

The Conifers Care Home

Brandy Cottage, Rhosllanerchrugog

Ecological Appraisal Report

July 2018

Produced by



www.wildbanksconservation.com

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1.0 INTRODUCTION

- 1.1 Wildbanks Conservation was commissioned to undertake detailed ecological surveys to assess for potential impacts the development might have with regards to protected species. This is in support of a planning application to build an extension onto the existing conifers care home building. This report provides results of a visual assessment undertaken at the site on 20th June and 25th July 2018.
- 1.2 The application site comprised a single-story detached residential care home with a concrete tiled roof. Surrounding habitats consist of mature gardens laid to lawn, with large shrubs and trees to west. Wider habitat includes the village of Johnstown and pastoral farmland and woodland to the south. The SSSI Stryt Las a'r Hafod, and the SAC of Johnstown Newt sites are some 100m to the north.
- 1.3 Development proposals are to gain planning consent to add an extension to the southern section of the care home. This has the potential to impact on protected species including bats, GCN or nesting birds that are using the building or site.

2.0 Survey Methodology

Desktop Survey

- 2.1 The Multi Agency Geographic Information for the Countryside (MAGIC) website has been reviewed for the presence of any sites with statutory designations of international (Special Conservation Area (SAC), Special Protection (SPA) or Ramsar Sites)), national (Site of Special Scientific, (SSSI)) or local nature conservation importance (Local Nature Reserves (LNR)) within 1km of the survey site.
- 2.2 Further inspection, using colour 1:25,000 OS base maps (www.ordancesurvey.co.uk) and aerial photographs from Google Earth (www.maps.google.co.uk) was also undertaken in order to provide additional context and identify any features of potential importance for nature conservation in the wider countryside.

Extended Phase 1 Habitat Assessment

- 2.3 The site was surveyed on the 20th June and 25th July 2018 using the standard Phase 1 Habitat Survey methodology (Joint Nature Conservation Committee, 2010). The survey was conducted by Mick Smith (Director Wildbanks Conservation with 12 years experience in ecological consultancy) Mick holds GCN class 2 licences for NE and NRW and GCN survey licences for NE and NRW.
- 2.4 This involved a systematic walk over of the site to classify the habitat types present and search for habitats/features that could be used by protected species. If required target notes were used to record features or habitats of particular interest. The survey was carried out in accordance with the extended Phase 1 Habitat survey methodology as described in Guidelines for Ecological Assessment (Institute of Environmental Assessment, 1995). This is a development of the original methodology outlined in the Handbook for Phase 1 habitat survey – A technique for environmental audit (JNCC, 2010). Photographs are included within the document. Plant names follow the third edition of the New Flora of the British Isles (Stace, 2010). The common name of the plant is stated first and is followed by the Latin name, on the first occasion that it is used. Only the common name is used subsequently.
- 2.5 Consideration was also given to the potential presence of species protected under the Wildlife and Countryside Act 1981 (as amended), the Protection of Badgers Act 1992 and The Conservation of Habitats and Species Regulations 2010 (as amended). Such species included, but was not limited to badger, bats, reptile, amphibians and bird species. Evidence of any invasive plant species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) was also recorded where present.

Bat Surveys

Bat assessments were undertaken in accordance with the statutory guidance¹.

2.6 *Visual Assessment*

The Exteriors of the building were visually assessed for potential access points and evidence of bat activity on 20th June 2018. Features such as small gaps under barge/soffit/fascia boards, raised or missing roof/ridge tiles or gaps at gable ends, which have the potential for use as access points, were sought. Evidence that bats actively used these potential access points would include staining within the gaps, or bat droppings or urine staining under gaps; a note being made wherever these were present. The presence of cobwebs and/or general detritus within and around potential access points was used as an indicator that bats had not recently used the area to access the building.

2.7 The interior of the building, including roof voids and cellars where accessible, were assessed for evidence of bat activity and for the potential to be used by bats. Evidence of a roost would be determined by the presence of dead or live bat(s), concentrated piles or scattered droppings, food remains such as insect wing fragments as well as scratch marks and / or staining.

2.8 The Visual Assessment was conducted by one licensed bat ecologist on 20th June 2018 (licence number 2015-15175-CLS-CLS). A high-powered torch and binoculars were used to aid the inspection.

2.9 *Trees - Bats*

An assessment of the potential of trees within the proposed development area of the site to support bat roosts was undertaken to enable recommendations with respect to the proposed works. Trees with a diameter of 250mm at breast height were examined for potential roost features such as cracks, fissures and rot holes that could provide suitable roost sites. Evidence of bat roosting activity in potential roost sites was sought and included staining and/the presence of bat droppings. An initial survey was undertaken from ground level, with the aid of binoculars.

2.10 From this survey an assessment can be made on the likelihood of trees to support roosting bats. In line with the Bat Conservation Trust (BCT) Good Practice Guidelines (2016), trees can be classified into one of five categories which range between a known roost, Category 1*, Category 1, Category 2 and Category 3 (where Category 3 has no potential for roosting bats). The basis of this criterion is subjective and based upon the surveyor's experience and judgement.

Nocturnal Survey

- 2.11 During the internal and external building assessment, evidence of use by bats and associated features that had the potential to offer roosting opportunities were identified. It was determined that the buildings provided moderate potential as a possible bat roost. As such emergence surveys were undertaken on the building on the 3rd of July 2018 and a dawn return to roost survey on the 23rd of July to determine whether any bats were roosting within the building. To complete this assessment three ecologists (one licensed and two experienced bat ecologists) were positioned around the areas of the building that would be effected by the development to ensure all aspects of the building could be fully observed. The surveys were conducted following BCT¹ guidelines, 2016.
- 2.12 The nocturnal surveys were undertaken when weather conditions were suitable i.e. mild, calm and dry. Batbox Duet bat detectors connected to digital WAV recorders, as well as Echometer Touch 2 Pro connected to an iPad, were used during this survey to aid species identification.
- 2.13 July is within the main activity season for bats. Consequently, the nocturnal surveys have been undertaken on the building during the optimal survey period to confirm the presence or likely absence of a bat roost.

¹Hundt L (2016) Bat Surveys: Good Practice Guidelines, 3rd edition, Bat Conservation Trust

3 SURVEY RESULTS

Desktop Study

- 3.1 Two statutorily designated sites were located within 1km of site, The Johnstown newt sites (SAC, <100m) and Stryt Las a'r Hafod (SSSI, <100m). These two sites primarily consist of wetland and grassland meadow habitat and are designated for the presence of great crested newts, and other amphibians.

- 3.2 The site consists of buildings, hard standing and gardens laid to law with mature non-native conifers (Cypress spp.) and hedges, and lawns

Trees - bats

- 3.3 Seven trees (Tr1-7) on site had a diameter of 250mm at breast height. These were non-native conifers (Cypress spp.). All the trees were ivy covered, and therefore, the ability to see roosting potential was hampered. The trees were given a roosting potential score of moderate and given the recommendation to undertake surveys upon them to identify roosts within them.

Internal/External Building Assessment (Plates 1- 8 Appendix A2)

- 3.4 The conditions during the survey were 21°C, dry and sunny. The previous week's weather had been warm and dry with minimal wind and no rain.

- 3.5 The main building is a 20th century detached residential care home with a concrete tiled roof (plates 1-3). It has a double pitched roof, with multiple hipped roof sections. A small single-story flat roofed building is attached on the southwestern end of the building. A loft space is present. The building is brick built, which is in good condition

Internal Assessment

- 3.6 The building had one large roof void accessed by ladder. The void was approximately 2m high to the ridge beam (plate 6). Internally the roof is constructed of large timber trusses with machined timber rafters. Modern underfelt is present in the roof. Access routes into the void were seen that could be used by bats or birds. The ground floor is not being used by bats, the windows and doors were all well sealed. No bat droppings or signs of bats were noted within the care home.

External Assessment

- 3.7 The exterior of the building is generally in good repair. The roof of the building was also in good repair, with no visible access points coming from missing or raised tiles. Ridge tiles, and verge mortar was in good condition allowing no potential access to loft space for bats. Potential access point for bats at this property were limited to a small numbers of gaps in soffit boxes (Plate 4), 3 holes were present allowing access. One of these holes had old bird nesting material in it (Plate 5). Additional access points came from gaps between soffit box and wall, and a gap were two roofs adjoin (Plate 8). No bat droppings were seen on any of the ground floor walls or windows. It is considered that the features identified within the roof could provide roosting opportunities for crevice dwelling species such as Pipistrelles.

Nocturnal assessment – 21st July 2016

- 3.8 Weather conditions during the dusk survey undertaken on 3rd July 2018 were optimal with a very light breeze (Beaufort 1) and no rain, cloud cover 1 Oktas and an ambient air temperature of 25°C. The survey started at 21:23 and concluded at 21:41. Sunset was at 23:11.
- 3.9 The first bat detected was a Soprano Pipistrelle at 21:53. Two noctules were recorded foraging around the building and garden from 21.56 until 23.04. Up to 2 bats were seen at any one time. The level of bat activity recorded during the survey was unremarkable and in line with what would have been expected due to the limited roosting opportunities present within the site and surrounding habitat.
- 3.10 No bats were seen emerging from the main building or any of the trees on site. All bats recorded were seen to arrive from off site.

Nocturnal assessment – 23rd July 2018

- 3.11 The weather conditions during the dawn survey undertaken on the 23rd July 2018 was warm with no wind and no rain, weather conditions were optimal. The dawn survey started at 03:05 and concluded at 05:15, sunrise was at 05:05.
- 3.12 The first bats to be recorded during the survey was a common pipistrelle at 03:07 that commuted from the north and headed off site to the west. Soprano pipistrelles were also recorded foraging across the site intermittently throughout the survey until 04:45. Eighteen Noctule bats were recorded foraging high over the site. With six individuals seen between 04:50 and 05:05. These bats were flying in a south-westerly direction.

- 3.13 No bats were recorded returning to a roost within the care home or within the trees during the dawn survey.

Great Crested Newts

- 3.14 Great crested newts have been recorded within the ponds within the Johnstown Newt Sites SAC some 50m to the north-east. Connective habitat between the development site is reasonable in the first instance but not ideal as newts would have to cross Stryt Las road in order to get on to the development site. Pasture and woodland exist to the south of the site offering excellent foraging and hibernation opportunities with a further watercourse to the south-east. Habitat within the whole care home site is varied and consist of hard standing in the form of roads, paths and patios, as well as large areas of mown amenity grassland with some individual shrubs and trees, which offers limited opportunities for GCN. Areas of shrubbery and herbaceous borders with loose vegetation and materials exist also and offer increase opportunities for GCN and could be used as respite habitat as GCN forage away from the ponds. Habitat within the development area and its surrounds are predominantly mown grass and standard trees and shrubs. These offer poor foraging habitat for GCN. There are some cracks and loose vegetation at the edge of the buildings and patios that could provide respite opportunities for GCN.

- 3.15 Overall it is considered likely that GCN could use the development site due to its close proximity to a known GCN site and that the site offers some opportunities for refuge Albeit with limited foraging opportunities.

3.16 *Nesting Birds*

During the daytime habitat assessment, no active bird nests were seen within the buildings. The surrounding gardens provide moderate habitat for nesting birds in the form of mature trees. The development site offers no potential for barn owls (*Tyto alba*), in the form of nesting and limited hunting opportunities due to the nature of the vegetation present on site and that no openings to the buildings are present.

3.17 *Badger*

No evidence of badger using the site was observed, no runs or latrines or excavations were seen.

3.18 *Other protected species*

No evidence of other protected species or habitats that could support other protected species were identified on the site.

Invasive species

- 3.19 No invasive plants as listed under Schedule 9 of the Wildlife and Countryside Act 1981 were observed at the time of survey.

4.0 DISCUSSION AND RECOMMENDATIONS

4.1 An ecological assessment was undertaken on The Conifers Care Home on the 20th June and 25th July 2018. Some opportunities exist on site for species protected under the Wildlife and Countryside Act 1981, The Conservation of Habitats and Species Regulation 2010 or the Protection of Badgers Act 1992.

4.2 No evidence of invasive plants listed on Schedule 9 of the Wildlife and Countryside Act 1981 were observed at the time of survey.

4.3 Habitats within the development site that had the potential to support protected species, these included bats, great crested newts and breeding birds.

Bats

4.4.1 Internal and external assessments of the buildings on site did not find any evidence that bats were roosting within them, however features were identified that could not be fully assessed during these surveys. Therefore, two nocturnal assessments were carried out on the 03/07/2018 and 23/07/2018. No bats were recorded roosting within the building or any trees on site. As such the development can proceed without further survey work in relation to bats.

4.4.2 Potential impacts on local bat populations

The inclusion of integral roosting features within the new development and the implementation of the recommendations made below would mean there would be no net loss of bat habitat or roosting features due to the development going ahead.

4.5 *Great Crested Newts*

Great crested newts have been recorded within the ponds within the Johnstown Newt Sites SAC some 50m to the north-east. Habitat within the grounds of the care home do provide some opportunities for foraging and refuge in the form of shrubbery, herbaceous borders and cracks around the patio. The presence of GCN within the development site and the areas surrounding it can not be ruled out prior to works commencing and the injury or death to GCN individuals is possible.

4.6 As such it is recommended that a Reasonable Avoidance Method Statement be produced that must be followed by the developer and its contractors to minimise potential disturbance, injury or death to GCN.

4.7 *Breeding birds*

Birds while building or on the nest are protected under the Wildlife and Countryside Act 1981 (as amended) and as such disturbance of them is strictly prohibited. No active nests were identified during the Visual Assessment but there are features primarily within the trees that could provide nesting opportunities. As such a precautionary approach must be taken to works in the vicinity of the trees, see recommendations below.

Badger

4.8 No evidence that badger utilise the site at present was found during the survey.

Habitats

4.9 The habitats on site were of low species diversity and were determined to be of low nature conservation value in themselves.

RECOMENDATIONS

4.10 In line with Section 118 of the National Planning Policy Framework, in order to increase biodiversity at the proposed development site, the following Ecological mitigation / enhancements should be incorporated into the final design and presented at the detailed application stage.

4.11 Recommendations for enhancements with regards to GCN are included within the Reasonable Avoidance Method Statement.

4.12 Ecological mitigation / enhancements to be incorporated into the final design should include:

1. If any of the trees within the site are to be felled or have major limbs removed the following avoidance measures should be implemented.
 - If practicable, trees to be retained.
 - If works are required to these trees, works kept to a minimum and, if practical, carried out between 1st October and 1st April.
 - Checks for nesting birds made if works are to be carried out between 1st April and 31st September.
2. Incorporation of permanent biodiversity features within the buildings themselves or installed on to trees:

These will include:

- Installation of 2 commercially available integrated bat roosts (e.g. Schweglar bat tubes) into each new gable end of the new extension at the highest opportunity. As well as 4 bat boxes (2 x Schweglar 1FF bat box and 2 x Schweglar 2F-with double front panel)
- Installation of five commercially available bird boxes installed on trees within the development

3. Sympathetic Lighting

Bats were recorded foraging across the site during both nocturnal surveys. The option for no additional external lighting should be considered in the first instance. However, if external lighting is required the lighting should be kept to a minimum and the tree canopy kept dark throughout the night.

Consideration should be given to:

- Restricting lighting to avoid unnecessary light spill particularly along the south and western boundaries in particular the tree canopies.
- Use of low height lighting, minimising light spill along the boundaries and into the tree canopy.
- Use of low lumen bulbs to keep brightness as low as practicable.
- Use of low UV lights or UV filters to lessen attraction to insects and hence impacts on predator feeding opportunities and behaviour.
- Use of timers during selected periods ensuring extended periods of dark during the night, particularly along the boundaries.
- Use of directional LED lighting and / or the use of hoods or cowls to minimising light spill, particularly along the boundaries.

5.0 EXECUTIVE SUMMARY

- 5.1 A Visual Assessment of the property was conducted on 20th June and 25th July 2018. Possible statutory constraints to the development were noted on site with respect to the potential presence of bat species and GCN. As such two nocturnal assessments were carried out which concluded that no bats were roosting within the care home in the areas around the new development. A Reasonable Avoidance Method Statement should be produced to reduce potential effects on GCN that maybe present during the development.
- 5.2 No evidence of nesting birds was noted in association with the building but opportunities for nesting birds exist within the trees in close proximity to the care home. All birds are protected whilst on the nest under The Wildlife and Countryside Act 1981 (as amended). The bird breeding season is from March to September and development works should avoid this period. However, should this not be possible, advice should be sought from an appropriately trained ecologist to identify measures that could be put in place to reduce potential impacts on the development due to nesting birds within the surrounding shrubs and trees.
- 5.3 Recommendations have been made as to what ecological enhancement / mitigation measures should be implemented. If these are carried out, no constraints to the development with regards to protected species are present and a net increase in opportunities for bats and birds will result.

A1 APPENDIX – RELEVANT LEGISLATION & PLANNING POLICY IN RELATION TO BAT SPECIES

Relevant Legislation

- A1.1 Due to recent declines in bat species’ populations within the United Kingdom, all bat species and their roost sites in Britain are protected under the Wildlife and Countryside Act 1981 (as amended). They are also included on Annex IV of Council Directive 92/43/EEC of 21st May 1992 on the Conservation of Natural Habitats and of Wild Fauna and Flora (known as the Habitats Directive). As a result of the United Kingdom ratifying this directive, all British bats are protected under The Conservation of Habitats and Species Regulations 2010. Under this legislation it is an offence to intentionally kill, injure or capture or intentionally (or recklessly in England and Wales) disturb bats or obstruct access to, damage or destroy bat roosts.
- A1.2 Under the law, a bat roost is any structure or place used for shelter or protection e.g. a building, bridge or tree. Bats use many roost sites and feeding areas throughout the year and since they tend to re-use the same roosts for generations these sites are protected whether bats are present or not.
- A1.3 Any activity resulting in a contravention of the legislation described above would require a Natural England licence to avoid committing an offence. Natural England issue licences for the purposes of:
- “preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial”.
- A1.5 The National Planning Policy Framework sets out how the planning system should contribute to and enhance nature conservation and the local environment. This is to be achieved through a combination of local planning policies as well as through the determination of planning applications with the aim of minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government’s commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.

A1.6 As such it is essential that the presence or otherwise of protected species, and the extent to which they are affected by proposals is established prior to planning permission being granted. Furthermore, where protected species are present and proposals may result in harm to the species or its habitat, steps should be taken to ensure the long-term protection of the species, such as through attaching appropriate planning conditions for example.

Natural Environment and Rural Communities Act 2006 (NERC Act)

A1.7 *Biodiversity: Section 40*

Under this legislation all local authorities have a legal duty to have regard to the purpose of conserving biodiversity (as defined in the Town and Country Planning Act (1990), Part 11). It also further refines the definition of biodiversity conservation, stating that it includes restoring or enhancing a population or habitat.

A1.8 *England: Section 41*

In England, this duty applies to any minister of the Crown and any government department and has specific reference to the Convention on Biological Diversity. However, Defra expects that the organisations affected will make reference to the lists of Habitats and Species of Principal Importance in England (produced under Section 41 of the NERC Act) when implementing the duty.

A1.9 Out of the eighteen bat species known to occur in the UK, seven of those species are listed as Species of Principal Importance, these include; Barbastelle bat *Barbastella barbastellus*, Bechstein's bat *Myotis bechsteinii*, noctule *Nyctalus noctula*, soprano pipistrelle *Pipistrellus pygmaeus*, brown long-eared *Plecotus auritus*, greater horseshoe bat *Rhinolophus ferrumequinum*, and lesser horseshoe bat *R. hipposideros*.

A1.10 Defra has produce guidance for local authorities on the implementation of biodiversity duty. This document echoes policies set out in Planning Policy Statement 9, the accompanying good practice guide and PAS2010. Of relevance to developers is that it encourages local planning authorities to:

- (i) provide screening advice to developers prior to the submission of a planning application;

- (ii) require relevant biodiversity information to be submitted with a planning application in order for the application to be considered valid;
- (iii) use of planning conditions and obligations to impose mitigation and enhancement measures if such measures are not included at an appropriate level in the development proposal;
- (iv) monitor the implementation of planning conditions and obligations relating to biodiversity conservation and to take action if these conditions are not met;
- (v) actively seek opportunities to enhance biodiversity, in addition to statutory requirements to protect designated sites, habitats and species.

A1.11 The guidance also suggests that planning obligations could be used to secure financial payments to ensure improved and ongoing management of nature conservation sites as mitigation for habitat loss within the development site.

A1.12 Great Crested Newts are protected under Schedule 5 of the Wildlife and Countryside Act (1981) as amended and Schedule 2 of the Conservation (Natural Habitats etc) Regulations 1994 (Regulation 38). Because of their rarity they are also protected under Annexes IIa and IVa of the Habitats and Species Directive and under the Berne Convention.

Langton *et alia* (2001) make the point that:

“The wording in the 1981 Act and 1994 Regulations is slightly different.” “Taken together, the Act and the Regulations (following the CROW Act 2000) make it illegal to:

- *Intentionally or deliberately capture or kill, or intentionally injure great crested newts.*
- *Deliberately disturb great crested newts or intentionally or recklessly * disturb them in a place used for shelter or protection.*
- *Damage or destroy a breeding site or resting place.*
- *Intentionally or recklessly damage, destroy or obstruct access to a place used for shelter or protection.*
- *Possess a great crested newt, or any part of it, unless acquired lawfully.*
- *Sell, barter, exchange or transport or offer for sale great crested newts or parts of them.*

*Reckless offences were added by the Countryside and Rights of Way Act 2000, which applies only to England and Wales”.

**A2 APPENDIX 2 – PHOTOGRAPHS OF POTENTIAL ACCESS POINTS
AND BAT EVIDENCE**

Plate 1: Southern aspect of The Conifers



Plate 2: Eastern aspect showing potential bat access points



Plate 3: Eastern elevation of building and single storey veranda



Plate 4: Example of damaged soffit



Plate 5: Damaged soffit with bird nesting material within soffit box



Plate 6: Roof void of building



Plate 7: Trees (Cypress spp.) within the grounds of site



Plate 8: Gap in flashing where roofs adjoin



Plate 9: Area adjacent to the patio with loose vegetation and herbaceous planting



Plate 10: Area beyond the southern gable end showing amenity grassland and vertical step upto patio area



Platte 11: Area of amenity grassland to be built on protruding from eastern gable



Plate 12: Eastern gable end showing bare ground and poor GCN habitat



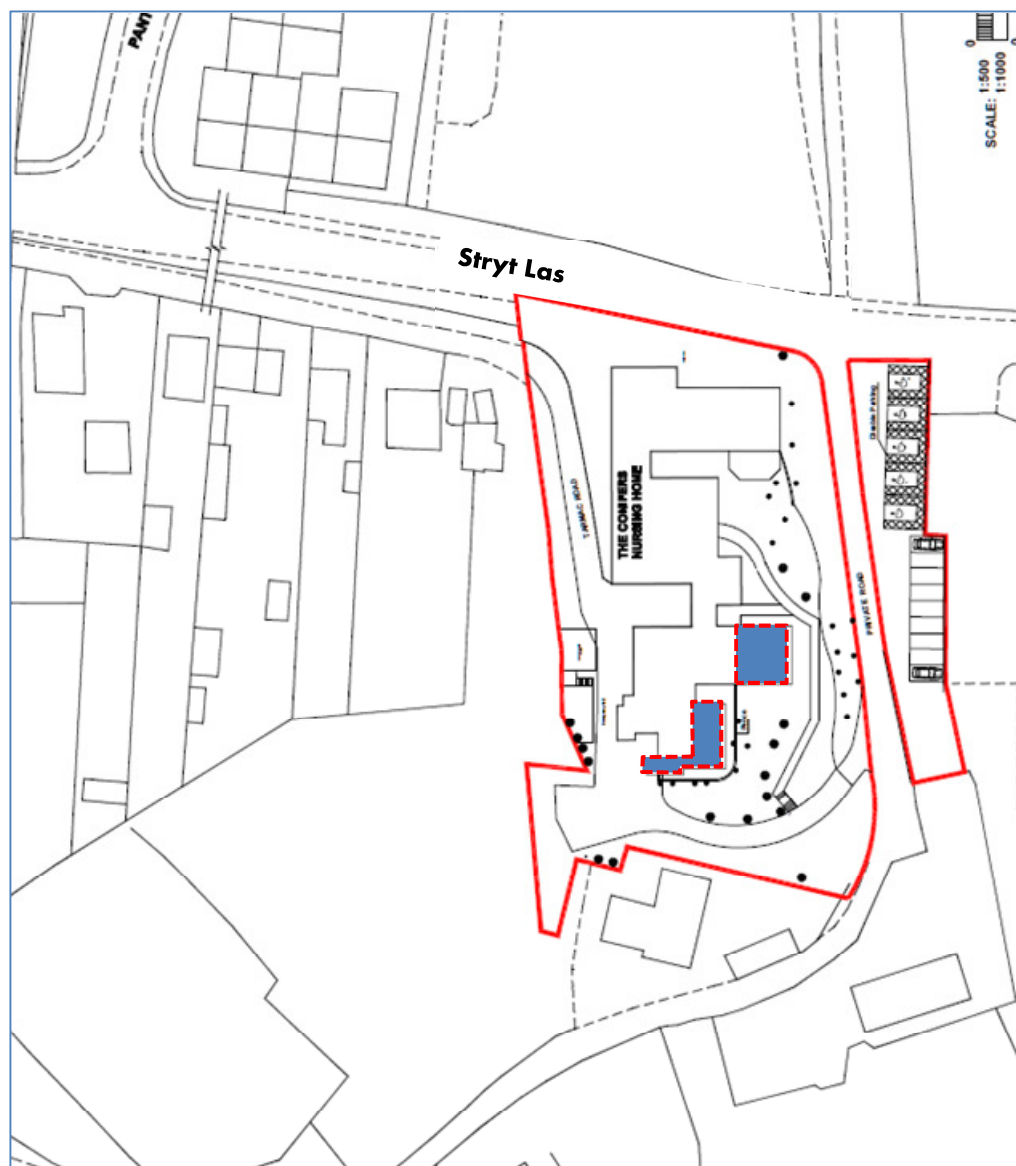
Plate 13: GCN refuge opportunities along the patio wall within the development site



Plate 14: Example of GCN refuge opportunities with development site



Figure 1 Building location Plan and location of extensions



Location of proposed extension

