

## Annington Land St Athan Vale of Glamorgan

Central Grid Reference ST01337 69333

## Extended Phase I Habitat Survey Survey Report

For Edenstone Homes

August 2016

(To be read in conjunction with Ecological Assessment of Land at Flemingston, St Athan 2016)

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#### 1 Introduction

#### 1.1 Survey Brief

TerrAqua Ecological Services Ltd was commissioned by Edenstone Homes to undertake an Extended Phase I Habitat Survey/Preliminary Ecological Assessment of a parcel of land at St Athan, Vale of Glamorgan, referred to as Annington Land. Approximate central grid reference ST01337 69333. The survey boundary was taken as that supplied by Mr Richard Kelso acting for Edenstone Homes.

The survey was undertaken in August 2016

#### 1.2 Client Details

The survey was undertaken on behalf of Edenstone Homes, Priory House, Priory Street, Usk NP115 1BJ following instructions to proceed by Mr Richard Kelso acting for Edenstone Homes.

#### 2 Background

#### 2.1 Rational

The survey was commissioned by the client as part of the ecological assessment of the site undertaken as one aspect of the scoping of the site with regard to its suitability for potential change in use or future development.

Part of the land included within the survey boundary is proposed to be included within the Vale of Glamorgan LDP. The following report should be read in conjunction with the Extended Phase I Habitat Survey/ Preliminary Ecological Assessment of the larger parcel of land adjacent to the site (*Land at Flemingston, St Athan, Vale of Glamorgan. TerrAqua Ecological Services, July 2016*).

This Extended Phase I survey report will ascertain the ecological value of the site and identify any further ecological survey work required to ensure compliance with current legislation.

The report includes broad conclusions as to the potential impact on species and habitats should development occur. However proposals are at an early stage and at present no detailed site layout is available. Therefore a full assessment of the potential impacts of any development is not possible at this stage and impacts will be assessed once all species specific surveys have been completed.

#### 2.2 Site Description

The site referred to as Annington land comprises and area of amenity grassland and concrete hard standing located at the northern end of the St Athan Village extending to approximately 3.6 acres. The land is flat with scattered planted trees present across the site. The site was formerly occupied by buildings which have now been demolished and the site has subsequently been converted to amenity use. The site lies immediately adjacent to open farmland which forms part of the Flemingston, St Athan potential development land for which an Extended Phase I survey/ecological assessment has also been undertaken on behalf of Edenstone Homes.

#### 2.3 National Designations

No part of the site is covered by a National or International designation for its conservation importance.

#### 2.4 Local Designations

No part of the site is covered by a local designation such as a Site of Interest to Nature Conservation (SINCs). A number of SINCs are located within a 1.5km radius of the site including:

East Flemingston approximately 1km North East (D40 W1) Land north of Llanbedderi Moor approximately 1.5km North East (D40 G5)

#### 3 Methodologies

The survey methodologies as used to assess the site are outlined below. These are accepted by both local authority and conservation bodies as the standard ecological assessment methodologies.

The survey was undertaken within the site boundaries as supplied by Mr Richard Kelso of Edenstone Homes.

#### 3.1 Survey Dates and Personnel

The survey was undertaken in August 2016 by Carmen Jones MSC MCIEEM Senior Ecological Consultant and Dyfrig Jones BSC Senior Ecological Consultant. Both highly experienced ecologists with extensive experience in both ecological assessment and species specific issues.

#### 3.2 Extended Phase I Ecological Assessment

The walkover survey consists of an assessment of the habitats present and was undertaken following the methodology as set out in the Handbook for Phase I Habitat Survey and extended to cover faunal species and their habitats according to the Chartered Institute of Ecology and Environmental Management (2016) Guidelines for Ecological Impact Assessment. CIEEM. Identified habitats were mapped using MapInfo Professional Software and target notes (TN) taken where appropriate for any additional features noted. The habitats mapped and target note locations are shown in Appendix II.

In addition, as part of the extended phase I survey, a record was made of all mammals, birds, amphibian, reptile and invertebrate fauna for which a sighting or evidence of activity was observed as well as the identification of habitats present considered suitable to support both internationally and nationally protected species, or any species considered to be rare or of local significance.

#### 3.3 Data Search

A desk top data search was undertaken for any records of species and/or habitats within the survey boundary. The data search was also extended to include a search for records within a 1.5 km radius of the survey centre of species or habitats, including protected and designated sites, which could be affected by the proposals for the site.

The data search included a search of records as held by the National Biodiversity Network online Gateway and a full data search undertaken by the South East Wales Biodiversity Record Centre (SEWBReC). The small parcel of land referred to as Annington Land forms part of the Ecological Assessment of the larger parcel of land referred to in point 2.1. The SEWBReC Data search results are therefore those as obtained for the main Survey Area and full results can be viewed within the Flemingston, St Athan Phase I report.

#### 3.4 Survey Limitations

The Phase I methodology is not intended to produce comprehensive species lists of fauna and flora and therefore the species lists should be considered representative but not totally inclusive. In particular mammal, invertebrate and bird species are likely to be under recorded during a single walkover survey.

The Phase I Habitat Survey does not set out to identify all non-native or native invasive plant species such as Japanese Knotweed. These species may be recorded during the course of the survey; however the absence of records for such species should not be taken as a statement that such species are not present within the survey area. If the presence of such species is of primary significance for any future use of the site then further detailed vegetation surveys to identify and map any such plants should be undertaken.

#### 4 Results Extended Phase I Survey

#### 4.1 Habitats

#### 4.1.1 Amenity Grassland

Amenity grassland is the dominant habitat type within the site boundary. The grassland is floristically very poor and with a sward height between 3-5cm. The grassland is managed by mechanical mowing. Species present include perennial rye (*Lolium perenne*), Yorkshire fog (*Holcus lanatus*), annual meadow (*Poa annua*), rough meadow (*Poa trivialis*), common bent (*Agrostis tenuis*), common couch (*Elymes repens*), cocksfoot (*Dactylis glomerata*), meadow buttercup (*Ranunculus acris*), daisy (*Bellis perennis*), greater plantain (*Plantago major*), ribwort plantain (*plantago lanceolata*), with occasional red clover (*Trifolium pratense*), and white clover (*Trifolium repens*).



Plate 1 amenity grassland

#### 4.1.2 Mature/Semi Mature Trees

A number of semi mature trees are scattered across the site and have been planted for principally ornamental purposes. Species present include *Quercus sp*, silver birch (*Betula pendula*), hawthorn (*Crataegus monogyna*), ash (*Fraxinus excelsior*), and beech (*Fagus sylvatica*). A line of non-native *Leylandi* species are located along the western boundary of the site forming a buffer between the site and the adjacent road. The eastern boundary of the site also has a buffer of plated trees scattered across amenity grassland.



Plate 2 scattered tree planting

#### 4.1.3 **Scrub**

An area of bramble scrub with a mix of grasses and tall herbs has developed at the eastern and north eastern end of the site. The scrub is dominated by bramble (*Rubus sp*) with a mix of blackthorn (*Prunus spinosa*) and ash saplings. Other species within this mosaic of habitat include horsetails (*Equisetum sp*), cocksfoot, Yorkshire fog, false oat (*Arrhenatherum elatius*) stinging nettle (*Urtica dioica*) and greater willowherb (*Epilobium hirsutum*).

EXTENDED PHASE I HABITAT SURVEY-PRELIMINARY ECOLOGICAL ASSESSMENT OF ANNINGTON LAND, ST ATHAN, VOG FOR EDENSTONE HOMES. TERRAQUA ECOLOGICAL SERVICES AUGUST 2016



Plate 3 scrub

#### 4.1.4 Hedgerows

#### H1

A species rich intact hedgerow approximately 4m-5m in height. The hedgerow is currently unmanaged but does show some signs of historic management practices. The hedgerow is protected on the opposite side by an electric fence to help exclude stock. The dominant woody species present include blackthorn (*Prunus spinosa*), hawthorn (*Crataegus monogyna*), elder (*Sambucus nigra*), hazel (*Corylus avellana*), privet (*Ligustrum ovalifolium*), ash (*Fraxinus excelsior*) and field maple (*Acer campestre*). Other species present within the hedge include honeysuckle (*Lornica periclymenum*), dog rose (*Rosa canina*) and clematis (*Clematis vitalba*). The ground flora is generally sparse due to the effects of grazing and reseeding. Species present include stinging nettle, greater willowherb (*Epilobium hirsutum*), rosebay willowherb (*Chamerion angustifolium*), field rose (*Rosa arvensis*), creeping thistle, meadow buttercup, bracken, ivy (*Hedera helix*), herb robert (*Geranium robertianum*) and low growing bramble (*Rubus sp*).



Plate 3 H1 from (field side)

#### 4.1.5 Bracken

A stand of bracken (*Pteridium aqualinum*) is present along the northern boundary. The bracken appears to have developed along the course of a previous section of hedgerow. The bracken stand is dense effectively shading out smaller plants and limiting the potential for a diverse flora. Other species recorded within the bracken include field bindweed (*Convolvulus arvensis*), stinging nettle, and occasional hogweed (*Heracleum sphondylium*).



Plate 4 bracken

#### 4.1.6 Hard standing

Large areas of un-vegetated concrete hard standing are located towards the eastern side with smaller areas present towards the south western corner. These appear to be former roads and car parking areas associated with a previous land use. These area are completely devoid of vegetation and have negligible ecological value.



Plate 5 concrete hard standing

#### 4.2 Data Search Results

#### 4.2.1 Designated Sites

#### 4.2.1.1 National Designations

No part of the site is covered by a National or International designation for its conservation importance.

#### 4.2.1.2 Local Designations

No part of the site is covered by a local designation such as a Site of Interest to Nature Conservation (SINCs). No SINC lies immediately adjacent to the survey boundary. Two SINCs are located within a 1.5km radius of the site including:

East Flemingston approximately 1km North East (D40 W1) Land north of Llanbedderi Moor approximately 1.5km North East (D40 G5)

#### 4.2.2.2 Fauna and Fauna

No records were found for any location within the survey boundary.

Following a data search undertaken by the local record centre (SEWBReC) records were found for a number of species within a 1.5km radius of the site, including:

Common pipistrelle and brown long eared bats are known to roost within 700m of the survey boundary.

Noctule bats known to be present within 700m

Lesser Horseshoe bats recorded within 900m

Greater Horseshoe bat known to roost within 2.5km

Great Crested Newt recorded within 900m

Barn Owl recorded within 900m

Otter know to be present on the river Thaw within 1000m

Records were also found relating to a large number of bird species listed on Section 42. Records were also found confirming the presence of common reptile species within a 1.5km radius of the site boundary

Records were found confirming an historic presence within adjacent fields of endangered arable plants namely shepherds needle (*Scandix pecten -veneris*) and corn buttercup (*Ranunculus arvensis*). No records for these species, historic or recent, were found for any location within this small grassland area.

#### 5 Ecological Evaluation

#### 5.1 Habitats

For reporting purposes the ecological value of a habitat is based upon the following criteria:

- Currently supports, or has the potential to support protected, nationally or locally scarce species
- Habitat has a high intrinsic value supporting a diverse range of species
- Is a UK BAP Habitat
- Local BAP Habitats with an ecological interest or cover a significant area of the site
- Natural habitats located within built up and/or urban areas

#### 5.1.1 Amenity Grassland

Amenity grass is the dominant habitat type across the site. Grasslands vary considerably in their floristic diversity and therefore their ecological value. Some created from traditionally managed semi improved grasslands are extremely diverse while those that have undergone significant agricultural improvement generally contain a far less diversity of flora.

The amenity grassland has been assessed as having a low floristic diversity with the sward representing a typical highly improved and managed sward. The management of the sward by regular mechanical mowing effectively prevents the species present from reaching a flowering or seeding stage thereby significantly reducing the already limited ecological value.

As a result of the sward type, species recorded and intensive management the amenity grassland is considered to be of a low ecological value.

#### 5.1.2 Semi Mature Trees

A number of semi mature trees are present within the site boundary. These comprise a mix of both native and non-native species planted for ornamental purposes. In common with all mature trees these specimens afford potential feeding opportunities for a diverse range of invertebrate and bird species and afford potential nesting opportunities for common bird species.

Mature trees also have the potential to be used as roosting sites for bat species. However none of the trees within the survey boundary have any features associated with potential use by bats. Therefore all of the trees are considered to be of negligible value to roosting bats but do afford potential foraging habitat.

All native mature trees have a high intrinsic ecological value and as such all mature trees are considered to be of a high ecological value at a site level. Due to the high percentage of non-native species within the site the trees are considered to be of moderate ecological value at a local level.

#### 5.1.3 **Scrub**

Scrub provides cover and feeding opportunities for mammal species, nesting opportunities for birds and potential feeding sites for invertebrate species. In this instance the extent of the scrub and species composition is such that alone it has limited ecological value. However the scrub does when taken in conjunction with adjacent hedgerow afford some potential for use by dormouse. The scrub is considered to have a moderate ecological value at a site level and a moderate to low value at a local level. Should dormouse be found within the site boundary or immediately adjacent habitats then the value of the scrub area is likely to increase. Further work is required in order to ascertain if the scrub is an important habitat for dormouse.

#### 5.1.4 Hedgerows

Hedgerows are recognised as being important wildlife habitats in their own right providing suitable habitats for over 47 species of conservation concern within the UK. Hedgerows are particularly recognised as being of importance to birds, butterflies, moths, bats, dormouse and both amphibian and reptile species. Hedgerows also form important wildlife corridors allowing species to disperse and move throughout the countryside to other favourable habitats.

In order to protect the hedgerow system and in acknowledgement of the importance of hedgerows to both wildlife and the general landscape the retention or removal of hedgerows is a material consideration during the planning process.

Hedgerows are classed as Priority Habitats within the UK Biodiversity Action Plan. In Wales hedgerows are listed under Section 42 as Habitats of Principal Importance for the Conservation of Biological Diversity. This places a duty on both government departments and local authorities to have regard for the conservation of hedgerow habitats. Hedgerows are also mentioned within the Vale of Glamorgan Local Biodiversity Action Plan.

A single species rich hedgerow borders the northern side of the site. This hedgerow has direct connectivity between the scrub areas within the site and the extensive hedgerow system of the Flemingston, St Athan potential development land to the north and the wider countryside.

Due to the effects of grazing and changes in management of the adjacent fields from arable to improved grass the ground flora at the base of the hedgerow on the northern side is floristically impoverished and dominated species such as nettle, bracken and low bramble however the southern side of the hedge base (Annington Land) lies adjacent to dense bramble scrub.

The hedgerow is considered to be one of the most ecologically valuable features within the site boundary. In common with its listing as a UK BAP habitat the hedgerow is considered to have a high ecological value at a site, local and county level.

#### 5.1.5 Bracken

Bracken, when forming part of mosaic of habitats can provide important micro habitats for delicate plants, invertebrates and important refuge areas for reptiles such as slow worm (*Anguis fragilis*), common lizard (*Lacerta vivipera*) and grass snake (*Natrix natrix*). However when such stands become dense and encroach into more valuable species rich habitats then bracken can reduce the diversity of and eventually eliminate such communities. The bracken along the northern boundary of the site has become dense and has reduced the potential for a diverse ground flora to develop within these areas. Therefore while retaining its value for use by reptiles as basking and feeding areas and potentially nesting areas for breeding birds the overall ecological value of the bracken is considered to be low at a site level.

#### 5.1.6 Concrete Hard Standing

The concrete hard standing areas remain primarily un-vegetated and have been assessed as having negligible ecological value.

#### 5.2 Flora

The amenity grassland has been intensively managed as a recreation area for some time and as a result lacks any degree of floristic diversity. The peripheral scrub, bracken and occasional tall herb areas contain species common to roadsides and abandoned areas. None of these communities contain any rare, or endangered plant species. The management of the land as an amenity grassland means that there is no possibility of any of the rare and endangered plant species formerly recorded within adjacent fields to be present within this survey area. As a result the Annington Land is not considered to be an area of interest with regard to its plant communities.

#### 5.3 Fauna

#### 5.3.1 Mammals

#### 5.3.1.1 Badger

No evidence of badger (*Meles meles*) activity was recorded during the Phase I walkover of the site. No evidence of the presence of badger sets was recorded within the hedgerow and scrub bordering the site and no mammal tracks attributable to badger were recorded within the grassland area. The field is regularly used by local residents as a dog walking area and therefore badger are likely to avoid set building within the confines of the site or immediately adjacent areas. It is considered highly unlikely that the development of the site will have an impact on badger.

#### 5.3.1.2 **Bats**

The data search results show that bats are active within a very close proximity to the site with common pipistrelle, brown long eared, Noctule, and lesser horseshoe and greater horseshoe having been recorded within a 1.5km radius of the site. Bats can and do commute significant distances between roosts and favoured feeding areas.

No buildings are present within the site and none of the trees have any potential for use by roosting bats. The trees and hedgerow do have potential for use as foraging areas and the hedgerow has potential for use as a commuting route by bats travelling from roosts outside the survey area including the bat houses located within the St Athan Base.

Further work is required before the importance of the site to feeding and/or commuting bats can be ascertained. Activity surveys will be required designed to establish the importance if any, of the features within the site to commuting and feeding bats (*These have been commissioned by Edenstone Homes as part of the Flemingston, St Athan Ecological Assessments for completion summer 2016*).

#### 5.3.1.3 **Dormouse**

The bramble scrub and species rich hedgerow both afford potential habitat for feeding and nesting dormouse. These habitats have direct links to the extensive network of hedgerows reaching across the wider countryside increasing the potential for dormouse to be present within the site.

No records were found relating to the presence of dormouse within the site boundary or within 1.5km of the site. However as dormouse are secretive and difficult to spot the species is likely to be under recorded unless specific dormouse surveys are undertaken.

The dormouse is a European protected species and is afforded protection under both the Habitats Directives and the Wildlife and Countryside Act and is also a UK BAP Priority species.

No survey of the site for dormouse has yet been undertaken and therefore a survey of the site for dormouse, using a recognised methodology, is required to ensure that any proposals for the site do not have a negative impact on dormice. (*These have been commissioned by Edenstone Homes as part of the Flemingston, St Athan Ecological Assessments for completion by summer 2017*).

#### 5.3.1.4 Otter

The Nant y Stepsau stream which runs through the northern boundary of the potential development area has potential for use by otter. The specie is known to be present on the River

Thaw and its tributaries of which Nant y Stepsau is one. The data search results confirm the presence of otter within the general area. Further survey work is required in order to ascertain the use, if any, being made of the watercourse by otter. (*These have been commissioned by Edenstone Homes as part of the Flemingston, St Athan Ecological Assessments for completion summer 2016*).

#### 5.4 **Reptiles**

Habitats suitable for common reptiles such as slow worm, grass snake and common lizard (*Lacerta vivipara*) are present within the site and include habitats suitable for both basking and hibernation although these are generally confined to the base of hedgerows, scrub and bracken areas. No records relating directly to the site we were found during the data search and no records were found relating to any immediate habitat, this is considered to be the result of under recording rather than the absence of reptiles within the locality. Reptiles are known to be well distributed throughout the Vale of Glamorgan and therefore the probability of reptiles being present within the habitats identified is significant. Further survey work would be required to ascertain the full use being made of the site by reptile species. (*These have been commissioned by Edenstone Homes as part of the Flemingston, St Athan Ecological Assessments for completion summer 2016*).

#### 5.5 Amphibian

No ponds are present within the site boundary and therefore the site is unlikely to be of importance to any amphibian species. The hedgerow and scrub does have the potential to be used by common amphibian species during their terrestrial life stages as feeding and commuting routes. Great Crested Newt are known to be present within the perimeter of the St Athan base however these are confined to areas at the western end of the camp, some 900m from the survey area. The distance between known populations and the absence of any suitable breeding habitat means that it is highly unlikely that the species is present within the site boundary and no further survey work for great crested newt is considered necessary. Overall the site is considered to be of low to moderate ecological value with specific regard to amphibian species.

#### 5.6 **Birds**

The unmanaged hedgerow, semi mature trees and scrub all afford excellent feeding opportunities for resident, summer migrant and winter migrant bird species. The site also offers potential nest sites for a wide range of bird species. Species such as blackbird (*Turdus merula*), great tit (*Parus major*), long tailed tit (*Aegithalos caudatus*), blue tit (*Parus caeruleus*), willow warbler (*Phylloscopus trochilus*), chaffinch (*Fringilla coelebs*), wren (*Troglodytes troglodytes*), robin (*Erithacus rubecula*),), wren (*Troglodytes troglodytes*), bullfinch (*Pyrrhula pyrrhula*), linnet (*Carduelis cannabina*), greenfinch (*Carduelis chloris*), carrion crow (*Corvus corone*), magpie (*Pica pica*), blackcap (*Sylvia atricapilla*), all observed during the phase I

survey. The open grasslands have limited value to owl species due to the close mown sward and lack of structural diversity making it generally unsuitable for small mammals. The hedgerows are also likely to be used as feeding sites for winter migrant species including fieldfare (*Turdus pilaris*) and redwing (*Turdus iliacus*) during the winter months. The nature of the habitats present means that it is highly unlikely that the site supports a breeding population of any WCA Schedule I bird species.

#### 5.6 Invertebrates

The range of habitats within the site are likely to support a wide range of common invertebrate species.

The impoverished sward means that the grassland areas have limited value to species such as butterflies and nectar seeking bees. The site does have some potential value for ground burrowing bees, wasps and beetles notably along the base of the hedgerow. The hedgerow and trees are considered to be of value for a range of invertebrates affording potential feeding opportunities including those provided by fruits, flowers and decaying woody matter. The nature of the site means that it is considered unlikely that the site supports any rare or scarce species or significant numbers of more common species.

#### 6 Conclusions

- No part of the site is covered by a statutory designation for its importance to nature conservation
- No part of the site is included within a local designation such as a SINC of Local Nature Reserve and no such designated land abuts the boundary of the site
- Two SINCs are located present within 1.5km radius of the site both located some 1km north east of the site
- Amenity grasslands are the dominat habitat type across the main body of the site. Under their current management the grasslands are considered to be of low ecological value.
- The single hedgerow is species rich, generally intact and affords potential habitats for birds, invertebrates and small mammals. The scattered trees have been identified as having some potential for use by birds and invertebrate species.
- No potential roosting opportunities for bats are present within the site boundary, however the trees and hedgerows do offer potential feeding and commuting habitats for bats and further survey work is required in order to ascertain the use, if any, being made of the site by commuting and foraging bats

- The hedgerow and adjacent scrub has the potential to support the hazel dormouse. No records for dormouse were found during the data search although this does not exclude the possibility that dormouse may be present. A full survey of the hedgerow system will be required, using a nest tube methodology, in order to ascertain the presence or otherwise of dormouse within the hedgerow system. The dormouse is a fully protected species and should dormouse be found then Natural Resources Wales Development licence will be required and appropriate mitigation considered before any removal or partial removal of the hedgerow system can be considered
- No habitats suitable for use by breeding great crested newt were found within the survey area. Great crested newt are present within the Vale of Glamorgan and are known to be present on ponds within the western side of the St Athan Camp some 900m from the survey boundary. As no suitable breeding habitat occurs within the site and the fact that the site is separated from the St Athan camp by roads and built up areas it is unlikely that any area within the survey boundary is important habitat for great crested newt. Therefore no further survey work with regard to great crested newt is considered necessary
- Habitats suitable for reptiles are present within the site and therefore further survey work will be required before an assessment can be made as to the importance if the site to reptiles
- The loss of hedgerows, trees and other habitats will lead to the loss of feeding and nesting areas for birds. Nesting birds are protected by law. Any clearance work must be undertaken outside the bird breeding season March-July or ecological advice sought and areas to be removed checked for nesting birds by an ecologist no earlier than 48 hours before removal works commence. If nesting birds are found then works must stop and no works on that area of hedgerow/habitat can be undertaken until all chicks have fledged and the nest abandoned.

#### 7 Recommendations

The extended phase I survey identified a number of features and habitats present that may support both European and UK protected, rare or uncommon species or habitats and species that require consideration as part of any future planning application. In order that a full understanding of the ecological importance of the site can be fully understood further species specific survey work will be required. The results obtained from these additional surveys will highlight any ecological constraints to the future development of the site and highlight any ecological features that should be retained post development not already highlighted within the above report.

Details of required surveys and optimal survey period are given in table 2 below:

Note the following surveys have been commissioned by Edenstone Homes (2016) and will be completed as part of the Flemingston, St Athan, potential development site ecological assessment and species specific works. The survey results for all species specific works will include all land included within this report.

Table 2 Survey Requirements Annington land, St Athan Development (potential) Site and Optimal Survey Period and Constraints

Survey Required	Reason	Timing
Bats- The hedgerows and scattered trees have the potential to be used by	This will allow for an understanding as to the	May-Sept Inclusive
commuting and foraging bats. It is recommended that a bat activity survey is	importance of individual features and areas of the site	
undertaken across the site.	with regard to bats and allow for appropriate	
	landscaping, and lighting design to protect any	
	important areas of bat activity.	
Reptiles- Habitats suitable for a number of different reptile species have been	This will allow for an appropriate methodology to be	April-October (weather
identified within the survey boundary. It is recommended that a survey of the site	produced where required, to ensure the protection of	dependant survey may be
is undertaken using a recognised methodology in order to establish what use is	reptiles prior to, during and after construction.	limited in August if
being made of the site by reptile.		temperatures are very high)
<b>Dormouse-</b> The hedgerows and scrub have been identified as being suitable for	To establish if dormouse are present and thereby	March-November (Nest tube
the hazel dormouse. The hazel dormouse is a fully protected species and	ensure that no damage or disturbance occurs to	methodology)
therefore its presence or otherwise needs to be ascertained. It is recommended	dormouse without the appropriate licence and	
that a survey of the hedgerows and woodland using a nest tube methodology is	permissions being granted and mitigation implemented	
undertaken to establish if dormouse are present		

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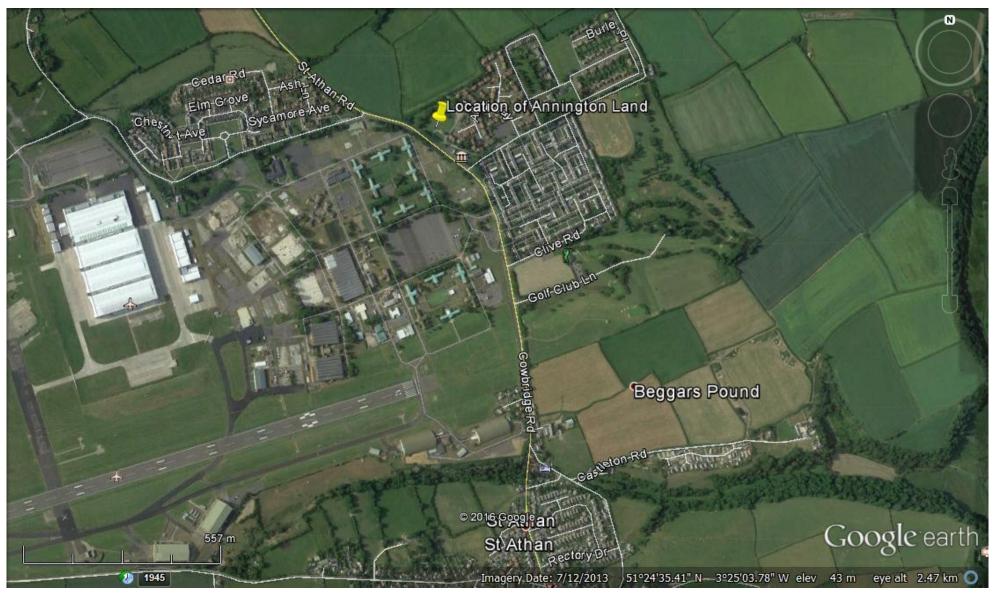
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### Appendix I

Aerial View Showing Location of Annington Land

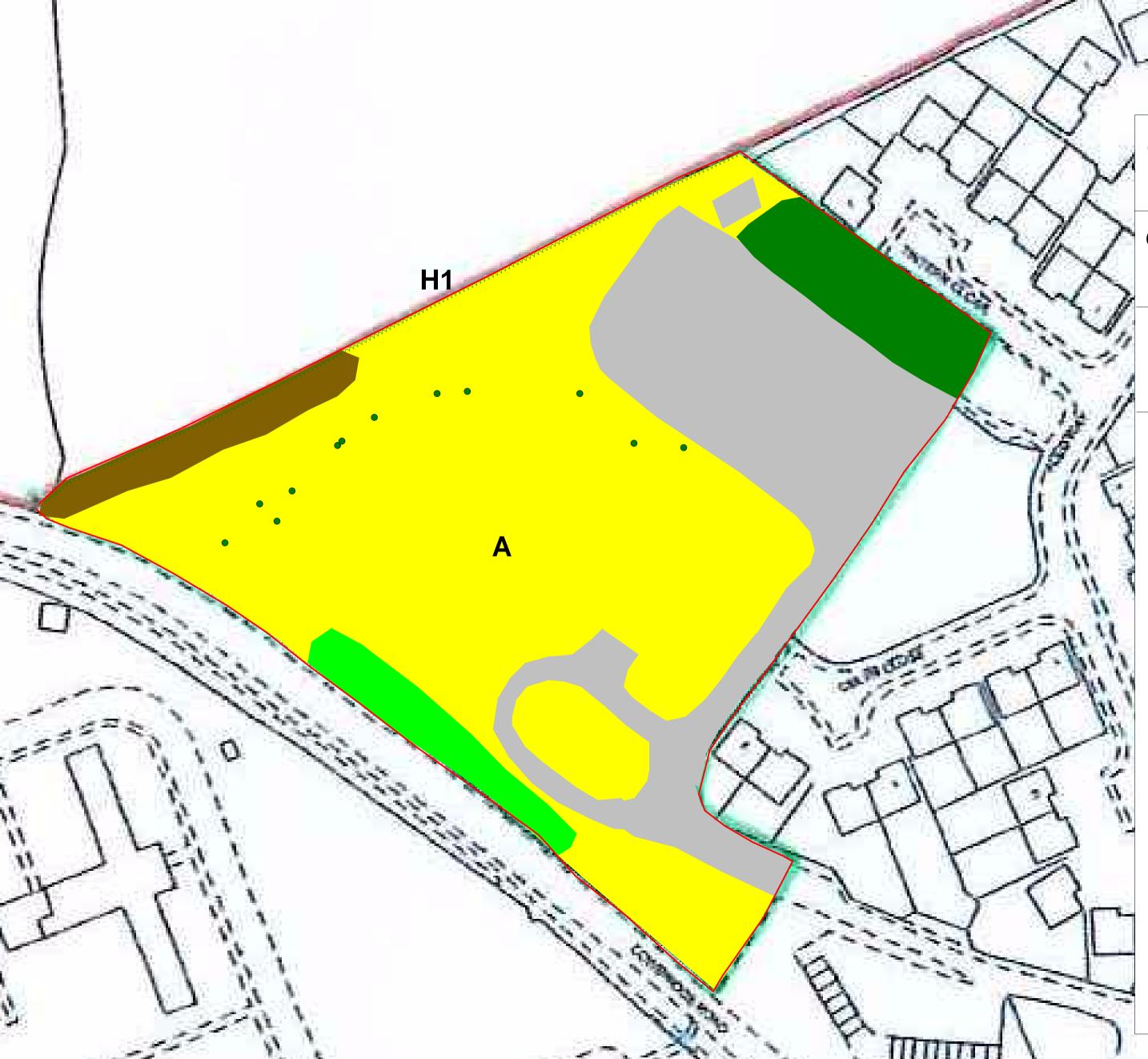
EXTENDED PHASE I HABITAT SURVEY-PRELIMINARY ECOLOGICAL ASSESSMENT OF ANNINGTON LAND, ST ATHAN, VOG FOR EDENSTONE HOMES. TERRAQUA ECOLOGICAL SERVICES AUGUST 2016



Aerial View showing general location of Annington Land (Image Google Earth 2016)

### Appendix II

Map Showing Habitats Recorded and Targeted Ecological Features



# TerrAqua Ecological Services Ltd

Client & Project:Edenstone Homes; St Athans

Drawing: Annington Phase 1; August 2016

### Legend:





Survey Boundary

Amenity Grassland

Hard Standing

Broadleved Trees (Planted)

Scrub

Bracken



• In

Non-native Trees (Planted)

Individual Broadleved Trees

Hedgerow