeding season is unavoidable then potential nesting habitat must be inspected before work commences to identify active birds' nests. Should they be present, the nest and a suitable buffer of habitat around it must be retained until the young have left the nest.

Hedgehog

- 4.22 Scrub and areas of introduced shrub on site have potential to support hedgehog. Hedgehog are an SPI and are listed as a priority species for Woking Borough (Surrey Nature Partnership, 2018), making them a material consideration for planning, and as such should be protected as part of the development and habitats enhanced for these species. Hedgehog are also protected against intentional acts of cruelty under the Wild Mammals (Protection) Act 1996.
- 4.23 Ground level vegetation clearance of the scrub and introduced shrub should be undertaken outside of the hibernation period (November – March inclusively), during the hedgehog active season, following the methodology provided for widespread reptiles above.
- 4.24 Any fencing to be included within the proposed development has the potential to fragment areas of foraging and nesting habitat of value to hedgehogs. It is therefore recommended that connectivity is maintained between the development and adjacent habitats by installing wildlife-friendly fencing, with gaps or tunnels in the bottom panels/gravel boards to allow easy passage for small mammals to continue foraging in this area. This can be achieved for example by cutting a hole (approximately 10x 10cm) in certain gravel boards, which is large enough for small mammals to pass through, but small enough to contain pets.

¹⁴ <https://www.woking.gov.uk/nature-and-sustainability/conservation-projects/great-crested-newts>

Fox and rabbit

- 4.25 Potential fox dens and rabbit burrows were identified on site (Appendix 1, TN1 and TN3). All wild mammals are protected against intentional acts of cruelty under the Wild Mammals (Protection) Act 1996. To avoid possible contravention, due care and attention should be taken when carrying out works with the potential to impact on the suspected fox den and rabbit burrows.
- 4.26 All active holes that will be impacted by the proposed development should be carefully dug out using hand tools, outside of the breeding season (March to July) and the area made inhospitable to encourage animals to relocate off site. Heavy plant machinery should not be tracked over the area where active holes are present until confirmed that any foxes have moved off site.

Other protected species

- 4.27 In the unlikely event that any other protected species are found during management works on site, the works must stop immediately and advice sought from a suitably qualified ecologist on how to proceed.

Environmental best practice

- 4.28 Appropriate storage of fuels and chemicals will minimise the risk of accidental spillage. Sources of best construction practice and environmental management include CIRIA guidance (Connolly and Charles, 2005) and various Defra/ Environment Agency guidelines. This guidance relates to various pieces of legislation including the Environmental Damage (Prevention and Remediation) Regulations 2009.
- 4.29 Retained trees on the boundaries of the site should be protected in accordance with British Standards Institution (2012) guidelines.
- 4.30 If species that are listed as invasive under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) are identified on site during the course of the works, it is recommended that measures are undertaken with regards to these species, to ensure that there is no risk of spreading these species. Vegetation should be chemically treated and either burned or buried on site.

FURTHER SURVEY REQUIREMENTS

- 4.31 Table 4.1 lists further survey requirements as recommended in the constraints section.

Table 4.1: Further survey requirements

Species/Habitat	Survey Requirement	Number of surveys and seasonal considerations
Bats	Preliminary Roost Assessment (including internal access and inspection of loft voids)	Single survey at any time of year (Collins (ed), 2016).
	Presence/likely absence surveys	One survey (where confirmed low potential for roosting bats) of buildings to be carried out between May and the end of August (Collins (ed), 2016).
Great crested newt	Great crested newt HSI Assessment	A HSI survey of the pond to the east of the site could be undertaken at any time of the year, but the optimum period is spring/summer for robust results (Oldham <i>et al.</i> , 2000).
	Environmental DNA survey	An eDNA survey can be carried out for planning, to confirm presence / absence. However, if presence is confirmed a great crested newt population survey may still be required for a licence application. Note: Surveys are not required if using the Woking District Licensing Scheme (as outlined above).
Reptiles	Hand searching	Areas of dense vegetation due for removal should be hand searched by a suitably licenced ecologist to check for any reptiles (and hedgehog. Vegetation clearance should be carried out outside of the hibernation season (November to March). Please note that if scrub and shrub vegetation is to be removed within the bird breeding season, a search for, and protection of, active nests will be required (see below).
Breeding birds	Nesting bird check	If vegetation clearance is carried out between September and the end of February, no survey is required. Otherwise, individual surveys are required up to 48 hours prior to demolition/vegetation clearance works (Newton <i>et al.</i> , 2011).

OPPORTUNITIES FOR ECOLOGICAL ENHANCEMENT

- 4.32 Planning policy at the national and local level and strategic biodiversity partnerships encourage inclusion of ecological enhancements in development projects. Ecological enhancements can also contribute to green infrastructure and ecosystem services such as storm water attenuation and reducing the urban heat island effect. The following measures would be suitable for integration into the site’s design, but may require a more detailed design to successfully implement.

Green roof/ biosolar

- 4.33 It is recommended that the proposed buildings incorporate areas of biodiverse roof where possible. To demonstrate the highest feasible and viable sustainability standards in line with London Plan Policies (GLA, 2016) it is recommended that a specification for

a biodiverse roof be drawn up by a company with a proven track record in delivering these features in London. Any biodiverse green roof should support at least 25 plant species.

4.34 A biodiverse green roof would provide additional benefits such as protecting and prolonging the life of the roof membrane, reducing building energy use by insulating the building in winter and keeping it cooler in summer, providing a SuDS function by reducing storm water run-off from the roof, reducing the urban heat island effect and local air/noise pollution. Combining a biodiverse roof with PV panels (biosolar roof) would also provide further benefits, such as the cooling effect the vegetation has on the PV cells, increasing their productivity in hot weather, as well as resulting in a more efficient use of roof space.

4.35 The green roof should follow UK standards (GRO, 2014) and include additional habitat features such as deadwood, varying substrate depths and areas of bare rocky substrate. This will provide good habitat for a range of invertebrates and birds including Surrey Biodiversity Action Plan species such as stag beetle.

Sustainable Drainage System (SuDS)

4.36 SuDS comprise a linked system of soft landscaping, green roofs, rain-water harvesting technologies including ponds, below ground drainage and porous surfacing which can be designed into a development to intercept and attenuate surface water and prevent flooding. Design of a SuDS would be appropriate to this development and should be considered as part of the site master plan. A SuDS would also increase biodiversity, for example by providing a series of habitats for wildlife to use, if appropriately planted – see below.

Wildlife planting

4.37 Any new landscaping within the proposed development should comprise wildlife planting, and should include native species and/or species of recognised wildlife value¹⁵. The use of nectar-rich and berry producing plants will attract a wider range of insects, birds and mammals and continue to accommodate those already recorded at the site.

¹⁵ For example The Royal Horticultural Society (RHS) Perfect for Pollinators Scheme <https://www.rhs.org.uk/science/conservation-biodiversity/wildlife/encourage-wildlife-to-your-garden/plants-for-pollinators> and the joint RHS/Wildlife Trust's Gardening With Wildlife In Mind Database <http://www.joyofplants.com/wildlife/home.php>

4.38 Good horticultural practice should be utilised, including the use of peat-free composts, mulches and soil conditioners, native plants with local provenance and avoidance of the use of invasive species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended).

4.39 Any areas of amenity grassland should use a flowering lawn mixture such as Emorsgate EL1 Flowering Lawn Mixture¹⁶. These contain slow growing grasses with a selection of wild flowers that respond well to regular short mowing.

Provision of bird nesting and bat roosting opportunities

4.40 The provision of bird boxes would be appropriate at this site. Many different designs are available including boxes to support colonial species such as house sparrow, a Species of Principal Importance for Woking Borough. Woodcrete bird boxes are recommended as they are long lasting compared to wooden boxes, insulate occupants from extremes of temperature and condensation and are available in a broad range of designs.

4.41 The provision of artificial bat roosting opportunities will also be appropriate at this site. These roosting opportunities may include bat boxes located on any retained mature trees on the boundaries of the site, or incorporated into the design of the new buildings, adjacent to suitable foraging and commuting habitats for bats. Bat boxes should be positioned between 3-5m above ground level facing south-east to south-west, in a location that will not be lit by artificial lighting. When incorporating more than one box, they should be placed apart from one another, ideally on different building facades. Models from Schwegler such as 1FF Flat Bat Box are appropriate for use on retained trees, suitable for the species potentially utilising the site, and do not require any cleaning. Integrated bat features such as Schwegler Bat Tube 1FR should be included within the designs of the new buildings, and are maintenance free. More information regarding the bat boxes are available through the Schwegler website¹⁷.

Dead wood habitats

4.42 It is recommended that, where possible, deadwood habitats are included on site. New log piles using untreated timber can be created within any public landscaped areas of

¹⁶ <https://wildseed.co.uk/mixtures/view/56/flowering-lawn-mixture>

¹⁷ www.schwegler-natur.de

the site to enhance the site, providing habitat for stag beetle and other invertebrates and fungi.

References

AECOM (2018). Woking Borough Council Site Allocations DPD – Habitats Regulations Assessment. <http://www.woking2027.info/ldfresearch/hra/hrareport> [accessed 20 February 2019].

Bat Conservation Trust (2018). *Bats and artificial lighting in the UK: Bats and the Built Environment Series*. Guidance note 08/18.

Biodiversity Reporting and Information Group (2008) *UK Biodiversity Action Plan Priority Habitat Descriptions*. JNCC. Peterborough.

British Standards Institution (BSI) (2012) BS 5837:2012- *Trees in relation to design, demolition and construction*. BSI, London.

CIEEM (2017) Guidelines for Preliminary Ecological Appraisal Second Edition. December 2017. https://www.cieem.net/data/files/Publications/Guidelines_for_Preliminary_Ecological_Appraisal_Jan2018_1.pdf [accessed 20 February 2019].

CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Chartered Institute of Ecology and Environmental Management, Winchester.

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

Eaton, M.A., Aebischer, N.J., Brown, A.F., Hearn, R.D., Lock, L., Musgrove, A.J., Noble, D.G., Stroud, D.A. and Gregory, R.D. (2015). Birds of Conservation Concern 4: the population status of birds in the United Kingdom, Channel Islands and Isle of Man. *British Birds* 108, 708–746. <http://britishbirds.co.uk/wp-content/uploads/2014/07/BoCC4.pdf> [accessed 20 February 2019].

Gent, T. and Gibson, S. (2003) *Herpetofauna Workers Manual*. JNCC, Peterborough.

Guildford Borough Council (2017). Thames Basin Heaths Special Protection Area Avoidance Strategy 2017. Supplementary Planning Document. https://www.guildford.gov.uk/media/24946/Thames-Basin-Heaths-SPA-Avoidance-Strategy-SPD-2017/pdf/Thames_Basin_Heaths_SPA_Avoidance_Strategy_SPD_2017.pdf [accessed 20 February 2019].

JNCC (2010) *Handbook for Phase 1 Habitat Survey – A Technique for Environmental Audit*. England Field Unit, Nature Conservancy Council. Reprinted by Joint Nature Conservation Committee, Peterborough.

Langton, T.E.S., Beckett, C.L., and Foster, J.P. (2001) *Great Crested Newt Conservation Handbook*. Froglife, Halesworth.

Leach Rhodes Walker Architects (2018). Kingfield Road Woking F.C.: Residential and new stadium design proposal. 7884_L(00)109A

Leach Rhodes Walker Architects (2019). Woking Football Club inc. Woking Football Club: Masterplan Ground Floor Plan. 7884_L(00)89_K. Date drawn 23.10.19.

Maddock (2008d). UK Biodiversity Action Plan Priority Habitat Descriptions: Lowland Mixed Deciduous Woodland. http://jncc.defra.gov.uk/pdf/UKBAP_BAPHabitats-30-LowlandMixedDecWood.pdf [accessed 20 February 2019].

MAGIC (2018) *Multi-Agency Geographic Information for the Countryside*. <http://www.magic.gov.uk/> [accessed 20 February 2019].

Ministry of Housing, Communities and Local Government (2019). *National Planning Policy Framework*. Ministry of Housing, Communities and Local Government, London. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/779764/NPPF_Feb_2019_web.pdf

Natural England (2013) *GIS Digital Boundary Datasets – Priority Habitat Inventory*. http://www.gis.naturalengland.org.uk/pubs/gis/GIS_register.asp [accessed 20 February 2019].

Roper, T.J. (2010) *Badger*. Harper Collins, London.

RSK ADAS Ltd (2016). Improvement Plan for Great Crested Newts Westfield Common. <https://www.woking.gov.uk/sites/default/files/documents/Nature/nestednewts.pdf> [accessed 27/02/2019].

Schwegler (2011). Bird and Nature Conservation Products. No.68. <http://www.schwegler-natur.de/index.php?main=home&sub=katalog-downloaden> [accessed 20 February 2019].

Stace, C.A. (2010) *New Flora of the British Isles* (3rd Ed.). Cambridge University Press, Cambridge.

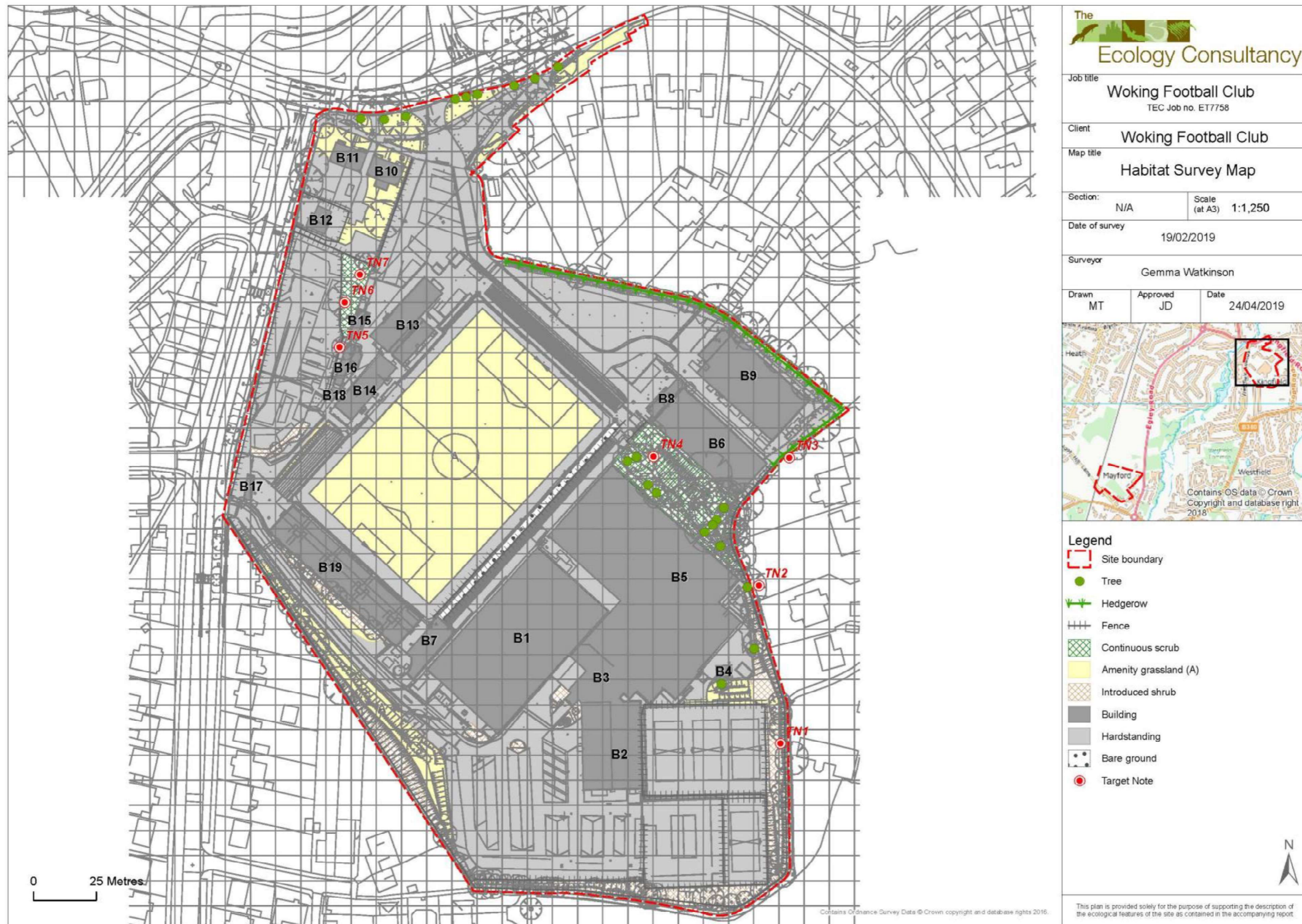
Surrey Nature Partnership (2018). Biodiversity & Planning in Surrey – Version 3 (November 2018). Including Appendix 2 for HPIs and SPIs for Woking Borough. <https://surreynaturepartnership.org.uk/our-work/> [accessed 27/02/2019].

The Ecology Consultancy (2019). Woking Football Club. Arboricultural Survey. Report for Woking Football Club.

Woking 2027 (2012) Planning the future of our Borough. Woking Local Development Document: Woking Core Strategy – October 2012. <http://www.woking2027.info/developmentplan/corestrategy/adoptedcorestrategy.pdf> [accessed 20 February 2019].

Appendix 1: Habitat Map

Figure 1: Habitat Survey Map



Appendix 2: Target Notes

Target Notes List for Woking Football Club site, Woking from the Phase 1 habitat survey and protected and notable species assessment carried out on the 19 February 2019.

Target note (TN)	Description
1	Active mammal hole with large spoil heap, beneath the introduced shrub along the eastern boundary of the site. Hole splits and narrows, considered likely to be used by fox. One disused mammal hole and two active rabbit burrows also present in this area.
2	Mature pedunculate oak tree. Some ivy covering and obscuring view of main trunk. Ivy stems not more than 5cm diameter, negligible potential for roosting bats.
3	Out grown hedgerow containing <i>Leylandii</i> , hazel, garden privet, laurel, elder, dog rose, ivy, hawthorn, horse-chestnut, ash and sycamore.
4	Fox noted on site here, on a large bund of earth covered with bramble scrub. Not fully accessible to inspect, has potential to support a fox den.
5	Football club building with slipped and missing tiles – potential roosting features for bats.
6	Mature ash with small snag ends. Ivy covering main trunk, but stems were less than 5cm diameter. No potential roosting features noted, negligible potential for roosting bats.
7	Area of bramble scrub and scattered trees including semi-mature ash, hazel, garden privet, poplar and sycamore.

Appendix 3: Photographs

Photograph 1

View of buildings B10 and B11, two pairs of semi-detached dwellings at north-west of site, with hanging tiles.



Photograph 2

Residential dwelling (B12) with dormer windows.



Photograph 3

View of south-eastern elevation of building B16 with slipped and missing tiles.



Photograph 4

Interior view of garden shed adjacent to the south-eastern boundary of the site, to the east of building B6. There is a hole in the roof, with dense cobwebs inside.



Photograph 5

View of amenity grassland area adjacent to south-western boundary of site, with introduced shrub along boundary.



Photograph 6

Area of dense continuous bramble scrub on a soil bund between buildings B5 and B6. A fox was seen here during the survey (TN3).



Photograph 7

Car parking areas at north-west of site, with outgrown hedgerow behind, on north-eastern boundary.



Photograph 8

Active mammal burrow within the introduced shrub along the eastern boundary of the site (TN1), with prints noted in the spoil heap.



Photograph 8

Active mammal burrow within the introduced shrub along the eastern boundary of the site (TN1), with prints noted in the spoil heap.



Appendix 4: Plant Species List

Plant Species List for Woking Football Club site, Woking compiled from Phase 1 habitat survey carried out on the 19 February 2019.

Scientific nomenclature and common names for vascular plants follow Stace (2010). Please note that this plant species list was generated as part of a Phase 1 habitat survey and does not constitute a full botanical survey and should be read in conjunction with the associated results section of this PEA.

Abundance was estimated using the DAFOR scale and additional notes taken as follows:

D = dominant, A = abundant, F = frequent, O = occasional, R = rare, L = locally c=clumped, e=edge only, g=garden origin, p=planted, y = young, s=seedling or sucker, t=tree, h=hedgerow, w=water

SCIENTIFIC NAME	COMMON NAME	ABUNDANCE	QUALIFIER
<i>Acer pseudoplatanus</i>	Sycamore	R	h
<i>Achillea millefolium</i>	Yarrow	R	
<i>Aesculus hippocastanum</i>	Horse-chestnut	R	h
<i>Agrostis sp.</i>	Bent species	O	
<i>Artemisia vulgaris</i>	Mugwort	R	
<i>Bellis perennis</i>	Daisy	F	
<i>Buddleia davidii</i>	Butterfly bush	O	
<i>Cardamine sp.</i>	Bittercress species	R	
<i>Cerastium fontanum</i>	Common mouse-ear	R	
<i>Clematis vitalba</i>	Traveller's-joy	R	
<i>Conyza sp.</i>	Fleabane species	R	
<i>Corylus avellana</i>	Hazel	R	h
<i>Crataegus monogyna</i>	Hawthorn	O	h
<i>Cupressocyparis Leylandii</i>	Leyland cypress	F	t
<i>Epilobium sp.</i>	Willowherb species	R	
<i>Euphorbia sp.</i>	Spurge species	R	
<i>Festuca sp.</i>	Fescue species	F	
<i>Fraxinus excelsior</i>	Ash	O	t, s, y, h
<i>Galium aparine</i>	Cleavers	R	
<i>Geranium molle</i>	Dove's-foot crane's-bill	R	
<i>Geranium robertianum</i>	Herb Robert	R	
<i>Geum urbanum</i>	Wood avens	R	
<i>Hedera helix</i>	Ivy	O	
<i>Holcus lanatus</i>	Yorkshire-fog	R	
<i>Hypochaeris radicata</i>	Cat's-ear	O	
<i>Ilex aquifolium</i>	Holly	R	
<i>Lamium purpureum</i>	Red dead-nettle	O	
<i>Lauraceae</i>	Laurel species	LA	
<i>Ligustrum ovalifolium</i>	Garden privet	R	h
<i>Lolium perenne</i>	Perennial rye-grass	F	
<i>Lysimachia vulgaris</i>	Creeping-Jenny	R	
<i>Malus sp.</i>	Apple species	R	
<i>Pinus sp.</i>	Pine species	R	t
<i>Plantago lanceolata</i>	Ribwort plantain	R	
<i>Platanus x hispanica</i>	London plane	O	t
<i>Populus sp.</i>	Poplar species	R	t
<i>Prunus spinosa</i>	Blackthorn	R	h
<i>Quercus cerris</i>	Turkey oak	R	t
<i>Quercus robur</i>	Pedunculate oak	R	t
<i>Quercus sp.</i>	Oak species	O	
<i>Rosa canina</i>	Dog-rose	R	h

<i>Rosa sp.</i>	Rose species	R	
<i>Rubus fruticosus agg.</i>	Bramble	LF	
<i>Salix caprea</i>	Goat willow	R	t
<i>Salix cinerea subsp. oleifolia</i>	Grey willow (Common willow)	R	t
<i>Salix fragilis</i>	Crack willow	R	
<i>Sambucus nigra</i>	Elder	O	
<i>Senecio jacobaea</i>	Common ragwort	R	
<i>Senecio vulgaris</i>	Groundsel	R	
<i>Sonchus asper</i>	Prickly sow-thistle	R	
<i>Taraxacum agg.</i>	Dandelion	O	
<i>Tilia sp.</i>	Lime species	R	t, e, h
<i>Trifolium repens</i>	White clover	O	
<i>Urtica dioica</i>	Common nettle	R	
<i>Veronica hederifolia</i>	Ivy-leaved speedwell	R	
<i>Veronica serpyllifolia</i>	Thyme-leaved speedwell	R	

Appendix 5: Legislation and planning policy

Important notice: This section contains details of legislation and planning policy applicable in Britain only (i.e. not including the Isle of Man, Northern Ireland, the Republic of Ireland or the Channel Islands) and is provided for general guidance only. While every effort has been made to ensure accuracy, this section should not be relied upon as a definitive statement of the law.

A NATIONAL LEGISLATION AFFORDED TO SPECIES

The objective of the EC Habitats Directive¹⁸ is to conserve the various species of plant and animal which are considered rare across Europe. The Directive is transposed into UK law by The Conservation of Habitats and Species Regulations 2017 (formerly The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended)) and The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 (as amended).

The Wildlife and Countryside Act 1981 (as amended) is a key piece of national legislation which implements the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and implements the species protection obligations of Council Directive 2009/147/EC (formerly 79/409/EEC) on the Conservation of Wild Birds (EC Birds Directive) in Great Britain.

Since the passing of the Wildlife & Countryside Act 1981, various amendments have been made, details of which can be found on www.opsi.gov.uk. Key amendments have been made through the Countryside and Rights of Way (CRoW) Act (2000).

Other legislative Acts affording protection to wildlife and their habitats include:

- Deer Act 1991;
- Countryside and Rights of Way (CRoW) Act 2000;
- Natural Environment & Rural Communities (NERC) Act 2006;
- Protection of Badgers Act 1992;
- Wild Mammals (Protection) Act 1996.

Species and species groups that are protected or otherwise regulated under the aforementioned domestic and European legislation, and that are most likely to be affected by development activities, include herpetofauna (amphibians and reptiles), badger, bats, birds,

¹⁸ Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora

dormouse, invasive plant species, otter, plants, red squirrel, water vole and white clawed crayfish.

Explanatory notes relating to species protected under The Conservation of Habitats and Species Regulations 2017 (which includes smooth snake, sand lizard, great crested newt and natterjack toad), all bat species, otter, dormouse and some plant species) are given below.

These should be read in conjunction with the relevant species sections that follow.

- In the Directive, the term ‘deliberate’ is interpreted as being somewhat wider than intentional and may be thought of as including an element of recklessness.
- The Conservation of Habitats and Species Regulations 2017 does not define the act of ‘migration’ and therefore, as a precaution, it is recommended that short distance movement of animals for e.g. foraging, breeding or dispersal purposes are also considered.
- In order to obtain a European Protected Species Mitigation (EPSM) licence, the application must demonstrate that it meets all of the following three ‘tests’: i) the action(s) are necessary for the purpose of preserving public health or safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequence of primary importance for the environment; ii) that there is no satisfactory alternative and iii) that the action authorised will not be detrimental to the maintenance of the species concerned at a favourable conservation status in their natural range.

Bats

All species of bat are fully protected under The Conservation of Habitats and Species Regulations 2017 through their inclusion on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species (e.g. all bats)
- Deliberate disturbance of bat species as:
 - a) to impair their ability:
 - (i) to survive, breed, or reproduce, or to rear or nurture young;
 - (ii) to hibernate or migrate³
 - b) to affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place
- Keeping, transporting, selling, exchanging or offering for sale whether live or dead or of any part thereof.

Bats are also currently protected under the Wildlife and Countryside Act 1981 (as amended) through their inclusion on Schedule 5. Under this Act, they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection
- Selling, offering or exposing for sale, possession or transporting for purpose of sale.

How is the legislation pertaining to bats liable to affect development works?

A European Protected Species Mitigation (EPSM) Licence issued by the relevant countryside agency (e.g. Natural England) will be required for works liable to affect a bat roost or for operations likely to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, rear young and hibernate). The licence is to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored.

Though there is no case law to date, the legislation may also be interpreted such that, in certain circumstances, important foraging areas and/or commuting routes can be regarded as being afforded de facto protection, for example, where it can be proven that the continued usage of such areas is crucial to maintaining the integrity and long-term viability of a bat roost¹⁹.

Badger

Badgers receive protection under The Protection of Badgers Act 1992 which consolidates the previous Badger Acts of 1973 and 1991. The Act makes it an offence to:

- Wilfully kill, injure, take, or attempt to kill, injure or take a badger;
- Cruelly ill-treat a badger, including use of tongs and digging;
- Intentionally or recklessly damage, destroy or obstruct access to a badger sett or any part thereof;
- Intentionally or recklessly disturb a badger when it is occupying a badger sett; or,
- Intentionally or recklessly cause a dog to enter a badger sett.

How is the legislation pertaining to badgers liable to affect development works?

¹⁹ Garland & Markham (2008) Is important bat foraging and commuting habitat legally protected? Mammal News, No. 150. The Mammal Society, Southampton.

A badger sett is defined in the legislation as “any structure or place which displays signs indicating current use by a badger”. A Development Licence would be required from Natural England for any development works liable to directly impact an active badger sett, or to disturb badgers whilst in the sett. Natural England has issued guidelines on what constitutes a licensable activity.

Natural England published an interim guidance document entitled ‘Badgers and Development, A Guide to Best Practice and Licensing’ (2007), which provides guidance on how development can be carried out within the law and in a way that minimises the detrimental impact on this species. Natural England advises that foraging areas should be maintained or new foraging areas created and that access between setts and foraging/watering areas should be maintained or new ones provided (Natural England, 2007).

Birds

With certain exceptions, all birds, their nests and eggs are protected under Sections 1-8 of the Wildlife and Countryside Act 1981 (as amended). Among other things, this makes it an offence to:

- Intentionally kill, injure or take any wild bird;
- Intentionally take, damage or destroy the nest of any wild bird while it is in use or being built;
- Intentionally take or destroy an egg of any wild bird;
- Sell, offer or expose for sale, have in his possession or transport for the purpose of sale any wild bird (dead or alive) or bird egg or part thereof.

Certain species of bird, for example the barn owl, black redstart, hobby, bittern and kingfisher receive additional special protection under Schedule 1 of the Act and Annex 1 of the European Community Directive on the Conservation of Wild Birds (2009/147/EC). This affords them protection against:

- Intentional or reckless disturbance while it is building a nest or is in, on or near a nest containing eggs or young;
- Intentional or reckless disturbance of dependent young of such a bird.

How is the legislation pertaining to birds liable to affect development works?

To avoid contravention of the Wildlife and Countryside Act 1981 (as amended), works should be planned to avoid the possibility of killing or injuring any wild bird, or damaging or destroying

their nests. The most effective way to reduce the likelihood of nest destruction in particular is to undertake work outside the main bird breeding season which typically runs from March to August²⁰. Where this is not feasible, it will be necessary to have any areas of suitable habitat thoroughly checked for nests prior to vegetation clearance.

Those species of bird listed on Schedule 1 are additionally protected against disturbance during the breeding season. Thus, it will be necessary to ensure that no potentially disturbing works are undertaken in the vicinity of the nest. The most effective way to avoid disturbance is to postpone works until the young have fledged. If this is not feasible, it may be possible to maintain an appropriate buffer zone or standoff around the nest.

Herpetofauna (Amphibians and Reptiles)

The sand lizard *Lacerta agilis*, smooth snake *Coronella austriaca*, natterjack toad *Epidalea calamita* and great crested newt *Triturus cristatus* receive full protection under The Conservation of Habitats and Species Regulations 2017 through their inclusion on Schedule 2. The pool frog *Pelophylax lessonae* is also afforded full protection under the same legislation. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of species listed on Schedule 2
- Deliberate disturbance of any Schedule 2 species as:
 - a) to impair their ability:
 - (i) to survive, breed, or reproduce, or to rear or nurture young;
 - (ii) in the case of animals of a hibernating or migratory species, to hibernate or migrate
 - b) to affect significantly the local distribution or abundance of the species
- Deliberate taking or destroying of the eggs of a Schedule 2 species
- Damage or destruction of a breeding site or resting place
- Keeping, transporting, selling, exchanging or offering for sale whether live or dead or of any part thereof.

With the exception of the pool frog, these species are also currently listed on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Under this Act, they are additionally protected from:

²⁰ It should be noted that this is the main breeding period. Breeding activity may occur outwith this period (depending on the particular species and geographical location of the site) and thus due care and attention should be given when undertaking potentially disturbing works at any time of year.

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection
- Selling, offering or exposing for sale, possession or transporting for purpose of sale.

Other native species of herpetofauna are protected solely under Schedule 5 of the Wildlife & Countryside Act 1981 (as amended). Species such as the adder *Vipera berus*, grass snake *Natrix helvetica*, common lizard *Zootoca vivipara* and slow-worm *Anguis fragilis* are listed in respect to Section 9(1) & (5). For these species, it is prohibited to:

- Intentionally (or recklessly in Scotland) kill or injure these species
- Sell, offer or expose for sale, possess or transport for purpose of sale these species, or any part thereof.

Common frog *Rana temporaria*, common toad *Bufo bufo*, smooth newt *Lissotriton vulgaris* and palmate newt *L. helveticus* are listed in respect to Section 9(5) only which affords them protection against sale, offering or exposing for sale, possession or transport for the purpose of sale.

How is the legislation pertaining to herpetofauna liable to affect development works?

A European Protected Species Mitigation (EPSM) Licence issued by the relevant countryside agency (e.g. Natural England) will be required for works liable to affect the breeding sites or resting places of those amphibian and reptile species protected under The Conservation Habitats and Species Regulations 2010 (as amended). A licence will also be required for operations liable to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, rear young and hibernate). The licences are to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored.

Although not licensable, appropriate mitigation measures may also be required to prevent the intentional killing or injury of adder, grass snake, common lizard and slow worm, thus avoiding contravention of the Wildlife and Countryside Act 1981 (as amended).

Invasive Plant Species

Certain species of plant, including Japanese knotweed *Fallopia japonica*, giant hogweed *Heracleum mantegazzianum* and Himalayan balsam *Impatiens glandulifera* are listed on Part II of Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) in respect to Section 14(2). Such species are generally non-natives whose establishment or spread in the wild may

be detrimental to native wildlife. Inclusion on Part II of Schedule 9 therefore makes it an offence to plant or otherwise cause these species to grow in the wild.

How is the legislation pertaining to invasive plants liable to affect development works?

Although it is not an offence to have these plants on your land per se, it is an offence to cause these species to grow in the wild. Therefore, if they are present on site and development activities (for example movement of spoil, disposal of cut waste or vehicular movements) have the potential to cause the further spread of these species to new areas, it will be necessary to ensure appropriate measures are in place to prevent this happening prior to the commencement of works.

Wild Mammals (Protection) Act 1996

All wild mammals are protected against intentional acts of cruelty under the above legislation. This makes it an offence to:

- Mutilate, kick, beat, nail or otherwise impale, stab, burn, stone, crush, drown, drag or asphyxiate any wild mammal with intent to inflict unnecessary suffering.

To avoid possible contravention, due care and attention should be taken when carrying out works (for example operations near burrows or nests) with the potential to affect any wild mammal in this way, regardless of whether they are legally protected through other conservation legislation or not.

B NATIONAL AND EUROPEAN LEGISLATION AFFORDED TO HABITATS

Statutory Designations: National

Nationally important areas of special scientific interest, by reason of their flora, fauna, or geological or physiographical features, are notified by the countryside agencies as statutory **Sites of Special Scientific Interest** (SSSIs) under the National Sites and Access to the Countryside Act 1949 and latterly the Wildlife & Countryside Act 1981 (as amended). As well as underpinning other national designations (such as **National Nature Reserves** which are declared by the countryside agencies under the same legislation), the system also provides statutory protection for terrestrial and coastal sites which are important within a European context (Natura 2000 network) and globally (such as Wetlands of International Importance). See subsequent sections for details of these designations. Improved provisions for the protection and management of SSSIs have been introduced by the Countryside and Rights of Way Act 2000 (in England and Wales).

The Wildlife & Countryside Act 1981 (as amended) also provides for the making of **Limestone Pavement Orders**, which prohibit the disturbance and removal of limestone from such designated areas, and the designation of **Marine Nature Reserves**, for which byelaws must be made to protect them.

Statutory Designations: International

Special Protection Areas (SPAs), together with **Special Areas of Conservation** (SACs) form the **Natura 2000** network. The Government is obliged to identify and classify SPAs under the EC Birds Directive (Council Directive 2009/147/EC (formerly 79/409/EEC)) on the Conservation of Wild Birds). SPAs are areas of the most important habitat for rare (listed on Annex I of the Directive) and migratory birds within the European Union. Protection afforded SPAs in terrestrial areas and territorial marine waters out to 12 nautical miles (nm) is given by The Conservation of Habitats & Species Regulations 2010 (as amended). The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 (as amended) provide a mechanism for the designation and protection of SPAs in UK offshore waters (from 12-200 nm).

The Government is obliged to identify and designate SACs under the EC Habitats Directive (Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora). These are areas which have been identified as best representing the range and variety of habitats and (non-bird) species listed on Annexes I and II to the Directive within the European Union. SACs in terrestrial areas and territorial marine waters out to 12 nm are protected under The Conservation of Habitats & Species Regulations 2010 (as amended). The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 (as amended) provide a mechanism for the designation and protection of SACs in UK offshore waters (from 12-200 nm).

Ramsar sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. The Convention covers all aspects of wetland conservation and wise use, in particular recognizing wetlands as ecosystems that are globally important for biodiversity conservation. Wetlands can include areas of marsh, fen, peatland or water and may be natural or artificial, permanent or temporary. Wetlands may also incorporate riparian and coastal zones adjacent to the wetlands. Ramsar sites are underpinned through prior notification as Sites of Special Scientific Interest (SSSIs) and as such receive statutory protection under the Wildlife & Countryside Act 1981 (as amended) with further protection provided by the Countryside and Rights of Way (CRoW) Act 2000. Policy statements have been issued by the Government in England and Wales highlighting the special status of Ramsar sites. This effectively extends the level of protection to that afforded to sites which

have been designated under the EC Birds and Habitats Directives as part of the Natura 2000 network (e.g. SACs & SPAs).

Statutory Designations: Local

Under the National Sites and Access to the Countryside Act 1949 **Local Nature Reserves** (LNRs) may be declared by local authorities after consultation with the relevant countryside agency. LNRs are declared for sites holding special wildlife or geological interest at a local level and are managed for nature conservation, and provide opportunities for research and education and enjoyment of nature.

Non-Statutory Designations

Areas considered to be of local conservation interest may be designated by local authorities as a **Wildlife Site**, under a variety of names such as **County Wildlife Sites** (CWS), **Listed Wildlife Sites** (LWS), **Local Nature Conservation Sites** (LNCS), **Sites of Biological Importance** (SBIs), **Sites of Importance for Nature Conservation** (SINCs), or **Sites of Nature Conservation Importance** (SNCIs). The criteria for designation may vary between counties.

Together with the statutory designations, these are defined in local and structure plans under the Town and Country Planning system and are a material consideration when planning applications are being determined. The level of protection afforded to these sites through local planning policies and development frameworks may vary between counties.

Regionally Important Geological and Geomorphological Sites (RIGS) are the most important places for geology and geomorphology outside land holding statutory designations such as SSSIs. Locally-developed criteria are used to select these sites, according to their value for education, scientific study, historical significance or aesthetic qualities. As with local Wildlife Sites, RIGS are a material consideration when planning applications are being determined.

C NATIONAL PLANNING POLICY

The National Planning Policy Framework (NPPF)

The National Planning Policy Framework (NPPF) replaced Planning Policy Statement (PPS9) in April 2012, and was updated in 2018, as the key national planning policy concerning nature conservation. The NPPF emphasises the need for suitable development. The Framework specifies the need for protection of designated sites and priority habitats and priority species. An emphasis is also made for the need for ecological networks via preservation, restoration

and re-creation. The protection and recovery of priority species – that is those listed as UK Biodiversity Action Plan priority species – is also listed as a requirement of planning policy. In determining a planning application, planning authorities should aim to conserve and enhance biodiversity by ensuring that: designated sites are protected from adverse harm; there is appropriate mitigation or compensation where significant harm cannot be avoided; opportunities to incorporate biodiversity in and around developments are encouraged; planning permission is refused for development resulting in the loss or deterioration of irreplaceable habitats including aged or veteran trees and also ancient woodland.

The Natural Environment and Rural Communities Act 2006 and The Biodiversity Duty

The Natural Environment and Rural Communities (NERC) Act came into force on 1st October 2006. Section 40 of the Act requires all public bodies to have regard to biodiversity conservation when carrying out their functions. This is commonly referred to as the 'biodiversity duty'.

Section 41 of the Act (Section 42 in Wales) requires the Secretary of State to publish a list of habitats and species which are of 'principal importance for the conservation of biodiversity.' They are referred to in this report as Species of Principal Importance and Habitats of Principal Importance. This list is intended to assist decision makers such as public bodies in implementing their duty under Section 40 of the Act. Under the Act these habitats and species are regarded as a material consideration in determining planning applications. A developer must show that their protection has been adequately addressed within a development proposal.

D LOCAL PLANNING POLICY

Woking Borough Core Strategy

The Woking Borough Core Strategy (2012) deals with matters of strategic importance for the Woking area. Key chapters include Chapter 5 – *Borough wide policies*.

Policy CS7: Biodiversity and Nature Conservation

The Council is committed to conserving and protecting existing biodiversity assets within the Borough. It will require development proposals to contribute to the enhancement of existing biodiversity and geodiversity features and also explore opportunities to create and manage new ones where it is appropriate. This will include those habitats and species listed in the Surrey Biodiversity Action Plan (BAP). Any development that will be anticipated to have a potentially harmful effect or lead to a loss of features of interest for biodiversity will be refused.

The Council will encourage new development to make positive contribution to biodiversity through the creation of green spaces, where appropriate, and the creation of linkages between sites to create a local and regional biodiversity network of wildlife corridors and green infrastructure. It will seek to retain and encourage the enhancement of significant features of nature conservation value on development sites.

Any development with potential impact on the SPA or the SAC will be subject to a Habitats Regulations Assessment to determine the need for Appropriate Assessment.

Policy CS17: Open space, green infrastructure, sport and recreation

All proposals for new residential development (other than replacement dwellings) will be required to contribute towards the provision of open space and green infrastructure, including the following:

- children's play areas and outdoor recreational facilities for young people.
- outdoor sports facilities.

Developers will be expected to contribute to provision through the Community Infrastructure Levy (CIL) or on larger sites through on-site provision and/or a S106 contribution as appropriate. Development involving the loss of open space will not be permitted unless:

- alternative and equivalent or better provision is made available in the vicinity
- or the development is directly related to the enhancement of the open space.

New residential units within five km of an SPA will be required to provide or contribute to the provision and improvement of Suitable Alternative Natural Greenspace (SANG) which is a component of Green Infrastructure and also its Strategic Access Management and Monitoring (SAMM). This land will be used to mitigate the impact and effect of residential development on the SPA, by providing informal recreation land of appropriate quality across Woking Borough. Standards for the provision of SANG are set out in the Council's Thames Basin Heaths SPA Avoidance Strategy 2010-15.

Policy CS22: Sustainable Construction

New residential development on greenfield sites will be required to meet the Code for Sustainable Homes level 5 (or any future national requirement) from now because of the relatively lower cost of developing such sites.

The Council will consider a case based on evidence of viability if an applicant can demonstrate that the requirement for code level 5 cannot be met. This will be considered on

a case by case basis. New non-residential development of 1,000 sq.m or more (gross) floorspace is required to comply with BREEAM very good standards (or any future national equivalent).

All development is encouraged to make biodiversity enhancements such as green roofs and bird and bat boxes. All new residential development is encouraged to meet the 'ecology' elements of the Code.

Policy CS24- Woking's landscape and townscape

All development proposals will provide a positive benefit in terms of landscape and townscape character, and local distinctiveness and will have regard to landscape character areas. To protect local landscape and townscape character, development will be expected to:

- conserve, and where possible enhance existing character, especially key landscapes such as heathlands, escarpments and the canal/river network and settlement characteristics; maintain locally valued features, and enhance or restore deteriorating features
- respect the setting of, and relationship between, settlements and individual buildings in the landscape
- conserve, and where possible, enhance townscape character, including structure and land form, landscape features, views and landmarks, and appropriate building styles and materials
- support land management practices that have no adverse impact on characteristic landscape patterns and local biodiversity.
- Protect and encourage the planting of new trees where it is relevant to do so.

E REGIONAL AND LOCAL BAPS

A number of priority habitats and species have been identified in the Biodiversity & Planning in Surrey document (Surrey Wildlife Trust, 2014), for the Surrey Biodiversity Partnership. Priority habitats and species within Surrey that are of relevance to this report include:

- Habitats:
 - lowland meadows (neutral grassland); and
 - Hedgerows.
- Species:
 - bats;

- great crested newt
- widespread reptiles – common lizard, grass snake, slow-worm
- birds of farmland and the wider countryside – including song thrush, dunnock, and house sparrow; and
- hedgehog.



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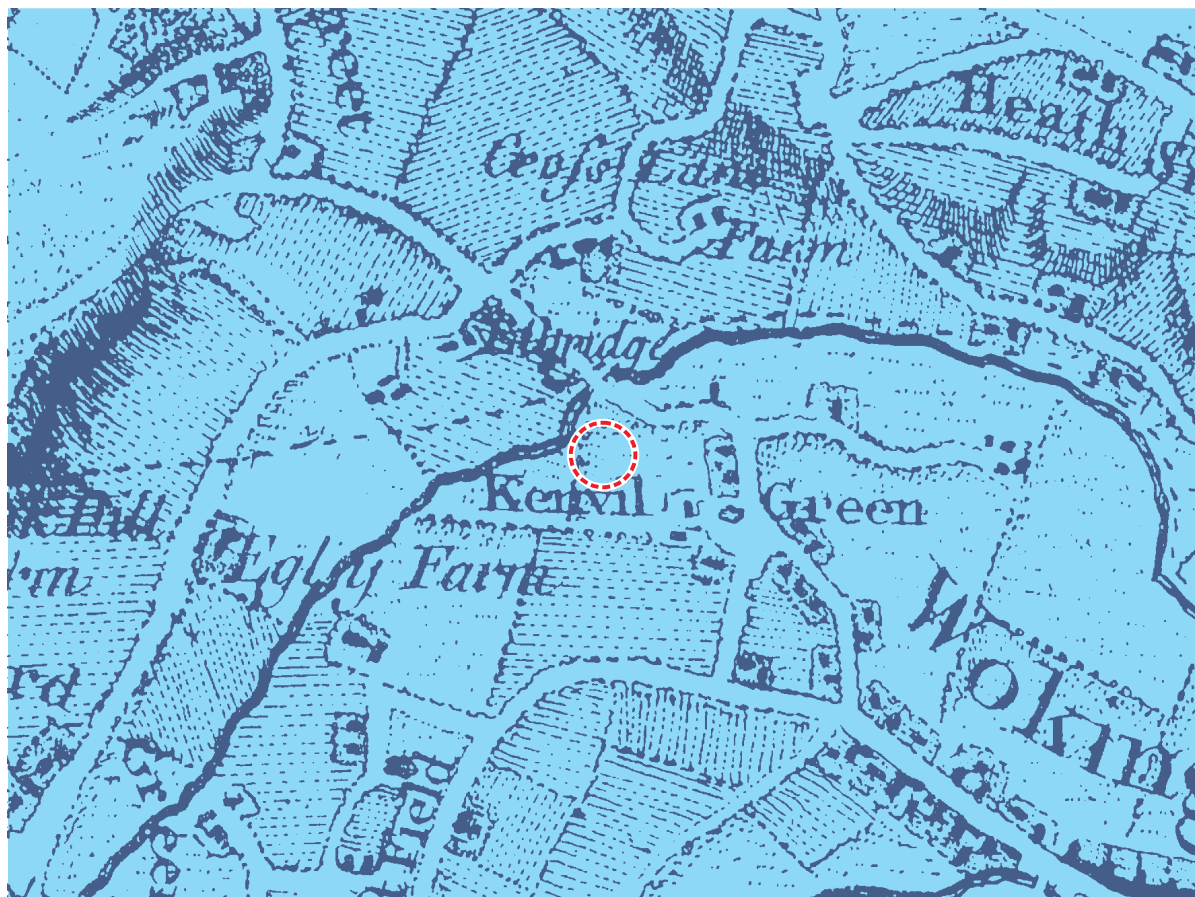
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Annex 11: Updated Historic Environment Assessment



WOKING FOOTBALL CLUB
Woking
GU22

Historic environment assessment

NGR 500583 157309

Historic Environment Record search reference: 046/19

WOKING FOOTBALL CLUB
Kingfield Road
Woking
Surrey GU22

County of Surrey

Historic environment assessment

November 2019

Sign-off history

issue no.	Issue date	Prepared by	Reviewed by	Project Manager	Notes
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5	20/11/2019	Andrew Francis (Archaeology)	-	-	Revised description of proposals incorporated

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Note: site outlines may appear differently on some figures owing to distortions in historic maps. North is approximate on early maps.

Executive summary

Woking Football Club has commissioned MOLA to carry out a historic environment assessment in advance of proposed development at Woking Football Club, Woking, in the County of Surrey. The scheme comprises the redevelopment of the site, following the demolition of all existing buildings and structures, to provide a replacement stadium with ancillary facilities, including flexible retail, hospitality and community spaces, independent retail floorspace (Classes A1/A2/A3), a medical centre (Class D1) and vehicle parking, plus residential accommodation comprising of 1,048 dwellings (Class C3) within 5 buildings of varying heights of between 3 and 10 storeys (and undercroft and part basement levels) on the south and west sides of the site, together with provision of new accesses from Westfield Avenue to car parking, associated landscaping and the provision of a detached residential concierge building.

This desk-based study assesses the impact of the scheme on buried heritage assets (archaeological remains). Above ground heritage assets (historic structures) are not discussed in detail, but they have been noted where they assist in the archaeological interpretation of the site. Buried heritage assets that may be affected by the proposals comprise:

- **Isolated prehistoric artefacts.** There is a low to moderate potential for isolated prehistoric remains to be found based on the site's favourable location near to a source of water. Such remains would be of low heritage significance.

There is a low potential for remains from all other periods. The site was located in open fields some distance from the main area of settlement around Old Woking c 600m to the east. It remained open until the football stadium and semi-detached houses were constructed in the early part of the 20th century. Any foundations relating to this development would have truncated any potentially surviving archaeological remains.

Based on the evidence, only archaeological remains of low significance are expected within the site. In the light of the limited archaeological survival potential of the site and despite the size and nature of the excavation for the proposed development it is unlikely that the local authority would require further investigation prior to determination. However, given the limited available information on archaeological survival within the site it is likely that Woking Borough Council would require investigation as part of a condition to ensure that no previously unidentified remains are lost without record. Such an investigation could take the form of a watching brief during ground works to record the presence, nature and extent and significance of any archaeological remains. Any archaeological work would need to be undertaken in accordance with an approved Written Scheme of Investigation (WSI) and could be carried out under the terms of a standard archaeological planning condition set out under the granting of planning consent.

1 Introduction

1.1 Origin and scope of the report

- 1.1.1 Woking Football Club has commissioned MOLA (Museum of London Archaeology) to carry out a historic environment assessment in advance of proposed development at Woking Football Club, Woking, GU22; National Grid Reference (NGR) 500583 157309: Fig 1. The scheme comprises the redevelopment of the site, following the demolition of all existing buildings and structures, to provide a replacement stadium with ancillary facilities, including flexible retail, hospitality and community spaces, independent retail floorspace (Classes A1/A2/A3), a medical centre (Class D1) and vehicle parking, plus residential accommodation comprising of 1,048 dwellings (Class C3) within 5 buildings of varying heights of between 3 and 10 storeys (and undercroft and part basement levels) on the south and west sides of the site, together with provision of new accesses from Westfield Avenue to car parking, associated landscaping and the provision of a detached residential concierge building.
- 1.1.2 This desk-based study assesses the impact of the scheme on buried heritage assets (archaeological remains). It will enable the archaeological advisors to the local planning authority (LPA) to formulate an appropriate response in the light of the impact on any known or possible heritage assets. These are parts of the historic environment which are considered to be significant because of their historic, evidential, aesthetic and/or communal interest.
- 1.1.3 This report deals solely with the archaeological implications of the development and does not cover possible built heritage issues, except where buried parts of historic fabric are likely to be affected. Above ground assets (i.e. designated and undesignated historic structures and conservation areas) on the site or in the vicinity that are relevant to the archaeological interpretation of the site are discussed. Whilst the significance of above ground assets is not assessed in this archaeological report, direct physical impacts upon such assets arising from the development proposals are noted. The report does not assess issues in relation to the setting of above ground assets (e.g., visible changes to historic character and views).
- 1.1.4 The assessment has been carried out in accordance with the requirements of the National Planning Policy Framework (NPPF)(MHCLG 2019; see section 9 of this report) and to standards specified by the Chartered Institute for Archaeologists (CIfA 2014, 2017) and Historic England (EH 2008, HE 2015). Under the 'Copyright, Designs and Patents Act' 1988 MOLA retains the copyright to this document.
- 1.1.5 Note: within the limitations imposed by dealing with historical material and maps, the information in this document is, to the best knowledge of the author and MOLA, correct at the time of writing. Further archaeological investigation, more information about the nature of the present buildings, and/or more detailed proposals for redevelopment may require changes to all or parts of the document.

1.2 Designated heritage assets

- 1.2.1 Historic England's National Heritage List for England (NHL) is a register of all nationally designated (protected) historic buildings and sites in England, such as scheduled monuments, listed buildings and registered parks and gardens. The List does not include any nationally designated heritage assets within the site.
- 1.2.2 The site is not within an Area of High Archaeological Potential or a Conservation Area.

1.3 Aims and objectives

- 1.3.1 The aim of the assessment is to:
- identify the presence of any known or potential buried heritage assets that may be affected by the proposals;

- describe the significance of such assets, as required by national planning policy (see section 9 for planning framework and section 10 for methodology used to determine significance);
- assess the likely impacts upon the significance of the assets arising from the proposals; and
- provide recommendations for further assessment where necessary of the historic assets affected, and/or mitigation aimed at reducing or removing completely any adverse impacts upon buried heritage assets and/or their setting.

2 Methodology and sources consulted

2.1 Sources

- 2.1.1 For the purposes of this report, documentary and cartographic sources including results from any archaeological investigations in the site and the area around it were examined in order to determine the likely nature, extent, preservation and significance of any buried heritage assets that may be present within the site or its immediate vicinity. This information has been used to determine the potential for previously unrecorded heritage assets of any specific chronological period to be present within the site.
- 2.1.2 In order to set the site into its full archaeological and historical context, information was collected on the known historic environment features within a 1km-radius study area around it, as held by the primary repositories of such information within Surrey which comprises the Surrey Historic Environment Record (HER). The HER is managed by Surrey County Council and includes information from past investigations, local knowledge, find spots, and documentary and cartographic sources. The study area was considered through professional judgement to be appropriate to characterise the historic environment of the site. Occasionally there may be reference to assets beyond this, where appropriate, e.g., where such assets are particularly significant and/or where they contribute to current understanding of the historic environment.
- 2.1.3 The extent of investigations as shown on Fig 2 may represent the site outline boundary for planning purposes, rather than the actual area archaeologically investigated. Where it has not been possible from archive records to determine the extent of an archaeological investigation (as is sometimes the case with early work), a site is represented on Fig 2 only by a centrepoint.
- 2.1.4 In addition, the following sources were consulted:
- MOLA – in-house Geographical Information System (GIS) with statutory designations GIS data, the locations of all ‘key indicators’ of known prehistoric and Roman activity across Surrey, past investigation locations, projected Roman roads; burial grounds from the Holmes burial ground survey of 1896; georeferenced published historic maps; Defence of Britain survey data, in-house archaeological deposit survival archive and archaeological publications;
 - Historic England – information on statutory designations including scheduled monuments and listed buildings, along with identified Heritage at Risk;
 - Surrey History Centre – historic maps and published histories;
 - Groundsure – historic Ordnance Survey maps from the first edition (1860–70s) to the present day;
 - British Geological Survey (BGS) – solid and drift geology digital map; online BGS geological borehole record data;
 - Woking Football Club – Proposed Lower Ground Floor (Colour), drg no. 7884-L(OO)78L, 1:500 @ A1 (Leach Rhodes Walker, 06/11/19); Proposed Basement Level (Colour), drg no. 7884-L(OO)283D, 1:500 @ A1 (Leach Rhodes Walker, 06/11/19); Block 1 Sections, drg no. 7884-L(OO)2901A, 1:200 @ A1 (Leach Rhodes Walker, 06/11/19); Preliminary Risk Assessment and Holes Logs (Jomas Associated Limited 2019a and b); Existing Site Survey (Woods Hardwick, 2018); and
 - Internet – web-published material including the LPA local plan, and information on conservation areas and locally listed buildings.
- 2.1.5 The assessment included a site visit carried out on the 20th February 2019 in order to determine the topography of the site, the nature of the existing buildings on the site, and to provide further information on areas of possible past ground disturbance and general historic environment potential. Observations made on the site visit have been incorporated into this report.

2.2 Methodology

- 2.2.1 Fig 2 shows the location of known historic environment features within the study area. These have been allocated a unique historic environment assessment reference number (**HEA 1, 2, etc**), which is listed in a gazetteer at the back of this report and is referred to in the text. Where there are a considerable number of listed buildings in the study area, only those within the vicinity of the site (i.e. within 50m) are included, unless their inclusion is considered relevant to the study. Buildings and other features such as clay pits and lime kilns shown on historic maps are not listed but are discussed where they are considered relevant to the study. Conservation areas and archaeological priority areas are not shown. All distances quoted in the text are approximate (within 5m) and unless otherwise stated are measured from the approximate centre of the site.
- 2.2.2 Section 10 sets out the criteria used to determine the significance of heritage assets. This is based on four values set out in Historic England's *Conservation principles, policies and guidance* (EH 2008), and comprise evidential, historical, aesthetic and communal value. The report assesses the likely presence of such assets within (and beyond) the site, factors which may have compromised buried asset survival (i.e. present and previous land use), as well as possible significance.
- 2.2.3 Section 11 includes non-archaeological constraints. Section 12 contains a glossary of technical terms. A full bibliography and list of sources consulted may be found in section 13 with a list of existing site survey data obtained as part of the assessment.

3 The site: topography and geology

3.1 Site location

- 3.1.1 The site is located at Woking Football Club, Kingfield Road, Woking, GU22 (NGR 500583 157309: Fig 1). The site area is approximately 5 hectares (ha) and is bounded by residential housing to the north and east, a sports ground and residential housing to the south and Westfield Avenue and residential housing to the west. The site falls within the historic parish of Woking, within the county of Surrey.
- 3.1.2 The Hoe Stream is 265m to the west of the site.

3.2 Topography

- 3.2.1 Topography can provide an indication of suitability for settlement, and ground levels can indicate whether the ground has been built up or truncated, which can have implications for archaeological survival (see section 5.2).
- 3.2.2 The site is within the wide, shallow valley of the River Wey. To the south, east and west of the site the land is relatively flat, being at 25.0m above Ordnance Datum (OD). To the north-east the land rises up reaching a high point of 47.0m OD at Hoebridge Golf Club, located 1.6km to the north-east of the site and 40.0m OD at Mount Herman, located 830m to the north-west of the site.
- 3.2.3 A levelled site survey undertaken in 2018 shows that the site runs counter to the topography of the wider area in that it rises gradually from the north to the south-west with a low point of 24.0m OD in the north to a high point of 25.5m OD in the south-west (Woods Hardwick, 2018). This could be the result of ground works on the site in an area running from the north to south-west.

3.3 Geology

- 3.3.1 Geology can provide an indication of suitability for early settlement, and potential depth of remains.
- 3.3.2 The geology recorded on the site by the British Geological Service (BGS) comprises the Kempton Park Gravel formation overlying Bagshot Sand.
- 3.3.3 A geotechnical survey was undertaken by Jomas Associates Limited within the site in 2019 (Jomas Associates Limited 2019a and b). Four boreholes (BH) were sunk: BH 1 in the western part of the site; BH 2 in the north-eastern part of the site; and BH 3 and BH 4 both in the southern part of the site.
- 3.3.4 In BH 1 ground level was recorded at 24.9m OD. A 1.2m thick layer of made ground comprising of asphalt and gravel, brick and concrete overlay Kempton Park Gravel at 23.7m OD. The underlying Bagshot Sand was recorded at 3.5mbgl (21.4m OD).
- 3.3.5 In BH 2 ground level was recorded at 24.6m OD. A 0.2m thick layer of made ground comprising of compact gravel overlay Bagshot Sand. No Kempton Park Gravel was recorded in BH 2.
- 3.3.6 In BH 3 ground level was recorded at 24.8m OD. A 1.0m thick layer of made ground comprising of asphalt and sandy gravel overlay Kempton Park Gravel at 23.8m OD. The underlying Bagshot Sand was recorded at 2.7mbgl (22.1m OD).
- 3.3.7 In BH 4 ground level was recorded at 25.1m OD. A 0.7m thick layer of topsoil comprising of sandy clay overlay Bagshot Sand. No Kempton Park Gravel was recorded in BH4.
- 3.3.8 It is therefore expected that in the west of the site Kempton Park Gravels could be recorded immediately below any made ground and in the east of the site the Gravel either does not survive or was never present and Bagshot Sand would be directly below any made ground.

4 Archaeological and historical background

4.1 Overview of past investigations

- 4.1.1 There has been one investigation (**HEA 1**) within the site itself however, no further details are recorded. Within the study area there have been a further four investigations, all evaluations (**HEAs 2, 3a, 3b and 4**), so the area is not very well understood, archaeologically. An investigation to the south-west of the site (**HEA 3b**) recorded evidence for possible prehistoric activity in the form of a likely paleo-channel which contained worked and burnt flints of possible Neolithic date and three postholes containing possible in situ wooden posts. The remaining investigations found alluvial deposits; a number of undated ditches or field boundaries; and two sherds of residual Late Iron Age/Roman pottery sherds.
- 4.1.2 The results of these investigations, along with other known sites and finds within the study area, are discussed by period, below. The date ranges given are approximate.

4.2 Chronological summary

Prehistoric period (800,000 BC–AD 43)

- 4.2.1 The Lower (800,000–250,000 BC) and Middle (250,000–40,000 BC) Palaeolithic saw alternating warm and cold phases and intermittent perhaps seasonal occupation. During the Upper Palaeolithic (40,000–10,000 BC), after the last glacial maximum, and in particular after around 13,000 BC, further climate warming took place and the environment changed from steppe-tundra to birch and pine woodland. It is probably at this time that Britain first saw continuous occupation. Erosion has removed much of the Palaeolithic land surfaces and finds are typically residual. There are no known finds dated to this period within the study area.
- 4.2.2 The Mesolithic hunter-gatherer communities of the postglacial period (10,000–4000 BC) inhabited a still largely wooded environment. The river valleys would have been favoured in providing a dependable source of food (from hunting and fishing) and water, as well as a means of transport and communication. Evidence of activity is characterised by flint tools rather than structural remains. There are no known finds dated to this period within the study area.
- 4.2.3 The Neolithic (4000–2000 BC), Bronze Age (2000–600 BC) and Iron Age (600 BC–AD 43) are traditionally seen as the time of technological change, settled communities and the construction of communal monuments. Farming was established and forest cleared for cultivation. An expanding population put pressure on available resources and necessitated the utilisation of previously marginal land. A paleo-channel containing worked and burnt flints of possible Neolithic date and three postholes containing possible in situ wooden posts were found during an evaluation by Wessex Archaeology in 2011 (**HEA 3b**), 385m to the south-west of the site. Alluvial layers around these features recorded accumulations of burnt flint which may be the result of natural or deliberate deposition. Another alluvial deposit recorded Early to Mid-Iron Age pottery. A Neolithic flint axe (**HEA 5**) was found 905m to the north-west of the site.
- 4.2.4 In all likelihood the area may have been farmed with low density activity (e.g., grazing, occasional field ditches) or was woodland.

Roman period (AD 43–410)

- 4.2.5 There has been little evidence for fully Romanised settlement in the Woking area to date. Beyond the study area, archaeological investigation has identified Romanised native farmsteads at Woking Park Farm south of Old Woking (Crosby 2003, 4) and reused Romano-British material is notable in the fabric of the extant church at Old Woking. The nearest potential Roman road is the proposed extension to Margary's 151 (1967, 66) known as Lacuna 151, but this is 3.2km to the south-west of the site. The known Roman roads are 11.3km to the north (Margary 4a) and 21km to the south (Margary 15).
- 4.2.6 There has only been one Roman artefact recovered in the study area. An abraded Roman

sherd (**HEA 4**) was found during an evaluation in 1994 by SCAU at Westfield County First School 500m to the south of the site.

- 4.2.7 Throughout this period, the site was located some distance from the main roads and areas of settlement and probably lay within open fields being used for agricultural purposes.

Early medieval (Saxon) period (AD 410–1066)

- 4.2.8 Following the withdrawal of the Roman army from England in the early 5th century AD, Germanic ('Saxon') settlers arrived from mainland Europe, with occupation in the form of small villages and an economy initially based on agriculture. By the end of the 6th century a number of Anglo-Saxon kingdoms had emerged, and as the ruling families adopted Christianity, endowments of land were made to the church. Landed estates (manors) can be identified from the 7th century onwards; some, as Christianity was widely adopted, with a main 'minster' church and other subsidiary churches or chapels. In the 9th and 10th centuries, the Saxon Minster system began to be replaced by local parochial organisation, with formal areas of land centred on settlements served by a parish church.
- 4.2.9 Saxon settlement was situated at Old Woking south-east of the modern town and 600m south-east of the site. The placename is likely to derive from the name 'Wocc' or 'Wocca' and translates as 'people of Wocca' suggesting an early pre-Christian settlement at the location (Palmer 1991). Early variations of the name include 'Woccingas' and 'Uoccingas'. The pre-Christian 'Ingas' in a place name meaning 'people of' often came to refer to settlements where there was a religious centre in Christian times (Smith 2005, 84) which was the case with Woking.
- 4.2.10 The earliest written reference to Woking comes from a letter from Pope Constantine to Cuthbald's Abbey at Petersborough (Medchamstead) around 710. It related to two other monasteries dependent upon Peterborough at Verundes (Bermondsey) and Woccingas (Woking; Crosby 2003, 7). In 780 a land grant of King Offa of Mercia confirms 20 hides of land to the church at Woking 'in which place the monastery is situated'. The monastery was almost certainly at the site of the present St Peter's Church, outside the study area, 1.4km to the south-east of the site (Crosby 2003, 7 and Briggs 2011). There are no recorded early medieval remains within the study area.
- 4.2.11 Throughout this period the site was located to the north-west of the main area of settlement and probably lay within open fields being used for agricultural purposes.

Later medieval period (AD 1066–1485)

- 4.2.12 Following the Norman Conquest, William the Conqueror gave the church and manor of Woking to the Norman Osbern and Mayford to William Malet. There is one confirmed entry for Woking in the Domesday Book undertaken in 1086. At this time Woking comprised 33 villagers, 9 smallholders with 20 ploughs and a church held by Osbern also included was a meadow, 32 acres and woodland at 133 pigs (Palmer 1991).
- 4.2.13 Woking Manor was owned by the crown until 1466 when Lady Margaret Beaufort and her third husband, Sir Henry Stafford obtained it by royal grant. Upon her death in 1509 the manor reverted back to the Crown. For the next 253 years the manor passed through various owners until Lord Onslow bought it in 1752. The Onslow family continue to own the manor (VCH 1911, 381-90).
- 4.2.14 The manor house was at Woking Palace, 2.4km to the east of the site. There has been a house on that site since 1272 (Arnold 2009, 6).

Post-medieval period (AD 1485–present)

- 4.2.15 John Norden's map of 1594 (Fig 3) is small scale which depicts the site area as open fields to the north of the River Wey.
- 4.2.16 The earliest map depicting the Manor of Woking is that by John Remnant of 1719 (not reproduced due to poor quality). It shows the site in the west of the manor.
- 4.2.17 John Rocque's map of Surrey of 1768 (Fig 4) adds a little further detail to the area. The site is still undeveloped just to the south of a main road and the Stanford Brook. A number of settlements and farms are shown but all some distance from the site.
- 4.2.18 The Ordnance Survey (OS) 1st edition 6":mile map of 1872/3 (Fig 5) is the first to show the

area in greater detail, confirming Rocque's indication of open fields. A field boundary aligned north-east, south-west is shown within the northern third of the site and a footpath, also aligned north-east, south-west is shown in the southern third of the site. Market gardening is shown around Kingfieldgreen adjoining the east of the site. Open fields are shown surrounding the remainder of the site.

- 4.2.19 No change within the site is shown on the OS 2nd edition 6":mile map of 1897 (Fig 6) and the OS 3rd edition 25":mile map of 1914 (Fig 7). The mapping shows that while the settlement of Kingfieldgreen to the east has grown, it has done so relatively slowly over the 40 year period between maps.
- 4.2.20 The OS 25:mile map of 1935/6 (Fig 8) shows that a sports ground has been constructed in the centre of the site; tennis courts, pavilions/stands to the south; and semi-detached housing fronting Westfield Avenue in the north-western corner of the site.
- 4.2.21 More recent mapping (which has not been reproduced due to being of poor quality) shows that the existing pavilions/stands have been extended and additional building development to the north and south of the stadium has been constructed.

5 Statement of significance

5.1 Introduction

- 5.1.1 The following section discusses historic impacts on the site which may have compromised archaeological survival from earlier periods, identified primarily from historic maps, and information on the likely depth of deposits.
- 5.1.2 In accordance with the NPPF, this is followed by a statement on the likely potential and significance of buried heritage assets within the site, derived from current understanding of the baseline conditions, past impacts, and professional judgement.

5.2 Factors affecting archaeological survival

Natural geology

- 5.2.1 Current ground level is at 24.0m in the north of the site, rising gradually to 25.5m OD in the south-west. Based on geotechnical data from boreholes sunk in the northern part of the site, the level of natural geology within the site is as follows (Jomas Associates 2019a and b):
- The top of truncated Gravel is at 23.7–23.8m OD (1.2–1.0mbgl); and
 - The top of untruncated sand is at 21.4–24.4m OD (3.5–0.2mbgl).
- 5.2.2 Between the top of the natural and the current ground level is modern made ground and undated made ground. The latter may potentially contain remains of archaeological interest.

Past impacts

- 5.2.3 Historic mapping shows that the area of the site has been open fields until the early 20th century when the sports ground in the centre of the site and tennis courts in the south were laid out; and semi-detached housing fronting Westfield Avenue in the north-west of the site were constructed. The type and extent of the foundations of the football stadium, pavilions/stands and tennis courts are not known, however, given the shallow depth of the underlying natural any foundations will have severely truncated or removed completely any archaeological remains within their extent.
- 5.2.4 The semi-detached houses would have had shallow stepped brick footing foundations which, given the limited lack of development within this part of the site, would have truncated any surviving archaeological deposits within their extent. These foundations will only have survived in the north-west corner of the site and are themselves now historical assets, albeit they have removed earlier remains.

Likely depth/thickness of archaeological remains

- 5.2.5 Archaeological remains, if present on the site, are likely to be found immediately below the topsoil, hardstanding and under and between foundations with any cut features extending into the natural geology to an unknown depth.

5.3 Archaeological potential and significance

- 5.3.1 The nature of possible archaeological survival in the area of the proposed development is summarised here, taking into account the levels of natural geology and the level and nature of later disturbance and truncation discussed above.
- 5.3.2 *The site has a low to moderate potential to contain prehistoric remains.* The site's location on well-drained gravel close to a reliable source of water would have made it an attractive area for settlement and farming. Worked and burnt flint and three postholes containing possible in situ wooden posts of Neolithic date; a Neolithic flint axe; and Early to Late Iron Age pottery suggests that there may be activity within the study area. Such remains would be of **low** heritage significance.

- 5.3.3 *The site has a low potential to contain Roman remains.* The site was located some distance from the main roads and no archaeological finds from this period have been identified within the study area.
- 5.3.4 *The site has a low potential to contain Saxon remains.* The site was located on the periphery of the main area of settlement which was concentrated at Old Woking, 600m to the south-east, probably in open fields. No archaeological finds from this period have been identified within the study area.
- 5.3.5 *The site has a low potential to contain medieval remains.* The settlement of Old Woking was concentrated around the Manor of Woking/Woking Palace, 600m to the south-east of the site and did not extend to within the study area. The site would have been in open fields. No archaeological finds from this period have been identified within the study area.
- 5.3.6 *The site has a low potential to contain post-medieval remains.* Available historic mapping shows that early 20th century semi-detached houses fronting Westfield Avenue in the north-west corner of the site were constructed and two field boundaries in the 19th century in the north-west corner and south of the site. Post-medieval remains are likely to comprise the footings of these houses and any such remains would be of **low** heritage significance based on their historical and evidential values. Deeply cut features such as field boundaries may be present, which would be of **low** heritage significance as derived from their historical and evidential value.

6 Impact of proposals

6.1 Proposals

- 6.1.1 The proposed development comprises the redevelopment of the site, following the demolition of all existing buildings and structures, to provide a replacement stadium with ancillary facilities, including flexible retail, hospitality and community spaces, independent retail floorspace (Classes A1/A2/A3), a medical centre (Class D1) and vehicle parking, plus residential accommodation comprising of 1,048 dwellings (Class C3) within 5 buildings of varying heights of between 3 and 10 storeys (and undercroft and part basement levels) on the south and west sides of the site, together with provision of new accesses from Westfield Avenue to car parking, associated landscaping and the provision of a detached residential concierge building. Beneath the five residential blocks will be an undercroft to a maximum depth of 4.0mbgl (20.5m OD) and beneath blocks 4 and 5 in the south of the site will be a basement to a maximum depth of 5.0mbgl (19.5m OD)(Figs 9–11).
- 6.1.2 The type and size of foundations are unknown, however, for the purposes of this assessment raft foundations for the new football stadium and piled foundations to a depth of c 17.0m AOD (c 8.5mbgl) for the five residential blocks have been assumed (Tsz Kan Woo *pers comm*, 29/04/19).

6.2 Implications

- 6.2.1 The identification of physical impacts on buried heritage assets within a site takes into account any activity which would entail ground disturbance, for example site set up works, remediation, landscaping and the construction of parking areas below each residential building and foundations. As it is assumed that the operational (completed development) phase would not entail any ground disturbance there would be no additional archaeological impact and this is not considered further.
- 6.2.2 It is outside the scope of this archaeological report to consider the impact of the proposed development on upstanding structures of historic interest, in the form of physical impacts which would remove, alter, or otherwise change the building fabric, or predicted changes to the historic character and setting of historic buildings and structures within the site or outside it.
- 6.2.3 The main potential for archaeological survival is the foundations of the early 20th century semi-detached houses which are of low heritage significance. There is likely to be possible survival for prehistoric remains and later medieval agricultural remains both of which are of low significance.

Hardstanding construction

- 6.2.4 Excavations for the construction for the hardstanding areas for the parking are likely to cause ground disturbance up to 1.0m below the ground surface, and deeper where there is levelling. Shallow archaeological remains within these areas would be severely truncated or removed completely but the bases of deeply cut features, such as boundary ditches etc. would survive although their context would be lost.

Foundations for the football stadium

- 6.2.5 The detail of the foundations for the proposed football stadium and residential accommodation is not known. However, it is anticipated that they could vary from shallow foundations for smaller lower buildings to piled foundations for larger taller buildings. The impacts of such are as follows:
- Excavation for standard strip and pad foundations would remove archaeological remains within the footprint of the foundation to a typical depth of 1.0–1.5mbgl as assumed for the purposes of this assessment. It is possible that the bases of deeply cut archaeological features such as pits, ditches and wells would remain intact beneath these impact levels, but their context would be lost.

- Piling for larger buildings would entirely remove any archaeological remains from within the footprint of each pile. Pile caps and ground beams would have a similar impact as standard strip and pad foundations.

Undercroft below each residential building

6.2.6 Any archaeological remains would be entirely removed within the footprint of the ground reduction. There may be additional impacts from piling beneath each area. It is assumed for the purposes of this assessment that the area would be excavated following the insertion of the perimeter wall and prior to the insertion of piled foundations.

Basement below blocks 4 and 5

6.2.7 Any archaeological remains would be entirely removed within the footprint of the ground reduction. There may be additional impacts from piling. It is assumed for the purposes of this assessment that the basement area would be excavated following the insertion of the perimeter wall and prior to the insertion of piled foundations.

Service / utilities trenches/ drains and planting

6.2.8 The excavation of any new service trenches and drains would extend to a depth of 1.0–1.5mbgl as assumed for the purposes of this assessment. Ground intrusion from any tree planting and subsequent root action would potentially reach a similar depth. This would entirely remove any archaeological remains within the trench footprint or tree-root extent.

7 Conclusion and recommendations

- 7.1.1 There are no designated heritage assets within the site and it does not lie within an Archaeological Priority Area, as designated by Woking Borough Council.
- 7.1.2 Archaeological survival potential across the majority of the site is expected to be low reflecting the presence of existing foundations and the shallow depth of the underlying naturals, i.e. Gravel to the west and Bagshot Sands to the east. Prior to the construction of the existing football stadium and semi-detached housing in the early 20th century the site was open fields some distance from centres of habitation. Excavation for the foundations of the football stadium and semi-detached housing will have severely truncated or completely removed all archaeological remains within their footprint.
- 7.1.3 The scheme comprises the redevelopment of the site, following the demolition of all existing buildings and structures, to provide a replacement stadium with ancillary facilities, including flexible retail, hospitality and community spaces, independent retail floorspace (Classes A1/A2/A3), a medical centre (Class D1) and vehicle parking, plus residential accommodation comprising of 1,048 dwellings (Class C3) within 5 buildings of varying heights of between 3 and 10 storeys (and undercroft and part basement levels) on the south and west sides of the site, together with provision of new accesses from Westfield Avenue to car parking, associated landscaping and the provision of a detached residential concierge building.
- 7.1.4 The proposed football stadium is in an area which has been previously truncated and it is likely that given the shallow depth of the underlying naturals, any archaeological remains will have been severely truncated or removed completely. The excavation for the undercroft and basement areas below the residential buildings would remove all archaeological remains within their footprint.
- 7.1.5 Table 1 summarises the known or likely buried assets within the site, their significance, and the impact of the proposed scheme on asset significance.

Table 1: Impact upon heritage assets (prior to mitigation)

Asset	Asset Significance	Impact of proposed scheme
Isolated prehistoric artefacts (low to moderate potential)	Low	Excavation of foundations for new football stadium; excavation of undercroft and basement areas below each residential building for car parking; piling. Significance of asset reduced to negligible or nil.
Evidence for 19th and 20th century field boundaries (low potential)	Low	

- 7.1.6 Based on the evidence, only archaeological remains of low significance are expected within the site. In the light of the limited archaeological survival potential of the site and despite the size and nature of the excavation for the proposed development it is unlikely that the local authority would require further investigation prior to determination. However, given the limited available information on archaeological survival within the site it is likely that Woking Borough Council (WBC) would require investigation as part of a condition to ensure that no previously unidentified remains are lost without record. Such an investigation could take the form of a watching brief during ground works to record the presence, nature and extent and significance of any archaeological remains. Any archaeological work would need to be undertaken in accordance with an approved Written Scheme of Investigation (WSI) and could be carried out under the terms of a standard archaeological planning condition set out under the granting of planning consent.

8 Gazetteer of known historic environment assets

- 8.1.1 The gazetteer lists known historic environment sites and finds within the 1km-radius study area around the site. The gazetteer should be read in conjunction with Fig 2.
- 8.1.2 The Surrey HER data contained within this gazetteer was obtained on 08/03/2019 and is the copyright of Surrey County Council 2019.
- 8.1.3 Historic England statutory designations data © Historic England 2018. Contains Ordnance Survey data © Crown copyright and database right 2019. The Historic England GIS Data contained in this material was obtained in September 2018. The most publicly available up to date Historic England GIS Data can be obtained from <http://www.historicengland.org.uk>.

Abbreviations

CA – Cotswold Archaeology

NHL – National Heritage List for England (Historic England)

SCAU – Surrey County Archaeological Unit

WA – Wessex Archaeology

HEA No.	Woking Description	Site code/HER/NHL No.
1	Westfield Tip, Woking <i>Test Pits</i> No further details recorded	ESE1839
2	Moor Lane, Woking <i>Evaluation. CA</i> The evaluation revealed a number of ditches, likely to be former field boundaries with the smaller ditches as internal drainage gullies or enclosures. For the most part these features remained undated. A single Late Iron Age or Romano-British find was considered to be residual.	ESE3202 MSE22626
3a	Westfield Tip and Woking Park, Hoe Valley, Woking <i>Evaluation. WA, 2010</i> Two phases in advance of flood protection, landscaping, tip remediation and redevelopment alongside the Hoe Stream. The first phase revealed a significant depth of alluvial deposits, late 19th and early 20th artefacts likely to have been washed up and deposited by the Hoe in a trench closest to the modern path of the stream, but no deposits of archaeological interest.	ESE3285
3b	Westfield Tip and Woking Park, Hoe Valley, Woking <i>Trial Trench. WA, 2011</i> Second phase of evaluation by WA in advance of flood protection, landscaping, tip remediation and redevelopment alongside the Hoe Stream. The second phase revealed alluvial layers within all of the trenches, confirming that the site historically lay within the floodplain. Evidence for a 1963 flood was identified in two of the trenches, with a layer of alluvium sealing late 19th to 20th century made ground. Evidence of prehistoric activity was revealed towards the central area of the site, with a likely palaeo-channel containing worked and burnt flints of probable Neolithic date located close to three postholes containing, possible in situ, wooden posts. Alluvial layers within a handful of areas around these features recorded accumulations of burnt flint which may be the result of natural or deliberate deposition. A further ditch close to these features contained fragments of post-medieval/modern leather, most likely from the sole of a shoe. A number of ditches were also revealed in trenches close by. The majority could not be dated, but two recorded within one trench were cut into the same layer of alluvium and then, later, covered by another alluvial deposit, with pottery dated from the Early to Mid Iron Age recovered from one. The results of the evaluation indicate the potential of the central area for containing a number of different phases of activity, with earlier phases sealed by alluvial layers caused by the various flooding episodes, and further work was undertaken in 2011.	ESE3287 MSE19042 MSE19045 MSE19046

HEA No.	Woking Description	Site code/HER/NHL No.
4	Westfield County First School, near Woking <i>Evaluation. SCAU, 1994</i> An archaeological evaluation of this disused school site, found a narrow gully and small pit of unknown date, thought likely to be of some antiquity, and one abraded sherd of Roman date.	ESE1843 MSE4979
5	Woking <i>Findspot – Neolithic flint axe</i> A Neolithic flint axe from Woking is in the British Museum (unregistered). No further details recorded.	MSE2804

9 Planning framework

9.1 National Planning Policy Framework

- 9.1.1 The Government issued the *National Planning Policy Framework* (NPPF) in March 2012 (DCLG 2012) and supporting *Planning Practice Guidance* in 2014 (DCLG 2014). The 2012 NPPF was revised and a new NPPF published in July 2018, with minor revisions in February 2019 (MHCLG 2019).

Conserving and enhancing the historic environment

- 9.1.2 The NPPF section concerning “Conserving and enhancing the historic environment” (section 12 of the NPPF 2012) has been replaced by NPPF 2018 Section 16 (unchanged in February 2019), reproduced in full below:

Para 184. Heritage assets range from sites and buildings of local historic value to those of the highest significance, such as World Heritage Sites which are internationally recognised to be of Outstanding Universal Value. These assets are an irreplaceable resource, and should be conserved in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life of existing and future generations.

Para 185. Plans should set out a positive strategy for the conservation and enjoyment of the historic environment, including heritage assets most at risk through neglect, decay or other threats. This strategy should take into account:

- a) the desirability of sustaining and enhancing the significance of heritage assets, and putting them to viable uses consistent with their conservation;
- b) the wider social, cultural, economic and environmental benefits that conservation of the historic environment can bring;
- c) the desirability of new development making a positive contribution to local character and distinctiveness; and
- d) opportunities to draw on the contribution made by the historic environment to the character of a place.

Para 186. When considering the designation of conservation areas, local planning authorities should ensure that an area justifies such status because of its special architectural or historic interest, and that the concept of conservation is not devalued through the designation of areas that lack special interest.

Para 187. Local planning authorities should maintain or have access to a historic environment record. This should contain up-to-date evidence about the historic environment in their area and be used to:

- a) assess the significance of heritage assets and the contribution they make to their environment; and
- b) predict the likelihood that currently unidentified heritage assets, particularly sites of historic and archaeological interest, will be discovered in the future.

Para 188. Local planning authorities should make information about the historic environment, gathered as part of policy-making or development management, publicly accessible.

Proposals affecting heritage assets

Para 189. In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance. As a minimum the relevant historic environment record should have been consulted and the heritage assets assessed using appropriate expertise where necessary. Where a site on which development is proposed includes, or has the potential to include, heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation.

Para 190. Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary

expertise. They should take this into account when considering the impact of a proposal on a heritage asset, to avoid or minimise any conflict between the heritage asset's conservation and any aspect of the proposal.

Para 191. Where there is evidence of deliberate neglect of, or damage to, a heritage asset, the deteriorated state of the heritage asset should not be taken into account in any decision.

Para 192. In determining applications, local planning authorities should take account of:

- a) the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation;
- b) the positive contribution that conservation of heritage assets can make to sustainable communities including their economic vitality; and
- c) the desirability of new development making a positive contribution to local character and distinctiveness.

Considering potential impacts

Para 193. When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation (and the more important the asset, the greater the weight should be). This is irrespective of whether any potential harm amounts to substantial harm, total loss or less than substantial harm to its significance.

Para 194. Any harm to, or loss of, the significance of a designated heritage asset (from its alteration or destruction, or from development within its setting), should require clear and convincing justification. Substantial harm to or loss of:

- a) grade II listed buildings, or grade II registered parks or gardens, should be exceptional;
- b) assets of the highest significance, notably scheduled monuments, protected wreck sites, registered battlefields, grade I and II* listed buildings, grade I and II* registered parks and gardens, and World Heritage Sites, should be wholly exceptional.

Para 195. Where a proposed development will lead to substantial harm to (or total loss of significance of) a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or total loss is necessary to achieve substantial public benefits that outweigh that harm or loss, or all of the following apply:

- a) the nature of the heritage asset prevents all reasonable uses of the site; and
- b) no viable use of the heritage asset itself can be found in the medium term through appropriate marketing that will enable its conservation; and
- c) conservation by grant-funding or some form of not for profit, charitable or public ownership is demonstrably not possible; and
- d) the harm or loss is outweighed by the benefit of bringing the site back into use.

Para 196. Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal including, where appropriate, securing its optimum viable use.

Para 197. The effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that directly or indirectly affect non-designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset.

Para 198. Local planning authorities should not permit the loss of the whole or part of a heritage asset without taking all reasonable steps to ensure the new development will proceed after the loss has occurred.

Para 199. Local planning authorities should require developers to record and advance understanding of the significance of any heritage assets to be lost (wholly or in part) in a manner proportionate to their importance and the impact, and to make this evidence (and any archive generated) publicly accessible. However, the ability to record evidence of our past should not be a factor in deciding whether such loss should be permitted.

Para 200. Local planning authorities should look for opportunities for new development within Conservation Areas and World Heritage Sites, and within the setting of heritage assets, to enhance or better reveal their significance. Proposals that preserve those elements of the setting that make a positive contribution to the asset (or which better reveal its significance) should be treated favourably.

Para 201. Not all elements of a Conservation Area or World Heritage Site will necessarily contribute to its significance. Loss of a building (or other element) which makes a positive contribution to the significance of the Conservation Area or World Heritage Site should be treated either as substantial harm under paragraph 195 or less than substantial harm under paragraph 196, as appropriate, taking into account the relative significance of the element affected and its contribution to the significance of the Conservation Area or World Heritage Site as a whole.

Para 202. Local planning authorities should assess whether the benefits of a proposal for enabling development, which would otherwise conflict with planning policies but which would secure the future conservation of a heritage asset, outweigh the disbenefits of departing from those policies.

9.2 Local planning policy

- 9.2.1 Following the Planning and Compulsory Purchase Act 2004, Planning Authorities have replaced their Unitary Development Plans (UDPs), Local Plans and Supplementary Planning Guidance with a new system of Local Development Frameworks (LDFs). UDP policies have been either 'saved' or 'deleted'. In most cases archaeology policies are likely to be 'saved' because there have been no significant changes in legislation or advice at a national level.
- 9.2.2 Woking Borough Council's Core Strategy was adopted in October 2012. It covers the period to 2027 and provides a clear vision of what the area will look by then and the means to achieve it. The Policy relevant to buried heritage assets is:

CS20: Heritage and conservation

New development must respect and enhance the character and appearance of the area in which it is proposed whilst making the best use of the land available. New development should also make a positive contribution to the character, distinctiveness and significance of the historic environment, including heritage assets at risk through neglect, decay or other threats.

The heritage assets of the Borough will be protected and enhanced in accordance with relevant legislation and national guidance as set out in the National Planning Policy Framework. The definition of what comprises the heritage assets of the Borough is included in the Glossary and also where relevant identified on the Proposals Map.

There will be a presumption against any development that will be harmful to a listed building. Alterations and extensions to listed buildings must respect the host building in terms of scale, design, use of materials, retention of the structure and any features of special historic or architectural importance. Planning applications will be refused for any alteration or extension to a listed building that will not preserve the building or its setting. A listed building consent will be required for any development that will affect a statutory listed building.

On all development sites over 0.4 hectares an archaeological evaluation and investigation will be necessary if, in the opinion of the County Archaeologist, an archaeological assessment demonstrates that the site has archaeological potential.

Within Areas of High Archaeological Potential (as illustrated on the Proposals Map), development will not be permitted unless the following are satisfied:

- Submission of an archaeological assessment of the site.
- Where archaeological importance of the site has been identified, a programme setting out a full archaeological survey of the site has been submitted and agreed with the Council.

The Council will work proactively with all stakeholders to ensure the conservation, enhancement and enjoyment of the historic environment, including identifying opportunities to mitigate and adapt to climate change where that will not harm the integrity of the heritage asset.

10 Determining significance

10.1.1 'Significance' lies in the value of a heritage asset to this and future generations because of its heritage interest, which may be archaeological, architectural, artistic or historic. Archaeological interest includes an interest in carrying out an expert investigation at some point in the future into the evidence a heritage asset may hold of past human activity, and may apply to standing buildings or structures as well as buried remains. Known and potential heritage assets within the site and its vicinity have been identified from national and local designations, HER data and expert opinion. The determination of the significance of these assets is based on statutory designation and/or professional judgement against four values (EH 2008):

- **Evidential value:** the potential of the physical remains to yield evidence of past human activity. This might take into account date; rarity; state of preservation; diversity/complexity; contribution to published priorities; supporting documentation; collective value and comparative potential.
- **Aesthetic value:** this derives from the ways in which people draw sensory and intellectual stimulation from the heritage asset, taking into account what other people have said or written;
- **Historical value:** the ways in which past people, events and aspects of life can be connected through heritage asset to the present, such a connection often being illustrative or associative;
- **Communal value:** this derives from the meanings of a heritage asset for the people who know about it, or for whom it figures in their collective experience or memory; communal values are closely bound up with historical, particularly associative, and aesthetic values, along with and educational, social or economic values.

10.1.2 Consultation on draft revisions to the original *Conservation Principles* document which set out the four values was open from November 2017 until February 2018. The revisions aim to make them more closely aligned with the terms used in the NPPF (which are also used in designation and planning legislation): i.e. as archaeological, architectural, artistic and historic interest. This is in the interests of consistency, and to support the use of the Conservation Principles in more technical decision-making (HE 2017).

10.1.3 Table 2 gives examples of the significance of designated and non-designated heritage assets.

Table 2: Significance of heritage assets

Heritage asset description	Significance
World heritage sites Scheduled monuments Grade I and II* listed buildings Historic England Grade I and II* registered parks and gardens Protected Wrecks Heritage assets of national importance	Very high (International/ national)
Historic England Grade II registered parks and gardens Conservation areas Designated historic battlefields Grade II listed buildings Burial grounds Protected heritage landscapes (e.g., ancient woodland or historic hedgerows) Heritage assets of regional or county importance	High (national/ regional/ county)
Heritage assets with a district value or interest for education or cultural appreciation Locally listed buildings	Medium (District)
Heritage assets with a local (i.e. parish) value or interest for education or cultural appreciation	Low (Local)
Historic environment resource with no significant value or interest	Negligible
Heritage assets that have a clear potential, but for which current knowledge is insufficient to allow significance to be determined	Uncertain

10.1.4 Unless the nature and exact extent of buried archaeological remains within any given area has been determined through prior investigation, significance is often uncertain.

11 Non-archaeological constraints

- 11.1.1 The purpose of this section is to highlight to decision makers any relevant non-archaeological constraints identified during the study, that might affect future archaeological field investigation on the site (should this be recommended). The information has been assembled using only those sources as identified in section 2 and section 13.4, in order to assist forward planning for the project designs, working schemes of investigation and risk assessments that would be needed prior to any such field work. MOLA has used its best endeavours to ensure that the sources used are appropriate for this task but has not independently verified any details. Under the Health & Safety at Work Act 1974 and subsequent regulations, all organisations are required to protect their employees as far as is reasonably practicable by addressing health and safety risks. The contents of this section are intended only to support organisations operating on this site in fulfilling this obligation and do not comprise a comprehensive risk assessment.
- 11.1.2 It is anticipated that live services are present on the site, the locations of which have not been identified by this archaeological report. Other than this, no other non-archaeological constraints to any archaeological fieldwork have been identified within the site.

12 Glossary

<i>Alluvium</i>	Sediment laid down by a river. Can range from sands and gravels deposited by fast flowing water and clays that settle out of suspension during overbank flooding. Other deposits found on a valley floor are usually included in the term alluvium (e.g., peat).
<i>Archaeological Priority Area/Zone</i>	Areas of archaeological priority, significance, potential or other title, often designated by the local authority.
<i>Brickearth</i>	A fine-grained silt believed to have accumulated by a mixture of processes (e.g., wind, slope and freeze-thaw) mostly since the Last Glacial Maximum around 17,000BP.
<i>B.P.</i>	Before Present, conventionally taken to be 1950
<i>Bronze Age</i>	2,000–600 BC
<i>Building recording</i>	Recording of historic buildings (by a competent archaeological organisation) is undertaken 'to document buildings, or parts of buildings, which may be lost as a result of demolition, alteration or neglect', amongst other reasons. Four levels of recording are defined by Royal Commission on the Historical Monuments of England (RCHME) and Historic England. Level 1 (basic visual record); Level 2 (descriptive record), Level 3 (analytical record), and Level 4 (comprehensive analytical record)
<i>Built heritage</i>	Upstanding structure of historic interest.
<i>Colluvium</i>	A natural deposit accumulated through the action of rainwash or gravity at the base of a slope.
<i>Conservation area</i>	An area of special architectural or historic interest the character or appearance of which it is desirable to preserve or enhance. Designation by the local authority often includes controls over the demolition of buildings; strengthened controls over minor development; and special provision for the protection of trees.
<i>Cropmarks</i>	Marks visible from the air in growing crops, caused by moisture variation due to subsurface features of possible archaeological origin (i.e. ditches or buried walls).
<i>Cut-and-cover [trench]</i>	Method of construction in which a trench is excavated down from existing ground level and which is subsequently covered over and/or backfilled.
<i>Cut feature</i>	Archaeological feature such as a pit, ditch or well, which has been cut into the then-existing ground surface.
<i>Devensian</i>	The most recent cold stage (glacial) of the Pleistocene. Spanning the period from c 70,000 years ago until the start of the Holocene (10,000 years ago). Climate fluctuated within the Devensian, as it did in other glacials and interglacials. It is associated with the demise of the Neanderthals and the expansion of modern humans.
<i>Early medieval</i>	AD 410–1066. Also referred to as the Saxon period.
<i>Evaluation (archaeological)</i>	A limited programme of non-intrusive and/or intrusive fieldwork which determines the presence or absence of archaeological features, structures, deposits, artefacts or ecofacts within a specified area.
<i>Excavation (archaeological)</i>	A programme of controlled, intrusive fieldwork with defined research objectives which examines, records and interprets archaeological remains, retrieves artefacts, ecofacts and other remains within a specified area. The records made and objects gathered are studied and the results published in detail appropriate to the project design.
<i>Findspot</i>	Chance find/antiquarian discovery of artefact. The artefact has no known context, is either residual or indicates an area of archaeological activity.
<i>Geotechnical</i>	Ground investigation, typically in the form of boreholes and/or trial/test pits, carried out for engineering purposes to determine the nature of the subsurface deposits.
<i>Head</i>	Weathered/soliflucted periglacial deposit (i.e. moved downslope through natural processes).
<i>Heritage asset</i>	A building, monument, site, place, area or landscape positively identified as having a degree of significance meriting consideration in planning decisions. Heritage assets are the valued components of the historic environment. They include designated heritage assets and assets identified by the local planning authority (including local listing).
<i>Historic environment assessment</i>	A written document whose purpose is to determine, as far as is reasonably possible from existing records, the nature of the historic environment resource/heritage assets within a specified area.
<i>Historic Environment Record (HER)</i>	Archaeological and built heritage database held and maintained by the County authority. Previously known as the Sites and Monuments Record
<i>Holocene</i>	The most recent epoch (part) of the Quaternary, covering the past 10,000 years during which time a warm interglacial climate has existed. Also referred to as the 'Postglacial' and (in Britain) as the 'Flandrian'.
<i>Iron Age</i>	600 BC–AD 43

<i>Later medieval</i>	AD 1066 – 1500
<i>Last Glacial Maximum</i>	Characterised by the expansion of the last ice sheet to affect the British Isles (around 18,000 years ago), which at its maximum extent covered over two-thirds of the present land area of the country.
<i>Locally listed building</i>	A structure of local architectural and/or historical interest. These are structures that are not included in the Secretary of State's Listing but are considered by the local authority to have architectural and/or historical merit
<i>Listed building</i>	A structure of architectural and/or historical interest. These are included on the Secretary of State's list, which affords statutory protection. These are subdivided into Grades I, II* and II (in descending importance).
<i>Made Ground</i>	Artificial deposit. An archaeologist would differentiate between modern made ground, containing identifiably modern inclusion such as concrete (but not brick or tile), and undated made ground, which may potentially contain deposits of archaeological interest.
<i>Mesolithic</i>	12,000 – 4,000 BC
<i>National Record for the Historic Environment (NRHE)</i>	National database of archaeological sites, finds and events as maintained by Historic England in Swindon. Generally not as comprehensive as the country HER.
<i>Neolithic</i>	4,000 – 2,000 BC
<i>Ordnance Datum (OD)</i>	A vertical datum used by Ordnance Survey as the basis for deriving altitudes on maps.
<i>Palaeo-environmental</i>	Related to past environments, i.e. during the prehistoric and later periods. Such remains can be of archaeological interest, and often consist of organic remains such as pollen and plant macro fossils which can be used to reconstruct the past environment.
<i>Palaeolithic</i>	700,000–12,000 BC
<i>Palaeochannel</i>	A former/ancient watercourse
<i>Peat</i>	A build-up of organic material in waterlogged areas, producing marshes, fens, mires, blanket and raised bogs. Accumulation is due to inhibited decay in anaerobic conditions.
<i>Pleistocene</i>	Geological period pre-dating the Holocene.
<i>Post-medieval</i>	AD 1500–present
<i>Preservation by record</i>	Archaeological mitigation strategy where archaeological remains are fully excavated and recorded archaeologically and the results published. For remains of lesser significance, preservation by record might comprise an archaeological watching brief.
<i>Preservation in situ</i>	Archaeological mitigation strategy where nationally important (whether Scheduled or not) archaeological remains are preserved <i>in situ</i> for future generations, typically through modifications to design proposals to avoid damage or destruction of such remains.
<i>Registered Historic Parks and Gardens</i>	A site may lie within or contain a registered historic park or garden. The register of these in England is compiled and maintained by Historic England.
<i>Residual</i>	When used to describe archaeological artefacts, this means not <i>in situ</i> , i.e. Found outside the context in which it was originally deposited.
<i>Roman</i>	AD 43–410
<i>Scheduled Monument</i>	An ancient monument or archaeological deposits designated by the Secretary of State as a 'Scheduled Ancient Monument' and protected under the Ancient Monuments Act.
<i>Site</i>	The area of proposed development
<i>Site codes</i>	Unique identifying codes allocated to archaeological fieldwork sites, e.g., evaluation, excavation, or watching brief sites.
<i>Study area</i>	Defined area surrounding the proposed development in which archaeological data is collected and analysed in order to set the site into its archaeological and historical context.
<i>Solifluction, Soliflucted</i>	Creeping of soil down a slope during periods of freeze and thaw in periglacial environments. Such material can seal and protect earlier landsurfaces and archaeological deposits which might otherwise not survive later erosion.
<i>Stratigraphy</i>	A term used to define a sequence of visually distinct horizontal layers (strata), one above another, which form the material remains of past cultures.
<i>Truncate</i>	Partially or wholly remove. In archaeological terms remains may have been truncated by previous construction activity.
<i>Watching brief (archaeological)</i>	A formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons.

13 Bibliography

13.1 Published and documentary sources

- Arnold P, 2009 *Woking Palace: Henry VIII's Royal Palace. The official guide to the Palace, fourth edition*
- Briggs R J S Woking Hundred: Testing Baxter's model of land tenure and royal patronage in the early English kingdom, <http://surreymedieval.wordpress.com>
- ClfA [Chartered Institute for Archaeologists] 2014a, *Standards and guidance for commissioning work or providing consultancy advice on archaeology and the historic environment*, Published December 2014, Reading
- ClfA [Chartered Institute for Archaeologists] 2014b, *Standards and guidance for the archaeological investigation and recording of standing buildings or structures*, Published December 2014, Reading
- ClfA [Chartered Institute for Archaeologists] 2017, *Standards and guidance for historic environment desk-based assessment*, Published December 2014, updated January 2017, Reading
- Crosby, A 2003 *A History of Woking*
- DCLG [Department of Communities and Local Government], March 2012 *National Planning Policy Framework*
- DCLG [Department of Communities and Local Government], March 2014 *Conserving and Enhancing the Historic Environment: Planning Practice Guide*
- Domesday Book, A Complete Translation*, eds Williams, A. and Martin, G.H. 1992, 2002. London: Penguin Books.
- EH [English Heritage], 2008 *Conservation principles, policies and guidance*. Swindon
- HE [Historic England] 2015a, *The Setting of Heritage Assets – Historic Environment Good Practice Advice in Planning: 3*. Historic England in collaboration with the Historic Environment Forum, second edition, Historic England July 2015.
- HE [Historic England] 2015b *Managing Significance in Decision-Taking in the Historic Environment – Historic Environment Good Practice Advice in Planning: 2*. Historic England in collaboration with the Historic Environment Forum, second edition, Historic England July 2015.
- HE [Historic England] 2017 *Conservation Principles for the Sustainable Management of the Historic Environment*, Consultation Draft, 10th November 2017
<https://content.historicengland.org.uk/content/docs/guidance/conservation-principles-consultation-draft.pdf>
- Humphery-Smith C, 1984 *The Phillimore Atlas and Index of Parish Registers*.
- Jomas Associates Limited 2018 *Desk Study/Preliminary Risk Assessment for Woking Football Club*
- Jomas Associates Limited 2019a *Preliminary Exploratory Hole Logs (BH1 – BH2) for Woking Football Club*
- Jomas Associates Limited 2019b *Preliminary Exploratory Hole Logs (BH3 – BH4) for Woking Football Club*
- MHCLG [Ministry of Housing, Communities and Local Government], 2019 *National Planning Policy Framework*, revised February 2019
- 'Parishes: Woking', in *A History of the County of Surrey: Volume 3*, ed. H E Malden (London, 1911), pp. 381-390. *British History Online* <http://www.britishhistory.org/vch/surrey/vol3/pp381-390> [accessed 15 April 2019]
- Palmer, M 1991 *Surrey Investigations-Woking*. Surrey County Council
- Smith, G 2005 *Surrey Placenames*. Loughborough
- Woking Borough Council 2012 *Woking Core Strategy, October 2012*

13.2 Other Sources

British Geological Survey online historic geology borehole data and digital drift and solid geology data
Historic England designation data
Groundsure historic Ordnance Survey mapping
Surrey County Council Historic Environment Record

13.3 Cartographic sources

John Norden's 250 years of map making in the County of Surrey, sheet 3b, 1594
 John Rocque's map of Surrey, 1768

Ordnance Survey maps

Ordnance Survey 1st edition 6" map (1872/3)
 Ordnance Survey 2nd edition 6" map (1897)
 Ordnance Survey 3rd edition 6" map (1914)
 Ordnance Survey 25" map (1935/6)

Engineering/Architects drawings

Leach Rhodes Walker, Proposed Lower Ground Floor (Colour), drg no. 7884-L(00)78L, 1:500 @ A1, 06/11/2019
 Leach Rhodes Walker, Proposed Basement (Colour), drg no. 7884-L(00)283D, 1:500 @ A1, 06/11/2019
 Leach Rhodes Walker, Block 1 Sections, drg no. 7884-L(00)2901A, 1:200 @ A1, 06/11/19
 Woods Hardwick; Woking Football Club and David Lloyd Gym, Woking Topographic Survey sheet 1 of 3, drg no. 0189-7-851A, 1:200 at A0, 26/09/2018
 Woods Hardwick, Woking Football Club and David Lloyd Gym, Woking Topographic Survey sheet 2 of 3, drg no. 0189-7-852A, 1:200 at A0, 26/09/2018
 Woods Hardwick, Woking Football Club and David Lloyd Gym, Woking Topographic Survey sheet 3 of 3, drg no. 0189-7-853A, 1:200 at A0, 26/09/2018

13.4 Available site survey information checklist

Information from client	Available	Format	Obtained
Plan of existing site services (overhead/buried)	not known	-	N
Levelled site survey as existing (ground and buildings)	Y	pdf	Y
Contamination survey data ground and buildings (inc. asbestos)	not known	-	N
Geotechnical report	Y	pdf	Y
Envirocheck report	not known	pdf	N
Information obtained from non-client source	Carried out	Internal inspection of buildings	
Site inspection	Y		Y

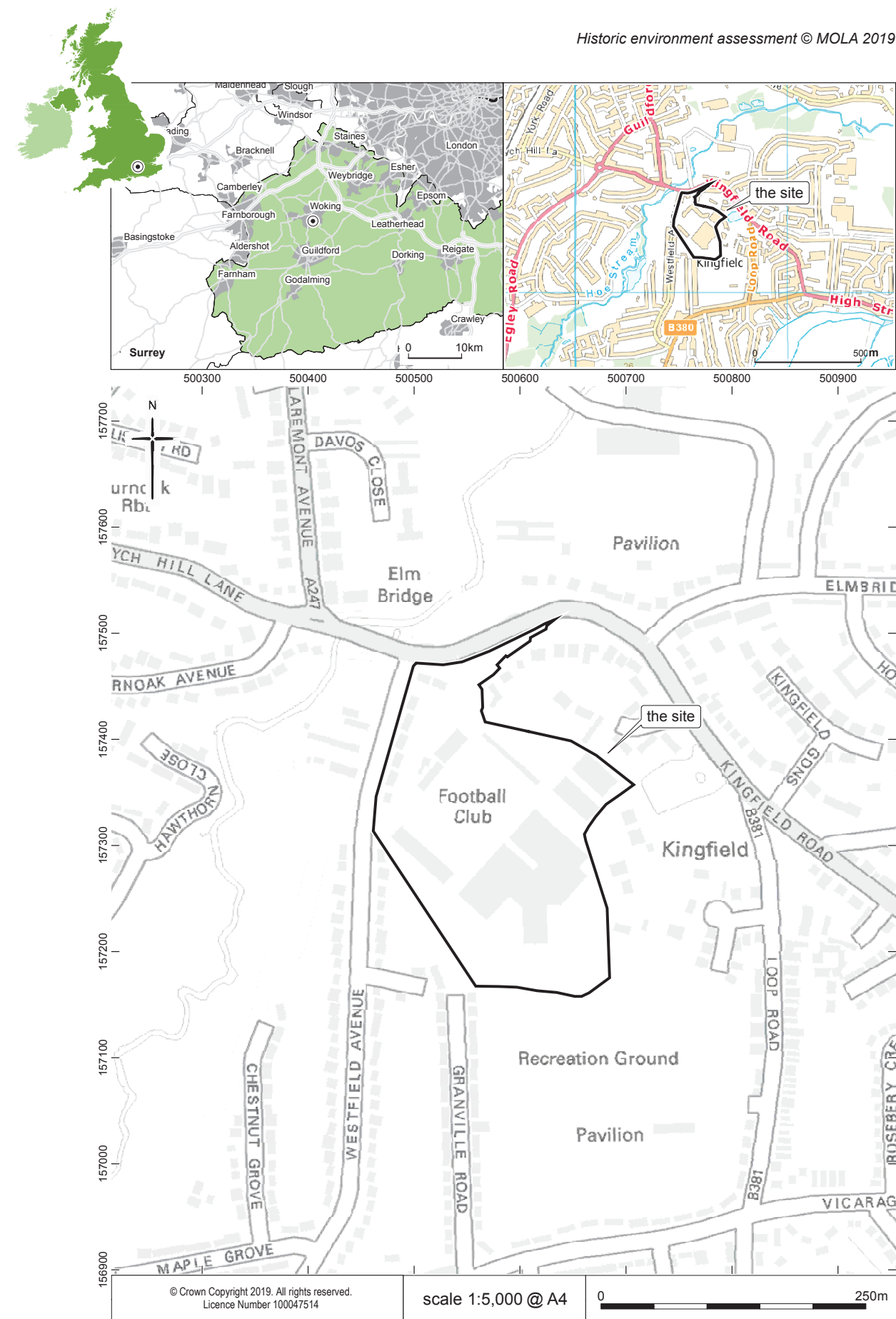


Fig 1 Site location

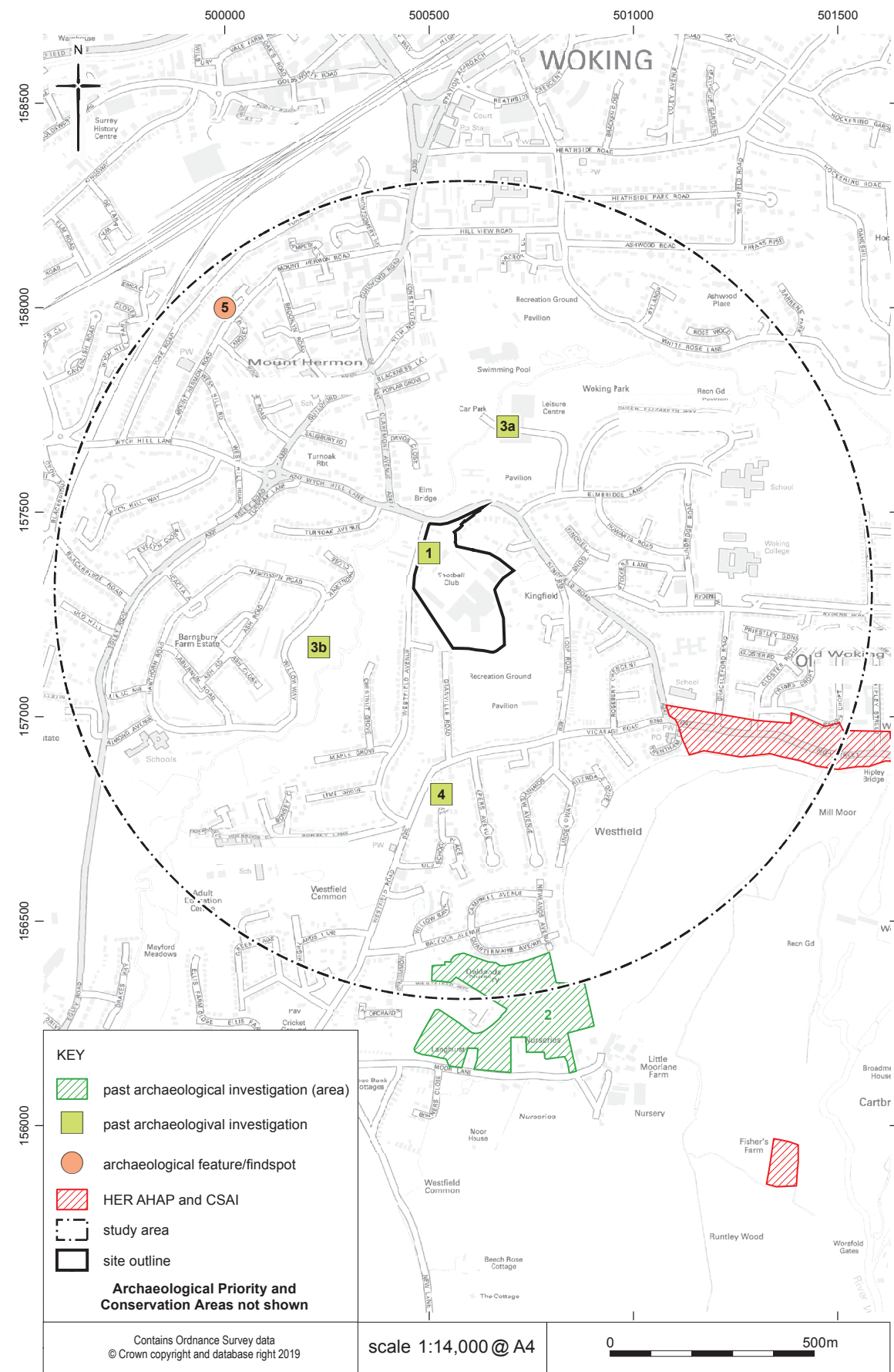


Fig 2 Historic environment features map

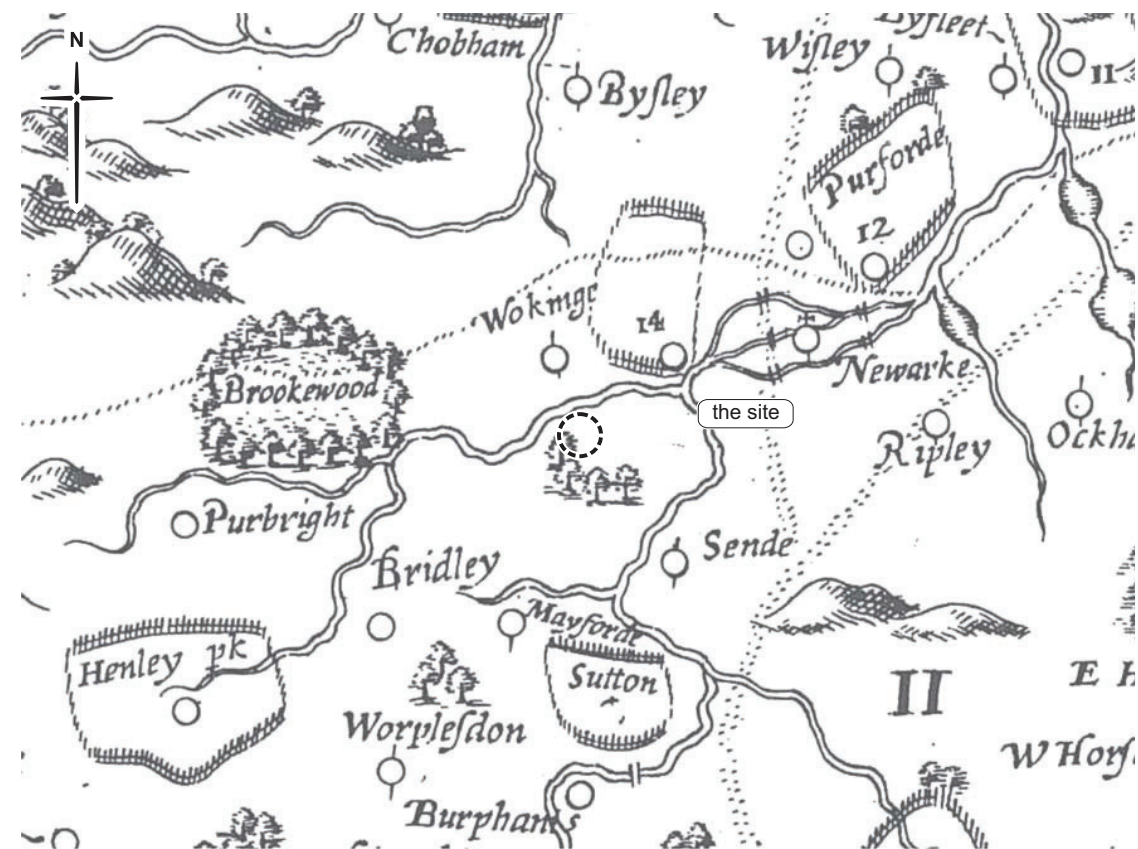


Fig 3 John Norden's 250 years of map making in the County of Surrey, sheet no. 3b, 1594.

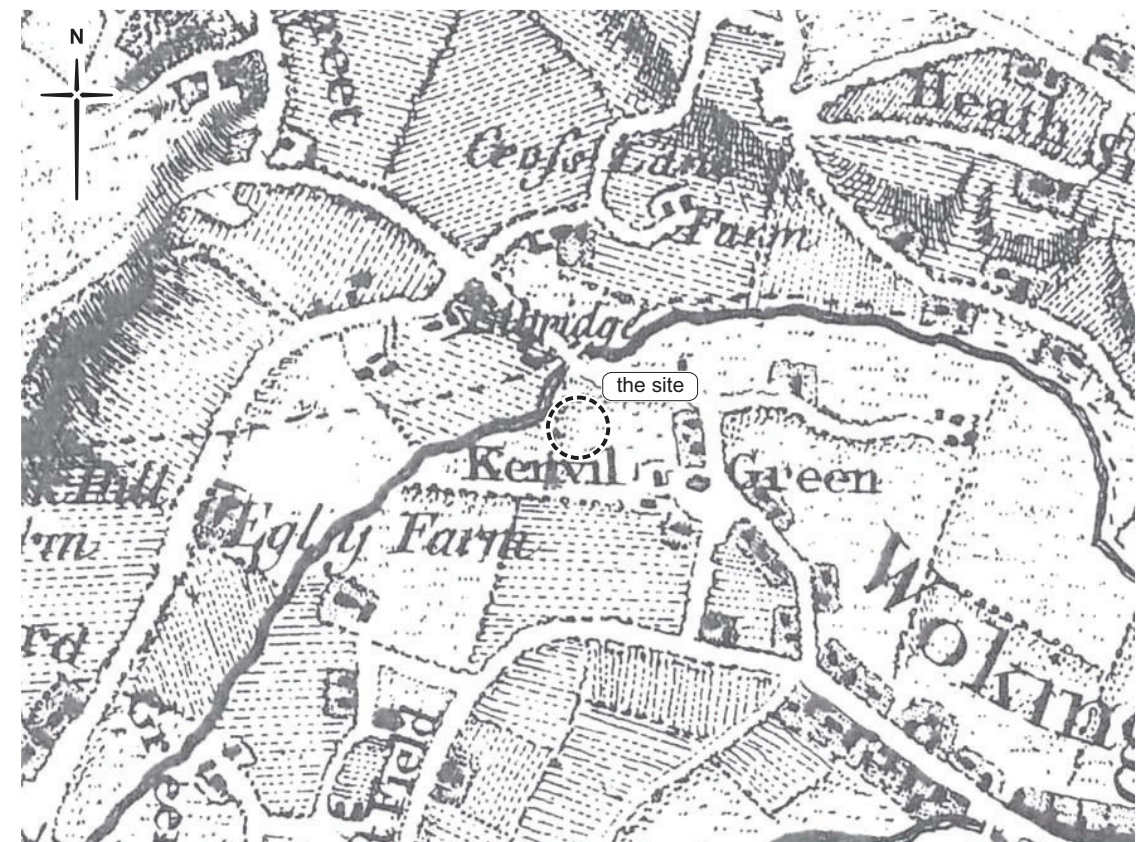


Fig 4 John Rocque's map of Surrey, 1768.



Fig 5 Ordnance Survey 1st edition 6":mile map of 1872/3 (not to scale).

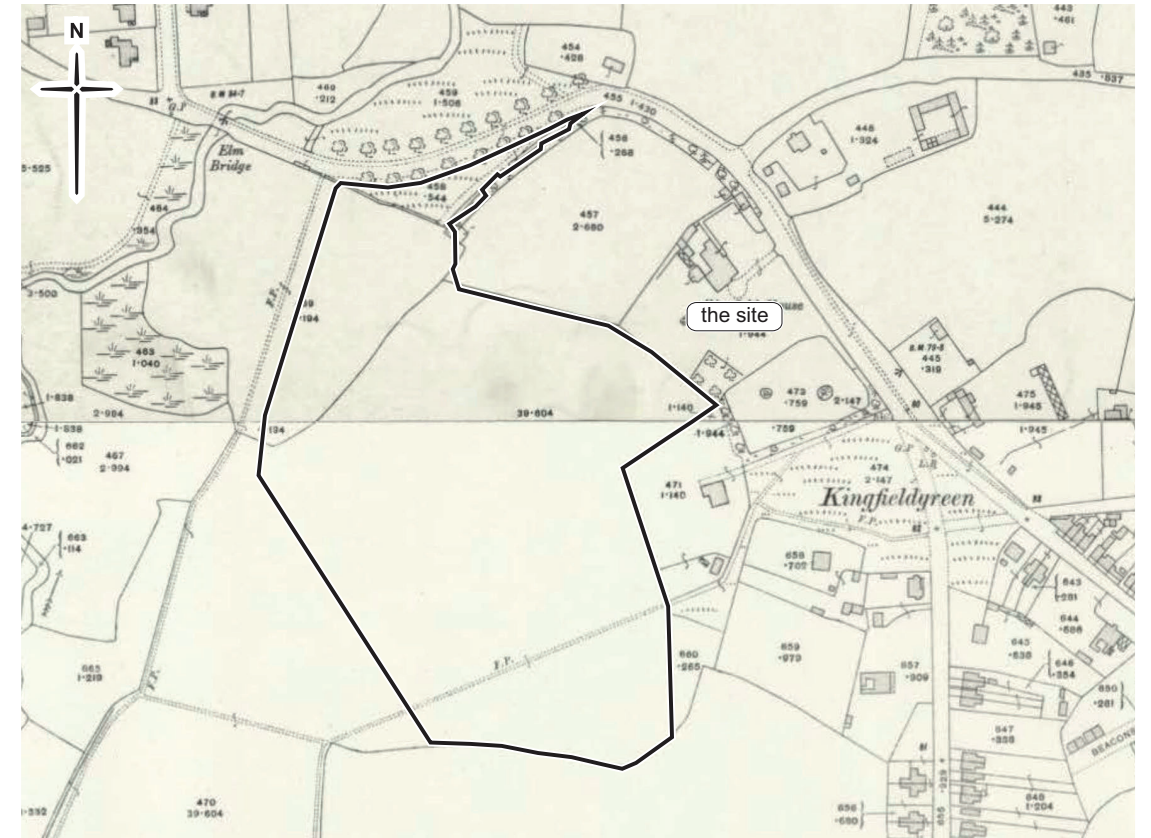


Fig 7 Ordnance Survey 3rd edition 25":mile map of 1914 (not to scale).

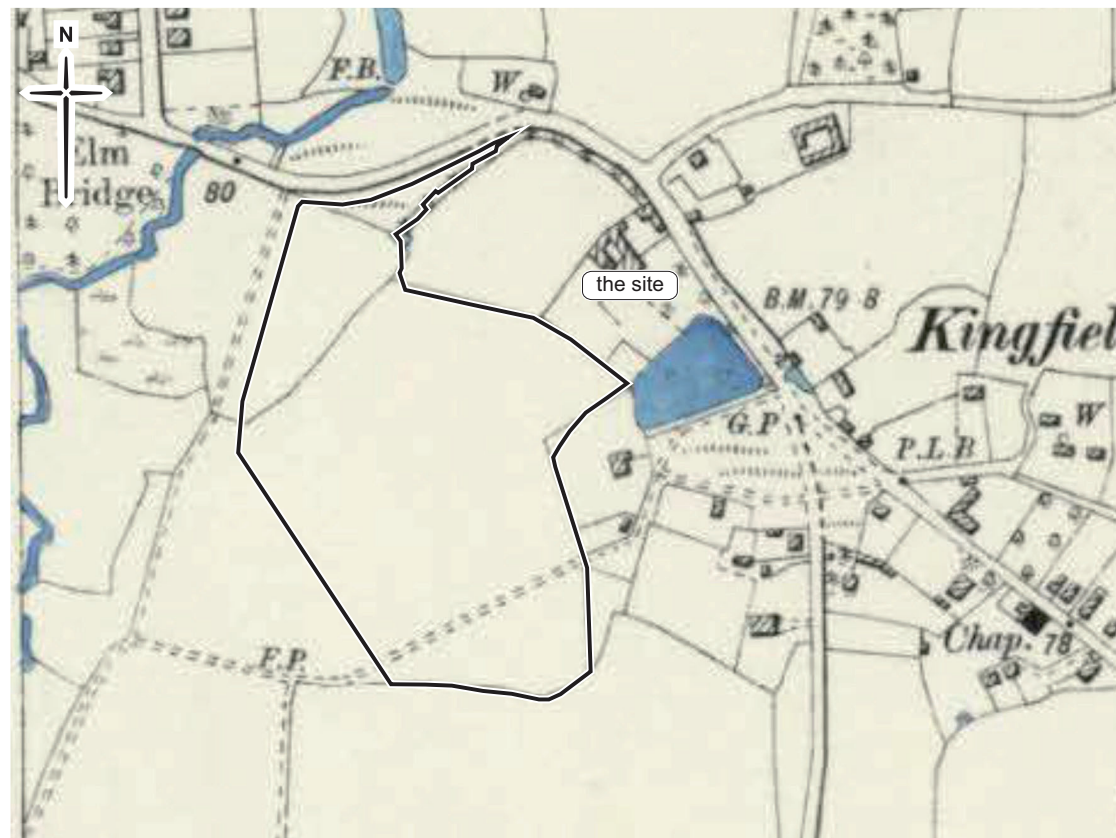


Fig 6 Ordnance Survey 2nd edition 6":mile map of 1897(not to scale).

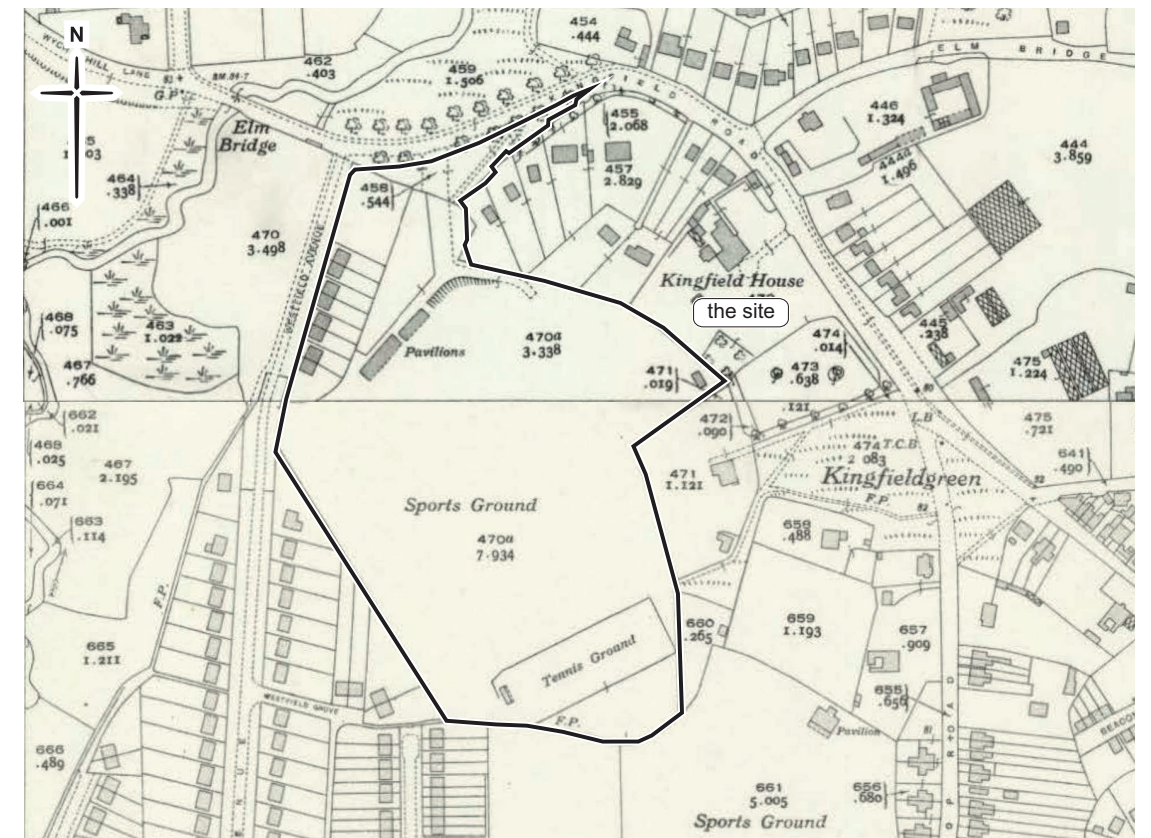


Fig 8 Ordnance Survey 25":mile map of 1935/6 (not to scale).

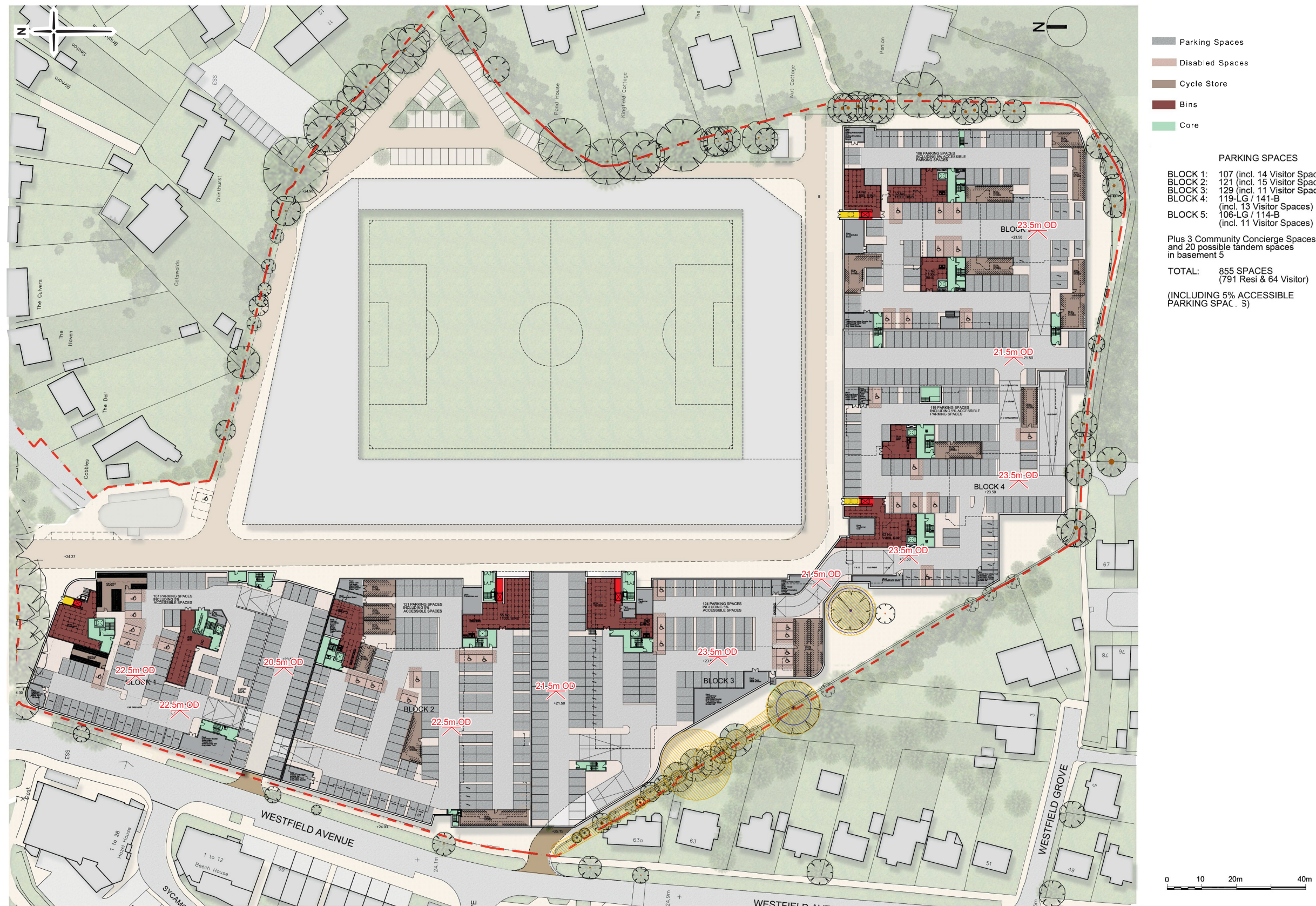


Fig 9 Proposed Lower Ground Floor (Colour)(Leach Rhodes Walker, drg no. 7884-L(00)78L, 1:500 @ A1, 06/11/19)



Fig 10 Proposed Basement Level (Colour)(Leach Rhodes Walker, drg no. 7884-L(00)283D, 1:500 @ A1, 06/11/19



SECTION A



SECTION B



SECTION C

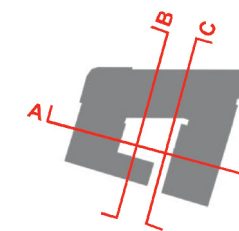


Fig 11 Block 1 Sections (not to scale)(Leach Rhodes Walker, drg no. 7884-L(00)291A, scale 1:200 @ A1, 21/10/19)