

Extended
Phase 1 survey of the buildings and land
around
Ex-Primary School in Fishguard on
Brodog Lane Pembrokeshire



Overgrown playground area and old school buildings with tarmac car park area

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EX-Fishguard Primary School land and buildings/ATEB & PCC/SA65 9NW- land to be considered for DEVELOPMENT in Pembrokeshire



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EXTENDED PHASE 1 SURVEY AND REPORT

Version: FINAL

Date: 8TH June finished 9th July 2018

Land at Ex-Fishguard Primary School
Pembrokeshire
SA65 9NW

Grid reference: SM 95589 37355

Action	Version No	Date	Author/surveyor	check	Sent
Survey			Sutcliffe		
Report-DRAFT	V1	11 th June 2018	A. Sutcliffe	yes	11 th June
FINAL REPORT	V2		Sutcliffe	yes	

1.0 Executive Summary

Subject – An extended Phase 1 ecological survey on land for development at Brodog Lane, in Fishguard near Haverfordwest Pembrokeshire.

Grid reference: SM 95589 37355

Timing – 15th May 2018

Surveyor - Anna Sutcliffe of Pembrokeshire Ecology in partnership with Biodiversity Solutions Ltd

Reason for survey – to establish the baseline conditions and to determine the importance of ecological features present in the specified area and to assess the need for further detailed surveys, with particular reference to protected and priority species and habitats.

The baseline survey data relevant to the site is described in respect of the West Wales Biodiversity Information Centre records and is seen in the Appendix 4.

The Proposed Plan – to build 18 affordable houses on the land.

Results of the Extended Phase 1 Survey: there are no issues to the habitats and species on site being destroyed as a result of building this new development. However, the retention of the banks and hedges would be looked upon favourably by planners and ecologically this would allow the wildlife that uses this habitat to continue to benefit from it.

Species that will be affected by the development

Badgers use the site regularly for foraging. A further assessment of the area is needed to find out where the badger sett is. Mitigation for the badgers will be to allow the badgers to continue to access the area through the existing paths.

Reptiles: ecologist to be present during the site clearance having presented a methods statement to the local authority explaining how the reptiles/amphibians will be captured and transported to a safe location if found on site.

Mitigation measures are suggested to compensate for the loss of habitat and loss of space for wildlife using the site currently. A plot has been designated in the North East corner of the plot; this area will not be disturbed by the development of the site and will be planted with wildlife flower mix suitable to augment the soil conditions on site. Badgers may plough into this area but this is to be expected and not stopped.

Landscaping requirements/enhancements:

Lighting – suitable for safety but positioned to illuminate paths and road with no up spill. The character and locations of the lights must be discussed with the planners and must conform to their environmental requirements.

Native trees and shrubs with spikes and prickles to be planted in the east hedge.

Further survey work: Bat surveys on the buildings – planned for June 2018-completed and separate report prepared and presented.

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2.0 Introduction, location, general site description and context.

An extended phase 1 ecology survey was carried out on the 15th May 2018 on the site known as [and referred to in the text as the project site] “ the former Fishguard Infants School in Brodog lane Pembrokeshire. ‘

The former infant school, is now vacant and in a generally poor state of repair.

Outline planning permission was granted in December 2005 but has now lapsed. The site incorporated 21 high density units with 10% affordable housing. The total site extends to approximately 1.7 acres or thereabouts. The site lies within the J.U.D.P. plan. The planning reference for the site is 05/117/PA. [See Figure 1a – 1c]

2.1 Anna Sutcliffe of Pembrokeshire Ecology was instructed by Jonathan Cole Development Officer for ATEB. Pembrokeshire Ecology in partnership with Biodiversity Solutions Ltd.

2.1.1 Location - Grid Reference: SM 95589 37355

2.1.2 General Description: The site consists of prefabricated buildings, hard standing and a field that has become overgrown. The site is surrounded on all sides by housing, in high density on the north, west and south sides with access to the coastal slopes in a lower density housing area.

The site is 180m from the sea and 140m from good biodiverse habitat most likely to be used by badgers and bats.



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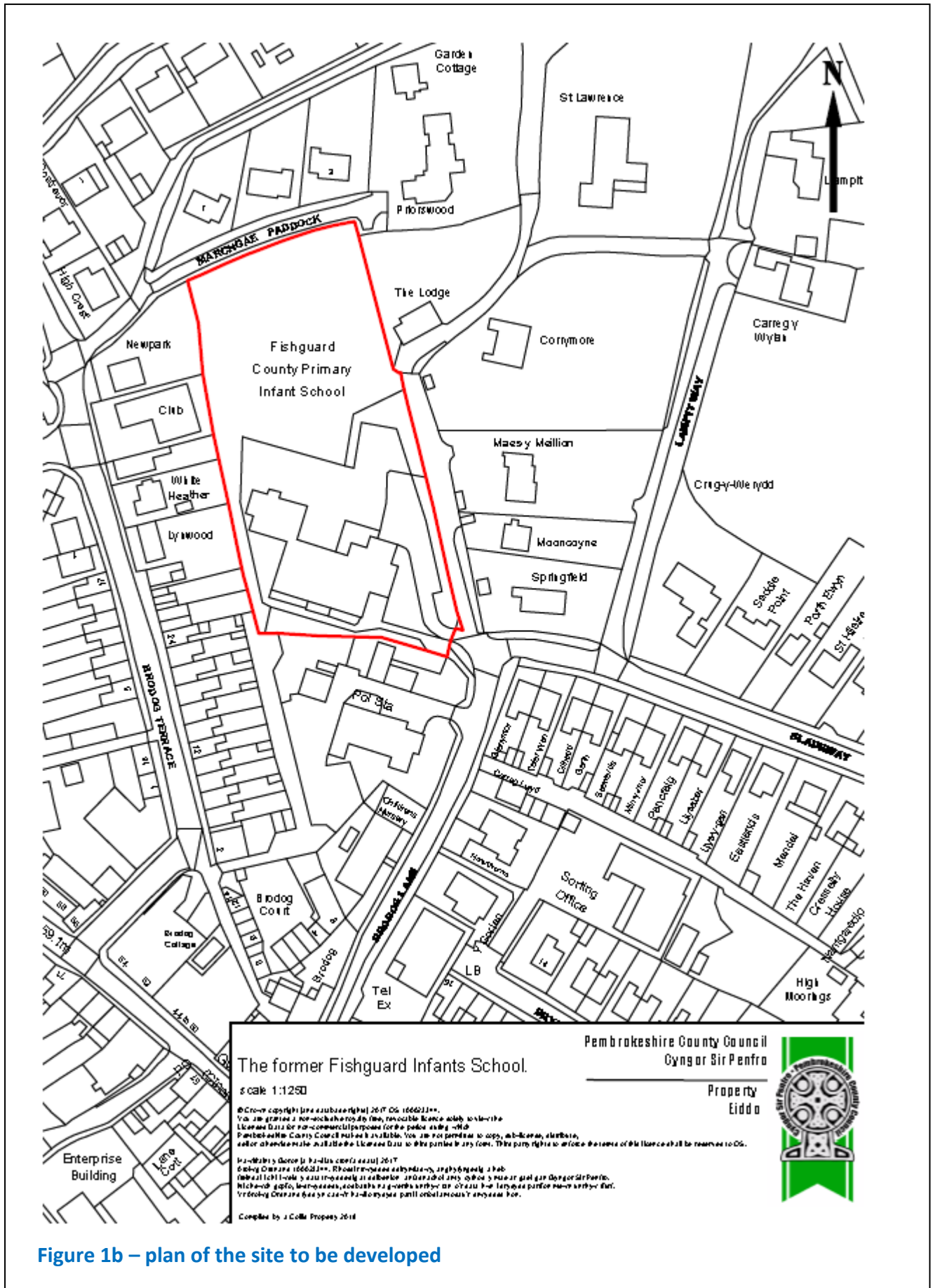


Figure 1b – plan of the site to be developed

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2.1.3 The extended phase 1 survey was commissioned to identify whether there are known or potential ecological constraints on the site from protected and notable species and habitats that are designated conservation areas. The reference material used as guidance for this survey and report is the Joint Nature Conservation Council: "handbook for Phase 1 habitat survey. The Phase 1 survey addresses the relevant wildlife legislation and planning policy as summarised in Section 2 of this report.

2.1.4 In order to deliver the full ecological picture for the whole site a desk study and Phase 1 Habitat survey were undertaken by an appropriately experienced ecologist to identify ecological features within the Project site and the wider potential zone of influence of the project. This Potential zone of influence is the site itself but also extends as far as the badger sett(s) located east of the site. Section 3 explains the Methodology.

2.2 Proposed development land for affordable housing

2.2.1 Proposed development is to build 18 affordable houses on the land; this could involve the removal of:

- Hedges
- Pembrokeshire banks or cloddiau
- Scrub
- Trees with potential for roosting bats
- Badger feeding areas
- Buildings with bat roost potential

2.3 Objectives

The objectives of the extended phase 1 survey are to:

- Identify designated nature conservation sites on or within proximity to the Project Site Identify known records of protected or notable species within proximity to the Project Site Identify and categorise the main habitats and features of ecological interest present within the Project Site
- Assess the potential for protected or notable species of fauna and flora
- Provide advice on potential ecological constraints and opportunities on or within proximity to the Project Site
- Identify the requirement for further habitat and species surveys
- Make recommendations for requirements to avoid and mitigate ecological impacts as well as opportunities for biodiversity enhancements
- Provide a map showing the Phase 1 habitats on the Project Site and features of ecological interest.
- Provide a map of the badger activity on site

2.3 1 The purpose of the report is to support the potential for the Project site land to be used as development land.

The report identifies any further survey work that will be necessary in the future in order to understand the full ecological impact on the Project site.

The legislation in relation to the protected species is outlined, but is not to be regarded as a definitive legal opinion. When dealing with individual species or habitats the client is advised to consult the full texts or the relevant legislation and obtain further legal advice.

The following wildlife legislation is potentially relevant to the project site:

- The Wildlife and Countryside Act (WCA) 1981 (as amended);
- The Countryside and Rights of Way (CRoW) Act 2000;
- The Conservation of Habitats & Species Regulations 2017
- The Hedgerow Regulations 1997
- The Protection of Badgers Act 1992
- The Environment (Wales) Act 2016
- The Natural Environment and Rural Communities Act 2006
- The Welfare of Future Generations Act 2015 [in Wales]

2.3.2 The above legislation has been considered when planning and undertaking this ecological survey work using the methods described in Section 3, when identifying potential constraints to the Project site, and when making recommendations for further survey, design options and mitigation, as discussed in Section 6.

Compliance with legislation may require the attainment of relevant protected species licences prior to the implementation of the Project.

2.4 Wildlife legislation and Planning Policy

2.4.1 National Planning Policy

2.4.2 The Planning Policy Wales (PPW)

2.4.3 Key Principles

2.4.4 Local Planning Policy

These details are found in Appendix 3

2.4.5 Surveyors experience and qualifications

Anna Sutcliffe has been a practising ecologist for over 40years, surveying a wide range of species on land and on the sea all around the UK and also abroad.

She is a member of Chartered Institute of Ecology and Environmental management and has a degree in botany, geography and environmental management. She has been a qualified bat surveyor for 8 years and is training for her hazel dormouse licence.

Biodiversity Solutions is a social enterprise group of experienced and highly skilled ecologists with knowledge that spans all species and habitats likely to be found in Pembrokeshire

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3.0 Methodology

3.1 Desk Study – the objectives of a desk study are to review the existing information available in the public domain concerning species and habitats.

The following searches have been undertaken:

Internationally, nationally and locally designated sites, up to 2 km from the Project Site using the Multi Agency Geographic Information for the Countryside (MAGIC) website (www.magic.gov.uk)

Protected and Priority species records and records of locally designated sites up to 2 km from the Project Site, using the West Wales Biodiversity Information Centre (WWBIC)

Special Areas of Conservation (SACs)

Sites of Special Scientific Interest (SSSIs)

Designated for bats within a 10 km radius of the Site in accordance with Bat Conservation Trust (Collins, 2016) recommendations

Tree Protection Orders (TPO's) – contact Richard Staden of Pembrokeshire County Council

Aerial photographs and Ordnance Survey (OS) maps were reviewed to identify features of ecological interest surrounding the Project Site including ponds within 500 m, nearby areas of ecological interest and features connecting these habitats (hedgerows, watercourses, railway lines, coastal slopes).

There have been no previous surveys done on this site.

3.2 Phase 1 Habitat Survey

A Phase 1 Habitat Survey (Figure 2b: Ref.4.2.1) of the Project Site was undertaken by one suitably experienced ecologist of Pembrokeshire Ecology on the 15th May 2018.

3.2.1 The survey involved a site walkover and ecological assessment of key habitats, land use and features. The main habitats present were recorded using standard Phase 1 Habitat Survey methodology as described in the Handbook for Phase 1 Habitat Survey: A technique for Environmental Audit (JNCC, 2010). The plant species defining the habitat types on the Project Site were recorded.

Evidence of any invasive plant species subject to legal controls was recorded. The Project Site was assessed for its potential to support protected or notable species in order to identify potential ecological constraints and to guide recommendations for further surveys.

3.3 Bats

During the Phase 1 Habitat Survey, where access allowed, trees and buildings throughout the project site were identified for their potential on the presence of features suitable as bat roost habitat. See Table 1 in APPENDIX 5 which describes bat roost potential from confirmed to negligible in trees and buildings.

Quality of habitat and foraging potential [Core Sustenance Zones] were assessed during the Phase 1 survey as show in Table 2 in APPENDIX 5 which describes 'High to negligible commuting and bat foraging potential categories.'

3.4 Badgers during the phase 1 survey the badger activity and badger paths were mapped. The boundaries of the site were inspected both from inside the site and on the outside wherever possible. Sett entrances are recognised by oval holes c.300mm wide x 200mm high, these have a tendency to have a large mound of loose earth outside the holes. Other signs searched for include: 'snuffle holes' [holes dug by badgers while hunting for invertebrates]; 'dung pits' where badgers dig holes and mark their territories with faeces; and 'day nests' where dried material fashioned into a nest can be used as an 'above ground nest', or material could be found that has been dropped en route the burrow. Badger guard hairs were also searched for on brambles and barbed wire. Any signs are marked on a summary map.

3.3.1 Tree roosts - Trees on the Project Site boundary were assessed during the Phase 1 survey as areas for further survey work rather than individual assessments. The assessment was conducted via an external appraisal from the ground using binoculars where necessary.

3.3.2 The trees and woodland overall rating was based on species composition and age, of their likelihood to support roosting bats and/or the need for further assessment.

The areas described above are outlined on the map at 4.2.5 and in Table 1 for buildings and trees categorised as requiring further survey work.

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3.3.3 Habitats on-site were classified into categories dependent on the presence of features suitable for bats to commute and forage [Core Sustenance Zones]. See Figure 3 map and Table 2 drawn up showing the potential commuting and core sustenance zones [CSZ]

3.12 Limitations

Biological records can be received from a wide variety of sources and may or may not be comprehensive and accurate. However, if assessed in conjunction with a Phase 1 Habitat survey, they can contribute to a robust ecological assessment of a site.

Some areas within the Project Site boundary were not accessible due to them being in private gardens.

Despite the limitations described, there are deemed to be no significant limitations to this survey.

The timing is in the early summer which is a very good time of year for surveys.

4.0 Baseline conditions

The designated habitats, sites and features within proximity to the Project Site are listed in **Table 3** below and shown on the protected and Priority species map in Appendix 4.

Table 3 - designated habitats, sites and features

Designations/Features	Description
Designated Sites within 2 km	none
Locally Designated Sites within 2 km	Goodwick Moor Wildlife Trust reserve
Designated Sites within 10 km designated for bats	Fishguard Cliff Site of Special Scientific Interest [SSSI] Pembrokeshire Coast National Park
Protected and Priority Species Records from the last 10 years within 2 km	Annexe 2 species: Greater horseshoe bat <i>Rhinolophus ferrumequinum</i> [1087m] Otters <i>Lutra lutra</i> – [751m] Hazel Dormouse
Priority Habitats and Species – Section 7 List	The following species have been recorded within 2 km of the Project Site in the last 10 years: Plants: bluebell <i>Hyacinthoides non-scripta</i> . [On site and 635m] Amphibians: Common toad <i>Bufo bufo</i> , palmate newt <i>Lissotriton helveticus</i> , common frog <i>Rana temporaria</i> . Reptiles: Slow-worm <i>Anguis fragilis</i> , grass snake <i>Natrix natrix</i> , adder <i>Vipera berus</i> , common lizard <i>Zootoca vivipara</i> , Birds: skylark <i>Alauda arvensis</i> , kingfisher <i>Alcedo atthis</i> , cuckoo <i>Cuculus canorus</i> , , yellowhammer <i>Emberiza citrinella</i> , reed bunting <i>Emberiza schoeniclus</i> , peregrine <i>Falco peregrinus</i> , kestrel <i>Falco tinnunculus</i> , pied flycatcher <i>Ficedula hypoleuca</i> , linnet <i>Linaria cannabina</i> , spotted flycatcher <i>Muscicapa striata</i> , curlew <i>Numenius arquata</i> , house sparrow <i>Passer domesticus</i> , dunnock <i>Prunella modularis</i> , bullfinch <i>Pyrrhula pyrrhula</i> , starling <i>Sturnus vulgaris</i> , redwing <i>Turdus iliacus</i> , song thrush <i>Turdus philomelos</i> , fieldfare <i>Turdus pilaris</i> , barn owl <i>Tyto alba</i> , lapwing <i>Vanellus vanellus</i> , woodcock <i>Scolopax rusticola</i> , geese, ducks, terns, wading birds, divers, gulls, plovers, sandpipers, and seabirds in the harbour area which will not be affected by the development e.g. herring gull <i>Larus argentatus</i> , black headed gull <i>Chroicocephalus ridibundus</i> , Mediterranean gull <i>Larus melanocephalus</i> ,

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Designations/Features	Description
	<p>Birds of prey – Merlin, peregrine falcon, kestrel</p> <p>Bats: Bat species Chiroptera, unidentified bat Myotis, Daubenton's Myotis daubentonii, Natterer's Myotis nattereri, Noctule Nyctalus noctula[251m], pipistrelle species Pipistrellus, common pipistrelle Pipistrellus pipistrellus, soprano pipistrelle Pipistrellus pygmaeus [301m], nathusius pipistrelle Pipistrellus nathusius, long-eared species Plecotus, brown long-eared Plecotus auritus [301m].</p> <p>Mammals (excluding bats): West European hedgehog Erinaceus europaeus, [116m] Eurasian badger Meles meles,[736m]</p> <p>Bats <i>Brown long-eared bat Plecotus auritus, soprano pipistrelle bat Pipistrellus pygmaeus, common pipistrelle bat Pipistrellus pipistrellus, Barn owl Tyto alba,</i> ,</p>
Surrounding Land Use	Urban sprawl
Ancient Woodland	Within 1,000m ancient woodland site
Ponds [within 500m]	Goodwick moor swamp
Previous surveys - bats	At least seven species of bats were recorded during transect surveys; common pipistrelle, soprano pipistrelle, Myotis sp., brown long-eared bat, noctule, greater horseshoe bat.
Previous surveys on site- INNS	none
Previous surveys on site - Badgers	none
Previous surveys on site - birds	Tetrad surveys for birds only along the coastline

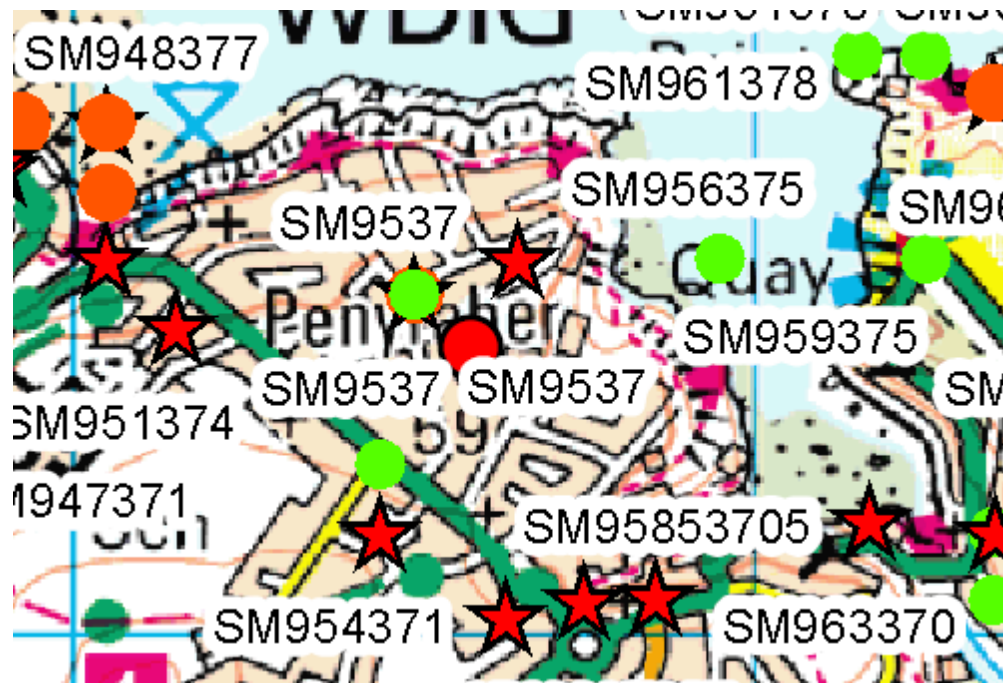


Figure 1c - Roughly 1Km from the site marked with a red spot. The key to symbols is seen below.

Red stars = Protected and priority species – BADGER AND CHIROPTERA [BATS]

Orange spot = other species of conservation concern

Green dots = locally important species

4.1 Limitations for Phase 1 survey

May is an optimal month for undertaking an Ecology survey and thus it was not limited by season, climate or weather conditions at the time.

Reasons for any departures from best practice methodology – no departures from best practice guidelines.

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4.2 Phase 1 habitat survey

4.2.1 Project Area defined and described by Figures 2, 2a and 2b:



Figure 2 – Aerial image of the project site with a coloured outline

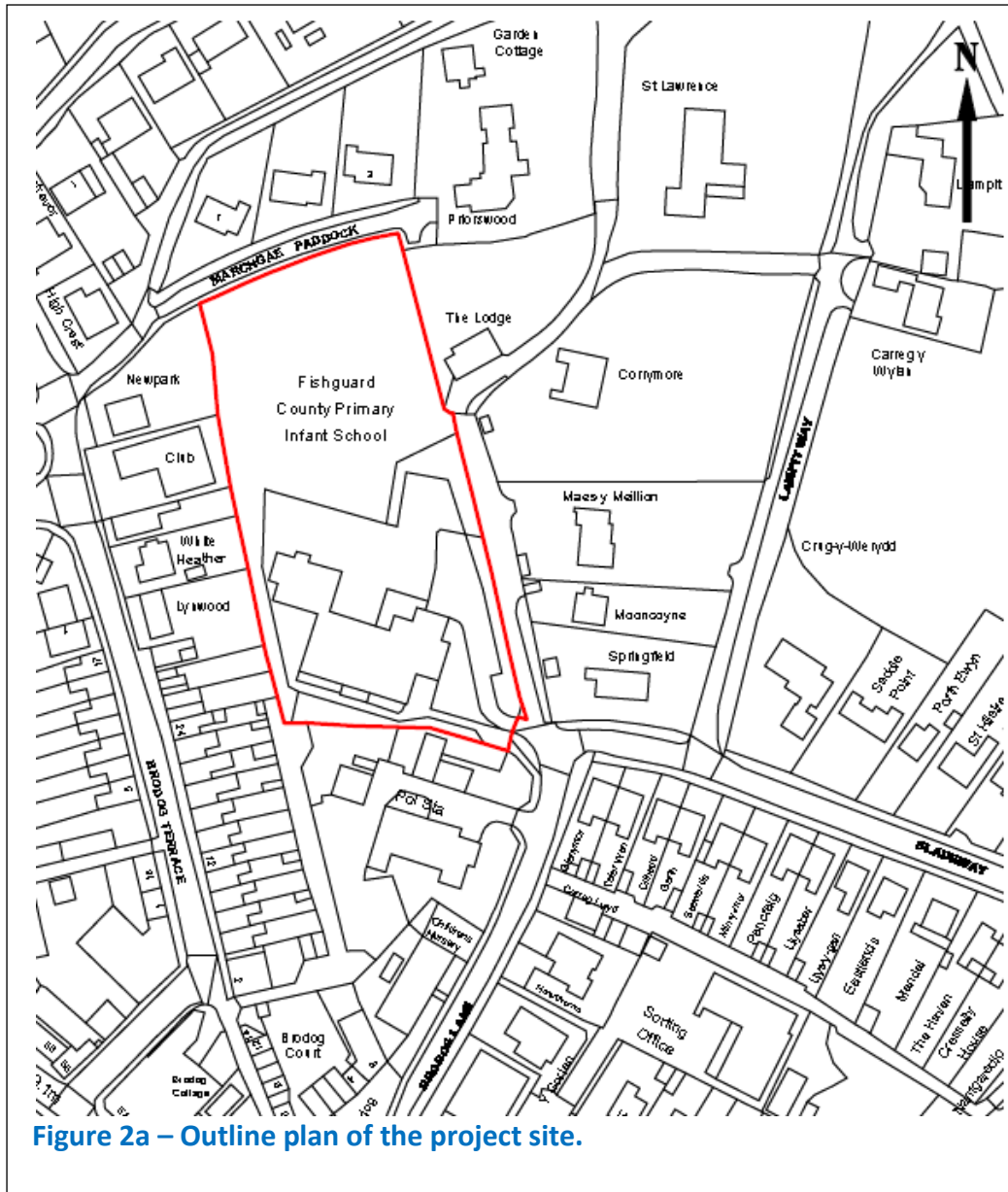
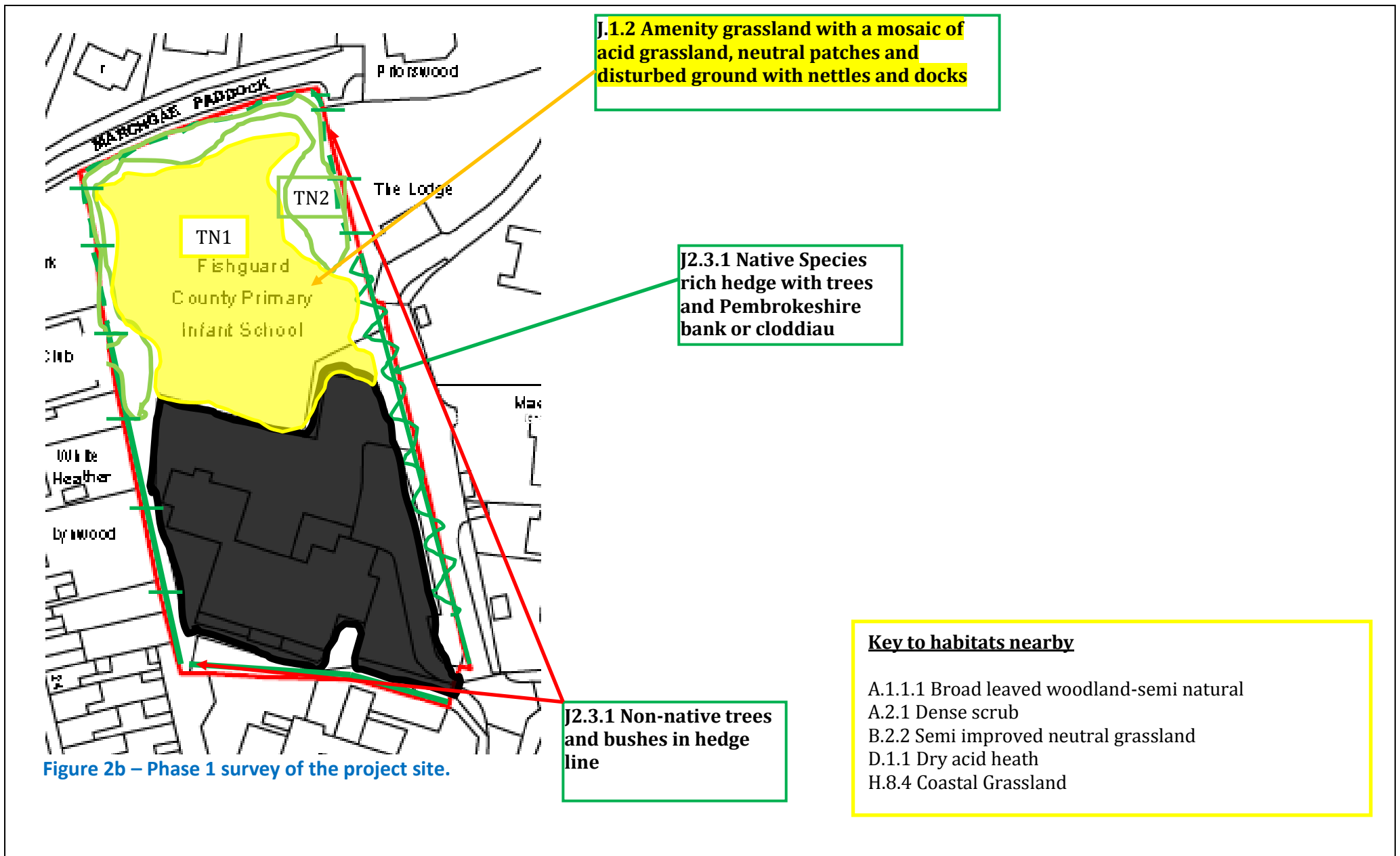
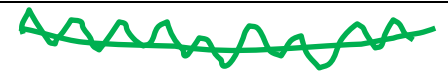




Figure 2a – Outline plan of the project site.

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Key is tabulated below [see Appendix 1 for species lists]

Phase 1 category	description	Colour marking
J.2.3.1	Species rich hedge with trees-continuous	
J.2.3	Species poor hedge near hyper nutrified area at top of field, with trees and big gaps	
J.2	Amenity grassland	

4.2.2 Habitats on site – compare the Phase 1 habitat types described below with the map and Target note species lists

TABLE 4 Habitat feature and Phase 1	Distribution in the habitat	Intrinsic Ecological value	Potential/confirmed value to protected species				
			Species	Breeding	Foraging	refuge	Dispersal
Amenity grassland on dry acid ground TN1	Around the edge of the site	Moderate biodiversity but good use by badgers for foraging bats and birds	Birds	no	yes	no	no
			Badgers	no	yes	no	no
			Bats	Low to very low	yes	yes	yes
Pembrokeshire bank and hedge with semi-mature trees: east side only TN2	Moderate to good biodiversity	Important locally for resident species and species for feeding and commuting e.g. bats birds, badgers Priority Habitat	Birds	yes	yes	yes	yes
			Badgers	No	yes	no	yes
			Reptiles	Low probability	yes	yes	yes
			Bats	yes	yes	yes	yes
Boundary with occasional trees, native and non native species with gaps between trees TN3	Species poor	low	Birds	yes	yes	yes	yes
			Badgers	no	yes	no	yes
			reptiles	low	low	low	no
			Bats	yes	yes	yes	yes
Scrub TN4	Invading field from edges	Low-medium importance as an ecological feature	Bats	no	no	no	no
			Birds	no	no	no	no
			Badgers	no	yes	no	yes
			Reptiles	no	no	no	no

4.2.3 Species lists per habitat as surveyed in late May 2018 are in Appendix 1

4.2.4 Birds – species noted during the survey

- Wren [*Troglodytes troglodytes*]
- Blue tit [*Cyanistes caeruleus*]
- Great tit [*Parus major*]
- Blackbird [Turdus merula]
- Dunnock [Prunella modularis]
- Barn Swallow [Hirundo rustica]
- Wood pigeon [Columba palumbus]
- Chaffinch [*Fringilla coelebs*]
- Robin [*Erithacus rubecula*]

This is not a complete bird list.

This ecological survey work found an overgrown playing field north of the derelict school buildings with moderate to poor biodiversity the highest ecological value being in the eastern hedge.

Negligible ecological value on the hard standing tarmac

4.2.5 Bat roost and foraging potential



Figure 3 - Bats in the buildings – surveys planned for July 2018 [separate bat report]. = see red star

There are access points in to the old school buildings, they are of low potential but as there are access points to prove beyond reasonable doubt that they have no bats surveys should take place.

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Access was not possible inside the buildings due to safety reasons and the presence of asbestos.

4.2.6 Badger foraging use and access points to site

Foraging /commuting habitat plus suspected badger sett – no actions within 30m of the badger sett



Figure 4 – main badger paths and access paths through the boundary hedges

KEY



Suspected badger sett – exact location to be verified



Figure 4a - Badger foraging areas – the most used area of the site with over 60 snuffle pits or foraging holes.

No dung pits located but many paths in and out of the east side of the site. The badger sett is suspected as being in the garden on the north east side of the site boundary.

The furthest garden boundary marked with a yellow line is 50m from the proposed site boundary. It is of paramount importance not to work to destroy or change any of the north east scrub before further work has located the badger sett. By law no work must be done nearer than 30m from a badger sett.

5. 0 Habitat Loss and potential impacts on the site

This is good quality habitat although the undergrowth has been sprayed recently and so have a swathe of dead plant material and open bare ground around the bases of the scrub and trees.

Without mitigation, during clearance, construction and operation the following potential impacts are anticipated:

- Habitat loss, severance and fragmentation of the eastern hedge and Pembrokeshire bank.
- Loss and/or disturbance of foraging and resting sites of protected species;
- Loss of roost site in the school buildings
- Disturbance, injury or killing of protected and priority species during site clearance and construction works; e.g. deep holes can be hazardous to mammals that can become entrapped. Provision must be made to ensure that this does not happen. [See badgers, birds and bats in Section 6 and 7]
- Disturbance from noise and vibration
- Pollution to land and/or water as a result of run-off of sediments, chemicals, fuel Or oil;
- Degradation of habitats on site and nearby that may be designated site habitats due to increases in:
 - nutrients from operational emissions;
 - Spread of invasive species; and,
 - External lighting disturbance.

The benefits of the hedges and trees are that they:

- Provide a buffer between the current housing and the site

Section 6.0 – Further survey work

6.1.1 Further surveys for protected species are recommended to inform the baseline data further. The survey work needs to be done in good time so that the results inform the Project design before it is finalised.

Certain species can only be surveyed for at certain times of year and without consideration this has potential to cause project delays.

6.1.2 Recommendations for further surveys are based on the current information available and will be subject to consultation with relevant consultees and local authority officers.

Further surveys are recommended for the following species:

6.2a Hedgerows

Hedgerows are important as a feature both on site and as a priority landscape feature in Pembrokeshire, only the east side of the site is of good quality. The boundary hedges particularly the east side must be retained.

6.2b) Tree Preservation Orders and Ancient Woodland

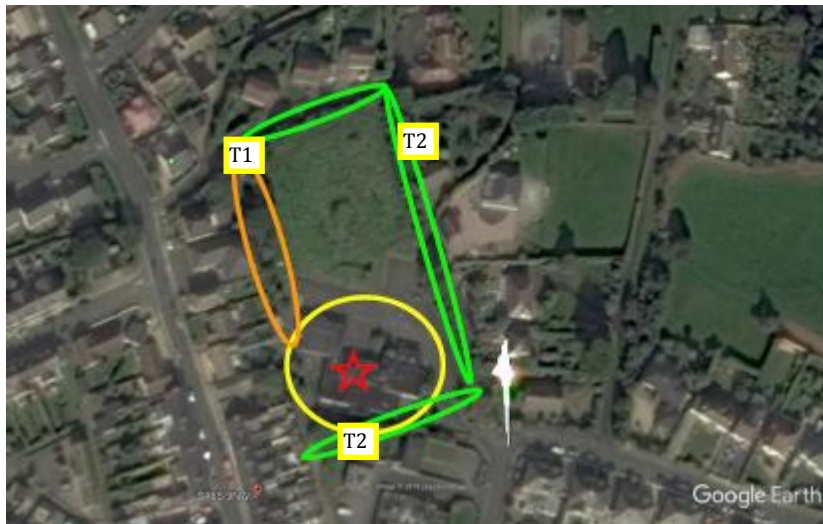
No trees have been found with TPO's nor any ancient woodland on site. However the trees within the curtilage of the site all need to be surveyed. There are a low number of semi-mature trees on site, all are in the hedge lines, and those in the eastern hedgerow-bank are ecologically valuable with good biodiversity in the ground flora. Additional plantings with spiky or thorny native species are acceptable.

Tree surveys required by a qualified tree surveyor and surgeon. The *Leylandii* on the boundaries on the south, south west and north east sides are large. Some are not on the project site land but may impact on the new buildings.

6.3 Bat Surveys - the following surveys are required to assess the Project site use for foraging and commuting and for roost use of the buildings and trees associated with the site if the site is assessed as high priority.

Bat key foraging zones and commuting lines:

- ✓ Walked Bat Transect surveys
- ✓ Automated bat detector surveys left on site for 5 continuous days during good weather
- ✓ Buildings scoping and activity surveys on the school buildings [if the safety officers allow] as this set of buildings will need to be demolished.-red star location
- ✓ Specific tree surveys in the sycamore tree [T1]. The Leylandii non-native trees [T2] are large enough to have some bat roost potential but most are not on the site land. If any of these need to be felled then a physical survey for features like cracks and tears and then dawn bat surveys to identify if bats are roosting and if so which bat species and the numbers using those tree features just before a tree is felled.



Bat potential foraging and commuting routes.

KEY to aerial image opposite:
Green areas represent good foraging /commuting habitat
Amber areas – moderate foraging /commuting habitat
The Bat Survey Guidelines (Ref. 2) requires surveys to consider potential roosts (trees, buildings and structures) within the Zone of Influence (Zoi) of a project.

General summary of potential survey work and site specific statement:

6.3.1 Tree Assessments

If any tree features are to be removed or illuminated by external lighting a tree survey and a preliminary ground level roost assessment should be undertaken within the area which will be affected.

6.3.2 Trees – Bat Roost Survey

Any trees to be removed or disturbed (disturbance can include lighting, crown lifting, limb removal, noise and vibration) which have been assessed as having low potential to support roosting bats will not be subject to further surveys, but precautionary measures may be appropriate during felling or pruning activities.

Any trees to be removed or disturbed which have been assessed as having moderate or high potential to support roosting bats may require a further Potential Roost Feature (PRF) climbed inspection survey and/or will require presence/absence surveys to be undertaken.

To establish roost presence or likely absence up to three manual surveys (dusk/dawn) are to be completed following the Bat Survey Guidelines (Collins, 2016). The climbed inspection can count towards one of the three manual surveys.

6.3.2a Building and Structure Assessments - bats

Buildings and/or structures within the vicinity of the Project Site and at the entrance(s) to the site should be assessed for their potential to support roosting bats.

6.3.3b Buildings and Structures - bats

Any buildings or structures assessed as having potential to support roosting bats may require an internal inspection, winter hibernations survey, and/or will require presence/absence surveys to be undertaken if they may be disturbed or demolished as part of the Project (disturbance can include lighting, renovation works, noise and vibration).

To establish roost presence or likely absence up to three manual surveys (dusk/dawn) are to be completed following the Bat Survey Guidelines (Ref. 2). 3 surveys are recommended to support a European Protected Species License application if a roost is to be destroyed or disturbed although in this instance this is unlikely to be required.

6.3.3c Activity Survey - bats

To ascertain the presence and/or level of bat activity on the Project Site, activity surveys (including walked transects and automated/static activity surveys) are recommended to be completed following the Bat Survey Guidelines (Ref. 2). However, experienced assessment of each site will ensure that the survey effort is suitable and sufficient.

6.3.3d Transect Surveys – bats

This can comprise two site visits a month, for each month between April and October inclusive for walked transects where transects will incorporate all areas of suitable habitat. Particular focus will be on commuting bats using the hedgerows and tree lines. The transect route will depend on suitable and safe access.

On this site it is most likely to require one site visit in the summer season.

6.3.3e Automated/Static Activity Surveys

This comprises a maximum survey effort for very good potential sites of

- up to three remote detector locations per transect
- data must be collected on five consecutive nights per month,
- for each month between April and October

The devices will be placed out and retrieved after each session. Recordings are then analysed in the office and prepared for inclusion in the report.

Low potential sites require 1 x walk about survey in the summer season and one period of static deployment – this site.

6.3.5 Assessment and surveys needed on this site: bats

6.3.5a - Walked transect survey – one in midsummer in combination with bat surveys on the buildings

6.3.5b - Surveys on buildings – these buildings need to be demolished, they are of poor quality but do have access points and therefore will require bat activity surveys during the active breeding months of the year . For this site two activity surveys are planned subject for June 2018.

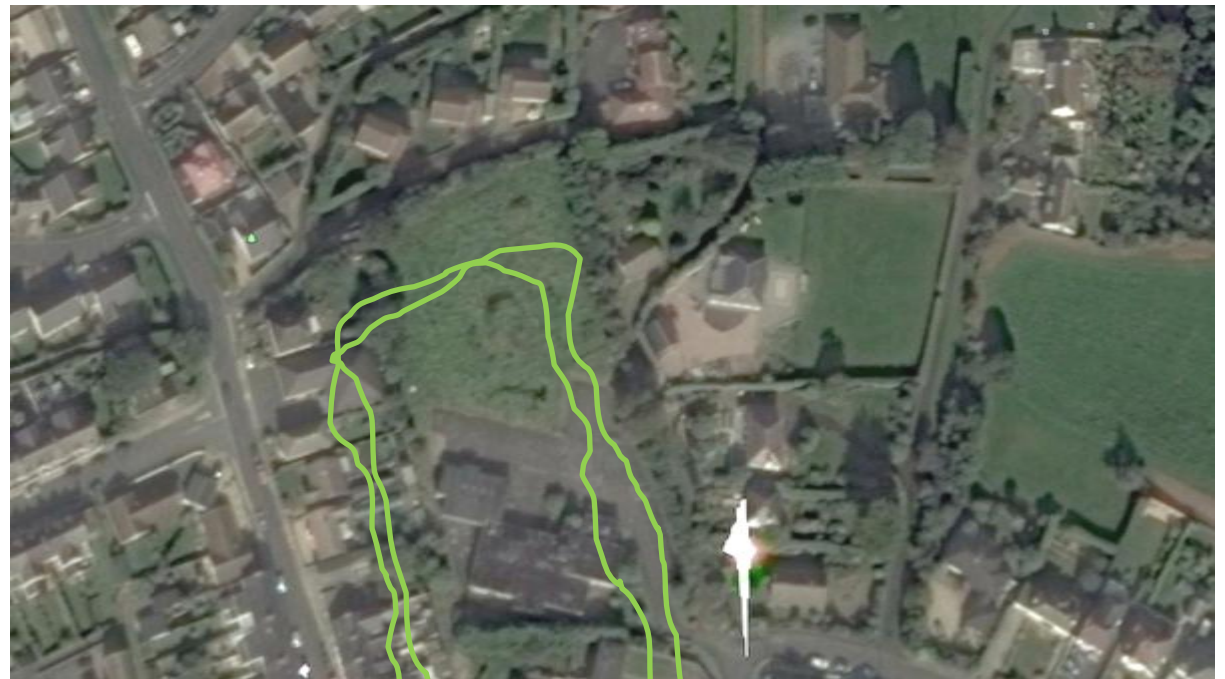
6.4 Bird surveys – if work is to start in the breeding bird season March to end of August then surveys will be required with focus on protected and priority species if present in areas of suitable habitat on site. The habitat for breeding birds is limited on site to trees around the edges. There were no signs of birds breeding on the ground.

As seen in the aerial image below.

It is illegal [Wildlife and Countryside Act 1981] to disturb any bird that is making a nest, laying and incubating and feeding young to fledging. Once the nest is vacated then the tree/bush/hedge etc can be disturbed and cut so long as this is done immediately after the bird has vacated the nest and **this has been confirmed by a bird surveyor the day that the vegetation removal is to take place.**

Previous surveys conducted one week or more ago will not be suitable.

Clearance of vegetation without surveys once planning permission has been granted and all conditions fulfilled can be done between the months of September and early March.



6.4a – Plan of the site showing the bushes and trees boundaries [GREEN LINE] that require bird surveys in the breeding season – March to end of August.

6.5 UK Protected Species – badgers (*Meles meles*) the site and 30m radius around the project site was searched for signs of badgers.

Signs of recent activity which have to be mapped are:

- Fresh spoil outside entrances
- bedding material (typically dried grass) outside entrances
- Holes being cleared of leaf litter
- Fresh tracks leading to/from the holes.

In Section 4 and Figures 4 and 4a show the badger paths and foraging areas. The eastern and northern hedges have several paths through each section.

Nearer to the site clearance time the boundary of the site and the woodland has to be investigated thoroughly to check for badger activity and setts within 30m of the site. A general survey in a 1Km radius around the site for potential and actual badger sett locations and activity may also be required.

If a badger sett is found within 30m of the Project site then this badger sett may have to be moved under licence from Natural Resources Wales.



Badger path into the NE corner



Badger snuffle pit – feeding hole

6.5.1 Badger sett location – important and must be done before ANY WORKS ARE DONE ON SITE. Most of the garden north east of the site which is where the centre of activity seems to be is within the 30m distance. No engineering or clearance activities to be done within the project site along this north east boundary.

EX-Fishguard Primary School land and buildings/ATEB & PCC/SA65 9NW– land to be considered for DEVELOPMENT in Pembrokeshire

NO FURTHER SURVEY WORK REQUIRED ON THESE SPECIES: BUT note precautionary approach for REPTILES AND AMPHIBIANS:

6.6 Otters - There is no stream or water course on this site - **No further survey work is required.**

6.7 Hazel Dormice - **No further survey work is required.**

6.8 Other mammals – rabbits, stoats, weasel and hedgehog, the habitats on site are considered to be good for these species. Building works once started need to introduce measures to avoid wildlife falling in to and getting trapped in any deep pits or holes. Wildlife ladders allow them to exit without harm. **Precautionary approach – no further surveys required**

6.9 Amphibians and Reptiles

Pembrokeshire has good records of common toad, common frog and palmate newt and for reptiles: viviparous lizard, adders and grass snakes are highly likely in the hedge bank habitat and banks as are slow worms and viviparous lizards in the drier areas of the site.

A precautionary approach to clearing the site is required at this site, so an ecologist must be present during the initial site clearance. The ecologist must be suitably trained and experienced to handle and transport the animals if found. A method statement will be required but **no survey works will be needed.**

6.10 Invasive Non Native species - Any species considered to be pernicious weeds under Schedule 9, Section 14 of the Wildlife and Countryside Act 1981 (as amended) will be noted, mapped and reported, if found during the survey. Such species include Japanese Knotweed (*Fallopia japonica*) and Himalayan Balsam (*Impatiens glandulifera*).

Invasive non-native plant species were NOT identified during the Phase 1 Habitat Survey.

6.11 Additional issues to consider

6.11a Run off issues – watershed drainage into the stream

Sewage - 18 houses will require additional pipe work system and sewage and run off measures.

A plan showing where the pipes will run, and what habitat needs to be destroyed to join up with the existing system must be shown to the ecologist.

Foul water runoff - wherever possible the introduction of porous surfaces and sensible use of habitat and garden areas with herbs and grass must be used to reduce the runoff from this site.

7.0 MITIGATION

The design of the site is seen below

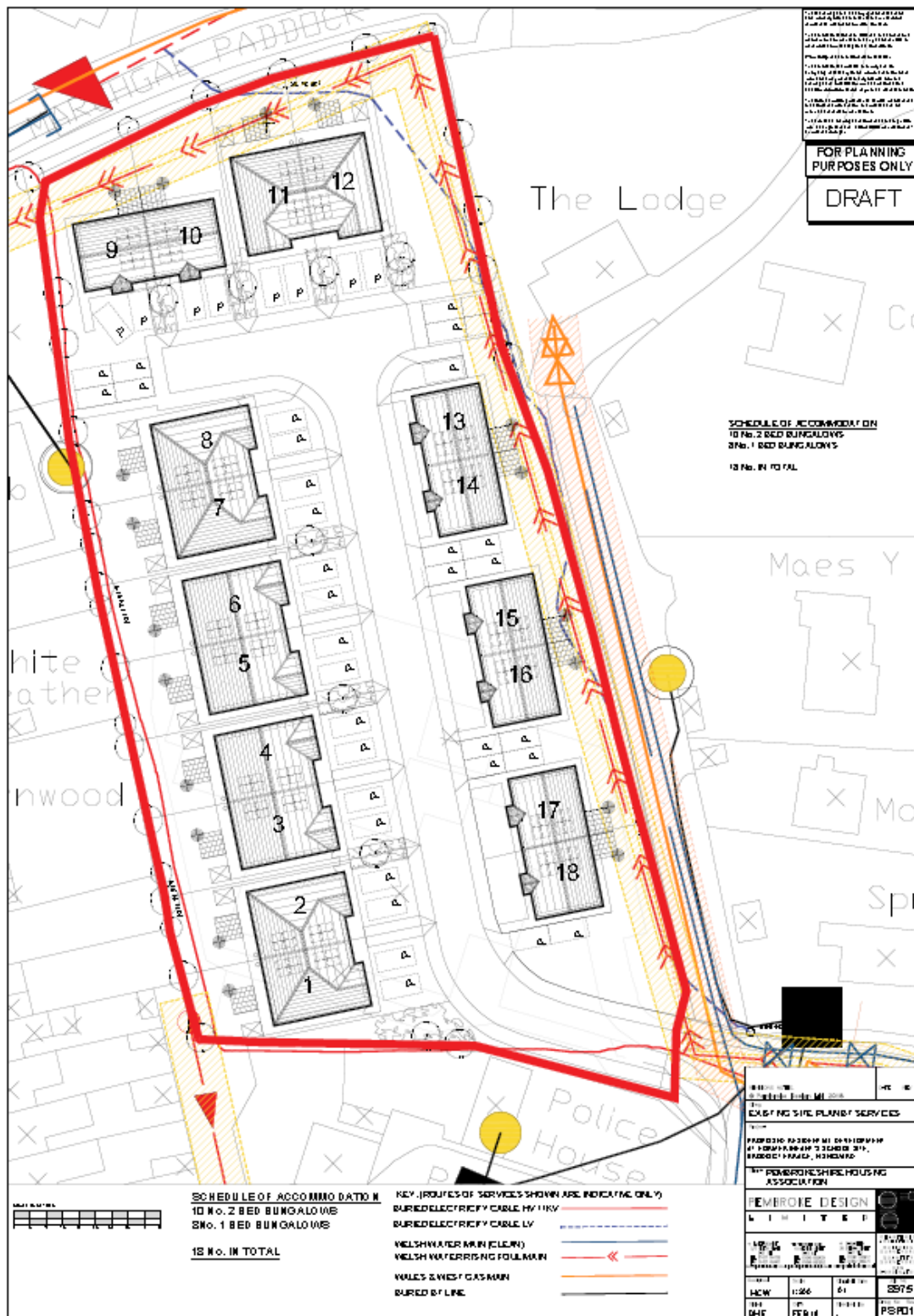


Figure 5 - Proposed site design without any enhancements of mitigation.

EX-Fishguard Primary School land and buildings/ATEB & PCC/SA65 9NW- land to be considered for DEVELOPMENT in Pembrokeshire

7.0 Mitigation

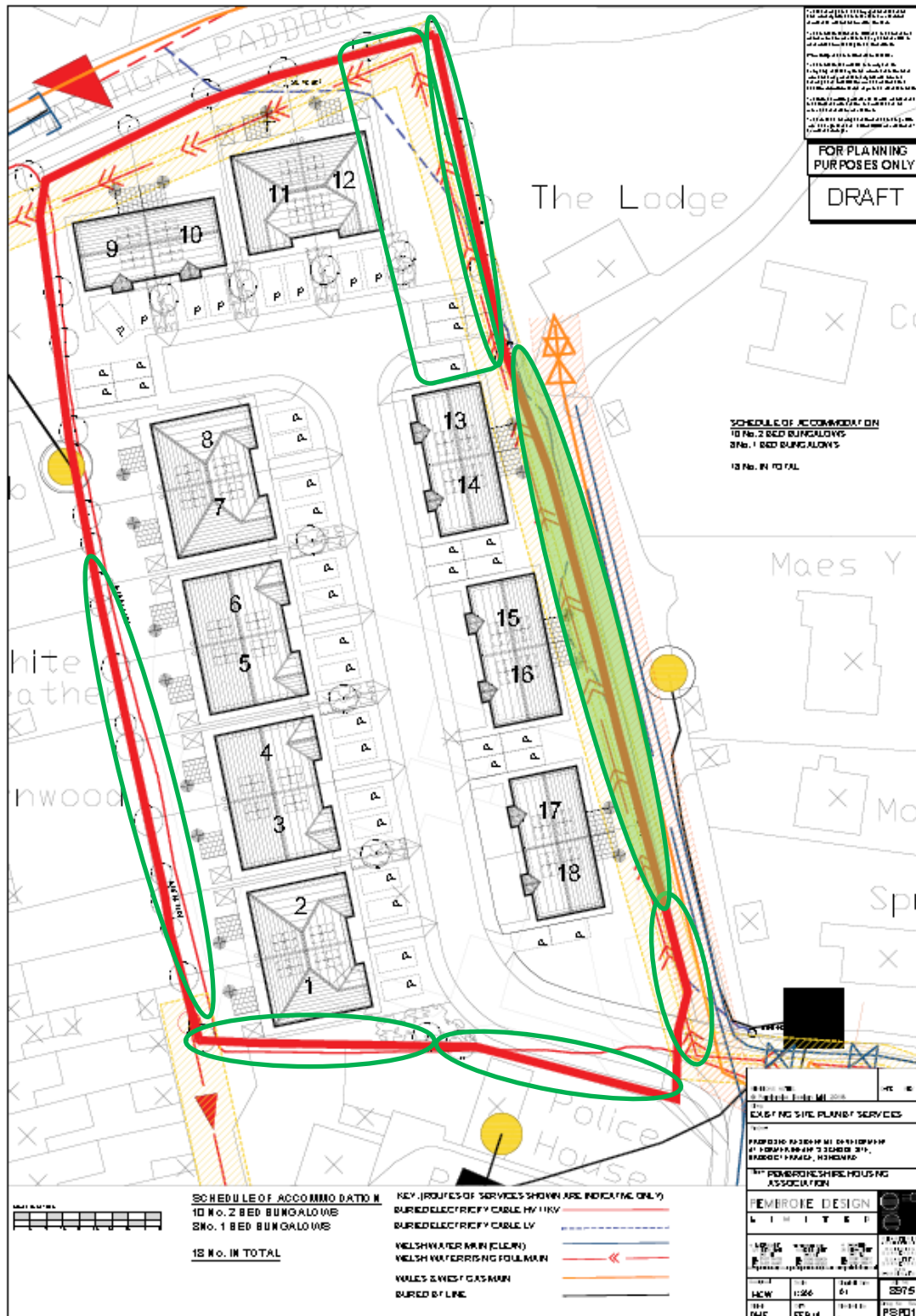
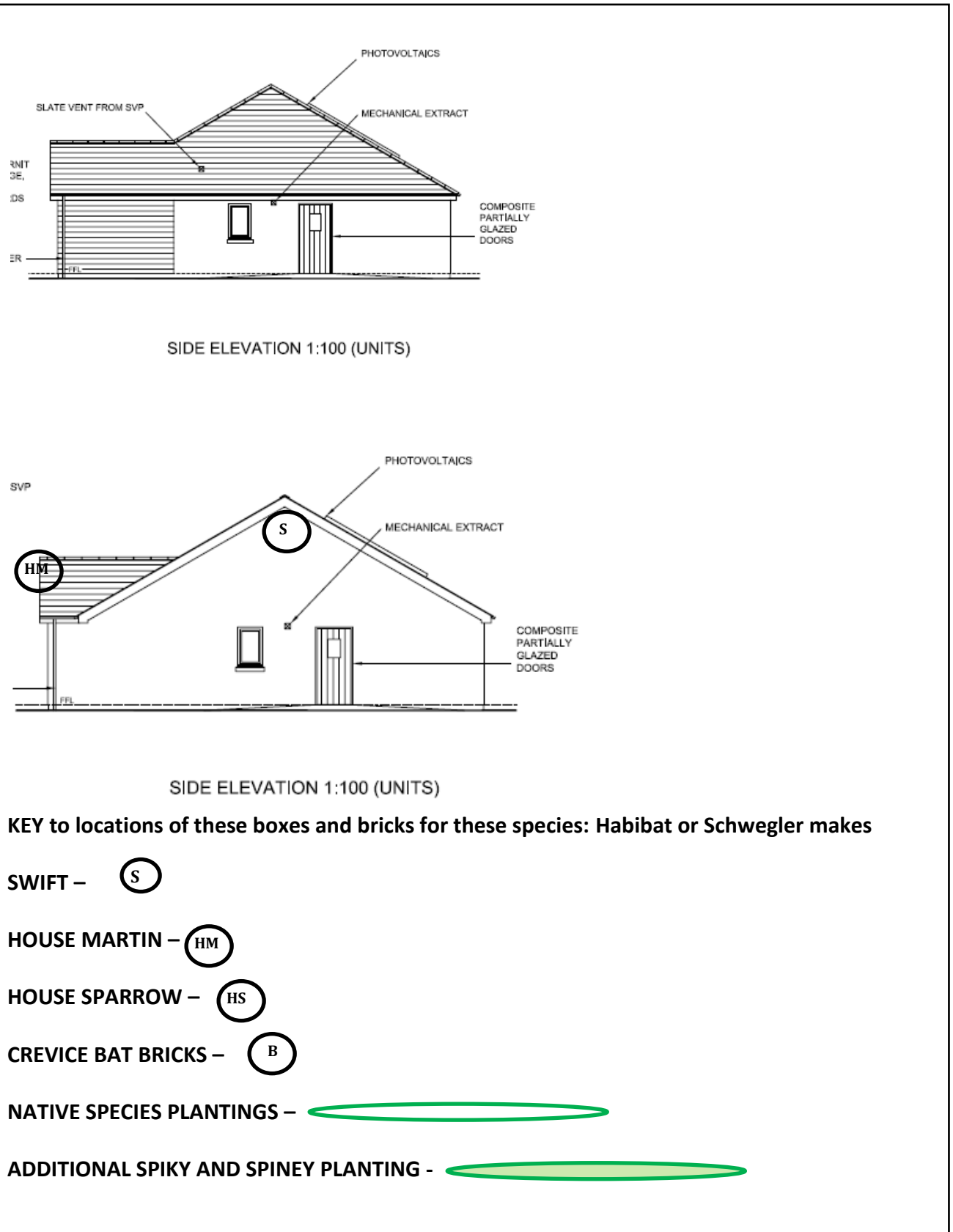


Figure 5.1 – green rectangle shows the proposed area designated for biodiversity and conservation in the North east corner.

7.1 Enhancement on site:



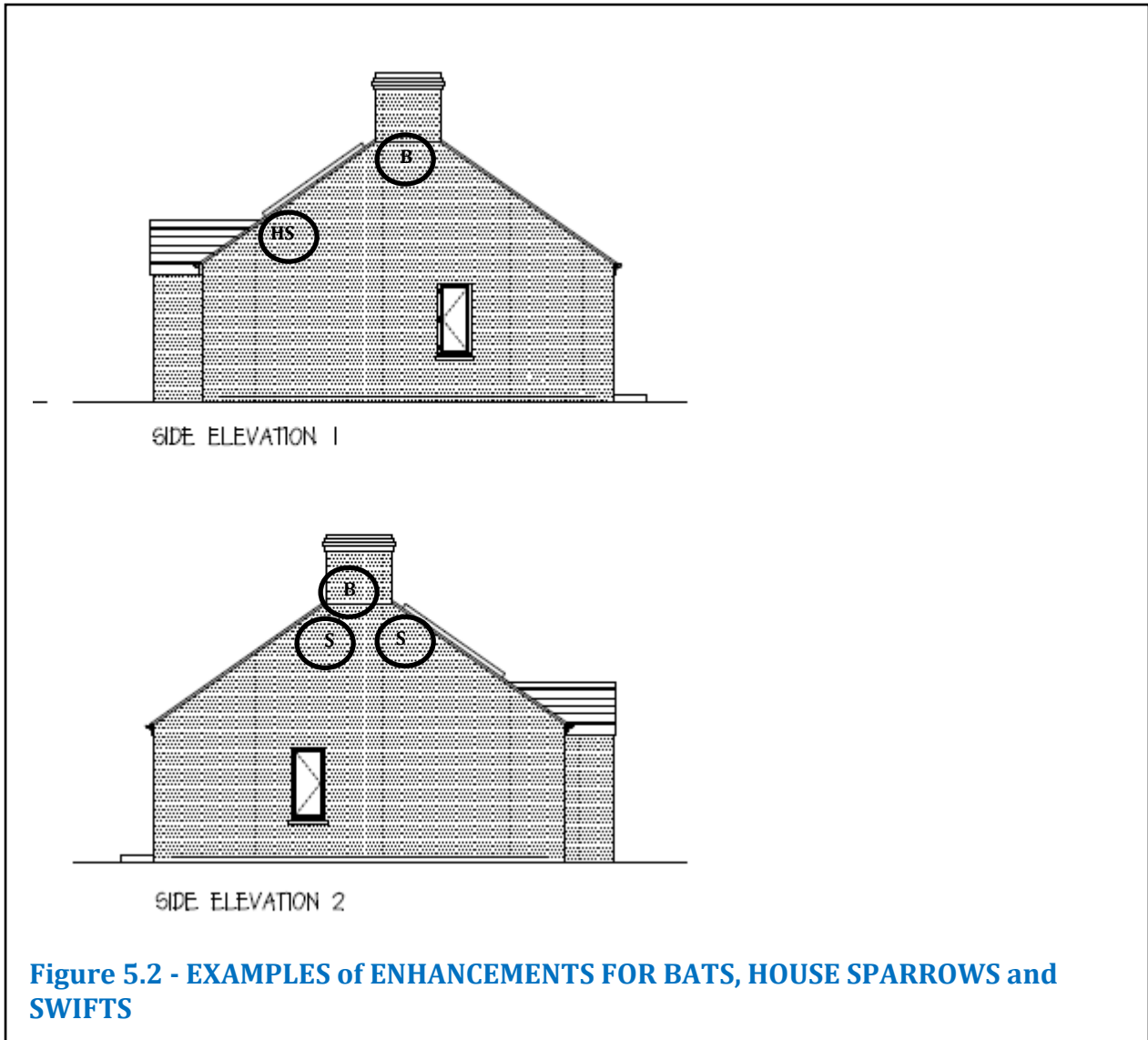


Figure 5.2 - EXAMPLES of ENHANCEMENTS FOR BATS, HOUSE SPARROWS and SWIFTS

ELEVATIONS – favoured aspect for bird and bat boxes – east and north.

Additional spiny trees and shrubs to plant in the boundary hedges:

Hawthorn [*Crataegus monogyna*]

Blackthorn [*Prunus spinosa*]

Bramble [*Rubus fruticosus*]

Holly [*Ilex aquifolia*]

Appendix 1 - species lists and target notes

The Phase 1 habitat designations are presented here with a capital letter from the alphabet and then a number showing which general habitat the plants fit into. The Dominance is an approximation assessed by eye using what is called the DAFOR scale. D-dominant: A-abundant: F-frequent: O-occasional: R-rare occurrence. L is used for localised distribution or % estimation.

TN1 - Phase 1 habitat - Amenity grassland and disturbed ground -listed by alphabetical order [Key to map – green outline with green wash.]

English name-disturbed ground	Latin name	% cover	notes
Bare ground		R	
Angelica	<i>Angelica sylvestris</i>	R	
Bindweed, common	<i>Convolvulus arvensis</i>	F	
Birds foot trefoil	<i>Lotus corniculatus</i>	O	
Bracken	<i>Pteridium aquilinum</i>	LA	
Bramble	<i>Rubus fruticosus</i> <i>agg.</i>	LA	
Buttercup, creeping	<i>Ranunculus repens</i>	F/O	
Celandine, Lesser	<i>Ranunculus ficaria</i>		
Cocksfoot	<i>Dactylis glomerata*</i>	o	
Cuckoo flower	<i>Cardamine pratensis</i>	LO	
Crested dogs tail	<i>Cynosurus cristatus</i>	O	
Daisy	<i>Bellis perennis</i>	O	
Dandelion	<i>Taraxacum officinale</i> <i>agg</i>	LF/O	
Dock , Broadleaved	<i>Rumex obtusifolius</i>	LF	
Eye Bright	<i>Euphrasia spp</i>	LO	
Fescue, Red	<i>Festuca rubra*</i>	LO -F	
Fog grass, Yorkshire	<i>Holcus lanatus*</i>	O	
Forget-me-not, field	<i>Myosotis arvensis</i>	o	
Geranium,	<i>Geranium</i>		
Knapweed	<i>Centaurea nigra</i>	O	
Ivy, common	<i>Hedera helix</i>	A	HEDGE EDGES
Nettle, common	<i>Urtica dioica</i>	F	
Plantain, lanceolate	<i>Plantago lanceolata</i>	O/F	
Ragwort, common	<i>Senecio jacobaea</i>		
Rosebay willow herb		O currently	More in summer
Rush , soft	<i>Juncus effusus</i>	R	
Sorrel, common	<i>Rumex acetosa</i>	F	
Strawberry wild	<i>Fragaria</i>		
Thistle, Creeping	<i>Cirsium arvense</i>	O/F	
Vernal Grass, Sweet	<i>Anthyllis vulneraria*</i>	LO	
Vetch,	<i>Vicia Spp</i>	O	



a. Disturbed area of grass and herbs, mostly acid, some nutrient enrichment with a few patches indicating neutral grassland too.



b. Hyper nutrified soil or rubble pile in middle of the field area

Hedge and bank East - TN2

English name- TREES AND WOODY PLANTS	Latin name	DAFOR	Notes
TREES			
Ash	<i>Fraxinus excelsior</i>	F	
Birch , silver	<i>Betula spp</i>		
Blackthorn	<i>Prunus spinosa</i>	F/A	
Bramble	<i>Rubus fruticosus agg</i>	F/A	
Dog Rose	<i>Rosa canina</i>	O	
Elder	<i>Sambucus nigra</i>	O	
Elm,	<i>Ulmus spp</i>	R	
Gorse, European	<i>Ulex europaeus</i>	O	
Hawthorn	<i>Crataegus monogyna</i>	O	
Hazel	<i>Corylus avellana</i>	R	
Holly	<i>Ilex aquifolium</i>	R	
Ivy, Common	<i>Hedera helix</i>	F/O	
Sycamore	<i>Acer psuedoplatanus</i>	F/A	

HERB AND SHRUB LAYERS-TN2		Cloddiau bank and hedge	NOTES
Bedstraw family	<i>Galium spp</i>		
Bluebell	<i>Hyacinthoides non-scripta</i>	O	
Campion, Red	<i>Silene dioica</i>	F	
Cows Parsley	<i>Anthriscus sylvestris</i>	F	
Creeping Buttercup	<i>Ranunculus repens</i>	O	
Dog rose	<i>Rosa canina</i>	F	
Violets	<i>Viola spp</i>	O	
Buckler Fern, Broad		F/O	
Herb Robert	<i>Geranium robertianum</i>	F/O	
Dandelion	<i>Taraxacum officinale</i>	O/R	
Speedwell, Germander	<i>Veronica chamaedrys</i>	O/F	
Hogweed, common	<i>Heraclium sphondylium</i>	LO/R	
Garlic Wild	<i>Allium ursinum</i>		
Ground Elder	<i>Aegopodium podagraria</i>		
Ivy, common	<i>Hedera helix</i>	LF	
Harts tongue fern	<i>Asplenium scolopendrium</i>	F	

Lichens			on woody branches of trees
Male Fern	<i>Dryopteris filix-max</i>	R	
Mosses		F=trees and bank	
Nettle, common	<i>Urtica dioica</i>		
Polypody fern	<i>Polypodium vulgare</i> agg	LO	
Primrose	<i>Primula vulgare</i>	O	
Scurvy grass	<i>Cochlearia officinale</i>	O	
Herb and shrub layers		Cloddiau bank and hedge – TN3	Notes



c. Eastern hedge looking south wards



- d. North end of eastern hedge where it deteriorates into *Leylandii* on the neighbouring property. Badger paths through here. Note the influx of blackthorn and gorse scrub into the field.



e. West side of Eastern hedge looking north



Badger path under wire fencing – see arrow above



Badger path on the other side of the path under the fence as seen above



f. Eastern hedge on the west side looking south



g. Eastern hedge from the east side

TN3- Discontinuous hedge with occasional trees native and non-native

English name	Latin name	DAFOR	notes
Alexanders			
Ash	<i>Fraxinus excelsior</i>		
Blackthorn	<i>Prunus spinosa</i>	LA	Suckers invading the field – farmer has sprayed with weed killer
Bramble	<i>Rubus fruticosus agg.</i>		
Brome , false	<i>Brachypodium Spp</i>	F/O	
Buddleia		O	
Buttercup , creeping	<i>Ranunculus repens</i>	F/LA	
Cock's foot	<i>Dactylis glomerata</i>	F/A	
Crested Dogs tail	<i>Cynosurus cristatus</i>	F/A	
Dock Broadleaved	<i>Rumex obtusifolius</i>	O	
Elder	<i>Sambucus niger</i>		
Elm, small leaved			
Fescue, Red	<i>Festuca rubra</i>	LF	
Gorse, European	<i>Ulex europaeus</i>	LO	
Holly	<i>Ilex aquifolia</i>	LO	
Honey suckle	<i>Lonicera periclymenum</i>		
Ivy	<i>Hedera helix</i>	LA-D	
Leylandii spp		LD	NE hedge and SW hedge
Sycamore	<i>Acer psuedoplatanus</i>		

TN4 – Scrub

Scrub	Latin name	DAFOR	Notes
Blackthorn	<i>Prunus spinosa</i>	LD	
Bramble	<i>Rubus fruticosus agg</i>	LD	
Gorse European			see
Vegetation and species as in TN1 Areas with no scrub or trees		LF 10-15%	



h. Area of wall on the west boundary with ivy



i. North west corner of the site



j. West and North hedge



k. North and east hedge lines - discontinuous - Badger path access points shown with yellow arrows, paths can be seen in the photos.

TN5 - Walls and gateways have a few additional species.

English name	Latin name	DAFOR	notes
Alexanders			
Ash	<i>Fraxinus excelsior</i>		
Blackthorn	<i>Prunus spinosa</i>	LA	Suckers invading the field – farmer has sprayed with weed killer
Bramble	<i>Rubus fruticosus agg.</i>		
Brome , false	<i>Brachypodium Spp</i>	F/O	
Buddleia		O	
Buttercup , creeping	<i>Ranunculus repens</i>	F/LA	
Cock's foot	<i>Dactylis glomerata</i>	F/A	
Crested Dogs tail	<i>Cynosurus cristatus</i>	F/A	
Dock Broadleaved	<i>Rumex obtusifolius</i>	O	
Elder	<i>Sambucus niger</i>		
Elm, small leaved			
Fescue, Red	<i>Festuca rubra</i>	LF	
Gorse, European	<i>Ulex europaeus</i>	LO	





L. walls and hard standing species

Appendix 2 References

The reference list for Preliminary Ecological Appraisal reports should include the standard references for each species or habitat as specified in IEEM *Sources of Survey Methods* (<http://www.ieem.net/sources-ofsurvey-methods-sosm->).

All UK and legislation for countries within the UK can be viewed at:
<http://www.hmso.gov.uk/legis.htm>,

References

Biodiversity 2020: A strategy for England's wildlife and ecosystem services
<http://www.defra.gov.uk/publications/2011/08/19/pb13583-biodiversity-strategy-2020/>

Defra (2007b) *An Introductory Guide to Valuing Ecosystem Services*. PB12852. Defra, London.

<http://www.defra.gov.uk/environment/policy/naturalenviron/documents/eco-valuing.pdf> (accessed 10 April 2010)

Institute of Ecology and Environmental Management (2006) *Guidelines for Ecological Impact Assessment in the United Kingdom* (CIEEM website – as above) Institute of Environmental Assessment (1995)

Guidelines for Baseline Ecological Assessment. E & FN Spon. London.

Joint Nature Conservation Committee *Phase 1 Habitat Classification*
<http://incc.defra.gov.uk/page-4258> Joint Nature Conservation Committee (2005)

The Marine Habitat Classification for Britain and Ireland version 04,
<http://www.incc.gov.uk/default.aspx?page=1584>. Joint Nature Conservation Committee (2010)

Handbook for Phase 1 habitat survey - a technique for environmental audit, ISBN 0 86139 636 8

Millennium Ecosystem Assessment (2005) – for further details visit
<http://www.maweb.org/en/About.aspx>

Natural Environment and Rural Communities (NERC) Act (2006)
(http://www.opsi.gov.uk/acts/acts2006/ukpga_20060016_en_1)

RSPB (2009) *Birds of Conservation Concern 3*. RSPB Sandy, Beds.
http://www.rspb.org.uk/Images/BoCC_tcm9-217852.pdf

The National Planning Policy Framework

<http://www.communities.gov.uk/publications/planningandbuilding/nppf>

The Natural Choice: securing the value of nature

<http://www.official-documents.gov.uk/document/cm80/8082/8082.asp>

Welsh Assembly Government (2009) *Technical Advice Note (TAN) 5 - Nature Conservation and Planning*

Appendix 3 – legal framework

3.1 Planning Policy Wales (8th Ed. January 2016) (PPW) sets out the land use planning policies of Welsh Government. It provides the policy framework for the preparation of Local Development Plans. Chapter 5, Conserving and Improving the Natural Heritage and Coast, outlines Welsh Government’s objectives for the conservation and improvement of natural heritage. Technical Advice Note 5 (TAN5) Nature Conservation and Planning (2009)

3.2 The Planning Policy Wales (PPW) is supplemented by a series of Technical Advice Notes. TAN 5 provides guidance on how the land use planning system should contribute to protecting and enhancing biodiversity and geological conservation. It provides advice on areas including the key principles of positive planning for nature conservation, nature conservation in Local Development Plans and development management procedures. It also provides advice on development affecting designated sites and habitats, in addition to protected or priority habitats and species.

3.2.1 Key Principles include that the town and country planning system in Wales should integrate nature conservation into all planning decisions; that the town and country planning system should look for development to provide a net benefit for biodiversity conservation with no significant loss of habitats or populations of species, locally or nationally and that they should ensure that the UK’s international and national obligations for site, species and habitat protection are fully met in all planning decisions.

3.3 Local Planning Policy

Local Development Plans (LDPs) must be produced by every Local Planning Authority in Wales.

Any development proposal will be tested against the policies within the LDP. The LDPs follow the planning guidance provide in PPW, including biodiversity and natural heritage policies. These include:

- protecting designated sites and other areas of importance for biodiversity conservation
- safeguarding protected species and priority species, including those listed in local biodiversity action plans
- Retaining, creating and enhancing features of importance for biodiversity conservation where appropriate.

Local planning policies for Pembrokeshire

For the precise wording of relevant local planning policies please refer back to the source documents. These have been considered whilst assessing the potential ecological constraints and opportunities identified by the desk study and field surveys and when

assessing requirements for further surveys, design options and ecological mitigation as described in Section 6.

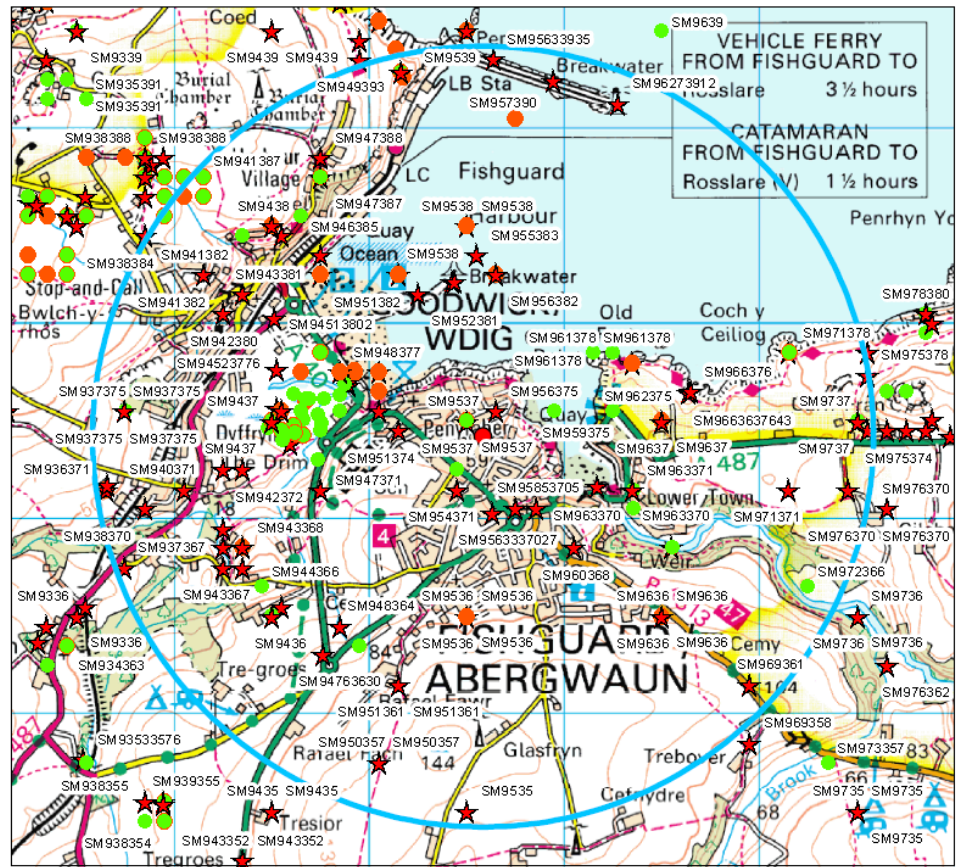
3.5 Section 7 lists of Species and Habitats of Principal Importance for Conservation of Biological Diversity in Wales

3.6 Ancient Semi-Natural Woodland (ASNW), Plantation on Ancient Woodland Site (PAWS), Restored Ancient Woodland Site (RAWS) or Ancient Woodland Site of Unknown category (AWSU) within or adjacent to the Project Site boundary using LLE dataset (<http://lle.gov.wales/home>)

3.7 Tree Protection Orders (TPO's)

Appendix 4 - Local Records centre information-See maps below

4.1 2Km buffer zone summary of protected and priority species, other species of conservation concern and locally important species records.



Species Records

Fishguard Primary School
SM9558437420
2km Buffer

Report produced for Pembrokeshire Ecology & Biodiversity Solutions on the 4th June 2018 by West Wales Biodiversity Information Centre.

This is a data search for all protected and priority species, other species of conservation concern and locally important species records held within 2km of the site.

- Legend**
- site
 - 2 km buffer
- Species Records Designation**
- ★ 1 - Protected and priority species
 - 2 - Other species of conservation concern
 - 3 - Locally important species

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4.2 Statutory and Non statutory sites near and in the 2Km buffer zone



West Wales Biodiversity Information Centre



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Protected Sites

Fishguard Primary School SM9558437420 2km Buffer

Report produced for Pembrokeshire Ecology & Biodiversity Solutions on the 4th June 2018 by West Wales Biodiversity Information Centre.

This is a data search for statutory and non-statutory sites within 2km of the search centre.

The following sites are within the search area:

Goodwick Moor Wildlife Trust Reserve
Fishguard Cliffs SSSI
Pembrokeshire Coast National Park

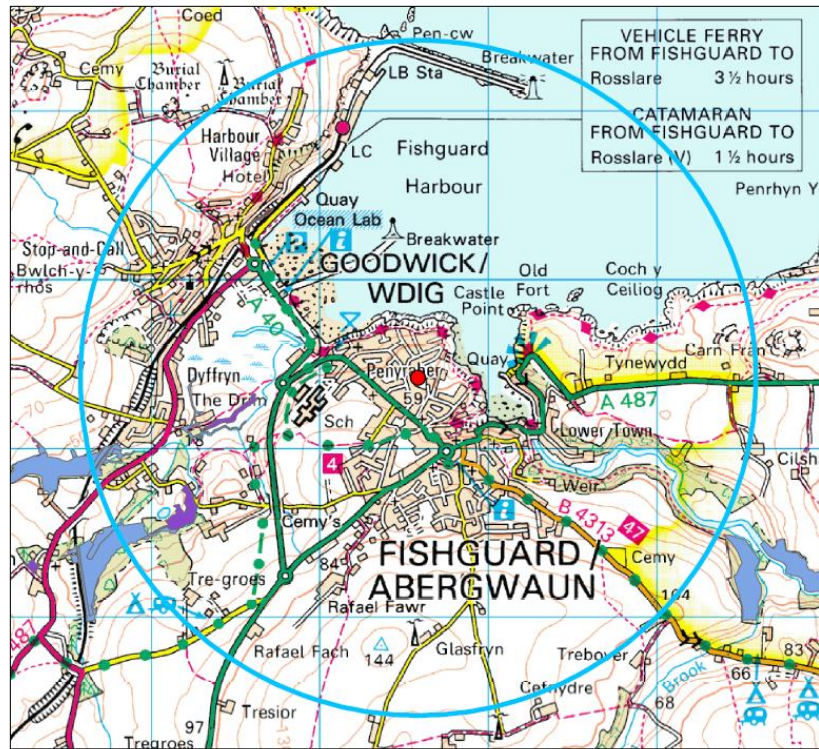
Legend

- site
- 2 km buffer
- Wildlife Trust Reserve
- ▨ Site of Special Scientific Interest
- ▨ National Park

4.4 Ancient Woodland sites within 2Km buffer zone



Ancient Woodland Inventory



VEHICLE FERRY
FROM FISHGUARD TO
Rosslare 3 ½ hours

CATAMARAN
FROM FISHGUARD TO
Rosslare (W) 1 ½ hours

Fishguard Primary School
SM9558437420
2km Buffer

Report produced for Pembrokeshire Ecology & Biodiversity Solutions on the 4th June 2018 by West Wales Biodiversity Information Centre.

This is a data search for areas in the Ancient Woodland Inventory and within 2km of the site.

Please see the map and legend for details.

Legend

- site
- 2 km buffer
- Ancient Semi Natural Woodland
- Ancient Woodland Site of Unknown Category
- Restored Ancient Woodland Site



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4.5 High risk bats – Noctules



Bat Records & Sites

Fishguard Ex Primary School SM9558437420 10km Buffer

Report produced for Pembrokeshire Ecology & Biodiversity Solutions on the 5th June 2018 by West Wales Biodiversity Information Centre.

This is a data search for high risk bat species records and sites designated for bats held within 10km of the site.

please see the species list for details of bat records.

The following site is within the buffer:

North Pembrokeshire Woodlands SAC

Appendix 5 – Tables of information

BAT SURVEYS

Table 1 - Building and Tree bat roost potential Categories

Potential	Description of Buildings	Description of Trees
Known or confirmed	Confirmed signs of bat presence/occupation (droppings, oily staining around entry points, insect remains, odour, scratching) and actual bat presence.	Confirmed signs of bat presence/occupation (droppings, oily staining around entry points, insect remains, odour, scratching) and actual bat presence.
High	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions (e.g. temperature, humidity, height above ground level, light levels or levels of disturbance) and surrounding habitat. Can include structures with points of access to the interior of the building and poorly maintained fabric providing ready access points for bats into structures, but at the same time not draughty. Structures of traditional stone, brick or timber construction. Structures with large (>20 cm) roof timbers with mortice joints, cracks and holes. Structures of pre or early 20th century construction. Structures with large complicated and/or uncluttered roof spaces providing unobstructed flying spaces. Structures with weather boarding and/or hanging tiles with gaps. Structures with accessible south facing roofs. Structures with proximity to good foraging habitat such as woodland, wetland, water and /or good hedgerows.	A tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions (e.g. temperature, humidity, height above ground level, light levels or levels of disturbance) and surrounding habitat.
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions (e.g. temperature, humidity, height above ground level, light levels or levels of disturbance) and surrounding habitat but unlikely to support a roost of high conservation status. Can include structures with some potential to support roosting bats, but fewer features than a high risk building. Features may include areas suitable for crevice dwelling and/or access points into structures. Some proximity to foraging habitat.	A tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status.

Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However these potential roost sites do not provide enough space, shelter protection, appropriate conditions and/or suitable habitat to be used on a regular basis or by large numbers of bats (i.e. unlikely to be suitable for maternity or hibernation).	Tree of sufficient size and age to contain potential roost features but with none seen from the ground or features seen have only very limited appropriate conditions and/or suitable habitat to be used on a regular basis or by large numbers of bats (i.e. unlikely to be suitable for maternity or hibernation)
Negligible	No features suitable for roosting bats. Can include structures constructed from unsuitable materials e.g. prefabricated with steel and sheet material. Structure is draughty, light and cool buildings with no roosting opportunities. High levels of regular disturbance including external and/or internal lighting. Building is isolated from areas of foraging habitat.	Trees with no potential to support bats.

Table 2 – Commuting and Foraging Habitat Potential Categories

Commuting and Foraging Potential	Descriptions
High	Continuous high quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge. High
Moderate	Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
Low	Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or un-vegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small number of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Negligible	Negligible habitat features on site likely to be used by commuting or foraging bats.

Appendix 6 – Photos

6.1 Buildings



North side of old school



East side of old school



West side of school looking south



West side of school looking north



North and east sides of the school



South side of school



View looking south onto the north side of the school over the playing field area



View looking North West from the hard standing on the east side of the school

Appendix 7 – plans – no proposed plans with elevations have been produced at this date – 19th June 2018

Mitigation is discussed in Section 7.0 using examples of the ‘type of houses’ that will be built on site