

PHPM Properties Ltd



Ecological Appraisal

Proposed Residential Development

Durban Road, Bognor Regis

28 October 2021

ENVIRONMENTAL AND
SUSTAINABILITY CONSULTANTS

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Executive Summary

This ecological appraisal report details the potential ecological effects of the proposed construction of a new residential development at Durban Road, Bognor Regis.

The site currently comprises a small area of derelict land which is largely hardstanding, but also contains scrub and grassland. Three mature willows are present to the north of the site. The site is considered unlikely to support any protected species, although the occasional presence of slow worms cannot be excluded.

As the site is not considered to be of significant ecological value, there would be no significant ecological impacts as a result of its development. However best practice measures to, protect the mature willow trees and prevent harm or disturbance to reptiles and nesting birds are recommended. The development presents opportunities for ecological enhancements including the erection of bird and bat boxes, and wildlife-friendly planting around the site.

Provided some of the recommended ecological enhancement measures are implemented, the development would comply with relevant nature conservation legislation and planning policy regarding ecological enhancements.

1.0 Introduction

1.1 *Background*

This document details the ecological effects of the proposed construction of a new residential development at Durban Road, Bognor Regis, West Sussex (see Figure 1.1 for the site location). In October 2021, Encon Associates were instructed by PHPM Properties Limited to undertake an ecological survey of the site in order to provide information regarding the ecology of the site and inform plans for its redevelopment.

1.2 *Brief Description of the Proposed Works*

The proposals entail the clearance of the site followed by the construction of a new residential development comprising 24 flats in a four-storey block. The building will include internal parking at the ground-floor level and a recessed fourth storey. There will be some external landscaped areas and a roof garden.

1.3 *Scope*

This document aims to assess the likely ecological effects of the proposed development.

The scope of this Ecological Assessment is to:

- Identify any potential biophysical changes as a result of the proposed development.
- Identify and provide a valuation of features of ecological interest on a site (such as habitats and protected species) and recommend further surveys should they be necessary.
- Assess the likely ecological effects of the development against relevant legislation and policy.
- Recommend avoidance and/or mitigation measures that are likely to be required to reduce the ecological impact of the proposals.

If no further surveys are recommended, this report can serve as full assessment of the ecological effects of the development in support of any planning application.

1.4 *Legislation and Policy Context*

1.4.1 *Relevant Legislation*

The Wildlife & Countryside Act 1981 (as amended) (1) is the primary piece of legislation by which biodiversity in the UK is protected. The most relevant areas of the Act to development related activities are:

- The identification and subsequent protection of Sites of Special Scientific Interest (SSSIs), which prohibits damaging activities
- The protection of certain species listed in Schedule 5, which prohibits killing, injury, disturbance, damage and/or destruction of breeding sites and/or resting places and sale (it should be noted that all parts of this protection do not apply to all Scheduled species)
- The protection of wild birds and their nests, which prohibits damage or destruction of nests whilst in use. Species listed in Schedule 1 of the act receive additional protection from disturbance whilst they are building a nest or are near a nest containing eggs or young. It also prohibits the disturbance of dependent young.
- Measures to prevent the spread of invasive plant species.

The Conservation of Habitats and Species Regulations 2017 (known as the ‘Habitats Regulations’) (2), pass two EEC Directives into UK law. The Regulations protect sites and species deemed to be of conservation importance across Europe. The most relevant parts of the Regulations to development related activities are:

- The protection of Special Protection Areas (SPAs) and Special Areas of Conservation (SACs)

- The protection of species listed within Schedule 2 of the Regulations, which prohibits killing, injury, disturbance, damage and/or destruction of breeding sites and/or resting places and sale, this confers some level of habitat protection.

In order for activities that would be likely to result in a breach of species protection under the regulations to legally take place, a European Protected Species (EPS) mitigation licence must first be obtained from Natural England.

The Protection of Badgers Act 1992 (3), deals solely with the protection of badgers *Meles meles* in the UK. It prohibits killing, injuring or taking badgers, damaging, destroying or otherwise interfering with a badger sett, disturbing an occupied badger sett and sale of badgers.

The Natural Environment and Rural Communities (NERC) Act 2006 (4) requires that public bodies to have regard to the conservation of biodiversity. This means that Planning Authorities must consider biodiversity when reaching planning decisions. Section 41 of the act lists habitats and species that are conservation priorities in England.

1.4.2 *Planning Policy*

Government policy with respect to the protection of biodiversity is laid out in the National Planning Policy Framework (NPPF) (5). This places an onus on development to minimise impacts to biodiversity and where possible to provide net biodiversity gain. The NPPF provides guidance to Local Authorities in how to conserve and enhance biodiversity through local Planning Policies and when assessing planning applications.

Local planning policy is contained within the *Arun Local Plan 2018* (6), which contains a number of policies relevant to the protection of ecology and biodiversity.

- Policy GI SP1 *Green Infrastructure and Development* aims to protect and enhance the existing Green Infrastructure Network throughout the district for a number of purposes, including biodiversity. The proposed development site does not fall within or adjacent to any parts of the Green Infrastructure Network.
- Policy ENV SP1 *Natural Environment* promotes the preservation, restoration and enhancement of biodiversity through the development process, by protecting both designated and non-designated sites and promoting the creation of new areas of habitat.
- Policy ENV DM1 *Designated Sites of biodiversity or geological importance* presumes against granting planning permission for developments which would have an adverse effect on any designated sites, other than in exceptional circumstances and when it can be demonstrated that any adverse effects of the proposals can be adequately mitigated.
- Policy ENV DM2 *Pagham Harbour* seeks to protect the internationally designated Pagham Harbour SPA, which lies to the west of the proposed development site. The Durban Road site lies outside the 5km buffer zone, and therefore this policy is not applicable to the proposed development.
- Policy ENV DM3 *Biodiversity Opportunity Areas* required development to retain and incorporate locally valued and important habitats including wildlife corridors, and to be designed to minimise disturbance to habitats. If a proposal would result in habitat loss, mitigation would be required. It also identifies Biodiversity Opportunity Areas (BOA). The Druban Road site does not fall within or adjacent to any BOAs.

- Policy ENV DM4 *Protection of trees* protects trees covered by Tree Protection Orders, and those falling within identified Ancient Woodland areas.
- Policy ENV DM5 *Development and biodiversity* requires development proposals to protect existing biodiversity and seek to achieve a net gain in biodiversity. It encourages the incorporation of landscaping to benefit biodiversity and features such as green roofs, walls and bird and bat boxes. If it is likely that a protected species is present on a development site, the policy requires appropriate surveys and mitigation proposals.

1.4.4 *Biodiversity Action Plans*

Biodiversity Action Plans (BAPs) were the UK's response to the 1992 Convention on Biological Diversity. The UKBAP (7) described the biodiversity of the UK and contains Action Plans for the most threatened habitats and species. It was implemented at a local level through regional and local BAPs. The *UK Post 2010 Biodiversity Framework* has now superseded the UKBAP, however BAPs are still used at a more local level in some areas. Species and habitats which were previously priorities within the UKBAP are now listed as Species of Principal Importance within section 41 of the NERC Act 2006 (4). There are no current BAPs which cover the site.

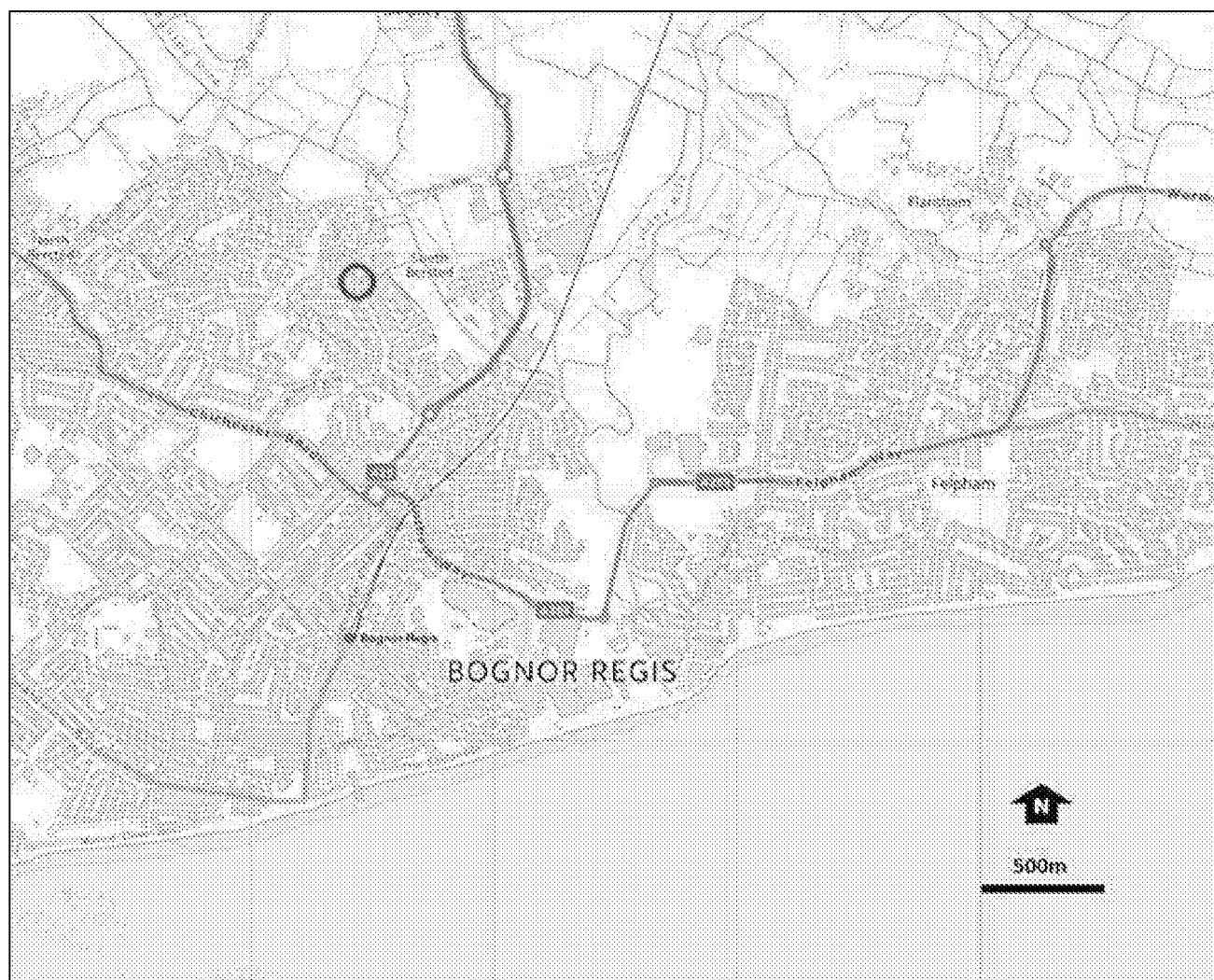


Figure 1.1: Site location. Contains Ordnance Survey data © Crown copyright and database right 2018.

2.0 Methodology

2.1 *Desk Study Methodology*

Available online resources such as the MAGIC (Multi-Agency Geographical Information for the Countryside) and NBN (National Biodiversity Network) websites were interrogated for relevant information, including statutory designated sites within 5km of the site. In addition, a search of information on protected sites and species within 1km of the site was requested from Sussex Biodiversity Record Centre (SxBRC).

2.2 *Field Survey Methodology*

The survey was carried out by Dr Liam Russell CEcol MCIEEM for and on behalf of Encon Associates Ltd on 9 October 2021. The survey followed CIEEM's Preliminary Ecological Appraisal guidance (8). The survey consisted of a site walkover (loosely based on the "Phase 1" methodology (9), modified to suit the situation) with all accessible areas of the site and adjacent land (where relevant) covered. The habitats present were generally described, with attention paid to their potential to support protected species. A general search for evidence of protected species was also undertaken.

2.3 *Assessment Methodology*

2.3.1 *Introduction*

The methodology for the assessment of the likely ecological effects of the proposed development is based on the principles of CIEEM's *Guidelines for Ecological Assessment in the UK, 2nd Edition* (10). Although this assessment does not constitute a formal Ecological/Environmental Impact Assessment, the CIEEM guidelines provide a useful framework for assessing ecological impacts at any level.

2.3.2 *Valuation*

Features of ecological interest are valued on a geographic scale. Value is assigned on the basis of legal protection, national and local biodiversity policy and cultural and/or social significance.

2.3.3 *Identification of Potential Ecological Impacts in Absence of Mitigation*

A development may have ecological effects beyond its site boundaries, therefore the CIEEM guidelines require that the 'zone of influence' be identified. Due to the relatively small size of this development, for the majority of ecological features, the zone of influence is considered unlikely to extend beyond the footprint of the works and immediately adjacent habitat. However the site lies within the

Without mitigation, the proposed development may result in the following biophysical changes during construction and/or operation:

- Loss of and damage to habitats within or adjacent to the footprint of the development and construction zone.
- Any loss or damage of habitats could result in death and/or injury to protected species should they be present.
- Disturbance of immediately adjacent habitats and any wildlife using them during construction.

2.4 *Limitations*

This survey comprised a single walkover. As such it is only possible to gain a snapshot of the ecology of the site and it is possible that some seasonal species could be missed. However, given the habitat types present on the site it is considered highly unlikely that any ecological features of significance would be missed.

The ecology of a site can change quickly over time. Therefore this survey is considered valid for two years from the date of the report.

3.0 Ecological Baseline

3.1 *Site Context*

The development site lies within the north of Bognor Regis (see Figure 1.1 for location), which is located within the South Coast Plain Natural Character Area (NCA). This is a flat, coastal landscape lying between the South Downs and South Hampshire Lowlands and the waters of the English Channel, Solent and part of Southampton Water. The coastline includes several major inlets and intertidal habitats of international importance for wildfowl and waders. Chichester Harbour Area of Outstanding Natural Beauty lies within the NCA and the foothills of the South Downs, along the northern boundary, fall within the South Downs National Park. Some three per cent of the area is designated as SSSI, and there are four SPAs, two SACs and four Ramsar sites: Chichester and Langstone Harbour, Pagham Harbour, The Solent and Southampton Water and Portsmouth Harbour. The harbours and the Manhood Peninsula, a small triangular peninsula south of Chichester, are the last relatively undeveloped stretches of coastline within the NCA. Elsewhere, there is significant urban development, with settlements along the coast dominated by the Portsmouth conurbation, trunk roads, suburban villages and an extensive string of seaside towns between Brighton and Southampton. Long, linear shingle beaches and more locally, sand dunes, are important coastal features (11).

The site itself comprises an area of derelict land at the corner of Durban Road and Ash Grove in the South Bersted area of Bognor Regis. The surrounding area is relatively urban with residential development to the south and west, and commercial/light industrial areas to the north and east. There are no significant green spaces within the immediate vicinity of the site, however an area of scrub and rough grassland is present approximately 210m to the northeast.

3.2 *Protected Sites*

There is one statutory designated site within the vicinity of the development site. The Brooks Local Nature Reserve, (LNR) lies approximately 400m northeast of the site is designated for its meadow and wetland habitats including reedbeds and ditches, permanent and temporary ponds, and an extensive newly planted floodplain woodland.

The nearest SSSI is Bognor Reef, a strip of rare vegetated shingle, which is approximately 2.1km to the south.

The site is approximately 5.1km from Pagham Harbour SSSI/SPA/Ramsar Site and therefore is outside of the identified Risk Zones, where impacts to the SPA are considered likely.

There are no non-statutory Sites of Importance for Nature Conservation (SINC) within 1km of the site

It is possible for ecologically sensitive sites to be affected by development within their vicinity. However, all of the sites identified here are considered to be outside of the zone of influence. They do not fall within the site or directly adjacent to it and therefore, no direct impacts in terms of habitat loss, damage or disturbance will occur. As they are considered to be outside of the zone of influence of the proposed development, they are not considered further within this report.

3.3 *Description of Habitats Within the Zone of Influence*

A survey map of the site with target notes is provided at Figure 3.1.

The Durban Road site is a small triangular plot of land at the corner of two roads in the north of Bognor Regis. It has been previously developed to a degree and contains a large area of hard standing in the centre (target note 1, photo 1). This comprises areas of both tarmac and concrete which have become vegetated to a degree, particularly by various grasses, ivy *Hedera helix*, as well as bramble *Rubus fruticosus* agg. and buddleia *Buddleia davidii*.

The eastern side of the site is covered by a dense bank of bramble scrub (target note 2, photo 2). This also contains buddleia, clematis *Clematis vitalba*, ragwort *Jacobaea vulgaris*, mugwort *Artemisia vulgaris* and false oat-grass *Arrhenatherum elatius*. At the northern end the scrub area, several hawthorn *Crateagus monogyna* are present (target note 3).

Towards the hard standing, the scrub grades into rough grassland with a number of herb and ruderal species present, and this habitat type is dominant along the western side of the site (target note 4, photo 3). False oat-grass is the dominant grass species, with cock's-foot *Dactylis glomerata*, sheep's fescue *Festuca ovina*, perennial rye-grass *Lolium perenne* and annual meadowgrass *Poa annua* also present. Herb and ruderal species present include creeping cinquefoil *Potentilla reptans*, ribwort plantain *Plantago lanceolata*, ragwort, yarrow *Achillea millefolium*, dandelion *Taraxacum officianale* agg., hawkbit *Leontodon* sp., spear thistle *Cirsium vulgare*, perforate St. John's wort *Hypericum perforatum*, red valerian *Centranthus ruber*, hedge bindweed *Calytegia sepium* and field bindweed *Convolvulus arvensis*. Horsetail *Equisetum vulgare* is also present, and bramble is colonising in some places. Young self-set goat willow *Salix caprea*, grey willow *Salix cinerea* and buddleia are present in the south of this area (target note 5, photo 4).

The western and southern sides of the site are surrounded by a strip of regularly mown amenity grassland (target note 6, photo 5), which is frequently used for parking vehicles and is consequently bare in places. This is dominated by perennial ryegrass and annual meadowgrass, with cock's-foot also present. Herb species present include yarrow, daisy *Bellis perennis*, dandelion, hawkbits, white clover *Trifolium repens*, dove's-foot cranesbill *Geranium molle*, common mallow *Malva sylvestris*, common chickweed *Stellaria media* and creeping cinquefoil.

Three large mature white willow *Salix alba* trees are present off site to the north (target note 7, photo 6), but overhang the site.

3.4 Protected or Notable Species

3.4.1 Introduction

SxBRC returned a number of records of protected or notable species from within the search area. Due to the nature of the habitats present, most of these would be unlikely to be present on the site. For example several were of wetland bird species which were recorded from wetland habitats such as those present at The Brooks LNR and similar habitats nearby. However species which could be found within the zone of influence are considered below.

3.4.2 Bats

SxBRC returned a number of records of bats from within the search. Species recorded include noctule *Nyctalus noctula*, serotine *Eptesicus serotinus*, common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus*, brown long-eared bat *Plecotus auritus* and a few unidentified bats.

There are no buildings or trees on the site that are suitable for bats to roost. No suitable roost features were noted on the large willow trees at the northern end of the site, although these were not surveyed in detail. The site may be used by foraging bats, although it is too small to be of significant value.

3.4.3 *Reptiles*

The rank grassland and scrub edge habitat on the site has a suitable structure for reptiles, particularly slow worms *Anguis fragilis*. Slow worms and grass snakes *Natrix helvetica* have been recorded within the search area, although not from the site itself. Whilst the habitat has a suitable structure for reptiles, it is extremely limited in extent, covering only a few square metres, and therefore is insufficient to support viable reptile population on its own. The site is relatively isolated from other areas of suitable reptile habitat by roads and development, and therefore whilst their presence on the site cannot be definitively excluded, it is considered unlikely that reptiles would be present in significant numbers.

3.4.4 *Amphibians*

SxBRC returned one record of a great crested newt *Triturus cristatus* from within the search area, dating from 2004. A number of common frog *Rana temporaria* records were also returned. No ponds could be identified within the vicinity of the site during the site visit and using Ordnance Survey mapping and online aerial imagery. The nearest identified pond is over 600m to the north and isolated from the site by roads and development. Therefore it is highly unlikely that great crested newts would be found on the site.

3.4.5 *Nesting birds*

SxBRC returned records of many bird species from within the search area. Many would not occur on the site due to the habitats present. However, the scrub vegetation and tree on

and adjacent to the site does provide opportunities for a variety of common species to nest. No evidence of nesting birds was noted during the survey.

3.5 *Ecological Valuation*

The habitats within the site are of limited ecological value. They are entirely artificial and similar habitats are relatively commonplace within the wider area. No vegetation is present on the site. Due to the habitats present, the application site is unlikely to support significant numbers of protected or notable species. Therefore the habitats on site are considered of value within the zone of influence only.

Although the large willow trees to the north of the site would not be protected under local planning policy, they are considered of some ecological value. They are large native trees within an otherwise relatively developed area and as such provide a resource for wildlife in the area. Therefore they are considered to be of local ecological value.

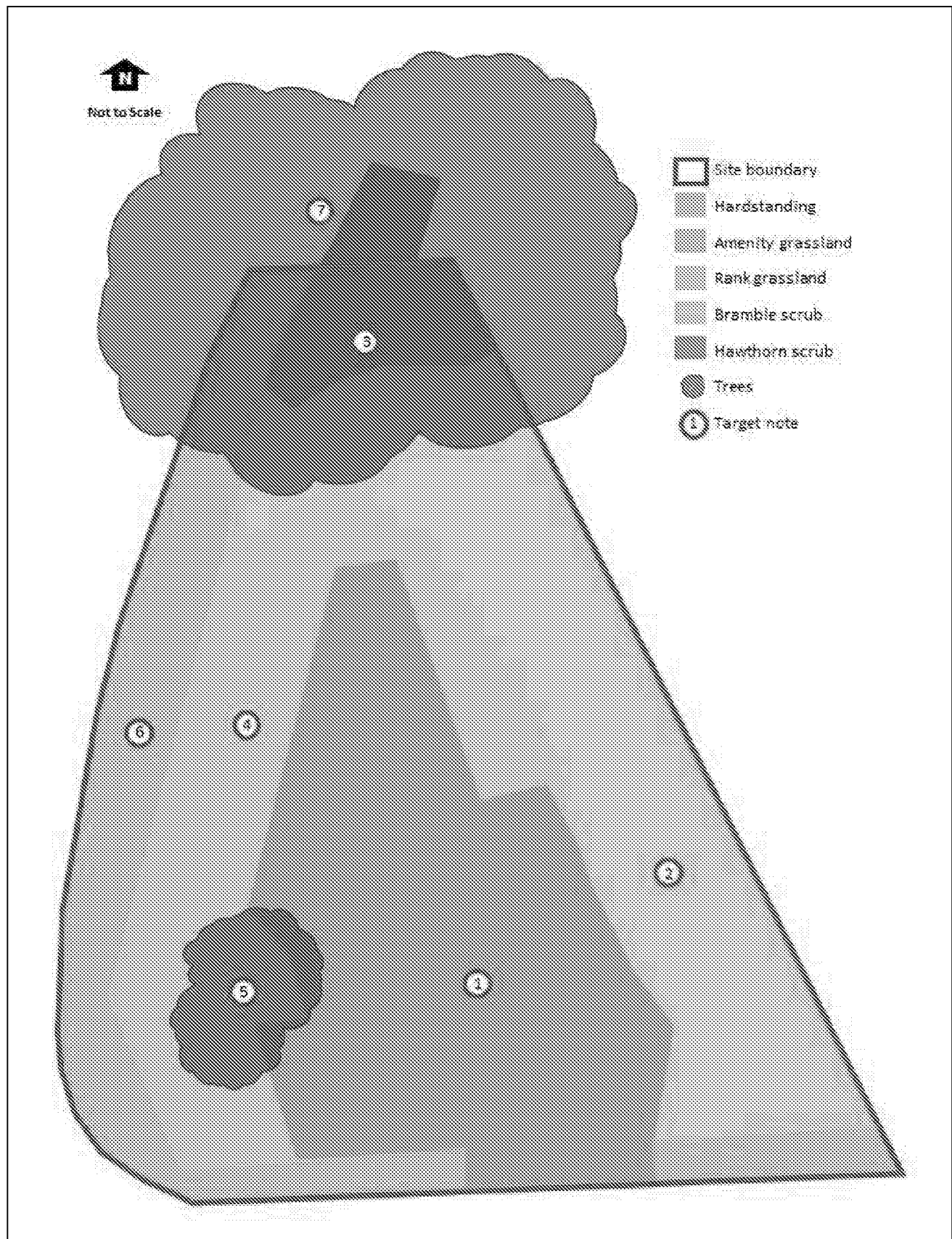


Figure 3.1: Habitats present on the site. See main text for target note descriptions

Photographs



Photo 1: Area of tarmac and concrete hardstanding in the centre of the site.



Photo 2: Bramble-dominated scrub on the eastern boundary. Hawthorn becomes dominant at the northern end.



Photo 3: Rank grassland along the western side of the site.



Photo 4: Self-set willow and buddleia are present in the southwest corner of the site.



Photo 5: Amenity grass verge along the western edge of the site.



Photo 6: Three large white willow trees are present at the northern end of the site.

4.0 Assessment of Likely Impacts in Absence of Mitigation

4.1 *Introduction*

The CIEEM guidelines (10) require that the potential impacts of the proposals should be considered in absence of mitigation. In order for a significant adverse effect to occur, the feature being affected must be at least of local value. However in some cases, features of less than local value may be protected by legislation and/or policy and these are also considered within the assessment. Although significant effects may be identified at this stage of the assessment, it is often possible to provide appropriate mitigation.

4.2 *Site Preparation and Construction Activities*

The habitats on the site are not considered to be of ecological value outside of the zone of influence and are unlikely to support protected or notable species. Therefore there would not be any significant impacts as a result of their loss or damage.

The willow trees to the north of the site will be retained, but could be accidentally damaged during construction by root compaction and crown damage. If the trees were damaged this could result in an adverse ecological effect at a local level.

Some vegetation on the site could be used by nesting birds. If clearance occurred whilst birds were nesting on the site, they could be disturbed and their nests destroyed or damaged. The nests, eggs and nestlings of all wild birds are protected from disturbance, damage and destruction under the Wildlife & Countryside Act and therefore this could result in a legal offence.

The presence of reptiles on the site is considered unlikely, and in the event that small numbers were present, the proposals would not have a significant ecological impact on reptile populations. However, all reptile are protected from killing and injury under the Wildlife & Countryside Act and therefore if any reptiles were harmed, it could result in a legal offence.

4.4 *Site Operation*

No operational impacts are considered likely.

5.0 Mitigation, Compensation and Enhancements

5.1 *Introduction*

This chapter contains recommendations for further works needed to fully assess the ecological impacts of the proposals and to mitigate any potential adverse effects. In addition, recommendations for the enhancement of nature conservation and biodiversity on the site are included.

5.2 *Further Survey*

The site is unlikely to support significant populations of protected species and therefore no further surveys are recommended.

5.3 *Mitigation Measures*

5.3.1 *Tree protection*

The mature willow trees to the north of the site should be protected during construction using standard arboricultural tree protection measures.

5.3.2 *Nesting birds*

Vegetation clearance should be timed to take place outside of the nesting bird season (typically March to August inclusive). If it is necessary to undertake any clearance within this period, any vegetation to be cleared should be thoroughly checked for the presence of active nests. If any nests are found they should be retained *in situ* with a suitable buffer of uncleared vegetation until the nestlings have fledged.

5.3.3 *Reptiles*

The site is unlikely to support reptiles, however slow worms have been recorded in the vicinity and therefore mitigation is recommended to prevent them from harm in the unlikely event that any are present. In order to prevent reptiles from being harmed, habitat manipulation should be undertaken to encourage them to leave the site. At least two weeks before any site clearance takes place, suitable habitat (i.e. the rough grassland and the edge of the bramble scrub) should be strimmed to a height of 100mm. This would deprive any reptiles present of suitable cover whilst leaving them unharmed, and therefore encourage them to leave the site. Habitat manipulation is not a suitable mitigation technique where large areas of habitat lost. However, it can be effective when only small amounts of habitat are affected, such as in this case.

5.4 *Recommendations for Ecological Enhancements*

5.4.1 *Introduction*

Planning policy requires development to provide some form of ecological enhancement. Due to the situation and existing ecological value of the site, opportunities for enhancements are limited. However, the following measures would provide some ecological enhancements within the proposed development.

5.4.2 *Swift nesting boxes*

The proposed building will be four storeys tall and therefore potentially suitable for swifts *Apus apus* to nest. At least four swift boxes or bricks should be installed on the eastern aspect of the building where there will be no accessible roof areas below. The boxes should be installed at roof level to allow the birds to fly directly into them. A number of suitable designs are commercially available.

5.4.3 *Bat boxes and other bird boxes*

At least two bat boxes and two bird boxes should be installed on the retained willows to the north of the site. Bat boxes designs should be suitable for pipistrelles in particular, which are the most likely species to be found within the area.

5.4.4 *Planting to benefit pollinators*

Although outside space is limited there is potential to provide ecological enhancements by planting in landscaped and accessible roof areas. Nectar-rich shrub species should be planted which will provide a food source for a variety of urban pollinator species including bees. Native species are preferred as they will benefit the widest range of species. Species such as heathers *Erica* spp. would be particularly beneficial. However, due to the urban nature of the site, other beneficial species such as lavenders *Lavendula* spp., would also be appropriate.

5.4.5 *Native tree planting*

Where planting is undertaken in landscaped areas of the site, this should utilise native tree species, and ideally those which produce fruits or berries. This will provide a variety of ecological benefits: trees that produce fruits or berries will provide food for a number of species, they will also provide shelter, and will enhance connectivity around the site. A number of species could benefit from this including bats, hedgehogs, and a variety of bird species. All tree stock planted should be of local provenance.

6.0 Summary and Conclusions

6.1 *Summary*

The proposed development site at Durban Road is not currently considered to be of ecological value outside of the zone of influence. Consequently the proposals are not likely to have a significant ecological impact in terms of effects to the habitat. However, it is necessary to ensure the mature willows at the northern end of the site are protected from damage during construction.

Whilst the site is considered unlikely to support reptiles, the possibility of the presence of low numbers cannot be definitively excluded, and therefore mitigation measures should be implemented to ensure that no reptiles are harmed during construction. Similarly, measures are also required to prevent nesting birds from being disturbed during site clearance.

There are opportunities to enhance the ecological value of the site, through the installation of swift nest boxes, bat boxes and other bird boxes, and wildlife-friendly planting to benefit pollinators and other urban wildlife.

6.2 *Residual Impacts*

As the site is not considered to be of significant ecological value, there would be no significant ecological impacts as a result of its development.

Provided some of the recommended ecological enhancement measures are implemented, the development would comply with relevant nature conservation legislation and planning

policy regarding ecological enhancements. Consequently there would be no residual impacts.

7.0 References

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