Whitcher Wildlife Ltd.
Ecological Consultants.

FORMER COMBS HOSTEL, HALL LANE, DEWSBURY.

OS REF: SE 25573 – 19016.

ECOLOGICAL IMPACT ASSESSMENT.

Ref No: **210150/EcIA/1.**

Date: **24th September 2021.**

Cliff Edge, Cliff Road, Darfield, Barnsley, S73 9HR.
Tel. 01226 753271.
info@whitcher-wildlife.co.uk www.whitcher-wildlife.co.uk
Company No. 4401613.

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1. INTRODUCTION.

1.1. Planning Permission is being applied for to develop the Former Combs Hostel site that lies on Hall Lane, Dewsbury into new housing.

1.2. Whitcher Wildlife Ltd was initially commissioned to carry out a Preliminary Ecological Survey in support of a planning application for the site.

1.3. That survey was carried out on 28th January 2021 and during that survey a number of potential ecological issues were identified and further species specific surveys were recommended for great crested newts, bats and nesting birds.

1.4. Subsequently a bat dusk emergence survey was carried out on 1st June 2021.

1.5. e-DNA samples for great crested newts were taken from Ponds 1, 2 and 3 on 1st June 2021.

1.6. This Ecological Impact Assessment (EcIA) has been prepared based on the findings of those surveys and outlines all relevant mitigation and enhancements that will be incorporated into the proposed development.

1.9. Appendices I to III of this report provide additional information on specific species and are designed to assist the reader in understanding the contents of this report.

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2. SURVEY METHODOLOGY.

2.1. Prior to visiting the site, the survey area was cross referenced to maps and aerial photographs to give a general idea of the habitats and potential issues within the area and to identify potential access and walking routes.

2.2. The survey area was walked where access was agreed and public rights of way were used where no access was agreed. All habitats within and immediately around the survey area were documented and the dominant species within that habitat listed in line with the JNCC Handbook for Phase 1 Habitat surveys.

2.3. The survey area and immediate surrounding area was thoroughly searched for evidence of badger (*Meles meles*) activity by looking for the following signs in line with Harris S, Cresswell P and Jefferies D (1989). *Surveying Badgers*. Mammal Society: -

* Badger setts.
* Badger latrines or dung pits.
* Badger snuffle holes and evidence of foraging.
* Badger paths.
* Badger prints in areas of soft mud.
* Badger hairs caught on fencing.

2.4. The survey area was searched for watercourses and where found all watercourses within the survey area and for approximately 50m in each direction were thoroughly searched for evidence of water vole (*Arvicola amphibius*) activity by looking for the following signs, in line with Rob Strachan, Tom Moorhouse and Merryl Gelling (2011). *Water Vole Handbook: Third Edition*: -

* Water vole burrows.
* Water vole faeces and latrines.
* Water vole feeding stations.
* Water vole runs.
* Water vole prints in areas of soft mud.
* Water vole lawns.
* Predator field signs.

2.5. The survey area was searched for watercourses and where found all watercourses within the survey area and for approximately 50m in each direction were thoroughly searched for evidence of otter (*Lutra lutra*) activity by looking for the following signs

in line with the P Chanin (2003). *Monitoring the Otter* and *Conserving Natura 2000 Rivers: Monitoring Series No10 Guidelines: -*

* Otter prints in soft mud.
* Otter spraints.
* Otter Holts.

2.6. The survey area was searched for watercourses and waterbodies. Where found, and where safe to enter the water, all were thoroughly searched for the presence of crayfish, for approximately 50m in each direction of the site, by searching under rocks and logs. Where stated, crayfish traps were also deployed into the watercourse. All survey work was carried out in accordance with the *Conserving Natural 2000 Rivers Monitoring Series No 1, Protocol for Monitoring the White Clawed Crayfish*.

2.7. The survey area was searched for mature trees and derelict buildings and where found these were checked for potential bat roosting sites in line with Collins, J. (ed.) (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edition)* by looking for the following signs: -

* Holes, cracks or crevices.
* Bat Droppings.

2.8. The land immediately adjacent to the survey area was assessed for bat roosting potential and bat foraging potential. Connective routes and flight lines were also assessed whilst on site and using maps of the area.

2.9. The area within 500m of the survey site was cross referenced to maps to highlight all ponds close to the site. Where possible, all ponds identified were accessed using agreed access or public rights of way to assess the potential for great crested newts (*Triturus cristatus*) to be present.

2.10. The ponds were subsequently thoroughly searched for evidence of great crested newt (*Triturus cristatus*) activity by carrying out e-DNA sampling techniques.

2.11. All survey work was carried out in-line with English Nature (2001). *Great crested newt mitigation guidelines*. English Nature.

2.12. The survey area was assessed for the potential for reptiles and suitable reptile habitats.

2.13. Where appropriate, the habitat within and surrounding the survey area was searched for species such as hazel, oak, honeysuckle, bramble and other species which may provide potential habitat for hazel dormice (*Muscardinus avellanarius*). Field signs such as feeding remains and nests were also searched for where possible, in line with P Bright, P Morris and T Mitchell-Jones *the Dormouse Conservation Handbook 2nd Edition*.

2.14. Where appropriate, the area within and surrounding the survey area was assessed for its potential to house habitat for red squirrels. Field signs of red squirrels were searched for at least every 50m, looking for any dreys, feeding signs or sightings of red squirrels.

2.15. All surveys were carried out in line with the Chartered Institute of Ecological and Environmental Management (CIEEM) survey standards and advice.

2.16. This document is prepared in line with The National Planning Policy Framework (NPPF). This sets out the government policy on biodiversity and nature conservation and places a duty on Planning Authorities to give material consideration to the effect of a development on legally protected species when considering planning applications. The NPPF and the Planning Practice Guidance on "Natural Environment" also promote sustainable development by ensuring that developments take account of the role and value of biodiversity and that it is conserved and enhanced within the development.

2.17. This report is prepared in line with the Natural Environment and Rural Communities (NERC) Act that came into force on 1st Oct 2006. Section 41 (S41) of the Act requires the Secretary of State to publish a list of habitats and species which are of principal importance for the conservation of biodiversity in England.

2.18. The survey was undertaken by a team led by Stevan Roebuck. Stevan has had experience carrying out great crested newt and bat surveys. Since 2013 Stevan has had experience in a professional capacity as a Wildlife Consultant carrying out ecology surveys, badger, great crested newt and bat surveys. Stevan holds a Natural England Survey License for Great Crested Newts and Bats and is currently working towards gaining further Natural England, NRW and SNH survey licences. Stevan is also a Qualifying Member of CIEEM.

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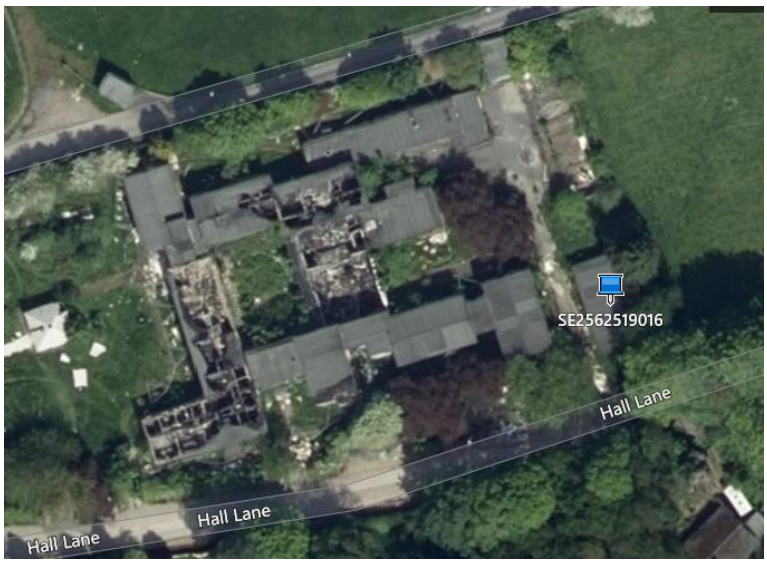
3. ECOLOGICAL BASELINE.

3.1. Data Search Results.

3.1.1. A desktop data search was requested from West Yorkshire Ecology Service for records of protected species and designated sites within 2km of the survey area.

3.1.2. There are five records of great crested newts within 2km of the survey area, although all records lie over 1.65km from the survey area. Four of the records are over twenty years old and the other record is from 2008.

3.1.3. There is a record of a Common Pipistrelle roost, recorded in 2007 located within the survey area around Building 9. The map below shows the location of the grid reference for this record. There is no more information on the roost.



3.1.4. There is a field record of a Common Pipistrelle bat located 40m to the southeast of the survey area, recorded in 2015. The map below shows this record, on the right.

3.1.5. There is a record of a Vesper bat species roost of 315 bats, recorded in 2004 located 20m from the survey area, on the opposite side of Hall Road. The map below shows this record, on the left.

3.1.6. Previous bat surveys have been carried out on the site, with a large bat roost identified within the southern corner of Building 6.

3.1.7. There are other records of bats and bat roosts, although all over 175m from the survey area.

3.1.8. There is one record of an otter, but this record is located over 1.6km from the survey area.

3.1.9. There are no designated sites within or adjacent to the survey area. The Kirklees Wildlife Habitat Network lies to the south of the survey area, on the opposite side of Hall Road.

3.1.10. The data search results cannot be placed in the public domain but are available to the client on request.

3.2. The Surveyed Area.

3.2.1. The surveyed area was the Former Combs Hostel, off Hall Lane, Dewsbury. The site includes all the old residential and maintenance buildings on site and the area of land to the west. The aerial photograph below shows the surveyed area and the immediate surrounding area.

3.2.2. The aerial photograph below shows the surveyed area and the wider surrounding area.

3.2.3. The area surrounding the surveyed site consist of sports fields to the north, a farm and scattered woodland to the east, parkland containing pockets of woodland to the south and built up residential areas to the west.

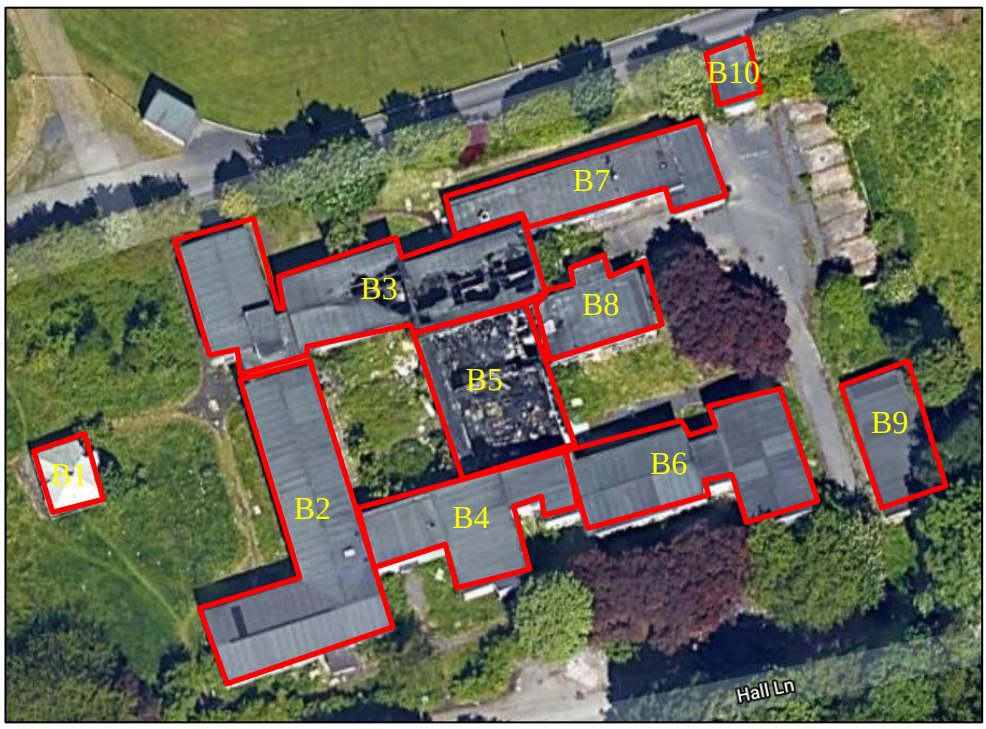
3.3. Description of Habitats.

3.3.1. Appendix IV of this report contains annotated maps marked up with the varying habitats that are cross referenced to target notes in Appendix V of this report. The habitats on and adjacent to the site are: -

- Building
- Improved Grassland
- Dense Scrub
- Mosaic of Scattered Scrub and Tall Ruderals
- Scattered Trees
- Defunct Hedge Species Poor
- Bare Ground
- Fence
- Wall

3.3.1.1. Building

The residential and maintenance buildings on site have been split and each given a number for the purpose of this report. Below is a map and brief description of each building with the buildings numbered 1 to 10.



3.3.1.1.1. Building B1.

B1 is a small pavilion building at the western end of the main buildings. The pavilion is open on two sides and supported with a steel frame with two brick walls to the north and eastern elevations, that are in a good state of repair. The roof is hipped and covered with timber and felt and is in a poor state of repair. The adjacent photograph shows B1.

3.3.1.1.2. Building B2.

B2 lies at the western end of the residential area and is a two-story building constructed with brick cavity walls that are generally in a good state of repair, although where some of the windows are missing, there are gaps into the cavity walls. All the windows and doors have been boarded up but some of the boards have been broken or removed. This building has been fire damaged with the roof completely missing with no loft space. The adjacent photograph shows B2.

3.3.1.1.3. Building B3.

B3 is attached to B2 on the northern elevation and is a two-story building constructed with brick cavity walls that are in a mixed state of repair. Some of the walls have been fire damaged with gaps created into the cavity walls. The windows and doors have been boarded up but some of the boards are now missing. The roofs of B3 are pitched with the western end intact, although the eastern roof has been fire damaged, as can be seen on aerial maps. The photographs below show the open windows at the western end of B3 and the fire damaged walls.


3.3.1.1.4. Building B4.

B4 is attached to B2 on the western elevation and is a two-story building constructed with brick cavity walls. The walls are generally in a good state of repair although there are areas that have been fire damaged leaving access into the cavity. The windows and doors have been boarded up but some of the boards are now broken or missing. The soffit and fascia boards are generally well fitted although there is some fire damage in places. The roof of B4 is semi pitched and appears to be intact although it could not be seen from ground level. No access was available to check for loft spaces. The photographs below show B4.


3.3.1.1.5. Building B5.

B5 lies between B3 and B4 and has been completely gutted by fire with only a timber shell and an internal solid brick wall still standing. The adjacent photograph shows the remainder of B5.

3.3.1.1.6. Building B6.

B6 is attached to B4 on the western elevation and is a two-story building constructed with brick cavity walls. The walls are in a good condition with no gaps to the cavity. The windows and doors have been boarded up but two of the boards on the first story are now missing. The fascia and soffit boards are generally well fitted although there is a small gap at the southeast corner. The roofs of B6 are pitched and covered with felt and appear in a good state of repair, although not all the roof could be seen from ground level. The photographs below show B6.

3.3.1.1.7. Building B7.

B7 is attached to B3 on the western elevation and is a single-story building constructed with brick cavity walls. B7 is the old boiler house and was open at the time of this survey. The roof is flat and covered with felt and has no loft space and is generally in a good state of repair, although there are gaps around a metal chimney flue and there are small areas where there are gaps behind the fascia boards. The adjacent photograph shows B7.

3.3.1.1.8. Building B8.

B8 lies just south of B7 and is a single-story building constructed with brick cavity walls. The walls are in a good state of repair with no gaps, cracks or missing bricks. The roof is flat and appears in a good state of repair with all fascia boards intact and well fitted. No access was available into B8 during this survey as all the windows and doors are boarded up. The adjacent photograph shows B8.

3.3.1.1.9. Building 9.

B9 lies in the southeast corner of the site and is a single-story building constructed with brick cavity walls. The walls are generally in a good state of repair although there is an area of missing brick in the eastern elevation. All windows and doors are boarded up with only a small broken piece of glass missing above the door. The roof is pitched and covered with felt and is in a good state of repair and all soffit and fascia boards are well fitted. No access was available into B9. The adjacent photograph shows B9.

3.3.1.1.10. Building B10.

B10 lies in the northeast corner of the site and is a small brick garage that has a steel roller shutter door with no windows. The garage has a flat roof and is in a good state of repair. No access was available into B10. The adjacent photograph shows B10.

3.3.1.2. Improved Grassland

At the western end of the site there is a large area of improved grassland and there are four small areas scattered around the buildings. The improved grassland contains species including perennial rye grass *(Lolium perenne)*, Yorkshire Fog *(Holcus lanatus)*, cocks foot *(Dactylis glomerata)* and false oat grass *(Arrhenatherum elatius)* with some tall ruderal species also identified including willowherb *(Chamaenerion sp(p)*, dock *(Rumex sp.)*, nettle *(Urtica dioica)* and thistle *(Cirsium sp(p)*. These areas will have been Amenity Grassland in the past but have been left unmanaged. The photographs below show two areas of Improved Grassland.


3.3.1.3. Dense Scrub

Throughout the surveyed area there are pockets of dense scrub that predominantly consist of bramble *(Rubus fruticosus)* with buddleia *(Buddleia davidii)*, ivy *(Hedera helix)*, dog rose *(Rosa canina)*, dogwood *(Cornus sp.)*, laurel *(Prunus laurocerasus)*, Cotoneaster *(Cotoneaster spp.)*, hazel *(Corylus avellana)*, hawthorn *(Crataegus monogyna)*, elder *(Sambucus nigra)*, sapling silver birch *(Betula pendula)*, ash *(Fraxinus excelsior)* and oak *(Quercus sp(p)* trees also present. The photographs below show areas of dense scrub.


3.3.1.4. Mosaic of Scattered Scrub and Tall Ruderal

There are patches of scattered scrub and tall ruderal species in the footprint of B5, between B7 and B8 and within an area of bare ground towards the eastern end of the site. These areas consist of bramble *(Rubus fruticosus)*, buddleia *(Buddleia davidii)*, willowherb *(Chamaenerion sp(p)*, nettle *(Urtica dioica)*, thistle *(Cirsium sp(p)*, ivy *(Hedera helix)*, elder *(Sambucus nigra)* and immature silver birch *(Betula pendula)* trees. The photographs below show two of these areas.


3.3.1.5. Scattered Trees

There are various scattered trees along the perimeter of the site and around the main buildings that include plum *(Prunus sp(p),* sycamore *(Acer pseudoplatanus),* silver birch *(Betula pendula),* ash *(Fraxinus excelsior)* hawthorn *(Crataegus monogyna)* and Leyland cypress *(Cupressocyparis leylandii).* The photographs below show some of the trees.


3.3.1.6. Defunct Hedge Species Poor

Along the southern site boundary there is a hedgerow that consists predominantly of hawthorn *(Crataegus monogyna)* and elder *(Sambucus nigra)* but also has some sapling ash *(Fraxinus excelsior)* and hazel *(Corylus avellana)* trees with bramble *(Rubus fruticosus)* and ivy *(Hedera helix)* tangled in the hedge. The adjacent photograph shows a section of the hedge.

3.3.1.7. Bare Ground

There are areas of bare ground scattered around the site that include a large tarmac area to the west, a tarmac and concrete parking area to the east and various tarmac and concrete paths linking the buildings. The photographs below show two of the areas of bare ground.

3.3.1.8. Fence

Within the surveyed area there are several fences that include Heras fencing, which has been erected around the buildings, timber lath fencing within a section of the hedgerow to the south, timber ranch fencing along the eastern site boundary and chain link and palisade fencing at the northeast corner of the site. The photographs below show three types of fences.


3.3.1.9. Wall

Three walls were identified within the surveyed area, a brick wall was located at the eastern end of the site, a stone wall at the southeast corner and two small brick walls either side of a small set of steps to the west of the buildings. The adjacent photograph shows the wall to the east.

3.4. Description of Fauna.

3.4.1. No badger setts or other badger field signs were identified within the surveyed area during this survey of the site.

3.4.2. No watercourses that may provide a suitable habitat for water voles, otters or freshwater white clawed crayfish were identified within the surveyed area.

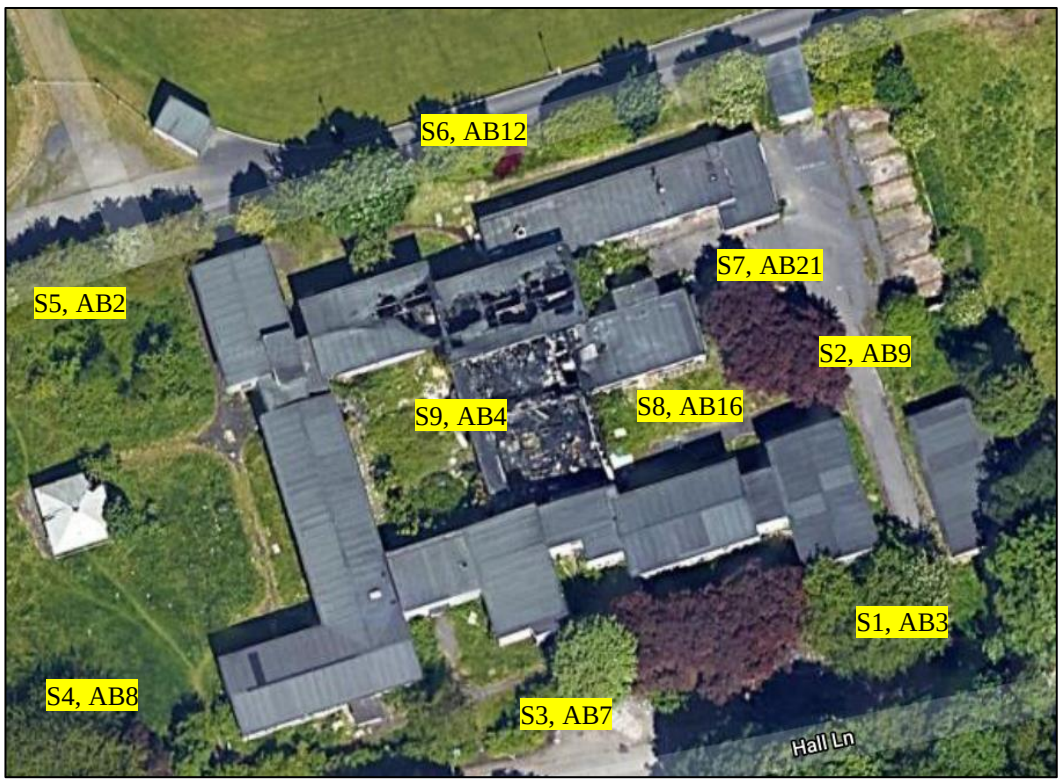
3.4.3. The buildings within the surveyed area all provide some potential for roosting bats, although as most of the buildings were either boarded up or unsafe to access, it was not possible to fully assess the level of bat potential within the buildings. Previous bat activity surveys of the site have identified a large Common Pipistrelle bat roost within the southeast corner of B6 and the data search identified a record of a bat roost within Building B9.

3.4.3.1. Bat Dusk Emergence Survey Results.

3.4.3.2. A bat dusk emergence survey was carried out on Buildings 2 to 10 by a team of surveyors from Whitcher Wildlife Ltd on 1st June 2021. Three of the surveyors hold current Natural England bat survey licences and six surveyors are experienced assistants.

3.4.3.3. The evening of the survey was warm, still and clear with a temperature of 19.5℃ recorded at 21.30 that dropped to 13℃ at 22.50.

3.4.3.4. All surveyors were equipped with Batbox Duet bat detectors, static Anabat recorders for subsequent computer analysis and two-way radios for communication. The aerial photograph below shows the location of the surveyors (S) and the Anabat recorders (AB).



3.4.3.5. Below are the results of each surveyor and the Anabat recorders.

3.4.3.5.1. Surveyor 1.

- 21.51 – A Common Pipistrelle was heard not seen

- 21.59 - A Common Pipistrelle was heard not seen
- 22.12 – A Common Pipistrelle passed over the site from north to south
- 22.25 - A Common Pipistrelle passed over the site from north to south

Anabat 3 with surveyor 1 recorded twenty-three Common Pipistrelle bat calls between 21.50 and 22.37.

3.4.3.5.2. Surveyor 2.

- 22.11 – A Common Pipistrelle past east to west
- 22.16 – A Common Pipistrelle was heard not seen
- 22.20 – A Common Pipistrelle flew west to east
- 22.22 – A faint common Pipistrelle was heard not seen
- 22.24 – A Common Pipistrelle flew north to south
- 22.29 - A Common Pipistrelle was heard not seen
- 22.30 - A Common Pipistrelle was heard not seen

Anabat 9 with surveyor 2 recorded a total of nine Common Pipistrelle bat calls between 22.16 and 22.37.

3.4.3.5.3. Surveyor 3.

- 21.50 – A Common Pipistrelle was heard to the south
- 21.53 - A Common Pipistrelle was heard to the south
- 21.57 – A Common Pipistrelle was heard foraging to the south
- 21.59 - A Common Pipistrelle was heard foraging to the south
- 22.12 – A Common Pipistrelle was heard not seen
- 22.16 – A Common Pipistrelle passed over from north to south
- 22.20 - A Common Pipistrelle passed over from north to south
- 22.22 - A Common Pipistrelle passed over from north to south
- 22.25 - A Common Pipistrelle passed over from north to south

Anabat 7 with surveyor 3 recorded a total of eight Common Pipistrelle bat calls between 21.51 and 22.25.

3.4.3.5.4. Surveyor 4.

- 21.51 – A Common Pipistrelle flew west to east over the site
- 22.02 – A Common Pipistrelle flew from the east over building then flew back east
- 22.11 – A Common Pipistrelle flew east to west over site
- 22.13 – A faint Common Pipistrelle was heard not seen
- 22.15 - A faint Common Pipistrelle was heard not seen
- 22.17 - A Common Pipistrelle flew from the east over building then flew back east

Anabat 8 with surveyor 4 recorded a total of eight Common Pipistrelle bat calls between 21.51 and 22.20.

3.4.3.5.5. Surveyor 5.

- 22.11 – Two Common Pipistrelle bats flew north to south over site
- 22.15 – A Common Pipistrelle flew north to south over site
- 22.16 – A Common Pipistrelle flew north to south over site
- 22.21 - A Common Pipistrelle flew north to south over site

Anabat 2 with surveyor 5 recorded a total of thirteen Common Pipistrelle bat calls between 22.10 and 22.26.

3.4.3.5.6. Surveyor 6.

- 22.14 – A faint Common Pipistrelle was heard not seen
- 22.16 - A faint Common Pipistrelle was heard not seen
- 22.18 - A faint Common Pipistrelle was heard not seen
- 22.28 – A faint Common Pipistrelle was heard not seen
- 22.33 – A faint Common Pipistrelle was heard not seen
- 22.39 - A faint Common Pipistrelle was heard not seen

Anabat 12 with surveyor 6 recorded a total of two Common Pipistrelle bat calls between 22.11 and 22.30.

3.4.3.5.7. Surveyor 7.

- 22.16 – A Common Pipistrelle was heard not seen passing to the east
- 22.20 – A Common Pipistrelle briefly foraged from south to east
- 22.22 – A Common pipistrelle was heard not seen foraging
- 22.24 – A Common Pipistrelle past over site from north to south
- 22.30 – A Common Pipistrelle past over from south to northwest

Anabat 21 with surveyor 7 recorded a total of four Common Pipistrelle bat calls between 22.16 and 22.30.

3.4.3.5.8. Surveyor 8.

- 22.04 – A Common Pipistrelle was heard foraging to the west
- 22.10 – A Common Pipistrelle flew over site from east to north
- 22.20 – A Common Pipistrelle flew north to southeast over site
- 22.28 – A Common Pipistrelle was heard not seen

Anabat 16 with surveyor 8 recorded a total of two Common Pipistrelle bat calls between 22.20 and 22.29.

3.4.3.5.9. Surveyor 9.

- 21.58 – A Common Pipistrelle flew west to south over site
- 22.08 – 22.25 - A Common Pipistrelle flew from the north and foraged around buildings
- 22.20 – A Common Pipistrelle flew west to east over site
- 22.28 – A Common Pipistrelle flew west to south over site

Anabat 4 with Surveyor 9 recorded a total of one-hundred and eleven Common Pipistrelle bat calls between 21.57 and 22.27.

3.4.3.6. During the survey, no bats were seen to emerge from any of the surveyed buildings.

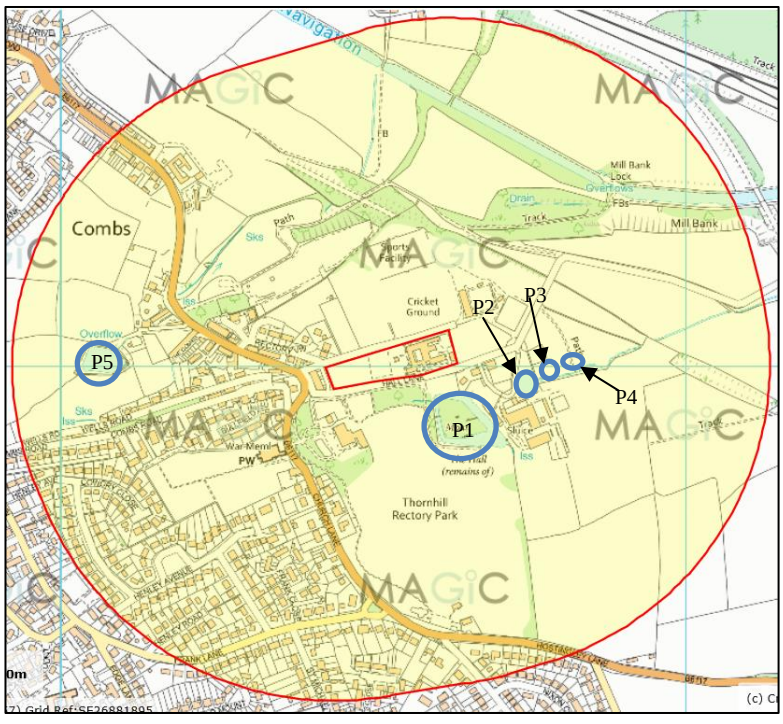
3.4.3.7. The level of bat activity around the site was very low throughout the survey with occasional Common Pipistrelle bats passing over the site, other than around

Surveyor 9 who had a single Common Pipistrelle bat foraging in the middle of the site.

3.4.4. There are various scattered trees within the surveyed area. Most of the trees provide no potential for roosting bats, although some provide low potential for roosting bats.

3.4.5. The hedgerow along the southern site boundary and scattered trees along the western site boundary will provide moderately suitable habitat for foraging and commuting bats. The scattered woodland within the parkland to the south of the site will provide high potential for foraging and commuting bats.

3.4.6. Five ponds with the potential to provide a suitable habitat for great crested newts were identified within 500m of the surveyed area whilst on site and by looking at maps of the surrounding area. The aerial map below shows the location of the site, the five ponds and a 500m buffer around the site. Two of the ponds are not shown on the map below but can be seen on aerial maps.



3.4.6.1. Three of the ponds were visited during this survey and a HSI (Habitats Suitability Index) score given to the ponds. A HSI gives an idea on how suitable the

ponds are to support breeding great crested newts. Below is a table with the results of the HSIs for the ponds.

HSI		P 1	P2	P 3
SI 1	Location	1	1	1
SI 2	Pond Area	N/A	1	1
SI 3	Pond Drying	0.9	0.5	0.5
SI 4	Water Quality	0.67	0.33	0.33
SI 5	Shade	0.6	1	1
SI 6	Fowl	0.67	1	0.67
SI 7	Fish	0.67	0.67	0.67
SI 8	Ponds	0.6	0.6	0.6
SI 9	Terrestrial Habitat	1	1	1
SI 10	Macrophytes	0.4	0.3	0.7
Total score		0.7	0.68	0.71
Presence		Good	Average	Good

3.4.6.2. Pond 1 is a moat located within the woodland to the south of the site. The pond was given a HSI score of 0.7, Good. The adjacent photograph shows part of the moat.

3.4.6.3. Pond 2 lies to the southeast of the site within a farm. The pond lies on the west side of a public footpath. The pond was given a HSI score of 0.68, Average. The adjacent photograph shows the pond.

3.4.6.3. Pond 3 lies to the southeast of the site within a farm. The pond lies on the eastern side of the public footpath and is joined by flowing water to Pond 2. The pond was given a HSI score of 071, Good. The adjacent photograph shows the pond.

3.4.6.4. No HSI could be given to Ponds 4 and 5 as there was no available access to the ponds.

3.4.6.5. e-DNA samples were taken of ponds 1, 2 and 3 on 1st June 2021. All three ponds returned a negative result for the presence of great crested newts. The table below shows the e-DNA test results.

Lab Sample No.	Site Name	O/S Reference	SIC	DC	IC	Result	Positive Replicates
4877	COMBS P2	SE 25831 18995	Pass	Pass	Pass	Negative	0
4878	P1	SE 25752 18961	Pass	Pass	Pass	Negative	0
4879	P3	SE 25593 18984	Pass	Pass	Pass	Negative	0

3.4.7. All the buildings within the surveyed area provide nesting bird potential during the nesting bird season, which extends between March and September each year. The vegetation within the surveyed site also provides an abundance of suitable nesting bird opportunities, particularly the dense scrub, hedgerows and scattered trees. Old inactive nests were identified within the trees along the western site boundary. As this survey was carried out in January, a thorough nesting bird survey was not carried out.

3.4.8. The surveyed area provides low potential habitat for reptiles as there are very few areas of refugia that reptiles could utilise, although the areas of bare ground may be suitable for basking reptiles.

3.4.9. The surveyed area does not provide any suitable habitat for hazel dormice as the site lies outside the natural range of the species.

3.4.10. The scattered trees within the surveyed area would provide a suitable habitat for red squirrels. However, the surveyed area lies outside the natural range of the species.

3.4.11. Cotoneaster is a non-native, alien, invasive, plant species, listed on Schedule 9 of the Wildlife and Countryside Act 1981. Cotoneaster was identified within the surveyed area adjacent to B4 and B5 and B5 and B6. The adjacent photograph shows the plant.

****

4. ASSESSMENT OF IMPACTS, MITIGATION AND RESIDUAL EFFECTS.

4.1. Designated Sites.

4.1.1. Assessment.

4.1.1.1. No designated sites were identified within or immediately adjacent to the surveyed area.

4.1.1.2. The Kirklees Wildlife Habitat Network lies to the south of the survey area, on the opposite side of Hall Road, over 10m from the southern site boundary.

4.1.2. Mitigation.

4.1.2.1. Works will be confined to the development site and will not affect Hall Lane or the land to the south.

4.1.2.2. There is a stone boundary wall alongside Hall Lane bordering the Wakefield Wildlife Habitat Network to the south which will prevent any accidental entry into this area.

4.1.3. Residual Effects.

The works will have **No Negative Impact** on the Wakefield Wildlife Habitat Network.

4.2. Habitats.

4.2.1. Assessment.

4.2.1.1. The hedgerow along the southern site boundary is a Priority Habitat as listed on the NERC Act 2006. Most of the existing hedgerows will be removed with two small areas on the northern boundary and one small area on the southern boundary retained. Therefore, there will be a high impact on habitats with high ecological value.

4.2.1.2. The remainder of the site is mainly buildings and bare ground with pockets of scrub and tall ruderal. There is an area of improved grassland at the western end of the site and a few small areas within the site. These have been amenity grassland that has been well mown but has now been left and has a low level of species present. All these areas are of low ecological value.

4.2.1.3. The works will have a high impact on habitats of low ecological value.

4.2.1.4. The table below provides an assessment of the baseline area habitats Biodiversity Units present on the site.

Habitat Type	Area in ha.	Distinctiveness	Condition Assessment	Biodiversity Units.
Urban - Developed land; sealed surface	0.4	V. Low	N/A	0Bu
Grassland - Modified grassland	0.29	Low	Poor	0.58
Heathland and shrub - Mixed scrub	0.36	Medium	Moderate	2.88
Total	1.05			3.46 Bu

4.2.1.5. The table below provides an assessment of the baseline linear habitats Biodiversity Units present on the site.

Hedgerow Type	Length in km.	Distinctiveness	Condition Assessment	Biodiversity Units.
Native Hedgerow	0.19	Low	Poor	0.38
Total	1.05			0.38 Bu

4.2.2. Mitigation.

4.2.2.1. Three small areas of native hedgerow, two along the northern boundary and one on the southern boundary will be retained. Any gaps within the hedge will be 'Gapped Up' with native hedging plants to improve and enhance the retained hedgerows.

4.2.2.2. Along the northern boundary, a 2m high native species hedgerow will be planted, which will join with the two retained sections of hedgerow and will form a near continuous hedgerow along the northern boundary.

4.2.2.3. Further native species hedgerows will be planted along the eastern and western site boundaries.

4.2.2.4. A number of trees along the northern and eastern boundaries will be planted on the site as part of the landscaping. These will be Heavy and Extra Heavy Standards including native fruit and berry bearing species.

4.2.2.5. The three areas of hedgerow and all retained trees will be protected during the works on the site with a protective fence to prevent the tracking of machinery, storage of chemicals and building materials in these areas.

4.2.2.6. As part of the landscaping of the site, there will be shrub planting, which will include native species, including fruit and berry bearing species.

4.2.2.7. The following tables show the post development habitats on the site and their biodiversity value.

Habitat Type	Area in ha.	Distinctiveness	Condition Assessment	Biodiversity Units.
Urban – Vegetated garden	0.24	Low	Poor	0.46
Grassland - Modified grassland	0.009	Low	Moderate	0.03

Urban - Introduced shrub	0.28	Low	Fairly Poor	0.81
Urban - Street Tree	0.24	Low	Moderate	0.37
Urban - Developed land; sealed surface	0.52	V.Low	N/A	0Bu
Total	1.05			1.67 Bu

Hedgerow Type	Length in km.	Distinctiveness	Condition Assessment	Biodiversity Units.
Native Hedgerow	0.25	Low	Moderate	0.92
Total	1.05			0.92 Bu

4.2.2.8. The results show that there will be a considerable loss of area habitat Biodiversity Units (reduces from 3.46 to 1.67Bu) while the hedgerow Biodiversity Units will increase from (0.38 to 0.92Bu). Overall, this represents a loss, decreasing the overall Biodiversity value from 3.84Bu to 2.59Bu.

4.2.3. Residual Effects.

The residual impact of the development on habitats will remain a **Moderate Negative Impact at a Local Level**.

4.3. Species.

4.3.1. Bats.

4.3.1.1. Assessment.

4.3.1.1.1. There are ten buildings within the surveyed area. During the initial survey of the site, Buildings 2 to 10 were assessed as providing potential for roosting bats, although as the buildings have been heavily fire damaged, it was not safe to access the buildings internally to thoroughly survey for bat roost potential.

4.3.1.1.2. Bat roosts have previously been identified within Buildings 6 and 9 in 2004 and 2007, including a large Common Pipistrelle Maternity roost. However, follow up surveys carried out by an alternative consultancy found no bat roosts present within any of the buildings and the dusk emergence survey carried out by Whitcher Wildlife Ltd on 1st June 2021 also identified no bat roosts within any of the buildings on site.

4.3.1.1.3. There are various scattered trees within the surveyed area, the majority of the trees provide no potential for roosting bats, although some of the trees provide low potential for roosting bats.

4.3.1.1.4. The site is assessed to provide low quality foraging habitat for bats along the southern site boundary. During the bat dusk emergence survey, low levels of bat activity were recorded around the site with just occasional bats passing over the site and a single Common Pipistrelle foraging between Buildings 5 and 6.

4.3.1.2. Mitigation.

4.3.1.2.1. Bat bricks will be installed into the new buildings erected on the site to enhance the sites roosting bat potential.

4.3.1.2.2. There will be no fragmentation of the perimeter habitat and in addition, further native species planting will be undertaken to further enhance the site perimeter and its value to bats.

4.3.1.2.3. A sensitive lighting scheme will be designed to avoid light impact on adjacent trees or hedgerows. This will utilse down lights that will illuminate the areas necessary for security only and will work on a PIR system to reduce lighting times.

4.3.1.3. Residual Effects.

By following the guidance provided above, the proposed development will have **No Negative Residual Impact** on bats.

4.3.2. Birds.

4.3.2.1. Assessment.

The buildings, scattered trees, dense scrub and the hedgerows along the site boundary provide nesting habitat for birds during the nesting season, which extends from March to September each year. Any works to the buildings or any vegetation clearance during the nesting season will potentially have a Negative Impact on any nesting birds present.

4.3.2.2. Mitigation.

4.3.2.2.1. Any works to the buildings or any vegetation clearance will be carried out outside the nesting bird season, which extends from March to September each year. Any works to the buildings or any vegetation clearance during the nesting season will be preceded by a nesting bird survey and any active nests identified will remain undisturbed until the young have fledged.

4.3.2.2.2. Additional nesting opportunities will be provided in the additional planting to be provided around the site perimeter and within the new buildings to be erected on site.

4.3.2.3. Residual Effects.

By following the guidance provided above, the proposed development will have **No Negative Residual Impact** on nesting birds.

4.3.3. Invasive Species/ Cotoneaster

4.3.3.1. Assessment.

Cotoneaster is a non-native, alien, invasive, plant species, listed on Schedule 9 of the Wildlife and Countryside Act 1981. Cotoneaster was identified within the surveyed area adjacent to B4 and B5 and B5 and B6.

4.3.3.2. Mitigation.

The Cotoneaster that is growing within the site will be removed and disposed of as contaminated waste. All parts of the plant including its berries will be removed.

4.3.3.3. Residual Effects.

By following the guidance provided above, the proposed development will have **No Negative Residual Impact** on spreading the Cotoneaster plant.

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5. COMPENSATION AND ENHANCEMENT MEASURES.

5.1. In line with the National Planning Policy Framework, it is necessary to provide biodiversity enhancements on the site.

5.2. Integrated bat bricks will be installed in the walls of 20% of the new houses to provide additional bat roosting opportunities. The design of bat brick shown below, or equivalent, will be installed high in gable end walls where they are not above windows or doors.

5.3. Six Vivaro Seville nest boxes, three with a 28mm entrance and three with a 32mm entrance will be placed on suitable trees around the site to provide nesting opportunities for a range of bird species. These will be installed at least 3m above the ground.

5.4. An integrated swift nest box will be installed in 20% of the new houses to be built on the site. The design will be as shown below or equivalent.

5.5. Access across the site will be provided for hedgehogs, small mammals and reptiles. Any fences between gardens will be furnished with gaps approximately 130mm square to allow that free movement.

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Prepared by:	
Stevan Roebuck	Date: 18th June 2021.

Checked by:	
Derek Whitcher. BSc, MCIEEM, MCMI	Date: 21st June 2021.

Amended by:	
Derek Whitcher. BSc, MCIEEM, MCMI	Date: 24th September 2021.

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Appendix I. BAT INFORMATION.

Ecology

There are currently 18 species of bat residing in Britain, 17 of which of which are known to breed here. They are extremely difficult to identify in the hand and even more so in flight.

All appear to be diminishing in numbers, probably due to habitat change and shortage of food, caused by pesticides, as insects are their sole diet.

As their diet consists solely of insects, bats hibernate during the winter when their food source is at its most scarce. They will spend the winter in hollow trees, caves, mines and the roofs of buildings.

Certain species, particularly the pipistrelle (the commonest and most widespread British bat) can quickly adapt to man-made structures and will readily use these to roost and to rear their young.

Surveys

During walkover surveys, bat roosts can be identified by looking for:

- Suitable holes, cracks and crevices within any building, tree or other structure.
- Bat droppings along walls, window cills, or on the ground.
- Prey remains, such as insect wings.

Further investigations can be made using endoscopes, by carrying out aerial inspections of trees or by conducting bat activity surveys during dusk and dawn over summer months.

Legislation

Bats are protected under Appendix II and III of the Bern Convention (1982), Schedule 5 and 6 of the Wildlife and Countryside Act (1981), Annex IV of the Habitats Directive (some species under Annex II), Annex II of the Conservation of Habitats and Species Regulations (2010) and EUROBATS agreement. Numerous species are

also listed under section 41 of the Natural Environment and Rural Communities Act (2006) making them species of principal importance.

All bats and their roosts are therefore protected in the UK. This makes it an offence to kill, injure or take any bat, to interfere with any place used for shelter or protection, or to intentionally disturb any animal occupying such a place.

The UK has designated maternity and hibernacula areas as Special Areas of Conservation (SAC's) under the Habitats Directive. Implementation of the UK Biodiversity Action Plan also includes action for a number bat species and the habitats which support them.

Where development proposals are likely to affect a bat roost site, a licence is required from Natural England.

Appendix II. NESTING BIRD INFORMATION.

Ecology

The nesting season will vary according to the weather each year but generally commences in March, peaks during May and June and continues until September. It is also worth remembering that some birds nest in trees and scrub, but others are ground nesting or prefer man- made structures or buildings.

Surveys

Nesting bird surveys search for potential nest sites in vegetation, buildings etc. Potential nesting sites are observed over a suitable period of time for bird movements or calling male birds that would indicate the presence of a nest. The presence of a nest can be identified from the field signs without the necessity to see the nest itself, thereby avoiding any disturbance of the nests. The best way to avoid this issue is to plan for vegetation clearance to be carried out outside the bird-nesting season.

Legislation

Nesting birds are protected under The Wildlife and Countryside Act 1981.

Part 1. -(1) Of the Act states that: - If any person intentionally: - kills, injures or takes any wild bird; takes, damages or destroys the nest of any wild bird while that nest is in use or being built; or takes or destroys an egg of any wild bird, he shall be guilty of an offence.

Part 1. -(5) of the Act states that: - If any person intentionally: - disturbs any wild bird included in Schedule 1 while it is building a nest or is in, on, or near a nest containing eggs or young; or disturbs young of such a bird, he shall be guilty of an offence and liable to a special penalty.

The Countryside and Rights of Way Act 2000 amends the above by inserting after “intentionally” the words “or recklessly”.

Appendix III. INVASIVE PLANT SPECIES INFORMATION.

Ecology

The Government has acknowledged the problems that can be caused by non-native invasive species. In 2008 the Government launched "The Invasive Non-Native Species Framework Strategy for Great Britain". The strategy provides a framework for a more co-ordinated approach to invasive species management. It seeks to create a stronger sense of shared responsibility across government, key organisations, land managers and the public.

The Non-Native Species Secretariat has been established to oversee the implementation of the strategy. Details of the secretariat including risk assessments and action plans for some species are available at www.nonnativespecies.org.

In general, there are four basic methods of controlling weeds; mechanical, chemical, natural and environmental.

- ***Mechanical control*** *includes cultivation, hoeing, pulling, cutting, raking, dredging or other methods to uproot or cut weeds.*
  Where this method is used all plant material must be considered "controlled waste" and must be disposed of properly.
- ***Chemical control*** *uses approved herbicides.*
- ***Natural control*** *uses pests and diseases of the target weed to weaken it and prevent it from becoming a nuisance.*
- ***Environmental control*** *works by altering the environment to make it less suitable for weed growth, for example by increasing or decreasing water velocity.*

Surveys

A site will be searched for invasive plant species growing on site, from mature plants to new shoots. A site will also be searched for dead stems indicating that plants that may have seasonally died back are present.

Legislation

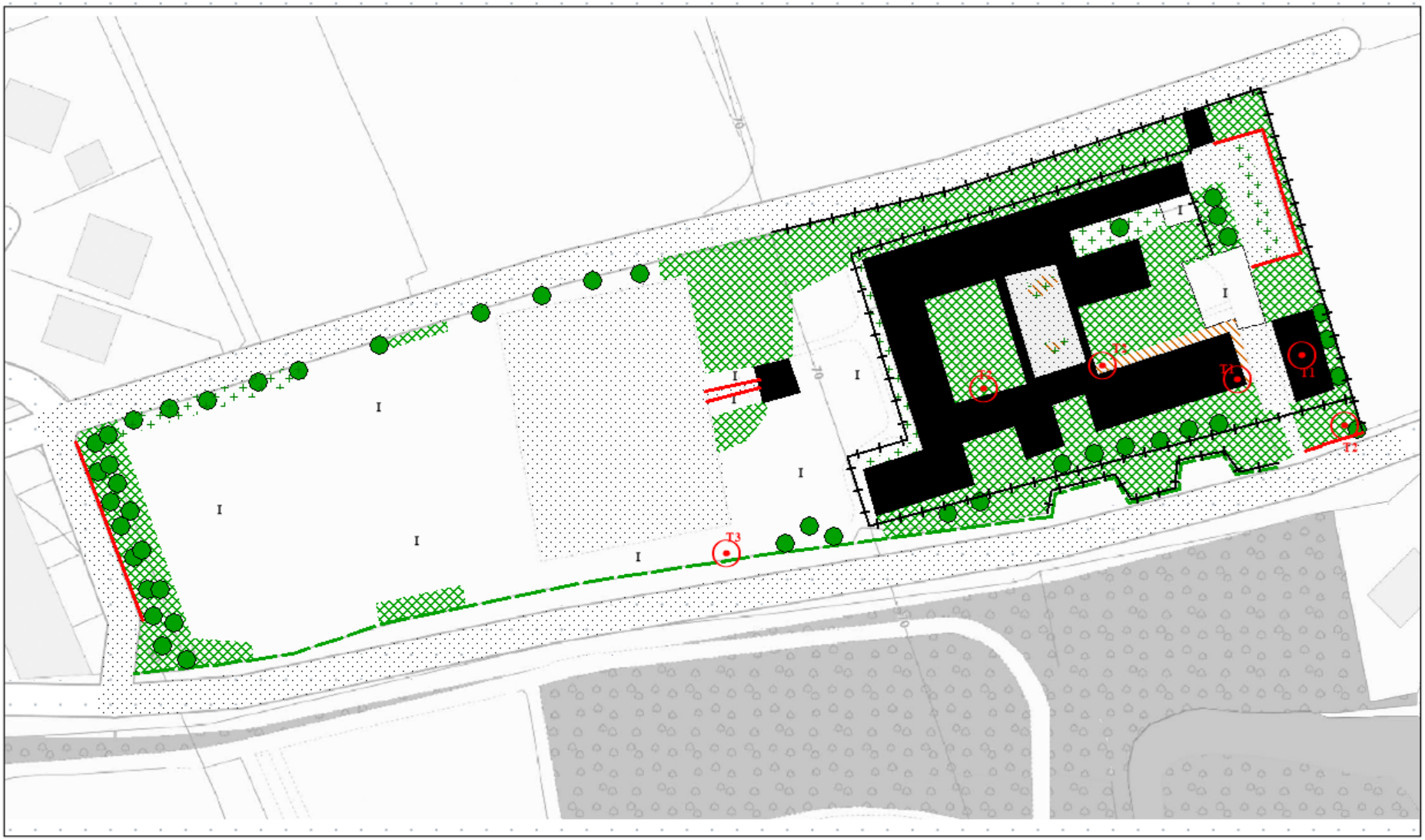
Invasive species listed under Schedule 9 are prohibited from release into the wild. Schedule 9, Section 14(2) prohibits 'planting' or 'causing to grow' in the wild of any plant listed in Part 2 of Schedule 9.

The following is a list of all the species of plant listed under Schedule 9 of The Wildlife and Countryside Act 1981.

Common Name	**Scientific Name**	**England & Wales**	**Scotland**
Alexanders, Perfoliate	*Smyrnium perfoliatum*	✓	
Algae, Red	*Grateloupia luxurians*	✓	
Archangel, Variegated Yellow	*Lamiastrum galeobdolon subsp. Argentatum*	✓	
Azalea, Yellow	*Rhododendron luteum*	✓	
Balsam, Himalayan	*Impatiens glandulifera*	✓	
Cotoneaster	*Cotoneaster horizontalis*	✓	
Cotoneaster, Entire Leaved	*Cotoneaster integrifolius*	✓	
Cotoneaster, Himalayan	*Cotoneaster simonsii*	✓	
Cotoneaster, Hollyberry	*Cotoneaster bullatus*	✓	
Cotoneaster, Small Leaved	*Cotoneaster microphyllus*	✓	
Creeper, False Virginia	*Parthenocissus inserta*	✓	
Creeper, Virginia	*Parthenocissus quinquefolia*	✓	
Dewplant, Purple	*Disphyma crassifolium*	✓	
False-acacia	*Robinia pseudoacacia*		✓
Fanwort	*Cabomba caroliniana*	✓	✓
Fern, Water	*Azolla filiculoides*	✓	✓
Fig, Hottentot	*Carpobrotus edulis*	✓	✓
Garlic, Three-Cornered	*Allium triquetrum*	✓	
Hogweed, Giant	*Heracleum mantegazzianum*	✓	✓
Hyacinth, water	*Eichhornia crassipes*	✓	✓
Kelp, Giant	*Macrocystis angustifolia*	✓	✓
Kelp, Giant	*Macrocystis integrifolia*	✓	✓
Kelp, Giant	*Macrocystis laevis*	✓	✓
Kelp, Giant	*Macrocystis pyrifera*	✓	✓
Kelp, Japanese	*Laminaria japonica*	✓	✓

Knotweed, Giant	*Fallopia sachalinensis*	✓	
Knotweed, Hybrid	*Fallopia japonica x Fallopia sachalinensis*	✓	
Knotweed, Japanese	*Fallopia japonica*	✓	
Knotweed, Japanese	*Polygonum cuspidatum*		✓
Leek, Few-flowered	*Allium paradoxum*	✓	✓
Lettuce, water	*Pistia stratiotes*	✓	✓
Montbretia	*Crocosmia x crocosmiiflora*	✓	
Parrot's-feather	*Myriophyllum aquaticum*	✓	
Pennywort, Floating	*Hydrocotyle ranunculoides*	✓	
Potato, Duck	*Sagittaria latifolia*	✓	
Primrose, Floating Water	*Ludwigia peploides*	✓	
Primrose, Water	*Ludwigia grandiflora*	✓	
Rhododendron	*Rhododendron ponticum*	✓	
Rhubarb, Giant	*Gunnera tinctorial*	✓	
Rose, Japanese	*Rosa rugosa*	✓	
Salvinia, Giant	*Salvinia molesta*	✓	✓
Seafingers, Green	*Codium fragile*	✓	
Seafingers, Green	*Codium fragile tomentosoides*		✓
Seaweed, Californian Red	*Pikea californica*	✓	✓
Seaweed, Hooked Asparagus	*Asparagopsis armata*	✓	✓
Seaweed, Japanese	*Sargassum muticum*	✓	✓
Seaweeds, Laver (except native species)	*Porphyra sp. except -* *P. amethystea* *P. leucosticta* *P. linearis* *P. miniata* *P. purpurea* *P. umbilicalis*	✓	✓
Shallon	*Gaultheria shallon*		✓
Stonecrop, Australian swamp	*Crassula helmsii*	✓	✓
Wakame	*Undaria pinnatifida*	✓	✓
Waterweed, Curly	*Lagarosiphon major*	✓	✓
Waterweeds	*All species of the genus Elodea*	✓	

Appendix IV. ANNOTATED MAP OF THE SURVEY AREA.

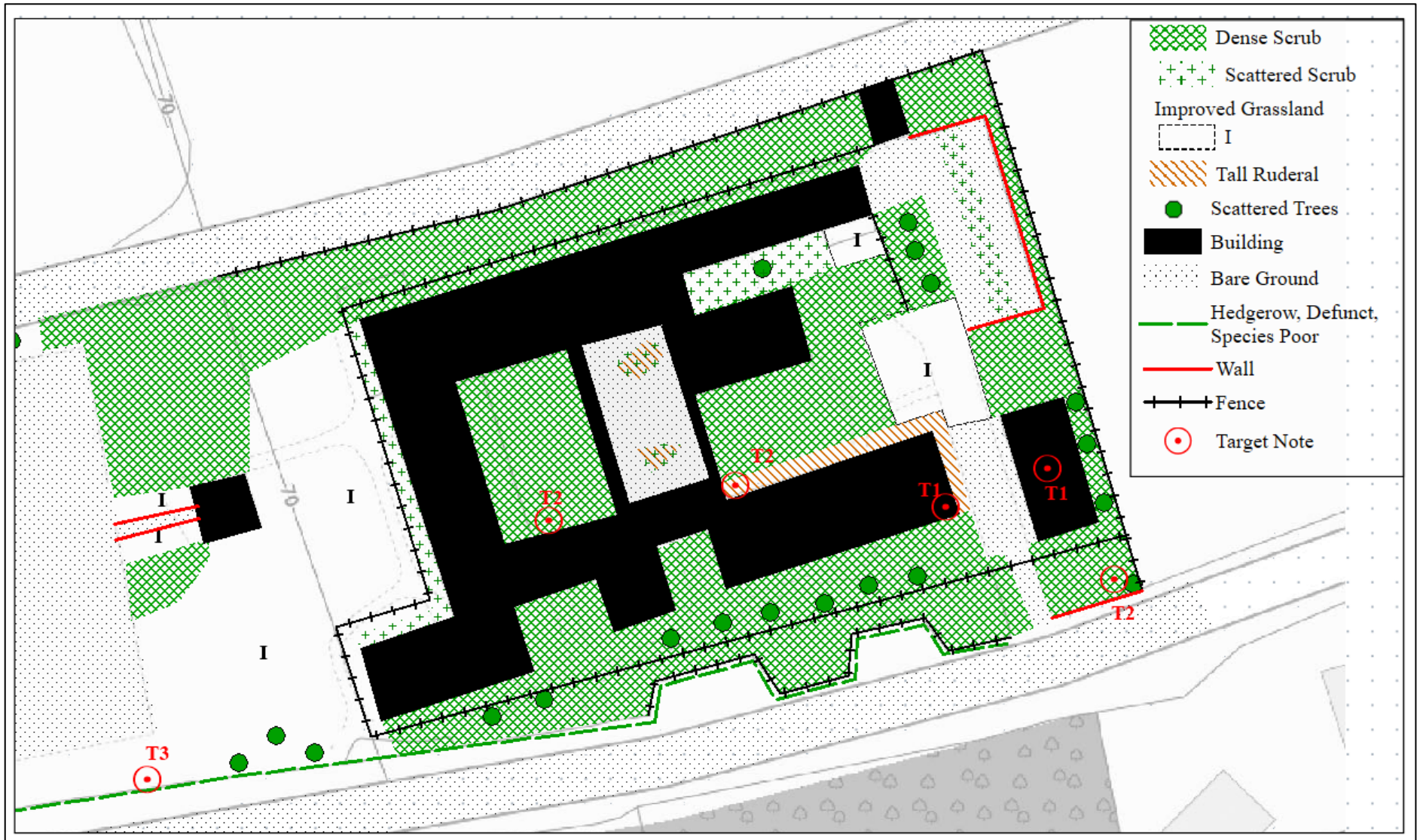


Site Name: Former Combs Hostel, Hall Lane.

Prepared by: Whitcher Wildlife Ltd

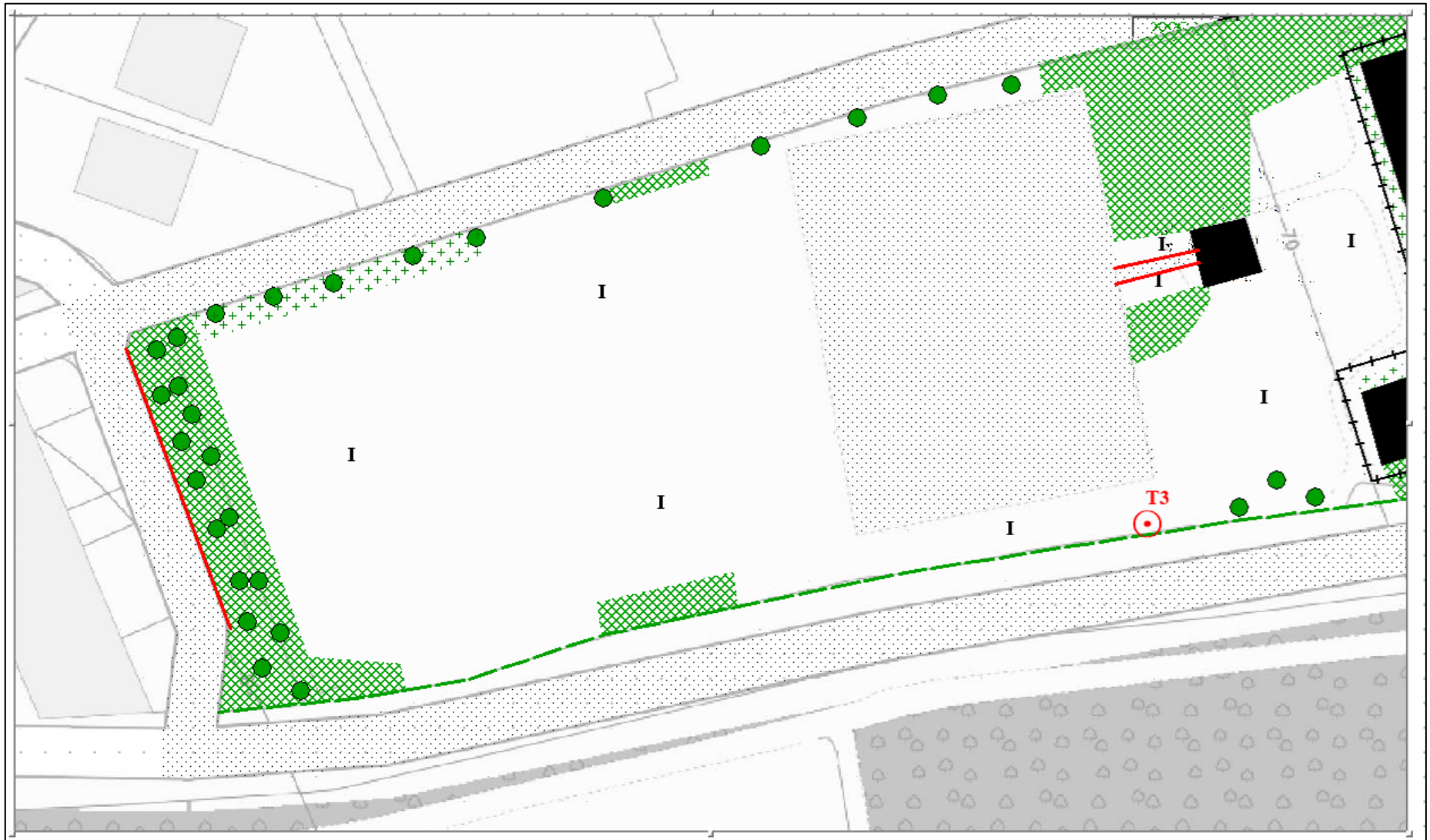
Reference: 210150

Date: 8th February 2021



Site Name: Former Combs Hostel, Hall Lane. Prepared by: Whitcher Wildlife Ltd

Reference: 210150 Date: 8th February 2021



Site Name: Former Combs Hostel, Hall Lane.

Prepared by: Whitcher Wildlife Ltd

Reference: 210150

Date: 8th February 2021

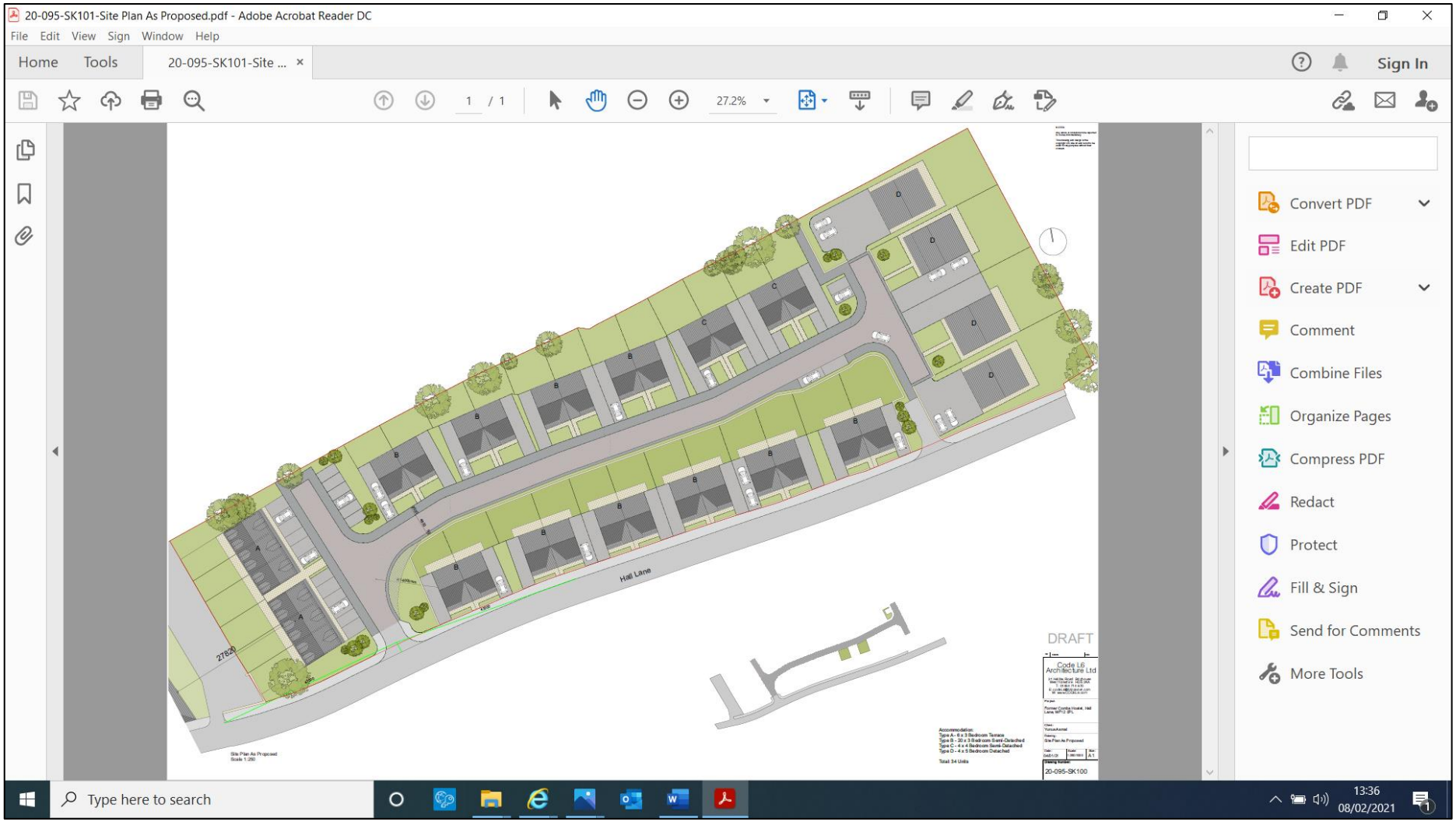
Appendix V. TARGET NOTES.

Target Note 1 are the bat roost that have previously been recorded in B6 and B9.

Target Note 2 are the clumps of Cotoneaster growing on the site.

Target Note 3 is the hedgerow along the southern site boundary.

Appendix VI. DEVELOPMENT PLAN.



Appendix VII. LANDSCAPE PLAN