

Pinewood Campus, Wokingham

Suitable Alternative Natural Greenspace Creation and Management Plan

Prepared on behalf of

Dandara Southern Limited & Legal and General Assurance (Pensions Management) Limited

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1. INTRODUCTION

Brief

- 1.1 Ecological Planning & Research Ltd (EPR) have been commissioned by Dandara Southern Limited & Legal and General Assurance (Pensions Management) Limited to provide ecological advice and support in relation to the proposed redevelopment of the former Johnson & Johnson headquarters at Pinewood Campus, Wokingham (the 'Site').
- 1.2 Planning permission is being sought for the provision of approximately 136 dwellings with associated infrastructure, landscaping and public open space. In addition, an on-Site Suitable Alternative Natural Greenspace (SANG) is to be delivered to provide an information recreational resource for both new and existing residents as an alternative to the nearby Thames Basin Heaths (TBH) Special Protection Area (SPA).
- 1.3 The provision of SANG as set out in this document is part of a strategy to avoid adverse effects on the TBH SPA. Further detailed assessment is included within the Ecological Impact Assessment report (EPR, 2026).

Planning Context with Respect to the Thames Basin Heaths

- 1.4 The TBH SPA designation covers a series of heathlands which support internationally important assemblages of ground nesting birds, listed under Annex I of the Birds Directive (Directive 2009/147/EC): Nightjar *Caprimulgus europaeus*, Woodlark *Lullula arborea* and Dartford Warbler *Curruca undata* (formerly *Sylvia undata*). The location of the SPA in relation to the Site is shown on **Figure 1**.
- 1.5 Research has shown that disturbance and predation of nests by domestic pets represents a significant threat to protected ground-nesting bird species, and supporting habitats are affected by eutrophication, trampling, increased risk of fire and fly-tipping (Underhill-Day, 2005). New residential development close to the Thames Basin Heaths increases this threat by introducing more people and their pets.
- 1.6 In light of this research, the Joint Strategic Partnership Board of affected local authorities in and around the Thames Basin Heaths SPA produced the 'Thames Basin Heaths Delivery Framework' (July, 2009), which outlines means by which residential development can avoid a significant negative effect on these birds. The Delivery Framework excludes development within 400m of the Thames Basin Heaths SPA since certain effects, primarily cat predation, cannot be avoided within this zone. Between 400m and 5km, where effects associated with dog-walking are likely, avoidance measures can be applied, including the provision of SANG and Strategic Access Management and Monitoring (SAMM). Large-scale development delivery beyond 5km is considered on a case-by-case basis.

- 1.7 To be effective as an alternative recreational resource to the Thames Basin Heaths SPA for both new and existing residents, the SANG must present particular characteristics that are favoured by existing and potential users of the SPA. Natural England's 'Guidelines for Suitable Alternative Natural Greenspace' describes characteristics that are required or desirable when creating a SANG, based on survey responses provided by visitors to the SPA (Natural England, 2021).
- 1.8 The key requirement is that a SANG should be perceived as a 'natural' environment. This will usually mean that it should have a mixture of semi-natural habitats, be easily accessible by new and existing residents and through which paths with natural surfacing provide a range of walks, including a circular walk of an appropriate minimum length. It should also be possible for dogs to be let off the lead of a substantial part of the walk throughout the year.

SANG Proposals

- 1.9 An on-Site SANG, measuring approximately 6ha is proposed to be delivered within the existing woodlands of the SANG. The location of the SANG in relation to the Proposed Development is shown on **Figure 2** and proposed SANG layout in **Figure 3**.
- 1.10 The SANG will make use of the existing woodland on the Site, providing a 1.37km circular walking route, which can be shorted or lengthened using the additional linking paths (total 0.65km). In addition there is a further path of 0.32km which loops around the development which can be utilise walkers wish to take a longer walk outside of the SANG. It will be directly accessible from the Proposed Development, and include links to nearby publicly accessible open greenspaces, therefore forming part of a wider connected suite of accessible greenspace for new residents (see **Figure 4**).
- 1.11 The on Site SANG will primarily be available to residents of the proposed development, but also the local population within a 400-metre catchment around the Site. Car parking is available at other nearby SANGs/public open space and with the addition of the proposed on Site SANG allows walks in the vicinity to be extended.
- 1.12 The proposed on Site SANG therefore meets all 'must have' quality criteria in Appendix 1 of the SANG Guidelines that it can, except where this relates to circular walk of 2.3-2.5km With respect to the length of a circular walk SANG Guidelines acknowledge a 2.3-2.5km circular walk is less likely to be achieved in a small SANG although it is desirable to provide it across a local SANG network.
- 1.13 It is therefore intended that the SANG will form part of a suite of local SANG, which when considered together are able to meet the necessary criteria to deliver SANG and therefore provide suitable impact avoidance measures for the Thames Basin Heaths SPA.

Consultation

- 1.14 Natural England were consulted on the SANG proposals via their Discretionary Advice Service. A site visit was undertaken on 19th November 2025, following which a response was provided by Natural England.

2. ENVIRONMENTAL AND ECOLOGICAL CONTEXT

Introduction

- 2.1 This section presents a summary of existing environmental and ecological baseline conditions within the Site, including the proposed SANG, as a means to inform its design and creation. Consideration of such contextual information will serve to promote successful establishment of the proposed SANG and the development of an assemblage of habitats that is at once naturalistic and sympathetic to the present and historic character of the broader landscape.

Physical Context

Site Location & Context

- 2.2 The Site (central grid reference SU835 659) lies to the south of Wokingham. Bordered by farmland to the north, woodland to the east and west, the Site consists of the 'main campus' (comprising a mix of buildings and hardstanding) and woodlands.
- 2.3 The Site falls within the Thames Basin Heaths National Character Area (NCA) (NCA number 129). An area characterised by its extensive areas of woodland and open heathland, resulting from the acidic nature of the underlying geology; with large conifer and plantation woodlands on former heathland.

Geology and Soils

- 2.4 The bedrock geology of the Site is Bagshot Formation. A sandy formation with local lenses of clay and superficial deposits of sand and gravels.
- 2.5 The soils on-Site comprise freely draining slightly acid loamy soils.

Habitats

- 2.6 The proposed SANG site is dominated by a mixture of Lowland Mixed Deciduous Woodland, Other Broadleaved Woodland and Other Mixed Woodlands. Species found across these woodlands include Silver Birch *Betula pendula*, Scots Pine *Pinus sylvestris* and Sweet Chestnut *Castanea sativa*.
- 2.7 The ground flora of these woodlands largely comprises Bracken *Pteridium aquilinum* and Bramble *Rubus fruticosus* agg, with stands of Rhododendron *Rhododendron* cf. '*ponticum*' and Cherry Laurel *Prunus laurocerasus* present in the understorey.
- 2.8 A man-made, lined pond is located within the woodland on the edge of the SANG. The pond supports aquatic, marginal and emergent plant species such as White Water Lily *Nymphaea alba*, Water Mint *Mentha aquatica*, Brooklime *Veronica beccabunga*, Yellow Flag *Iris pseudoacorus*, and Common Duckweed *Lemna minor*.
- 2.9 Although not present within the proposed SANG site, acid grasslands are present within the wider Site, including Lowland Dry Acid Grasslands, a Habitat of Principle Importance under the Natural Environment and Rural Communities (NERC) Act 2006 (as amended).

2.10 A number of invasive non-native species (INNS) listed under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) have been found within the Site. These are:

- Variegated Yellow Archangel *Lamium galeobdolon subsp. argentatum*
- Parrot's Feather *Myriophyllum aquaticum*; and
- Rhododendron *Rhododendron cf. 'ponticum'*.

Fauna

2.11 A suite of ecological surveys has been undertaken across the Site, including the proposed SANG. Full details of the surveys and findings can be found within the Ecological Impact Assessment (EPR, 2025b).

2.12 Findings of note for the purposes of this SANG Creation and Management Plan that have been recorded on-Site include:

- Populations of Wood Ant *Formica rufa* within the woodlands of the proposed SANG;
- Thirteen trees have been categorised as supporting potential roosting features for individual bats (abbreviated to PRF-I), a further 11 trees have been categorised supporting potential roosting features for multiple bats (PRF-M);
- A Natterer's bat and Common/Soprano Pipistrelle roost within a tree within the proposed SANG; and
- A bat assemblage including woodland specialists such as Barbastelle and Noctule.

2.13 In addition, common and widespread bird species typical of woodlands habitats were recorded. Such species included Blue Tit *Cyanistes caeruleus*, Great Tit *Parus major* and Blackbird *Turdus merula*.

2.14 Surveys were also undertaken for Great Crested Newt *Triturus cristatus*, reptiles and Hazel Dormice *Muscardinus avellanarius*, however following negative survey results, all are considered likely absent from the Site at this time.

Opportunities

2.15 Part of the SANG site falls within the Berkshire Local Nature Recovery Strategy (LNRS). Whilst the Berkshire LNRS fails to identify the Site for heathland and lowland dry acid grassland creation/restoration, the whole Site was originally derived from an unenclosed heathland mosaic, and patches of this still remain in the form of small areas of acid grassland.

2.16 Despite not needed for SANG function specifically, there is potentially a major opportunity to restore these Priority habitat types and secure them under a positive management regime *in perpetuity*.

- 2.17 Part of the proposed SANG site falls within the 'area that could become of particular importance for biodiversity' (ABC) designation of the Berkshire LNRS. Opportunities identified within the LNRS include:
- Manage woodland;
 - Restore grassland;
 - Veteranize trees; and
 - Create ponds.
- 2.18 Whilst not all of the proposed SANG falls within an ABC area of the LNRS, opportunities to contribute to the above objectives will be sought throughout the SANG to increase the local value for biodiversity.
- 2.19 Habitat creation, enhancement and ongoing conservation management of the proposed SANG will result in biodiversity net gains through the improvement and diversification of existing habitats. This will benefit local floral communities, invertebrate assemblages, reptiles, birds, small mammals and bats, including Species of Principal Importance listed under Section 41 of the NERC Act 2006 (as amended) and the Berkshire Local Recovery Nature Strategy.

3. AIMS AND OBJECTIVES

Introduction

- 3.1 This section considers the aims and objectives of habitat creation and management within the proposed SANG. Underpinning the SANG delivery proposals are the two principle aims and five derived objectives, whose achievement can be monitored as a means to evaluate the efficiency of implementation and management work and to guide future changes to the management plan.

Aims

- 3.2 The principle aims of habitat creation and management within the SANG are to:
- Provide a convenient and accessible, enjoyable and satisfying recreational experience in a natural environment, so that new and existing residents in the area, who would otherwise travel to the Thames Basin Heaths SPA, with or without a dog, opt to visit the proposed SANG as an alternative; and
 - Protect and enhance the naturalness, biodiversity and local character of the proposed SANG area, to increase its likely effectiveness as a SANG and in accordance with policy and legislative requirements.

Objectives

- 3.3 These principal aims are supported by a series of more specific objectives:
- 1) To deliver and maintain an accessible greenspace resource in fulfilment of criteria set out in Natural England's 'Guidelines for the Creation of SANG' (2021);
 - 2) To create new semi-natural habitats in order to achieve biodiversity gains and produce a diverse, naturalistic, and attractive landscape;
 - 3) To restore and enhance existing degraded habitats in order to achieve biodiversity gains and produce a diverse, naturalistic, and attractive landscape; and
 - 4) To manage the SANG for both amenity value and biodiversity benefit.

Objective 1: To deliver and maintain an accessible greenspace resource in fulfilment of criteria set out in Natural England's 'Guidelines for the Creation of SANG'

- 3.4 Developer guidance for Wokingham Borough Council indicates that SANG should be provided at a rate of 8ha per 1,000 new residents for new development within 5km of the TBH SPA (Wokingham Borough Council, 2025).
- 3.5 With an average household occupancy of 2.4 (UK Census, 2021), the Proposed Development would result in an additional 326 residents in the area. Using the standard provision rate of 8ha per 1,000 new residents, the Proposed Development will therefore be required to deliver a total of 2.61ha of SANG to provide suitable impact avoidance for the Proposed Development.
- 3.6 The SANG has been designed with consideration to Natural England's Guidelines. A circular walking route is available, with shorter routes possible along the proposed network of footpaths. With new acid grasslands within woodland glades, ponds and enhanced woodlands, a variety of semi-natural habitats will be provided. This, combined with native screening planting will

ensure the SANG maintains a rural feel. The SANG is located adjacent to the Proposed Development, ensuring accessibility for new and existing residents. Although located within woodlands, consideration has been given to the habitat types and ongoing management to ensure the SANG is perceived as safe by visitors.

- 3.7 Natural England's Guidelines state that SANG 'must have' a circular walking route of 2.3-2.5km, with the exception of 'Small SANG' areas that are proximate or well connected to other SANG areas and networks of publicly accessible greenspaces. In this case, due to the overall size and shape of the woodland, providing a footpath length of 2.3km would result in a somewhat convoluted network of paths and potential loss of woodland, and so this is not proposed.
- 3.8 Natural England's 'Guidelines for the Creation of SANG' state that *"small sites of no smaller than two hectares have potential to provide effective mitigation where traditional SANG is unavailable. These SANG areas will be linked and/or in proximity to an already established SANG. If effectiveness can be demonstrated of small or linear SANGs working alone, then we will assess this on a case-by-case basis, taking into account the site's context amongst the wider greenspace network [...] It is however desirable to provide the full Appendix 1 criteria across a local SANG network or on another SANG."*
- 3.9 There are multiple greenspace options within close proximity to the proposed on-Site SANG. Newlands Farm SANG (consent expected imminently), will be located approximately 60m to north of the Site. Newlands Farm is a 'fully functioning' SANG, meeting all the requirements of SANG including the 2.3km circular walk. T
- 3.10 There is also publicly open greenspace immediately adjacent to the east of the Site at the Pinewood Centre, with a large pond and woodland. Diagonally opposite the Site, on the opposite side of the Nine Mile Road, is an existing SANG, called Oakham Wood SANG.
- 3.11 A full assessment of the SANG's functionality, and therefore ability to provide suitable impact avoidance, is set out in the accompanying Ecological Impact Assessment report (EPR, 2026).
- 3.12 **Appendix 1** relates the specific characteristics of the proposed SANG to the essential and desirable attributes set out in Natural England's 'Guidelines for the Creation of SANG' (Natural England, 2021).

Objective 2: To create new semi-natural habitats in order to achieve biodiversity gains and produce a diverse, naturalistic, and attractive landscape

- 3.13 The existing woodland is proposed to be diversified through the creation of new semi-natural habitats to provide a diverse and attractive landscape.
- 3.14 Glades will be opened within the woodlands to create areas of acid grassland, creating transitional habitats between the woodland understorey and grasslands. These habitats will be of particular value to reptiles, amphibians and woodland invertebrate specialists.
- 3.15 A new pond is proposed, increasing the extent of aquatic habitats within the Site and providing new opportunities for invertebrates and amphibians.

Objective 3: To enhance existing habitats in order to achieve biodiversity gains and produce a diverse, naturalistic, and attractive landscape

- 3.16 Alongside the proposed habitat creation, the enhancement of existing habitats will further provide opportunities for local biodiversity. The existing woodland is proposed to be enhanced with the implementation of an appropriate management regime to control understorey vegetation and non-native species, create a diverse flora and well-structured woodland of value to local biodiversity.

Objective 4: To manage the SANG for both amenity value and biodiversity benefit

- 3.17 To ensure that the amenity and biodiversity value of the SANG is maintained in perpetuity, ongoing management will be undertaken. Such actions will include:
- The checking and upkeep of Site furniture and infrastructure;
 - Aftercare of newly established habitats; and
 - Ongoing conservation management of new and existing habitats.

4. SANG CREATION

- 4.1 This section sets out the implementation and habitat creation works that will be completed prior to the opening of the SANG. The proposed layout of the SANG is shown at **Figure 3**.

Timing

- 4.2 The SANG will be implemented in full and made available to residents before first occupation of the Proposed Development.

Provision of Infrastructure

Fencing and Access

- 4.3 Attractiveness to dog-walkers will be an essential attribute of the SANG. To this end, the SANG will be created as a secure, enclosed area within which dogs can be freely and safely exercised off-lead.
- 4.4 Dog-proof fencing will be installed around the eastern perimeter of the SANG (and other locations where existing fencing to the south, west and north needs to be repaired/dog-proofed), to create a secure space. In keeping with the naturalistic, semi-rural character of the SANG, boundary fencing will be of timber post-and-wire or post-and-rail construction with stock netting, and positioned behind new boundary screen planting where provided (see **Figure 3**). Dog waste and litter bins will be provided.
- 4.5 Where footpaths enter/exit the SANG, self-closing gates will be installed. Suitable access points (such as field gates) will be installed at suitable locations to allow access for management and maintenance equipment. Gates will be designed so that they do not prevent wheelchair or mobility scooter access to the SANG, but do prevent access by all-terrain motorbike or quad bikes (this can be achieved, for example, using kissing gates with carefully sized chambers).

Paths

- 4.6 The proposed path network is shown on **Figure 3**.
- 4.7 Footpath surfaces will be naturalistic (i.e. with no imported base substrate) to maintain the countryside feeling of the routes. Timber edging will be used for some of the paths to aid in their definition. The circular walking route will be of hoggins or bound gravel to ensure all year-round access.

Interpretation Boards & Waymarkers

- 4.8 Interpretation boards will be installed at high footfall areas, such as access points and focal points, to visually show the walking route options within the SANG and provide relevant information on the local biodiversity and/or history of the Site.
- 4.9 The existing interpretation board will be repurposed and positioned within the SANG.
- 4.10 Waymarkers will be positioned along the walking routes to guide visitors along the main circular route.

- 4.11 Timber will be the predominant material used, in simple robust designs to remain in keeping with the natural setting of the SANG.
- 4.12 To ensure that the SANG site remains clean and well maintained, a combined dog/litter bin will be installed at access points from the Proposed Development where they can be easily accessed for emptying.

Habitat Creation

- 4.13 The principles for habitat creation are set out below to demonstrate that the SANG can provide semi-natural habitats in line with the requirements of the Natural England SANG Guidelines.

Acid Grasslands

- 4.14 To increase local habitat and flora diversity, new glades will be opened within the woodlands to allow acid grasslands to establish. Created along the proposed footpath network, these glades will aid in helping the woodland SANG feel more open, increasing the perceived safeness for visitors.
- 4.15 Small areas of woodlands will be cleared to create the glades. These areas are shown indicatively on **Figure 3** but will be finalised subject to local ground conditions.
- 4.16 Acid grasslands will be created using material salvaged from elsewhere on Site in the first instance. Where additional acid grassland material is needed this will be sought from a local acid grassland donor site from nearby, that is actively managed for conservation. With the land managers permission, either green hay (via a hay cut taken in July/August when seed is still hanging in the sward), or as brush-harvested seed. If a local donor site cannot be identified, then an appropriate acid grassland seed mix will be used, such as 'Emorsgate EM7F Meadow Mixture for Sandy Soils' or similar.
- 4.17 Once cleared, the soil surface of the glade will be prepared to receive turf/seed. The soil will be cultivated to remove any existing vegetation and then harrowed to create a fine tilth. The turf/seed will then be broadcast directly onto the soil surface, either by hand or machine. For areas of seed mix this will then be rolled to promote contact with the soil.

Tree/Scrub Screening Planting

- 4.18 Native tree and scrub planting will be used to act as screening within the SANG, minimising the feel of busyness between footpaths and urban intrusion from nearby development and roads.
- 4.19 Species to be included are those which are typical of the area and habitats, and may include:
- Oak *Quercus robur*;
 - Beech *Fagus sylvatica*;
 - Rowan *Sorbus aucuparia*;
 - Holly *Ilex aquifolium*; and
 - Hawthorn *Crataegus monogyna*.

- 4.20 The trees/shrub will be planted in single species groups of approximately 3-5 plants in the centre of a 1.5m grid square and protected during establishment using tree guards.
- 4.21 Where practical, planting will take place between November and March to maximise the chance of successful establishment. Container-grown plants can be planted all year round if required, and cell grown whips will also have an extended planting season.
- 4.22 During establishment any skewed trees and shrubs will be re-staked as required. Any diseased, dead or dangerous plants will be removed.

Dog Pond

- 4.23 A new pond will be created with the primary objective of providing an exercise resource for dogs.
- 4.24 The pond will be mechanically excavated, and clay lined. Excavated subsoil will be backfilled over the liner to a minimum compacted depth of 300mm. This backfilled substrate will be graded and sculpted to form gently sloping, irregularly contoured sides and a series of marginal shelves, the depth of which will be varied in order to accommodate the requirements of a broad range of marginal and submerged aquatic plant species. After backfilling, the maximum depth of the pond should be approximately 1m.
- 4.25 The pond will include a broad and gently sloping 'beach', to be created at the point facing the path to serve as an access point for dogs.
- 4.26 The pond margins will be shown with a native species wetland seed mix, such as 'Emorsgate EP1 Pond Edge Mixture', or similar. Once the pond is at least partly filled, native marginal and aquatic plants, either in the form of plugs or pre-planted coir pallets, will be planted directly into the substrate. Such planting will be predominantly focused away from the dog access beach, and plant selection will favour vigorous species that are relatively tolerant of disturbance, such as Lesser Pond Sedge *Carex acutiformis* and Yellow Flag Iris *Iris pseudacorus*. Additional planting will include aquatic plants that also provide foraging resources for invertebrates.

Habitat Enhancements

Woodlands

- 4.27 The existing woodlands are proposed to be retained and will largely be enhanced through the implementation of suitable conservation-led management regimes as outlined in **Section 5** below.
- 4.28 However, immediate measures to enhance the woodland will also be undertaken, including supplementary planting to diversify the woodland vegetation. Species to be planted include:
 - Oak;
 - Beech; and
 - Rowan.

- 4.29 All newly planted stock will be native species originally sourced within the UK (as of local provenance as possible), sourced from a reputable conservation supplier with a clear and transparent biosecurity policy.
- 4.30 Newly planted trees will be protected using tree guards. Planting will take place between October and March for deciduous species in order to maximise the chance of successful establishment. Where new planting fails to establish specimens will be replaced on a like-for-like basis.
- 4.31 Dense stands of Holly are currently aiding in the shading of the woodland floor. However, Holly is in itself a native woodland species which provides an important foraging resource for winter birds and is an important woodland component for Barbastelle bats, so it should not be removed entirely. Instead, some initial clearing of Holly will take place to open up areas of the woodland floor to facilitate the growth of ground flora whilst leaving discrete clumps of Holly scattered throughout the woodland.
- 4.32 Selective thinning will also take place, whereby some of the taller (but not oldest) trees will be removed. These trees are at present competing with each other for the light, and have grown tall, contributing to the shading of the understorey. Removing a few individuals will aid in alleviating this and encourage a greater floral diversity.
- 4.33 In line with the aspirations of the LNRS, opportunities to add veteran features to trees will be considered. Veteranisation techniques mimic the effects of the natural tree ageing process and decay through creation of 'woodpecker' holes, hazard beams and splits. Some features are designed to provide instant roosting features whereas others are designed to develop over time. Veteranisation will take place in conjunction with advice from a suitably-experienced arborist who understands tree physiology and can create features which are very close to natural features.
- 4.34 Veteranisation is not appropriate on trees where bat roosts have already been confirmed or where potential bat roost features already exist.

Pond

- 4.35 The existing pond will be enhanced to improve its condition and value to local biodiversity. The existing pond liner will be removed and replaced with a clay liner instead, for durability.
- 4.36 Litter, detritus and any non-native vegetation will be removed from the pond and disposed of in an appropriate manner. This activity will be undertaken in the winter months when amphibians are most likely to be terrestrially hibernating, to reduce the potential for their disturbance.
- 4.37 If fish are present these will also be removed.
- 4.38 Vegetation around the pond will be thinned to increase light penetration and encourage vegetation growth within the pond. Trimmings and felled trees will be cut into small sections and piled strategically around the pond to provide refugia and hibernacula for amphibians.
- 4.39 The pond will be allowed to refill naturally by rain water, but may be aided with clean water from a bowser.

- 4.40 Duckweed *Lemna sp* will be manually removed from the pond so that less than 10% of the surface is covered.

Invasive Non-native Species

- 4.41 The proposed SANG currently supports a number of INNS listed either under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) or Schedule 2 of the Invasive Alien Species Order. These are:

- Variegated Yellow Archangel;
- Parrots Feather; and
- Rhododendron.

- 4.42 Whilst not listed under Schedule 9, Cherry Laurel *Prunus laurocerasus*, is also recognised as an INNS, outcompeting local species and dominating woodlands.

- 4.43 To improve the biodiversity value of the SANG, long-term control of INNS will be implemented to allow opportunities for native flora to thrive, further benefiting local wildlife. Due to the long-term management which is often required to control INNS, control measures are set out in **Section 5** below.

Implementation Considerations

- 4.44 During the implementation of the SANG, consideration will be given to the presence of protected species to ensure legal compliance and prevent incidents which may cause harm or injury.

Amphibians and Reptiles

- 4.45 Works which may cause ground disturbance, such as stump removal (if required) will be undertaken between April and October (inclusive), to avoid the herptile hibernation season.
- 4.46 In the unlikely event Great Crested Newt are found at any time, works must stop and an ecologist contacted for further advice.

Birds

- 4.47 Tree felling works to facilitate the SANG implementation will be undertaken between September and February (inclusive) to avoid the bird nesting season. Should this not be possible, nesting bird checks will be undertaken by a suitably qualified ecologist (SQE) no more than 24 hours prior to tree felling and/or vegetation clearance.
- 4.48 Should an active nest be identified, a suitable exclusion zone around the nest will be established, approximately 3-5m depending on the species. Species sensitive to disturbance, and those listed under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) may be subject to larger buffers.
- 4.49 Works may only begin within the exclusion zone once an SQE has confirmed the nest is no longer active.

- 4.50 In the event a nest is found during the course of felling/clearance works, all works must stop and an ecologist contacted. Works may only re-start upon confirmation from the ecologist the nest is not active.

Bats

- 4.51 As outlined in **Section 2**, 14 trees have been categorised as PRF-I, a further 10 trees have been categorised as PRF-M whilst one of these trees also supports a confirmed bat roost. Where trees are to be removed to facilitate SANG infrastructure or habitat creation, this will not include trees which have been identified as being suitable to support roosting bats.
- 4.52 Any mature trees to be felled will be checked by a suitably qualified ecologist (SQE) prior to felling.
- 4.53 Should a bat be found during the course of tree works, all works to the tree must stop and an ecologist contacted. Works may only be able to begin once a suitable licence has been issued by Natural England.

Dormice

- 4.54 Whilst the surveys of the Site have not identified Dormice as likely present, habitats present within the Site are considered suitable to support them. Therefore, given the legal protections afforded to them, suitable measures are recommended during the implementation phase.
- 4.55 Works on the understorey should be undertaken between December to March, with vegetation reduced to no less than 30cm.
- 4.56 If a Dormouse is found, all works must stop and an ecologist contacted.

5. ONGOING MANAGEMENT

Introduction

- 5.1 This section sets out an overview of the management prescriptions that will ensure the SANG is maintained to the required standard, in perpetuity, to maintain its function in providing amenity space and biodiversity value.
- 5.2 Where significant habitat creation and enhancement is undertaken, the long-term management and monitoring of the habitats will be detailed out in a Habitat Management and Monitoring (HMMP) to be secured via S106 agreement or suitable alternative legal agreement.

Infrastructure Maintenance

- 5.3 Regular maintenance checks will be conducted to identify and remedy damage to items of amenity infrastructure. In accordance with timing constraints outline above, periodic vegetation clearance around paths and gates may be undertaken as required in order to maintain unobstructed public access.
- 5.4 Checks of footpaths will be regularly undertaken to ensure that they remain accessible and are not obstructed or blocked.
- 5.5 Removal of loose litter and emptying of dog waste and litter bins will be undertaken at appropriate intervals.
- 5.6 In the longer term, items of site furniture and infrastructure will be repaired or replaced as required to maintain the safety and accessibility of the SANG, and the integrity of the perimeter fencing.

Habitat Management

- 5.7 Ongoing management will be undertaken to ensure the proposed habitats maintain the natural experience expected of a SANG and provide the committed biodiversity net gains.

Acid Grasslands

- 5.8 Management of the new grassland will be essential for the structure, balance and diversity. Without management the grassland would become rank and coarse and eventually turn into scrub or ruderal areas.
- 5.9 Re-sowing may be required in the first year of management as seed dormancy and erratic germination means that only a proportion of the seeds are likely to germinate in any one flush. However, it should be noted that the development of a diverse high-quality acid grassland depends upon the fact that the ground conditions are sandy/gravelly and freely draining, and that patches may parch/drought and die in summer. Allowing this process to take place is essential for acid grassland creation, as the bare patches that result provide new germination niches/opportunities for the seeds of annual wildflower to disperse into. Areas of acid grassland creation should not therefore be watered beyond the first summer of establishment as regular watering will prevent this natural process from taking place.

- 5.10 Once the grassland has fully established, a rotational cutting regime will be employed (leaving small areas uncut each year) to ensure that some level of shelter is provided at all times for reptiles and to create a mosaic of habitats.
- 5.11 The cutting of acid grassland should be timed to ensure seeds have been dispersed prior to cutting, generally August/September. The grassland should be cut to 100 to 150mm and all cuttings should be removed from Site and composted to prevent the release of nutrients back into the grassland (the objective is to create nutrient poor conditions that aid the establishment of biodiversity and prevent vigorous growth of grass species that would suppress the establishment of wildflowers).
- 5.12 The establishment of the acid grassland will be visually checked each summer by an appropriately experienced ecologist. If any ruderal species or invasive plants are identified within this area, then they must be removed before they release seed in the summer. No fertilisers or pesticides (including weedkillers) are to be used.

Woodlands

- 5.13 Ongoing management of Holly and selective thinning of smaller trees, as outlined in **Section 4**, will remain ongoing as part of the regular woodland management within the SANG to maintain light levels to ground flora.
- 5.14 The Sweet Chestnut stands will be subject to coppicing as part of on-going management. This will prevent them becoming excessively tall and 'leggy' and ensure low-growing vegetation and ground flora persists as effective ground cover for invertebrates and small mammals, and to allow the development of woodland ground flora. Stands of Sweet Chestnut will be coppiced on a long-rotation (every 12-25 years), with no more than 10% coppiced each year.
- 5.15 More generally, felling will only be carried out on trees that are considered to be a significant hazard or would be deemed beneficial to the ecology of the area. Major maintenance work or felling of trees must be undertaken outside of the breeding bird season (March – August inclusive), unless there are over-riding health and safety concerns. In this instance, the advice of a suitably qualified ecologist should be sought prior to felling.
- 5.16 Prior to the removal of any significant trees (e.g. those with decay features such as rot holes, split limbs or ivy cladding), an ecologist should be consulted to ensure bat roosts are not likely to be impacted.
- 5.17 If mature trees fall in extreme weather condition they should, where practical, be left to decay where they lie and not be removed. If it is necessary to move the deadwood, it is best to transfer it only a short distance away from the tree, positioned in dappled shade. The tree stumps should be retained and not ground up, as some species required buried dead wood and roots in which to develop. Dead leaved and decaying vegetation should not be removed but left undisturbed to provide potential breeding sites for detritivorous invertebrates.
- 5.18 Regular checks of trees within close proximity of footpaths will be undertaken to maintain a safe walking environment.

Ponds

- 5.19 Management of non-native invasive species will be undertaken to allow native flora to establish, providing benefits to local biodiversity including invertebrates and amphibians.
- 5.20 Monitoring of the ponds will be undertaken to identify any failures of the pond liner, accumulations of litter and the introduction of invasive non-native plant species.
- 5.21 In the longer term, management intervention may be required to ensure that aquatic flora are maintained at optimal levels. If plant cover extends across more than 80% of a pond's surface, up to 30% of aquatic vegetation should be removed. Any such removal should be undertaken in late autumn or winter and in an appropriately sensitive fashion.

Tree/Scrub Screening Planting

- 5.22 Any trees, shrubs or plants that die, are removed or become seriously damaged or diseased within a three-year period of planting shall be replaced during the next planting season with a specimen of similar size and species.
- 5.23 If an element fails to establish, and it is considered that this is because of the environment, and a replacement will also not establish, it will be replaced with a suitable alternative.
- 5.24 Tree guards should be removed and recycled after a 3-5 year period, depending on growth rates.
- 5.25 Trimming and cutting of scrub shall be undertaken to maintain transitional interfaces in a graded non-linear condition, incorporating sheltered bays, glades and scalloped edges to maximise the extent of edge habitats. Cutting will prevent the encroachment of scrub and maintain the successional habitats. Trimming and cutting of scrub habitats will take place in January and February to avoid the breeding bird season (March – mid-September inclusive).
- 5.26 Scrub blocks will be coppiced or pollarded on a 7-10 year rotation, subject to growth rates. No more than 30% of trees within the scrub blocks should be coppiced or pollarded in any one year.
- 5.27 Where practical, cut logs and stems of trees will be left to decay within suitable habitats. This will increase deadwood habitats for fungi and saproxylic invertebrates such as Stag Beetle *Lucanus cervus* and provide a food source for birds and small mammals.

Invasive Non-Native Species Management

- 5.28 All works undertaken on INNS management must adhere to suitable biosecurity measures to prevent the spread of INNS.
- 5.29 Such measures include the thorough cleaning of equipment/machinery after completion of works and checking of clothing/shoes for fragments to prevent accidental spread of plant materials.

Variegated Yellow Archangel

- 5.30 Variegated Yellow Archangel should be removed via manual pulling, taking care to remove all of the root system to prevent re-establishment. Pulling is best undertaken when the ground is damp and full plants can be more easily removed.

- 5.31 During works, plant waste should be stored on a non-permeable surface (such as hardstanding or plastic sheeting) to prevent unintentional spread of plant fragments which may allow new populations to establish.
- 5.32 Due to the proximity of the plants to the pond, herbicides should not be used.
- 5.33 Any Variegated Yellow Archangel materials (including soils) must be disposed of appropriately to prevent spreading of the plant, such as burning on site to ensure it is not spread off-site. Classified as 'controlled waste', if it is to be removed from Site it must be done so by an appropriately licenced waste carrier.

Parrots Feather

- 5.34 As part of significant pond enhancements, Parrots Feather will first be removed by hand between March and October, ensuring the whole plant (including root system) is removed. The liner will then be removed with appropriate biosecurity measures to ensure any fragments of Parrots Feather will not be spread. Chemical treatment may also be applied locally at this stage to kill any potential remaining fragments and prior to clay lining and sculpting of the pond profile.
- 5.35 During works, plant waste should be stored on a non-permeable surface (such as hardstanding or plastic sheeting) to prevent unintentional spread of plant fragments which may allow new populations to establish.
- 5.36 Parrots Feather must be disposed of appropriately to prevent spreading of the plant, such as burning on site to ensure it is not spread off-site. Classified as 'controlled waste', if it is to be removed from Site it must be done so by an appropriately licenced waste carrier.

Rhododendron and Cherry Laurel

- 5.37 Eradication of Rhododendron is difficult and will often take many years. Whilst not as persistent as Rhododendron, similar methods may be used to manage Cherry Laurel.
- 5.38 Stems must be cut, as close to the ground as possible (best done in the winter), and the arising removed for disposal. Where access allows, flailing may be a suitable alternative, especially with younger plants. However, neither method prevents regrowth which must in itself be managed.
- 5.39 Once the arisings have been removed, the stump may be dug out of the ground. However, any root left will allow for the plant to return, so must ensure all trace of the root ball is removed. This method will be especially difficult in woodland.
- 5.40 Alternatively, the stump may be treated with herbicides, either applied directly to the stump or injected.
- 5.41 Should they emerge, regrowth and seedlings may be sprayed with herbicides, although this is not as effective as treating the stump and should be undertaken with extreme caution to prevent damage to surrounding plants.
- 5.42 Any cuttings from Rhododendron must be disposed of appropriately to prevent spreading of the plant, such as burning on site to ensure it is not spread off-site. Classified as 'controlled waste', if it is to be removed from Site it must be done so by an appropriately licenced waste carrier.

6. DELIVERY, FUNDING AND MANAGEMENT ARRANGEMENTS

Introduction

- 6.1 This section sets out the arrangements for the delivery and future ownership of, and responsibility for, the future management of the SANG; and the mechanisms through which the required funding will be secured in-perpetuity.

Delivery

- 6.2 The developer will undertake the implementation works detailed in **Section 4** to deliver the SANG to the standard envisaged in this report, but may call upon assistance from external organisations as required.

Ownership and Management

- 6.3 The preferred arrangement is for WBC to take on the management of the SANG. If that is not taken forward, SANG management would be passed to a Management Company, protected by step in rights.
- 6.4 Management would be secured through an appropriate legal agreement, with an appropriate sum of money ring-fenced to ensure that sufficient funds are available for in perpetuity management.

Funding

- 6.5 An indicative costing assessment has been undertaken to provide an indication of the funding required both to establish the SANG to the standard envisaged within this report, and to maintain the SANG in-perpetuity for a period of 80 years (the latter calculated using the 'Net Present Value' (NPV) Methodology. This costing assessment is provided in **Appendix 2**.
- 6.6 The mechanism for funding of the SANG in perpetuity will be agreed with Wokingham Borough Council and secured appropriately.

7. REFERENCES

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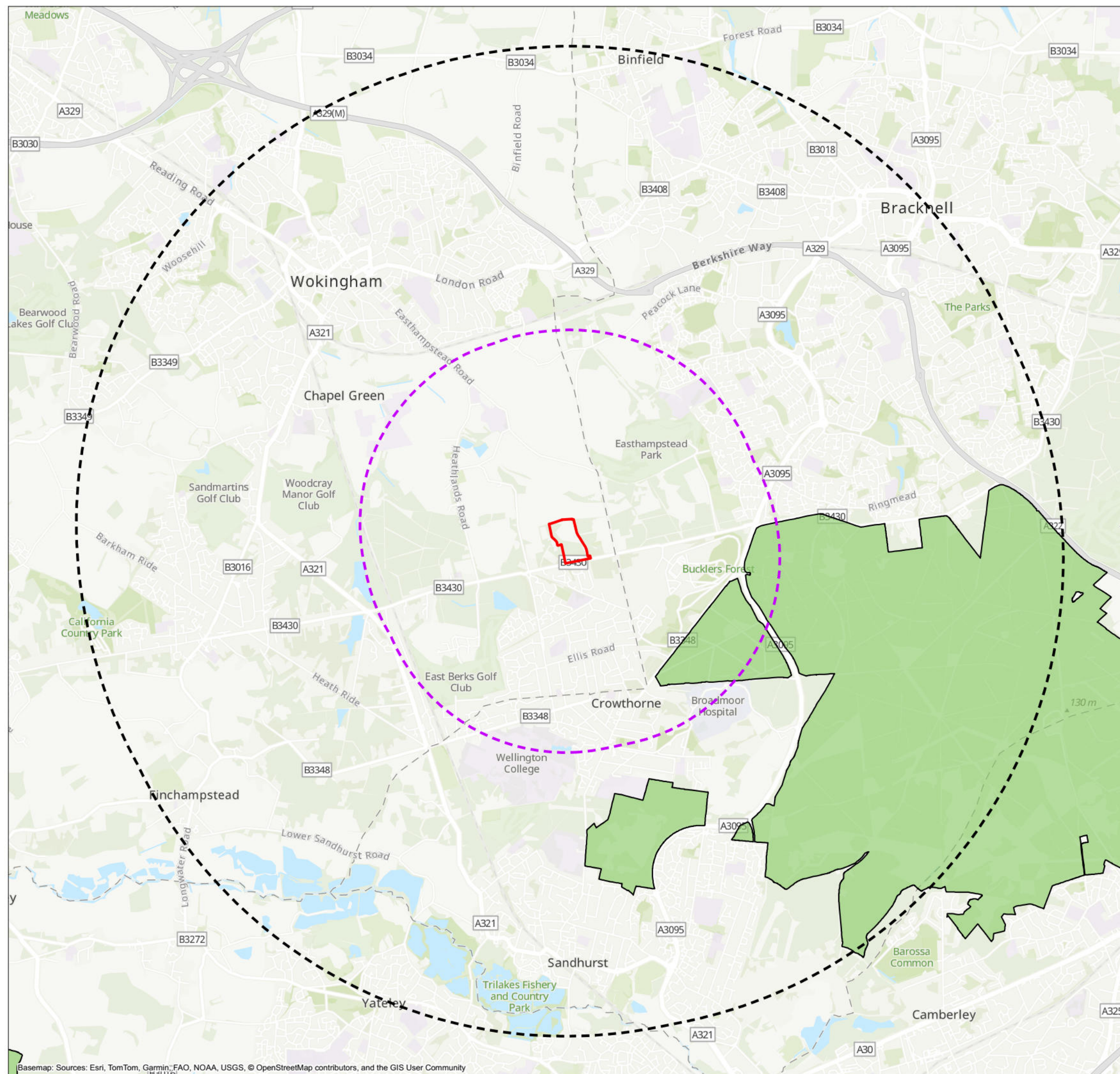


Figure 1 Site Location & Nature Designations

KEY

-
-  Site boundary
 2km linear distance from site boundary
 5km linear distance from site boundary
 Thames Basin Heaths Special Protection Area (SPA)

SCALE: 1:40,000 at A3



CLIENT: Dandara Southern Limited & Legal and General Assurance (Pensions Management) Limited

PROJECT: Pinewood Campus, Wokingham

DATE: 16 March 2026

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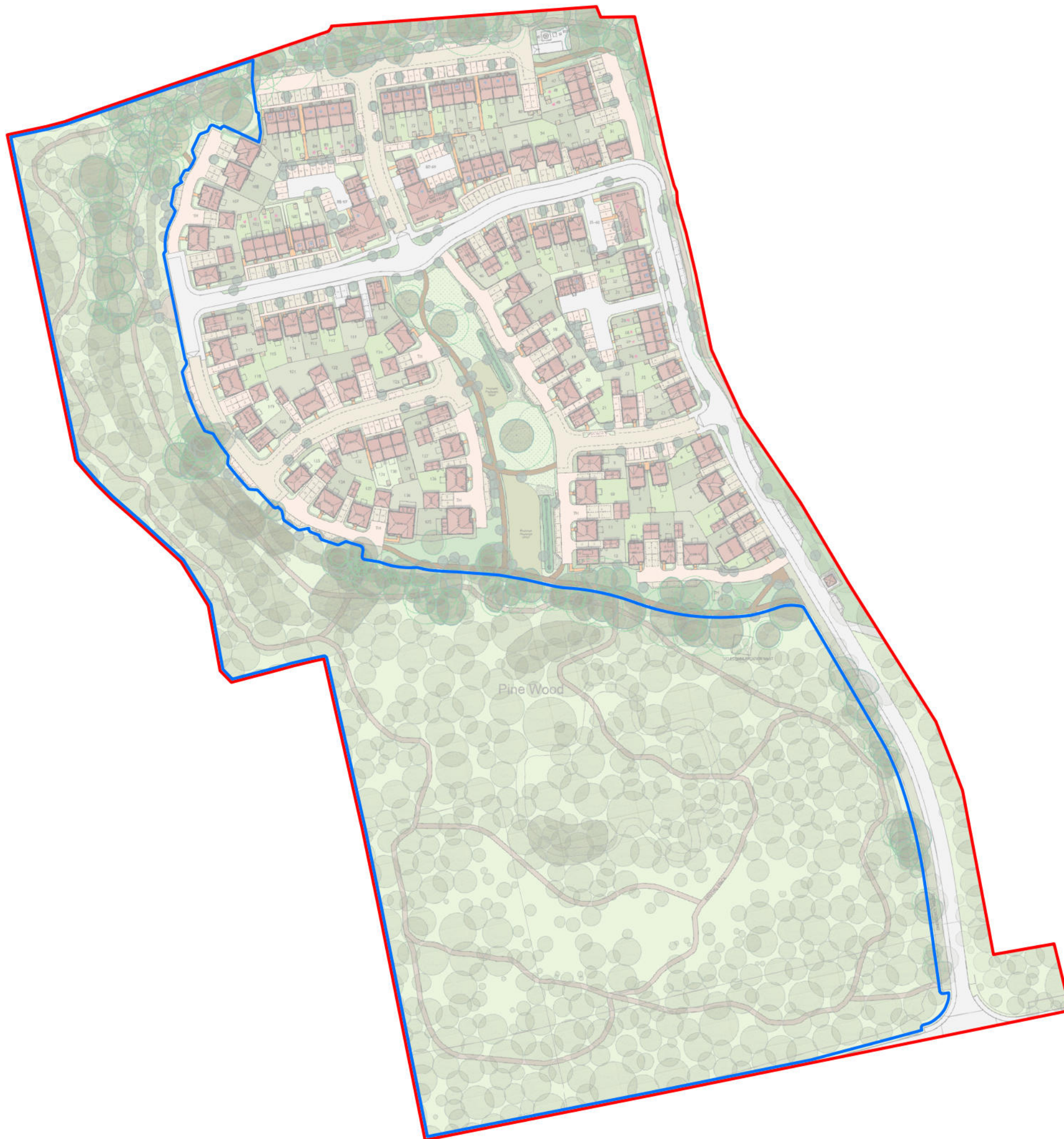


Figure 2 SANG Context

KEY

-  Site boundary
-  SANG boundary (6.12ha)

SCALE: 1:1,750 at A3

0 25 50 75 100 Metres



CLIENT: Dandara Southern Limited & Legal and General Assurance (Pensions Management) Limited

PROJECT: Pinewood Campus, Wokingham

DATE: 17 March 2026

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Basemap: Site Layout Plan, McBains, PIN100360-MCB-ZZ-ZZ-DR-A-0230, D5-P01, 17/03/2026

Appendix 1

SANG Quality Criteria, NE SANG Creation Guidelines (2021)

Must Have/ Should Have		Criteria	SANG Proposals
1	Must have	Parking on all sites larger than 4ha (unless the site is intended for use within 400m only)	The proposed residential development for which the SANG is to serve is located within 400m of the SANG, and a car park is therefore not necessary.
2	Must have	Circular walk of 2.3-2.5km	A circular walk of 2.3-2.5km cannot be completed within the SANG. The SANG will therefore act as part of a wider suite of SANGs within which a 2.3km walk can be completed.
3	Must have	Car parks easily and safely accessible by car and clearly sign posted	N/A
4	Must have	Access points appropriate for particular visitor use the SANG is intended to cater for	Access will be available into the SANG from the adjacent development for which it is designed to serve.
5	Must have	Safe access route on foot from nearest car park and/or footpath	Access will be directly from residential streets into the SANG, thereby providing a safe route. Access into the wider suite of SANGs is to be delivered via SANG quality links.
6	Must have	Circular walk which starts and finishes at the car park	A circular walk is available which starts and finishes from the access points into the residential development.
7	Must have	Perceived as safe – no tree and scrub cover along part of walking routes	Although located within woodland, ongoing management will ensure the footpaths do not become overgrown, maintaining the feel of a safe open footpath.
8	Must have	Paths easily used and well maintained but mostly unsurfaced	Paths will be unsurfaced unless ground/terrain conditions require a bound-gravel or similar to ensure the route remains in good condition and accessible year-round.
9	Must have	Perceived as semi-natural with little intrusion of artificial structures	The woodland and grassland habitats provide a semi-natural feel. Screening planting will be used to prevent intrusion from adjacent development.
10	Must have	If larger than 12ha then a range of habitats should be present	A range of habitats are present, including woodlands, grasslands and ponds.
11	Must have	Access unrestricted – plenty of space for dogs to exercise freely and safely off the lead	Dogs will be able to roam freely off-lead through the woodland. Dog-proof fencing will ensure the SANG is secure.
12	Must have	No unpleasant intrusions (e.g. sewage treatment smells etc)	No unpleasant intrusions are present.
13	Must have	Clearly sign posted or advertised in some way	Signs will be installed as part of the Proposed Development.
14	Must have	Leaflets or website advertising their location to potential users	To be created and distributed to new and existing residents to increase awareness.

Must Have/ Should Have		Criteria	SANG Proposals
15	Should have	Can dog owners take dogs from the car park to the SANG safely off the lead	N/A
16	Should have	Gently undulating topography	The SANG is largely flat, but includes gently undulating topography in parts.
17	Should have	Access points with signage outlining the layout of the SANG and routes available to visitors	Interpretation boards will be installed to illustrate the walking routes available.
18	Should have	Naturalistic space with areas of open countryside and dense and scattered trees and shrubs. Provision of open water is desirable	The SANG includes areas of open grassland, woodlands and new ponds.
19	Should have	Focal point such as a viewpoint or monument within the SANG	A woodland glade within the SANG will include the existing bug hotel and interpretation board, alongside a dog pond, to provide a focal point within the SANG.

Appendix 2

Indicative SANG Cost Projection

Capital Works Costs	Unit	Cost per unit	Quantity	Set Up Costs
Interpretation board	no.	£1,200	7	£8,400
Waymarkers	no.	£120	8	£960
Kissing gate	no.	£550	5	£2,750
Maintenance access gate	no.	£450	1	£450
Bins	no.	£570	5	£2,850
Dog-proof fencing	m	£12	663	£7,956
Bound gravel walking route	m	£54	1360	£73,440
Secondary routes marked out with site-won material	days	£350	4	£1,400
Extend woodland glades	days	£750	10	£7,500
Acid grassland creation	m2	£0.9	5000	£4,500
Boundary planting	m	£18	1084	£19,512
Scrub/woodland block planting	m2	£1.1	4000	£4,400
Pond creation	no.	£6,000	1	£6,000
Woodland diversification planting	no.	£5	80	£400
Selective thinning and scrub reduction	days	£350	16	£5,600
Tree veteranisation	days	£350	2	£700
Pond enhancement	days	£350	2	£700
Invasive flora removal	days	£350	6	£2,100
10% replacement planting (Year 1)	n/a	n/a	n/a	£2,400
Planting maintenance (Years 1 - 3)	days	£350	18	£6,300
OHP & Contingency @ 30%	n/a	n/a	n/a	£43,537
Total				£205,813

Annual Management Costs	Unit	Annual cost per unit (averaged where task not annual)	Quantity	Annual cost
Empty bins	no.	£300	5	£1,500
Path maintenance	m	£2	1360	£2,720
Clear encroaching vegetation	days	£350	4	£1,400
Mow grassy glades	days	£750	1	£750
Scrub/woodland management (thinning & coppicing)	days	£350	8	£2,800
Invasive flora removal	days	£350	2	£700
Tree safety inspection	no.	£600	1	£600
OHP & Contingency @ 30%	n/a	n/a	n/a	£3,141
Total				£13,611

Capital Replacement Costs	Unit	Cost per unit	Quantity	Cost	Life (years)
Interpretation board	no.	£1,200	7	£8,400	15
Waymarkers	no.	£120	8	£960	15
Kissing gate	no.	£550	5	£2,750	15
Maintenance access gate	no.	£450	1	£450	15
Bins	no.	£570	5	£2,850	15
Fencing (post & wire with stock netting)	m	£12	663	£7,956	15

NPV-adjusted Capital Replacement by 15 yr increments	15	30	45	60	75
	£8,400	£8,400	£8,400	£8,400	£8,400
	£960	£960	£960	£960	£960
	£2,750	£2,750	£2,750	£2,750	£2,750
	£450	£450	£450	£450	£450
	£2,850	£2,850	£2,850	£2,850	£2,850
	£7,956	£7,956	£7,956	£7,956	£7,956
Subtotal	£23,366	£23,366	£23,366	£23,366	£23,366
OHP @ 20%	£4,673	£4,673	£4,673	£4,673	£4,673
Contingency @ 10%	£1,752	£1,752	£1,752	£1,752	£1,752
Total capital costs	£29,792	£29,792	£29,792	£29,792	£29,792
NPV Rate	0.597	0.356	0.213	0.127	0.076
Net Present Value	£17,782	£10,614	£6,335	£3,782	£2,257
Total					£40,771

Funding Requirement	
Number of years	80
Rate of Return	3.5%
Cumulative NPV Factor for Annual Management	26.75
NPV for Annual Management Costs	£364,078
NPV for Capital Replacement Costs	£40,771
Total SANG Management Funding Requirement	£404,848

