



2420 The Quadrant, Aztec West, Almondsbury, Bristol BS32 4AQ
T +44 (0)1454 853000 F +44 (0)1454 205820 E rpssw@rpsgroup.com W rpsgroup.com

Our Ref: Stencils Farm, Aldridge
Your Ref: OXF10235

E-mail: [REDACTED]
Direct Dial: [REDACTED]
Date: 28 March 2017

BY EMAIL

[REDACTED]
RPS Birmingham

Dear [REDACTED]

Please find enclosed the Ecology Constraints and Opportunities Plan (Drawing OXF10235-001), a simplified Features of Ecological Importance Plan (OXF10235-002) and the accompanying letter report prepared for the land at Stencils Farm to inform the assessment of development constraints and assist in the preparation of the masterplan.

If you have any queries about the attached please do not hesitate to get in touch.

Yours sincerely,
For RPS

[REDACTED]

[REDACTED]
Associate Director





Stencils Farm, Walsall Ecology Constraints and Opportunities Plan

Scope of Works

RPS have been instructed to undertake a review of the ecology of land at Stencils Farm to inform a parameters plan being prepared for Barratts West Midlands to identify an appropriate scale of residential development. The work has been informed by a scoping site survey and data trawl. The key ecological features and issues are presented on an Ecology Constraints and Opportunities Plan (COP), a simplified Features of Ecological Importance Plan, and detailed in this supporting letter report. The assessment includes options for the site layout design and incorporation of mitigation. The assessment has also considered legally protected species and identified where further surveys will be a requirement for any future planning application.

Site Context

The survey area comprises a series of intensively managed fields (primarily in arable production) on the eastern edge of Walsall. Stencils farm building and garden and a caravan storage area with three detached farm outbuildings are located in the south-western corner of the site.

The site is bounded to the south by the A454, a section of dual carriageway. The Daw End Branch Canal adjoins the eastern site boundary with the long distance footpath (the Beacon Way) running alongside the western bank. The canal is a Linear Site of Local Importance for Nature Conservation (SLINC) and has been identified and also designated as a “Greenway [Proposed]” within the adopted and emerging development plan.

Method

Desk Study

A request was submitted to the local records centre for information on non-statutory designated nature conservation sites within 2km of the survey site and for records of protected or otherwise notable species (e.g. species listed under the local or UK BAP) within 2km of the survey site.

Field Survey

The site walkover survey was undertaken on 9th March 2017 by Grace Harley. The habitats within the site were assessed. Notes were made on their structure, composition and context. Each habitat was reviewed to assess their potential to support legally protected or otherwise notable flora and fauna. Consideration was given to habitats adjoining the site boundary and the wider ecological context. Searches were made for invasive non-native plant species focussing on those species currently listed in Schedule 9 of the Wildlife and Countryside Act 1981 (as amended in 2010).

Nature Conservation Designations

There are no internationally designated sites, one biological SSSI, four Local Nature Reserves (LNR) and a further six SINC's within 2km of the site boundary. The Daw End Branch Canal Linear Site of Local Importance for Nature Conservation (SLINC) is located along the eastern site boundary.

Three of the hedgerows within the site (H8, H9 and H10 on the Constraints and Opportunities Plan) have been designated as a SLINC.

Park Lime Pits, designated as a Local Nature Reserve (LNR), is located 140m to the north-west of the site, at the closest point. Park Lime Pits is also designated as a Site of Importance for Nature Conservation (SINC), and “Wildlife Corridor”. The SINC boundary includes the area subject to the LNR as well as the adjoining arable fields – one of which is located within the site boundary (the northern part of the western field on the Constraints and Opportunities Plan). Adams Brook, which forms the

northern site boundary, and surrounding area of marshy grassland also lie within the designation. Adams brook connects to the Daw End Branch Canal, also a SLINC site, situated on the eastern site boundary. The legally protected species, white-clawed crayfish have been recorded in the brook.

The Park Lime Pits SINC comprises a disused limestone quarry and old pasture grassland with habitats including calcareous grassland, open water and conservation arable farmland.

Table 1 – Designated Sites

Designated Site	Proximity to Site	Description
SSSI		
Stubbers Green Bog SSSI	2.00km north-east	2.8ha shallow pool with fringing valley mire and swamp communities which have developed in a hollow, presumed to be caused by mining subsidence.
LNR		
Park Lime Pits LNR	0.14km north-west	A 9.5ha species-rich old limestone quarry and habitats include base-rich grassland and meadows, open water and conservation farmland. Over 300 different plants have been recorded and more than 100 species of birds. Bat foraging activity is also noted on the citation for nature reserve.
Hay Head Wood LNR	0.24km south-east Located on the southern side of the A454 dual carriageway	Habitats include ancient semi-natural broadleaved woodland, base-rich grassland and a pond which is the remnant of an old canal.
Cuckoo’s Nook and Dingle LNR	1.13km east	Ancient semi-natural woodland with bluebells, ramsons. Silurian limestone fossils and bentonite clay layers.
Mill Lane LNR	1.28km west	Habitats include lowland neutral grassland, lowland calcareous grassland, lowland heathland, wet grassland and a pond. There are rare and uncommon plants, amphibians and birds.
SINC		

Park Lime Pits SINC including Adams Brook	Partially overlapping the north-western part of the site and including the area of marshland to the north	Site comprised of disused limestone quarry and old pasture grassland with habitats including calcareous grassland, open water and conservation arable farmland. Designation includes arable fields (partially within the site) and the northern boundary water course, adjoining grassland within the site
Hay Head Wood SINC	0.24km south-east Located on the southern side of the A454 dual carriageway	Habitats include ancient semi-natural broadleaved woodland, calcareous grassland and a pond which is the remnant of an old canal.
Walsall Arboretum Extension SINC	0.9km south	A narrow stream corridor, encompassing rough grassland, scrub, drainage ditches and wet hollows.
Cuckoo's Nook and The Dingle SINC	1.13km east	Much of the site is ancient semi-natural woodland with an associated rich flora with many plants rare and uncommon in the conurbation.
Mill Lane SINC	1.28km west	Former railway sidings subject to land reclamation project in 1990s with diverse range of soil types and associated vegetation. Several man-made ponds support good amphibian populations.
Three Crowns Pasture SINC	1.8km South-east	Site comprises two grazed species rich pastures, associated hedgerows with diverse field layer and an overgrown unmetalled trackway.

Key Habitats

The key habitats of ecological value within the site are listed below and included in Table 2 with photographs. References to individual hedgerows, seasonal ponds and ditches are numbered in the list below and their locations shown on the Ecology [Constraints and Opportunities] Plan (Reference - Drawing OXF10235-001).

- Marshy grassland in the northern part of the site (within Park Lime Pits SINC)
- Adam’s Brook and the adjoining small blocks of broadleaved woodland, streamside trees and shrubs (within Park Lime Pits SINC)
- Northern section of western arable field (within Park Lime Pits SINC).
- Continuous mature mixed species hedgerows/treelines (H1, H2 and H6) with semi-mature and mature trees
- SLINC hedgerows/treelines (H8, H9 and H10) with semi-mature and mature trees
- Mature trees along the A454 (although not protected by preservation order)
- Daw End Branch Canal SLINC (Immediately adjoining the eastern site boundary)


Recommended surveys for planning applications






- *Botanical assessment of marshy grassland and watercourses in late spring/early summer*






In addition, secondary features of biodiversity value were the drainage ditches and seasonal ponds. If the farmhouse or associated buildings were found to support a bat roost they would also become a key feature.





The other habitats are ubiquitous habitats of low ecological value. None of the arable field margins supported herbaceous strips being managed specifically to provide benefits for wildlife. Although arable fields have low conservation value as a habitat, a few bird species with high conservation status utilise arable land.

Table 2 – Habitat Photographs and Descriptions

Key Habitat	Photograph	Description
Marshy grassland		Large rectangular area of waterlogged marshy grassland dominated sedge and rush species, with willow herb, meadow sweet, water plantain, hemp agrimony and tormentil all noted in the sward.

<p>Small areas of broadleaved woodland</p>		<p>Small areas of immature broadleaved woodland. Largest areas located alongside Adams Brook on the northern site boundary. Species present include oak, ash, elder, alder, willow, hazel and hawthorn.</p>
<p>Hedgerows/treelines with mature trees</p>		
<p>H1</p>		<p>Managed intact hawthorn dominated hedgerow with occasional semi-mature tree. Managed to 2m width and 2-3m height. Other species present include elder, holly, blackthorn, ash, hazel. No ditch or hedge bank present.</p>
<p>H2</p>		<p>Hawthorn, willow and elder dominated treeline. Wider broadleaved woodland section in centre on field corner. Eastern section is more recently managed. 4-6m height. No ditch or hedge bank. (Hedgerow and part of arable field within SINC designation)</p>
<p>H6</p>		<p>Defunct hedgerow along western bank of stream corridor with occasional semi-mature oak and hawthorn.</p>
<p>H8</p>		<p>SLINC hedgerow with semi-mature and mature trees. Hawthorn dominated with occasional semi-mature oak. Associated drainage ditch on southern and western side.</p>

H9		SLINC hedgerow with semi-mature and mature trees. Unmanaged hawthorn hedgerow with dry narrow ditch on southern side. Occasional semi-mature oaks and large multi-stemmed mature ash at western end. Other species include hazel and holly.
H10 (treeline)		SLINC semi-mature and mature treeline. Mature oaks, ash, hawthorn, holly and elder. 2-3m wide corridor. No ditch or bank. Maximum tree diameter of 1m. Several trees with potential cavities which could be used by roosting bats.
Waterbodies/courses		
Daw End Branch Canal (offsite/north-eastern site boundary)		4-5 m wide canal. 2m wide grass towpath on western bank. Brick engineered southern bank. 20cm drop to water surface. Sparsely vegetated southern bank. Eastern bank dominated by fringing bulrush with scattered hawthorn scrub. No submerged or floating aquatic vegetation noted in canal.
P1 (offsite)		Seasonal pond/pooling to the north of drainage ditch W1. Located offsite within small area of broadleaved woodland. No aquatic vegetation. Flat profile. Soil substrate. Holding approximately 20cm water. (within SINC designation)
P2		Small seasonal pond in generally flat low-lying ground approximately 4m by 4m in extent within broadleaved woodland corridor associated and fed by Adams Brook to the west. Limited aquatic vegetation.

<p>P3</p>		<p>Small pond fed by drainage ditch W5 from the north. Culverted under road to the south. Aquatic macrophyte vegetation present.</p>
<p>W1</p>		<p>Wet drainage ditch along western site boundary. Steep banks. 50cm width, 50cm depth. Holding approximately 20cm water. Limited aquatic vegetation. Hawthorn, elder and scrub on western bank.</p>
<p>W2 Adams Brook (Northern boundary stream)</p>		<p>Narrow watercourse approximately 1m wide with generally flat profile. Southern bank is 1m high shallow sloping northern bank. Scrub dominated northern bank. Shallow 10cm water depth with slow flow and limited aquatic vegetation.</p>
<p>W3</p>		<p>Stream corridor located to the west of H6. 20cm water depth. Clear of aquatic vegetation. Gently sloping soil banks limited vegetation cover. Broadleaved woodland and scrub at northern end. Some areas of bulrush. Slow flow.</p>

W4		Steep banked narrow, <50cm width) drainage ditch leading to small pond (P3) and culverted under road to south. Limited aquatic vegetation. Vegetated eastern and northern bank. Bulrush, sedges and rushes are present in northern section.
----	---	---

Protected Species Review

Bats

In August 2016 Cotswold Wildlife Services undertook a survey of the buildings at Stencils Farm to assess their potential for supporting roosting bats as part of an outline planning application. Their findings concluded that the buildings offered low and negligible potential and although bat droppings were found within the outbuilding that these were deposited during flight and no roost was confirmed within the building during the single emergence/re-entry survey.

Given the overall structure and condition of the buildings however they are considered to offer the following potential for supporting roosting bats. A planning application involving the demolition of the buildings would require confirmation of the absence of external and internal potential roost features as concluded by the existing survey. Specific evidence should be presented on the Stencils Farm outbuildings to confirm its status for the planning application.

As a whole the mature trees within the site have value for roosting bats, with a few noted as having high value with obvious potential roost features particularly in hedgerow H10.

The following bat species recorded within 2km of the site: Soprano pipistrelle *Pygmaeus pipistrellus*, Common Pipistrelle *Pipistrellus pipistrellus*, Noctule *Nyctalus noctula*, Brown long-eared *Plecotus auritus*, Daubentons *Myotis daubentoni* and unidentified *Myotis sp.* Regular bat foraging activity is expected along watercourses, mature hedgerows and the canal.

Surveys for planning applications

- Assessment of mature trees that will potentially be felled (tree climbing and provisionally emergence surveys)
- External and internal inspections of buildings
- Roost presence/absence surveys of buildings
- Bat activity surveys – whole site

Badgers

No signs of badger activity were encountered during the survey and no badger setts were identified within or adjacent to the site, but badgers are known to be active in the local area.

Surveys for planning application

- No further badger survey likely to be required

Otter, Water vole and white clawed crayfish

There are two records for white clawed crayfish from 2003 located 0.76km from the site at SP02849997. There are nine records for water vole from 2002 located 0.62km from the site at SK033001. There is one record for otter from 2003 located 1.7km from the site at SP036978. There is some limited potential for these species to occur in the northern stream and/or canal.

Surveys for planning application

- *Water vole survey of watercourse and drains is a likely requirement*
- *Ensuring protection of the northern watercourse/drains and banks should be integrated into the masterplan*
- *Building in robust protection into the scheme could avoid the need for some surveys*

Breeding birds

The hedgerows and dense areas of trees and shrubs would be expected to provide a food source for local bird populations and support an assemblage of common breeding bird species.

Farmland bird species of conservation concern can be associated with arable fields (for example skylark). The arable fields had very limited potential to support nesting or wintering birds

Surveys for planning application

- *Assessment of the breeding bird assemblage is a probable requirement for a planning application*

Great crested newts

There are no records of great crested newts (GCN) located within 2km of the site.

The small seasonal ponds (P1 and P2) located on the site boundary are likely to annually dry up and are considered unsuitable as breeding habitat for a population of GCN.

There is the possibility that the canal could support GCN however the presence of fish populations would significantly reduce its suitability.

The majority of the length of watercourses within the site hold shallow flowing water and very limited aquatic vegetation and are therefore unlikely to be used by GCN.

Small sections of watercourse W4 could be suitable for GCN and contained evidence of supporting amphibians and despite being shallow pond P3 contains suitable aquatic vegetation for egg laying.

There is a large lake in Park Lime Pits LNR. This would be expected to have very low potential to support GCN based on its size and likely fish populations.

There are further smaller ponds located 155m and 490m south of the dual carriageway however the A454 is considered to be a substantial dispersal barrier and therefore even if they were found to support a GCN population the likelihood of them venturing onto the site is considered to be negligible.

Surveys for planning application

- *Habitat Suitability Index (HSI) calculations of ponds and suitable sections of drainage ditches within the site and within 250m of the site boundary to assess suitability for supporting GCN.*
- *Presence/absence survey of waterbodies with average or higher HSI scores (provisional)*

Reptiles

There are no records of reptiles within 2km of the site. Reptiles are almost certainly absent from the arable fields. The semi-improved grassland in the south-western part of the site, adjoining the A454 could provide suitable habitat for reptiles, particularly the more tussocky areas located close to the southern boundary. The extensive marshy grassland on the northern boundary and a small south-facing grassland bank on the north-eastern site boundary also provides potential reptile habitat.

Surveys for planning application

- *Possible presence/absence survey in selected areas of the site*

Review of Potential Constraints and Avoidance

Key constraints and opportunities are illustrated on the Ecology Plan (Drawing OXF10235-001) and are summarised below.

Habitats

Features of High Importance

- Northern boundary stream; Adams Brook (part of SINC)
- Eastern boundary Daw End Branch Canal (SLINC) (off-site)
- Northern boundary marshy grassland (part of SINC)
- Northern part of western arable field (part of SINC)
- SLINC hedgerows/treelines (H8, H9 and H10)
- Mature trees considered to have high potential for bats particularly within hedgerow H10

Features of Moderate Importance

- Other higher value hedgerows with drainage ditches and mature trees (H1, H2 and H6)
- Individual mature tree (south-eastern field)
- Seasonal shallow ponds (P2 and P3)

Feature of Potential Importance

- Stencils farm main house and outbuildings if found to be suitable for supporting bats (potential bat roost)

Avoidance/Mitigation

- Establish green space stand-off between built development and designated sites notably the northern stream (Adams brook) and canal (recommended minimum stand-off of 10m widening to 20m in places)
- Retention and protection of the SINC and SLINC habitats within the site.
- Retention of marshy grassland in the northern part of the site and incorporation into green infrastructure
- Retention of higher value hedgerows with trees with buffers to maintain their context and root protection areas; or mitigate where some loss is unavoidable (Recommend a minimum of 3m on either side and encompassing all tree root protection areas beyond the spread of the canopies).
- Retain and enhance the seasonal ponds and/or construct new ponds within the green space in the site layout
- Enhancement of part of SINC that overlaps the site: conversion to neutral and marshy grassland types appropriate for the ground conditions

Benefits

- Protection of existing features of highest value, establishment of buffers and enhancement of areas of low conservation value,
- Avoid triggering higher levels of mitigation,
- Reduce the potential for impacts on legally protected species
- Incorporate biodiversity value into the site design to negate losses from development of the site

General Opportunities

New habitats should be included in the emerging site layout to help achieve no net loss of biodiversity and achieve compliance with planning policy legislation.

Mitigation for loss of hedgerows should include the creation of new native hedgerows (ideally greater than 1:1) or a combination of new native hedgerow planting and the creation of new blocks of native tree and shrub planting. Blocks of native trees and shrubs would be best located towards the eastern and western boundaries. Planting on the southern side of the stream should be avoided.



The creation of green space with features of value for biodiversity on the southern side of the northern boundary stream would create a buffer and strengthen the east-west link between the Park Lime Pits and the canal.

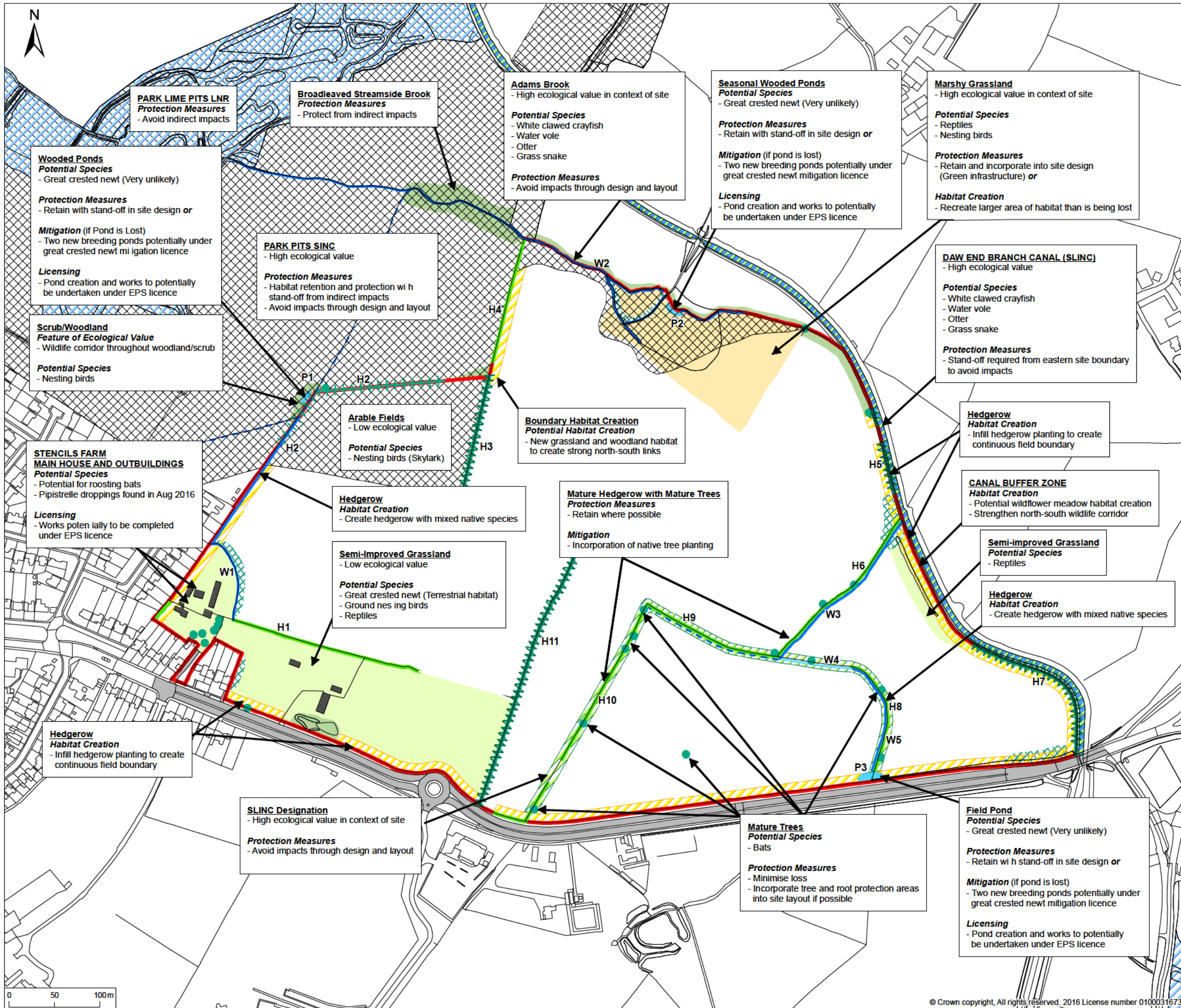
General principles

- Maximise biodiversity value within the drainage/flood alleviation measures
- Provision of wildflower meadow / flowering amenity grassland in the public open space
- Maintain strips of green space along at least the northern and eastern site boundaries to maintain wider landscape connectivity / provide wildlife corridors in the final design
- Retain highest value bat flight lines

Enclosures:

OXF10235-001

OXF10235-002



© 2016 RPS Group
Notes
 1. This drawing has been prepared in accordance with the scope of RPS's appointment with its client and is subject to the terms and conditions of that appointment. RPS accepts no liability for any use of this document other than by its client and only for the purposes for which it was prepared and provided.
 2. If received electronically it is the recipient's responsibility to print to correct scale. Only written dimensions should be used.

Legend

- Site Boundary
- Local Nature Reserve
- Park Pits SINC
- SLINC Designation
- Potential Habitat Creation
- Broadleaved Woodland
- Scrub
- Grassland
- Semi-improved Grassland
- Building
- Hardstanding
- Daw End Branch Canal
- Pond (Seasonal)
- Running Water
- Standing Water (W4)
- Dry Ditch
- Hedgerow
- Tree-Line
- Sp Poor Heavily Managed Hedgerow
- Mature Tree

POTENTIAL SURVEYS REQUIRED

- Water vole (Brook/canal)
- Otter (Brook/canal)
- Crayfish (Brook/canal)
- Hedgerow survey
- Bat (Tree/farm buildings)
- Bat activity surveys (Spring/summer/autumn)
- Reptile (Grassland/canal/brook)
- Great crested newt (Ponds)

HABITAT CREATION/MITIGATION

- Wildflower meadow
- Blocks of native tree/shrub planting to develop semi-natural structure

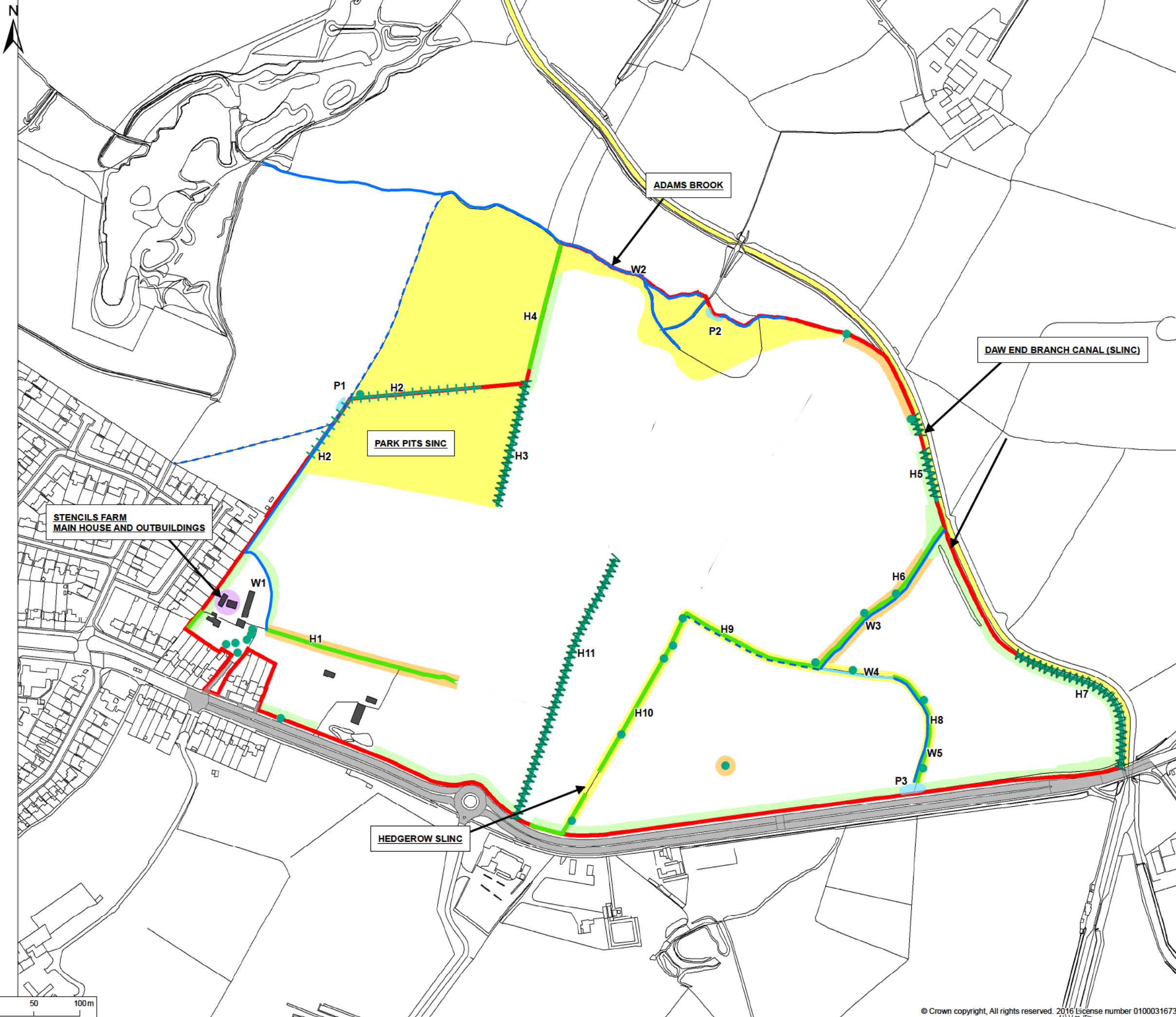
Rev	Description	Date	Initial	Checked
A	Addition of SINC & SLINC	MAR 17	MD	GH

RPS

2420 The Quadrant, Aztec West, Almondsbury,
 Bristol, BS32 4AQ
 T: +44(0)1454 853 000 E: rps@rpsgroup.com F: +44(0)1454 205 820

Client -
 Project **STENCILS FARM**
 Title **ECOLOGY CONSTRAINTS AND OPPORTUNITIES PLAN**

Status **FINAL** Drawn By **MD** PM/Checked By **TO**
 Job Ref **OXF10235** Scale @ A3 **1:4,000** Date Created **MAR 17**
 Drawing Number **OXF10235-ECO-001** Rev **A**



© 2016 RPS Group
Notes
 1. This drawing has been prepared in accordance with the scope of RPS's appointment with its client and is subject to the terms and conditions of that appointment. RPS accepts no liability for any use of this document other than by its client and only for the purposes for which it was prepared and provided.
 2. If received electronically it is the recipient's responsibility to print to correct scale. Only written dimensions should be used.

- Legend**
- Site Boundary
 - Ecological Features**
 - Features of High Ecological Importance (Retention & Protection to Avoid Impacts)
 - Features of Moderate Ecological Importance (Retention & Protection to Avoid Impacts)
 - Features with Potential Ecological Importance
 - Site Enhancement Opportunities (Potential Habitat Creation)

Rev	Description	Date	Initial	Checked
-	-	-	-	-



2420 The Quadrant, Aztec West, Almondsbury,
 Bristol, BS32 4AQ
 T: +44(0)1454 853 000 E: rps@rpsgroup.com F: +44(0)1454 205 820

Client -
 Project **STENCILS FARM**
 Title **FEATURES OF ECOLOGICAL IMPORTANCE**

Status	Drawn By	PM/Checked By
FINAL	MD	TO
Job Ref	Scale @ A3	Date Created
OXF10235	1:4,000	MAR 17
Drawing Number		Rev
OXF10235-ECO-002		-

rpsgroup.com/uk