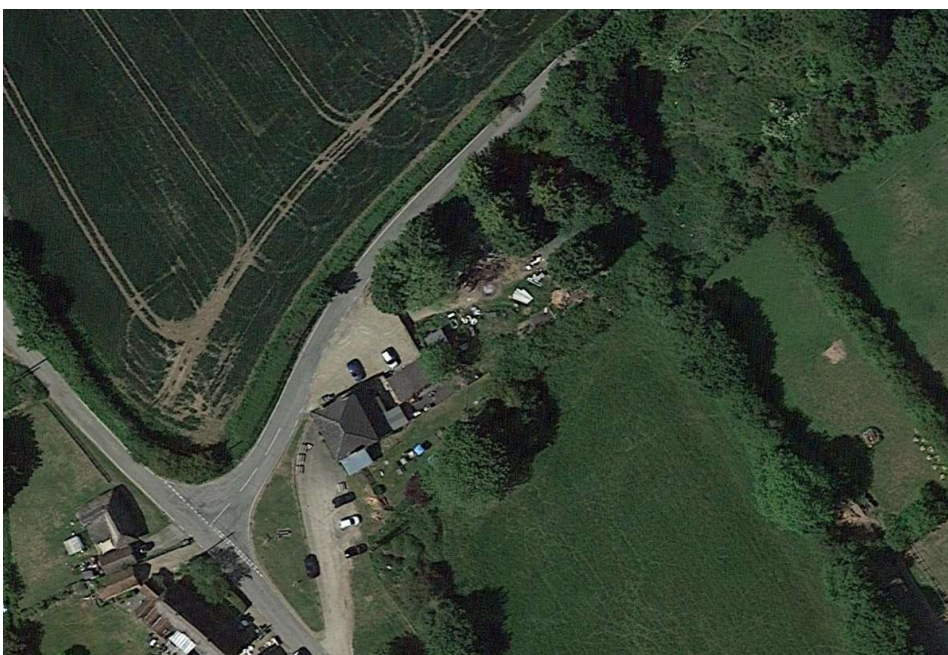
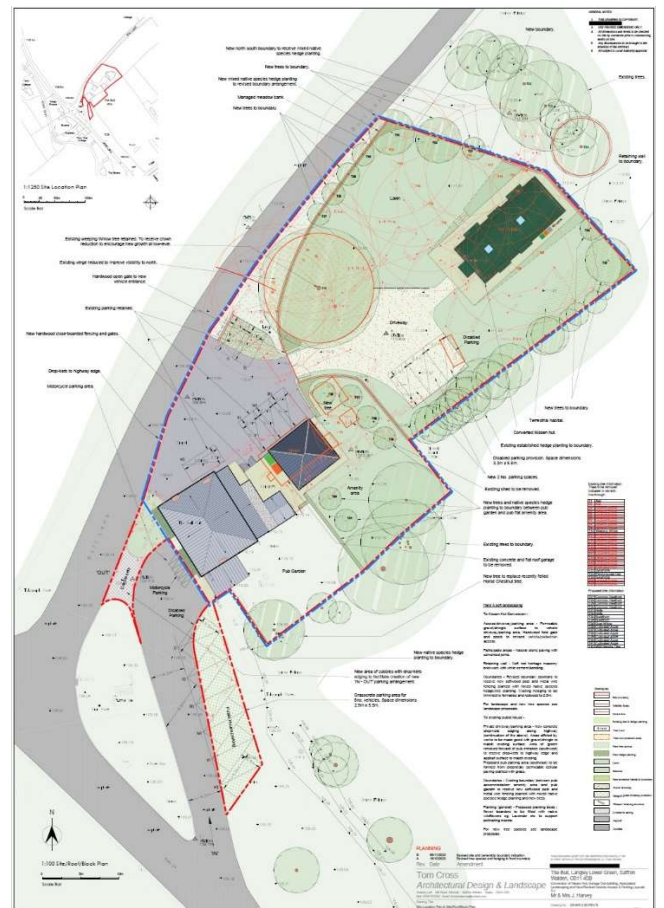
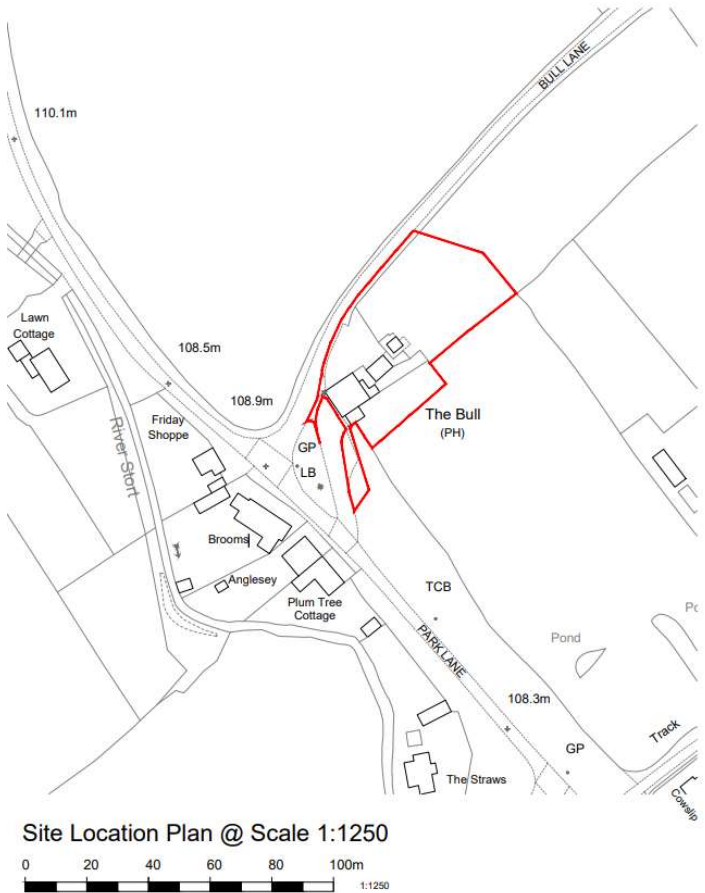


Ecology report

1. Commissioned by Mr James Harvey
2. Planning application details

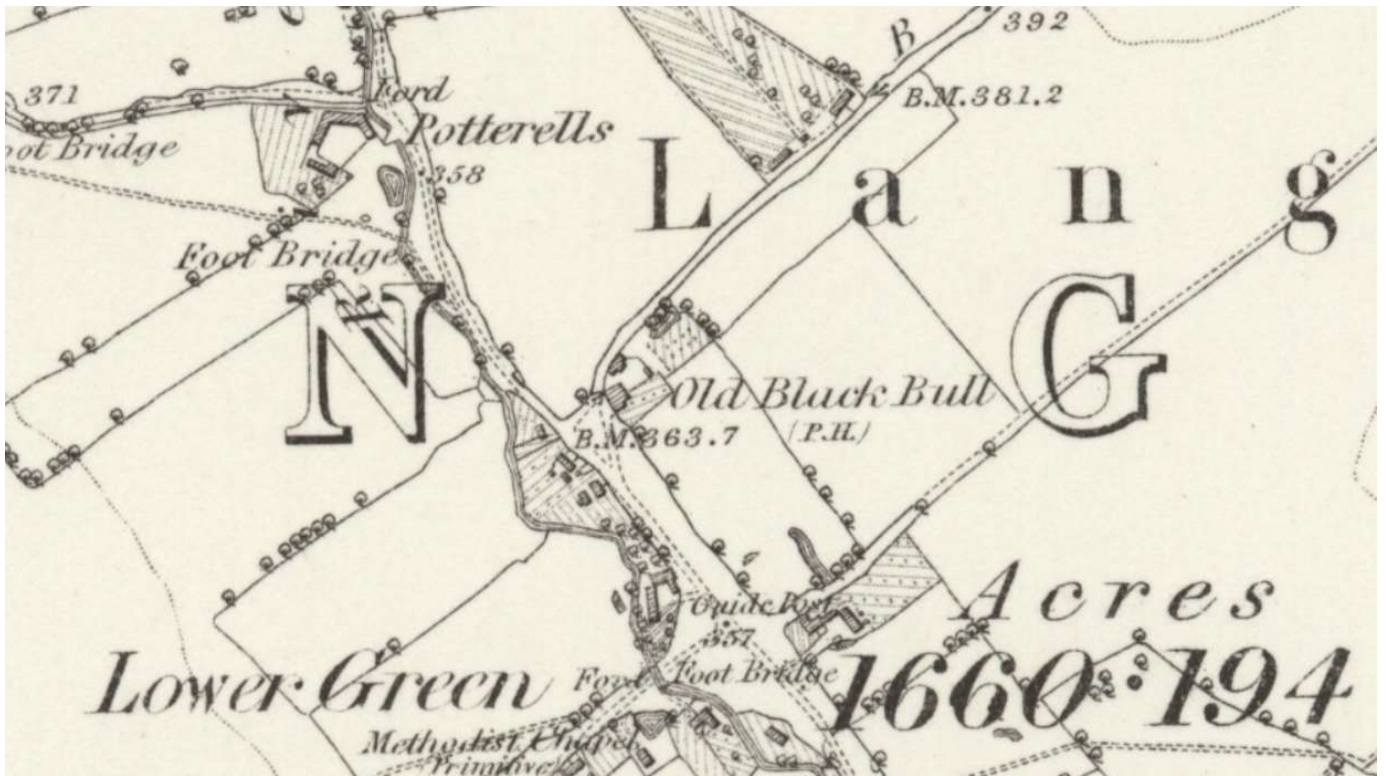
Application for the conversion of the existing Nissen Hut to a single detached C3 dwelling, in addition the conversion of the existing Garage Out-building with associated landscaping and a new/revised vehicle access and parking layout on land to the rear of, but separate to, The Bull Public House, Langley Lower Green, Essex. CB11 3SB



Google Earth image of the application site and road junction.

3. Location and site history

Detailed knowledge of the history of a site is very important in order to understand the Ecology.



1883



1883

1883 showing the current building built in the mid to late 19th century, it is thought to have retained the windows from the original building first established in 1780. Also, by 1878 the O.S. shows an additional building to the north of the Public House. One could speculate that it was a very large stable block or maybe living accommodation. Image below.



Image dating to 1878 showing the large outbuilding to the west of the current pub building.
(Courtesy of The Bull website, 'History')

There is a pond also marked on the land behind the Old Black Bull Public House. Part of the profile of this pond is still just visible on the ground. However, the remnant profile does not appear to have been inundated for some decades; terrestrial perennials only, no aquatic or marginal plant species recorded in 2022.

Listing schedule.

LANGLEY LOWER GREEN

1.

5222

Black Bull Inn

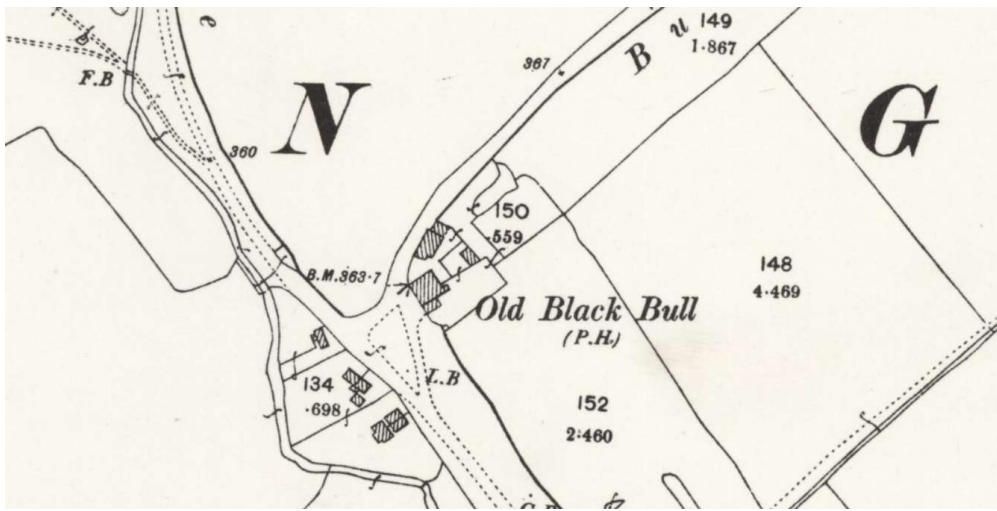
TL 43 SW 15/1282 II GV

2.

Mid-late C19 red brick building. Two storeys. Three window range of iron ornamental lattice casements. Central doorway. Roof slate, hipped, with end chimney stacks. **Included for group value.**

Listing NGR: TL4371734556

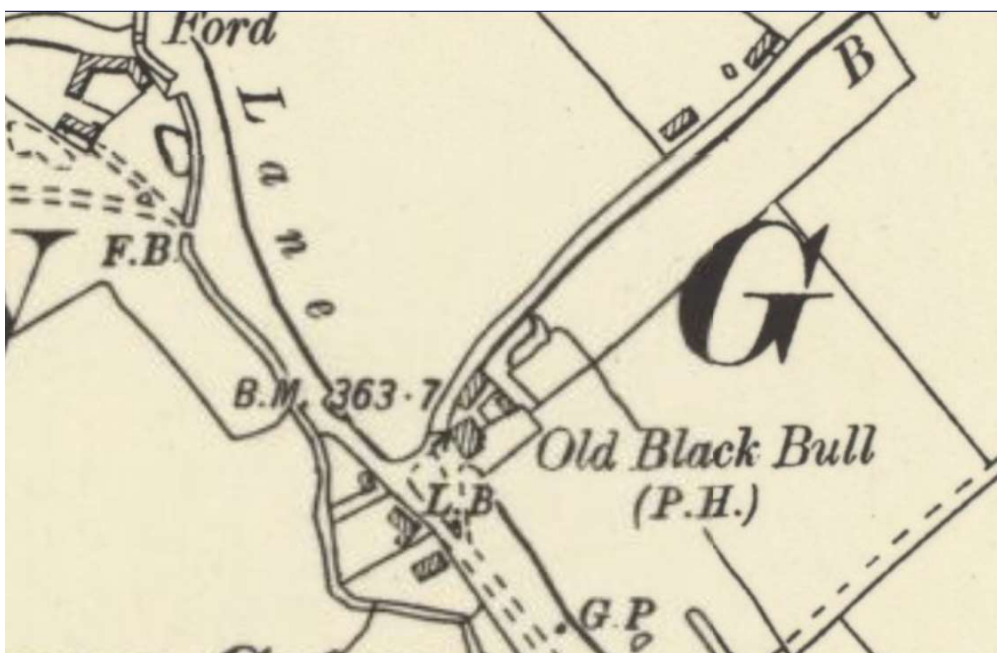
The listing makes clear that the current building does not warrant separate listing status. It is listed merely due to the fact that it lies in close proximity to other listed properties.



1897



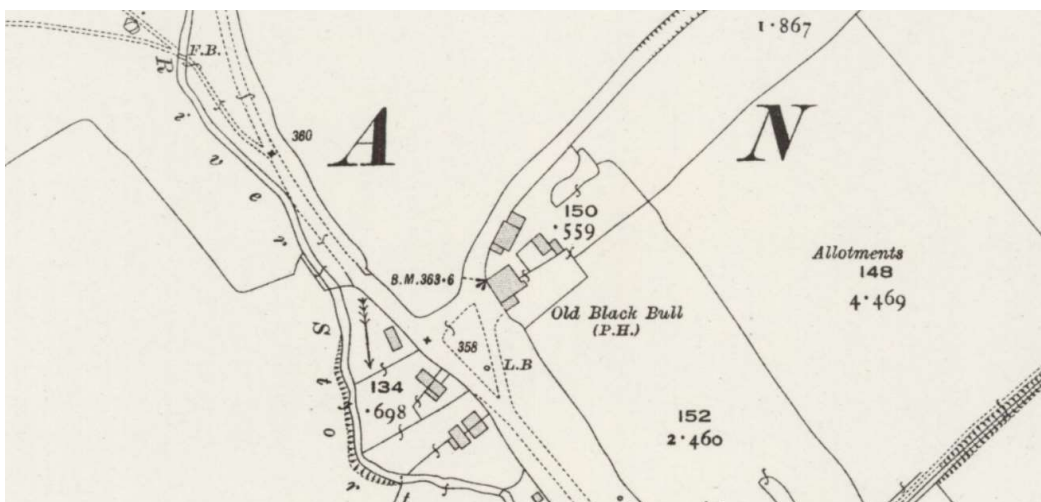
1897



1903



1903



1921

The pond shown to the northeast of The Bull on the 1921 O.S. Map, is almost identical to the area shown in 1883.



1921

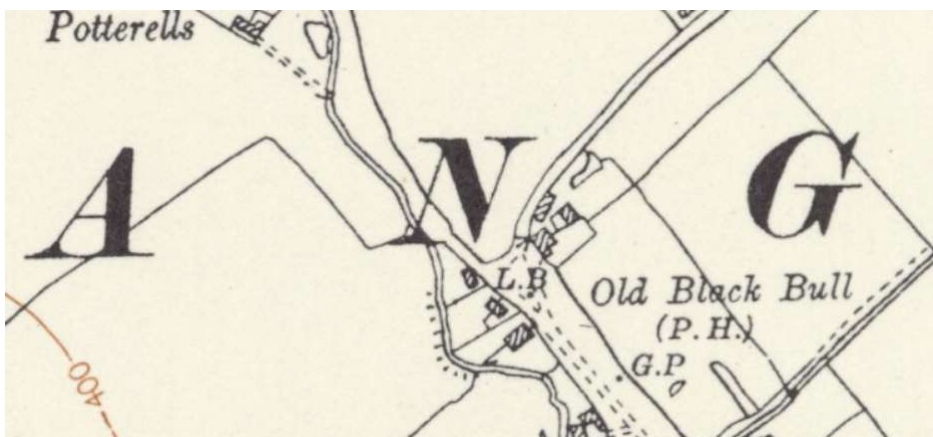


1950



1950

The large outbuilding and pond are shown as still extant in 1950.



1970



1970

The large outbuilding remains shown on the O.S. plan in 1970. The existing 2023 Public House building is unchanged apart from the removal of the lean-to section on the southeast corner. The large outbuilding, now removed, was still in existence in 1970. The area of the pond is still shown as unchanged 53 years ago. This waterbody no longer exists although part of the profile is still visible on the ground. It is very clear that this has not been a functional pond for quite some time. There is no evidence of aquatic or marginal flora in 2023.

4. Grid reference: Centre of the application area 543747, 234584

Area 2200 square metres, (0.22 hectares)

5. Gradient

The application area has a gentle slope from the high point at the northeast boundary down to the low point at the southwest boundary. The proposed C3 Dwelling would be located on the uppermost plateau replacing the existing large Nissen Hut. There are some localised profiles within the application area, including part of the profile of a pond. To the north of the application area boundary lies the majority of an empty lined pond, surrounded by paving slabs.

6. Geology

Solid geology

The entire site, i.e., which covers all the land within the red application line, is on a deposit of Lewes Nodular Chalk and Seaford Chalk Formation but undifferentiated. These white Upper Chalk deposits were laid down in warm, shallow Cretaceous seas C. 84 to 94 Ma. This deposit becomes differentiated into two separate strata elsewhere in the southern part of the UK.

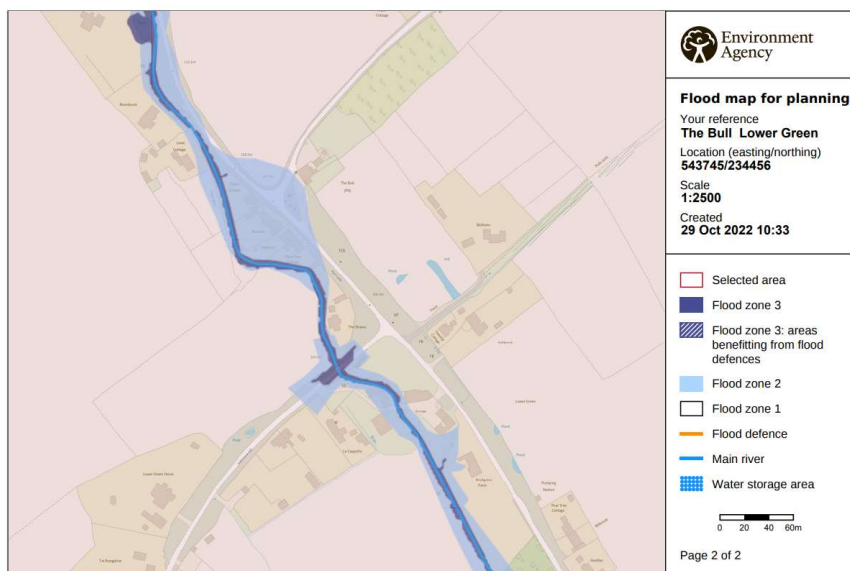
Superficial geology

Again, the entire site is situated on various thicknesses of the Lowestoft Formation, formerly, glacial boulder clay. This flint rich glacial clay probably originates from the Great Anglian Glacial Period, three 'Ice Ages' ago, C. 450,000 years BP.

To the southwest, approximately 35 from the front door of The Bull, 65 metres from the southwest boundary of the proposed new dwelling and 80 metres from the footprint of the

proposed dwelling. the land slopes down to the River Stort. The superficial geology changes on the southwest side of Park Lane to 'Head', sand, silt, calcareous clay and gravel. This material has soliflucted down the slope differentiating the constituent parts of the Lowestoft Formation to the headwater of the River Stort This area between is mostly comprised of Head, a mixture of materials, rich in Glacial Clay with elements of sand and gravel, that has soliflucted down the gradient towards the river.

7. Hydrology



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The entire proposed development, i.e., the area to the northeast of The Bull is located in Flood Zone 1. Flood Zone 2 is shown to come to the front i.e., the southwest wall of the existing pub building. Bounding the River Stort are areas of Flood Zone 3. These, however, are at a much lower contour and some distance from the proposed development area, as shown below.



Nearest Ponds

Please see below for a map of the ponds shown on the Ordnance Survey in 2022. Some of these ponds have not been maintained and were in a poor state in 2021, 2022, and continue to be neglected when revisited in September 2023



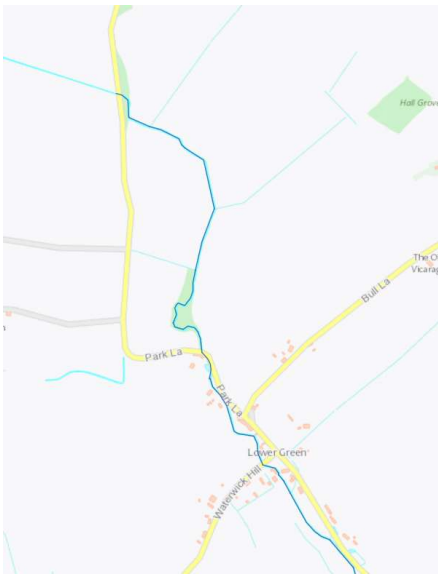
Nearest Ordinary Watercourse

There is a remnant of a recently dug ditch to the north of the application area. This ditch, which lies just outside the application boundary appears to have little purpose.

The nearest bona fide Ordinary Watercourse are a group of land drains to the east of the application area. These drain in a south-easterly direction and receive little maintenance. They are small and are dry for much of the year.

One of the headwaters of the River Stort flows in a south-easterly direction from a point 75 metres southwest from the application area on the opposite side of Park Road. This is an active Ordinary Watercourse.

Part of the Main River of the River Stort, Langley Lower Green. The change from Ordinary Watercourse to a Main Watercourse occurs 1000 metres upstream and to the northwest of the point that is nearest the application site.



The Nearest Main River

8. Wider environment.

The following planning application sites were examined for any rare or protected species.

Hazel Cottage Bull Lane Langley Saffron Walden CB11 4SA

Land At Bull Lane Langley

Meadow Cottage Bull Lane Langley Saffron Walden CB11 4SA

Old Vicarage Bull Lane Langley Saffron Walden CB11 4SA

Rouen Bull Lane Langley Saffron Walden CB11 4SA

Street Record Bull Lane Langley

The area surrounding the application site is a mixture of low-density housing, arable fields and small groups of trees. Rough grassland and wide road verges are also a significant feature.

Magic.gov shows no species worthy of a Countryside Stewardship grant on farmland within 750 metres.

9. Desktop information

Analysis of the biological records supplied by the Essex Field Club show no rare or protected species present on the application site. The effect of this proposed single dwelling over the wider environment is not significant. As stated below, Chiropteran species are bound to be present on the site. The *Triturus cristatus* interest in the wider environment appears to be confined to Langley Upper Green, 850 metres to the north.

There are no rare or uncommon plant species recorded within the application area, and no WCA 9 species.

Magic.gov indicates the following

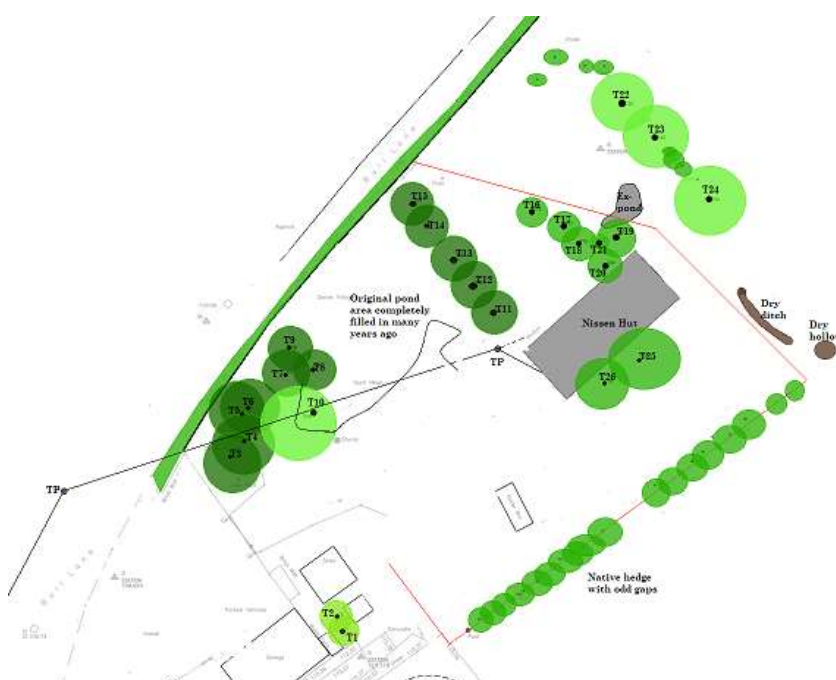
- a. Local Nature Reserves (England) None within 5000 metres
- b. National Nature Reserves (England) None within 5000 metres
- c. Ramsar Sites (England) Lea Valley RAMSAR Site 22000 metres to the south
- d. Sites of Special Scientific Interest (England)
 1. Great Hornead Park SSSI 5360 metres to the south southwest
 2. Debden Water SSSI 8575 metres to the east
 3. Quendon Wood SSSI 8580 metres to the east southeast
 4. Therfield Heath SSSI 10250 metres to the west northwest
 5. Blagrove Common SSSI 11000 metres to the east by south
- e. SSSI Impact Risk Zones - to assess planning applications for likely impacts on SSSIs/SACs/SPAs & Ramsar sites (England) The application area is outside all SSSI, SAC, SPA and Ramsar Impact Zones.
- f. Special Areas of Conservation (England)
- g. Special Protection Areas (England) None within 5000 metres.
- h. Biosphere Reserves (England) None within 5000 metres
- i. Wild Bird General Licence Protected Sites Condition Zone (England) None within 10000 metres

Priority habitats

1. Deciduous Woodland 250 metres to the northwest
2. Traditional Orchard 775 metres to the west northwest
3. Scales Park East Wood 1500 metres to the southwest replanted Ancient Woodland
- 4 High Wood 1650 metres to the north northeast replanted Ancient Woodland

The application area is well outside any other priority habitat as marked by Magic.gov.

10. Habitat diagram



The only Priority Habitat currently on site is the native hedge along the south-eastern boundary. Both ponds are redundant and not functional.

Below, the ex-pond north of the application boundary and the dry ditch and hollow. This northern boundary is not marked on the ground with a fence or even marker posts.



The defunct pond, left and centre 2022, right September 2023



The northern boundary remains unmarked September 3rd 2023.

11. Invertebrates

Terrestrial invertebrates recorded from fingertip / destructive searches throughout the survey period up to 3rd September 2023. Additional species flying over the site were also recorded, e.g., *Aeshna mixta* and *Aeshna grandis* on more than one occasion.

Hymenoptera

- i. *Lasius flavus* Yellow Meadow Ant
- ii. *Lasius niger* Black Garden Ant
- iii. *Bombus lapidarius* Red Tailed Bumblebee
- iv. *Bombus terrestris* Buff Tailed Bumblebee
- v. *Osmia bicornis* Red Mason Bee
- vi. *Andrena fulva* Tawny Mining Bee

Odonata

- vii. *Aeshna mixta* Migrant Hawker Dragonfly flying late summer
- viii. *Aeshna grandis* Brown Hawker Dragonfly flying late summer

Coleoptera

- ix. *Harmonia axyridis* Harlequin Ladybird
- x. *Coccinella septempunctata* Seven Spotted Ladybird
- xi. *Adalia bipunctata* Two Spot Ladybird

- xii. Ground Beetle?
- xiii. *Ocypus olens* Devil's Coach Horse

Diptera

- xiv. *Tipula paludosa* Crane Fly
- xv. *Fannia canicularis* Lesser Housefly
- xvi. *Musca domestica* Common Housefly

Lepidoptera

- xvii. *Celastrina argiolus* ssp *britannica* Holly Blue
- xviii. *Anthocharis cardamines* Orange Tip
- xix. *Aphantopus hyperantus* Ringlet
- xx. *Maniola jurtina* Meadow Brown
- xxi. *Pararge aegeria* Speckled Wood (*Brachypodium sylvaticum* frequent)
- xxii. *Pyronia tithonus* Gatekeeper
- xxiii. *Pieris brassicae* Large White
- xxiv. *Cucullia verbasci* Mullein Moth
- xxv. *Pieris rapae* Small White
- xxvi. *Gonepteryx rhamni* Brimstone

Gastropoda

- xxvii. *Cepaea nemoralis* (presumed) Dark Lipped Banded Snail
- xxviii. *Cepaea hortensis* White Lipped Banded Snail
- xxix. *Cornu aspersum* Garden Snail
- xxx. *Arion ater* Black Garden Slug
- xxxi. *Limax maximus* Leopard Slug

Myriapoda

- xxxii. *Stigmatogaster subterranea* Western Yellow Centipede
- xxxiii. *Lithobius forficatus* Brown Centipede
- xxxiv. *Tachypodoiulus niger* White Legged Snake Millipede

Malacostraca

- xxxv. *Trichoniscus pusillus* Pygmy Woodlouse much the commonest species under the building material
- xxxvi. *Oniscus asellus* Common Shiny Woodlouse
- xxxvii. *Porcellio scaber* Rough Woodlouse

Aquatic invertebrates

There is no permanent water so obligate aquatic fauna, e.g., the larvae of Odonata were not recorded.

None; no permanent water

No further species were recorded during the two surveys of 2023

12. Fish

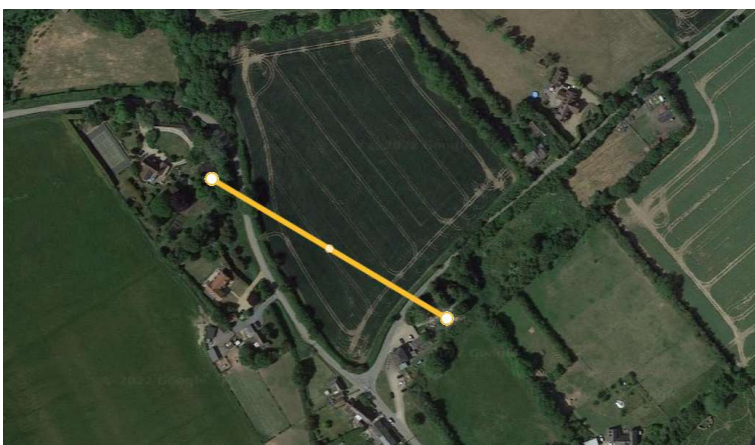
None; no permanent water within or near the application area.

13. Amphibians



Ponds 1-9 shown above

Pond 1

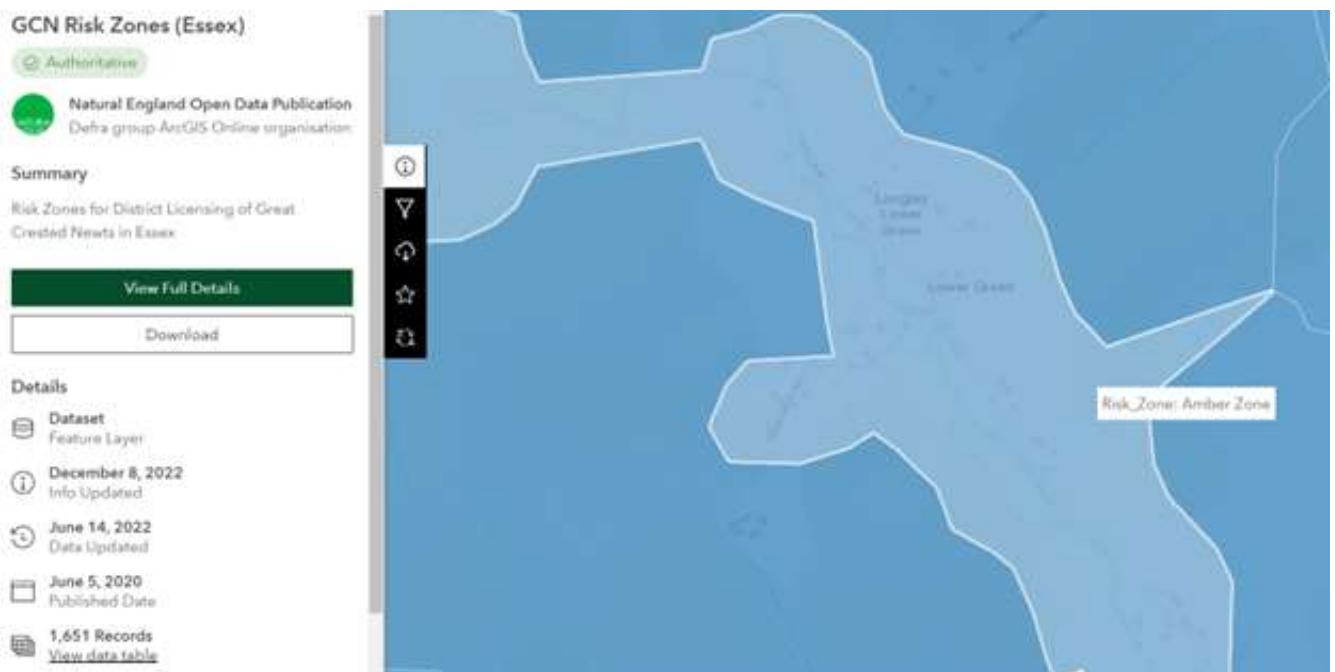


Pond 1 175 metres away to the west northwest of the application area as shown above. The terrain between Pond 1 and the application area is long and tortuous, carriageway and a large

arable field intervene. It is very unlikely that any species of native amphibian would migrate from this pond to the application area.

Ponds 2-9 i.e., all those to the south of the application area within 500 metres, were observed and recorded in late 2021 for the ecology report by A. R. Arbon, associated with Uttlesford planning application no. UTT/21/3513/FUL Three Elms, Park Road, Langley Lower Green, Saffron Walden, Essex. CB11 4SD. There appeared to be little change in 2022. There are no records of *Triturus cristatus* from any of these ponds from the Essex Field Club biological records 2021, Uttlesford District Council Constraints Map or Natural England Licensing data. A search of nearby planning applications over the last 5 years revealed a presence of *Triturus cristatus* in Langley Upper Green only, 850 metre to the north and northwest.

Although there is a lack of confirmed records for *Triturus cristatus*, the application area is within the Natural England GCN **Amber** Risk Impact Zone, see below.



This status is a probability plan formed by the concentration of ponds per hectare and other criteria without specific and up to date confirmatory field surveys. The State of Nature reports of recent years shows a decline in many species.

It is very important therefore, not to miss any vulnerable species by merely relying on historic and current records. For that reason, comprehensive destructive searches were carried out on three occasions over the entire application area. There are so many opportunities for shelter under

More than 100 objects were inspected on each occasion for both juvenile and non-breeding adults of all native species of Amphibian in the late summer/ early autumn of 2022. The site has numerous objects, artificial cover objects, ACOs, giving suitable opportunities for both shelter and hibernation. Having visited the site numerous times from July 2021 to December 2022, this is a dynamic yard constantly being disturbed and objects moved. Pet dogs also come to the site regularly and roam freely. No native or exotic species of Amphibian were recorded.

Images of the destructive searches. Over 300 of these objects, metal, concrete and wooden, were lifted and the fauna recorded; no amphibians or reptiles but numerous.



The destructive search was repeated on 3rd September 2023. Most adult amphibians would have left their breeding ponds by this date and assumed a terrestrial foraging mode.



Despite lifting 100 + objects on 3rd September 2023 no species of amphibian were recorded.

Order Anura

- i. Bufo bufo Common Toad None recorded.
- ii. Rana temporaria Common Frog None recorded.

Order Urodela

- a) *Triturus cristatus* Great Crested Newt None recorded.

The biological records, show that there is no recorded presence of *Triturus cristatus* in Langley Lower Green. There is a confirmed and well-established population in Langley Upper Green. However, that population lies over 850 metres away to the east northeast.

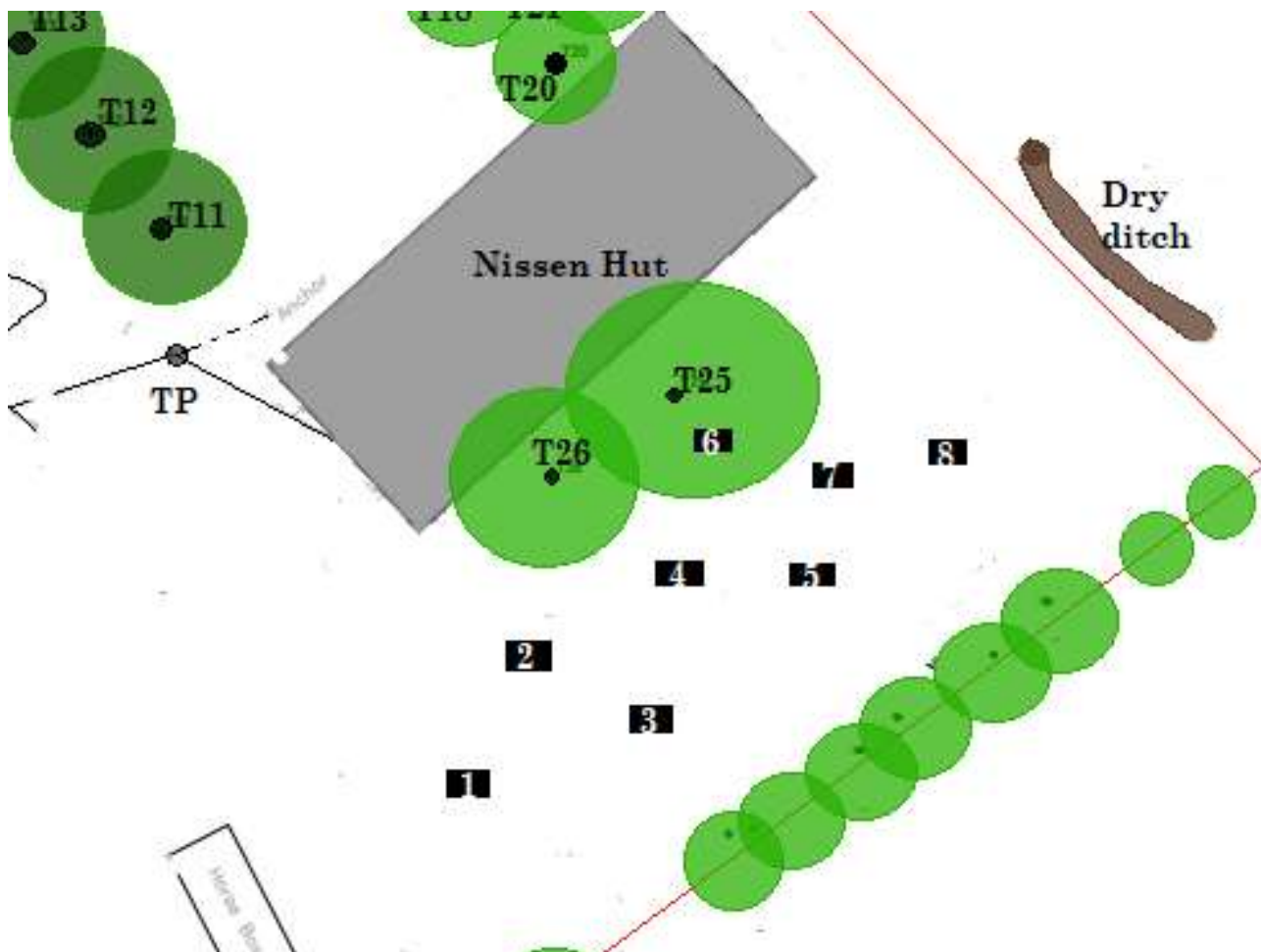
All the other searches, Uttlesford Constraints Map, Natural England License information from Magic. gov. Other recent planning applications nearby in Langley Lower Green, e.g., The planning approval at Three Elms in Park Road less than 500 metres away

- b) *Lissotriton vulgaris* Smooth Newt None recorded.
c) *Lissotriton helvetica* Palmate Newt None recorded.

14. Reptiles

Despite there being countless opportunities for shelter amongst the artificial cover objects, ACOs, within the site, constant movement, additions, and removals deter all species of native Reptile. The amphibian destructive searches recorded no species of native Reptile. The main access drive with low vegetation is disturbed at least twice a day by a Landrover and other vehicles. The prime basking area, therefore, was to the south of the Nissen Hut. The vegetation here was tall and lank but the ground did receive significant solar penetration.

8 refugia were placed within this small area as shown below in early September 2022. Recording commenced on the 15th September until 28th September.



Reptile survey	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Visit 6	Visit 7
Date	15 09 2022	17 09 2022	19 09 2022	21 09 2022	23 09 2022	25 09 2022	28 09 2022
Start time	16.01	16.05	16.09	11.09	16.23	16.02	16.05
End time	16.10	16.11	16.16	11.21	16.34	16.09	16.13
Start temperature	17	13	15	12	17	15	11
End temperature	17	13	15	12	17	15	11
Start wind speed	8NW	6W/NW	6 NW/N variable	1E/SE	3N variable	3 W variable	4W/SW variable
End wind speed	8NW	6W/MW	6 NW/N variable	1E/SE	3N variable	3 W variable	4W/SW variable
Start cloud cover	6/8	1/8	7/8	7/8	4/8	4/8	7/8
End cloud cover	6/8	1/8	7/8	7/8	4/8	4/8	7/8
Start sun	Weak	Strong	Weak	Weak	Moderate	Moderate	Weak
End sun	Weak	Strong	Weak	Weak	Moderate	Moderate	Weak
Since last rain	24 +	24 +	24 +	24 +	12 hours	24 +	24 +
Mat 1	0	0	0	0	0	0	0
Mat 2	0	0	0	0	0	0	0
Mat 3	0	0	0	0	0	0	0
Mat 4	0	0	0	0	0	0	0
Mat 5	0	0	0	0	0	0	0
Mat 6	0	0	0	0	0	0	0
Mat 7	0	0	0	0	0	0	0
Mat 8	0	0	0	0	0	0	0

The NAARS Methodology was used although some of the refugia were less than 6000 mm apart in order to capture more sunlight.





Above, some before and after images of the refugia; only common invertebrates recorded over the seven visits.

After the seven visit NARRS survey in 2022 recorded no species of reptile, repeating this exercise in full would be considered excessive. However, a transect inspection from south to north and a thorough destructive search were undertaken from 11.00 hrs – 12.15 hrs on 3rd September. The early morning fog had cleared leaving a mostly sunny day. Temperature 19 degrees C., last precipitation 1st September early morning, cloud cover 4/8, wind 3N.

Again the use and the regular disturbance of the site was unchanged. No reptile species were recorded either from the transect survey or the destructive search on 3rd September 2023.

Order Squamata

Sub-Order Serpentes

- a) *Natrix Helvetica* Barred Grass Snake None recorded
- b) *Vipera berus* Adder None recorded

Sub-Order Lacertilia

- a) *Anguis fragilis* Slow-Worm None recorded
- b) *Zootoca vivipara* Common Lizard None recorded

15. Aves Birds

The following species were recorded from the application area during the survey period.

- a) *Passer domesticus* House Sparrow only on one occasion
- b) *Aegithelos caudatus* Long Tailed Tit small group flying through on one occasion
- c) *Columba palumbus* Wood Pigeon
- d) *Prunella monedula* Dunnock
- e) *Pica pica* Magpie
- f) *Troglodytes troglodytes* Wren
- g) *Cyanistes caeruleus* Blue Tit

- h) *Parus major* Great Tit
- i) *Fringilla coelebs* Chaffinch
- j) *Sylvia atricapilla* Blackcap
- k) *Phylloscopus collybita* Chiffchaff
- l) *Erithacus rubecula* Robin always on site
- m) *Turdus merula* Blackbird
- n) *Picus viridis* Green Woodpecker nearby

No evidence of *Tyto alba*, Barn Owl occupying the Nissen Hut, no pellets or faecal deposits inside.

The disturbance caused through daily use and movement of material within the site is a great deterrent to nesting passerines. The application requires the removal of a number of trees, the vast majority of which are semi-mature, non-maintained, unstable *Cupressocyparis x leylandii*, Leyland Cypress. The nesting opportunities within this group of trees are significant. However, limb failure and unstable roots amongst this group is becoming increasingly common.



Images show limb failures and unstable roots within the group of *Cupressocyparis x leylandii*.

It is axiomatic that if planning consent is granted, all trees scheduled to be removed would undergo an intensive search for nests. The applicant is fully aware of Section 1b and 1c of the WCA 1981 as amended.

16. Mammals

a) Rodentia

1. *Apodemus sylvatica* Wood Mouse
2. *Microtus agrestis* Field Vole
3. *Sciurus carolinensis* Grey Squirrel

b) Insectivores

1. *Sorex araneus* Common Shrew a single animal present under disturbed refugia
2. *Talpa europaea*, Common Mole no evidence of this species within the application area
3. *Erinaceus europaeus* Western European Hedgehog. No physical presence or faecal evidence recorded throughout the survey period May-November 2022. The habitat amongst the artificial objects is good and the invertebrate prey is plentiful. The apparent absence of *Meles meles* together with objects that collect rainwater, make it surprising that no evidence of this species was recorded in the summer and autumn of 2022 or September 2023.

c) Mustelida

1. *Lutra lutra* Otter, no evidence of spraint, paw prints or tail drag around the pond. No aquatic ditch fauna as the Ordinary Watercourses are largely dry for most of the year. The Main River, just in excess of 70 metres southeast too distant for a holt but not too distant for a natal holt. The searches revealed nothing associated with this species, paw prints, tail drag etc. Disturbance is a significant deterrent for this species to be recorded. No change or record 2023.

2. *Meles meles* Badger. Although this species is extremely common, no evidence of presence was recorded from the application site or the land to the north. More specifically, no Setts of any sort including Outlier Setts, (using the Thornton classification), latrines, hair, de-turfing, snuffle holes. The application area and 100 metres along both directions of Park Road and Bull Lane carriageways on either side of the application site entrance, were surveyed for any activity indication the presence of this species. None recorded 2022 or September 2023.

d) Cervidae

1. *Dama dama* Fallow Deer, hoofprint and faecal evidence only, none visually recorded.



Evidence of *Dama dama*. Left and centre 2022, right 2023.

e) Canidae

1. *Vulpes vulpes* Red Fox faeces recorded but no den. No further evidence 2023.

f) Chiroptera

The site was monitored during May to September 2022 and again in early September 2023. There are moveable artificial structures within the site, e.g., the horsebox, the constant movement and disturbance would ultimately deter any species of this Order of Mammals. This situation has not changed in September 2023.

The proposals in the application require the existing garage to the north of the Public House to be modified and refurbished. This building was surveyed according to Collins Edition 3 2016 Chapter 5 in 2022 and resurveyed on 3rd September 2023. This building has a flat roof sealed on all sides and is in good condition. The three garage doors are all well-fitting as is the side door on the south side. The gaps between the roof and sidewall on the south side are all stopped with no access for Birds, Bats or Rodents. In addition, there is significant light pollution from the Public House, plus is a floodlight illuminating the car park and from parked cars leaving at night during the volant season. There were no PRFs recorded in or

around this well-maintained building. One therefore has to categorise this building as far as Bat roost features is of negligible potential. The conclusion therefore is that no emergence/ re-entry surveys are required.



Within the bounds of the property of the proposed new dwelling there are three buildings. The first is a very small wooden garden storage building. This was inspected and found to sound in all aspects. No PRFs.



The second building is an old wooden structure with an apex roof covered in roofing felt. The felt has deteriorated over the last few years, some parts are now missing. The first survey in late May 2022 was compromised by aggressive vegetation, see image on left below. A full assessment could not be completed at that time. The opportunity to inspect did not come until late November 2022, once the vegetation had diminished, see image on right below.

Although the roofing felt had come away in some areas it was permanently glued to the single skin plywood roof in all other places. Where it has come away it flaps in the wind, enough to dismiss this structure as having potential for any type of roost. The sidewalls are all intact and offer no realistic entry point. Access from the east is rather compromised by the, Fraxinus excelsior, Ash tree that covers that aspect. No change up to 3rd September 2023.



Nissen Hut

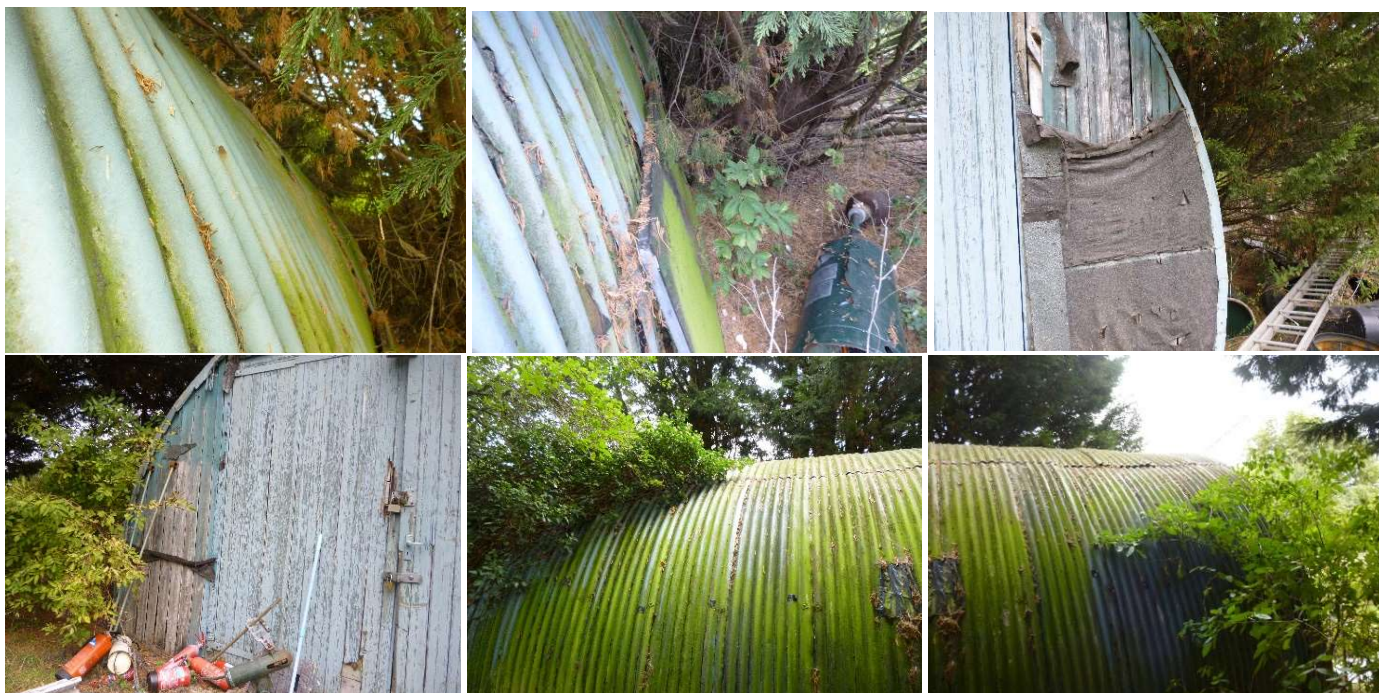
The only other building within the area designated for the proposed new dwelling is the Nissen Hut; this was also inspected using the same methodology above for PRFs, Potential Roosting Features. Any small crevices on the outside of this building were filled with cobwebs, indicating a negative entry point. *Cupressocyparis x leylandii* covered most of the east side, again deterring any kind of realistic entry.



Cobwebs filled all the crevices.

Image of the rest of the Nissen Hut below; all sound.



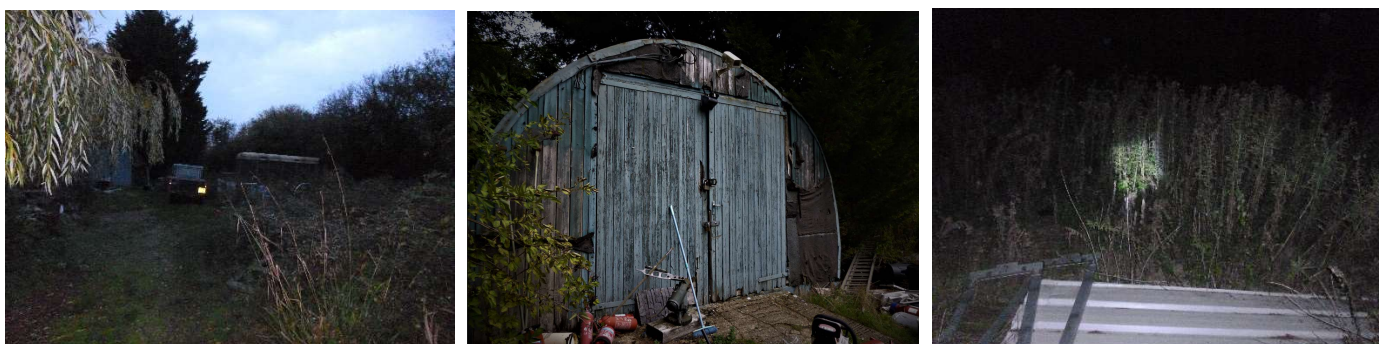


The only possible access point for any species of bat was the gap in the top right-hand part of the wooden door, see below.



Access to the inside of this structure was denied for a long period during the spring and early summer of 2022. For that reason, an emergence survey was commenced

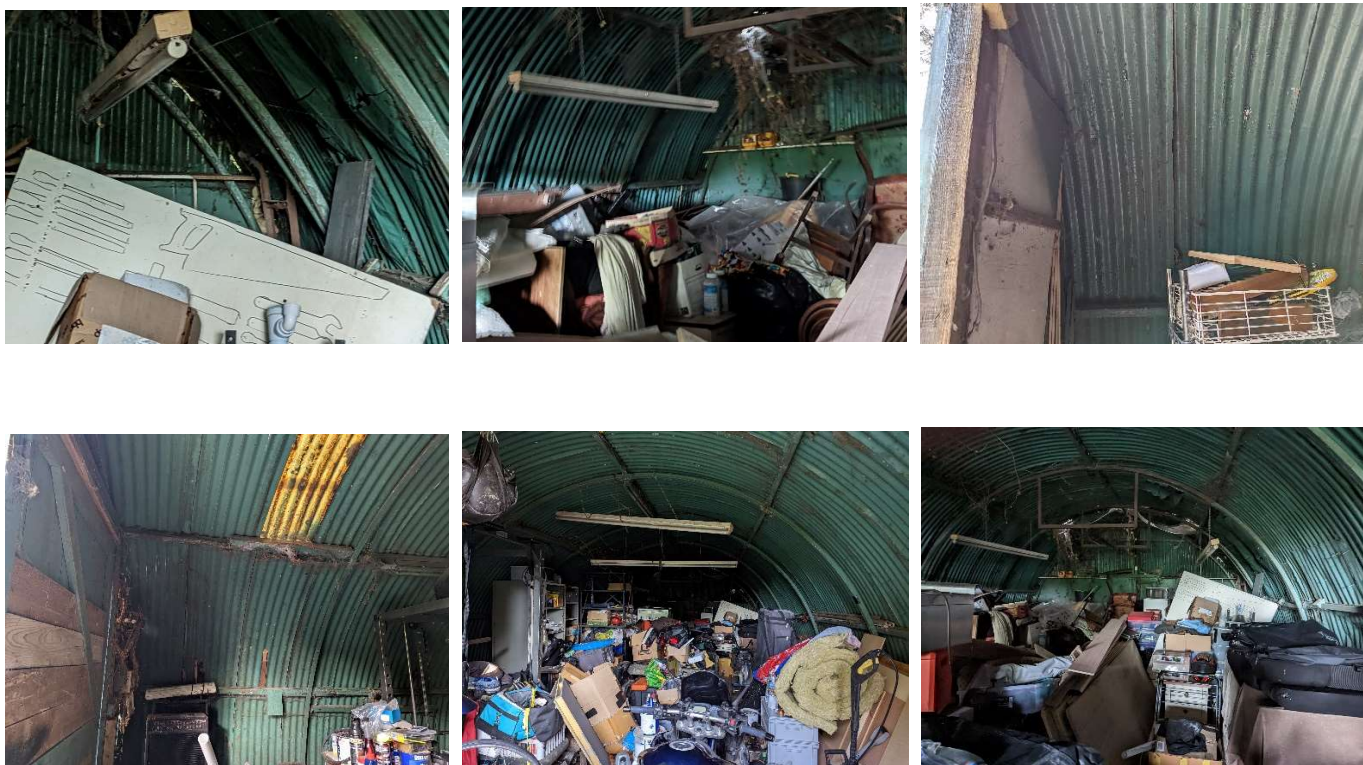
Emergent survey



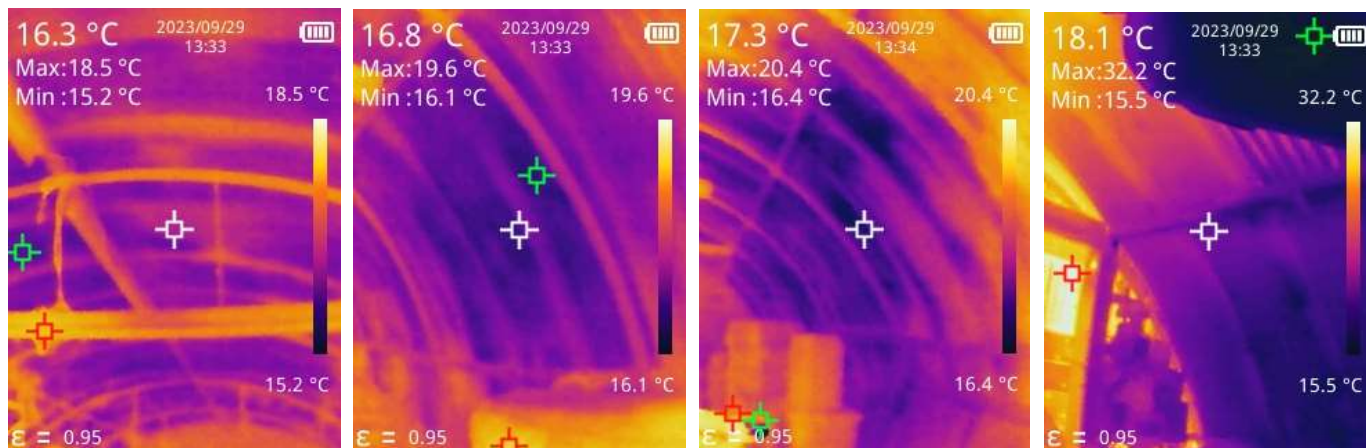
Friday 2nd September 2023. Nothing emerged from this single point of entry / exit on the single warm night 18 degrees celsius, no precipitation, light wind. Shortly after this single visit access to the Nissen Hut was possible.

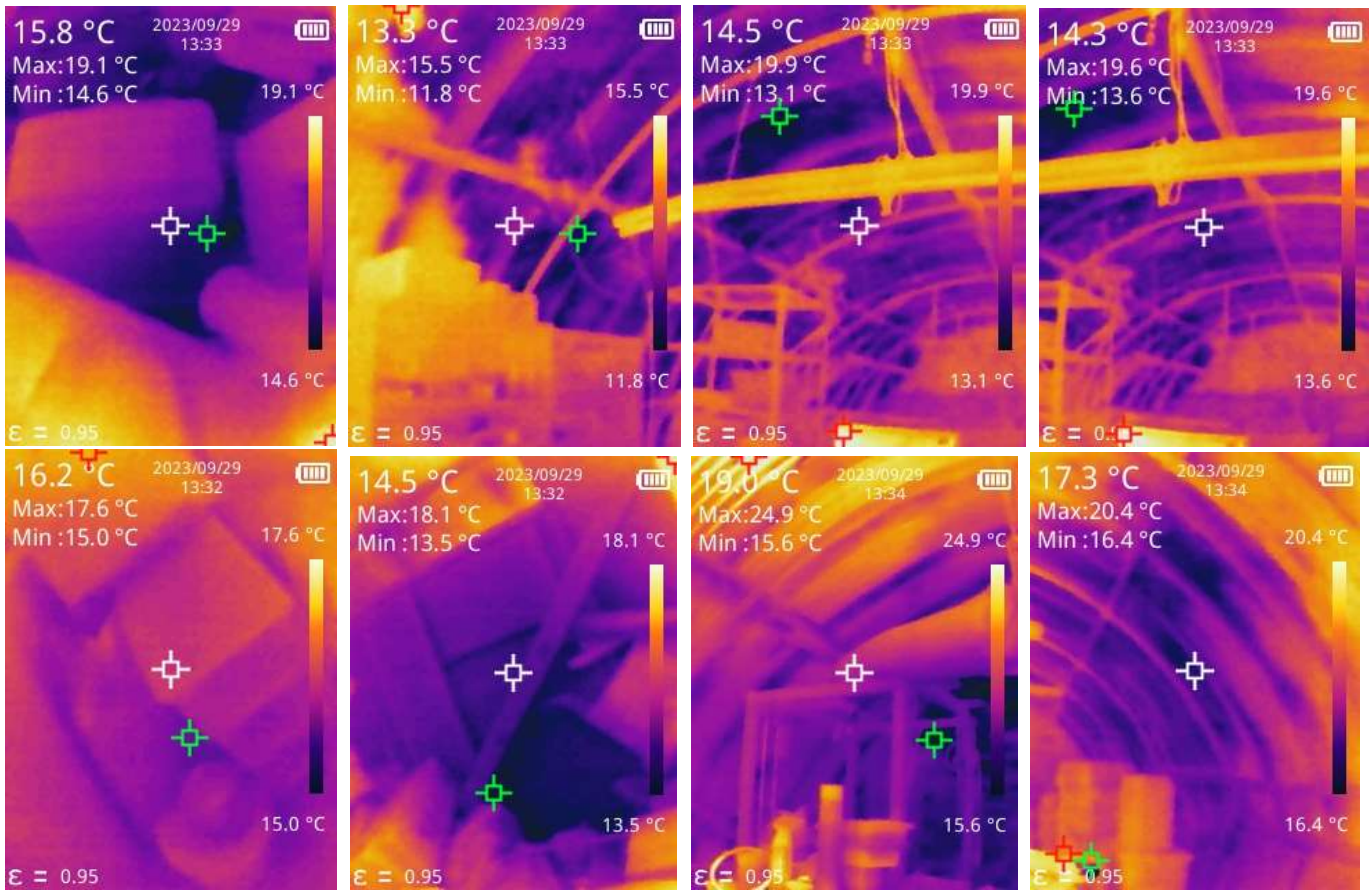
Clearly, the building had just a single skin corrugated iron structure. No internal cladding, roof cavities or any other internal structure that could provide a PRF. The structure was obviously used for general storage as can be seen below. Movement and disturbance within

this building is significant. The conclusion was that this is not a suitable structure for any type of Bat roost. Due to the lack of roosting opportunities and entry points the emergent survey was not pursued any further.



On 29th September 2023, due to the publication of Collins Edition 4 2023, the inside of this Nissen Hut was surveyed with a thermal imaging camera. See images below. Although there was an entry point the inside of the building was very unsuitable for any kind of roost site, negligible potential. The TI survey searched for roost hotspots with a live camera over all parts inside. The equipment a Topdon TC004 is limited at long distance but at close to medium range it is quite able to record by still frame and video the elevated IR of a roost or a single individual.





No evidence from this imagery of any occupation.

The native hedge along the southeast boundary does offer a good foraging opportunity. The design has taken this into account with no external security lighting on that side just a double door to the office room.

The single possible entry point, disturbance and the constant movement of material within this structure deters species of this taxonomic Order. No further surveys required if the situation remains unchanged.

17. Vascular Plants, Bryophytes and Fungi

The botanical list below relates to the whole application site.





All images above date from 2022. Images below date from 2023.





1. *Rosa rubiginosa* Sweet Briar; many hybrids exist so specimen taken for analysis
2. *Rubus fruticosus* agg Bramble
3. *Urtica dioica* Common Stinging Nettle
4. *Vitis vinifera* Cultivated Grape
5. *Geranium robertianum* Herb Robert
6. *Taraxacum officinale* agg Dandelion
7. *Agrostis stolonifera* Creeping Bent Grass
8. *Stellaria media* Common Chickweed
9. *Lamium album* White Dead Nettle
10. *Dactylis glomerata* Cock'sfoot Grass
11. *Crepis capillaris* Smooth Hawk'sbeard
12. *Geranium molle* Dove'sfoot Crane'sbill
13. *Lolium perenne* Perennial Ryegrass
14. *Cirsium vulgare* Spear Thistle
15. *Cirsium arvense* Creeping Thistle
16. *Glechoma hederacea* Ground Ivy
17. *Ranunculus repens* Creeping Buttercup

18. *Arrhenatherum elatius* False Oat Grass
19. *Calystegia sylvatica* Large Hedge Bindweed
20. *Holcus lanatus* Yorkshire Fog
21. *Trifolium repens* White Clover
22. *Tanacetum parthenium* Feverfew
23. *Reseda luteola* Weld
24. *Verbascum Thapsus* Great Mullein
25. *Rumex obtusifolius* Broad Leaved Dock
26. *Chelidonium majus* Greater Celendine
27. *Chenopodium album* Fat Hen
28. *Bryonia dioica* White Bryony
29. *Alliaria petiolata* Garlic Mustard
30. *Carex pendula* Pendulous Sedge
31. *Sambucus niger* Elder
32. *Cupressocyparis x leylandii*
33. *Rhytidiadelphus squarrosus*
34. *Bellis perennis* Daisy
35. *Galium aparine* Common Cleavers
36. *Hedera helix* Ivy
37. *Humulus lupulus* Hop
38. *Euphorbia lathyris* Caper Spurge
39. *Helminthotheca echioides* Prickly Ox-Tongue
40. *Linaria purpurea* Purple Toadflax
41. *Rubus armeniacus* Armenian or Himalayan Blackberry
42. *Potentilla reptans* Creeping Cinquefoil
43. *Prunella vulgaris* Common Self Heal

No WCA 9 species were recorded from the application area throughout the survey period.

Bryophytes

1. *Ceratodon purpureus*
2. *Schistidium crassipilum*
3. *Didymodon vinealis*
4. *Didymodon fallax*
5. *Rhytidiadelphus squarrosus*
6. *Brachythecium rutabulum*
7. *Brachythecium albicans*
8. *Amblystegium serpens*
9. *Rhytidiadelphus squarrosus*
10. *Tortula muralis*
11. *Grimia pulvinata*
12. *Homolothecium sericeus*

The above is far from a comprehensive list. These records were collected passively during the destructive searches. No species were added in 2023.

Conclusion.

This site has been thoroughly searched in 2022 and 2023 for any rare, notable, or protected species of fauna and flora; nothing recorded.

The priority habitat of the south-eastern native hedge is retained and enhanced by these proposals with additional native species planted in the gaps.

The application for a single dwelling with detached garage with no significant change to the built footprint enables a good opportunity to enhance the biodiversity over the site. The removal of the failing *Cupressocyparis x leylandii* and replacement native tree species would be an enormous plus, particularly with the addition of several bird boxes.

Where there are no artificial light pollution or disturbance issues both crevice and hollow type south facing Bat boxes can be erected.

This has been a complex site to survey with all the artificial objects contained within. The survey period was therefore necessarily prolonged.

I see no ecological reason to refuse this application, with the proviso that a comprehensive biodiversity enhancement plan is produced that reduces the number of introduced garden plants and native plant species are allowed to flourish around the margins. This will encourage native invertebrate larvae, producing a good base for the local food chain.

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