

Eric Bennett Consultancy Ltd

Protected species survey and advice

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Wortley Village

Bat Survey

March 2011.

Details of Surveyor

| Surveyor | Experience |
|-----------------|---|
| Mr Eric Bennett | Licensed bat worker since 1988. Licensed by Natural England for all bat species in all counties. NE Licence No: 20110098 |

Record of revisions

| Date | Details |
|---------------|-----------------|
| 15 March 2011 | Original Report |
| | |

Report of Bat Survey

Wortley Village

1 Introduction

1.1 The survey was required in connection with proposals for six sites within the village.

2 Details of work proposed

| | | | |
|---------|---|--|-----------|
| Site 2 | Open fronted garages | Demolish existing and rebuild on similar footprint. | SK308993 |
| Site 4 | Two-storey stone barn | Convert and extend | SK 307994 |
| Site 7 | Range of single-storey stone buildings-vehicle repair workshop & builders Yard. | Demolish existing and replace with new build. | SK 307996 |
| Site 10 | Open-fronted building | Demolish and re-develop | SK307996 |
| Site 11 | Agricultural buildings & shelter | Demolish and/or alter. Redevelop as workshops/offices. | SK308996 |
| Site 12 | Open-fronted animal shelter | Convert to holiday cottage | SK312996 |

3 Background to the special protection afforded to bats under UK and EC legislation.

- 3.1 Bats are highly specialised creatures and require a relatively narrow range of suitable conditions in order to sustain a viable population. Bats require an abundant supply of flying insect food in places where they can easily be caught and they need safe and reliable roosting sites, particularly during breeding and hibernation.
- 3.2 Bats are heavily dependent on buildings and trees for their roost sites and, therefore, extremely susceptible to disturbance from human activities ranging from simple maintenance work through major conversion and renovation schemes to building demolition. Development schemes can also isolate bat populations and sever roost sites from favoured feeding areas, by removing hedgerows and trees that bats use as commuting routes.
- 3.3 Bats are susceptible to disturbance and have been known to abandon roost sites after instances of disturbance. The effects of disturbance are more pronounced at different times of year. Serious disturbance during breeding can result in the breeding females being killed or the abandonment and subsequent starvation of dependent young. Repeated disturbance during winter hibernation can result in the death of adult animals from starvation.
- 3.4 The level of protection afforded to bats in UK and European legislation reflects the fact that it is now generally accepted that bats have declined substantially, maybe by as much as 60% over recent years. Most species are declining and vulnerable and all are protected.

4 Details of Survey

4.1 Daytime survey by a single surveyor.

5 Methodology for the survey

- 5.1 A detailed internal and external inspection of the building was carried out to identify potential roost sites and access points and any signs of actual occupation such as droppings, discarded moth wings, staining etc.
- 5.2 A dusk emergence and activity survey was not carried out because of the season.
- 5.3 Assessment of site and surrounding habitats.
- 5.4 Search of existing bat roost records.

6 Description of habitats

6.1 The sites were located around the village in a parkland landscape with abundant trees and woodlands including some veteran trees. To the east the woodlands form a continuous link to the Stainborough/Rockley/Worsbrough area which is an important area for bats. To the west the River Don valley woodlands are also important areas for bats. In general then the Wortley area would be expected to support all the locally occurring species.

7 Results of dusk survey

7.1 A dusk survey was not carried out because of the season.

8 Existing local records

8.1 Barnsley Bat Group has the following records for the area.

Roosts

| Site Name | District | Roost Type | NGR | Species | Count | Date |
|--------------------------------|-------------|-------------|-----------|------------------|-------|----------|
| Wharncliffe Railway Tunnel | Wharncliffe | | SK 295983 | Daubentons | | |
| Cherry Tree Cottages | Wortley | House | SK291995 | 55 Pipistrelle | 1 | 14/03/91 |
| Wortley Top Forge | Wortley | Barn | SK294998 | Brown Long-eared | +Dr | 08/01/89 |
| Top Cottage, Wortley Top Forge | Wortley | House | SK 294999 | Pipistrelle | + Dr | /95 |
| Hare Springs Cottage | Wortley | House | SK 302986 | Indet | - | 12/07/94 |
| Old Post Office | Crane Moor | House | SE 305014 | Pipistrelle | Dr | 25/01/04 |
| Crane Moor Road | Crane Moor | House | SE 304014 | Indet | 81 | 7/92 |
| Lower Toad Hole Wood Tree | Thurgoland | Tree Cherry | SE302015 | Noctule | +Dr | 02/10/87 |
| Pilley Bridge, Green Springs | Pilley | Bridge | SE 326008 | Daubentons | 5 | 13/04/93 |
| Bruce Lodge 1 | Pilley | House | SE 327009 | Whiskered | 52 | 5/93 |
| Hermit Hill Farm | Wortley | Barn | SE 323008 | Brown Long-eared | | |
| Bruce Lodge 2 | Pilley | House | SE 327009 | 55 Pipistrelle | 15 | |

Records

| | | | | | | |
|-------------------------------|---------|---------------|----------|------------------|---|------------|
| Finkle Street fields to north | Wortley | Flight record | SK302989 | Noctule | 5 | 19/06/1989 |
| Rose Cottage | Wortley | Grounded bat | SK3099 | Brown Long-eared | 1 | 13/06/1993 |

9 Protected species legislation

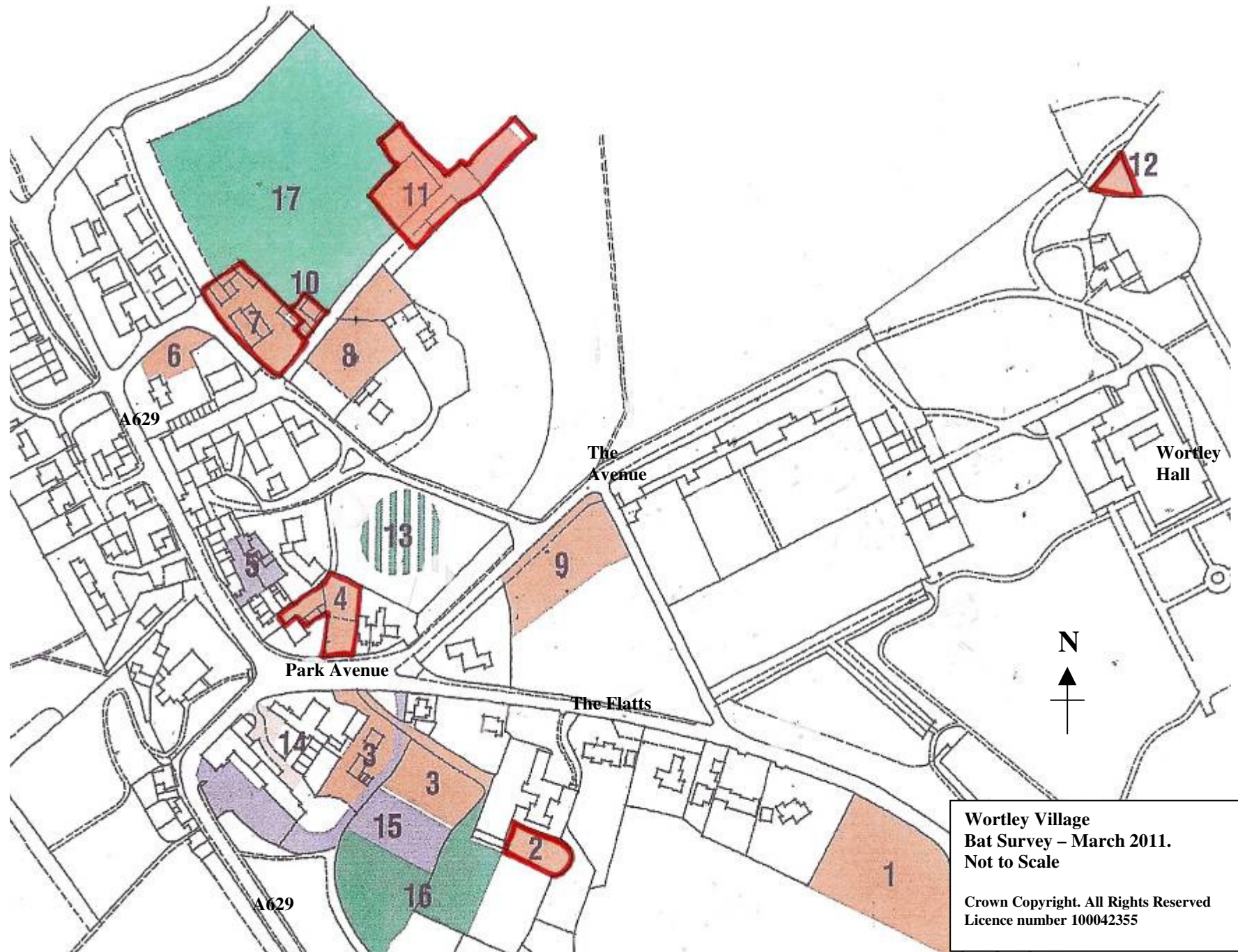
9.1 Bats and their roosts are fully protected at all times (whether the bats are currently present or not). This protection comes from the Wildlife & Countryside Act 1981 (updated by the Countryside & Rights of Way Act 2000) and the Habitats Regulations 1994 (updated by the Conservation (Natural Habitats) (Amendment) Regulations 2007). Under this legislation it is an offence to deliberately kill, injure, capture or disturb bats or to damage, destroy or obstruct access to any place used by bats as a breeding site or resting place.

9.2 Under the habitats regulations, where bats may be affected by development proposals, a licence is required from Natural England. Published guidelines on the licence procedure indicate that if, on the basis of survey information and specialist knowledge of the species concerned, the proposed activity is reasonably likely to result in an offence then, a licence is required. If, on the other hand the proposed activity is reasonably unlikely to result in an offence, then a licence is not required.

9.3 All birds, their nests and eggs are protected under the Wildlife and Countryside Act 1981, during the breeding season. It is an offence to intentionally take, kill or injure any wild birds or destroy their nests

and eggs. In addition some species have additional protection under schedule 1 of the act where it is an offence to disturb these birds whilst nest building or at a nest containing eggs or young or to disturb the dependent young of such a bird.

- 9.4 Barn Owls have special protection under schedule 1 of the Wildlife & Countryside Act 1981. The adult birds, their eggs and young are fully protected at all times but disturbance of the nest site (including the building or tree containing the nest site) would only be an offence during the breeding period (from start of egg laying until the last chick leaves the nest) usually between March and August, but could be longer. To constitute an offence, disturbance must be shown to be reckless. Disturbance may be deemed to be reckless if it is committed by someone who could be expected to know that the bird(s) might be present, but failed to check.
- 9.5 Licenses cannot be issued for removal of Barn Owls in order to facilitate development.



Wortley Village
Bat Survey - March 2011.
Not to Scale

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SITE 2

10 Results of daytime survey

- 10.1 The survey was carried out on 28 February 2011.
- 10.2 The site comprised a single-storey open-fronted shed with stone walls and blue slate roof. The building was cut into the slope of the land with the rear eaves only about 1.6 metres above ground level, much too low to be attractive to bats. The front was largely open with the roof supported on cast iron columns. The east gable was mostly covered by a lean-to structure in an adjacent garden. The west gable was well pointed with no suitable openings for bats.
- 10.3 Internally the building was open to the underside of the roof and used for storage. The roof was supported on sawn timber trusses containing no suitable sockets or joints which could provide suitable roosting crevices. The ridge was well sealed with tile lats butted tightly along both sides of the ridge board except for a short section at the east end but this was quite cobwebby and clearly not used by bats.
- 10.4 A small section at the eastern end was enclosed and locked and apparently used as a garage. Access was not possible but the area too small in any case to be used by bats.
- 10.5 The floor, surfaces of stored materials and inside gable walls were carefully examined but no signs of droppings, discarded moth wings or urine spotting were found to suggest any use by bats.
- 10.6 As a matter of course the building was checked for signs of other protected species. No signs of Barn Owl were found but the building was used by nesting swallows during the summer of 2010.

11 Evaluation of survey results

- 11.1 Externally the rear walls were too low to be attractive to bats and the gables were covered by a lean-to at one end and well pointed with no openings at the other. Internally the building was potentially more attractive to bats with direct flight access to the ridge area. No signs of droppings, urine spotting or discarded insect remains were found on the floor, inside gable walls or surfaces of stored materials etc. Such signs would normally remain for many years unless disturbed.
- 11.2 The building was used by nesting swallows

12 Site & species status assessment

- 12.1 No evidence to suggest the presence of a roost. Single bats possible.

13 Assessment of Impacts without mitigation.

- 13.1 No negative impacts are predicted.

| Development effect | Scale of Impact | | | |
|---|-----------------|-----|--------|------|
| | Negligible | Low | Medium | High |
| Destruction of roost site | + | | | |
| Risk of killing/injuring bats during roof stripping | + | | | |
| Temporary disturbance from building works during breeding season | + | | | |
| Temporary disturbance from building works outside the breeding season | + | | | |
| Post development interference | + | | | |

- 13.2 Nesting sites for swallows would be lost.



SITE 4

10 Results of daytime survey

- 10.1 The survey was carried out on 28 February 2011.
- 10.2 The site involved a single two-storey stone barn at the rear of Rose Cottage. The roof was covered with plain concrete tiles. The walls were generally well pointed, particularly in the upper parts with eroded stonework generally low down. The eaves on both sides had timber fascia with quite large gaps particularly on the south side showing evidence of use by small birds. The gable verges were well pointed with one or two potentially suitable openings for bats on the east gable.
- 10.3 Internally the upper floor was open to the underside of the roof which was lined with underfelt. The felt was wrapped tightly over the ridge board with no access gaps for bats except at the gable wall tops. The roof was supported on sawn timber trusses containing no suitable sockets or joints which could provide suitable roosting crevices. The ridge and apexes of internal gable walls were cobwebby suggesting bats were unlikely.
- 10.4 The floor and inside gable walls were carefully examined but no signs of droppings, discarded moth wings or urine spotting were found to suggest any use by bats.
- 10.5 As a matter of course the building was checked for signs of other protected species. No signs of Barn Owl or nesting swallows were found.
- 10.6 Two very large mature trees were present in the adjacent garden.

| | | | |
|----|----------------|---------------------|--|
| T1 | Horse Chestnut | Stem dia. 1000mm | Very large tree. An apparent wound/split was noted on a large limb hanging over the garden of Rose Cottage, approx. 1.5 metres long. |
| T2 | Sycamore | Stem dia. 500mm | Pruning wounds but no suitable roosting crevices noted. |

11 Evaluation of survey results

- 11.1 Externally there were potentially attractive roost sites available to bats under the fascias on both sides and small gaps were noted in the verge pointing to the east gable. Evidence of nesting birds was noted under fascias but no bat droppings were found.
- 11.2 Internally the building appeared suitable for Brown Long-eared bats but no signs of droppings, urine spotting or discarded insect remains were found on the loft floor or internal gable walls. Such signs would normally remain for many years unless disturbed.
- 11.3 Tree T1 appeared to have a long split in a large limb overhanging the garden of Rose Cottage. This could not be fully evaluated from the ground but should be checked further if removal is considered.
- 11.4 There is a record of a Brown Long-eared bat found grounded at Rose Cottage in June 1993 but there is no detail of the circumstances.

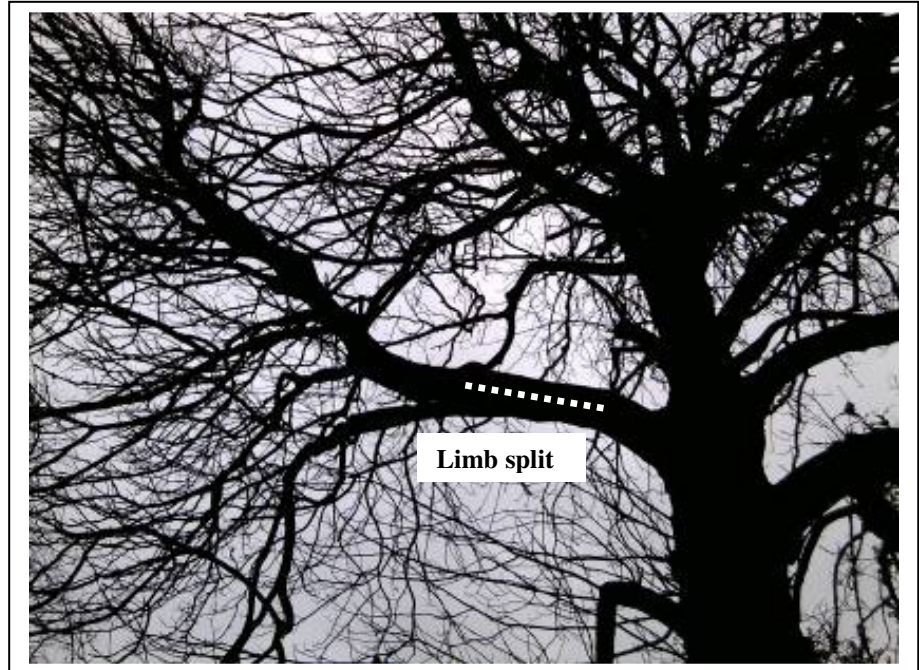
12 Site & species status assessment

- 12.1 No evidence to suggest the presence of an internal loft species such as Brown Long-eared bat but there is potential for a summer roost of Pipistrelle behind fascias, particularly on the south side that would need to be checked during the active season if the eaves are likely to be disturbed in the scheme.
- 12.2 The limb cavity in T1 is likely to be attractive to bats.

13 Assessment of Impacts without mitigation.

- 13.1 Requires further evaluation in the active season.

| Development effect | Scale of Impact | | | |
|---|-----------------|-----|--------|------|
| | Negligible | Low | Medium | High |
| Destruction of roost site | | | | |
| Temporary loss of roost site during building works. | | | | |
| Modification of roost site | | | | |
| Risk of entombing bats during building work | | | | |
| Risk of killing/injuring bats during roof stripping | | | | |
| Temporary disturbance from building works during breeding season | | | | |
| Temporary disturbance from building works outside the breeding season | | | | |
| Post development interference | | | | |



SITE 7

10 Results of daytime survey

10.1 The survey was carried out on 28 February and 4 March 2011.

10.2 The site contained two building groups described below.

Car Repair Yard

| | |
|---|--|
| A | <p>Stone garage with blue slate roof currently used as a car repair workshop. The walls were generally well pointed with no suitable openings for bats noted. Small gaps were noted in the verge pointing to both gables, potentially suitable for bats. Gaps were also noted under the edge of slates at wall top level on the front (west) eaves. The eaves on the east side were covered by a lean-to.</p> <p>Internally the bulk of the building was taken up by the car repair workshop. This area was open to the underside of the roof. No signs were found and the disturbance and fumes etc from the workshop would make the area unsuitable for bats. A small room at the north end, with a separate door in the north gable, was used for storage. This too was open to the roof but the roof and upper walls were heavily covered by cobwebs indicating that bats were unlikely to be present. No signs were found.</p> |
| B | <p>Lean-to extension to north side of A. The walls were a mix of corrugated iron and ply boarding with large windows along the east wall. The roof was corrugated sheet. Internally the space was open to the underside of the corrugated roof sheets. There was no potential for bats.</p> |
| C | <p>Single-storey open fronted stone shed with blue slate roof and cast iron columns supporting the roof along the front. The north gable contained a large uncovered window opening. Slates were missing from the verge to the north gable exposing the wall top.</p> <p>Internally the barn was open to the underside of the roof which was lined with underfelt. The internal space was largely filled with timber pallets and boarding to eaves height. The internal gable wall and the upper surfaces of the pallets etc were carefully examined but no signs of droppings or urine spotting were found to suggest any use by bats although there were a few discarded moth wings on the east gable wall suggesting use as a feeding perch at some time.</p> <p>As a matter of course the building was checked for signs of other protected species. No signs of Barn Owl were found but there were signs of nesting swallows.</p> |

Builder's yard

| | |
|---|--|
| D | <p>Single-storey stone barn with blue slate roof. South gable showed some gaps in the verge pointing. There were potential openings in the front eaves with open joints along the eaves line but probably too disturbed by the road to be attractive. The rear was hipped with no apex.</p> <p>Internally the roof was lined with insulation board to the underside of rafters with no enclosed loft space.</p> |
| E | <p>Single-storey stone barn with blue slate roof. Only the rear wall was open and accessible to bats. Potential openings at wall top level under the edge of roof slates and in an open building joint in the back wall between barns E and F.</p> <p>Internally open to the roof with trusses containing no suitable mortice or sockets for bats. No signs of droppings, urine spotting or discarded insect remains on any of the stored materials within the building.</p> |

| | |
|---|---|
| F | <p>Single-storey open-fronted stone shed with blue slate roof. The rear wall was well pointed with potential crevices only along the eaves line beneath the edge of roof slates. Potential opening also beneath lead flashing on the north gable and gaps in the pointing to the gable apex at the south end.</p> <p>Internally open to the roof with stored timber etc up to eaves level. The roof trusses containing no suitable mortice or sockets for bats. No signs of droppings, urine spotting or discarded insect remains on any of the stored materials within the building.</p> |
|---|---|

10.6 A number of large mature trees were present in the site.

| | | | |
|----|----------|---------------------|---|
| T1 | Lime | Stem dia. 900mm | No visible cavities suitable for roosting bats were seen. |
| T2 | Lime | Stem dia. 900mm | No visible cavities suitable for roosting bats were seen. |
| T3 | Lime | Stem dia. 750mm | No visible cavities suitable for roosting bats were seen. |
| T4 | Lime | Stem dia. 600mm | No visible cavities suitable for roosting bats were seen. |
| T5 | Sycamore | Multi-stem | No visible cavities suitable for roosting bats were seen. |
| T6 | Lime | Stem dia. 450mm | No visible cavities suitable for roosting bats were seen. |
| T7 | Sycamore | Stem dia. 1000mm | No visible cavities suitable for roosting bats were seen. |

11 Evaluation of survey results

11.1 An evaluation of the different buildings is given in the following table.

Car Repair Yard

| | |
|--------------|---|
| A Garage | <p>Some small gaps in the gable verge pointing and along the eaves although these were somewhat obstructed by tree branches and likely to be affected by road disturbance.</p> <p>Internally most was actively used for vehicle repair and too disturbed. Store room at the northern end quiet but too small for bats.</p> |
| B Lean-to | No interest for bats. |
| C Open front | Some openings in the rear walls and north gable but flight access to the ridge area through the open front likely to be more attractive to bats although there were no signs of droppings, urine spotting on the surface of stored timber to suggest any actual use. Several old moth wings at the foot of the south gable wall suggests possible occasional use by Brown Long-eared bat for feeding perch. |

Builders Yard

| | |
|------------|--|
| D Workshop | <p>Some small gaps in the gable verge pointing and along the eaves although these were somewhat obstructed by tree branches and likely to be affected by road disturbance.</p> <p>Internally the rafters were fully lined with insulation board with no separate loft space.</p> |
|------------|--|

| | |
|--------------|--|
| E Workshop | Some openings in the rear walls at eaves level facing the fields and a vertical open building joint in the back wall between buildings E and F. Summer breeding roost unlikely but could be used by single males or hibernating bats. Internally open but ridge area very cobwebby indicating the absence of bats. No signs of droppings, urine spotting or discarded insect remains. |
| F Open front | Some openings in the rear walls and south gable and under flashing at the north gable but flight access to the ridge area through the open front likely to be more attractive to bats although there were no signs of droppings, urine spotting or discarded insect remains on the surface of stored timber to suggest any actual use. |

12 Site & species status assessment

Car Repair Yard

| | |
|--------------|--|
| A Garage | Bat roost unlikely. |
| B Lean-to | Building Unsuitable |
| C Open front | No evidence for a roost but possible occasional feeding perch for Brown Long-eared bats. |

Builder's yard

| | |
|--------------|--|
| D Workshop | Bat roost unlikely |
| E Workshop | Bat roost unlikely but single bats possible in rear wall crevices. |
| F Open front | No evidence for a roost. |

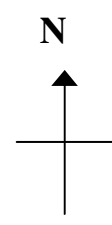
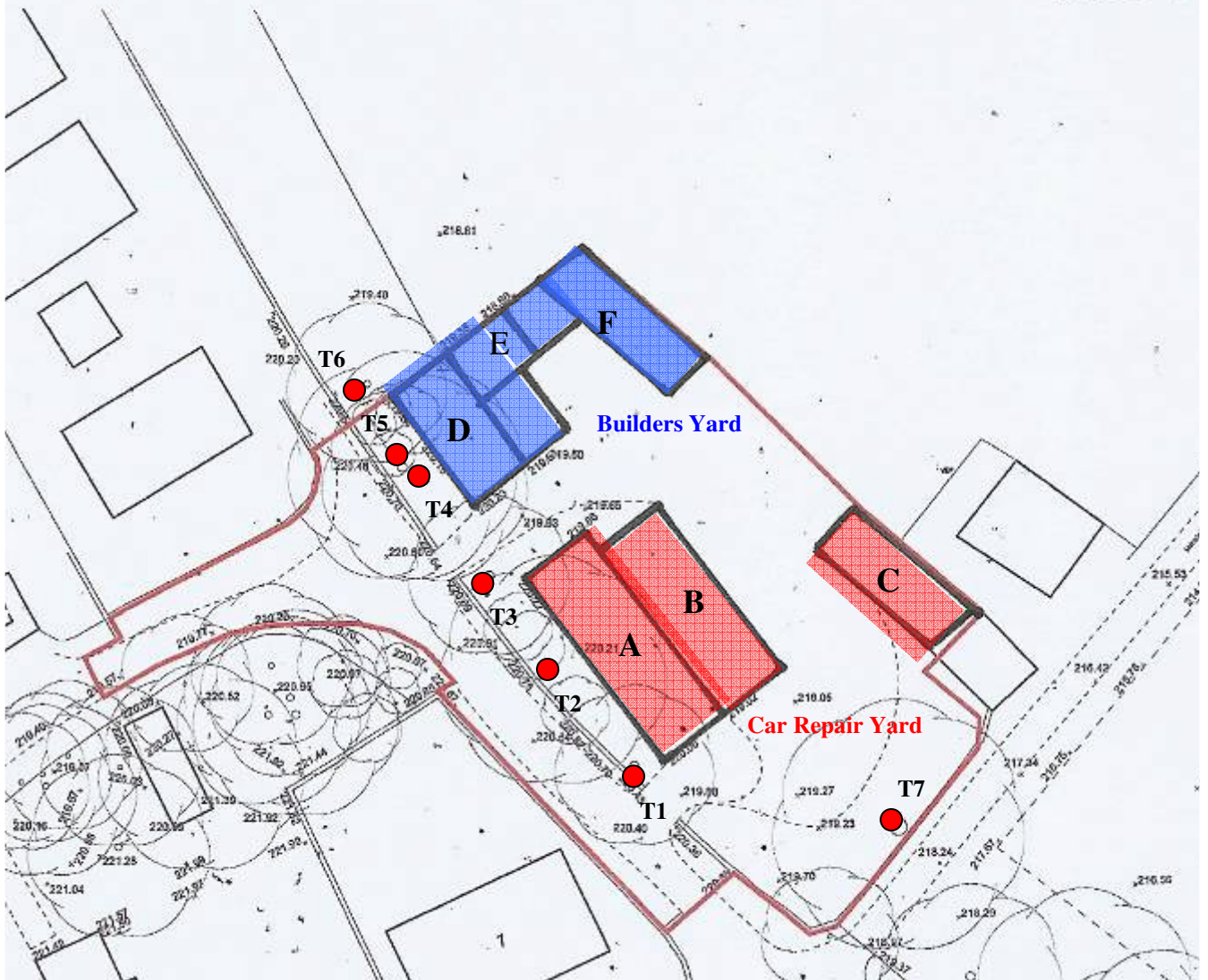
13 Assessment of Impacts without Mitigation.

13.1 No significant negative impacts predicted.

| Development effect | Scale of Impact | | | |
|---|-----------------|-----|--------|------|
| | Negligible | Low | Medium | High |
| Destruction of roost site | + | | | |
| Temporary loss of roost site during building works. | + | | | |
| Modification of roost site | + | | | |
| Risk of killing/injuring bats during demolition | | + | | |
| Temporary disturbance from building works during breeding season | + | | | |
| Temporary disturbance from building works outside the breeding season | + | | | |
| Post development interference | + | | | |

13.2 Nesting sites for swallows would be lost.

Site 7



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Car Repair Yard



Garage building A



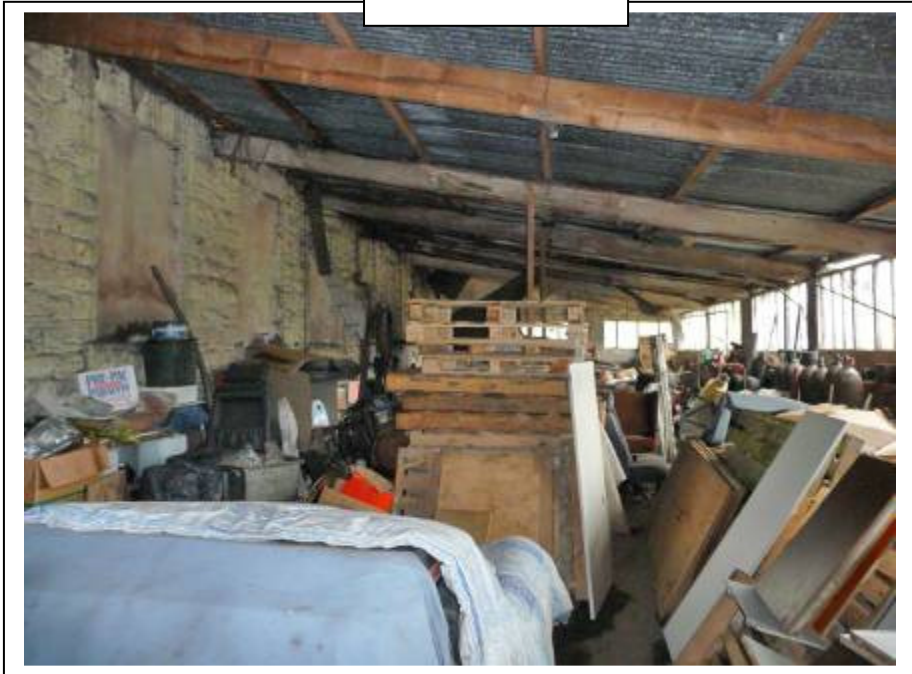
Car Repair Yard



Barn B



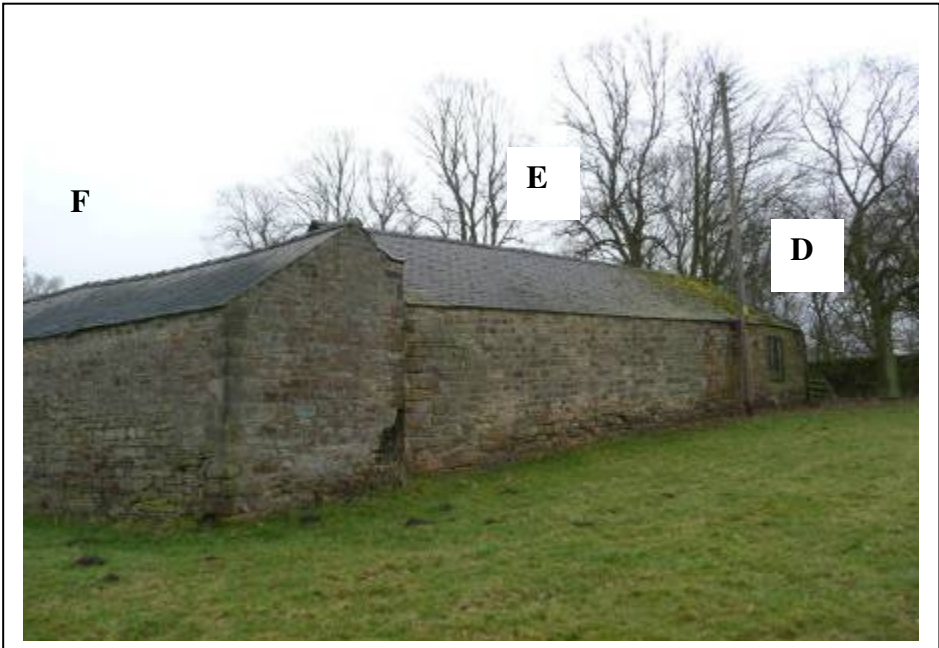
Barn C



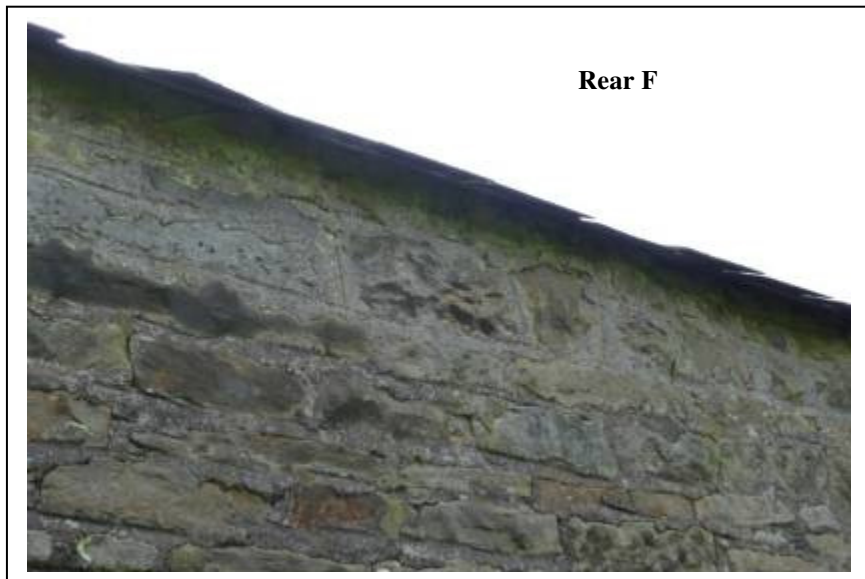
Builders Yard

Wortley Village – Bat Survey – March 2011

Site 7



Builders yard



SITE 10

10 Results of daytime survey

- 10.1 The survey was carried out on 4 March 2011.
- 10.2 The site contained two buildings described below.

| | |
|---|--|
| A | Single-storey stone barn with blue slate roof, part of a range including the adjacent open-fronted barn. Some open joints around quoins at wall corners and under the edge of roof slates along the eaves. Some gaps were also noted in the pointing to the gable verges. Internally the barn was open to the underside of the roof with a half loft along the north side not quite extending under the ridge line. The ridge was generally very cobwebby. No signs of droppings, urine spotting or discarded insect remains were found on any of the many surfaces or on the internal gable walls. |
| B | Open barn with single stone wall on the north side and partial corrugated sheet walls on the wall and south side and a corrugated sheet roof. The front was open. No potential at all for bats. |

- 10.3 As a matter of course the building was checked for signs of other protected species. No signs of Barn Owl or nesting swallows were found.

11 Evaluation of survey results

- 11.1 Building B had no potential for bats at all.
- 11.2 Building A showed potential roost sites under the edge of roof slates at eaves level and in gaps in pointing at the gable verge but overall the building is considered too low to be attractive to bats.
- 11.3 Internally the building was open to the roof but the rafters and ridge board were very cobwebby indicating that bats were not present. There were no signs of droppings, urine spotting or discarded insect remains were found on the loft floor or internal gable walls. Such signs would normally remain for many years unless disturbed.

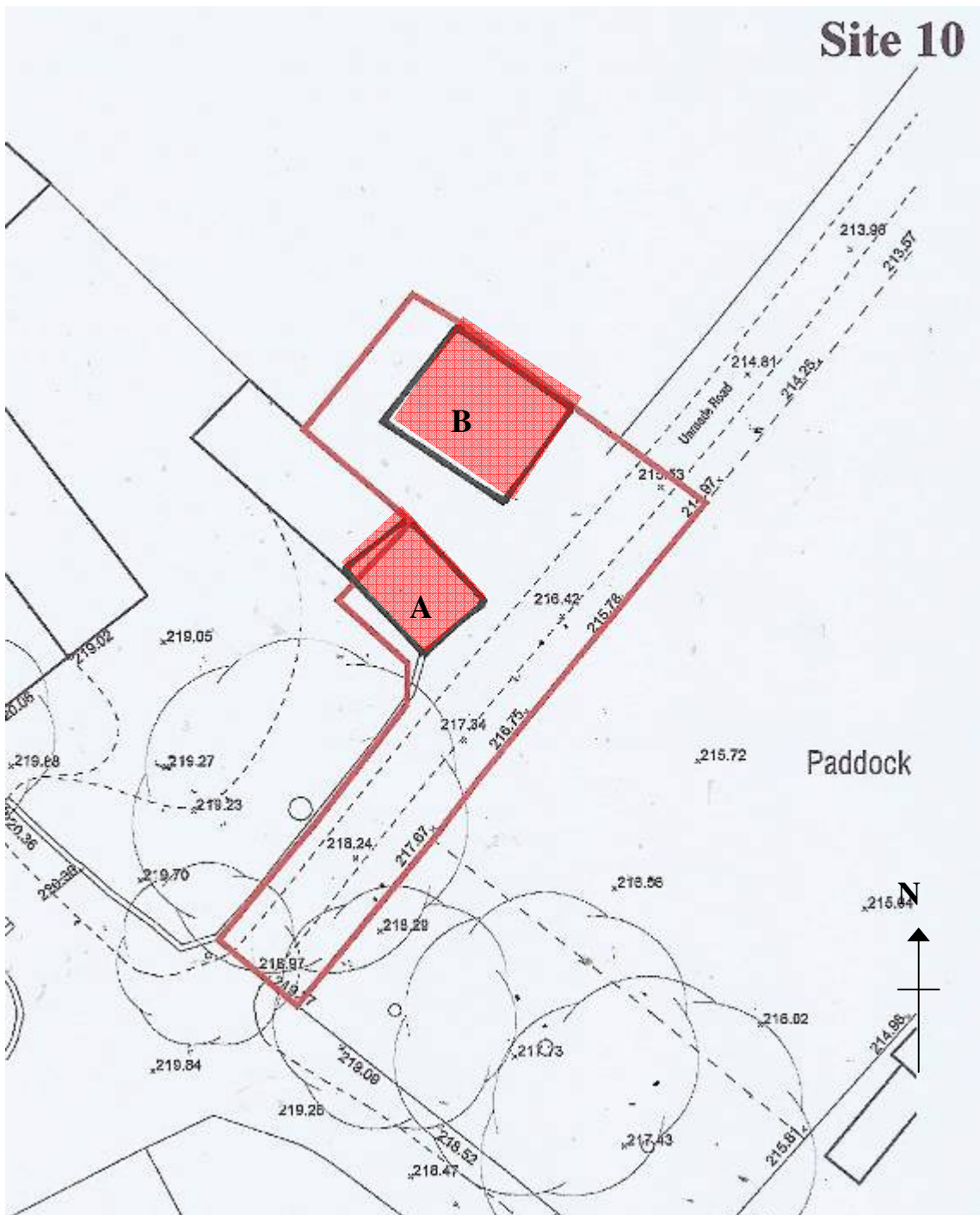
12 Site & species status assessment

- 12.1 No evidence to suggest the presence of a summer roost. Crevices may be used by hibernating bats.

13 Assessment of Impacts without mitigation.

- 13.1 No negative impacts are predicted.

| Development effect | Scale of Impact | | | |
|---|-----------------|-----|--------|------|
| | Negligible | Low | Medium | High |
| Destruction of roost site | + | | | |
| Temporary loss of roost site during building works. | + | | | |
| Modification of roost site | + | | | |
| Risk of killing/injuring bats during demolition | | + | | |
| Temporary disturbance from building works during breeding season | + | | | |
| Temporary disturbance from building works outside the breeding season | + | | | |
| Post development interference | + | | | |



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SITE 11

10 Results of daytime survey

- 10.1 The survey was carried out on 28 February 2011.
- 10.2 The buildings were all modern style animal shelters with steel frame and corrugated sheet roof and partial timber clad walls. The buildings had no potential for bats or other protected species.

11 Evaluation of survey results

- 11.1 The buildings were modern frame barns with no potential for bats.

12 Site & species status assessment

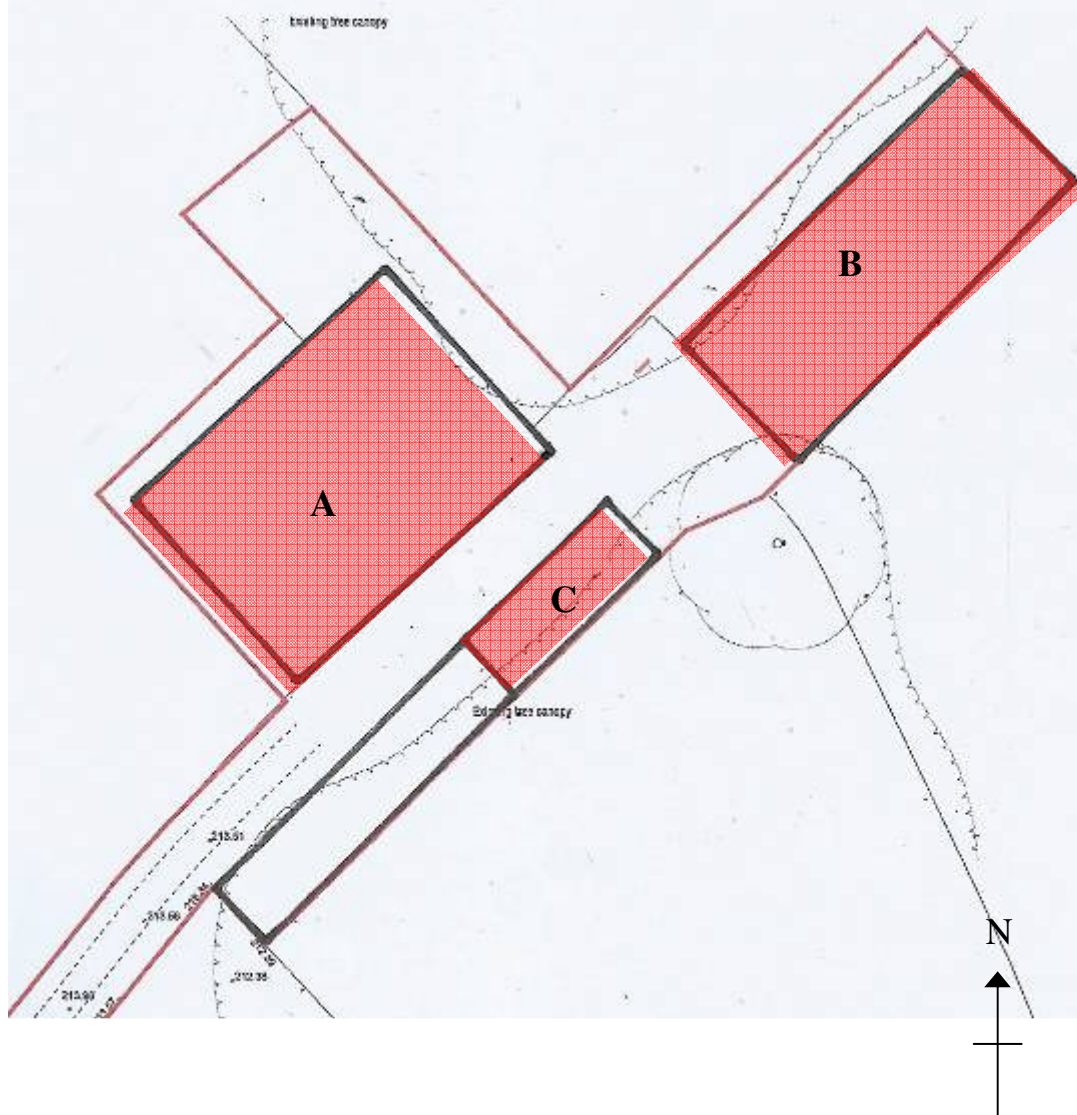
- 12.1 No roost potential.

13 Assessment of Impacts without Mitigation.

- 13.1 None

| Development effect | Scale of Impact | | | |
|---|-----------------|-----|--------|------|
| | Negligible | Low | Medium | High |
| Destruction of roost site | + | | | |
| Temporary loss of roost site during building works. | + | | | |
| Modification of roost site | + | | | |
| Risk of entombing bats during building work | + | | | |
| Risk of killing/injuring bats during roof stripping | + | | | |
| Temporary disturbance from building works during breeding season | + | | | |
| Temporary disturbance from building works outside the breeding season | + | | | |
| Post development interference | + | | | |

Site 11



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SITE 12

10 Results of daytime survey

- 10.1 The survey was carried out on 28 February 2011.
- 10.2 The site concerned a single small stone field barn. The majority of the building was open-fronted on the west side with an enclosed stable area at the south end. The walls were generally well pointed with no openings. Gaps under the edge of roof tiles at eaves level and in the pointing beneath the gable verges were noted providing potential roosting sites for bats. A window opening in the south gable was covered with a steel mesh grille.
- 10.3 Internally the barn was open to the underside of the roof, which was supported on a single sawn timber truss containing no suitable sockets or joints which could provide suitable roosting crevices. The ridge was cobwebby indicating that bats were unlikely.
- 10.4 The floor and inside gable walls were carefully examined but no signs of droppings, discarded moth wings or urine spotting were found to suggest any use by bats.
- 10.5 As a matter of course the building was checked for signs of other protected species. No signs of Barn Owl were found but there were signs of nesting swallows.
- 10.6 Two very large mature trees were present in the adjacent area.

| | | | |
|----|----------------|--------------------|--|
| T1 | Horse Chestnut | Stem dia. 750mm | Very large veteran tree. Large section of dead stem approx. 2.5 metres high and hollow. Otherwise no suitable roosting cavities noted. |
| T2 | Sycamore | Stem dia. 900mm | Large cavity noted in an upper limb approx. 400mm high and 150-200mm wide. Otherwise no suitable roosting cavities noted. |

11 Evaluation of survey results

- 11.1 Externally there were potential roost sites in the rear eaves and at both gables and whilst no signs were found, any droppings that might have been present last summer would probably have been removed by snow and rain during the winter. Internally the open-fronted nature of the building would be attractive to bats but no signs were found and droppings etc on internal surfaces would remain for some years unless disturbed.
- 11.2 Tree T2 had a cavity in an upper limb. This could not be fully evaluated from the ground but should be checked further if removal is considered.
- 11.3 The barn was used by nesting swallows.

12 Site & species status assessment

- 12.1 No evidence to suggest the presence of an internal loft species such as Brown Long-eared bat but there is potential for other species such as Myotis bats including Whiskered and Natterer's bats with sites in the ridge area being most likely. Crevices such as those in the eaves and gables might also be used by hibernating bats. The building would need to be checked during the active season to confirm presence or absence.
- 12.3 Tree T2 contained a cavity in an upper limb that would be very likely to attract roosting bats.

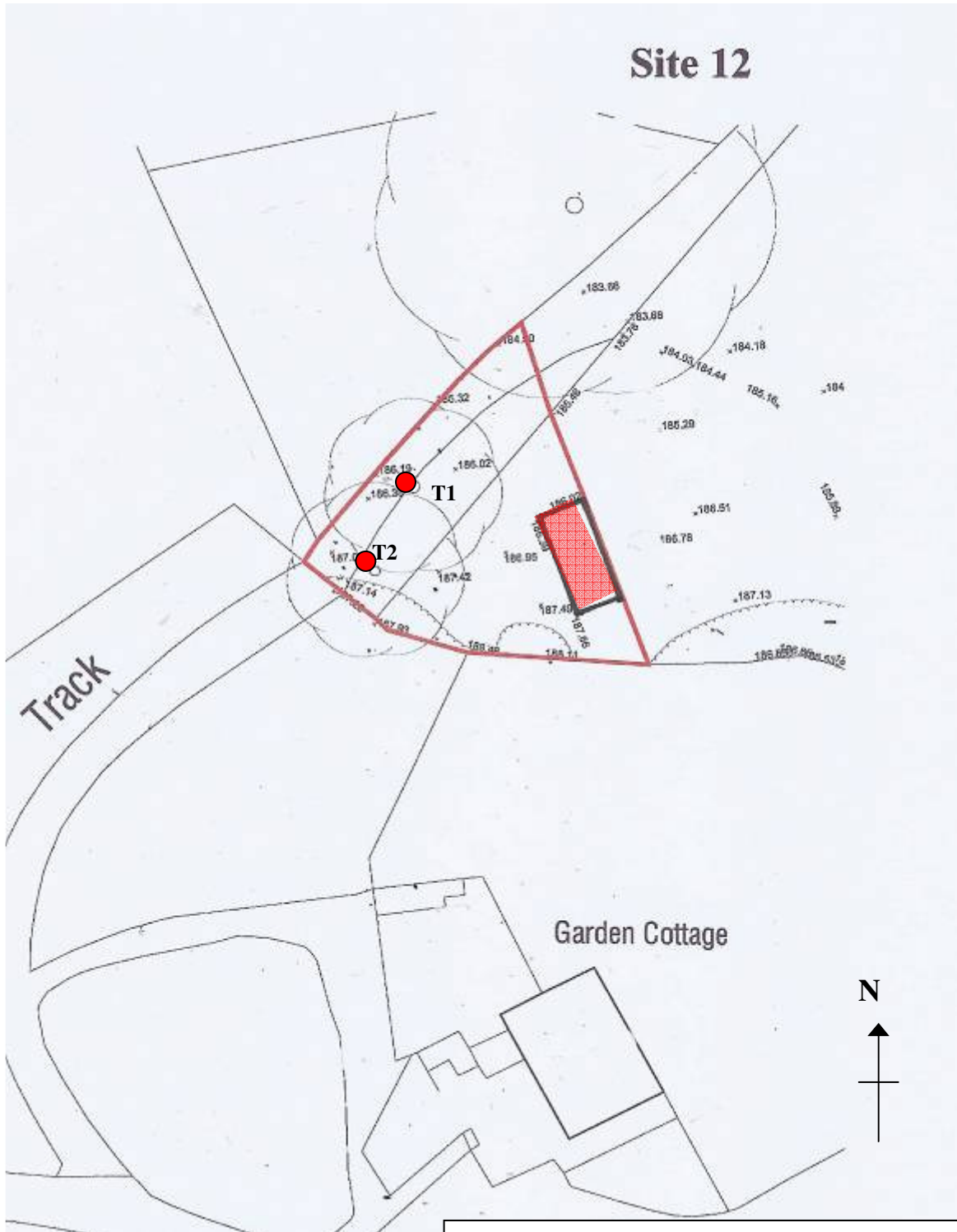
13 Assessment of Impacts without mitigation.

- 13.1 Requires further evaluation in the active season.

| Development effect | Scale of Impact | | | |
|---|-----------------|-----|--------|------|
| | Negligible | Low | Medium | High |
| Destruction of roost site | | | | |
| Temporary loss of roost site during building works. | | | | |
| Modification of roost site | | | | |
| Risk of entombing bats during building work | | | | |
| Risk of killing/injuring bats during roof stripping | | | | |
| Temporary disturbance from building works during breeding season | | | | |
| Temporary disturbance from building works outside the breeding season | | | | |
| Post development interference | | | | |

13.2 Nesting sites for swallows would be lost.

Site 12



Wortley Village – Bat Survey – March 2011.
Not to Scale

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Wortley Village – Bat Survey – March 2011

Site 12



14 Mitigation guidelines

- 14.1 Mitigation is required to avoid or reduce the impact of development proposals on the population of bats present, either roosting or feeding. Licences are normally required where a roost site is threatened in some way by a scheme, but might also be necessary where the viability of a roost is threatened by the removal of the availability of crucial feeding habitat.
- 14.2 Natural England in their published guidelines (Bat Mitigation Guidelines Jan 2004) defines the key principles involved. i.e. Mitigation involving changes to the scheme or altering the timing of work to reduce or remove impacts and Compensation, the creation of new replacement roosts or habitats.
- 14.3 Natural England also requires mitigation/compensation to be proportionate to the size of the impact and the importance of the population affected and as a principle:
- There should be no net loss of roost sites and that compensation should provide an enhanced resource since the adoption of new roost sites by bats is not guaranteed.
 - The scheme should aim to replace like with like in terms of the status of the site. i.e. male roost, maternity roost, hibernation roost etc.
 - Compensation should ensure that the affected bat population could continue to function as before so attention may need to be given to surrounding habitats.

15 Mitigation Summary

| | |
|---------|---|
| Site 2 | Careful demolition in safe season. Create roost opportunities in replacement building. |
| Site 4 | Further survey required in active season. Mitigation subject to results. Care with roof stripping if necessary & care with any works along eaves or gable verges where extension may overbuild existing eaves or gable. Care with tree work if areas with cavities are to be removed –further survey required to confirm absence of bat roost. |
| Site 7 | Careful demolition in safe season. Create roost opportunities in replacement building. |
| Site 10 | Careful demolition in safe season. Create roost opportunities in replacement building. |
| Site 11 | No mitigation required |
| Site 12 | Further survey required in active season. Mitigation subject to results. Care with roof stripping and masonry work to upper walls and gables. |

16 Mitigation proposals

- 16.1 Mitigation proposals are given below for each of the sites as appropriate.

| | |
|---------------|---|
| Site 2 | Purely as a precaution, roof stripping should not be carried out during the breeding season (May-August) unless the absence of bats has been confirmed by a dusk emergence survey. Care should also be taken during roof stripping lifting rather than sliding ridge tiles and checking beneath for signs of bats. If bats or droppings are found further advice should be sought immediately and work halted in that area. |
|---------------|---|

| | |
|----------------------|---|
| | <p>Care should be taken with the demolition of stone walls. Bats will hibernate in the rubble filled core of walls, gaining access through open joints etc. The roost site can be a considerable distance from the access point. Although the risk of significant numbers of bats being present is not high this work should not be done during winter months when the bats are inactive and unable to escape. Single male bats will also use wall crevices during the active season. During the active season bats are likely to be disturbed by the erection of scaffolding, general building work disturbance etc and move to other sites. Work to demolish stone walls should therefore be started after a sustained period of disturbance around that part of the building.</p> <p>It would be beneficial in conservation terms to retain some openings for bats in the replacement building. These need be no more than small un-pointed openings in gable apex locations approximately 15x50mm in size or unsealed openings behind fascias.</p> <p>In general it is preferable to have completed any work before swallows commence nesting in spring or to cover openings to buildings to prevent nest building. Where the birds have commenced nesting it would be an offence to destroy the nests etc. It is normally suggested that the buildings should be demolished or checked and the openings covered before the end of March to prevent nesting taking place.</p> |
| <p>Site 4</p> | <p>Further dusk and/or dawn survey required in the active season to confirm presence or absence of bats. Some precautionary measures are given below but these might change if a roost is subsequently confirmed.</p> <p>Further survey will be required for the tree cavity if felling or pruning are proposed.</p> <p>Purely as a precaution, roof stripping should not be carried out during the breeding season (May-August) unless the absence of bats has been confirmed by a dusk emergence survey. Care should also be taken during roof stripping lifting rather than sliding ridge tiles and checking beneath for signs of bats. If bats or droppings are found further advice should be sought immediately and work halted in that area.</p> <p>Any timber treatment should be carried out using only safe Permethryn type chemicals on the Natural England list of approved safe chemicals. The work area should be checked for the presence of bats prior to application (including mortise joints) to ensure that bats are not directly sprayed with the chemical. Use of new pre-treated timber such as tanalised, is safe provided the treated timber has been allowed to dry before use.</p> <p>Great care should be taken with masonry work and re-pointing walls. Bats will use crevices at any time of year but are more vulnerable during winter hibernation when they are unable to escape when disturbed. At this time they are likely to use sites deep in the rubble filled core of walls, gaining access through open joints etc. The roost site can be a considerable distance from the access point. For this reason where bats may be present this type of work should preferably not be done in the winter months with spring and autumn being the preferred seasons.</p> <p>During the active season bats are likely to be disturbed by the erection of scaffolding, general building work disturbance etc and move to other sites. Work to crevices should therefore be started after a sustained period of disturbance in that part of the building.</p> <ul style="list-style-type: none"> • Shallow crevices where the full extent can be easily seen and that can clearly be seen to be empty may be filled. • Any crevices that appear to extend into the rubble filled core of the wall or disappear behind other building stones and cannot be fully seen may be reduced by careful pointing leaving small permanent escape holes approx. 15x30mm in size at regular intervals accessing the core of the wall. • Any such crevices that have to be fully filled and where permanent escape openings cannot be retained will need to be checked by a licensed batworker with an endoscope or similar instrument or by dusk emergence observations. |

| | |
|----------------|---|
| | <p>Open joints at eaves level which extend under the edge of roof slates should generally be retained for potential use by bats in the future. These should be identified in advance and clearly marked in order to prevent accidental filling.</p> |
| Site 7 | <p>Purely as a precaution, roof stripping should not be carried out during the breeding season (May-August) unless the absence of bats has been confirmed by a dusk emergence survey. Care should also be taken during roof stripping lifting rather than sliding ridge tiles and checking beneath for signs of bats. If bats or droppings are found further advice should be sought immediately and work halted in that area.</p> <p>Care should be taken with the demolition of stone walls. Bats will hibernate in the rubble filled core of walls, gaining access through open joints etc. The roost site can be a considerable distance from the access point. Although the risk of significant numbers of bats being present is not high this work should not to be done during winter months when the bats are inactive and unable to escape. Single male bats will also use wall crevices during the active season. During the active season bats are likely to be disturbed by the erection of scaffolding, general building work disturbance etc and move to other sites. Work to demolish stone walls should therefore be started after a sustained period of disturbance around that part of the building.</p> <p>It would be beneficial in conservation terms to retain some openings for bats in the converted building. These need be no more than small un-pointed openings in gable apex locations approximately 15x50mm in size or unsealed openings behind fascias. Locations over doors and windows should be avoided.</p> <p>In general it is preferable to have completed any work before swallows commence nesting in spring or to cover openings to buildings to prevent nest building. Where the birds have commenced nesting it would be an offence to destroy the nests etc. It is normally suggested that the buildings should be demolished or checked and the openings covered before the end of March to prevent nesting taking place.</p> |
| Site 10 | <p>Purely as a precaution, roof stripping should not be carried out during the breeding season (May-August) unless the absence of bats has been confirmed by a dusk emergence survey. Care should also be taken during roof stripping lifting rather than sliding ridge tiles and checking beneath for signs of bats. If bats or droppings are found further advice should be sought immediately and work halted in that area.</p> <p>Care should be taken with the demolition of stone walls. Bats will hibernate in the rubble filled core of walls, gaining access through open joints etc. The roost site can be a considerable distance from the access point. Although the risk of significant numbers of bats being present is not high this work should not to be done during winter months when the bats are inactive and unable to escape. Single male bats will also use wall crevices during the active season. During the active season bats are likely to be disturbed by the erection of scaffolding, general building work disturbance etc and move to other sites. Work to demolish stone walls should therefore be started after a sustained period of disturbance around that part of the building.</p> <p>It would be beneficial in conservation terms to retain some openings for bats in the converted building. These need be no more than small un-pointed openings in gable apex locations approximately 15x50mm in size or unsealed openings behind fascias. Locations over doors and windows should be avoided.</p> |
| Site 11 | <p>No Mitigation required.</p> |
| Site 12 | <p>Further dusk and/or dawn survey required in the active season to confirm presence or absence of bats. Some precautionary measures are given below but these might change if a roost is subsequently confirmed.</p> <p>Further survey will be required for the tree cavity if felling or pruning are proposed.</p> |

| | |
|--|--|
| | <p>Purely as a precaution, roof stripping should not be carried out during the breeding season (May-August) unless the absence of bats has been confirmed by a dusk emergence survey. Care should also be taken during roof stripping lifting rather than sliding ridge tiles and checking beneath for signs of bats. If bats or droppings are found further advice should be sought immediately and work halted in that area.</p> |
| | <p>Any timber treatment should be carried out using only safe Permethryn type chemicals on the Natural England list of approved safe chemicals. The work area should be checked for the presence of bats prior to application (including mortise joints) to ensure that bats are not directly sprayed with the chemical. Use of new pre-treated timber such as tanalised, is safe provided the treated timber has been allowed to dry before use.</p> <p>Great care should be taken with masonry work and re-pointing walls. Bats will use crevices at any time of year but are more vulnerable during winter hibernation when they are unable to escape when disturbed. At this time they are likely to use sites deep in the rubble filled core of walls, gaining access through open joints etc. The roost site can be a considerable distance from the access point. For this reason where bats may be present this type of work should preferably not be done in the winter months with spring and autumn being the preferred seasons.</p> <p>During the active season bats are likely to be disturbed by the erection of scaffolding, general building work disturbance etc and move to other sites. Work to crevices should therefore be started after a sustained period of disturbance in that part of the building.</p> <ul style="list-style-type: none"> • Shallow crevices where the full extent can be easily seen and that can clearly be seen to be empty may be filled. • Any crevices that appear to extend into the rubble filled core of the wall or disappear behind other building stones and cannot be fully seen may be reduced by careful pointing leaving small permanent escape holes approx. 15x30mm in size at regular intervals accessing the core of the wall. • Any such crevices that have to be fully filled and where permanent escape openings cannot be retained will need to be checked by a licensed batworker with an endoscope or similar instrument or by dusk emergence observations. <p>Open joints at eaves level which extend under the edge of roof slates should generally be retained for potential use by bats in the future. These should be identified in advance and clearly marked in order to prevent accidental filling.</p> <p>In general it is preferable to have completed any work before swallows commence nesting in spring or to cover openings to buildings to prevent nest building. Where the birds have commenced nesting it would be an offence to destroy the nests etc. It is normally suggested that the buildings should be demolished or checked and the openings covered before the end of March to prevent nesting taking place.</p> |

16 Conclusions & Recommendations

- 16.1 As things stand no activity has been identified and a bat roost has not been confirmed in any of the buildings. Because of the circumstances however and the character of buildings 4 and 12, a dusk visit during the summer will be necessary to positively confirm or discount a roost. If, however, a roost is subsequently discovered a Natural England license application would almost certainly be required. This process generally takes about 6-8 weeks from submission.
- 16.2 In the remainder of the buildings a roost is considered unlikely and simple precautionary measures are recommended.

EM Bennett
15 March 2011