



Ecological Mitigation, Enhancement and Monitoring Plan

Hornsey Police Station, Tottenham Lane, London N8 7EJ

Dixon8

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Guidelines

This assessment has been designed to meet:

- British Standard 42020 (2013) 'Biodiversity – Code of Practice for Planning and Development'.

Proportionality

The work involved in preparing and implementing all ecological surveys, impact assessments and measures for avoidance, mitigation, compensation and enhancement should be proportionate to the predicted degree of risk to biodiversity and to the nature and scale of the proposed development. Consequently, the decision-maker should only request supporting information and conservation measures that are relevant, necessary and material to the application in question. Similarly, the decision-maker and their consultees should ensure that any comments and advice made over an application are also proportionate.

This approach is enshrined in Government planning guidance, for example, paragraph 174 of the National Planning Policy Framework for England.

The desk studies and field surveys undertaken to provide a preliminary ecological appraisal (PEA) might in some cases be all that is necessary.

(BS 42020, 2013)

In consequence of the scale and intensity of the proposed development, this plan-led report is considered adequate and proportionate. It communicates all relevant information necessary to determine a planning application or support the recommendations for further surveys.

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1.0 Introduction and Context

1.1 Background

Arbtech Consulting Limited was commissioned by Dixon8 to produce an Ecological Mitigation, Enhancement and Monitoring Plan (EMEMP) for the proposed development at Hornsey Police Station, Tottenham Lane, London N8 7EJ (hereafter referred to as “the site”).

The site has been subject to the following previous ecological assessments of relevance to this report:

- Preliminary Ecological Appraisal and Preliminary Roost Assessment (“PEA/PRA”; Arbtech Consulting Ltd, April 2023)
- Biodiversity Net Gain Assessment (“BNG Assessment”; Arbtech Consulting Ltd, June 2023).

1.2 Project Description

The planning application pertaining to the site (HGY/2022/2116) describes the development as “Retention of existing Police Station building (Block A) with internal refurbishment, rear extensions and loft conversions to create 6 terrace houses and 4 flats. Erection of two buildings comprising of Block C along Glebe Road and Harold Road to create 8 flats and erection of Block B along Tottenham Lane and towards the rear of Tottenham Lane to create 7 flats and 4 mews houses including landscaping and other associated works” (hereafter referred to as the proposed development). A proposed development plan is provided in **Appendix 1**.

1.3 Site Context

The site is located at National Grid Reference TQ30638902 and has an area of approximately 0.2ha comprising a single block of buildings which comprise Hornsey Police Station. It is surrounded by a highly urban local setting, with residential plots and local stores present in the immediate vicinity of the site. The wider landscape comprises the same infrastructure, and the city of London extends to the south. A site location plan is provided in Appendix 2.

1.4 Scope of This Report

Following the submission of planning application 23/02079/FUL, the proposed development was conditionally approved. The Decision Notice included pre-commencement planning conditions pertaining to ecology; of relevance to this report, planning condition 30 states:

- (a) Prior to the commencement of above ground works, details of ecological enhancement measures and ecological protection measures shall be submitted to and approved in writing by the Council. This shall detail the biodiversity net gain, plans showing the proposed location of ecological enhancement measures, a sensitive lighting scheme, justification for the location and type of enhancement measures by a qualified ecologist, and how the development will support and protect local wildlife and natural habitats.*

- (b) *Prior to the occupation of development, photographic evidence and a post-development ecological field survey and impact assessment shall be submitted to and approved by the Local Planning Authority to demonstrate the delivery of the ecological enhancement and protection measures is in accordance with the approved measures and in accordance with CIEEM standards.*

The aims of this Biodiversity Enhancement Plan are to provide ecological enhancement and management prescriptions to ensure viable enhancements are provided to ensure a measurable net gain of biodiversity is achieved as a result of the development. As such, this report aims to provide sufficient detail to support the discharge of planning condition 30a. Once the construction phase is complete, a walkover will be undertaken and this report will be updated in order to discharge 30b.

2.0 Ecological Baseline Conditions Relevant to This Report

The ecological baseline conditions of relevance to this report were determined as a result of previous ecological assessments at the site, comprising a PEA/PRA (Arbtech Consulting Ltd. 2023) and a BNG Assessment (Arbtech Consulting Ltd, 2023).

2.1 Habitats Recorded on Site

The site is characterised by commercial buildings (Hornsey Police Station). Habitats recorded at the site comprise:

- Buildings;
- Other developed land.

2.2. Value to Protected/Notable Species

Given the type and extent of habitats recorded and the assessed connectivity between the site and the wider landscape, the site was assessed to provide opportunities for the following protected and/ or notable species:

- Commuting/foraging bats; and
- Hedgehogs.

The site is not considered suitable to support any other protected and/or notable species.

2.3 Scope for Enhancement

Connectivity exists between the site and the wider landscape for foraging and commuting bats, common species of nesting birds and hedgehogs. As a result, the future presence of these species cannot be discounted. It is therefore assessed that mitigation through precautionary working methods are required to reduce the potential for impacts to these species to an acceptable low level during construction. It is also assessed that enhancement of the site targeting the species groups have a viable probability of occupation and will thus represent effective ecological enhancement.

3.0 Ecological Mitigation and Enhancement Plan

3.1 Mitigation

Mitigation prescriptions to reduce adverse impacts to ecological receptors as identified through previous ecological assessment are detailed in **Table 1** below.

Table 1: Mitigation Prescriptions

Mitigation	Specification
Persons Responsible and Lines of Communication	A Development Biodiversity Champion will be selected for the construction phase and the landscape and biodiversity enhancements phase of the development. The Biodiversity Champion will be someone with significant influence during construction, such as the contract or project manager. The Development Biodiversity Champion is responsible for ensuring all actions outlined in this EMEP are implemented. Any queries with regards to the mitigation and enhancement prescriptions should be addressed to the project ecologist and communication should be retained between the Development Biodiversity Champion and project ecologist throughout the project. The project ecologist's contact details are located on the title page of this report. It is recommended that the Biodiversity Champion informs the project ecologist of the commencement of enhancement installation works and provides updates where necessary. Once the ecological enhancements have been installed, a Post-Development Biodiversity Champion will be allocated who has influence on site once the development is complete, such as a long-term maintenance contractor or the landowner. The Post-Development Biodiversity Champion will be responsible for ensuring all recommended management is undertaken and any associated remedial measures are completed where necessary.
Post-Development Inspection	A post-development inspection of the proposed enhancements will be undertaken by a suitably qualified ecologist once works are complete. This is to ensure the recommended enhancements have been installed successfully and to recommend any remediation measures where necessary, and to ensure the discharge of condition 30b. Should significant remediation be required, additional site visits may be recommended following completion of the remediation until the enhancement installation is considered satisfactory.
Commuting and Foraging Bats - Wildlife sensitive lighting strategy	External Lighting All external lighting will be installed in accordance with current guidance issued by the Bat Conservation Trust and Institute of Lighting Professionals: <i>Guidance Note 08/23: Bats and Artificial lighting at Night</i> (BCT & ILP 2023). External lighting will be installed in a way as to limit artificial light spill over habitats of value to protected and/ or notable species potentially using the site. External lighting installation will avoid excessive light spill over: - Retained habitats of elevated value including retained trees and hedgerows. - Any newly installed species-specific habitat prescriptions resulting from further surveys to be completed.

The following lighting design prescriptions are considered suitable for the type and scale of the proposed development to minimise the impacts of artificial lighting on site on bats and other protected/ notable species. External lighting will be installed in accordance with the below design prescriptions:

- **Reducing the operating time of lighting and levels of illuminance provided via:**

Preventing the use of motion sensors where possible to allow lights to be turned off permanently whilst not in use.

Where the use of motion sensors is desirable, light sensors should be set to lighting periods of no longer than 30 seconds to prevent unnecessary light spill.

- **Avoiding light spill via:**

The use of directional lighting by using luminaires with rear shields and an upwards lighting ratio of zero.

- **Light type:**

Use of lamps that minimise UV emissions or use UV filters to reduce the attractiveness of the lamp to invertebrates as not to attract invertebrates away from bat foraging habitat.

Use high-pressure sodium or LED lamps, ideally warm white as this has a low relative attractiveness of invertebrates.

Installing lighting systems that deliver no greater than a 3lux average illuminance, with a maximum horizontal illuminance of 0.6 uniformity (subject to appropriate maintenance factors).

Internal Lighting

Impacts of artificial light spill through windows will be mitigated by fitting internal lighting fixtures in line with recommendations within Guidance Note 08/23 (BCT & ILP 2023). Specifically, in order to limit light spill through windows, internal lighting will be recessed into the ceiling and set back a minimum of 1m from all windows as to limit horizontal light spill. A schematic representation of the effect of these lighting prescriptions is provided in **Figure 1** overleaf.

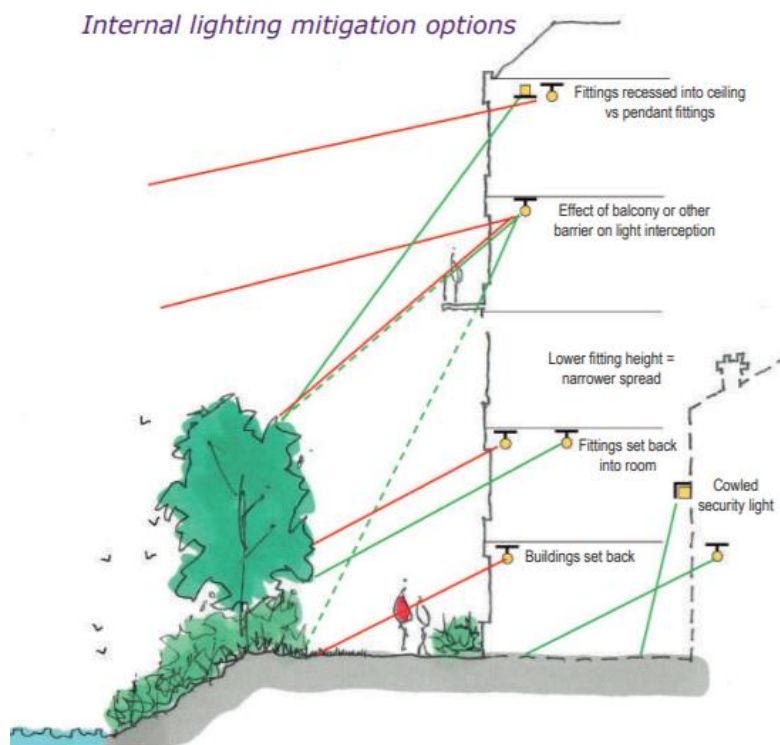


Figure 1: Internal Lighting mitigation options. Image taken from Guidance Note 08/23 (BCT & ILP 2023).

Precautionary methods of working –hedgehogs

No evidence indicating the presence of badgers or hedgehogs was recorded during the site survey. However, the presence of these species foraging and/ or commuting on site for transient periods cannot be discounted. The following precautionary working methods will therefore be adhered to during construction:

- Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape.
- The use of night-time lighting will be avoided, or sensitive lighting design will be implemented to avoid light spill on to retained habitats which mammals could use.
- Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations.

3.2 Enhancement

Enhancement of the site including the provision of compensatory habitats through soft landscaping and species-specific features in addition to any subsequent management requirements are detailed in **Table 2** below.

Table 2: Enhancement Prescriptions

Works	Specification
Management Term	The management prescriptions outlined within this table must be implemented over a period of at least 30 years.
Tree and Shrub Planting	Overview: Fourteen small new trees and new areas of scrub will be planted as part of the proposed development, as described and illustrated on the plan in Appendix 1 (which also details species composition). This will result in a measurable net gain in biodiversity on site, and contributes to achieving a minimum gain of 10% in biodiversity as a result of the proposed development. The new habitats are proposed to be “poor” condition (per the BNG assessment), but the following management prescriptions will be followed regardless, to ensure that the new habitats are successful. Objectives: • To plant trees and shrubs that will provide pollinating, foraging, and refuge opportunities for protected and/ or notable species groups including bats, birds, hedgehogs, badgers, dormice and invertebrates. • Ensure that good horticultural practice is employed to encourage long-term health and vitality of all trees and shrubs. • Ensure well-balanced crowns and/ or natural shape by preventing over competition. Creation Method: • Ground preparation and planting Each tree and shrub should be planted within a hole three times as wide of the supplied pot and of a similar depth. Root balls should be soaked thoroughly in water before planting and root balls should be loosened to expose restricted roots before planting. The planted trees and shrubs should then be backfilled ensuring there are no air pockets around roots or any roots protruding out of the ground. • Timing It is best to prepare the land during the summer ready for planting between November and March. Planting trees and shrubs before the new year helps ensure better rooting and subsequent establishment including faster growth during the first growing

season.

Management prescriptions:

Table 2.1: Tree and shrub management prescriptions.

Management	When	Rationale
At the end of each growing season all plant failures are to be 100% replaced	When required; checked annually in Autumn.	To maintain amenity and wildlife value.
If required, provision of stakes and guards. Guards to be left on for a minimum of 5 years	N/A	Protect from damage
Stakes should be checked and any broken or damaged stakes during this time would be removed (as above) and replaced with ties re-fixed	When required; checked annually in Autumn.	Maintain protection
Remove weeds	When required; checked twice annually in early spring and in Autumn.	Reduce competition for resources nutrients etc.by weeds
Application of bark mulch at a depth of 50 mm	Immediately after planting and then when required; checked annually in Autumn.	Reduce competition for resources nutrients etc.by weeds
Do not apply chemical fertilisers	At all times.	The use of chemical fertilisers will encourage vigorous grasses and weeds to grow
Apply a light dressing of well-rotted manure	Annually in the winter	Note the overuse of manure fertilisers will encourage vigorous grasses and weeds to grow.
Removal of spent flowers from perennial plants should be removed	Twice annually, late spring and in the Autumn.	Allows plants to place more energy into re-growth.

	through 'deadheading' Watering should be undertaken before and after planting out and as necessary for the continued thriving of all planting. Check and replace any plant failures once a year	When required; provide more water during periods of draught and less water during times of prolonged rain. For the first 5 years	Ensures plants do not dry out and subsequently fail. To ensure no gaps form.
Green Roof Creation	Biodiverse or extensive green roof installation will be implemented. A methodology is provided for both but it is recommended construction options are explored independently by contractors. Suitability of each type will be assessed against the buildings suitability for hosting them and any cost constraints. It is noted that either type of roof would comply with the BNG assessment (2023) and the target condition of the new green roof is "poor", so no specific management practices are required under the terms of BNG, but the below will be followed to ensure survival and viability of the new green roof. Native Biting stonecrop <i>Sedum album</i> English stonecrop <i>Sedum anglicum</i> Reflexed stonecrop <i>Sedum reflexum</i> Vipers bugloss <i>Echium vulgare</i> Kidney vetch <i>Anthyllis vulneraria</i> Bladder campion <i>Silene vulgaris</i> Centaury <i>Centaureum erythraea</i> Common poppy <i>Papaver Rhoeas</i>		

	Yellow wort <i>Blackstonia</i> <i>Perfoliata</i> (seed plant black redstart) Non native Chives <i>Allium schoenoprasum</i> Dwarf iris <i>Iris pumila</i> Crocus <i>Crocus spp.</i> Red creeping thyme <i>Thymus praecox</i> Minor thyme <i>Thymus Minimus</i> Rock rose <i>Helianthemum</i> <i>Nummularium</i> Sedum mats can be purchased for any entire sedum roof. 1) Extensive green roof Two broad types will be suitable and cost effective in this scenario 1. Lightweight Extensive – Simplest and most low maintenance roof type using sedum plants. 2. Extensive – Uses wildflowers and sedum and supports a greater range of wildlife. Provenance Installation -Consult structural engineer or architect as to the capacity of buildings to host a green roof. This will typically weigh from 60-150kg per square metre depending on its mode of construction and will increase when rain or snow saturated.
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- Either a flat or a pitched roof will be suitable. Pitched slopes are suitable up to 10°. Anything over 20° will require a frame to prevent slipping.

-Add a waterproof lining over existing roofing felt (e.g. pond liner). This can be protected during installation using a fleece liner.

Pitched roof

-Build frame using lightweight metal or rot proof wood at the same depth as substrate (normally 100mm min). This functions to hold substrate and plants in place whilst permitting drainage to take place via holes added to the bottom of the frame or the maintenance of a 10mm gaps between roof and frame.

- Add a pre-mixed lightweight green roof substrate.

-A pitched roof with frame will require ~60mm of soil and 20mm of pre vegetated mats e.g. sedum.

Flat roofs

-For flat roofs or those up to 5°, a 10mm layer of pea gravel will be required over the protective fleece.
This will ensure free drainage.

2) Biodiverse roof

These are built similarly to an extensive green roof but will be colonised via seeding and plug plants.

Installation

-Waterproofing and a frame will need to be built as with an extensive green roof (in the case of flat roofs, a lip with drainage gaps could be built around the roof to hold the substrate).

-A layer of biodiverse substrate will be installed, which contains a mixture of gravels ranging from pebble grade to fines. Waste materials from the development can be added to this, as can rocks and logs to create enhanced structural heterogeneity.

-It is important to ensure drainage is well designed to prevent future issues with pooling water.

	-It will be seeded with a chalk grassland mix similar to that prescribed for grassland on site. -These will be augmented by windblown seeds. This can be installed by the contractor or specialist companies such as Bauder and Sempergreen may be used. More information is available at their websites; https://www.bauder.co.uk. https://www.sempergreen.com/en/solutions/green-roofs/types/lightweight-flat-green-roof Establishment Long Term management Maintenance is required twice a year to ensure drainage is cleared, plants are watered if required and dead plants are replaced. Maintenance needs can be reduced by selecting species which self-seed prolifically and are adapted to dry environments. Whilst more expensive, installation by a specialist company will reduce long term maintenance costs due to their use of maintenance reducing technology and construction methodology and will ensure construction meets any relevant building regulations.
Green Wall Creation	Green walls will be created to enhance the biodiversity value of the site. It is noted that any type of climber would comply with the BNG assessment (2023) and the target condition of the new green roof is “poor”, so no specific management practices are required under the terms of BNG, but the below will be followed to ensure survival and viability of the new green walls. Climbers will be added where appropriate/practicable along boundary fences and walls using a mixture of native and non-native climbing plants with known value to biodiversity. Varieties are selected based upon value to pollinators and disease resistance.

	Climbers Native Honeysuckle <i>Lonicera periclymenum</i> Dog rose <i>Rosa canina</i> Hop <i>Humulus lupulus</i> (Full sun) Bittersweet <i>Solanum nigra</i> Blackberry <i>Rubus fruticosus</i> agg. Tufted vetch <i>Vicia cracca</i> Clematis <i>Clematis vitalba</i> Non Native Night blooming jasmine <i>Cestrum nocturnum</i> (Partial to full (filtered) sun – sheltered location) Rambling species roses <i>Rosa spp. (var)</i> Kew rambler (shade tolerant – can tolerate north facing elevations) Open arms (miniature – suitable for houses – part to full sun). Golden clematis <i>Clematis tangutica</i> <i>Ceanothos</i> spp. (Full to part sun, ideally full) Pyracantha <i>Pyracantha mohave</i> Climbing hydrangea <i>Hydrangea petiolaris</i> (shade tolerant) Wisteria <i>Wisteria sinensis</i> (Full sun) <i>Note on roses; Feeding requirements may be higher on free draining calcareous soils. Varieties grafted onto Rosa canina are likely to thrive with the least aftercare.</i> Provenance Native species should be of as close as possible to local provenance. Ideally donor sites will be from the local area, although regional provenance would be acceptable as the site is not within close distance of any semi natural habitats which means the risk of adversely
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	impacting local genotypes is low. Of non-native ornamental species, no species shall be selected which is listed as a Schedule 9 Invasive Species or which is listed on the London Invasive Species Initiative. Installation/Substrate Depending upon their tolerance to soil type and landscaping design preferences, climbers can be installed either within planters or directly into the ground. Methodologies for both are included. Ground When planting, a hole will be dug twice the depth and width of the rootball. This will generally need to be backfilled with a mixture of organic matter such as compost, bone meal and a mycorrhizal input such as Root Grow alongside any further species specific required amendments such as manure in the case of roses. Species used to climb houses will be selected based on suitability. The individual requirements of species must be established prior to planting as there will be variations in requirements. For example Weigela thrive with amendments of manure and clematis require a deeper planting depth and a shaded crown. Planters Planters will contain a free draining soil based compost such as John Innes. These will need to be large (at least 1m in width and depth) to accommodate root zones and increase the likelihood of long term plant survival. The planting process is as for that in the ground. Establishment Intersperse climbers with wall shrubs such as Ceanothos or underplanted smaller shrubs and plants where certain species require their root crowns to be in shade. In the first season, plants must be subject to regular watering. This must be deep to encourage deep root growth, however plants should only be watered if the soil is dry to avoid overwatering and causing root rot. Plants in planters may need more regular watering in hot spells. Feeding should be undertaken in accord to species specific requirements. Extended release fertilisers could be integrated into the
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	planters. Long Term Management For the next year plants will be annually pruned, trained and fed in line with their specific species requirement with watering taking place during hot periods if required.
Integrated Bat Box Enhancements	Overview: Two integrated bat boxes will be installed onto the new buildings on site. These bat boxes represent an ecological enhancement, and will support an increase in biodiversity on site when coupled with habitat enhancements to provide further resource opportunities for bats on site. Details of the bat boxes to be installed are as follows: <i>Integrated bat boxes to be integrated into the façade of new buildings</i> • The recommended integrated bat boxes will be constructed of woodcrete/woodstone. Boxes of this construction are known to require minimal maintenance and have a lifespan of 25 years plus. • 2No. Integrated Eco Bat Box with Cavity (or similar) will be installed into the façade of new building. This bat brick type is suitable for integration into a range of building types including brick walls, timber cladding, and stone and are suitable to support a range of species including Common Pipistrelles <i>Pipistrellus pipistrellus</i> and Soprano Pipistrelles <i>Pipistrellus pygmaeus</i> which are likely to be present in the local area.

- The bat boxes will be positioned 3-5m above ground level, or higher where necessary, on the **south/south-west** elevations, facing vegetated habitats, with a clear flight path to and from the entrance. The bat boxes will not be positioned directly above any windows and should be away from or high above artificial light.



Figure 2: Integrated Eco Bat Box with cavity suitable for a range of crevice dwelling bat species.
(Image credit: <https://www.wildcare.co.uk/integrated-eco-bat-box-cavity.html>)

Management:

The proposed bat boxes are designed to require no management or maintenance. Furthermore, preventing physical disturbance of bat boxes will increase the chances of occupation by roosting bats. However, it is recommended that the bat boxes are inspected annually for the first five years outside of the typical active season for bats (May to September inclusive) following installation. Bat boxes must be replaced if they are damaged, removed, or have fallen from their recommended location.

Integrated Bird Box Enhancements

Overview:

Three integrated swift boxes will be installed on site.

Details of the bird boxes to be installed are as follows:

Bird boxes to be integrated into the façade of new building:

- The recommended bird boxes will be constructed of woodcrete/woodstone. Boxes of this construction are known to have minimal maintenance and have a lifespan of 25 years plus.

- 3No. Ibstock Swift Eco Habitat Boxes (or similar) (see **Figure 3**) will be installed into the façade of the new buildings. Swift bricks are a "universal nest brick" for species of small bird, including red-listed species such as house sparrow, common swift, starling and house martin. House sparrow and starling are priority species listed in Section 41 of the NERC Act.
- The bird boxes should be positioned close together (0.6-1.0m between bricks) as swifts prefer to nest gregariously.
- The bird boxes should be placed at least 5m above ground level under the eaves of a building, on a **north** or **east** elevation, where they will be sheltered from prevailing wind, rain and strong sunlight.
- To be suitable for swifts, the bricks require an open aspect with no trees or large shrubs potentially obstructing the birds' flight path up to 5m from the brick.



Figure 3: Ibstock Swift Eco Habitat

(image credit: <https://www.ibstock.co.uk/product/ecohabitats/swift-box?page=1&>)

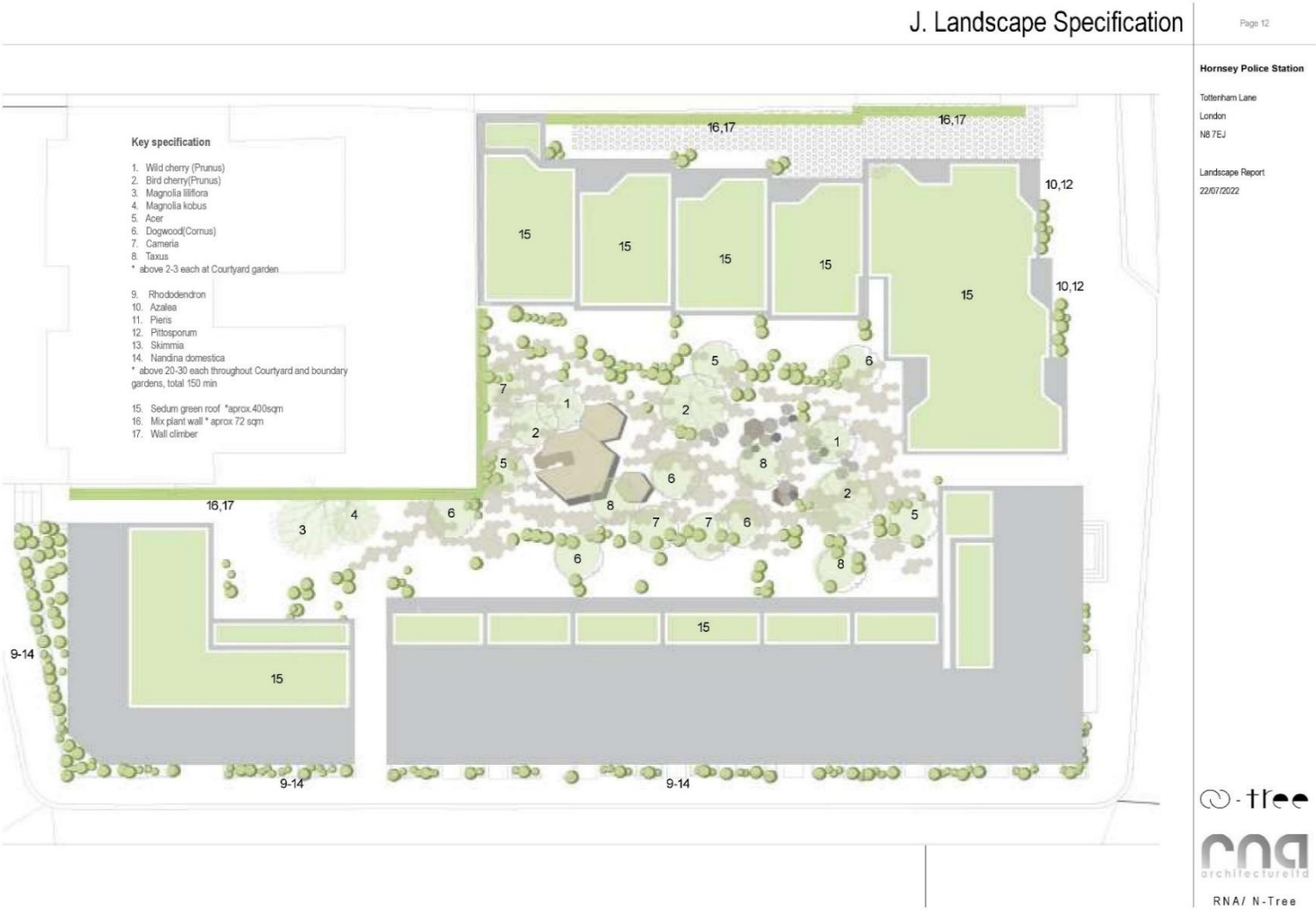
Recommended Management:

The proposed bird boxes are designed to require no management or maintenance. Furthermore, preventing physical disturbance of bird boxes will increase the chances of occupation by nesting birds. However, it is recommended that the bird boxes are inspected annually for the first five years outside of the typical nesting bird season (March to September inclusive) following installation. Bird boxes must be replaced if they are damaged, removed, or have fallen from their recommended location.

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Appendix 1: Proposed Development Plan



Appendix 2: Site Location Plan



Appendix 3: Legislation and Planning Policy

LEGAL PROTECTION

National and European Legislation Afforded to Habitats

International Statutory Designations

Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) are sites of European importance and are designated under the EC Habitats Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora (the Habitats Directive) and the EC Birds Directive 2009/147/EC on the conservation of wild birds respectively. Both form part of the wider Natura 2000 network across Europe.

Under the Habitats Directive the, Article 3 requires the establishment of a network of important conservation sites (SACs) across Europe in order to conserve the 189 habitats and 788 species (non- bird) identified in Annexes I and II of the Directive (as amended).

SPAs are classified under Article 2 of the EC Birds Directive both for rare bird species (as listed on Annex I) and for important migratory species.

SACs and SPAs up to 12 nautical miles (nm) from the coast are afforded protection in the UK under the Conservation of Habitats and Species Regulations 2010 which consolidate all amendments made to the Conservation (Natural Habitats, &c.) Regulations 1994. In Scotland, the requirements of Habitats Directive are implemented through a combination of the 1994 and the 2010 (reserved matters) Regulations. The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 (as amended) provide a means for designating and protecting SACs in UK offshore waters (from 12-200 nm).

Ramsar sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. The Convention covers all aspects of wetland conservation and recognises the importance of wetland ecosystems in relation to global biodiversity conservation. The Convention refers to wetlands as “areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres” however they may also include riparian and coastal zones. Ramsar sites are statutorily protected under the Wildlife & Countryside Act 1981 (as amended) with further protection provided by the Countryside and Rights of Way (CROW) Act 2000. Policy statements have been issued by the Government in England and Wales highlighting the special status of Ramsar sites. The Government in England and Wales has issued policy statements which ensure that Ramsar sites are afforded the same protection as areas designated under the EC Birds and Habitats Directives as part of the Natura 2000 network (e.g. SACs & SPAs).

National Statutory Designations

Sites of Special Scientific Interest (SSSI) are designated by nature conservation agencies in order to conserve key flora, fauna, geological or physio-geographical features within the UK. The original designations were under the National Parks and Access to the Countryside Act 1949 but SSSIs were then re-designated under the Wildlife & Countryside Act 1981 (as amended). As well as reinforcing other national designations (including National Nature Reserves), the system also provides statutory protection for terrestrial and coastal sites which are important within the European Natura 2000 network and globally. Further provisions for the protection and management of SSSIs have been introduced by the Countryside and Rights of Way Act 2000 (in England and Wales) and the Nature Conservation (Scotland) Act 2004.

Local Statutory Designations

Local authorities in consultation with the relevant nature conservation agency can declare Local Nature Reserves (LNRs) under the National Parks and Access to the Countryside Act 1949. LNRs are designated for flora, fauna or geological interest and are managed locally to retain these features and provide research, education and recreational opportunities.

Non- Statutory Designations

All non-statutorily designated sites are referred to as Local Wildlife Sites (LWS) and can be designated by the local authority for supporting local conservation interest. Combined with statutory designation, these sites are considered within Local Development Frameworks under the Town and Country Planning system and are a material consideration during the determination of planning applications. The protection afforded to these sites varies depending on the local authority involved. Regionally Important Geological Sites (RIGs) are the most important geological and geomorphological areas outside of statutory designations. These sites are also a material consideration during the determination of planning applications.

The Hedgerow Regulations 1997

The Hedgerow Regulations 1997 are designed to protect 'important' countryside hedgerows. Importance is defined by whether the hedgerow (a) has existed for 30 years or more; or (b) satisfies at least one of the criteria listed in Part II of Schedule 1 of the Regulations.

Under the Regulations, it is against the law to remove or destroy hedgerows on or adjacent to common land, village greens, SSSIs (including all terrestrial SACs, NNRs and SPAs), LNRs, land used for agriculture or forestry and land used for the keeping or breeding of horses, ponies or donkeys without the permission of the local authority. Hedgerows 'within or marking the boundary of the curtilage of a dwelling-house' are excluded.

National and European Legislation Afforded to Species**The Habitats Directive**

The EC Habitats Directive aims to promote the maintenance of biodiversity by requiring Member States to take measures to maintain or restore wild species listed on the Annexes to the Directive at a favourable conservation status, introducing robust protection for those species of European importance. The Directive is transposed into UK law by The Conservation of Habitats and Species Regulations 2010 (the Conservation Regulations) and the Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 (as amended). The following notes are relevant for all species protected under the EC Habitats Directive:

In the Directive, the term 'deliberate' is interpreted as being somewhat wider than intentional and may be thought of as including an element of recklessness.

The Habitats Regulations do not define the act of 'migration' and, therefore, as a precaution, it is recommended that short distance movement of animals for e.g. foraging, breeding or dispersal purposes are also considered.

In order to obtain a European Protected Species Mitigation (EPSM) licence, the application must demonstrate that it meets all of the following three 'tests': the action(s) are necessary for the purpose of preserving public health or safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequence of primary importance for the environment;

- There is no satisfactory alternative; and
- The action authorised will not be detrimental to the maintenance of the species concerned at a favourable conservation status in their natural range.
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The Wildlife and Countryside Act (WCA) 1981 (as amended)

The Wildlife and Countryside Act (WCA) 1981 (as amended) implements the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and implements the species protection requirements of EC Birds Directive 2009/147/EC on the conservation of wild birds in Great Britain (the birds

Directive). The WCA 1981 has been subject to a number of amendments, the most important of which are through the Countryside and Rights of Way (CROW) Act (2000) and Nature Conservation (Scotland) Act 2004.

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

- Deer Act 1991
- Natural Environment & Rural Communities (NERC) Act 2006
- Protection of Badgers Act 1992
- Wild Mammals (Protection) Act 1996

Badgers

Badgers *Meles meles* are protected under The Protection of Badgers Act which makes it an offence to:

- Wilfully kill, injure, take, or attempt to kill, injure or take a badger
- Cruelly ill-treat a badger, including use of tongs and digging
- Possess or control a dead badger or any part thereof
- Intentionally or recklessly damage, destroy or obstruct access to a badger sett or any part thereof
- Intentionally or recklessly disturb a badger when it is occupying a badger sett
- Intentionally or recklessly cause a dog to enter a badger sett
- Sell or offers for sale, possesses or has under his control, a live badger

Effects on development works:

A development licence will be required from the relevant countryside agency for any development works liable to affect an active badger sett, or to disturb badgers whilst they occupy a sett. Guidance has been issued by the countryside agency's to define what would constitute a licensable activity. It is not possible to obtain a licence to translocate badgers.

Birds

With certain exceptions, all birds, their nests and eggs are protected under Sections 1-8 of the WCA. Among other things, this makes it an offence to:

- Intentionally (or recklessly in Scotland) kill, injure or take any wild bird
- Intentionally (or recklessly in Scotland) take, damage or destroy (or, in Scotland, otherwise interfere with) the nest of any wild bird while it is in use or being built
- Intentionally take or destroy an egg of any wild bird
- Sell, offer or expose for sale, have in his possession or transport for the purpose of sale any wild bird (dead or alive) or bird egg or part thereof.
- Intentionally or recklessly obstruct or prevent any wild bird from using its nest (Scotland only)

Certain species of bird, for example the barn owl, bittern and kingfisher receive additional protection under Schedule 1 of the WCA and Annex 1 of the European Community Directive on the Conservation of Wild Birds (2009/147/EC) and are commonly referred to as "Schedule 1" birds.

This affords them protection against:

- Intentional or reckless disturbance while it is building a nest or is in, on or near a nest containing eggs or young
- Intentional or reckless disturbance of dependent young of such a bird
- In Scotland only, intentional or reckless disturbance whilst lekking

- In Scotland only, intentional or reckless harassment

Effects on development works:

Works should be planned to avoid the possibility of killing or injuring any wild bird, or damaging or destroying their nests. The most effective way to reduce the likelihood of nest destruction in particular is to undertake work outside the main bird nesting season which typically runs from March to August. Where this is not feasible, it will be necessary to have any areas of suitable habitat thoroughly checked for nests prior to vegetation clearance.

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

Herpetofauna (Amphibians and reptiles)

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

- Deliberate killing, injuring or capturing of Schedule 2 species
- Deliberate disturbance of species in such a way as:
 - To impair their ability to survive, breed, or reproduce, or to rear or nurture young;
 - To impair their ability to hibernate or migrate
 - To affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

With the exception of the pool frog, these species are also listed on Schedule 5 of the WCA and they are additionally protected from:

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

Other native species of herpetofauna are protected solely under Schedule 5, Section 9(1) & (5) of the WCA, i.e. the adder *Vipera berus*, grass snake *Natrix natrix*, common lizard *Zootoca vivipara* and slow-worm *Anguis fragilis*. It is prohibited to:

- Intentionally or recklessly kill or injure these species.

Effects on development works:

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

Although not licensable, appropriate mitigation measures may also be required to prevent the intentional killing or injury of adder, grass snake, common lizard and slow worm, thus avoiding contravention of the WCA.

Bats

All species are fully protected by Habitats Regulations 2010 as they are listed on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species (e.g. All bats)
- Deliberate disturbance of bat species in such a way as:
- To impair their ability to survive, breed, or reproduce, or to rear or nurture young;
- To impair their ability to hibernate or migrate
- To affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

Bats are afforded the following additional protection through the WCA as they are included on Schedule 5:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection

Effects on development works:

Works which are liable to affect a bat roost or an operation which are likely to result in an illegal level of disturbance to the species will require an EPSM licence. The licence is to allow derogation from the legislation through the application of appropriate mitigation measures and monitoring.

Legislation afforded to Plants

With certain exceptions, all wild plants are protected under the WCA. This makes it an offence for an 'unauthorised' person to intentionally (or recklessly in Scotland) uproot wild plants. An authorised person can be the owner of the land on which the action is taken, or anybody authorised by them.

Certain rare species of plant, for example some species of orchid, are also fully protected under Schedule 8 of the Wildlife and Countryside Act 1981 (as amended). This prohibits any person from:

- Intentionally (or recklessly in Scotland) picking, uprooting or destruction of any wild Schedule 8 species (or seed or spore attached to any such wild plant in Scotland only)
- Selling, offering or exposing for sale, or possessing or transporting for the purpose of sale, any wild live or dead Schedule 8 plant species or part thereof
- In addition to the UK legislation outlined above, several plant species are fully protected under Schedule 5 of The Conservation of Habitats and Species Regulations 2010. These are species of European importance. Regulation 45 makes it an offence to:
- Deliberately pick, collect, cut, uproot or destroy a wild Schedule 5 species
- Be in possession of, or control, transport, sell or exchange, or offer for sale or exchange any wild live or dead Schedule 5 species or anything derived from such a plant.

Effects on development works:

An EPSM licence will be required from the relevant countryside agency for works which are liable to affect species of planted listed on Schedule 5 of the Conservation of Habitats and Species Regulations 2010. The licence is to allow derogation from the legislation through the application of appropriate mitigation measures and monitoring.

Invasive Species

Part II of Schedule 9 of the WCA lists non-native invasive plant species for which it is a criminal offence in England and Wales to plant or cause to grow in the wild due to their impact on native wildlife. Species included (but not limited to):

- Japanese knotweed *Fallopia japonica*
- Giant hogweed *Heracleum mantegazzianum*
- Himalayan balsam *Impatiens glandulifera*

Effects on development works:

It is not an offence for plants listed in Part II of Schedule 9 of the WCA 1981 to be present on the development site however it is an offence to cause them to spread. Therefore, if any of the species are present on site and construction activities may result in further spread (e.g. earthworks, vehicle movements) then it will be necessary to design and implement appropriate mitigation prior to construction commencing.

Injurious weeds

Under the Weeds Act 1959 any land owner or occupier may be required prevent the spread of certain 'injurious weeds' including (but not limited to):

- Spear thistle *Cirsium vulgare*
- Creeping thistle *Cirsium arvense*
- Curled dock *Rumex crispus*
- Broad-leaved dock *Rumex obtusifolius*
- Common ragwort *Senecio jacobaea*

It is a criminal offence to fail to comply with a notice requiring such action to be taken. The Ragwort Control Act 2003 establishes a ragwort control code of practice as common ragwort is poisonous to horses and other livestock. This code provides best practice guidelines and is not legally binding.

NATIONAL PLANNING POLICY (ENGLAND)

National Planning Policy Framework

The National Planning Policy Framework promotes sustainable development. The Framework specifies the need for protection of designated sites and priority habitats and species. An emphasis is also made on the need for ecological infrastructure through protection, restoration and re-creation. The protection and recovery of priority species (considered likely to be those listed as UK Biodiversity Action Plan priority species) is also listed as a requirement of planning policy.

In determining a planning application, planning authorities should aim to conserve and enhance biodiversity by ensuring that: designated sites are protected from harm; there is appropriate mitigation or compensation where significant harm cannot be avoided; opportunities to incorporate biodiversity in and around developments are encouraged; and planning permission is refused for development resulting in the loss or deterioration of irreplaceable habitats including aged or veteran trees and also ancient woodland.

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

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

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

LOCAL PLANNING POLICY

Rother District Council Local Plan

Policy EN5: Biodiversity and Green Space states:

“Biodiversity, geodiversity and green space will be protected and enhanced, by multi-agency working where appropriate, to:

- 1. Maintain and develop a district-wide network of green infrastructure where possible linking areas of natural green space;*
- 2. Protect and enhance the international, national and locally designated sites, having due regard to their status;*
- 3. Establish a major area of accessible open space at Combe Valley Countryside Park, between Bexhill and Hastings;*
- 4. Enhance the nature conservation value and multi-functional nature of the Romney Marsh Biodiversity Opportunity Area;*
- 5. Support opportunities for management, restoration and creation of habitats in line with the opportunities identified for the Biodiversity Opportunity Areas (BOAs) and targets set out in the Sussex Biodiversity Action Plan;*
- 6. Continue to develop the wetland habitat at Bewl Water Reservoir, with compatible recreational uses;*
- 7. Increase accessibility to the countryside from urban areas, especially in the Hastings and Bexhill fringes;*
- 8. Ensure that development retains, protects and enhances habitats of ecological interest, including ancient woodland, water features and hedgerows, and provides for appropriate management of these features;*
- 9. Require developers to integrate biodiversity into development schemes by avoiding adverse impacts from development on biodiversity or habitat, or where wholly unavoidable, provide appropriate mitigation against or compensation for any losses. In any event, developers will also be expected to consider and promote opportunities for the creation and/or restoration of habitats appropriate to local context.”*

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

A European Protected Species Licence (EPSL) issued by Natural England will be required for works likely to affect a bat roost or for operations likely to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, rear young and hibernate). The licence is to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and their efficiency/success to be monitored. The legislation may also be interpreted such that, in certain circumstances, important foraging areas and/or commuting routes can be regarded as being afforded *de facto* protection, for example, where it can be proven that the continued usage of such areas is crucial to maintaining the integrity and long-term viability of a bat roost (Garland & Markham, 2008).

There are 17 species of bat breeding in England and Natural England issues licences under Regulation 55 of the Habitats Regulations to allow you to work within the law.

Licences are issued for specific purposes stated in the Regulations, if the following three tests are met:

- The purpose of the work meets one of those listed in the Habitats Regulations (see below);
- That there is no satisfactory alternative;

- That the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status (FCS) in their natural range

The Habitats Regulations permits licences to be issued for a specific set of purposes including:

1. ***include preserving public health or public safety or other imperative reasons of over-riding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment;***
2. scientific and educational purposes,
3. ringing or marking
4. conserving wild animals

Development works fall under the first purpose and Natural England issues bat mitigation licences for developments.

EUROPEAN PROTECTED SPECIES POLICIES

In December 2016 Natural England officially introduced the four licensing policies throughout England. The four policies seek to achieve better outcomes for European Protected Species (EPS) and reduce unnecessary costs, delays and uncertainty that can be inherent in the current standard EPS licensing system. The policies are summarised as follows:

- Policy 1; provides greater flexibility in exclusion and relocation activities, where there is investment in habitat provision;
- Policy 2; provides greater flexibility in the location of compensatory habitat;
- Policy 3; provides greater flexibility on exclusion measures where this will allow EPS to use temporary habitat; and,
- Policy 4; provides a reduced survey effort in circumstances where the impacts of development can be confidently predicted.

The four policies have been designed to have a net benefit for EPS by improving populations overall and not just protecting individuals within development sites. Most notably Natural England now recognises that the Habitats Regulations legal framework now applies to 'local populations' of EPS and not individuals/site populations.