

Ecological Impact Assessment



Project: Wellspring, Pearson Road, Neath

Instructed by: Mr Hadleigh Hobbs

Reported by: Ecological Services Ltd
10 Mount Pleasant, Llanelly Hill, Abergavenny, Monmouth NP7 0NT
Reported by

Author	Date	Version
Ash Harris	28th June 2021	V2

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1. Introduction

The applicant is seeking planning permission to create 8 residential properties at a parcel of land off Pearson Way, Neath. The proposed development site is centred at grid reference SS7464495712 and consists of a large open area of grassland and a small amount of scattered trees along the western boundary.

In order to undertake a full appraisal of the proposed development and the potential impacts and significance of impacts upon the habitats and species within the development site and adjacent habitats, an Ecological Impact Assessment (EclA) has been undertaken. An EclA helps provide a clear and methodical way to identify, quantify and evaluate the potential significant effects of a proposed plan or project.

1.1 Site Description

The proposed development site sits within the suburb of Pencaerau, Neath and is considered to be within an urban setting. Residential housing abuts the northern and southern boundaries. A tarmac footpath runs along the western boundary and Pearson Road forms the eastern boundary. The site itself slopes steeply from east to west. A drain cover is visible to the north of the site.

Garth Mor Woodland lies approximately 10m to the west of site and extends southwards. Residential housing is present to the north, east and west of site. A few houses are present to the south of site but open fields and woodland are present in the wider area.

1.2 Surveyor Experience

Aislinn Harris is a full member of Chartered Institute of Ecology and Environmental Management (CIEEM). Aislinn is an ecologist with 12 years experience undertaking a wide range of flora and fauna surveys. All survey work is undertaken following JNCC Phase 1 Survey Guidelines and CIEEM Guidelines for Preliminary Ecological Appraisal (2nd Ed 2017). Aislinn is a licenced bat ecologist (S085699-1) with a wide variety of experience undertaking bat activity surveys..

2. Legislation

The **Habitats Directive (Directive 92/43/EEC)** aims to '*contribute towards ensuring biodiversity through the conservation of natural habitats and of wild fauna and flora in the European territory of the Member States*'. The Directive requires the establishment and conservation of a network of sites within each member state which protect the rarest flora and fauna found across Europe. A number of species and habitats are listed in Annex 2 of the directive for which areas can be designated as a SAC. The aims of the Habitats Directive are transposed into British Law through the **Conservation of Habitats and Species Regulations 2017**.

The **Wildlife and Countryside Act (1981)** as amended provide the legislation framework and protection for SSSI. A SSSI is designated by a statutory nature conservation body such as Natural Resources Wales (NRW) for its make up of flora, fauna, geological and / or physiographical features. Each SSSI should have a citation which describes the site and its special features.

The Environment (Wales) Act 2016 is a wide reaching piece of legislation which seeks help improve the management of Wales' natural resources into the future. The Act sets out a Wales wide approach to planning and managing its natural resources at a national and local level in a sustainable manner. One main requirement for all public bodies, such as local councils, is to maintain and enhance biodiversity where possible within their duties.

2.1 Habitats

Statutory Designations

No statutory protected sites lie within or directly adjacent to the proposed development site.

Non Statutory Designations

Hedgerow is present to the east, south and north west of the site which qualifies as section 7 habitat under the Environment (Wales) Act 2016 and a UK Biodiversity Action Plan habitat. Any loss of such habitat, regardless of the quality, will require compensation measures.

2.2 Species

Great Crested Newt

Great crested newts (*Triturus cristatus*) are a European protected species and are protected under the Conservation of Habitats and Species Regulation 2017. In summary, they are protected from:

- Deliberate capture, killing and injuring,
- Deliberate disturbance of a breeding site or resting place,
- Deliberate taking or destroying of eggs,
- Damage or destruction of a breeding site or resting place.

Great Crested Newts are listed on schedule 5 of The Wildlife & Countryside Act 1981 which protects them from intentional or reckless disturbance or obstruction when using a structure or place for shelter and / or protection. It is also an offence to sell, offer or expose for sale a great crested newt.

Bats

All British bats are a European protected species and are protected under the Conservation of Habitats and Species Regulation 2017. In summary, they are protected from:

- Deliberate capture, killing and injuring,
- Deliberate disturbance of a breeding site or resting place,
- Damage or destruction of a breeding site or resting place.

Schedule 5 of The Wildlife and Countryside Act (1981) also protects all species of British bat and their roosting locations. British bats are protected from intentional or reckless disturbance and or obstruction of their roosting places. Barbastelle, bechstein, noctule, brown long eared, common pipistrelle, soprano pipistrelle, greater horseshoe and lesser horseshoe bats are also listed in section 7 of the Environment (Wales) Act 2016 which makes them a key species to sustain and improve biodiversity

Otter

The common otter (*Lutra lutra*) is a European protected species and is protected under the Conservation of Habitats and Species Regulations 2017. In summary, they are protected from:

- Deliberate capture, killing and injuring,
- Deliberate disturbance of a breeding site or resting place,
- Damage or destruction of a breeding site or resting place.

Otter are listed on schedule 5 of The Wildlife & Countryside Act 1981 which protects them from intentional or reckless disturbance or obstruction when using a structure or place for shelter and / or protection. It is also an offence to sell, offer or expose for sale an otter. Otter is listed in section 7 of the Environment (Wales) Act 2016 which makes them a key species to sustain and improve biodiversity.

Nesting Birds

All breeding birds are protected under schedule 1 of the Wildlife and Countryside Act (1981) as amended. Under this Act it is an offence to:

- Intentionally take, damage or destroy the nest of any wild bird while it is in use or being built.
- Intentionally take or destroy the egg of any wild bird

Enhanced protection is afforded to species listed on Schedule 1 of the Act, this additional protection makes it an offence to:

- Intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building, or at a nest containing eggs or young, or disturb the dependent young of such a bird.

Reptiles

Reptile such as the slow worm, common lizard, adder and grass snake are protected under the Wildlife and Countryside Act 1981(as amended). They are protected from killing, injuring and sale. In Wales sand lizard, smooth snake, adder, grass snake, slow worm and common lizard are listed in section 7 of the Environment (Wales) Act 2016 which makes them a key species to sustain and improve biodiversity.

Dormice

The dormouse (*Muscardinus avellanarius*) is a European protected species and is protected under the Conservation of Habitats and Species Regulations 2017. In summary, they are protected from:

- Deliberate capture, killing and injuring,
- Deliberate disturbance of a breeding site or resting place,
- Damage or destruction of a breeding site or resting place.

Dormouse are listed on schedule 5 of The Wildlife & Countryside Act 1981 which protects them from intentional or reckless disturbance or obstruction when using a structure or place for shelter and / or protection. It is also an offence to sell, offer or expose for sale a

native dormouse. Dormouse is listed in section 7 of the Environment (Wales) Act 2016 which makes them a key species to sustain and improve biodiversity.

Badger

Badgers are protected under the Protection of Badgers Act 1992. In summary they are protected from:

- Taking, killing or injuring;
- Cruelty;
- Interfering with a badger sett;
- The selling and possession of badgers;
- Marking or ringing.

Badgers are also listed on schedule 6 of the Wildlife and Countryside Act 1981 as amended.

Badgers tend to have a variety of setts with different uses and functions within the territory for the family unit. In general there is usually a main sett which the family will use the most. There are then annex, subsidiary and or outlier setts which depending on family structures and environmental pressures may be used at different times of the year. As female badgers tend to have their cubs over winter the disturbance and damage of badger setts is prohibited between December and June inclusive.

3. Preliminary Ecological Assessment

3.1 Desktop Study section

A data search undertaken with Aderyn to ensure all relevant ecological information for the local area is available. A 2km buffer zone was searched and records returned within 500m of site are noted below:

- Records for the presence of hedgehog - approximately 85m away,
- Record for the presence of slow worm - approximately 250m away,
- Bat record of 2 bats flying within a house - approximately 330m away,
- Foraging and commuting noctule & myotis species of bat - approximately 440m away,
- Record of a soprano pipistrelle bat roost - approximately 440m away,
- Numerous bird records including Black-headed Gull, Dunnock, House sparrow,

Records of note returned for the rest of the buffer zone are detailed below:

- Water Vole,
- Lesser horseshoe bat,
- King Fisher,
- Smooth Newt,
- Lapwing,

3.1.1 Protected Sites

A data search for species records was undertaken for the proposed development site and surrounding area. The search also considered statutory and non-statutory protected sites.

Statutory Protected Sites

The proposed development site does not lie within or directly adjacent to any statutory designated sites. The Earlswood Road Cutting and Ferryboat Inn Quarry Site of Special Scientific Interest (SSSI) lies approximately 1.9km away from site.

Non-Statutory Protected Sites

There are no non statutory designated sites within or directly adjacent to the proposed development site. A number of Sites of Importance for Nature Conservation (SINC) are present within the search area. The closest such site is the Garth Mor Woodland with lies

to the west of site separated from the development by a tarmac footpath. The remaining SINC in the local area and an approximate distance from the development site are listed below:

- NPT Watercourses
- TENNANT CANAL (1633m)
- ROMAN WAY REEDBED (1706m)
- BRITON FERRY WASTE GROUND (1768m)
- EARLSWOOD GRASSLANDS (1856m)
- NEATH CANAL (560m)
- BRUNEL DOCK GRASSLAND (1958m)
- EARLSWOOD AREA (1987m)
- NEATH ESTUARY (799m)
- GIANT'S GRAVE (997m)
- SQUARE POND (626m)
- BWLCH ROAD HEDGES (1819m)
- Gnoll Country Park (1729m)
- SHELONE WOODS (1345m)
- PENTREFFYNNON (1876m)
- THE WAUN, CIMLA (448m)
- GWLYPTIR MYNACHLOG NEDD (1554m)

The proposed development site sits within a B-Lines designation. A large number of Ancient Semi Natural Woodland is present within the search area. The closest such site is approximately 380m to the east.

3.1.2 Potential Impacts to Protected Sites

The development is situated directly adjacent to a SINC site. However no works will affect the non statutory protected site. A sensitive light design will also ensure that no indirect impacts to the site via vectors such as lighting will be experienced. The development is unlikely to affect any other protected sites in the wider area.

3.2 Site Survey Details

A walkover survey of the site was completed **20th May 2021**. The survey included all areas of land within the proposed development site boundary. A full list of species recorded can be found in Appendix 1.

The site is bounded by a **wooden close board fence** on the north, south and western boundary. The fence line along the west boundary has partially collapsed. The site is open along the eastern boundary. A small number of scattered trees are present along the western boundary of the site. Species noted include sycamore and a species of oak

thought to be common oak. The trees to the south west corner of the site are mature with a diameter of around 30cm at chest height.

The vast majority of the site is considered to be **species rich grassland**. Species noted include birds foot trefoil, field speedwell, common knapweed, common vetch, cuckooflower, red and white clover, annual meadow grass, creeping bent, yorkshire fog and silverweed. The grassland to the north of the site has a higher dominance of more ruderal species such as nettle, broadleaved and curled dock. This may indicate the area has been disturbed in the past. A **drain cover** is visible in this area and it is thought likely that the work to either install or manage the drain disturbed the ground cover allowing more ruderal species to establish.

3.3 Likely Significant Species Effects

GCN

There are no records for the presence of GCN within 2km of the proposed development site. The habitats currently found within the site boundary are considered to be unsuitable for use by such species. No further recommendation for GCN are made.

Dormice

There are no records for the presence of dormouse within 2km of the proposed development site. The habitats currently found within the site boundary are considered to be unsuitable for use by such species. No further recommendations for dormouse are made.

Bats

There are a number of records for bats within the local area. The closest such record is approximately 330m away and for 2 bats found flying within a residential property. There are no buildings within the development site boundary. The trees within the site boundary were subject to a ground based visual inspection for the potential presence of roosting bats.

No trees were observed to have suitable features for roosting use by bats. No gaps or cracks within any tree was noted. Whilst the surveyor considered it possible to see around all of the trees on site, the survey was undertaken in May when the trees are in leaf. Some potential roosting features higher in the trees could have been missed, although this is considered unlikely.

A small number of common bat species may use the site for foraging purposes on occasion. Roosting use by bats within the site boundary is considered highly unlikely. Consideration for use of the site by bats and the adjacent SINC woodland must be given.

Otters

No evidence of the presence of otter was found during the site visit. The habitats on site do not provide any cover for use by such species. No further recommendations for badger are made.

Badger

No evidence of the presence of badger was found during the site visit. It is considered highly unlikely that the proposed development site is used by badger. No further recommendations for badger are made.

Birds

The trees within the site boundary could be used by nesting birds during the spring and summer. **Precautionary measures for nesting birds are required.**

Reptiles

The site is considered to be fairly isolated from any adjacent habitat suitable for use by reptile. A road forms the eastern site boundary and a tarmac footpath forms the western site boundary. The boundary along the western boundary is not considered a significant constraint to reptile movement too and from the the adjacent SINC, however it would be less desirable for reptiles to move across it. The close board fence line along the northern and southern boundary could also restrict the movement of reptiles too and from the site.

The grassland within the site boundary is suitable for use by reptiles during the summer months. However the isolation of the site and possible historic disturbance need to be considered. The adjacent woodland to the west of site is separated by a tarmac footpath which is sub optimal habitat for reptiles to cross but they will if needed. The adjacent residential gardens could be used by reptiles to move into and out of the site but the close board fencing makes it difficult for reptiles to move through. The site is also open to the public and likely to be well used by locals. Any reptile refugia placed within the grassland are likely to be disturbed by curious locals.

On balance it is suggested we assume the presence of a small number of common reptiles within the site boundary and mitigate accordingly. It is unlikely that reptiles use the development site but the possible presence of individuals within the site boundary cannot be ruled out.

4. Impact Assessment

The role of a EclA is to address significant effects which the project may have. For the purpose of this assessment significant impacts will be those that affect legally protected sites and species within and directly adjacent to the proposed development site.

The EclA process presents a hierarchy of approaches to ensure a project of plan lowers its potential impacts. The works should seek to

- **AVOID** - Consider options to avoid any potential harm to an ecological feature,
- **MITIGATE** - If negative effects are unavoidable, measures should be implemented to minimise and reduce potential effects,
- **COMPENSATE** - If negative effects are still likely to be experienced despite measures to reduce impacts being implemented appropriate compensatory measures should be implemented.
- **ENHANCEMENT** - Works should always seek to provide net benefits for biodiversity to help meet the section 7 requirements of the Environment Act (Wales) 2016.

The scope of the proposed development works has been reviewed and streamlined to ensure only works necessary are to be undertaken. The new access pointing site is considered to have the highest potential ecological impact however this work is required to improve highways safety. The development proposals have the potential to negatively impact on:

- Bats
- Reptiles
- Nesting Birds

4.1) **Ecological Feature - Bats**

Whilst the presence or roosting bats within the site boundary is considered highly unlikely, the presence of foraging and commuting bats in the local area is likely. Garth More SINC lies adjacent to the development site, separated by a tarmac footpath. The woodland habitat is likely to be used for various nocturnal species such as bats. It is therefore important that the development does not result in light spill onto adjacent habitat.

Potential Impacts

- Loss of foraging and commuting habitat on site,

- Light spill onto adjacent SINC,

Measures to be Implemented

- All external lighting will be kept to the bare minimum required for health and safety reasons.
- Any external light source installed as part of the construction works will be motion activated and set to the lowest time to remain lit that is possible.
- Any external light source will be directional and will only illuminate a doorway or footpath as required. A directional light source can be cowed or recessed back into the casing to prevent light spill.
- All lighting must meet the recommendations in the BCT Guidance Note 08/18 Bats and artificial lighting in the UK document <https://theilp.org.uk/publication/guidance-note-8-bats-and-artificial-lighting/>

4.2) Ecological Feature - Reptiles

The proposed development site is considered to be suitable for use by reptiles during the summer months for foraging and commuting purposes. Due to the small size of the site and steep topography it is not possible to retain any habitat within the site boundary during construction. Whilst it is thought highly unlikely that any reptiles will be encountered during the site clearance works, a precautionary approach is to be adopted.

Potential Impacts

- Damage, death or injury to reptiles,

Measures to be Implemented

- All site contractors will be given a toolbox talk which covers the legal protection given reptiles, what they look like, where they may be found and what to do if reptiles are found at any point during the works on site.
- If site clearance works commence between the months of March to October inclusive the grassland will be cut in two stages. Vegetation cutting will be undertaken by hand and start on Pearson Way (the eastern boundary) and progress westwards. This will naturally encourage any reptiles present in to adjacent gardens of the adjacent SINC.
- The first stage vegetation cut will take vegetation down to a minimum height of 100mm. All arisings will be collected from site and removed within 24hours of being cut.
- The second stage vegetation cut will occur 24hours after the first stage. For the second stage vegetation will be cut to a maximum height of 50cm, as close to

ground level as possible. All arisings will be collected from site and removed within 24hours of being cut.

- If reptiles are seen during site clearance works the supervising ecologist will be consulted on how to proceed. Advice may entail that the ecologist visit site and move any animal to the adjacent woodland.
- The displacement fo reptiles from the site boundary will be temporary. Once construction work is completed, animals will be able to recolonise the gardens and soft landscaping within the site.

4.3) Ecological Feature - Nesting Birds

Nesting birds have the potential to use the trees within the proposed boundary. It is anticipated that the trees will be retained. Although some work to remove smaller trees maybe required. All wild birds are protected while nesting with some exceptions for certain pest species.

Potential Impacts

- Disturbance of the nesting birds.
- Loss of bird nesting habitat.

Measures to be Implemented

- Any tree removal within the site boundary will be completed **outside of the bird nesting season of March to August inclusive**. If this is not achievable an ecologist must inspect any trees or ground vegetation with the potential for birds to be present, for active birds' nests prior to removal works beginning. If an active nest or activity indicating a nest might be present is identified a buffer zone of at least 5m, up to 20m depending on species, around the nest must be observed until the chicks have fledged. Only then can the vegetation be removed.

5. Enhancement Measures

The Environment Act (Wales) 2016 places a duty on all competent authorities to ensure that biodiversity is not only conserved but enhanced. The proposed development works create potential features that can be improved for the benefit of biodiversity.

5.1 Provision of Bird Nesting Opportunities

- 1 x Vivara Pro Woodstone House Sparrow Nest Box will be erected on the north facing elevation of units 1, 2 and 3. The boxes will be built into the walls at the gable apex or eaves of the building.

5.2 Provision of Bat Roosting Opportunities

- 1 x Vivara Pro Build-In Woodstone Bat Box will be erected on the south facing elevation of unit 4.
- 1 x Vivara Pro Build-In Woodstone Bat Box will be erected on the west facing elevation of units 6, 7 and 8.
- All boxes will be built into the walls at the gable apex or eaves of the building. No lighting will be placed within 2m of any bat box.

5.3 New Hedgerow Planting

A habitat buffer will be created along the western boundary of the site within the rear garden of each unit. The buffer will create a vegetated corridor for wildlife to commute along the periphery of the development site boundary, helping to prevent habitat fragmentation.

The buffer zone will measure at least 1m in width and be planted with native hedgerow species to create a hedgerow / shrub area. Each owner of a plot within the site boundary will be advised that the hedgerow will be managed **once every two years** to ensure a dense hedgerow is created. Each hedgerow section will be trimmed **between the months of November to February inclusive** to avoid bird nesting season and allow any fruit or berries to be eaten by local wildlife.

5.4 Fencing

Any fencing within the site boundary will incorporate features to ensure it is wildlife friendly. Should any close board timber fencing be used it will have either:

- a 13cm by 13cm gap cut at ground level every 2m or;
- it will have a continuous gap of 13cm from the base of the fence and ground along the entire fence line,

Any mesh fencing must have a continuous gap of 13cm from the base of the fence and ground along the entire fence line.

6. Management Responsibilities

The proposed development site owner will have the responsibility to ensure the measures within this document are fully and continually implemented during the life time of the project. All site sub contractors must be fully inducted and made aware of the ecological constraints and required working methods.

Each plot will be sold to an individual buyer once construction is completed. Within the buyer information details on the buffer zone will be included. The buyer will be advised to manage the hedgerow sensitively for wildlife and that the hedge can only be cut once every 2 years between the months of November to February inclusive.

Bibliography

- Biodiversity: Code of practice for planning and development¹ published by the British Standards Institute (BS 42020:2013)
- CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine version 1.1. Chartered Institute of Ecology and Environmental Management, Winchester.
- European Communities (2000) MANAGING NATURA 2000 SITES The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC

Appendix 1 - Plant Species Recorded

Species	Common Name
Trees & Scrub	
<i>Acer pseudoplatanus</i>	Sycamore
<i>Quercus robur</i>	English oak
Herbaceous Plants	
<i>Cardamine pratensis</i>	Cuckoo flower
<i>Juncus conglomeratus</i>	Compact rush
<i>Taraxacum</i> spp	Dandelion
<i>Rumex obtusifolius</i>	Broad-leaved dock
<i>Filipendula ulmaria</i>	Meadow sweet
<i>Lotus corniculatus</i>	Bird's foot Trefoil
<i>Trifolium</i> sp	White Clover
<i>Ranunculus repens</i>	Creeping buttercup
<i>Urtica dioica</i>	Nettle
<i>Centaurea nigra</i>	Knapweed
<i>Rumex crispus</i>	Curled dock
<i>Geranium robertianum</i>	Herb Robert
<i>Veronica persica</i>	Common field speedwell
<i>Arrhenatherum elatius</i>	False oat grass
<i>Medicago arabica</i>	Spotted medick
<i>Bella perennis</i>	Daisy
<i>Trifolium pratense</i>	Red clover
<i>Trifolium repens</i>	White clover
<i>Leontodon hispidus</i>	Rough Hawkbit
<i>Plantago lanceolata</i>	Ribwort plantain
<i>Agrostis stolonifera</i>	Creeping bent
<i>Poa annua</i>	Annual meadow grass
<i>Cerastium fontanum</i>	Common mouse ear
<i>Geranium dissectum</i>	Cut leaved cranesbill
<i>Vicia sativa</i>	Common vetch

Appendix 2 - Proposed Development Site boundary

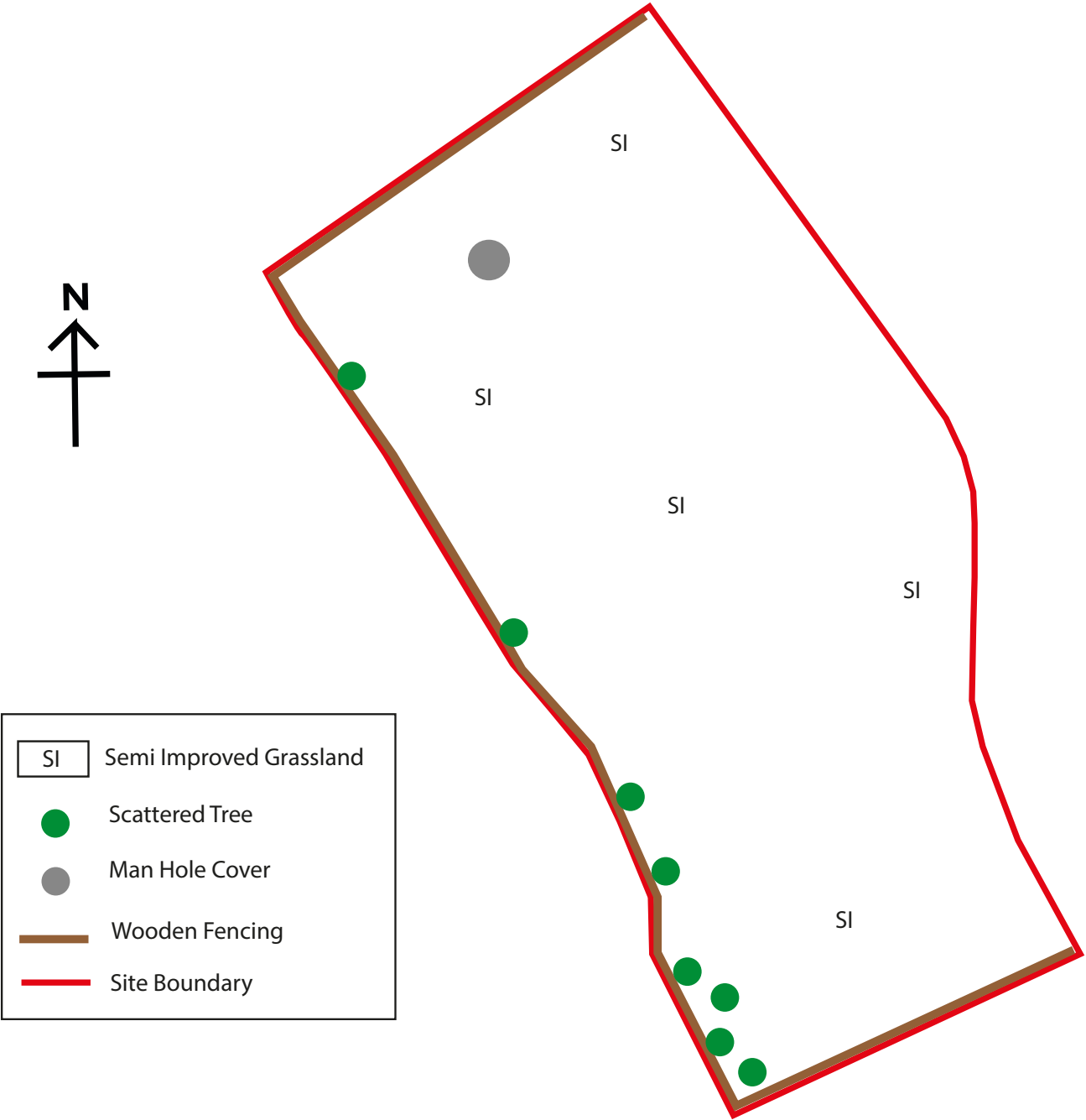


Appendix 3 - Phase 1 Habitat Map

WELLSPING, PEARSON WAY, NEATH

Habitat Map

May 2021



Appendix 4 - Site Photographs



Site looking southwards



Site looking northwards



View of steep slope on site



Scattered trees to the south west of site



Man hole cover to north of site



Western boundary of site