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Preliminary Ecological Appraisal Including a Protected Species Assessment at The Old Griffin, Main Road, Somersham, Suffolk. IP8 4PH.

On behalf of:

Mr Toby Simmons

May 2023

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Figures, Photographs & Tables

0 SUMMARY

1.1.1 Skilled Ecology Consultancy Ltd. was commissioned by Mr Toby Simmons to undertake a Preliminary Ecological Appraisal including a Protected Species Assessment at The Old Griffin, Main Road, Somersham, Suffolk. IP8 4PH. The proposal is for one new dwelling.

1.1.2 The survey was conducted on 18th May 2023 by experienced ecologist Roger Spring BSc MCIEEM (licensed to survey for great crested newts *Triturus cristatus* and licenced to survey for bats – level 2). The survey consisted of an inspection for preferred habitat types and signs and evidence of protected and priority species, such as for bats, great crested newts, reptiles, badgers *Meles meles* and nesting birds following Natural England (English Nature) Guidelines. A local biological record search was undertaken.

1.1.3 The site is small and includes a rear garden dominated by short, improved grassland and boundary shrubs and trees. A small area of brash, recently cut logs and rubble is present in the south of the site. Flowing along the northern boundary is a stream. The footings of the new dwelling are at least 15m from the stream and boundary trees, which are proposed for retention.

1.1.4 The site is positioned in a central village location surrounded by residential housing beyond which arable farming is the dominant local land use.

1.1.5 The proposed construction zone is small and considered low in ecological value and unlikely to support protected, priority or rare species. No signs or evidence of such were discovered. Further ecological surveys or mitigation were considered unnecessary for the proposed development to proceed. However, to minimise any residual risk of impact, precautionary measures for hedgehogs, birds, water voles and bats are provided in this report and should be followed.

1.1.6 With the recommendations followed as described, development could proceed with a minimal risk of harm or impact to local ecological value or to protected, priority or rare species and notable habitats.

1.1.7 Biodiversity enhancements for net gain are also included in the report.

1 INTRODUCTION

1.1 Background

1.1.2 Skilled Ecology Consultancy Ltd. was commissioned by Mr Toby Simmons to undertake a Preliminary Ecological Appraisal including a Protected Species Assessment at The Old Griffin, Main Road, Somersham, Suffolk. IP8 4PH. The proposal is for one new dwelling.

1.1.3 Wildlife such as nesting birds, bats, reptiles and great crested newts *Triturus cristatus* are protected by law. Protected and priority species and habitats, are also a material consideration for individual planning decisions under the National Planning Policy Framework, 2021 (MHCLG, 2021).

1.1.4 This study and report complies with the Chartered Institute for Ecology and Environmental Management (CIEEM) 2017 Guidelines for Preliminary Ecological Appraisals.

1.1.5 CIEEM guidelines indicate that ecological surveying typically remains valid for between 12 and 18 months (CIEEM, 2019).

2 METHODOLOGY

2.1 Desk Study

2.1.1 A biological record search was undertaken by Suffolk Biodiversity Information Service (SBIS) on behalf of Skilled Ecology Consultancy Ltd.

2.1.2 A search of the Multi-agency Geographical Information for the Countryside (MAGIC) was also conducted, to check for statutory nature conservation sites.

2.1.3 These results were then combined with the findings of the site survey, to assess the risk of ecology issues, relevant to planning, occurring on the site.

2.2 Study Limitations

2.2.1 Botanical assessment was undertaken at a suitable time of year, though some late flowering species and annuals may not be visible or identifiable to species level.

2.3 Initial Site Survey

Habitats and Surroundings

2.3.1 The site was visited on the 18th May 2023 to survey for ecology issues. This included the following:

- Noting the suitability of habitats present on the site, with regard to protected, priority and rare species; including plants, amphibians, reptiles, mammals, nesting birds, invertebrates and protected, priority or red-listed Birds of Conservation Concern (BoCC);

- Assessing the habitats surrounding the site and in the local area;

- Direct survey for evidence of protected species as far as possible, e.g. for bats, reptiles, great crested newts, badgers *Meles meles,* and nesting birds;

- Checking for invasive species such as Japanese knotweed *Fallopia japonica* and giant hogweed *Heracleum mantegazzianum*.

Bat Inspection

2.3.2 The assessment for bats was conducted by an experienced ecologist, licensed by Natural England to disturb and take bats for science and education. The boundary trees were inspected for bat activity, suitability and potential for roosting following English Nature Bat Mitigation Guidelines (English Nature, 2004) and Bat Conservation Trust Best Practice Guidelines, therefore considerations were:

- the availability of access to roosts for bats;

- the presence and suitability of cracks, crevices, gaps, fissures, ivy growth and other places as roosts;

- signs of bat activity or presence, such as; the bats themselves, droppings, grease marks, scratch marks, urine spatter and prey remains.

2.3.3 Equipment available for use during the survey included a ladder, high powered torch, digital camera and binoculars.

2.3.4 The availability of access to roosts was assessed based upon the presence of holes large enough to allow entry to bats and lack of cobwebs and dirt.

2.3.5 The outside of trees were inspected for gaps, cavities, access points and crevices, and any signs of bats (droppings, staining, urine spatter), in accordance with Natural England (English Nature) guidelines (English Nature, 2004).

Reptiles & Amphibians

2.3.6 The site was inspected for potentially suitable terrestrial habitats for foraging, sheltering or dispersing amphibians and foraging, sheltering, breeding and basking habitat for reptiles. High quality terrestrial refuges searched for, included:

- Log piles & rockeries,
- Thick leaf litter,
- Compost & manure heaps,
- Mammal burrows,
- Deep ground cracks;
- Refuse suitable for shelter;
- Tussock grassland;
- Hedgerows and any other potential habitats.

Badgers, Hedgehogs, Water Voles, Dormouse & Other Mammals

2.3.7 Signs and evidence of badgers, and other protected, priority and rare mammal activity searched for included the following:

- Setts, holes and burrows;
- Foraging holes and other diggings;
- Latrines, droppings, spraints and scats;
- Mammal hairs;
- Paw prints and other tracks;
- Feeding remains;
- Scratch marks, bedding material and other signs.

3 RESULTS AND RISK

3.1 Site Description & Location

3.1.1 The site is small and includes a rear garden dominated by short, improved grassland and boundary shrubs and trees. A small area of brash, recently cut logs and rubble is present in the south of the site. Flowing along the northern boundary is a stream. The footings of the new dwelling are at least 15m from the stream and boundary trees, which are proposed for retention.

3.1.2 The site is positioned in a central village location surrounded by residential housing beyond which arable farming is the dominant local land use.

3.1.3 No ponds were identified within 250m from the site (Ordnance Survey Map, 2023).

3.2 Nature Conservation Sites

3.2.1 The closest statutorily designated nature conservation site is Little Blakenham Pit Site of Special Scientific Interest (SSSI) located approximately 1.8km north east. The SSSI is designated for chalk grassland habitat and significant numbers of roosting bats (MAGIC, 2023).

3.3 Data Search

3.3.1 The following information is a list of herpetofauna records collated by SBIS on behalf of Skilled Ecology Consultancy Ltd.

Table 1 - Summary of local records.

Species	Location (closest record)	Year
Great Crested Newt	1.1km south east	2012

3.3.2 In addition to the above records, MAGIC, 2023 indicates that bats including daubentons, natterers, and brown long-eared are the dominant species occupying roosts at Little Blakenham Pit SSSI.

3.4 Protected, Priority & Rare Species

Vegetation & Habitats

3.4.1 The site includes: short improved grassland habitat along with boundary shrubs and trees (understood to be retained).

Herbaceous plants and grasses found in the main lawn area included: dovesfoot cranesbill *Geranium molle*, daisy *Bellis perennis*, white dead nettle *Lamium album*, cut-leaved cranesbill *Geranium dissectum*, common mouse-ear *Cerastium fontanum*, perennial rye grass *Lolium perenne*, annual meadow grass *Poa annua*, broad-leaved dock *Rumex obtusifolius*, meadow buttercup *Ranunculus acris*.

Herbaceous plants found around brash, freshly cut logs and rubble in the south included: cow parsley *Anthriscus sylvestris*, stinging nettle *Urtica dioica*, ivy *Hedera helix*, herb Robert *Geranium robertianum*, common mallow *Malva sylvestris*, red dead-nettle *Lamium purpureum*, creeping thistle Cirsium arvense, white bryony *Bryonia dioica*, grape vine *Vitis* sp., lords and ladies *Arum maculatum*, burdock sp. *Arctium* sp., perennial sowthistle *Sonchus arvensis*, common ragwort *Senecio jacobaea* and garlic mustard *Alliaria petiolata.*

Trees and shrubs on the site boundary (primarily to the north and west) included: ash *Fraxinus excelsior* (1 x mature 1 x immature), sycamore *Acer pseudoplatanus*, Wisteria sp., leylandii cypress *Cupressus x leylandii*, purple plum *Prunus cerasifera*, Laburnum sp., hazel *Corylus avellana*, hawthorn, Oregon grape *Mahonia aquifolium*, firethorn *Pyracantha* sp., lilac *Syringa vulgaris*, horse chestnut *Aesculus hippocastanum* (mature), plum *Prunus domesticus* and butterfly bush *Buddleja davidii*.

3.4.2 No protected, priority or notable plants were found on the site. No UK priority habitats are proposed for impact. No Schedule 9 invasive plants were present in the construction zone.

Bats

3.4.3 Trees on site and on the site boundary were all considered negligible in suitability or potential for roosting bats being either too small in trunk diameter or immature to support roosting bats. No signs or evidence of bats were observed on trees on site.

3.4.4 The site boundary trees and beyond the trees to the stream in the north were considered optimal bat foraging habitat with a high likelihood of high numbers of bats foraging along the stream during fine weather conditions. This habitat and trees are not proposed for impact.

Other Protected & UK Priority Mammals

3.4.5 The site is small and considered low in suitability for foraging by brown hare *Lepus europaeus*, badgers *Meles meles* and hedgehogs *Erinaceus europaeus* etc. No signs or evidence of such species were noted during the survey.

3.4.6 The stream was inspected for suitability and signs and evidence of water voles *Arvicola amphibius* or otters *Lutra lutra*. The stream is approximately 1m wide, shallow and lacking aquatic or high marginal vegetation, making total inspection possible. No signs or evidence of water voles or otters were found.

Birds

3.4.7 Birds observed or heard on or close to the site during the survey included; wood pigeon *Columba palumbus,* great tit *Parus major*, rook *Corvus frugilegus*, house sparrow *Passer domesticus* chaffinch *Fringilla coelebs*, blue tit *Cyanistes caeruleus*, goldfinch *Carduelis carduelis*, and robin *Erithacus rubecula*.

3.4.8 House sparrow are UK priority birds and red-listed Birds of Conservation Concern (BoCC). House sparrow were heard in adjacent gardens and will likely visit the site on occasions for foraging.

3.4.9 In general, the features of highest ecological value for birds on the site are the boundary trees and shrubs and stream which are proposed for retention.

3.4.10 All other birds recorded are common and widespread species and green-listed Birds of Conservation Concern (BoCC).

3.4.11 The BoCC ratings are summarised as follows:

- Red-listed - highest conservation concern;
- Amber-listed - moderate conservation concern;
- Green-listed - least conservation concern.

Great Crested Newts & Other Amphibians

3.4.12 Most of the habitats on site were considered low-negligible in suitability or potential as terrestrial habitat for great crested newts, the small area of brash, recent logs and rubble in the south was considered theoretically suitable as terrestrial habitat, though limited in area. However, no local ponds were identified. Ponds are required for breeding and it is documented that most great crested newts stay within 100m of a breeding pond (Great Crested Newt Conservation Handbook, 2003).

Reptiles

3.4.13 Habitats present on the site were considered low-negligible in suitability or potential for reptiles. Little safe basking, foraging, sheltering or breeding habitat was present.

3.4.14 No reptiles were discovered during the survey visit. Sunny locations were watched for basking reptiles.

Invertebrates

3.4.15 The proposed construction zone was considered negligible in suitability or potential for invertebrates of conservation concern with common and widespread habitat types present.

3.4.16 No notable invertebrates were observed during the survey.

Other Protected, Priority or Rare Species

3.4.17 No signs or evidence of any other protected or priority species were observed on the site, nor were there any suitable habitats for such.

4 DISCUSSION OF RISK AND LEGISLATION

4.1 Protected & Priority Species

Bats

4.1.1 Bats are protected under the Wildlife and Countryside Act 1981 as amended by the Countryside Rights of Way Act 2000 and under the Conservation of Habitats and Species Regulations 2017. Some bats are also UK priority species. A summary of the offences likely to be relevant to development are:

- Intentionally or deliberately kill, injure or take a bat;
- Intentionally or recklessly damage, destroy or obstruct access to any place that a bat uses for shelter or protection, whether bats are present or not;
- Damage or destroy a breeding site or resting place of any bat;
- Intentionally or recklessly disturb a bat while it is occupying a structure or place that it uses for shelter or protection;
- Deliberately disturb a bat anywhere.

4.1.2 Bats have been recorded locally (MAGIC, 2023) and will on occasions forage on the site and locally in gardens. The habitats of highest ecological value for bats were the boundary trees, shrubs and stream which are proposed for retention. The stream will be protected from any additional light disturbance by the trees and shrubs.

4.1.3 The trees were considered negligible in suitability for roosting bats. No signs or evidence of bats were observed on the site.

4.1.4 Therefore, it was considered that the risk of significant impact, to bats, bat roosts or local bat populations is very low/negligible.

4.1.5 Further bat surveys or mitigation were considered unnecessary. However, to minimise any residual risk of impact to bats, precautionary measures, detailed later in the report, should be followed.

Other Protected, Priority & Rare Mammals

4.1.6 The proposed construction zone was considered theoretically suitable for foraging by hedgehogs and badgers. However, the site is small and unlikely to be of significant value. No signs or evidence of hedgehogs, badgers, water voles otters or any other notable mammals were discovered on the site or adjacent to the site. It is also noted that the new building footings will be at least 15m from the stream and boundary trees.

4.1.7 Therefore, the risk of significant impact to such species was considered negligible.

4.1.8 Further surveys or mitigation were considered unnecessary. However, to minimise any residual risk of impact to hedgehogs and water voles during construction, precautionary measures, detailed later in the report, should be followed.

Birds

4.1.9 Wild birds are protected under the Wildlife and Countryside Act 1981 and, with certain exceptions (e.g. pest species) in certain situations, it is an offence to intentionally:

- Kill or injure any wild bird;
- Take, damage or destroy the nest of any wild bird while it is in use or being built;
- Take or destroy the egg of any wild bird.

4.1.10 Some bird species (such as barn owls) are also specially protected under Schedule 1 of the Wildlife and Countryside Act 1981 and others are UK priority species.

4.1.11 The proposed construction zone was considered low in suitability for protected and priority bird species.

4.1.12 The risk of significant impact to notable birds or local bird conservation was considered very low.

4.1.13 Therefore, it was considered unnecessary to undertake further bird surveys for rare or protected birds or provide mitigation for such species. However, to prevent harm to actively nesting common birds, recommendations, detailed later in the report, should be followed.

Great Crested Newts & Other Amphibians

4.1.14 Great crested newts are protected under the Wildlife and Countryside Act 1981 as amended by the Countryside Rights of Way Act 2000, and the Conservation of Habitats and Species Regulations 2017. Great crested newts are also UK priority species. A summary of the offences likely to be relevant to development are:

- Intentionally or deliberately capture or kill;
- Intentionally injure;
- Deliberately disturb, or intentionally or recklessly disturb in a place of shelter or protection;
- Damage or destroy a breeding site or resting place;
- Intentionally or recklessly damage, destroy or obstruct access to a place used for shelter or protection.

4.1.15 The site is mostly low-negligible in suitability for great crested newts, though the brash, log and rubble piles in the south were theoretically suitable as terrestrial habitat. No local ponds are present. The risk of great crested newts being present and using the site was considered very low/negligible.

4.1.16 Therefore, further amphibian surveys or mitigation were considered unnecessary. However, to minimise any residual risk of impact, precautionary measures, detailed later in the report, should be followed.

Reptiles

4.1.17 Widespread reptile species including, grass snake, adder, slow worm and common lizard, are protected from intentional killing and injuring under the Wildlife and Countryside Act 1981. They are also UK priority species.

4.1.18 The site is small and low-negligible in suitability for reptiles. No reptiles were discovered on the site. Habitats adjacent to the site were also low in suitability for reptiles.

4.1.19 Therefore, the risk of a reptiles using the site and being impacted or harmed by the proposed works was very low/negligible. Therefore, further reptile surveys or mitigation were considered unnecessary.

Plants & Invertebrates

4.1.20 No rare, protected or priority plants were present or were likely to be impacted.

4.1.21 Further botanical surveys or mitigation for rare plants or notable habitats were considered unnecessary.

4.1.22 The risk of spreading Schedule 9 invasive plants and infringing the relevant legislation was considered very low.

4.1.23 Regarding invertebrates, the proposed construction zone is small and habitats present common and widespread. The risk of presence of a significant assemblage of invertebrates of conservation concern was considered negligible.

4.1.24 Further invertebrate surveys or mitigation were considered unnecessary.

Other Protected & Priority species

4.1.25 No signs or evidence of other protected, priority or rare species were observed on the site and it was considered that there was a very low risk of such species occurring on the site or being impacted by the proposed development.

4.2 Other Issues

Sensitive Habitats

4.2.1 The proposed works are small scale and not particularly close to any nature conservation sites. The risk of impact to such sites (direct or indirect) was considered highly unlikely.

4.2.2 Therefore, further surveys or mitigation for designated nature conservation sites or other sensitive habitats were considered unnecessary.

5 RECOMMENDATIONS

5.1 Precautionary Measures & Compensation

Bats

5.1.1 To minimise any residual risk of impact to bats, the following precautionary measures should be undertaken:

- Any new proposed external lighting should be minimised. Where external lighting is required, it should be warm white LED lamps <3000k with glass glazing, rather than plastic, as these produce the least amount of heat and UV light possible, minimising the attraction effects on insects and minimising disturbance to local bats.

- Any new external lighting proposed for the development should be aimed carefully, to minimise illumination of boundary habitats and avoid light spillage into the sky, or horizontally out from any structures, by using hoods or directional lighting.

- Any trees felled should be replaced within the soft landscaping to compensate for habitat loss.

Hedgehogs, Water Voles, Amphibians & Reptiles

5.1.2 The risk of hedgehogs, water voles, amphibians & reptile being significantly impacted by the development was very low, to minimise any residual risk of impact or harm or impact, the below recommendations should be followed:

- Before construction commences, vegetation should be maintained short with regular cutting.

- During construction heras fencing should be erected along the northern boundary to protected trees and the stream from disturbance and impact.

- During works, waste materials should be removed off site immediately to prevent wildlife using the materials for shelter and being harmed by subsequent movement;

- Construction materials should be stored on hardstanding or on pallets to prevent wildlife from sheltering in the materials and being harmed by movement of the materials;

- No construction work at night when hedgehogs, water voles and amphibians are mostly active;

- Any excavations for the development should be covered at night or should have a roughly sawn plank placed in them to facilitate escape, the plank should not be placed at more than 30º and must be at least 30cm in width;

- If at any stage notable wildlife are observed on the site, works should stop immediately, and the animal should be allowed to disperse of its own accord, or an ecologist should be contacted for advice;

Birds

5.1.3 It is recommended that to prevent harm to nesting birds, any necessary clearance or reduction of trees, scrub and shrubs should commence outside of the main bird breeding season (March until the end of August). If this timescale is not possible then an ecologist should check the site for active bird nests before vegetation clearance.

5.1.4 If an active bird nest was found, it would be necessary to protect the nest from harm or disturbance until the bird had finished nesting.

5.2 Enhancements

5.2.1 To provide biodiversity enhancement in accordance with national planning policy (NPPF, 2021) the below will be undertaken:

5.2.2 Installation of the below habitat boxes:

- 1 x Vivara pro sparrow terrace (or similar if out-of-stock) will be positioned high (just below the roof) on the newly developed dwelling facing a northerly direction.

- 1 x Beaumaris Bat Box (or similar if out-of-stock) will be installed high (just below the roof) of the newly developed dwelling facing a southerly direction.

5.2.3 Wildlife boxes can be purchased on-line.

5.2.4 All newly restored lawn will be sown with a wildflower seed mix to increase botanical diversity.

5.2.5 A new hedgerow is proposed for the boundary (see layout below). The new hedgerow should be planted in a double staggered row, preferably 5 whips per linear metre, with spiral tree guards and include: 60% Hawthorn (Crataegus monogyna) 20% Field maple (Acer campestre), 10% Hazel (Corylus Avellana), 5% wild cherry (Prunus avium), 5% guelder rose (Viburnum opulus).

5.2.6 All other new soft landscaping will be native and/or wildlife attracting.

6 CONCLUSION

6.1 At the time of survey, the proposed construction zone supported common and widespread habitats very low in suitability or potential for protected, priority or rare species. No signs or evidence of such were identified. The risk of significant impact to such species or to local ecological value was considered very low.

6.2 Further ecological surveys or mitigation were considered unnecessary for the development to proceed. Recommendations for birds, hedgehogs, water voles, reptiles, bats and amphibians are provided and should be followed accordingly.

6.3 With recommendations followed as described, the development could proceed with a minimal risk of harm impact to protected, priority or rare species or notable habitats.

6.4 With the biodiversity enhancements followed as described, the proposed development would be enhanced for the benefit of local wildlife in accordance with national planning policy.

7 REFERENCES

Bat Conservation Trust (2016) *Bat Surveys- Good Practise Guidelines, 3rd Edition*. Bat Conservation Trust, London.

English Nature (2004). *Bat Mitigation Guidelines Version 2004*. English Nature, Peterborough.

Ministry of Housing, Communities and Local Government (2021). *National Planning Policy Framework, February 2021.* Fry Building, London.

Natural England (2008). *Template for Method Statement to support application for licence under Regulation 44(2) (e) in respect of Great Crested Newts Triturus cristatus*. Form wmla14-2_tcm6-4103. Natural England, Peterborough.

Oldham, R.S., Keeble, J., Swan, M.J.S. and Jeffcote, M. (2000). *Evaluating the Suitability of Habitat for the Great Crested Newt* (*Triturus cristatus*). Herpetological Journal Vol. 10 pp. 143-155.

Suffolk Biodiversity Information Service (2023). *2km Radius Herpetofauna Search*. SBIS, Ipswich.

Internet reference- *www.gridreferencefinder.com* (accessed in 2023).

www.magic.defra.gov.uk (accessed in 2023).

8 APPENDICES

8.1 Appendix 1: Figures

Figure 1 – Habitat map.

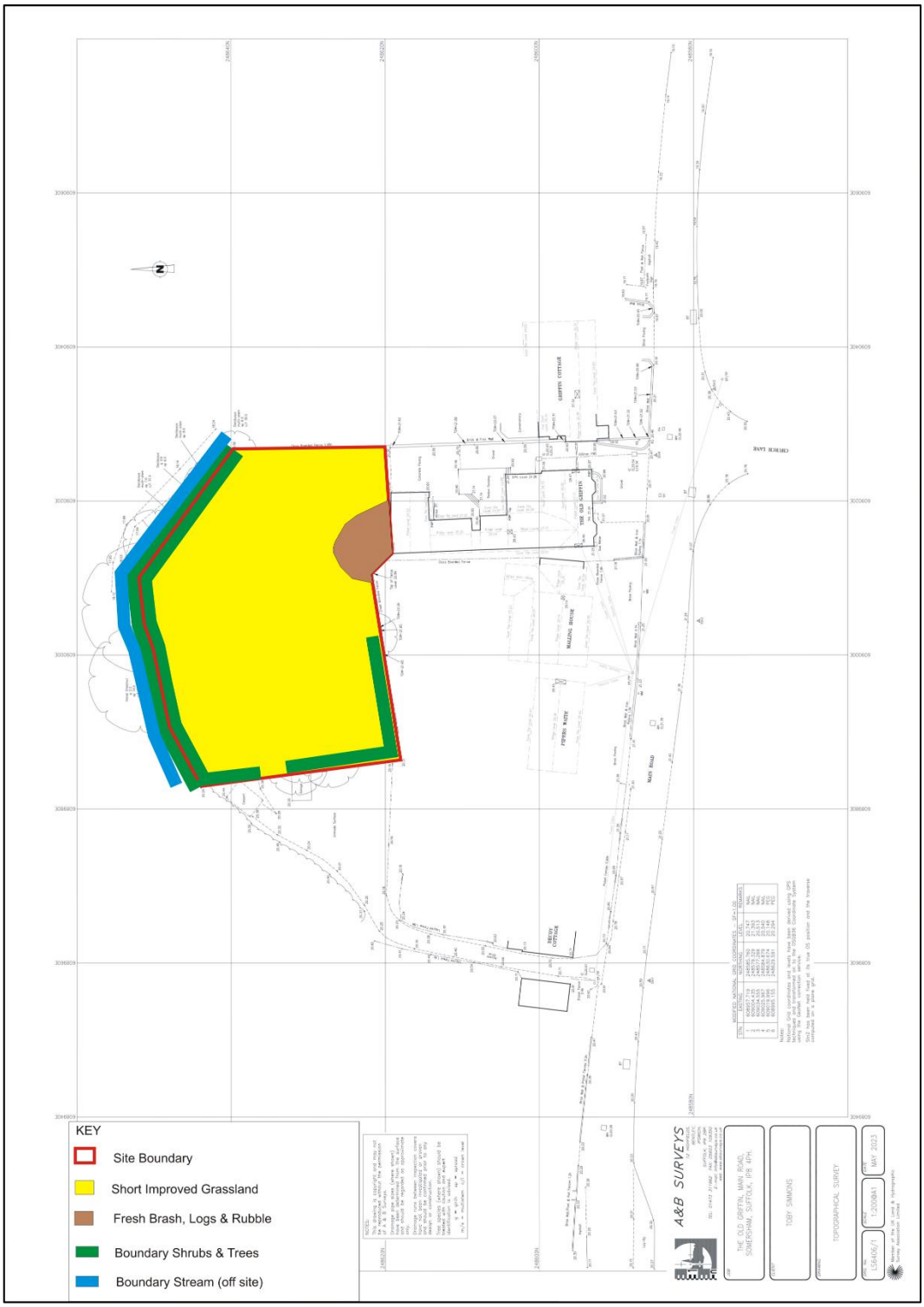
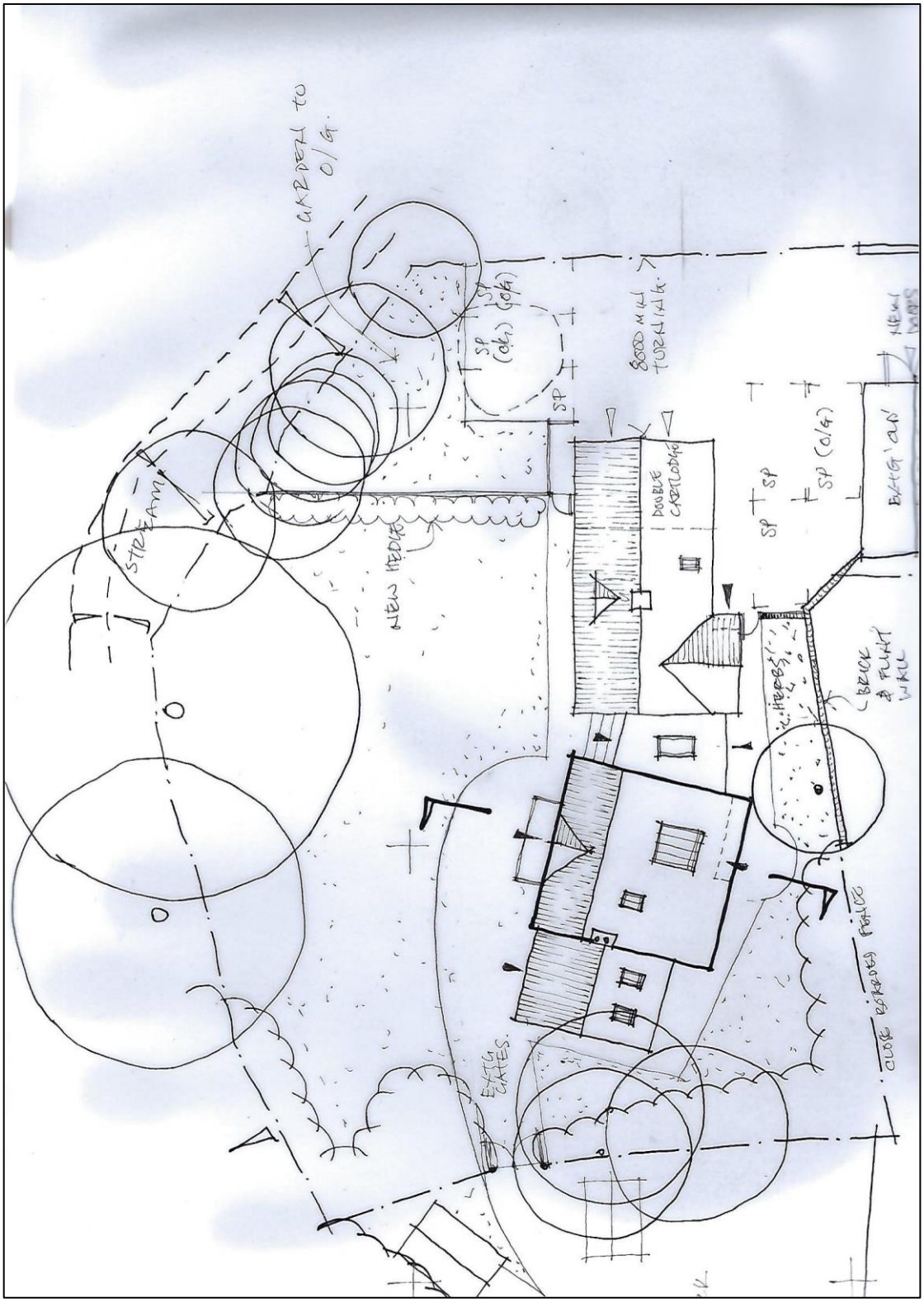


Figure 2 – Proposed development.



8.2 Appendix 2: Photographs

Photograph 1: Main site area looking from east to west.

Photograph by Roger Spring 2023

Photograph 2: Main site area looking from north to south.

Photograph by Roger Spring 2023

Photograph 3: Proposed entrance.

Photograph by Roger Spring 2023

Photograph 4: Fresh, brash, log and rubble pile in the south of the site.

Photograph by Roger Spring 2023

Photograph 5: Northern boundary trees.

Photograph by Roger Spring 2023

Photograph 6: Stream located north of the site.

Photograph by Roger Spring 2023