



ECOLOGICAL IMPACT ASSESSMENT

Old Blacksmiths Yard, Angmering, West Sussex

On Behalf of: Mr Espezel

Planning Issue

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L I Z A R D

Landscape Design and Ecology

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SUMMARY

Lizard Landscape Design and Ecology has been commissioned to undertake an Ecological Impact Assessment of land proposed for development at Old Blacksmith Yard, Angmering, West Sussex (*Grid Reference: TQ 073 046 – hereafter referred to as 'the site'*).

A Preliminary Ecological Appraisal and Preliminary Bat Roost Assessment of the site was undertaken on 8th April 2019, to appraise the existing ecological resource within the land and the surrounding area. A full Ecological Impact Assessment was then undertaken using this baseline data.

The site is formed of improved grassland bordered by hard / bare ground, scattered trees and stream. The site itself is of **low ecological value** with no habitats of interest noted.

The site was found to be of negligible value to roosting bats, however the adjacent wooded area is likely to provide some foraging opportunities. A series of mitigation / avoidance measures have been devised to ensure the development does not contravene any UK or European legislation.

Once avoidance and mitigation measures have been taken into account, the impacts of the planned development upon biodiversity will be **negligible, non-significant** with proposed ecological enhancements resulting in a **net gain** and a **long-term positive increase** in biodiversity in line with national planning policy guidance.

1.0 INTRODUCTION

- 1.1 Lizard Landscape Design and Ecology has been commissioned to undertake an Ecological Impact Assessment of land proposed for development at Old Blacksmiths Yard, Angmering, West Sussex (*Grid Reference: TQ 073 046 – hereafter referred to as 'the site'*).
- 1.2 A Preliminary Ecological Appraisal and Preliminary Bat Roost Assessment of the site was undertaken on 8th April 2019, to appraise the existing ecological resource within the land and the surrounding area. A full Ecological Impact Assessment was then undertaken using this baseline data.
- 1.3 A summary of the results of these surveys, potential impacts of the proposals, and details of avoidance, mitigation and compensation measures have been detailed within this report. This report has been prepared by Louise Barker (*MSc BSc, Ecologist; Lizard Landscape Design and Ecology*) and reviewed by Joe Jackson (*Principle, Landscape Architect BA (Hons) LA DipLA CMLI; Lizard Landscape Design and Ecology*).

Site Information

- 1.4 The site is bounded to the north by Water Lane, to the west by Arun Angling (commercial building) and associated parking, to the east by a tree lined neighbouring residential garden and to the south by a stream which contributes to the Black Ditch River.

Surrounding Landscape

- 1.5 The surrounding landscape is of mixed use. The site is located to the north-eastern edge of the village of Angmering; the nearby surroundings were historically used for plant nurseries and light industrial / commercial use. The land-use is currently changing to largely residential use as the village of Angmering expands.

- 1.6 Angmering is surrounded to the east and west largely by arable land and patches of woodland; it is connected to more continuous coastal development at its southern extent. The nearest woodland is 640m to the north of the site; this is designated as Deciduous Woodland forming Poling Furzefield. The nearest patch of Ancient Woodland is Groom's Copse (7.5 Ha), situated 670m to the north-east; Ancient Woodland is generally more extensive to the north and east. Soils on site are described as freely draining slightly acid loamy soils.

Development Proposals

- 1.7 The scheme proposals include the development of 2 no. semi-detached 3 bed residential dwellings with associated parking and hard and soft landscape areas.

Survey Aims

- 1.8 The aim of this ecological appraisal survey has been:
- *To identify habitats and protected species present, and any other features of ecological value;*
 - *Identify any potential ecological constraints;*
 - *Identify impacts of the proposed development and set out appropriate avoidance, mitigation and compensation measures;*
 - *To provide suggestions for enhancements to be incorporated into the scheme.*

2.0 PLANNING POLICY AND LEGISLATION

Legislation

2.1 Legislation relating to wildlife and biodiversity of particular relevance to this EclA includes:

- *The Conservation of Habitats and Species Regulations 2017;*
- *The Wildlife and Countryside Act 1981 (as amended);*
- *The Natural Environment and Rural Communities (NERC) Act 2006.*

2.2 This above legislation has been addressed, as appropriate, in the production of this report.

National Planning Policy

2.3 The National Planning Policy Framework (NPPF) 2018 sets out the government planning policies for England and how they should be applied. '*Chapter 15: Conserving and Enhancing the Natural Environment*' states that development should be '*minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.*'

2.4 The Government Circular 06/2005, which is referred to by the NPPF, provides further guidance in respect of statutory obligations for biodiversity and geological conservation and their impact within the planning system.

Local Planning Policy

- 2.5 Local Planning Policy relevant to this site include; Policies ENV DM3 and ENV DM5 of the *Arun Local Plan 2011 – 2031 (currently under review)* which state that planning permission will only be granted where:
- *The proposals have no adverse impacts upon the international, national and local designated sites (statutory and non-statutory) within the district;*
 - *Development schemes seek to achieve a net gain in biodiversity and protect existing habitats on site;*
 - *Proposals incorporate elements of biodiversity including green walls, roofs, bat and bird boxes as well as landscape features minimising adverse impacts on existing habitats (whether designated or not);*
 - *Development schemes should provide a network of green spaces which serve to reconnect isolated sites and facilitate species movement;*
 - *Sites have been screened for their potential to support protected species. Where there is evidence of a protected species on a proposed development site, planning applications include a detailed survey of the subject species, with details of measures to be incorporated into the development scheme to avoid loss of the species. Developments must take into account Natural England's Standing Advice with regards protected species.*
- 2.6 The current development proposals comply with all national and local planning policy with regards biodiversity.

3.0 METHODOLOGY

3.1 Desk Study

- 3.1.1 The Multi-Agency Geographic Information for the Countryside (*MAGIC*) was consulted for all designated sites, priority habitats and protected species licence records within 2.0km of the site. The desk search was conducted on 4th April 2019.

3.2 Field Survey

- 3.2.1 A preliminary ecological appraisal was undertaken on 8th April 2019, and the site subjected to an ecology survey using guidelines set out in the *Handbook for Phase 1 Habitat Survey – A Technique for Environmental Audit (JNCC, 2003)*.
- 3.2.2 Habitats within the site were classified and the presence, or potential presence, of certain protected and / or notable species of flora and fauna were identified. A summary description of the habitat within the site following the *Phase 1 Habitat Survey Methodology* is presented in Section 4.0. This involved identifying features that may be used by protected species, potential foraging areas and other signs of use. Water bodies were recorded wherever possible, within 500 metres of the proposed development site.
- 3.2.3 The results are summarised and accompanied in large part by photographic evidence contained in *Appendix A – Site Photographs*. Recommendations for further investigation and survey are made in the following report.

3.3 Preliminary Bat Roost Assessment

3.3.1 A Preliminary Bat Roost Assessment of trees on site was undertaken on 8th April 2019 by an experienced, licenced bat surveyor who undertook an internal and external examination of the existing trees. The bat surveyors assessed the existing structures visually and searched for evidence such as;

- *Staining beneath or around a hole caused by natural oils in bat fur;*
- *Bat droppings beneath a hole, roost or resting area;*
- *Bat droppings and / or insect remains beneath a feeding area;*
- *Audible squeaking from within a hole;*
- *Insects (especially flies) around a hole;*
- *Dead bats.*

3.3.2 An external investigation assessed the trees to determine whether there were access points readily available for bats to utilise. Gaps / crevices identified were examined using a Clulite CB2 torch, ladder and endoscope where appropriate.

3.3.3 Trees were visually identified from the ground, using binoculars where necessary, for features that could be used by bats such as:

- *Woodpecker Holes;*
- *Knot Holes;*
- *Tear-outs;*
- *Flush Cuts;*
- *Double Leaders.*

3.3.4 Once features had been assessed the trees were then categorised in accordance with *Table 4.1 of the Bat Conservation Trust's Good Survey Guidelines (2016) (shown below):*

Table No. 01 – Bat Roost Suitability Guidelines (BCT, 2016)

Category	Buildings	Trees
Negligible	No suitable features identified.	No suitable features identified.
Low	A structure which could be used opportunistically, however, are not likely to be used on a regular basis / by a large number of bats.	Tree of sufficient size / age to support bat roost features; but with none identified from the ground.
Moderate	A building with features which, could be used regularly by a small number of bats.	Tree with features which, may support a bat roost of low conservation status.
High	A building with features suitable for use by a large number of bats on a regular basis.	A tree with several potential bat roost sites that are suitable for use by a large number of bats.

3.4 Ecological Impact Assessment

3.4.1 The methodology for Ecological Impact Assessment (EclA) follows best practice guidelines set by the Chartered Institute of Ecology & Environmental Management (CIEEM): 'Guidelines for Ecological Impact Assessment' (CIEEM, 2018). This includes identifying the baseline conditions on the site and subsequently rating the potential effects of the development based on the sensitivity and value of the resource affected, combined with the magnitude, duration and scale of the impact (or change). This is initially assessed without mitigation measures, and then assessed again after allowing for the proposed mitigation measures; this provides the residual effects. The assessment is divided into construction effects and longer-term operational effects.

3.4.2 Each ecological feature within the site has been considered within a defined Geographic context such as:

- *International and European;*
- *National;*
- *Regional;*
- *County;*
- *District;*
- *Local;*
- *Site Level;*
- *Negligible.*

3.4.3 Based upon CIEEM guidance, value was determined with reference to the following factors:

- *Its inclusion as a Designated Site or other protected area;*
- *The presence of habitat types of conservation significance, e.g. Habitats of Principal Importance (NERC 2006);*
- *The presence (or potential presence) of species of conservation significance e.g. Species of Principal Importance (NERC 2006);*
- *The presence of other protected species e.g. those protected under The Wildlife and Countryside Act 1981;*
- *The sites social and economic value.*

3.4.4 The ecological impacts resulting from the proposals were then described according to a defined set of characteristics as defined within '*Guidelines for Ecological Impact Assessment in the UK and Ireland*' (CIEEM, 2018). This assessment considers residual impacts (once all mitigation has been taken into account), with any significant effects highlighted. A significant effect is defined as "*an effect which either supports or undermines biodiversity conservation objectives for 'important ecological features' or for biodiversity in general*".

3.4.5 The confidence that a certain activity will result in a significant adverse effect has been ranked as follows:

- *Highly probable;*
- *Probable;*
- *Unlikely;*
- *Highly unlikely.*

3.4.6 Where initial impacts have been identified as significant, avoidance, mitigation and compensation measures have been proposed to avoid, prevent or offset such effects. Enhancement has been proposed to ensure that the development represents a net gain in biodiversity in accordance with National Policy.

4.0 BASELINE ECOLOGICAL CONDITIONS

4.1 Designated Sites

Statutory Protected Sites

- 4.1.1 Statutory protected sites within 2.0km of the site are shown in *Table No. 02* below:

Table No. 02 – Statutory Protected Sites

Site	Reason for Designation	Location
South Downs National Park	A large national park covering over 1600km ² encompassing a variety of habitats which support a range of fauna and flora.	360m E.

- 4.1.2 The only statutory protected site within 2.0km of the proposal site is the South Downs National Park, which is 360m from the eastern boundary of the site. The site is separated from the South Downs National Park at this point by the A280 link road; the surroundings of the site have been long established in commercial and horticultural use and are not representative of the landscape of the National Park.
- 4.1.3 The site is located within the *Impact Risk Zones* of *Arundel Park SSSI* and *Climping Beach SSSI*. The proposed development does not fall into a category which would require consultation with Natural England. The existing site is currently in use as overflow parking to the Arun Angling unit, with mainly ornamental shrubs and trees lining the borders. The proposed development may slightly increase indirect recreational pressures upon local designated sites. Proposals are considered unlikely to have a negative impact upon these protected areas due to the small scale of the proposals.

Non-Statutory Protected Areas

- 4.1.4 Local Wildlife Sites (previously referred to as; *Sites of Nature Conservation Importance (SNCI's)*) - LWSs are designations applied to the most important non-statutory nature conservation sites. They are recognised by the *National Planning Policy Framework (2012)* and as such are material considerations when assessing planning applications.

- 4.1.5 The following non-statutory protected site located within 2.0km is detailed in *Table No. 03* below.

Table No. 03 – Non-Statutory Protected Sites

Name	Distance
Highdown Park North Field SNCI	1.8km E

- 4.1.6 The site is neither located within nor adjacent to any *Non-Statutory Designated Site*. The intervening distance and discrepancy between habitats suggest that the development proposals would not have an adverse effect upon any of the above sites. The proposals should seek to protect and enhance aspects of green infrastructure, in line with the *Arun Local Plan 2011-2031*. Within the site, the assets of relevance would include the deciduous tree groups and hedges. The proposals should therefore seek to retain boundary vegetation and reinforce this to provide vegetative corridors.

4.2 Habitats

- 4.2.1 Within 2.0km of the site there are *Priority Habitats of coastal and floodplain grazing marsh; lowland calcareous grassland; deciduous woodland; ancient and semi-natural woodland and traditional orchard*.

- 4.2.2 Habitats within and adjacent to the site include:

- *Hard / Bare Ground;*
- *Improved Grassland;*
- *Running Water;*
- *Scattered Trees;*
- *Introduced Shrub.*

Hard / Bare Ground

- 4.2.3 An access driveway lies on the northern boundary of the site shared with the adjacent commercial unit and car park. Bare ground is also found in the centre of the site where the grass is sparse. This area is of **negligible value**.

Improved Grassland

- 4.2.4 Strips of improved grassland lines the edges of the site. The sward was approximately >5cm at the time of survey and appears to be regularly maintained. Perennial ryegrass (*Lolium perenne*) dominates with frequent lesser burdock (*Arctium minus*) present alongside occasional Common Horsetail (*Equisetum arvense*) and common daisy (*Bellis perennis*). This common, widespread habitat is of **site value** only.

Running Water

- 4.2.5 A stream that contributes to the Black Ditch River lies along the southern edge of the site, which flows in a westerly direction. This common, widespread habitat is of **local value**.

Scattered Trees

- 4.2.6 Poplars (*Populus sp.*) line the eastern boundary of the site, located adjacent the proposed construction zone along with a Common Hawthorn (*Crataegus monogyna*) and Ash (*Fraxinus excelsior*) which are also present along the eastern bund. A large multi-stemmed Cypress (*Cypressus sp.*) and a Weeping Willow (*Salix babylonica*) tree is located along the southern edge of the site. A small Ash (*Fraxinus excelsior*) specimen lies on the western edge. The trees are of **site / local** value.

Introduced Shrub

- 4.2.7 Bluebells (*Hyacinthoides non-scripta*) and daffodils (*Narcissus sp.*) dominant, with frequent periwinkle (*Vinca difformis*) on areas along the eastern bund and in planter areas on the northern edge of the site. This common, widespread habitat is of **site value** only.

4.3 Protected Species

- 4.3.1 The following species assessment is based upon protected species records returned from desk study and the field study of the site. Those species for which no suitable habitat exists on site have been screened out of the assessment.

Amphibians

Desk Study

- 4.3.2 There are no records of Great Crested Newt within 2.0km of the site. eDNA survey and HSI assessment of the nearest ponds was conducted in 2016 by another consultancy for an unrelated development. The results were negative for great crested newts, suggesting their likely absence in the immediate area. Great crested newts and their resting / breeding sites are protected under *The Conservation of Habitats and Species Regulations 2017* and *The Wildlife and Countryside Act 1981 (as amended)*.

Site Assessment

- 4.3.3 Shrubs to the east of the development footprint may provide some suitable terrestrial habitat for amphibians, however the development footprint itself is considered to be sub-optimal.
- 4.3.4 A large pond is present 30 metres east of the proposed site. The pond (P1) is approximately 2000m² and approx. 20 – 50cm deep with gently sloping banks surrounded by amenity grassland, shrubs and deciduous woodland. Water quality is poor with fish and fowl both present. A poor macrophyte coverage was recorded with species including iris and water lily sp. The HSI assessment of the duck pond is summarised in Table No. 04 below:

Table No. 04 – Summary of HSI Results

<i>HSI Criteria</i>	<i>P1</i>
Location	1
Pond Area	0.8
Permanence	0.9
Water Quality	0.33
Shade	0.8
Waterfowl	0.01
Fish	0.3
Pond Count	0.65
Terrestrial Habitat	0.33
Macrophytes	0.6
HSI Score	0.3897
Suitability	Poor

Reptiles*Desk Study*

- 4.3.5 There are limited records of reptiles within 2.0km of the site. Results of a nearby site some 20m from the proposed construction zone show there to be no reptiles of any species recorded during a reptile survey undertaken in August-September 2018. Widespread reptiles are likely to be present locally given the horticultural nature of surrounding sites. All species of UK reptile are protected against reckless or intentional killing or injuring under *The Wildlife and Countryside Act 1981 (as amended)*.

Site Assessment

- 4.3.6 Widespread reptiles might still be assumed to be present in suitable habitat such as field margins and roadside verges within the local landscape. However, the proposed site with its well-maintained form is of sub-optimal value to reptiles. The site is considered to be of **negligible value** to reptiles.

Breeding Birds*Desk Study*

- 4.3.7 A total of 143 no. species of bird have been recorded within 2.0km of the site, including Schedule I species Barn Owl, Brambling, Whimbrel; and 12 no. of BoCC Red Listed Species.

Site Assessment

- 4.3.8 The surrounding scattered trees offer suitable nesting habitat for small passerines. Due to the abundance of other similar habitat in the local area, the habitat is of **site value** only to nesting birds.

Bats*Desk Study*

- 4.3.9 Bats relevant to the site such as common pipistrelle bats (*Pipistrellus pipistrellus*); and brown long-eared bats (*Plecotus auritus*) have been recorded within the local area.

Site Assessment

- 4.3.10 The majority of trees within / surrounding the site were specimens which offered no discernible potential bat roost features; Due to the poor suitability of these trees, no further survey work with regards to bats was deemed necessary. The site is considered to be of **negligible value** to roosting bats.
- 4.3.11 The ancient woodlands <600m north of the site is likely to be of **local / district** value to foraging and commuting bats, as well as likely supporting numerous tree roosts. There is no suitable foraging habitat within the footprint of the development.

*Water voles**Desk Study*

- 4.3.12 There are records of water voles (*Arvicola amphibious*) within 2.0km of the site, including at the balancing ponds 214.0 m to the south-east of the site. The water vole is fully protected *under Schedule 5 of The Wildlife and Countryside Act 1981 (as amended)*.

Site Assessment

- 4.3.13 The watercourse adjacent to the site contains a very shallow slow flowing stream with limited vegetation along the river banks providing sub optimal aquatic and terrestrial habitat for Water Voles. Due to the abundance of other similar habitat in the local area, the habitat is of **site value** only to Water Voles.

Others

- 4.3.14 No suitable habitat for any other protected species was recorded within or adjacent to the site area.

5.0 ASSESSMENT OF EFFECTS AND MITIGATION MEASURES

5.1 Designated Sites

Potential Impacts

- 5.1.1 The site is located within the *Impact Risk Zone* of *Climping Beach & Arundel Park SSSI*. While the nearest statutory designated area is South Downs National Park, located 500m to the east. The proposed development does not fall into the categories requiring consultation with Natural England. Due to the intervening distance, no impacts are likely to occur.

Mitigation and Compensation

- 5.1.2 None required.

Residual Impacts

- 5.1.3 **No likely significant effects** upon any designated site is predicted as a result of this development.

5.2 Habitats

Potential Impacts

- 5.2.1 Development proposals will result in the loss of areas of scattered trees and introduced shrub areas. These habitats are common and widespread and could be replaced post development. In the absence of mitigation, surrounding habitats may be degraded through dust and emissions during the construction phase. The majority of habitats within the site consist of common and widespread species and are in themselves of little intrinsic ecological interest. Their removal to facilitate a proposed small-scale development is of minor impact magnitude.

Mitigation and Compensation

- 5.2.2 Post-development, a landscape scheme will replace habitats lost with further areas of amenity grassland and introduced shrub areas; new native tree planting and areas of wildflower. Wildlife friendly planting should be utilised, increasing the overall biodiversity value of the site. Works during the construction phase will be undertaken in accordance with guidance provided within *The Control of Dust and Emissions During Construction and Demolition SPG (July 2014)* to control any excess dust creation which may impact adjacent ecologically sensitive habitats.

Residual Impacts

- 5.2.3 No priority or other important habitats or plant species will be affected by this development, the impact of which is **not significant**.

5.3 Amphibians*Potential Impacts*

- 5.3.1 In the absence of avoidance / mitigation, the development could result in the killing or injuring of amphibians. Given the small size of the proposed construction zone and the sub-optimal terrestrial habitat on site these impacts are highly unlikely to occur.

Mitigation and Compensation

- 5.3.2 All footings and trenches should be checked each morning for the presence of amphibians. In the unlikely event any GCN is found on site during the works all activities will cease until a suitably qualified ecologist and Natural England have been contacted for advice.

Residual Impacts

- 5.3.3 The overall impact of the scheme will be **non-significant**.

5.4 **Reptiles**

Potential Impacts

- 5.4.1 No impacts predicted, no reptiles were recorded within the zone of influence of the development.

Mitigation and Compensation

- 5.4.2 Removal of any areas which may be suitable for hibernation such as log or brash piles (*if present*) will be removed by hand during the reptile active season.

Residual Impacts

- 5.4.3 The overall impact of the scheme will be **non-significant**.

5.5 **Bats**

Potential Impacts

- 5.5.1 In the absence of mitigation impacts could include the disruption of commuting corridors and foraging habitat through inappropriate lighting. Given the small scale of the site, and abundance of good foraging habitat in the local environment, impacts would be of very minor impact magnitude.

Mitigation and Compensation

- 5.5.2 A sensitive lighting scheme will be employed with lighting kept to the minimum levels and angled down and away from surrounding tree lines. The landscape scheme will include 'bat-friendly' planting to increase the foraging resource while enhancement hedge / tree planting will enhance connectivity between the site and wider area.

Residual Impacts

- 5.5.3 The overall impact of the scheme will be **non-significant**.

5.6 Breeding Birds

Potential Impacts

- 5.6.1 In the absence of avoidance / mitigation, the development could result in the damage / destruction of a bird nest.

Mitigation and Compensation

- 5.6.2 The scattered trees planned for removal should be removed outside the nesting season (*season: March-August, although pigeons may nest all year*) or should be checked prior to removal by a suitably qualified person.

Residual Impacts

- 5.6.3 The overall impact of the scheme will be **negligible, non-significant**.

6.0 ECOLOGICAL ENHANCEMENTS

6.1 The design of the proposed development includes ecological enhancements for the benefit of wildlife in line with the *National Planning Policy Framework* and *Local Planning Policy*. Ecological enhancements which will be included as part of development proposals include

- *The use of flowering shrubs as listed within the RHS 'Perfect for Pollinators' plant list to create a border around the new building.*
- *The provision of nesting boxes for a variety of bird species within trees surrounding the site, or on proposed dwellings;*
- *The provision of bat boxes on existing mature trees;*
- *Use of a sympathetic lighting scheme across the site, with lighting angled down and away from hedge / tree lines;*
- *Provision of a hedgehog house to open spaces, to provide additional habitat for hedgehogs;*
- *Seeding of any areas of unused open space with a wildflower seed mix, to provide improved ecological resource for invertebrates; amphibians and reptiles;*
- *Holes of 13 cm x 13 cm should be left at the bases of fencing to allow free movement of hedgehogs across the site;*
- *Replacement native tree; shrub; and hedge planting to reinforce boundary planting; possible species might include: field maple; wild privet; hazel; hawthorn; willow; silver birch; guelder rose; cherry; blackthorn; crab apple; rowan; holly; hornbeam; spindle;*
- *Compost / log piles where space allows. Where this is not possible the placement of bug hotels such as NHBS Bee and Bug Biome or similar will provide additional habitat for invertebrates;*
- *The use of pale and night-scented species around the site will increase bat foraging potential. Species could include jasmine, Michaelmas daisy and evening primrose.*

7.0 CONCLUSIONS

- 7.1 The site is formed of existing building surrounded by hard / bare ground, shrubs and amenity grass. The site itself is of **low ecological value** with no habitats of interest noted.
- 7.2 The site was found to be of negligible value to roosting bats, however the surrounding trees are likely to provide good foraging opportunities. A series of mitigation / avoidance measures have been devised to ensure the development does not contravene any UK or European legislation.
- 7.3 Once avoidance and mitigation measures have been taken into account, the impacts of the planned development upon biodiversity will be **negligible, non-significant** with proposed ecological enhancements resulting in a **net gain** and a **long-term positive increase** in biodiversity in line with national planning policy guidance.

8.0 REFERENCES

JNCC: Handbook for Phase 1 Habitat Survey – A Technique for Environmental Audit; (2003);

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www.magic.gov.uk.

Table No. 05 – Species List for Habitat Parcels**Amenity Grassland**

Common Name	Scientific Name	DAFOR
Lesser Burdock	<i>Arctium minus</i>	F
Cleavers	<i>Galium aparine</i>	O
Common Daisy	<i>Bellis perennis</i>	O
Common Nettle	<i>Urtica dioica</i>	LF
Cowslip	<i>Primula veris</i>	O
Creeping Buttercup	<i>Ranunculus repens</i>	LA
Fescue sp.	<i>Festuca sp.</i>	LD
Germander Speedwell	<i>Veronica</i>	O
Ground Ivy	<i>Glechoma hederacea</i>	LF
Hairy Bittercress	<i>Cardamine hirsuta</i>	LF
Lesser Celandine	<i>Ficaria verna</i>	O
Lesser Stitchwort	<i>Stellaria</i>	O
Mosses	<i>Mosses sp.</i>	LF
Perennial Ryegrass	<i>Lolium perenne</i>	D
Common Sow-thistles	<i>Sonchus oleraceus</i>	O
Red Dead-nettle	<i>Lamium purpureum</i>	F
White Dead-nettle	<i>Lamium album</i>	F
Bracken	<i>Pteridium</i>	R
Cuckoo-pint	<i>Arum maculatum</i>	O
Soft Rush	<i>Juncus effusus</i>	O
Common Ivy	<i>Hedera helix</i>	O
Ribwort Plantain	<i>Plantago lanceolata</i>	R

Introduced Shrub

Common Name	Scientific Name	DAFOR
Bramble	<i>Rubus fruticosus</i>	D
Bluebell	<i>Hyacinthoides non-scripta</i>	F
Daffodil	<i>Narcissus sp.</i>	F
Periwinkle	<i>Vinca difformis</i>	F
Field Horsetail	<i>Equisetum arvense</i>	F
Grey Willow	<i>Salix cinerea</i>	R
Bay Laurel	<i>Laurus nobilis</i>	R
Elder	<i>Sambucus nigra</i>	O

Scattered Trees

Common Name	Scientific Name	DAFOR
Cypress	<i>Cupressus sp.</i>	LD
Weeping Willow	<i>Salix babylonica</i>	R
Poplar sp.	<i>Populus nigra</i>	LD
Ash	<i>Fraxinus excelsior</i>	LF
Hawthorn	<i>Crataegus monogyna</i>	R

Table No. 06 – Target Notes (TN) for Ecology Phase 1 Habitat Survey

TN	Feature	Description	Protected Species
TN01	Bon fire residue	Log pile, part of bon fire residue could provide suitable habitat for reptiles. To be removed by hand.	Reptiles
TN02	Small mammal holes	Several small mammal holes line the earth bund and river bank.	N/A

APPENDICES:

Appendix A – Site Photographs



Image 1 - Overview of the proposed site at Old Blacksmiths Yard. Water Lane lies to the north of the site and an earth bund borders the eastern site boundary. The site itself is of low ecological value with no habitats of interest noted.



Image 2 - Habitats on site include; introduced shrubs, improved grass and scattered trees with areas of bare/ hardground dominating the centre of the site.

MR ESPEZEL
OLD BLACKSMITHS YARD, ANGMERING, WEST SUSSEX
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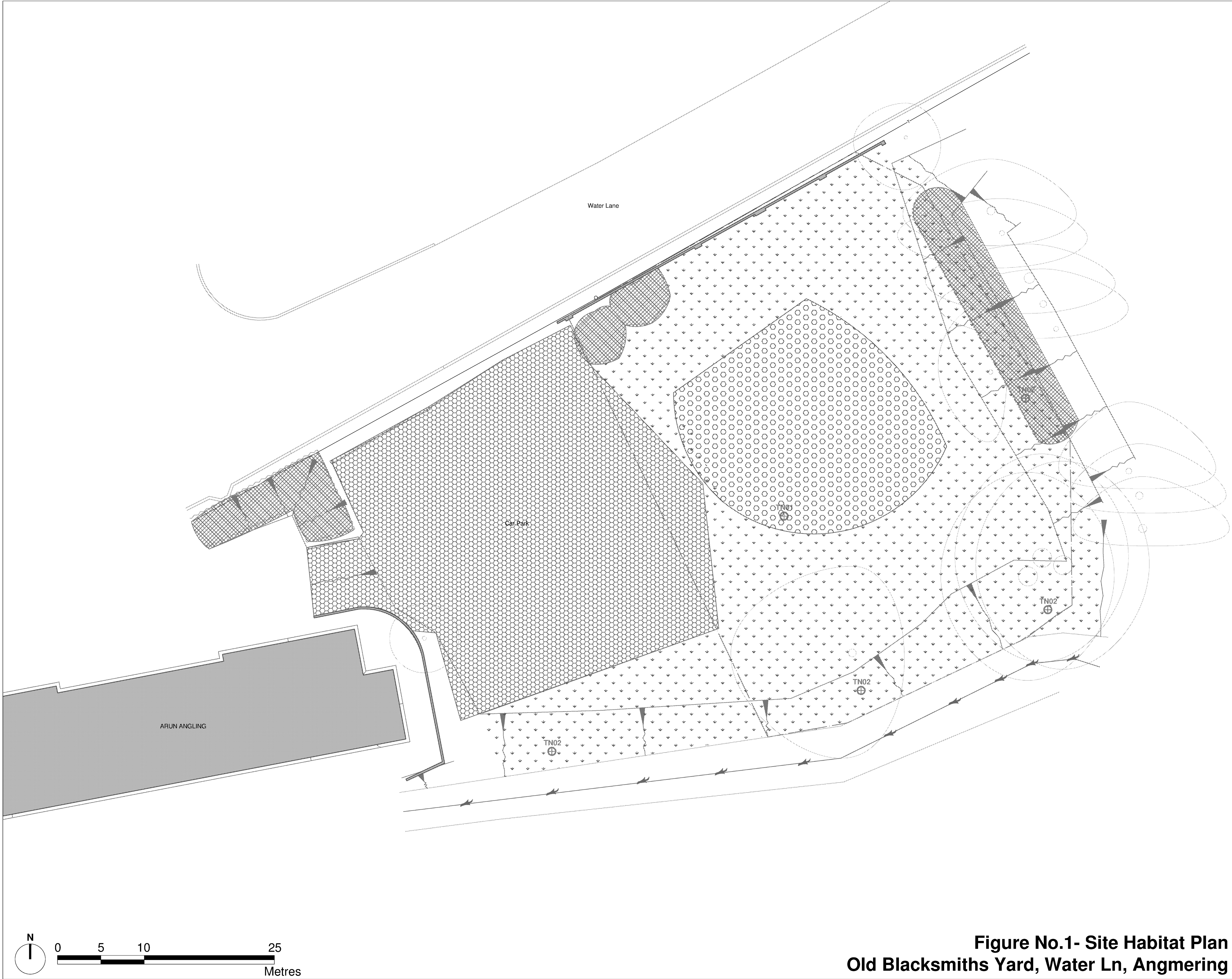


Image 3 - Areas of improved grassland across the site were recently cut back to >5cm in height. 2 no. mature trees are located along the southern edge of the construction zone.



Image 4 - Bordering the southern boundary, a slow flowing stream, with water flow in a westerly direction and contributing to the Black Ditch River.

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Legend - 1:100

- Survey Boundary.
- Existing Buildings / Walls.
- Scattered Trees.
- Hardstanding.
- Bare Ground.
- Improved Grassland.
- Introduced Shrubs.
- Target Notes.
- Running Water (Arrow indicates flow direction).

Notes: The original of this drawing was produced in colour - a monochrome copy should not be relied upon.

Habitat areas are indicative and for information only - please do not scale from this drawing.

Planning Issue

Rev	Description	Date	Initials
00	Planning Issue	17.04.19	LB



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<i>Client</i> Mr D Espezel			
<i>Project Title and Location</i> Old Blacksmiths Yard Water Ln, Angmering, West Sussex			
<i>Drawing Title</i> Figure No.1 - Site Habitat Plan			
<i>Scale</i> 1:100@A1	<i>Drawn</i> LB	<i>Approved</i> JJ	<i>Date</i> 17.04.2019
<i>Drawing No</i> LLD1688-ECO-FIG-001-SHP	<i>Revision</i> 00		

Figure No.1- Site Habitat Plan
Old Blacksmiths Yard, Water Ln, Angmering