JWilsonEcology

Park Cottage, Fenton Road, Stubton, Newark

**Bat Survey Report** 

June 2023

# **JWilsonEcology**

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## 1.0 INTRODUCTION

The following bat survey report has been prepared by Joseph Wilson BSc ACIEEM of JWilsonEcology on behalf of the Wright Family. It provides details of the bat survey work completed in 2023 at Park Cottage, Fenton Road, Stubton, Newark. The report provides details of the bat survey work completed on the site, which comprises of an initial desktop survey, alongside an internal and external inspection of the buildings for the presence of bats, and the suitability of the building to support roosting bats, and subsequent nocturnal survey work.

## **Background**

The survey site consists of a single detached two storey building with associated driveway and garden area, alongside a single storey outhouse and garage. The site is located on the northwest edge of the village of Stubton and is accessed from Fenton Road, which is to the northwest of the site. The central grid reference for the site is SK 87291 49033.

## **Proposals**

The proposals for the site seek to demolish the existing dwelling and associated garage units and replace it with three new sustainable dwellings, associated landscaping and driveways.

### 2.0 LEGISTATION

- 2.1 Before any proposals take place, measures must be taken to ensure that the legislation concerning bats is not breached as a result of works. All UK bat species are afforded full protection under the Wildlife & Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 (as amended).
- 2.2 Under Regulation 43 of the Conservation of Habitats and Species Regulations 2017 (as amended) it is illegal to:
  - Deliberately capture, injure or kill any wild animal of a European Protected Species (EPS),
  - Deliberately disturb wild animals of an EPS (affecting ability to survive, breed or rear young) –
    disturbance of animals includes in particular any disturbance which is likely to impair their
    ability to survive, to breed or reproduce, or to rear or nurture their young,
  - Deliberately disturb wild animals of an EPS (impairing ability to migrate or hibernate) –
    disturbance of animals includes in particular any disturbance which is likely to impair their
    ability in the case of hibernating or migratory species to hibernate or migrate,
  - Deliberately disturb wild animals of an EPS (affecting local distribution and abundance) disturbance of animals includes in particular any disturbance which is likely to affect
    significantly the local distribution or abundance of the species to which they belong,
  - Deliberately disturb wild animals of an EPS (whilst occupying a structure of place used for shelter or protection) – intentionally or recklessly disturb any wild animal while it is occupying a structure or place which it uses for shelter or protection,
  - Damage or destroy a breeding site or resting place of a wild animal an EPS.
- 2.3 Under the Wildlife and Countryside Act 1981 (as amended) it is illegal to:
  - Recklessly or intentionally kill, injure or take any wild animals included in Schedule 5.
  - Recklessly or intentionally damage or destroy, or obstruct access to any structure or place which any wild animal included in Schedule 5 uses for shelter or protection,
  - Recklessly or intentionally disturb any such animal while it is occupying a structure or place which it uses for shelter or protection.
- If impacts to bats or their roosts cannot be avoided a European Protected Species Licence from Natural England is required in order to allow proposals to derogate from the Legislation (Licences cannot be obtained to provide protection against offences under the Wildlife & Countryside Act 1981 (as amended)). As part of the application process a number of 'Tests' have to be met by the application.
- 2.5 Natural England Guidance Note: European Protected Species and the Planning Process Natural England's Application of the 'Three Tests' to Licence Applications (March 2011) states:
  - "In determining whether or not to grant a licence Natural England must apply the requirements of Regulation 535 of the Regulations and, in particular, the three tests set out in sub-paragraphs (2)(e), (9)(a) and (9)(b)6."
  - (1) Regulation 53(2)(e) states: a licence can be granted for the purposes of "preserving public health or public safety or other imperative reasons of overriding public interest including those of

- a social or economic nature and beneficial consequences of primary importance for the environment".
- (2) Regulation 53(9)(a) states: the appropriate authority shall not grant a licence unless they are satisfied "that there is no satisfactory alternative".
- (3) Regulation 53(9)(b) states: the appropriate authority shall not grant a licence unless they are satisfied "that the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range."
- 2.6 Conservation status is defined as "the sum of the influences acting on the species concerned that may affect the long-term distribution and abundance of its population within its territory". It is assessed as favourable when:
  - population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and
  - The natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and
  - There is, or will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.
- 2.7 These tests must not only reach agreement with Natural England when assessing a Licence application, they must also be assessed by the planning authority when determining a planning application.

#### 3.0 METHODOLOGY

### **Desktop Study**

- In order to compile existing baseline information, relevant ecological information was requested from both statutory and non-statutory nature conservation organisations.
  - · Lincolnshire Environmental Records
  - Natural England via the Multi Agency Geographic Information for the Countryside (MAGIC) interactive map (http://magic.defra.gov.uk/website/magic/)
- 3.2 Further inspection, using colour 1:25,000 OS base maps (www.ordnancesurvey.co.uk) and aerial photographs from Google Earth (www.maps.google.co.uk), was also undertaken in order to provide additional context and identify any features of potential importance for nature conservation in the wider countryside.

## **Internal / External Building Assessment**

- The building within the site was inspected for their potential to support roosting bats by Joseph Wilson, a licenced bat ecologist, licence number (2015-15982-CLS-CLS) on the 2nd May 2023.
- The exterior of the buildings were visually assessed for features such as small gaps under barge/soffit/fascia boards, raised/ missing ridge tiles and gaps at gable ends, which have the potential to provide access points for bats. Evidence that bats actively use potential access points include staining within gaps, bat droppings and urine staining under gaps, a note being made wherever these were present. Indicators that potential access points had not recently been used include the presence of cobwebs and general detritus within potential access points. All suitable access points were inspected using a torch and an endoscope where required.
- 3.5 The interior of any accessible building, including roof voids (where present), were visually assessed for evidence of bat activity and/or for the potential to be used by bats. Evidence of a roost could be determined as the presence of a dead or live bat(s), concentrated piles or scattered droppings, food remains such as insect wing fragments, as well as scratch marks and/or staining.
- 3.6 The buildings onsite have been inspected for the potential to support roosting bats. The buildings have been assessed against the bat survey guidelines1 in order to provide a potential value for roosting bats. The table below has been used as a guide along with professional judgement.

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https://www.bats.org.uk/resources/guidance-for-professionals/bat-surveys-for-professional-ecologists-good-practice-guidelines-3rd-edition

**Table 1: Roost Suitability** 

Suitability	Description of Roosting Habitat	
Negligible	Negligible habitat features onsite likely to be used by roosting bats.	
Low	A structure with one or more potential roost site that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (I.e. unlikely to be suitable for a maternity or hibernation)	
Medium	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation statues (with respect to roost type onley – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).	
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.	

## **Nocturnal Survey**

- 3.7 Nocturnal surveys carried out on-site have been completed in line with bat survey guidelines. All aspects of buildings to be surveyed have been covered visually by surveyors, ensuring all suitable access features have been identified prior to the start of the survey.
- 3.8 Surveys have been completed during May-August, during suitable weather conditions, with no rain and light wind. Dusk emergence surveys have been conducted starting a minimum of 15 minutes prior to sunset and continuing a minimum of 1.5hrs post sunset. Dawn emergence surveys have been completed a minimum of 1.5hrs prior to sun rise and up to 15 minutes post sun rise.
- 3.9 Surveys have been completed with by a licenced bat worker from JWilsonEcology, accompanied by suitably trained surveyors.

#### 4.0 RESULTS

## **Desktop Study**

- Records held by Lincolnshire Environmental Records, which include roost records and general records such as sightings have been requested.
- 4.2 Magic maps (Magic.defra.gov.uk), which is an interactive mapping system was used to identify any previous records of protected species or habitats on-site. This identified that there were no protected species recorded within or adjacent to the site. However, it should be noted that Magic no longer provides records of bat roost locations, which is a limitation.
- Using Google maps and Ordinance Survey mapping, the site was identified to be located within a rural setting. Open arable pastural fields and areas of woodland lie within close proximity to the site. It was identified that an area of woodland, located to the east of the site, follows a natural valley and river. This area is suitable for foraging and commuting bats, providing a range of varied habitat. The woodland and local residential housing also provides suitable roosting habitat for potential bats.

### Site context

- The site which is located on the northwest extent of the village of Stubton, is accessible from Fenton Road. The site is approximately 0.3acres in size, and is a residential property, a detached 2-story dwelling, with two associated garages, a driveway and large garden which is maintained as such.
- The site is bounded on its southern extent by another residential property, its eastern aspect runs parallel to Fenton Road, whilst its northern and western aspects are bounded by open pastoral fields.
- The boundary between the site and the residential property to the south is formed by a wooden close board fence. The boundaries along the northern and western edges are formed by newly planted (less than 10 years) hedgerows, with species such as privet, hawthorn and sycamore present. The eastern boundary is formed by a single species privet hedgerow. All hedgerows onsite are managed as typical garden boundaries and are immature with low ecological value.
- The majority of the site is formed by short mown garden lawn, this is cut regularly. This provides limited ecological value to the site. A small number of individual trees are present on site, including a single monkey puzzle tree and three holly trees/bushes. Fruit trees, such apple and cherry are also present within the site but do not meet the criteria for orchard status.
- The site is a typical traditional village residential plot, with detached dwelling and well managed garden, including fruiting trees, which offers low ecological.

## **Internal / External Building Assessment**

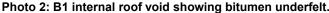
- There are three buildings onsite, these are B1 (a two-story detached house), B2 (a single-story 4.9 brick garage/outbuilding) and B3 (which is a single-story prefabricated garage).
- B1 is a two-story brick-built dwelling, with a hipped concrete tile roof. The building has two 4.10 single storey brick-built extensions, one to the northern aspect and one to the southern aspect. Both extensions have a single pitched concrete tile roof.
- The building has a brick-built chimney located centrally on the southern aspect of the roof, this 4.11 has associated lead flashings. Soffit boxes are present on the eaves of the main house, with minimal gaps present where it abuts the brickwork. Externally, the roof looks to be in general good condition, however there are a few areas of missing mortar along hipped areas and gaps where full concrete tiles have been cut to meet the ridge tile, creating small gaps.
- The verges on both single-storey extensions are pointed with cement, which is in general good 4.12 condition. However, there are gaps present where the verges meet the eaves, allowing access directly under the tiles, between the tiles and the underfelt. Timber facias area also present, which allow the plastic guttering to be directly fixed. There are limited gaps between the facias and the brickwork. These gaps are only suitable for individual bats. Where the tiles of these extensions meet the main house, lead flashing is also present. At the end of these lead areas gaps area present allowing access underneath, between the lead and brick/roof tiles.
- B1 also includes uPVC windows and doors, with brick lintels, plastic guttering and associated 4.13 downpipes. No other features of note were recorded during the survey.



Photo 1: External building photo from the western aspect

Internally B1, supports a loft space within the main house, and this is used for general storage, 4.14 accessible via a drop-down ladder and is fitted with lighting. The roof structure is formed with rough sawn timber, which provides the hipped shape to the roof. Traditional bitumen underfelt is present and therefore inspection of the gaps between the tile and the bitumen is not possible. The chimney breast is concrete rendered, and has minimal gaps present where it extends through the roof structure.

4.15 All timbers were inspected for presence of bats. The timbers were found to have a small amount of cobwebs, with NO bats found. NO evidence of bats was found within the loft area, with all surfaces inspected. Several wasps' nests were found in early stages of development.





- 4.16 B1 has been identified as holding MEDIUM potential to support roosting bats. The structure holds several potential access points into areas suitable for crevices roosting bats.
- B2 is a single storey-brick built garage / outbuilding with a pitched concrete tiled roof. It has pointed verges, plastic guttering supported by timber facias, and a mix of concrete and wooden lintels. On the southern aspect, a metal upward opening garage door is present. On the western side, wooden doors allow access into the main body of the building, and access to a further two small stores. The eastern aspect hosts timber framed windows. The roof is formed by concrete tiles, with a concrete tile ridge. It is in reasonable condition, with some areas of missing mortar. There are gaps present at the eaves, allowing access into the building. This also allows water and light ingress, and it has been noted that the timber wall plate and bitumen underfelt has degraded because of this associated water damage.
- Internally the building is open to the roof line with no void present. The roof is formed by rough sawn timber with bitumen underfelt present. The garage area is open, with additional lighting present. Evidence of water ingress can be found in the western aspect with damage to the underfelt, which is rotten and torn. Other areas of damage to the felt can be seen near to the verge, and other areas where it has torn/degraded over time. At the northern extent, over the top of the two smaller stores, a mezzanine type floor was present offering a raised storage area. The internal area was fully inspected with no evidence of bats found, the roofing timbers were inspected and found to have some light cobwebbing, but no signs of bat activity.
- 4.19 The building at present holds LOW suitability for roosting bats, however with the general repair of the roof, it is anticipated that with no human intervention the potential will reduce to negligible.





4.20 B3, is a single-storey concrete prefabricated garage building with timber frontage. The roof structure is formed by timber and metal framing, with a mix of composite corrugated and metal corrugated roofing sheets. Internally the building is open to the roof line with no underfelt. The building is used on a daily basis, with windows present on the western aspect providing sufficient amounts of daylighting. Although the building structure offers vast access points at the eaves with direct access internally, the structure itself does not hold any potential for roosting bats due to the materials present. There are no crevices available, and the roofing materials are such that they do not provide gaps, and the material fluctuates in temperature dramatically. As such this building holds NO potential for roosting bats.

### **Nocturnal Survey**

- 4.21 B1 has been identified as holding medium potential to support roosting bats and as such it has been recommended that two nocturnal surveys are completed. B2 has been identified as holding a low potential to support roosting bats and as such a single nocturnal survey has been recommended.
- The first survey for B1 has been completed on the 27<sup>th</sup> June 2023, this survey was a dusk emergence survey. The survey was started at 21:15, with sunset at 21:30, the survey continued until 23:00. Temperature at the start of the survey was 19°C dropping to 17°C by the end. There was between 90-100% cloud cover throughout the survey, with no rain and a light breeze.
- There were no bats seen to emerge from the B1 during the survey, with activity throughout the survey from commuting and foraging bats including Common Pipistrelle and Noctule bats. The first bat was recorded passing through the site from East to West which was a single Noctule bat, flying high in the sky. Common Pipistrelle bats were observed initially commuting across the site from South to North, from the direction of nearby houses. These were then observed foraging around the site and off-site habitats to the North. The activity was low and not identified to be significant.
- 4.24 The second nocturnal survey has not been completed at this stage but will be completed 2 weeks following the first survey. This will consist of a dawn survey and will cover both B1 (low potential) and B2 (medium potential).

#### 5.0 CONCULSION AND RECOMMENDATIONS

### **Development Proposals**

As previously discussed, the proposals for the site are to demolish the existing building on-site and replace the building with three new sustainable, residential dwellings, alongside landscape planting and associated parking.

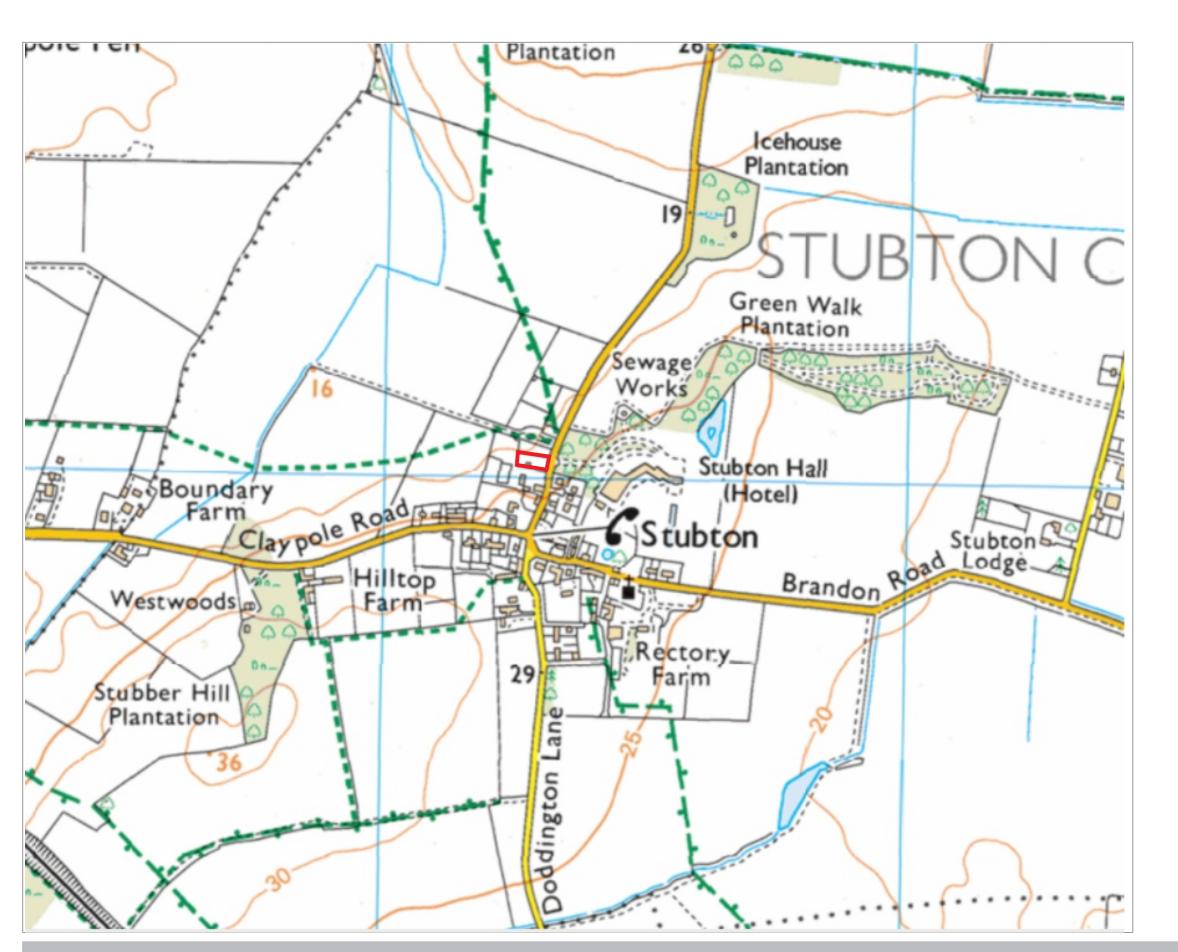
### **Discussion**

- The buildings on-site were surveyed for the presence and potential to support roosting bats. The buildings were found to have no evidence of roosting bats. The building B1 did however have several features which provided the building with a moderate suitability to support roosting bats and building B2, held features with a low suitability to support roosting bats.
- 5.3 The building B1 and B2 have been assessed as having moderate / low suitability for roosting bats, in line with the Bat Survey Guidelines. If the development proposals cannot be changed, i.e. demolition of the building, in order to mitigate for the loss of damage of any potential roosting feature, further survey work is required in order to confirm the presence or absence of bats within that feature. The proposals are for a full demolition of the building.
- It has been recommended that further survey work is undertaken prior to planning and the subsequent demolition of the building. The additional survey work for B1 would include two nocturnal surveys (one dusk and one dawn), carried out by a licenced bat ecologist, in line with the Bat Survey Guidelines. These surveys would be completed between May and August during suitable weather conditions. B2 which holds low potential would be subject to a single nocturnal survey, within the same timeframe. The additional surveys would confirm the presence or absence of any roosting bats.
- At this stage a single dusk survey has been completed covering B1, no bats were observed to emerge from the building and bat activity within the site was low and not considered to be significant. The survey was completed in peak season and during suitable weather conditions. Therefore, it is considered that if a significant roost was present on-site it would have been identified during the first nocturnal survey. Although B2 was not fully covered during this survey, surveyors were in close proximity to the building and as such would have observed any significant roost within that building.
- The second survey will be completed covering both B1 and B2, this will be a dawn re-entry survey carried out a minimum of 2 weeks after the first nocturnal survey. The results of this survey will be provided in a separate survey letter to confirm the results of the survey.
- In the event no bats are identified roosting within the building during the additional survey, no further surveys would be required after this point and the development would be able to commence with no restrictions. However, it would be recommended that enhancements for bats and wildlife would be included within the development. This could range from suitable planting within the site boundary for insects which would increase the foraging suitability on-site for bats

- and birds. Further enhancements could be made with the addition of bat and bird boxes either integrated within the fabric of the building or attached externally.
- If bat roost(s) are recorded within the additional survey work, then a full suite of bat nocturnal surveys will be completed in line with Bat Survey Guidelines. Following this a full mitigation package would be submitted and agreed with Natural England, in order to gain a European Protected Species Mitigation Licence (EPSML) for the site to enable the proposals to continue.
- 5.9 The likelihood of a significant roost (maternity roost) is low negligible, and as such, if a bat roost is confirmed, it is likely to be that of a small number of crevice roosting bats, or that of single bats.
- 5.10 The development proposals have the capacity, if required, to provide suitable mitigation for the loss of roosting bats that maybe found, including the provision of mitigation for a maternity roost. As a worst-case scenario if a maternity roost of bats is found, it is likely that due to location it would be a common and widespread species, such a Common/Soprano Pipistrelle or Brown Long-eared.
- It is not the role of the planning department to determine and agree the mitigation proposed, however it is their role to ensure that the favourable conservation status of the protected species is maintained. It should be noted that all works will be completed by licenced ecologists. In the event mitigation is required, it will be prepared and agreed with Natural England. Natural England will determine the licence application and agree the proposed works and mitigation covered by the licence are suitable, proportionate and in keeping with the species requirements.

### **Summary**

- 5.12 No bats or evidence of bats have been found during the internal and external survey of the buildings onsite.
- 5.13 The building B1 has been identified as holding Moderate potential for roosting bats. Two nocturnal surveys will be completed between May and August.
- One nocturnal survey has already been completed on B1, with no bats recorded roosting in the building.
- B2 has been identified as holding Low potential for roosting bats, one nocturnal survey will be completed between May and August.
- 5.16 If no roosting bats identified during this survey, works on site can commence with no restrictions.
- 5.17 If roosting bats are identified, further nocturnal surveys will be completed and an EPSM licence will be sought from Natural England to cover the proposed demolition works.

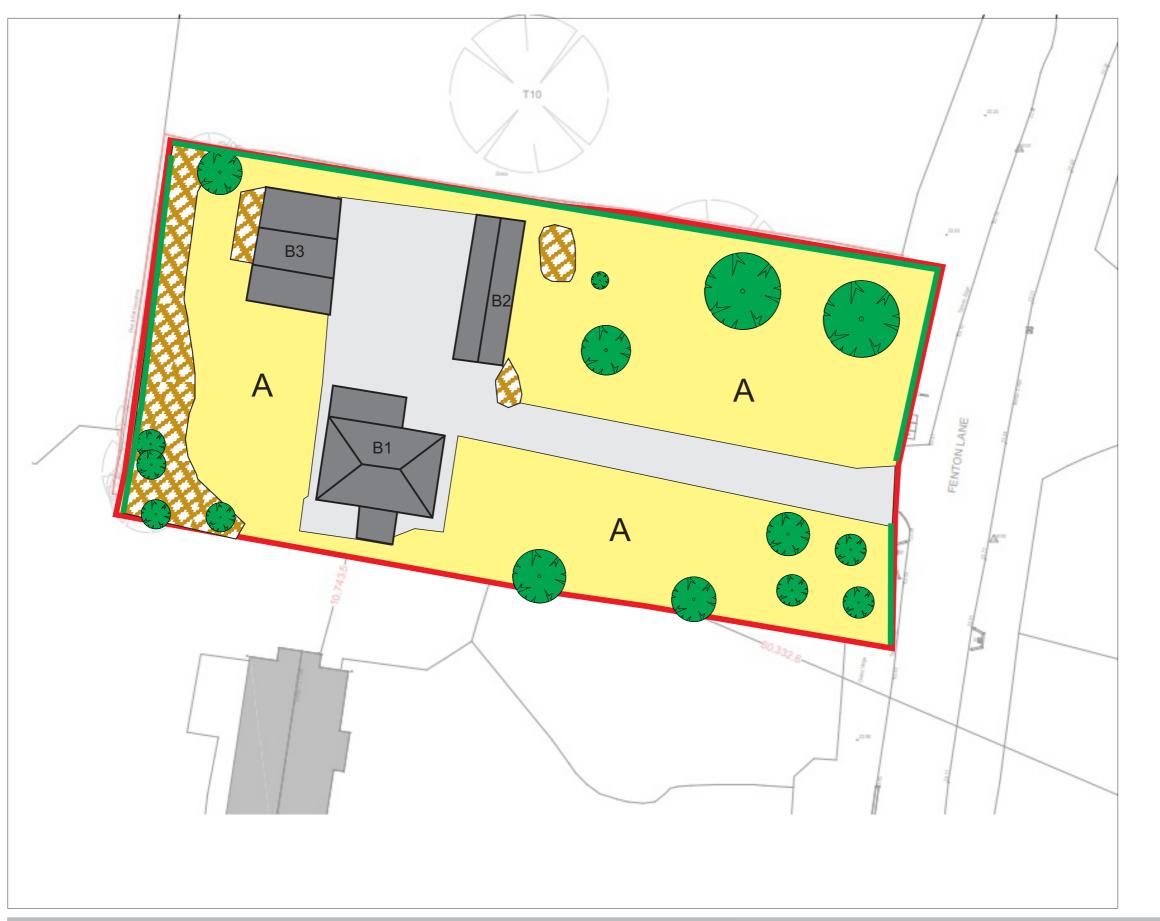




The Wright Family

Park Cottage, Fenton Road, Stubton, Newark

Figure 1: Site Location



**KEY** 

Individual Tree



Species Poor Hedge



Ornamental / Shrub Planting



Amenity Grassland



Hard Standing



Building with Referrence



Site Boundary

The Wright Family

Park Cottage, Fenton Road, Stubton, Newark

Figure 2: Phase 1 Plan