Penarth Heights

Ecology Report

ON BEHALF OF CREST NICHOLSON (SW)

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NICHOLAS PEARSON ASSOCIATES
ENVIRONMENTAL PLANNERS • LANDSCAPE ARCHITECTS • ECOLOGISTS

30 Brock Street Bath BA1 2LN
tel: 01225 445548 fax: 01225 312387
info@npaconsult.co.uk

www.npaconsult.co.uk

CONTENTS

SUMMARY

1. An Extended Phase 1 Habitat Survey and ecological desk study were undertaken in 2005. Subsequently, bat foraging and commuting surveys were undertaken between June and August 2005 and reptile presence/absence surveys were undertaken in September 2005.

2. No important habitats were found on-Site nor on adjacent land, although woodland habitats were considered to be likely to have importance in an urban context to the local community.

3. Whilst a number of statutory and non-statutory Sites designated for their nature conservation interest are located within 1 km of Penarth Heights, none are any closer than 250 metres, and it is considered that the proposed redevelopment of the Site poses a negligible risk of damage to them.

4. Bat foraging and commuting surveys positively identified four species of bat utilising the Site. As further survey effort in 2007 is required to determine bat usage of buildings on Site and trees (if required) to be affected by the proposed development, a separate bat report will be issued at a later date.

5. A reptile presence/absence survey identified small numbers of Slow-worm *Anguis fragilis* and Common Lizard *Zootoca vivipara* on Site in several locations.

6. Large regenerating colonies of Japanese Knotweed *Fallopia japonica* and Giant Knotweed *F. sachalinensis* were noted during the Extended Phase 1 Habitat Survey. A knotweed eradication program was started by a professional contractor in autumn 2004, and this will aim to kill all remaining stands of these invasive species present on the Site and close to it.

1.0 INTRODUCTION

1.1 An area of land at Penarth Heights, a prominent hillside location overlooking Cardiff Bay, currently comprises a number of residential blocks, associated external gardens and courtyards/ parking areas together with areas of open space generally laid to grass. The residential blocks have mostly been unoccupied for a number of years. The site is identified for comprehensive redevelopment.

1.2 Nicholas Pearson Associates (NPA) was commissioned by Crest Nicholson to undertake ecological surveys of the land (the 'Site'), the centre of which lies at Ordnance Survey NGR ST 181722, and accessible land immediately adjacent to it.

1.3 This report considers the current ecological value of the Site and its adjacent land, identifies ecological constraints and recommends further ecological work where appropriate.

2.0 METHODOLOGY

2.1 Desk Study

2.1.1 Records of protected and notable flora and fauna were requested from the Countryside Council for Wales (CCW), the Vale of Glamorgan District Council and the South East Wales Biodiversity Records Centre (SEWBReC). The defined range of this desk study included the Site itself as well as the surrounding area within an approximate radius of 1 km.

2.1.2 Locations of important Sites that have been designated for their nature conservation interest within 1 kilometre of the centre of the Site were also requested from these organisations. Sites with statutory national or international designations in this area could typically include notified or candidate Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR), Special Areas of Conservation (SAC), Special Protection Areas (SPA) and Ramsar Sites. Sites with non-statutory designations of local value in Glamorgan would typically include candidate or designated Sites of Importance for Nature Conservation (SINCs). Such sites are generally identified on account of the flora and fauna they support, and are generally considered to be of county wildlife importance.

2.1.3 Habitat and Species Action Plans listed in the national Biodiversity Action Plan (UK BAP) as well as the county BAP[1] were also consulted with regard to species or habitats that might be present on the Site.

2.1.4 Biodiversity Action Plans have been produced for a whole series of habitats and species as part of the British government's commitment to maintain and enhance national and local biodiversity following the United Nations Convention on Environment and Development in 1992 (generally known as the Rio Summit). Appendix 1 lists the species and habitats for which action plans have been prepared in the Vale of Glamorgan.

2.2 Extended Phase 1 Habitat Survey

2.2.1 The Site and its adjacent accessible habitats were surveyed by a botanist and a faunal specialist on 27 June 2005. Weather conditions were sunny and warm, with good visibility. Habitats and obvious features within the Site likely to be of value to protected, rare or otherwise notable species were mapped following the Joint Nature Conservation Committee's Phase 1 Habitat Survey Method (1990) as amended in 1995 by the Institute of Environmental Assessment (IEA 1995).

2.3 Reptile Survey

2.3.1 A reptile presence/absence survey was undertaken at the Site wherever suitable habitat e.g. long grassland and rough grassland / light scrub mosaics were present. The survey was undertaken by an experienced ecologist in September 2005, based on current best practice guidelines (HGBI 1998 and Froglife 1999).

2.3.2 The standard method for reptile surveys involves the deployment of artificial refuges, which reptiles use to bask on or shelter under. A range of materials can be used to fabricate suitable refuges including corrugated metal sheets, carpet tiles and roofing felt. All of these materials absorb heat and therefore provide reptiles with the opportunity to warm up without exposing themselves to obvious danger. In some cases suitably-placed refuges can attract reptiles from surrounding habitat where suitable sites for basking / shelter are sparse.

[1] Vale of Glamorgan Biodiversity Action Plan

2.3.3 For the current survey, 0.5m x 0.5m squares of roofing felt were placed on top of short or flattened vegetation and handfuls of dry grass or another suitable 'bedding material' were placed underneath each one. This helps to trap humidity, creates a temperature gradient and gives Reptiles a more diverse hiding place.

2.3.4 For general survey purposes i.e. to confirm presence / absence, seven checks on each refuge are recommended. Sixty refuges were laid out on 30 August 2005, and checked on seven occasions between 09 and 29 September 2005.

2.3.5 All checks were undertaken in early morning or late afternoon / early evening, when air temperature was typically between approximately 10 - 20° C with an absence of rain and little or no wind.

3.0 RESULTS

3.1 Desk Study

3.1.1 Desk study data is included in Appendix II. A summary is provided below.

Statutory Designated Sites

3.1.2 The coastal area which lies below Penarth Heights (Cardiff Bay) is covered by several statutory designations. These include the Severn Estuary SPA, Severn Estuary proposed SAC, Severn Estuary Ramsar Site, and Severn Estuary SSSI.

Non-statutory Designated Sites

3.1.3 Several cSINCs lie relatively close to the Site, the closest being approximately 250 metres away, and the furthest approximately 600 metres distant. However, because cSINCs in the Vale of Glamorgan have not been confirmed at the time of writing this report, and whilst consultation with landowners is ongoing, the Vale of Glamorgan District Council has requested that details should not be disclosed in any manner that might enter the public domain. Therefore these details are not included within this report, although they can be provided on request.

3.1.4 None of these sites are likely to be affected in any way by the redevelopment proposals at Penarth Heights.

Protected, BAP and Notable Species

3.1.5 Of the organisations contacted, only SEWBReC were able to provide specific records of protected species and other notable species within the 1 km search area for plants, birds and invertebrates. However, the Vale of Glamorgan District Council expressed an opinion that the Site had some potential to support bats, breeding birds, badgers *Meles meles*, reptiles, and Common Dormouse *Muscardinus avellanarius*. CCW advised that Otters *Lutra lutra* are known to be present in the River Ely and Cardiff Bay.

3.2 Extended Phase 1 Habitat Survey

Existing Conditions

3.2.1 Figure 1 shows the results of the field survey, along with associated target notes. All species recorded in the survey have been listed in Appendix III, with nomenclature for species of vascular plants following Stace (1997).

3.2.2 The Site occupies a prominent position on the upper levels of a terraced north-facing hillside overlooking Cardiff Bay. Much of the survey area comprised habitats of low intrinsic ecological diversity and interest, including large areas of former amenity grassland around the buildings, and extensive areas of dense scrub, particularly on steeper ground.

3.2.3 Of particular note were several large and well-established stands of Japanese Knotweed and its close relative Giant Knotweed. These were mainly present on the steeper slopes, and appeared to have been allowed to spread for many years without control. Considerable die-back indicated that all of the large stands had been sprayed with a herbicide on the current year's early-season growth, leaving large areas of bare ground and brash. Some regeneration from rhizomes of both species was also seen, and small untreated outliers of living Japanese Knotweed were present around the Site, particularly in dense thorn scrub.

3.2.4 Many residential buildings (mostly blocks of apartments) were also present across the Site. These were nearly all vacant, and their associated gardens were neglected and overgrown.

The larger grassed-over amenity spaces between the buildings were being mowed at the time of survey, and were short and well-kept, but of low ecological interest.

3.2.5 Secondary broad-leaved woodland was present around the margins of the Site, and particularly downhill. The main canopy trees were Ash *Fraxinus excelsior* and Sycamore *Acer pseudoplatanus*, with a poorly developed shrub and herbaceous understorey below, except for some of the lower woodland, which contained outgrown Hazel *Corylus avellana* coppice. Dense and impenetrable Bramble *Rubus fruticosus* scrub was spreading outwards from the edges of most woodland stands.

3.2.6 On-Site, a number of sub-mature ornamental trees were present, either as standards, or in small planted copses. Norway Maple *Acer platanoides* and Grey Poplar *Populus x canescens* were among the most common species.

Table 1: Target notes to accompany Figure 1

1	A strip of Sycamore-cherry-willow-Field Maple woodland. Traveller's-joy is present and understorey shrubs include Dogwood and Hawthorn. The strip continues on the other side of the path to the north. There is also some Hazel in the woodland to the north - nuts have been opened by Grey Squirrels only. There is a grassland fringe along the southern edge of the path - low potential for reptiles.
2	Dense woodland on slope. Canopy species are Ash, Field Maple, and cherry with a Hawthorn understorey. Some Hazel is also present - nuts opened by Wood Mouse and Grey Squirrel. Ground cover is dominated by Ivy.
3	Dense, secondary broad-leaved woodland - possibly having developed over part of a planted area of shrubs. Sycamore is the dominant canopy species, with an understorey comprising Goat Willow, Hawthorn, Dogwood and Garden Privet. Flatter parts have been heavily disturbed by walkers and cyclists, and the woodland is generally of low botanical interest.
4	Dense unmanaged plantation woodland on a steep SW facing slope. The key canopy trees are ornamental cherries and Ash, with a shrub understorey of Garden Privet and Hawthorn. The woodland is dense and apparently unmanaged, with Ivy dominating the ground. Some fallen dead wood is also present. There are no mature trees.
5	An immature secondary Sycamore-Ash-Field Maple woodland, with drapes of Traveller's-joy, and impenetrable Bramble scrub along the edges. The canopy casts dense shade, and consequently the ground flora is very impoverished (mostly Ivy and Bramble). Possible Common Dormouse potential.

6	End-block with multiple access points around window boardings. Pitched roof with soffit boards missing - low Bat potential. Surrounding grassland is dominated by False Oat-grass, Yorkshire-fog and Cock's-foot - there is some potential for common Reptiles. Associated herbs are few - mostly clovers, Common Ragwort, Cut-leaved Crane's-bill. Bramble scrub to the west of the building may support some butterflies (several 'browns' seen there). Common Blue Damselfly and a female Common Darter also seen.
7	Emperor Dragonfly and Common Darter seen foraging over grassland similar to 6.
8	Former open space between housing blocks gone wild, and now dominated by False Oat-grass and other coarse grasses and herbs, along with outgrown shrubs, and scrambling Traveller's-joy, Large Bindweed and Bramble.
9	Overgrown gardens attached to empty residences, comprising mainly outgrown ornamental shrubs (likely to support nesting birds), trees and small overgrown lawns. Neglected pavement-wall angles have been colonised by a range of typical opportunistic urban ruderals, especially willowherbs, Barren Brome, and Canadian Fleabane. House Sparrows are evident in this area. Metal plates over window openings on buildings, all of which have pitched, tiled roofs with ventilation capping tiles at apex.
10	Outbuildings with flat, felt roof. No evidence of bats - it is highly unlikely that it would be used other than as an occasional night roost. Courtyard areas with scrub and tall, improved grassland with low potential for reptiles (lack of habitat connectivity, too tall and rank).
11	An extensive stand of Japanese Knotweed dominating part of a steep north-facing slope below the former playground. It appears to have been chemically treated recently in an eradication attempt, but partial re-growth is present. Continued treatment will be required to assure complete eradication.
12	A large stand of chemically treated Giant Knotweed on a N facing bank, very close to stands of Japanese Knotweed. Surviving plants are > 3m tall. Some Japanese Knotweed is mixed in with this too. Some re-growth is evident; ground below the plants is virtually devoid of other biodiversity interest, other than Ground-elder. Giant Knotweed has crossed the pedestrian path at the base of the slope, and is spreading into the nearby woodland and scrub.
13	Banded Demoiselle on vegetation next to the path. Impenetrable scrub to the north of the path.
14	Japanese Knotweed extending downslope into mixed scrub and woodland - has been sprayed with herbicide recently, but not killed.
15	Tall grassland fringe at top of slope by allotments: the grassland and allotments have potential to support Slow-worms/Common Lizards. Grassland is tall and rank, with False Oat-grass, Yorkshire-fog, meadow-grasses and plantains.
16	Colony of live Japanese Knotweed.
17	A stand of Ash, some with an Ivy covering. Low to negligible Bat potential.
18	Dense Bramble scrub and mature Sycamore - two of which have a dense covering of Ivy. Likely to be attractive to nesting birds, but of low bat potential.
19	Dense woodland on slope, including Sycamore, willow, Alder, Dogwood, Butterfly-bush, and Hawthorn. The only ground cover is Japanese Knotweed, Ivy and Bramble.
20	A densely scrubby north-facing bank forming a mosaic with large patches of treated Japanese Knotweed, Bramble and Butterfly-bush.

21	An isolated stand of Japanese Knotweed.
22	Oak-Ash-Field Maple woodland on slope with an understorey of old Hazel stools. Nuts have been opened by Grey Squirrels only.
23	Allotments on a north-facing slope, with some scrub and trees. Part of the Site is in cultivation, but the remainder is disused and overgrown, with False Oat-grass, Bramble etc. Potential for common reptiles.
24	Small outliers of Japanese Knotweed developing in grassland.
25	Unmanaged grassland with potential to support common species of Reptile.
26	Stand of Field Maple, some of which has a dense Ivy covering. Has low-negligible Bat potential.
27	Woodland on steep slope. Canopy species are Sycamore and Ash, with Hazel prominent in the understorey at the top of the slope. Only nuts that have been opened by Grey Squirrels are evident.
28	A N-facing bank covered with the remains of an extensive stand of Japanese Knotweed, which has recently been treated with herbicide. The weed is regrowing and will require further treatment to complete eradication.
29	Grassland bordered by dense scrub (including Cherry Laurel and Butterfly-bush) to the north. A more open sward with better potential for reptiles than other grassland present on Site.
30	One plant of Corn Parsley growing robustly in disturbed ground.
31	Stand of Japanese Knotweed extending along a fence-line and into adjacent woodland.

Important Habitats on-Site

3.2.7 Figure 1 shows the extent and location of all standard Phase 1 habitat types found in the course of the survey. Important habitats are defined here as those that would qualify for inclusion in a local or UK BAP (Appendix I), or that are otherwise considered to be important in a local context. Within the Site and the land immediately adjacent to it, none of the habitats found satisfied either of these criteria.

3.2.8 Descriptions of some of the most prominent habitats found on Site are given below.

Poor Semi-improved Grassland

3.2.9 This category covers species-poor grasslands that are generally intermediate in character between improved and unimproved grasslands, and as such, it covers a broad spectrum of grassland types. In the context of the Site, poor semi-improved grasslands have probably developed from formerly intensively managed areas of amenity grassland, with a number of species colonising existing species-poor swards. Areas of this habitat were rank, and dominated by coarse grasses, in particular False Oat-grass *Arrhenatherum elatius*, with a few

common herbaceous associates, including Common Ragwort *Senecio jacobaea*, Ribwort Plantain *Plantago lanceolata* and Field Bindweed *Convolvulus arvensis*. In terms of the National Vegetation Classification (NVC), these grasslands could be placed within a species-poor variant of MG1a (False Oat-grass grassland, Red Fescue *Festuca rubra* sub-community).

Semi-natural Broad-leaved Woodland

3.2.10 This habitat occupies some of the slopes within and around the margins of the Site. It was mostly quite young (although older on the lower slopes) and the main canopy species were Ash and Sycamore. Because the woods appeared to be unmanaged, the woodland floor was densely shaded as a consequence, and the woodland structure was poorly developed. The shrub understorey was sparse in the upper woodlands, with Elder *Sambucus nigra* occasional. Older Pedunculate Oak *Quercus robur* - Ash - Field Maple *Acer campestre* woodland on lower ground held former Hazel coppice, now unmanaged. The main woodland floor species was Ivy *Hedera helix*, which is a highly shade-tolerant species. Few other herbs, grasses or sedges were present, and extensive ground trampling and disturbance from the public was also present in at least one copse.

Dense Scrub

3.2.11 Mostly, this comprised extensive areas of vigorous Bramble, up to 2 metres high and impenetrable. Common associates were found with the scrub, including False Oat-grass, Traveller's-joy *Clematis vitalba*, Large Bindweed *Calystegia silvatica*, Great Willowherb *Epilobium hirsutum* and Ash saplings colonising from nearby woodland stands.

Important Habitats Off-Site

3.2.12 No important habitats were noted in the vicinity of the Site.

Protected, BAP and Other Notable Species

3.2.13 No direct evidence of any notable species of flora or fauna was found during the Extended Phase 1 Habitat Survey. However, habitats present on the Site were considered to have potential to support certain protected species.

3.2.14 There was considerable suitable habitat on-Site in the form of scrub, trees and buildings that would provide suitable nesting Sites for a range of Bird species.

3.2.15 Long grassland and scrub edges were thought to have potential to support common species of reptile, e.g. Common Lizard and Slow-worm (target notes 6, 15, 23, 25 and 29). In addition, certain buildings, structures and trees on Site were considered to have potential to support bat roosts.

3.2.16 Habitat capable of supporting Common Dormouse was present just off-Site in the form of semi-natural broad-leaved woodland. An inspection of hazelnuts in selected woodland areas (target notes 1, 2, 22 and 27) was made in the course of the current survey, but the only nutshells found had been gnawed by Grey Squirrels *Sciurus carolinensis*.

3.2.17 No evidence was seen of Badger (setts, tracks, dung, paw-prints or hairs) and habitats on-Site were considered to be sub-optimal for this species.

3.3 Reptile Survey

3.3.1 Thirty sightings of Slow-worm and one sighting of Common Lizard were recorded during the course of the refuge checks (see Table 2 for full results and Figure 2 for locations). The weather conditions on each of the survey visits were considered optimal for recording reptiles. It should be noted that the number of sightings does not necessarily equate to the total number of reptiles since it is possible that the same animal was seen more than once.

3.3.2 A population estimate for reptiles on Site can be made from the survey results in Table 2 below. Following the survey assessment guide (Froglife 1999); an estimate of population size can be made from the results. The maximum number of adult counts in one day is two (visits one and two), so it is reasonable to assume that a low population of reptiles is present.

Table 2: Survey Results

Site Visit	Date	Species	Occurrence and Gender	Location (see Figure 2)
1	09.09.2005	Slow worm	1 Female	In area adjacent to scrub by playground
		Slow worm	1 Juvenile	In area adjacent to scrub West of playground
		Common Lizard	1 Male/Female	In area adjacent to scrub West of playground
2	19.09.2005	Slow worm	1 Female	In area adjacent to scrub West of playground
		Slow worm	3 Juveniles	In area adjacent to scrub West of playground
		Slow worm	1 Female	In area adjacent to scrub by playground
		Slow worm	1 Juvenile	In scrub adjacent to the West of the allotments
3	20.09.2005	Slow worm	3 Juveniles	In area adjacent to scrub West of playground
		Slow worm	1 Male	In scrub adjacent to the North East of the allotments
4	23.09.2005	Slow worm	2 Juvenile	In area adjacent to scrub West of playground
5	27.09.2005	Slow worm	1 Female	In scrub adjacent to the North East of the allotments
		Slow worm	5 Juveniles	In area adjacent to scrub West of playground
6	28.09.2005	Slow worm	5 Juveniles	In area adjacent to scrub West of playground
		Slow worm	1 Juvenile	In scrub adjacent to the South East of the allotments
7	29.09.2005	Slow worm	3 Juveniles	In area adjacent to scrub West of playground
		Slow worm	1 Male	In scrub adjacent to the West of the allotments

4.0 CONCLUSIONS

4.1 Most of the Site is ecologically uninteresting, and is likely to present few constraints to development. Semi-natural habitats, where present, are either immature or degraded, and have little intrinsic botanical value. In the context of the predominantly urban area, however, the woodland habitats are of local value, likely to have local recreational and aesthetic value to the local community.

4.2 Ecological constraints have been highlighted on Site and it is considered that the proposed development would impact upon bats, breeding birds and a low population of reptiles.

4.3 As woodland habitats identified in the survey were generally off-Site, and there were no historical records of Badger or Common Dormouse, these species were not considered likely to be present.

4.4 All species of British bat are fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) with protection recently extended by the Countryside and Rights of Way Act 2000. Four of the sixteen species of bat - Greater Horseshoe *Rhinolophus ferrumequinum* Lesser Horseshoe *Rhinolophus hipposideros*, Barbastelle *Barbastella barbastellus* and Bechstein's *Myotis bechsteinii* - resident in the UK are also protected under Schedule 2 of the Conservation (Natural Habitats & c.) Regulations 1994. Development works that affect Bat roosts can only be carried out under the terms of a licence[2] issued by DEFRA. Such licences are only issued where a number of conditions have been set (usually relating to detailed mitigation measures).

4.5 All common reptiles (Common Lizard, Grass-snake *Natrix natrix*, Slow-worm and Adder *Vipera berus*) receive partial protection under Schedule 5 (part 9 (1)) of the W&CA 1981. This legislation protects these species from intentional killing or injury. However, this protection does not extend to habitats used by reptiles.

4.6 All wild birds are protected under Section 1 of the W&CA 1981, and the CROW Act 2000 extended this protection. This makes it an offence to intentionally kill or injure any wild bird or to damage or destroy any active bird's nest or its eggs. Certain species e.g. Barn Owl *Tyto*

[2] Licences are required for any activity which would otherwise be considered illegal e.g. disturbing a place of shelter or protection.

alba are afforded further protection under Schedule 1 of the same Act, which includes the intentional or reckless disturbance of the bird whilst nesting, or disturbance of the dependent young of that species.

4.7 A number of live and/or regenerating colonies of Japanese and Giant Knotweed were seen on-Site. Several small patches were present in dense scrub or woodland edge, and appeared to have escaped the early application of herbicide in 2005. Japanese Knotweed is extremely difficult to eradicate completely, and can re-grow from extremely small fragments of rhizome (Child and Wade 2000). Disposal of material contaminated with the plant can be very expensive in order to comply with relevant legislation. In the UK, it is listed under Schedule 9, Section 14 of the W&CA 1981, making it an offence to plant or otherwise cause the species to grow in the wild. It is also classified as 'controlled waste' under the terms of the Environmental Protection Act 1990, and it must therefore be disposed of safely at a licenced landfill Site in accordance with the EPA (Duty of Care) Regulations 1991. Giant Knotweed is not currently subject to legislative control, although its invasive nature makes it an undesirable species to have on a Site. It is understood that both knotweed species (including regeneration and outlier colonies) at Penarth Heights will be eradicated by a professional contractor by means of an intensive three-year control program 2005-2007.

5.0 RECOMMENDATIONS

5.1 Further ecological works are recommended to establish a complete baseline upon which any mitigation for the proposed development can be based. Initial mitigation proposals are described below. The exact scope of works would depend upon the final plans for the development and would need to be agreed with CCW and the Vale of Glamorgan District Council (VGDC).

5.1 Reptiles

5.1.1 As a small population of reptiles is present on Site, it is recommended that prior to development a translocation is undertaken to ensure no detriment to the existing population.

5.1.2 Consultation with CCW and VGDC is underway. The key principals of a reptile translocation could include;

- Translocation of reptiles from suitable areas to a sustainable receptor Site. To achieve this habitat enhancement of a receptor area is proposed to the western side and or adjacent to the Site may be required or if this is not possible an alternative receptor area in the local area would be required. To be able to deem this area suitable to receive reptiles agreement with CCW and VGDC would be required and further survey work to determine if any existing reptile populations are present at the alternative Site.

- Reptiles retained in habitat at the proposed receptor area at the western side of the Site or adjacent to the Site would, be prevented from accessing the construction area by the creation of unsuitable land corridors (e.g. short grassland or soil stripping).

- Translocation effort should be such that all reptiles could reasonably be assumed to have been removed (in practice, ten visits with zero capture). On this basis, a destructive search would not be necessary.

5.2 Breeding Birds

5.2.1 As habitat to support breeding birds has been identified on Site it is recommended that careful scheduling of development works that might affect trees, scrub, bushes, buildings and other structures considered to have potential to support nests are undertaken outside the bird breeding season. As a general rule in southern Britain, nearly all species nest between March and August. However, clearance can be undertaken between September and February inclusive following a negative result from updated ecological survey.

5.3 Bats

5.3.1 Buildings and trees on Site have potential to support roosting bats, and further survey is required before any recommendations can be made with respect to this group of species.

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