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Land at Higgins
Brook, East of
Chipping Lane,
Longridge – Phase 1

Bat Inspection Report for Discharge of Condition 19

Report Number: 2001_R16_PM_LP

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Section 1: Introduction

- 1.1 Tyler Grange LLP (TG) have been commissioned to prepare an bat inspection for a proposed residential development at land to the immediate north of the settlement of Longridge (hereafter referred to as the 'site'). The site is centred on Ordnance Survey (OS) grid reference SD 60377 38045 and extends to a total area of 24.8 hectares (61.3 acres).
- 1.2 An Ecological Assessment (Document 2001/R08b) was originally prepared by TG in March 2015 to accompany the outline planning application (Reference 3/2014/0764) for up to 363 dwellings including affordable housing and housing for the elderly, relocation of Longridge Cricket Club to provide a new cricket ground, pavilion, car park and associated facilities, new primary school, vehicular and pedestrian access landscaping and public open space, with all matters reserved except for access.
- 1.3 The original ecological assessment found no evidence of bats roosting in either trees or the cricket pavilion within the site.
- 1.4 Outline planning consent was granted on 29th October 2015. Condition 19 of the outline consent states that:

'The reserved matters application(s) shall be accompanied by repeat surveys of the trees identified for removal and existing cricket pavilion to confirm the continued absence of roosting bats. If the bat surveys demonstrate that bats have colonised, the surveys shall include appropriate mitigation and/or proposals. The development shall thereafter be carried out in complete accordance with the approved survey(s).'

1.5 This report has been prepared in order to discharge this condition by assessing structures (trees and a building) within the site for their potential to support roosting bats.

Section 2: Methodology

- 2.1. The surveys followed standard methodologies set out in the Bat Mitigation Guidelines¹, the Bat Workers Manual² and Bat Surveys Good Practice Guidelines³ (Hundt, L. 2012) and comprised:
 - Detailed climbing inspection of trees assessed as having potential to support roosting bats and which would be affected by the development; and
 - An inspection survey of the cricket club building (see plan 2001/P47a) to assess potential to support roosting bats.
- 2.2. Surveyor details are listed below in **Table 2.1**.

Name	ne Licence number		Surveys	
Simon Holden MCIEEM	2015_16148_CLS- CLS	7 years	Tree assessment, building inspection and emergence survey.	
John Moorcroft MCIEEM CEnv	N/A	8 years	Tree assessment and climbing inspections.	

Table 2.1: Surveyor information

Survey Methods

Daytime Tree Climbing Inspection

- 2.3. Climbing inspections were undertaken on the 12th January 2016 of trees that had been identified as having the potential to support roosting bats and that would be affected by development.
- 2.4. Suitable trees were climbed by a qualified tree climber using rope and harness techniques. Potential roost features (see **Table 2.2**) were inspected using an endoscope to identify signs indicating use by, or high suitability for roosting bats. Signs may include:
 - Cavities extending upwards with smooth sides;
 - · Cavities extending more than 70mm;
 - Presence of bat droppings; or
 - Presence of live or dead bats.
- 2.5. The purpose of the detailed inspection was to investigate potential roost features up close and to determine whether bats may be using them as roost sites.

³ Hundt, L. (ed) (2012) Bat Surveys Good Practice Guidelines – 2nd Edition, Bat Conservation Trust, London.



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¹ Mitchell-Jones, A.J. (2004). *Bat Mitigation Guidelines*. English Nature, Peterborough.

² Mitchell-Jones, A.J. and McLeish, A.P. 2004 –Bat Workers Manual – 3rd Edition JNCC

Features of Trees Used As Bat Roosts	Signs Indicating Possible Use by Bats
Natural holes	Tiny scratches around entry points.
Woodpecker holes	Staining around entry points.
Cracks/splits in major limbs	Flies around entry points.
Loose bark	Smoothing of surfaces around cavity.
Behind dense, thick stemmed ivy	Bat droppings in/around/below entrance.
Hollows/cavities	Audible squeaking at dusk or in warm weather.
Within dense epicormic growth	Distinctive smell of bats.
Bird & bat boxes	

Table 2.2: Common features used by bats for roosting and fields signs that may indicate use by bats

Building Inspection Survey

- 2.6. An inspection survey of the cricket club building was undertaken on the 13th August 2014.
- 2.7. The potential of the building to support roosting bats was assessed using professional judgement and the criteria shown in **Table 2.3** below.
- 2.8. Externally the building was carefully examined and a visual inspection undertaken of structures such as brickwork, lead flashing, fascia boards and tiles for evidence of bat use, including droppings and staining from fur-oil or urine. Internally the building is fitted with a suspended ceiling and no access to a roof void was possible.
- 2.9. The inspection was aided by the use of binoculars, a high powered torch and an endoscope.

Categorisation of Roost Potential for Trees and Buildings

2.10. The potential of buildings and trees to support roost was categorised in accordance with the criteria listed in **Table 2.3** below.

Main Category	Sub Category	Category Description	Indicators	
1 (Roost)	n/a	Evidence of use by bats.	• Sighting/hearing of bats (including emergence). Droppings, staining, smoothing and/or scratch marks. OR	
		-	Anecdotal record of bat roost e.g. from land owner.	
2 (Potential Roost)	А	High potential to support bat	• Numerous or high potential roosting features that are not exposed to the elements: e.g. crevices deeper than 100mm, width 15-70mm.	
			Unobstructed flyways.	
			Low disturbance levels.	
			• Situated within or near to woodland, parkland or next to water bodies, buildings (i.e. potential foraging and roosting habitat).	
		Well connected to wider landscape through presence of continuous linear features such as hedgerows, watercourses, farm tracks etc.		
	В	Moderate potential to support bat roost(s)	Some of the above features but considered to be less suitable on account of age, location and disturbance levels.	



Main Category	Sub Category	Category Description	Indicators
3 (Low Roost Potential)	n/a	Low potential to support bat roost(s)	 Limited suitable roosting features: Trees – dense ivy cover or superficial loose bark. Exposed roosting features e.g. open to wind/rain. High levels of regular disturbance e.g. from lighting or noise. Exposed roosting features e.g. open to wind/rain; Isolated from suitable foraging habitat & commuting features.
Negligible	n/a	Negligible potential to support bat roost(s)	No features suitable for use by roosting bats. Features offering some roosting potential but considered unlikely to be used due to access restrictions or disturbance levels.

Table 2.3: Bat roost assessment categories – adapted from Hundt (2012)

Survey Limitations

2.11. As the cricket building had a suspended ceiling a full internal inspection was not possible. However, the building had low potential for roosting bats. A dusk emergence survey was undertaken and a high degree of confidence is placed on the results.

Quality Control

2.12. All ecologists at Tyler Grange LLP are members of CIEEM and abide by the Institute's Code of Professional Conduct.



Section 3: Survey Results

Tree Assessment and Tree Climbing Inspection

3.1 Four trees which were likely to be affected by the development and had been identified as having bat roost potential were inspected. These were Trees 2, 18, 19 and 23 locations are shown on plan **2001/P47a**, no other mature trees were identified that required further assessment. The results of the tree assessment are provided in **Table 3.1** below.

Tree Reference	Species	Description E	
T2	Alder	Mature alder with a damaged stem and possible bat access hole (tree climbed 12 th January 2016). Suitability of potential roost feature found in cavity extending up the stem for approximately 40cm. No evidence of use by bats found.	2
T18	Sycamore	Mature sycamore, some old ivy cover (ivy has been cut) one knot hole is present to the west but is blind (30th January 2014). Ivy was dead and falling off and contained no suitable roost features. Rot hole was inspected found not lead to a cavity capable of supporting bat roosts. Ivy was falling off and contained no suitable roost features.	3
T19	Ash	Mature ash with old dead ivy cover and a damaged limb, however this appears to be exposed and not lead to a cavity (climbed 12th January 2016). Damaged limb was inspected; cracks were full of rotting tree matter and did not lead to cavities capable of supporting roosting bats. A rot hole was found at 4m on the western side. This was inspected with an endoscope. No bats were present and no signs of previous occupation were found. Ivy was falling off and contained no suitable roost features.	2
T23	Alder	Alder with single woodpecker hole which extends upwards into the stem. (Inspected from ladder 12th January 2016) Suitability of potential roost feature confirmed but no evidence of use by bats found.	2

Table 3.1: Results of tree assessment and inspection

Daytime Building Inspection Survey

3.2 The results of the inspection of the cricket club building are detailed in Table 3.2 below. **Plan 2001/P47a** shows the location of the building.



Plate 3.1 showing the exterior construction of the cricket pavilion

Building	Description	Assessment
Cricket Club	Single- storey stone building with flat steel/ iron roof.	Low Potential – Category 3
	Occasional gaps behind steel fascia boards and wooden soffits which may offer some potential access point for bats.	

Table 3.2 Results of building inspection.

Assessment

Tree Assessment and Inspection

3.3 All trees identified with possible roost potential that are affected by proposed development have been climbed and inspected for bat roosts. None of the trees were found to contain any evidence of roosting by bats.

Building Inspection

3.4 The cricket pavilion was found to have low potential to support roosting bats due to the limited presence of suitable features. No evidence of use by bats was recorded during the building inspection.

Section 4: Mitigation and Compensation

- 4.1. Although no evidence of roosting bats was recorded within any trees to be lost or otherwise affected by the development; however potential roosting features were present within Trees 2, 19 and 23.
- 4.2. These trees should be inspected immediately prior to felling and should be soft felled under supervision from a suitably experienced and qualified ecologist.
- 4.3. Should bats be found, work will need to stop immediately and Natural England contacted.
- 4.4. If bats are found during the removal of trees it may be necessary to obtain a Natural England Protected Species Licence.
- 4.5. As the loss of these trees will lead to a loss of roosting opportunities for bats, replacement roosting features should be provided through the provision of bat boxes, either on retained trees or on new buildings within the development. Details of the placement of these features can be found in document 2001/R14.

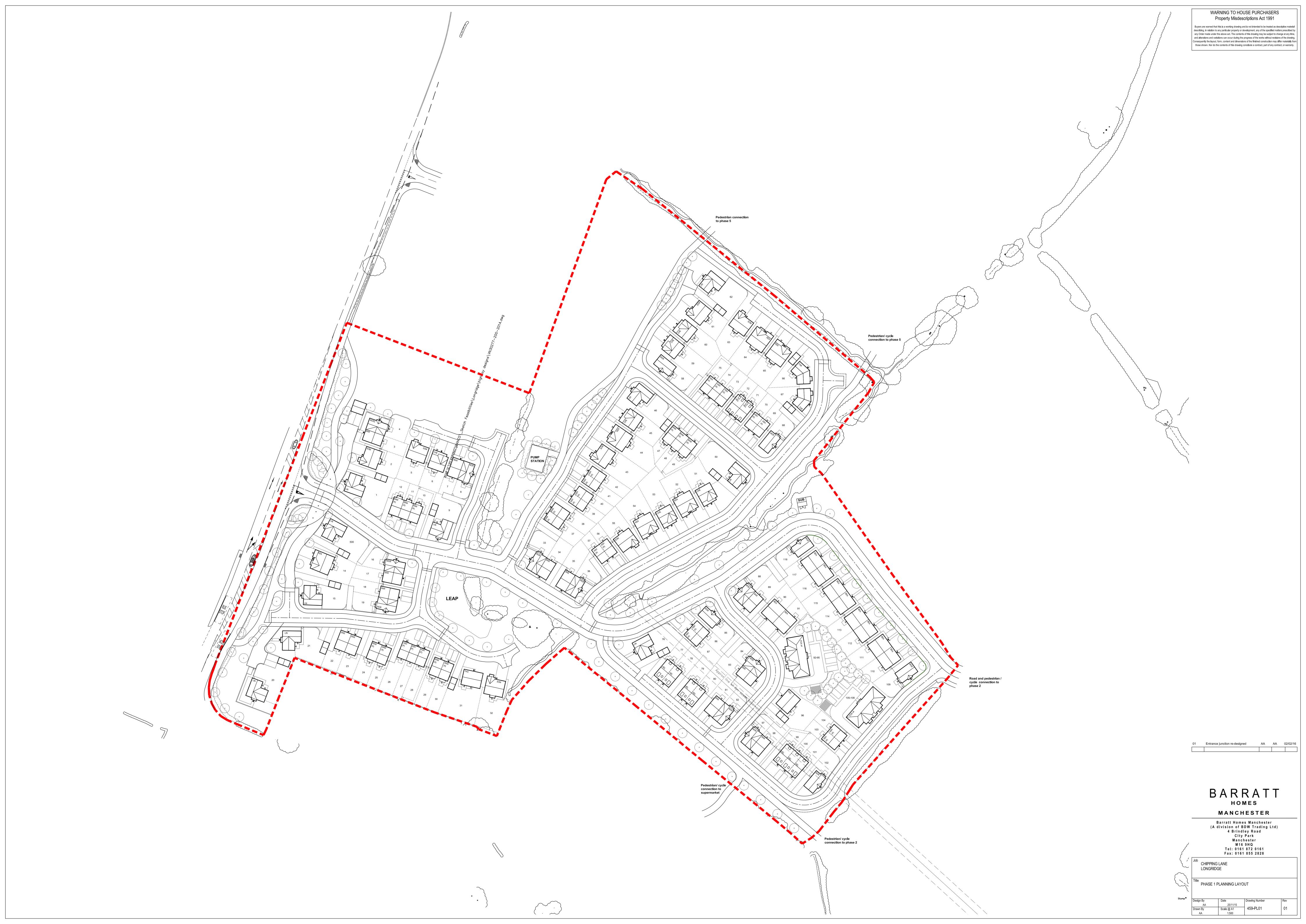
Section 5: Conclusion

5.1. No evidence of roosting bats was recorded during any of the surveys undertaken.



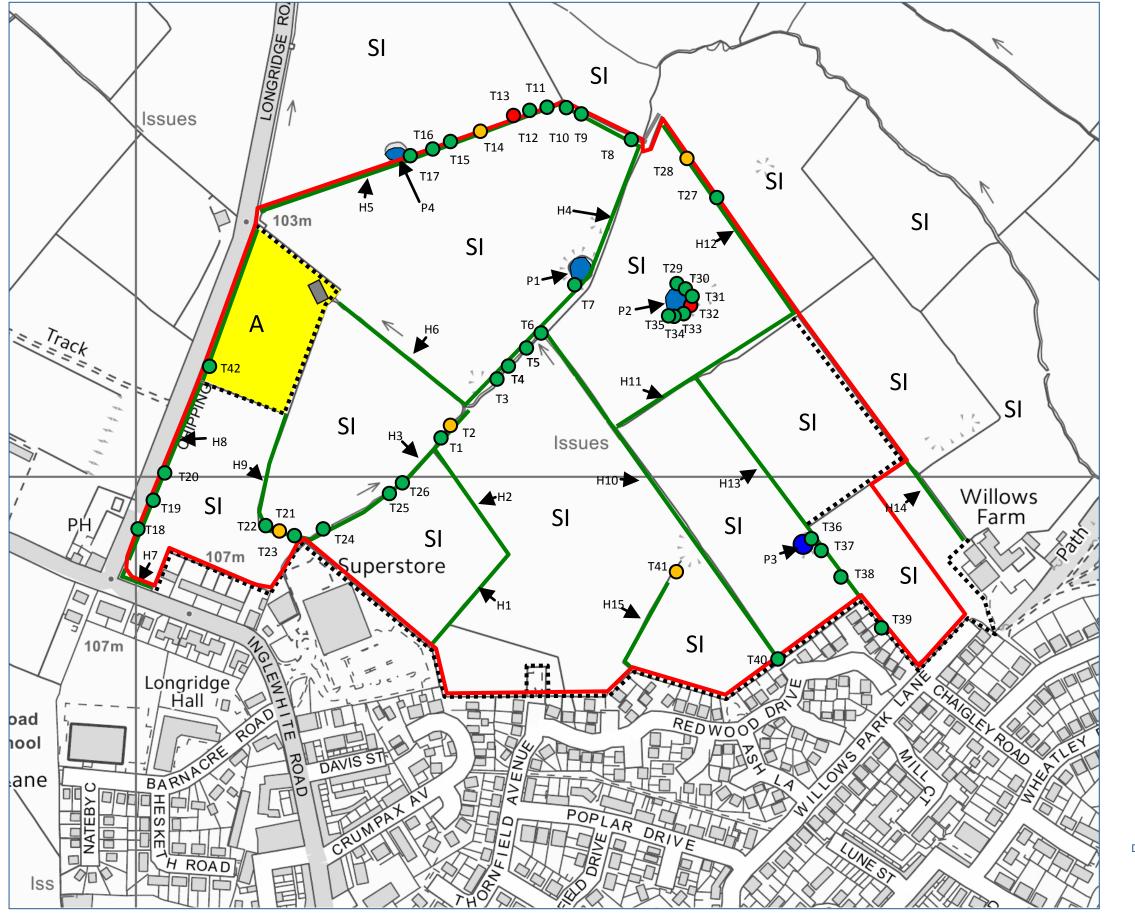
- 5.2. Inspections of the cricket club building confirmed the continued absence of bat roosts. Any works to this building, including demolition, are very unlikely to result in any impacts to bats.
- 5.3. Recommendations have been made to safeguard bats and provide alternative roosting opportunities.
- 5.4. It is considered that this assessment is adequate to discharge Condition 19 and it is not thought that any further work should be required prior to the commencement of works.

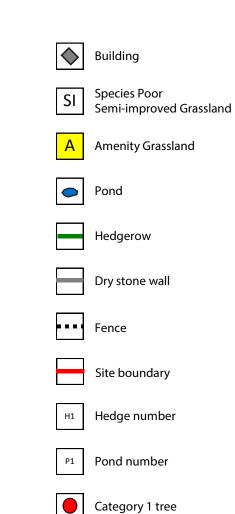
Appendix 1: Proposed Layout



Plan

2001/ P47a - Assessment of Trees for Bat Roosts







Category 2 Tree

Category 3 Tree

Projec

Bowland Meadows and Higgins Brook, Land East of Chipping Lane, Longridge

Drawing Title

Assessment of Trees for Bat Roosts

Scale Drawing No.

Date

Checked

September 2014
JM/JE

2001/P47a

TG Tyler Grange

As Shown (Approximate)