



Reptile Mitigation Plan

Oak Park, Havant
for:

Ashley House plc.

CRM.1112.009.EC.R.002



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Reptile Mitigation Plan

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For:	Ashley House plc.
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1 Introduction

1.1 Commission

- 1.1.1 In September 2015 Enzygo Ltd was commissioned by Ashley House plc. to produce a Reptile Mitigation Plan (RMP) for their parcel of land off Oak Park, Havant, Hampshire, PO9 2EL (central grid reference: SU 7201 0714, located within the Hampshire County Council planning authority. The RMP, and its implementation, will allow a S106 agreement to be discharged for planning permission APP/15/00303 granted on 18th December 2015.
- 1.1.2 The proposed works will involve clearance of the site and redevelopment as social care housing. Refer to Appendix A for proposed site layout.

1.2 Aims and Objectives

- 1.2.1 The RMP strategy aims to mitigate for potential impacts to common reptile species during the construction and operational phase of the site, and to provide clear information for contractors to follow when undertaken construction works. Potential impacts include:
- Killing/Injury of common reptiles; and
 - Loss of suitable reptile habitat, including hibernacula.
- 1.2.2 This report has been produced with reference to current mitigation guidelines for common reptiles (HGBI, 1998) and in accordance with BS42020:2013: Biodiversity – Code of Practice for Planning and Development (BSI, 2013). Where applicable, mitigation measures make reference to the Construction (Design and Management) Regulations 2015 (CITB, 2016).
- 1.2.3 This report remains valid for 2 years from the date of publication, or until conditions across the site should substantially alter.

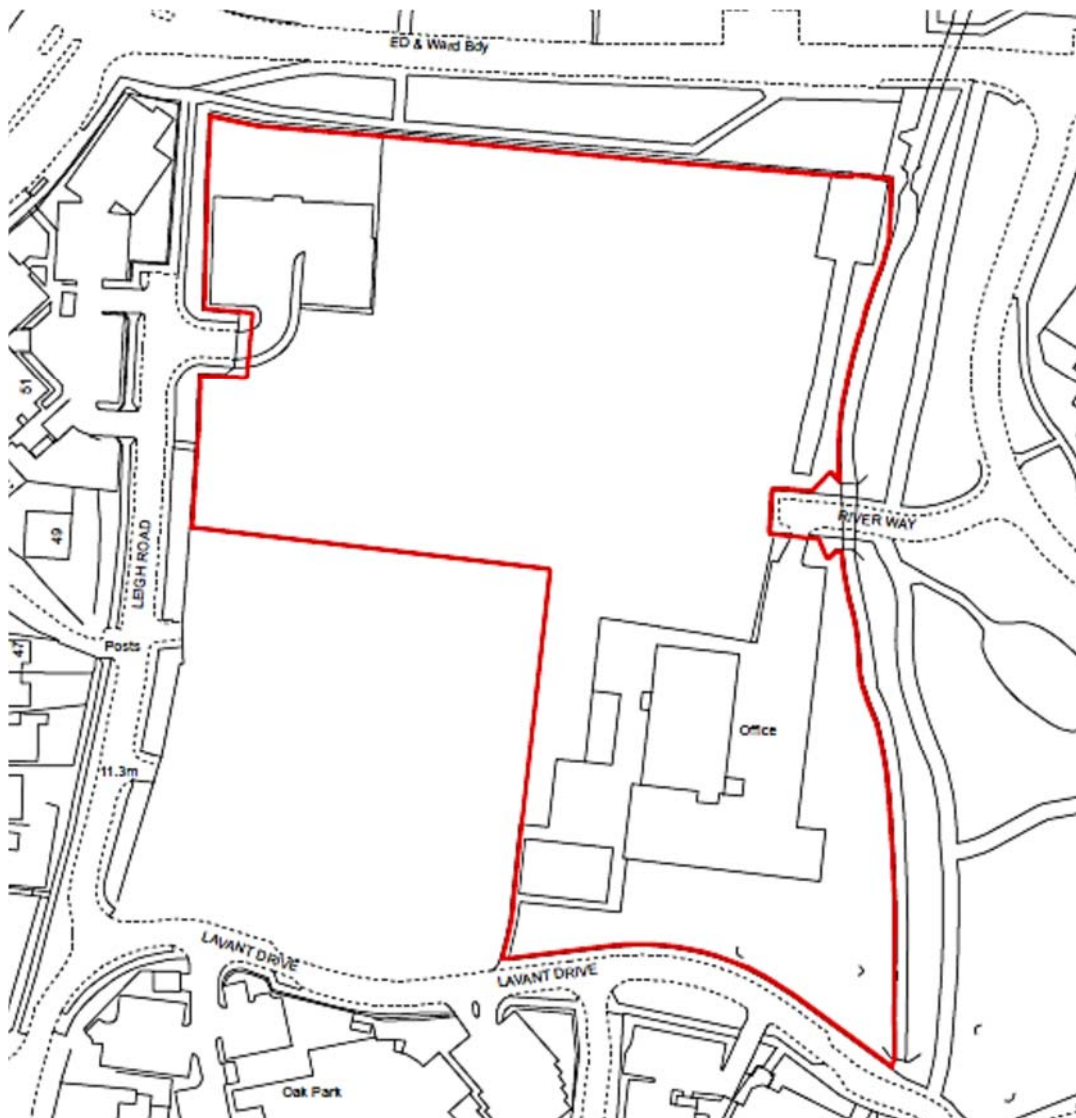
1.3 Background

- 1.3.1 A Preliminary Ecological Appraisal of the site (Enzygo, 2015a) identified habitats across the site (i.e. matrix of coarse grassland, scrub and ephemeral habitat with rubble piles) suitable for use by common reptile species. A subsequent reptile survey (Enzygo, 2015b) identified the presence of a 'Good' population (peak 13 adults) of Slow-worm (*Anguis fragilis*), with juveniles also encountered indicating breeding. The report also identified historical records of Slow-worm and Adder (*Vipera berus*) within the wider area.
- 1.3.2 In accordance with current guidance (Froglife, 1999) the site does not qualify as a 'Key Reptile Site', and the 'Good' population of Slow-worm requires 60 days of translocation, during suitable weather conditions, using at least 50 refugia per hectare (HGBI, 1998).

1.4 Site Context

- 1.4.1 The approximately 2 hectare site comprises a matrix of coarse grassland, scrub, and ephemeral/short perennial habitat with remaining areas of hardstanding and building rubble from demolished buildings.

Figure 1.1: Site Boundary



1.4.2 The town of Havant extends on all aspects, with Lavant Stream running along the eastern boundary and main roads defining all other site boundaries.

1.5 Nomenclature

1.5.1 The English names of flora and fauna species are given in the main text of this report. Scientific names are used alongside the English name where this first occurs. Vascular plants and Charophytes follow the nomenclature of The Botanical Society for the British Isles database (BSBI, 2007) with all other flora and fauna following the National Biodiversity Network (NBN) Gateway (NBN, 2014).

2 Relevant Legislation and Policy

2.1 Legislation

2.1.1 Wildlife legislation and policy relevant to the proposed works covered by this RMP, are set out below. This legal information is a summary only, and the original legal documents should be consulted for definitive information.

Table 2.1: Legislation Protection Afforded to Sites/Habitats that could Potentially be Affected by the Proposed Works

Designated Site/Habitat	Legal Status
None	-

Table 2.2: Legislation Protection Afforded to Species that could Potentially be Affected by the Proposed Works

Species	Legal Status
European Protected	
None	-
Nationally Protected	
Viviparous Lizard, Grass Snake, Slow-worm, Adder	These animals receive limited protection under The Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000), which makes it illegal to intentionally kill or injure any such animal.
Invasive Species	
None	-

2.1.2 Section 40 of the Natural Environment and Rural Communities Act 2006 (the NERC Act) places a legal duty on public bodies, including planning authorities, to 'have regard' to the conservation of biodiversity when carrying out their normal functions, which includes consideration of planning applications.

2.1.3 In compliance with Section 41 of the NERC Act, the Secretary of State has published a list of species and habitats considered to be of principal importance for conserving biodiversity in England under the UK Post-2010 Biodiversity Framework. This is known as the list of Habitats and Species of Principal Importance (HPI/SPI), of which there are 56 habitats and 943 species. The HPI/SPI list is used to guide planning authorities in implementing their duty under the NERC Act.

2.1.4 Viviparous Lizard (*Zootoca vivipara*), Grass Snake (*Natrix natrix*), Adder and Slow-worm are SPI species (JNCC, 2015). There are currently no common reptile species specifically listed on Hampshire Local BAP (Hampshire Biodiversity Partnership, 2016).

2.2 National Planning Policy

2.2.1 The NPPF set out the Government's planning policies for England and how these are expected to be applied. At the heart of the NPPF is a presumption in favour of sustainable development. This presumption does not apply where development requiring Appropriate Assessment under the Birds or Habitats Directives is being considered, planned or determined.

2.2.2 The NPPF states that:

'When determining planning applications, local planning authorities should aim to conserve and enhance biodiversity by applying the following principles:

- *if significant harm resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;*
- *proposed development on land within or outside a Site of Special Scientific Interest (SSSI) likely to have an adverse effect on a SSSI (either individually or in combination with other developments) should not normally be permitted. Where an adverse effect on the site's notified special interest features is likely, an exception should only be made where the benefits of the development, at this site, clearly outweigh both the impacts that it is likely to have on the features of the site that make it of special scientific interest and any broader impacts on the national network of SSSIs;*
- *development proposals where the primary objective is to conserve or enhance biodiversity should be permitted;*
- *opportunities to incorporate biodiversity in and around developments should be encouraged;*
- *planning permission should be refused for development resulting in the loss or deterioration of irreplaceable habitats, including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss; and*
- *the following wildlife sites should be given the same protection as European sites: potential Special Protection Areas (SPA) and possible Special Areas of Conservation (SAC); listed or proposed Ramsar sites; and sites identified, or required, as compensatory measures for adverse effects on European sites, potential SPAs, possible SACs, and listed or proposed Ramsar sites.'*

2.2.3 Under the NPPF, the Planning Authority has a responsibility to promote the preservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of priority species populations, linked to national and local targets, and identify suitable indicators for monitoring biodiversity in the plan.

2.2.4 Also under the NPPF the planning system should contribute to and enhance the natural and local environment by minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.

3 Mitigation Strategy

3.1 Avoidance of Impacts

Site Briefing

3.1.1 Prior to the commencement of any pre-start works (i.e. installation of exclusion fencing) the main contractor (and any personnel appointed by the main contractor) will receive a formal briefing by an Ecological Clerk of Works (ECoW). This briefing will detail all relevant protected species issues as set out within this RMP. A copy of this RMP must be read and understood by all contractors conducting the works.

3.1.2 The ECoW will be suitably qualified and experienced, and licensed/accredited where necessary. The role of the ECoW is in accordance with BS42020:2013 (BSI, 2013) and will satisfy the following requirement:

'An ecological clerk of works should be able to demonstrate a level of experience and competence commensurate with the complexity of the role needed on site to deal with the wide range of ecological issues likely to be encountered and to adapt to new and unforeseen challenges raised by development activities'.

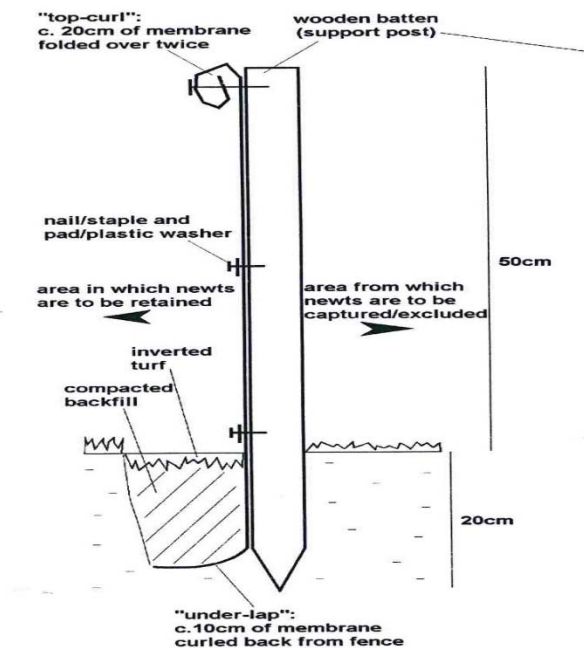
3.1.3 The main contractor will be responsible for relaying any necessary information to contractors on site, either employed by them directly or third parties. Advice should be sought from Enzygo's Principal Ecologist in the event of complex issues arising or in cases where there is any doubt as to the action to be taken. Deviation from this RMP will only be undertaken upon written agreement with Enzygo.

3.1.4 To avoid the disturbance of any hibernating common reptiles, works will only proceed outside of the hibernation period (Nov-Feb, weather dependant).

Exclusion Fencing

3.1.5 The installation of exclusion fencing will be undertaken by an ecological contractor or by a third party contractor under direct supervision of the ECoW, and will follow the specification as shown below (appropriate for common reptiles as well as common amphibians).

Figure 3.1: Exclusion Fencing Design



3.1.6 In September 2015, exclusion fencing was installed around the majority of the proposed working footprint, with drift fencing also installed to further break up habitats. Refer to Drawing Number: CRM.1112.009.EC.D.002 for alignment of exclusion fencing. The proposed working footprint now extends beyond this fencing (i.e. works will now include habitats to south-east, restoration of stream bank, and works to northern and western boundary features). Habitats to the south-west will not currently be subject to works, but these continue to provide habitat suitable for common reptiles. As such, an additional span of exclusion fencing will be installed along the south-western boundary of the proposed works (to isolate this from habitats which will continue to support common reptile populations and prevent reptiles from re-entering the site). Further exclusion fencing will not be installed along any other site boundaries, instead natural barriers will be used to prevent the movement of common reptiles back on to the site (i.e. Crossland Drive to north, Leigh Road to west, Lavant Drive to south, and Lavant Stream along the eastern boundary).

3.1.7 Exclusion fencing along the south-western site boundary shall remain for the duration of construction works, to prevent reptiles moving onto the working footprint from retained habitats. This will then be removed upon completion of construction works. All other exclusion fencing will be removed upon completion of the reptile translocation and destructive search, as detailed below, with natural barriers continuing to prevent the movement of reptiles onto the site from these directions during construction activities. Fencing will be removed by an ecological contractor or by a third party contractor under the direct supervision of an ECoW (as reptiles could be present alongside fencing).

Translocation

3.1.8 Artificial reptile refugia were set out across the site in September 2015. This included approximately 50 squares of flat roofing felt 0.5x0.5m and 0.5x1m, and approximately 20 squares of corrugated tin 0.5x1m. These were left for at least 1-week prior to commencement of translocation (so that vegetation beneath could die back and conditions suitable for basking reptiles could establish). Squares of carpet refugia were also set out across the site and pit-traps installed along the edge of exclusion fencing to aid in the capture of common amphibians.

3.1.9 Translocation proceeded in 2015, whereby a total of 30 capture days from 5th September to 4th October 2015 were undertaken. A total of 137 Slow-worm (87 adults and 50 juvenile) and 2 Common Frog (*Rana temporaria*) were relocated to the receptor site. As winter set in (and conditions became unsuitable for the capture of common reptiles), translocation stopped. However, an average of 1.8 Slow-worm were still being captured.

3.1.10 Translocation will continue during April-June 2016, as necessary, to obtain either: a further 30 days of trapping (to obtain 60 days total), or obtain 5 days clear. This will include all areas of the site where works are to be undertaken (including beyond current exclusion fencing, where vegetation works to boundary hedgerows for example are required). Trapping will proceed during suitable weather conditions and at an appropriate time of day (i.e. when artificial refugia are not in shade or too hot). Any reptiles encountered (and common amphibians) will be caught by gloved hand by the ECoW and placed in plastic bucket (with air holes and grass cuttings for cover), then immediately relocated to the receptor site.

3.1.11 To expedite trapping throughout 2016, additional artificial refugia will be set out across the site. This will include at least an additional 50 squares of flat roofing felt 0.5x0.5m and 20 squares of corrugated bitumen 0.5x1m (to bring numbers up to the level stipulated within guidance). No further carpet refugia or pit-traps will be installed, and current ones will be removed (artificial reptile refugia are sufficient to capture the low number of common amphibians encountered).

Habitat Manipulation

3.1.12 Additionally, to expedite trapping throughout 2016, paths will be cut into denser areas of vegetation and across the site to break up habitats. This will allow access to isolated parts of the site and encourage remaining common reptiles to move out into open areas, hence increase the capture effort. A hand search of any natural refugia (i.e. rubble/log piles, wood chippings, cracks within hardstanding) will also be undertaken. Any habitat manipulation will be undertaken by an ecological contractor or by a third party contractor under the direct supervision of the ECoW. In each instance, an ecologist will check any potential habitats/refugia prior to clearance. Habitats will be strimmed carefully using hand tools in 2 passes (first to a height of no less than 300 millimetres).

Destructive Search

3.1.13 Following completion of the reptile translocation, a destructive search will be undertaken across the site. This will be undertaken by an ecological contractor or by a third party contractor under the direct supervision of the ECoW. A digger with a toothed bucket will gently scrape off turf and vegetation, and the ECoW will check for any further common reptiles.

Post-Development

3.1.14 No operational avoidance methods are to be employed, as the common reptile population will have been relocated off-site.

3.2 Mitigation of Impacts

3.2.1 No mitigation activities are proposed (site to be cleared and developed).

3.3 Compensation of Impacts

Receptor Site

- 3.3.1 Following discussion with the County Ecologist and Hampshire County Council in 2015, it was agreed that reptile mitigation should not be incorporated on site (i.e. location not suitable for the retention/creation of habitats or the retention of common reptile population as it is surrounded by urban sprawl). Instead compensation methods were discussed, and it was agreed that Staunton Country Park would best serve as a suitable receptor site. This contains large areas of suitable reptile habitat (i.e. grassland and scrub), and is located on the northern edge of Havant so has connectivity to the surrounding landscape.
- 3.3.2 To compensate for the loss of suitable reptile habitat on site, Hampshire County Council are to undertake enhancement works to Staunton Country Park that will benefit the relocated and local common reptile populations.

3.4 Enhancements

- 3.4.1 To enhance the site for any residual common reptile population (and other wildlife such as common amphibians and invertebrates), 6 informal reptile hibernacula (i.e. brash piles) will be created along the eastern boundary/beside Lavant Stream and throughout the south-eastern corner of the site around an improved SUDS feature.

3.5 Residual Impact

- 3.5.1 If all of the avoidance and mitigation measures outlined above are incorporated into the proposed works programme, then no significant residual impacts to common reptiles (or common amphibians) are perceived. The incorporation of enhancements, both on site and within the receptor site at Staunton Country Park, will result in a biodiversity gain.

4 Management and Monitoring

4.1 Management

4.1.1 No post-development management, specific for common reptiles, is to be undertaken on site.

4.1.2 Hampshire County Council will continue to manage the receptor site at Staunton County Park in a manner which is appropriate to benefit biodiversity, including common reptiles.

4.2 Monitoring

4.2.1 No post-development monitoring, specific for common reptiles, is to be undertaken on site or at Staunton Country Park receptor site.

5 References

Publications

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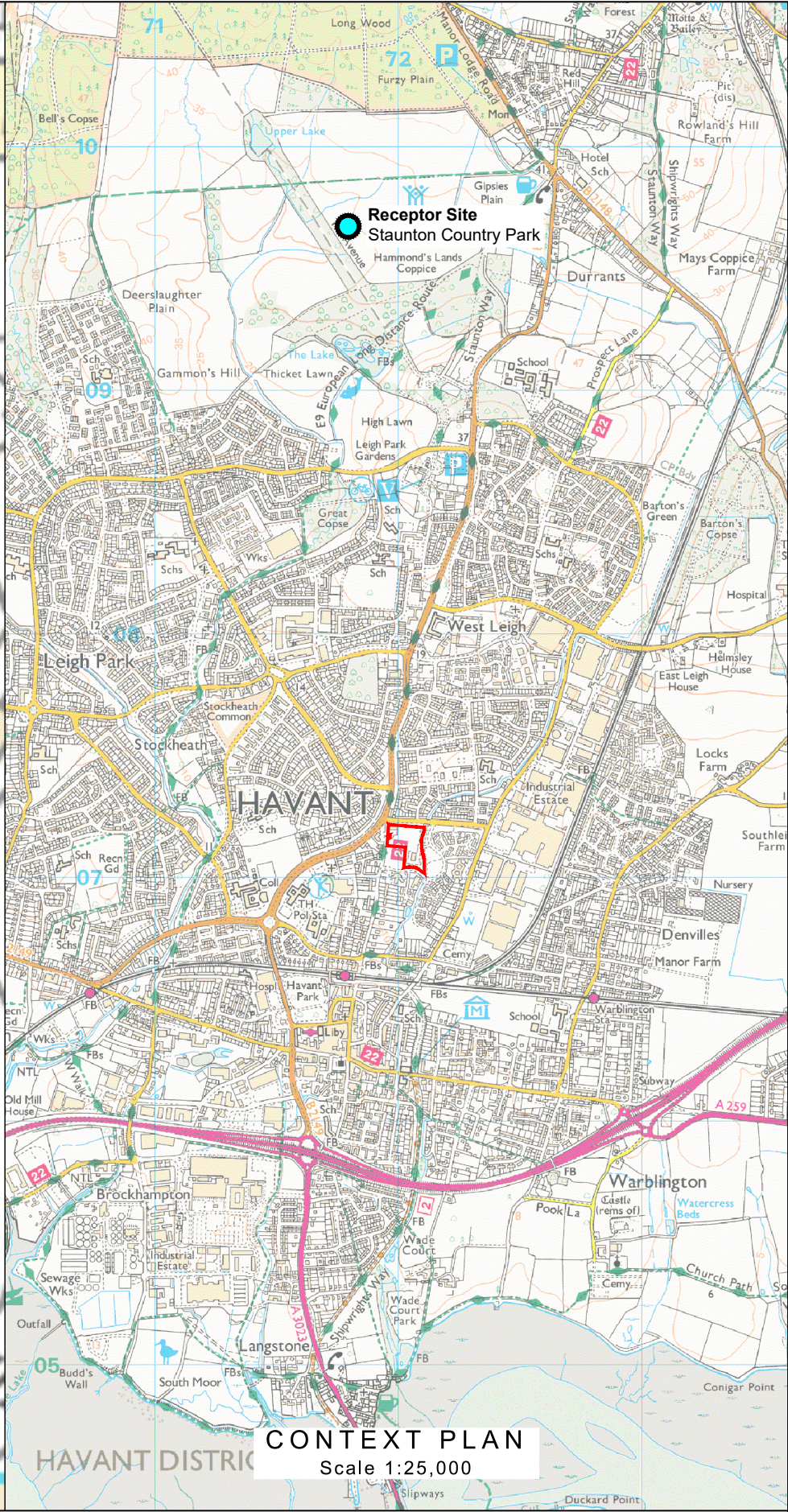
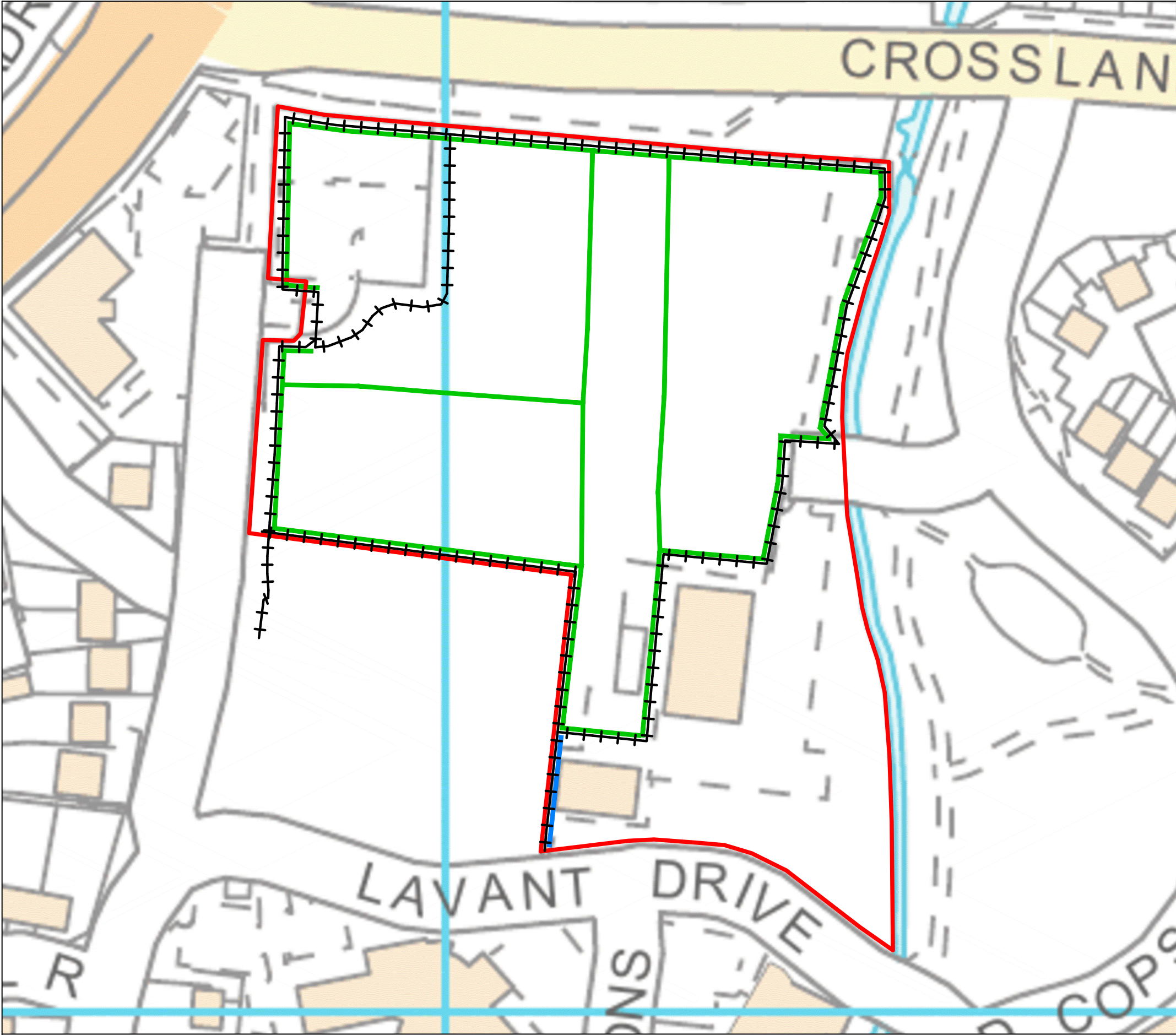
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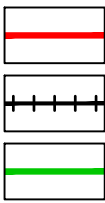
Wildlife and Countryside Act 1981 (as amended). Available at:
<http://www.legislation.gov.uk/ukpga/1981/69> [Accessed on 3rd February 2016].

Drawing CRM.1112.009.EC.D.002 – Reptile Mitigation Location



STEP Business Centre, Wortley Rd, Sheffield, S36 2UH

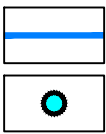
Key:



Site Boundary

Fencing

Current Exclusion Fencing
(Installed 2015)



New Proposed Exclusion Fencing

Receptor Site
Staunton Country Park

SCALE

1:1,000@A3

DATE

Mar 2016

DRAWN

MG

PROJECT NO.

CRM.1112.009

DRAWING NO.

CRM.1112.009.EC.D.002

CHECKED

DA

PROJECT

Oak Park, Havant

DRAWING TITLE

Receptor Mitigation Location

CLIENT

Ashley House plc

Appendix A – Proposed Site Layout



DESIGN OBJECTIVES

To create a safe, attractive and stimulating environment for residents, staff and visitors.

- The design seeks to:
- create a range of spaces of distinctive character and that offer a range of experiences;
 - provide opportunities for residents to engage with and influence their environment;
 - ensure that the environment is safe, secure and legible;
 - provide an attractive setting for the building and activities within;
 - provide privacy for residents within the building;
 - ensure the protection and integration of important existing vegetation;
 - create an ecologically rich environment, incorporating a range of planting and habitat; and,
 - specify planting that offers sensory and seasonal interest.

For further details refer to the landscape section of the Design & Access Statement

KEY

- Site Boundary
- Levels (indicative - subject to confirmation by engineer)
- Existing Vegetation
 - Existing trees to retain
 - Existing hedge to retain
- Proposed Vegetation
 - Feature tree
 - Pleached tree
 - Multi-stem tree
 - Specimen plant
 - Ornamental hedge
 - Mixed ornamental border
 - Ground cover planting
 - Climbing plant
 - Meadow
 - Lawn
- Street Furniture
 - Pergola
 - Seat type 1
 - Seat type 2 (sculptural cubes)
 - Water feature
 - Sculptural feature
 - Raised plant bed (incorporating seating)
 - Raised plant bed (incorporating wicking system)
 - Greenhouse
 - Compost area
 - Bin store (enclosed within pergola, fence and trellis)
 - Cycle store
 - Sprinkler housing

Boundary Treatment, Access and Level Change

- 2-2.5m high timber acoustic fence
- 1.5m high grey steel railings
- 1.8m high timber fencing
- 1.5m high glass balustrade
- Timber trellis panels
- Vehicular gate
- Pedestrian gate
- Freestanding handrail
- Retaining wall and handrail
- Steps
- Ramp

Hard Surface Treatment

- Feature paving type 1
- Feature paving type 2
- Feature paving type 3
- Decking
- Resin bounded gravel
- Concrete block paving
- Tarmac surface
- Compacted gravel
- Stepping stones type 1
- Stepping stones type 2

Lighting

Lighting to consist of low level bollards, in ground lighting and feature lighting

Arboriculture

For details of existing vegetation to be retained and protection measure refer to the arboriculturalist's information

Ecology

For details of existing site ecology and recommendations refer to the ecologist's information

Architecture

For details of buildings, including details of the extensive green roof refer to the architect's plans



SCALE	PROJECT NO.	PROJECT
1:500@A2	CRM.1112.005.L.D.007	HAVANT HEALTH AND WELLBEING CAMPUS
DATE	DRAWING NO.	DRAWING TITLE
March 2015	7 (revision B)	LANDSCAPE PROPOSALS
DRAWN	CHECKED	CLIENT
SF	PB	HAMPSHIRE LIVING SPACE



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