Mattin MacLean Ltd.

Redevelopment of Existing Industrial Units for Residential Purposed, Bowden Hey Mill, Chapel-en-le-Frith.

BAT SURVEY REPORT

August 2011

FPCR Environment and Design Ltd
Registered Office: Lockington Hall, Lockington, Derby DE74 2RH
Company No. 07128076. [T] 01509 672772 [F] 01509 674565 [E] mail@fpcr.co.uk [W] www.fpcr.co.uk

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1.0 INTRODUCTION

1.1. This report has been prepared by FPCR Environment and Design Ltd on behalf of Mattin MacLean Ltd.. The survey was commissioned to assess the ecological constraints to conversion of an existing industrial unit for residential purposes and demolition of some sections of the industrial unit to facilitate car parking. The site is situated to the north of the town of Chapel-en-le-frith (Grid Ref: SK 061 812) (Figure 1).

1.2. Five interconnected buildings currently used for industrial purposes are affected by the planning application. The buildings are a combination of three / two storey traditional stone built buildings with pitched slated tiled roofs and a modern aluminium clad industrial infill section located centrally between the traditional stone built sections.

1.3. Existing residential development is present to the west and north west of the site and further modern industrial units are situated immediately east of the proposed development area. Immediately south of the proposed development area is an area of mature fruit trees and rank vegetation. The Black Brook and a line of mature trees are present on the north eastern boundary of the proposed development.

2.0 METHODOLOGY

Internal / External Building Assessment

2.1. External aspects of the buildings were examined to determine any potential access points and roost sites in July 2011. Structural features with the potential for use by roosting bats were recorded and suitable access points such as small gaps under eaves/soffit boards, raised or missing ridge tiles and gaps at gable ends were identified. Evidence to substantiate use was also sought during this survey. This evidence includes staining from urine and/or fur and the presence of bat droppings in and around features. Indicators that potential access points had not recently been used included the presence of heavy cob-webbing and general detritus around these points.

2.2. The interior of the buildings were also visually assessed for evidence of bat activity and/or for the potential to be used by bats in July 2011. Evidence of a roost would be determined by 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.

2.3. These surveys were completed by a licensed bat ecologist from FPCR (Natural England Survey Licence Number 20111880).

Nocturnal Surveys

2.4. A single dusk (emergence) survey was undertaken the buildings affected by the proposed works. Surveyors were positioned on all aspects of the buildings from 30 minutes prior until 90 minutes following sunset. The number and species of bats observed emerging or entering the buildings was recorded. These surveys were completed on the 25 July 2011.

2.5. Ultrasonic bat detectors were used by surveyors to aid in identification. All of the nocturnal surveys were conducted in appropriate conditions, i.e. ambient temperature exceeding 10 ˚C and little wind and no rain.

2.6. These surveys were completed by a licensed bat worker from FPCR (Licence Reference Number: 20101339) and trainee bat workers.

Barn Owl

2.7. Over the survey the presence of barn owls in the buildings was also assessed by an experienced barn owl worker from FPCR. Evidence of barn owl activity sought included the presence of the following evidence: barn owl pellets, barn owl feathers, nesting material and faecal splashes.

Desk Study

2.8. The 10Km grid square on the NBN Gateway in which the site is situated was reviewed for existing records within 2Km of Chapel-en-le-Frith (Grid Square: SK08).

3.0 RESULTS

Internal / External Building Assessment (Figure 2)

3.1. Building B1 is a three storey traditional stone built former mill building with a pitched slate tiled roof. Structural features of note included: stone window lintels of the widows, skylights on the northern elevation of the roof, wooden fascia boards and areas of lead flashing was also present around the skylights and the chimney. Externally, a limited number of potential access points / roost sites were identified associated with this building. These included: occasional gaps beneath ridge tiles, gaps beneath areas of the fascia board and gaps beneath area of lifted lead flashing. No external evidence of occupation was identified associated to this building during the survey. Internally, the third floor of the building had been converted for storage and under boarding had been installed throughout the building. The third floor room was approximately 2.5 – 3m to the pitch of the building and no evidence of a roost was identified internally.

3.2. A small single storey brick built extension with a lean too style slate tiled roof is denoted as building B2. This building was situated on the southern elevation of building B1. The only external structural features of note were an area of lead flashing between the roof of this building and building B1 and a skylight. Potential access points into this building comprise areas of missing roof tiles and gaps between the lifted lead flashing. No external evidence of occupation was identified during the survey. Internally, no roof void was present in this building but under boarding was present beneath the roof covering. No internal evidence of occupation was identified over the survey.

3.3. Building B3 situated to the north of building B1 was a modern infill section between the mill buildings. This building was constructed from modern aluminium cladding and a modern aluminium lean too style roof was present on this building. Over the survey no potential access points or potential roost sites were identified externally. Internally, the building was constructed around a steel frame and no underlining or roof void were present. No potential roost sites or evidence of current or previous occupation was identified over the internal survey of this building.

3.4. The building denoted as B4 was another two storey traditional stone built building with a pitched slate tiled roof. Externally, the structural features of note identified included: stone window lintels, wooden fascia boards and skylights in the southern elevation of the roof. Approximately 50% of the slate tiled roof on the northern elevation had been covered with a traditional bituminous

roofing felt which limited the number of potential access points externally. The potential access points identified into the building included: occasional gaps beneath the ridge tiles, gaps beneath the wooden fascia boards and a gap in the western gable end verge. Over the survey no external evidence of occupation was identified.

3.5. Internally, building B4 comprised three separate sections denoted as B4a – B4c. B4a was a two storey section of the building and the first floor of the building had been converted for office use. A traditional king post roof truss system was present this area of the building. Plaster board had been installed beneath the roof covering and no roof void or evidence of occupation was identified in this area. The central section of the building, denoted as B4b, has a mezzanine floor installed. A traditional king post roof trusses system was present and plaster board had been installed beneath the roof covering. No roof void or internal evidence of occupation was identified in this building. The area denoted as B4c was a two storey section of the building. A small roof void approximately 1.5m to the pitch of the building was present over this area of the building. A traditional rafter, ridge and purlin roof support system was present in the roof void of this building but no underlining was identified. At the time of survey no evidence of current or previous evidence of occupation was identified in this roof void.

3.6. Building B5 was a single storey section of the unit with a lean too style slate tiled roof, the majority of which had been covered with a bituminous roofing felt. Externally, the structural features of note recorded included wood fascia boards. To the west of the building was a single storey entrance porch with a flat felted roof (denoted as B5a), wooden fascia boards were present around this section. Potential access points into these buildings included occasional gaps beneath roof tiles which had not been covered by the bituminous roofing felt and occasional gaps behind the wooden fascia boards. No external evidence of occupation was identified associated with these building. Internally, a false hanging ceiling was present in the buildings and access to the small void above was not possible.

Nocturnal Emergence (Dusk) Survey (Figure 3)

3.7. Over the emergence survey no bats were identified emerging from the buildings affected by the planning application. The first bat identified was a common pipistrelle *Pipistrellus pipistrellus* which entered the site from the north along the Black Brook and the commuted over the building at 21.27. Over the emergence survey other activity identified within the site was limited to occasional common pipistrelle along Bowden Lane, the Black Brook and the mature tree line on the northern bank of the Black Brook. The key area of activity identified over the survey was over the mature fruit trees and the rank vegetation immediately adjacent to the south of the proposed development area. During the survey several common pipistrelle bats were identified constantly foraging over these habitats between 21.32 to 21.55, after which no further activity was identified over these habitats.

Barn Owls

3.8. No evidence of barn owl activity was identified within any of the buildings during the survey.

Desk Study

3.9. Several general records of bat species were identified in the 10Km grid square in which Chapel-en-le-frith is located. These included five 2Km records and one 100m record. Within 2Km of Chapel-en-le-firth two 2Km and one 100m records were identified. One of the 2Km grid records was identified over the area of Chapel-en-le-frith and the other 2Km grid record was identified over the area of Chinley northwest of Chapel-en-le-firth. The 100m grid record identified was to the north west of Chapel-en-le-firth in the open countryside to the north of Chinley.

3.10. Within the 10Km grid square, five species specific records and two general species records were identified. The species specific records were for Daubenton's *Myotis daubentonii*, Natterer's *Myotis nattereri*, common pipistrelle, soprano pipistrelle *Pipistrellus pygmaeus* and brown long eared *Plecotus auritus*. The general species records identified were for *Myotis sp.* and *Pipistrellus sp.*.

3.11. The species specific records identified within 2Km of Chapel-en-le-frith were for Natterer's, common pipistrelle and brown long eared. The Natterer's record identified was a general record covering the whole of the 10Km grid square. The common pipistrelle records included a 1Km record over the area of the site, eight 100m records to the north west of Chapel-en-le-frith and two 2Km records. One of the 2Km records was over the area of Chapel-en-le-frith and the other was to the north west over the area of Chinley. The 2Km record for brown long eared was to the north west of Chapel-en-le-frith over the area of Chinley.

3.12. The general species records for *Myotis* and *Pipistrelle sp*. were both identified within 2Km of Chapel-en-le-frith. The *Myotis sp*. record was a 100m record to the north west of Chapel-en-le-frith immediately adjacent to the A6. Several general species records for *Pipistrelle sp*. were identified, but only one 2Km grid record was identified over the area of Chapel-en-le-frith.

4.0 DISCUSSION AND RECOMMENDATIONS

4.1. During the internal / external survey of the buildings a limited number of potential access points were identified into the building denoted as B1, B2, B4, B5 and B5a. These potential access points comprised: gaps beneath roof / ridge tiles, lifted areas of lead flashing and gaps beneath wooden fascia boards. Over the survey no external evidence of usage was identified with these buildings. No potential access points or roost sites were identified into the modern infill section denoted as B3. Internally, the majority of the buildings were under boarded and no roof voids were identified. Only one small roof void was identified over the building noted as B4c. Over the survey no internal evidence of occupation was identified in any of the buildings and the only potential roost site identified was between the existing roof covering and the under boarding.

4.2. From the above assessments it was concluded that the building only provided limited potential to be used as a bat roost site.

4.3. Over the emergence survey no bats were identified emerging from any of the buildings within the site. Common pipistrelle was the only species identified foraging within the site over the survey, with the majority of activity being identified over the rank vegetation and mature fruit trees immediately south of the proposed development site. During the survey other activity identified was occasional common pipitstrelle bats foraging along the Black Brook, Bowden Lane and the mature tree line on the northern bank of the Black Brook. The level of activity identified was relatively low and typical of an area on the edge of the urban environment.

4.4. From the completed survey it has been concluded that the presence of a bat roost is not a statutory constraint to the proposed demolition of a number of the industrial buildings to the north of the site and re-development of the industrial unit to the south of the site. Given that some limited potential for a bat roost was identified in the buildings it is recommended that a precautionary approach to demolition and re-development is followed. This should include the careful removal of the roof / ridge tiles and the widen fascia boards. In the unlikely event any bats are identified during this exercise then all operations should be stopped immediately and further advice sought from a suitably qualified consultant.

4.5. During re-development of building B1 enhancements for the local bat population should be provide in the overall design. The enhancements should include the installation of ridge tile access points and 75cm of traditional bituminous roofing felt down either elevation of the roof (Figure 4). The provision of such enhancements would be in accordance to local and national planning policy covering nature conservation.

4.6. At the time of survey no evidence of barn owls was identified within the buildings affect by the proposed development. Therefore, the presence of barn owls has not been identified as a statutory constraint to the proposed development.

4.7. Although no evidence of breeding bird activity was confirmed in the building over the surveys, suitable areas for nesting birds were identified. Consequently, it is recommended that the proposed operations to the building are completed outside the main breeding period which is March to September (inclusive). In the event this timing is not possible then the contractors or an experience ecologist should complete a thorough inspection of the buildings prior to commencing operations. If active nest sites are identified during this survey then operations effecting the nest site and around the nest site should be delayed until confirmation that the chicks have fledged the nest has been confirmed.



Site Location

Mattin Maclean Ltd.

Bowden Hey Mill
Chapel-en-le-Frith, Derbyshire.

SITE LOCATION PLAN

Not to Scale @ A4 KG / KG 12.08.2011

Figure 1

J:\4786\REPORT\FIGURE 1 - SITE LOCATION PLAN.cdr

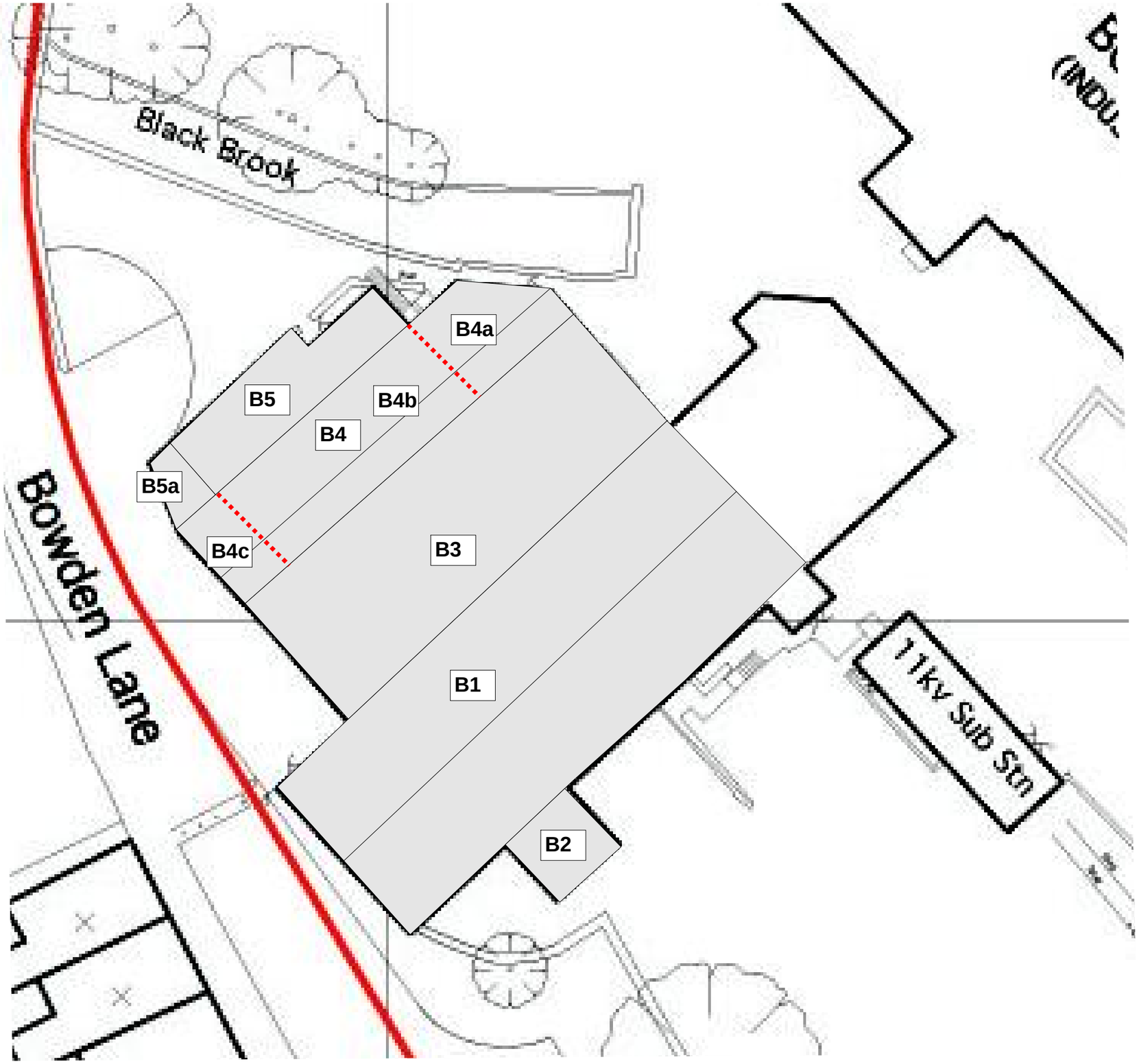
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B1

Building with Reference Number



Mattin MacLeean Ltd

Bowden Hey Mill
Chapel-en-le-frith

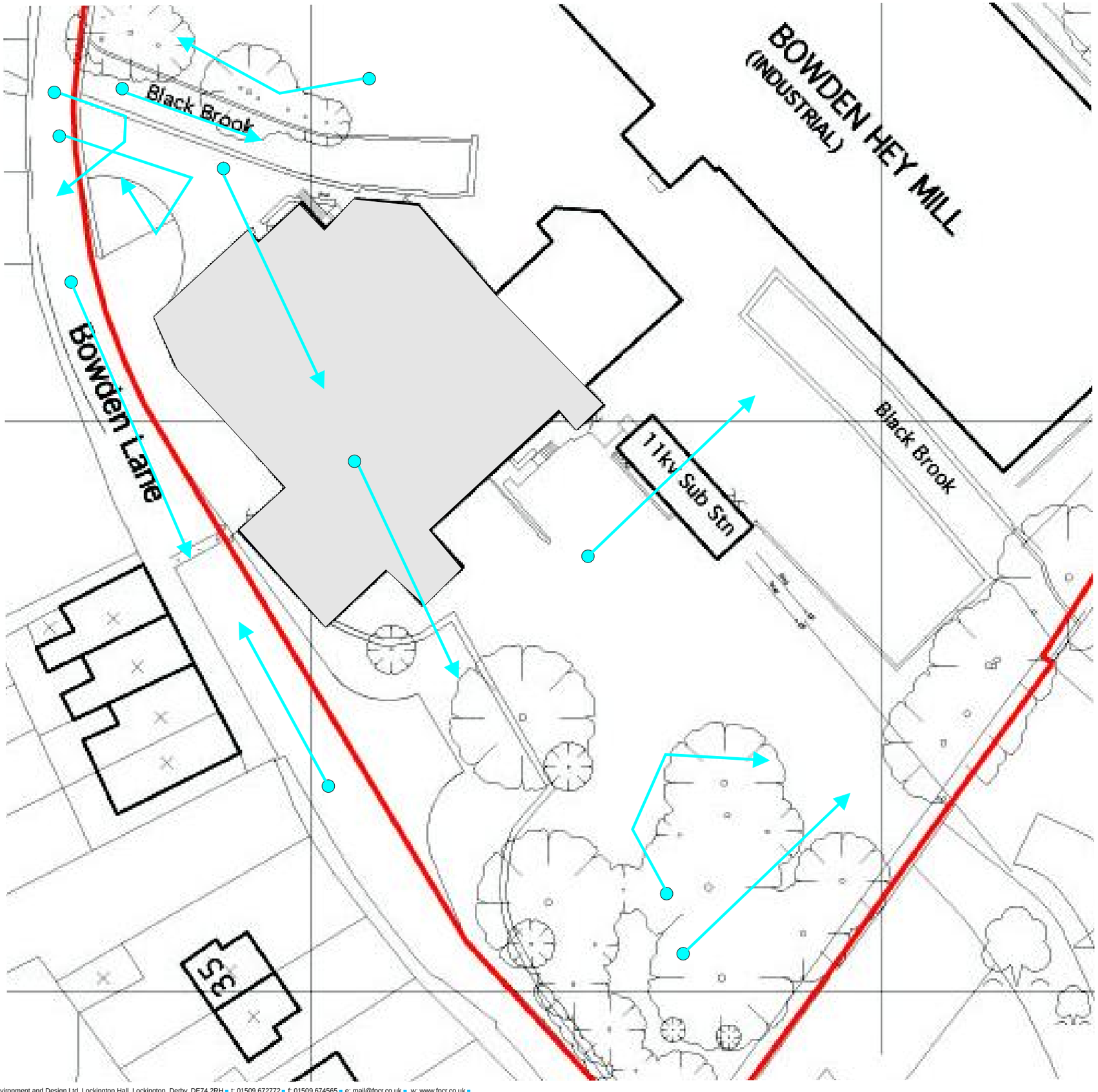
BUILDING LOCATION PLAN

Not to Scale @ A3 KG / KG 12.08.2011

Figure 2

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J:\4786\Report\Figure 2 - Building Location Plan.cdr



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Buildings surveyed

Location of surveyors

Common pipistrelle foraging patterns

Buildings surveyed

Buildings surveyed

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Bowden Hey Mill
Chapel-en-le-frith

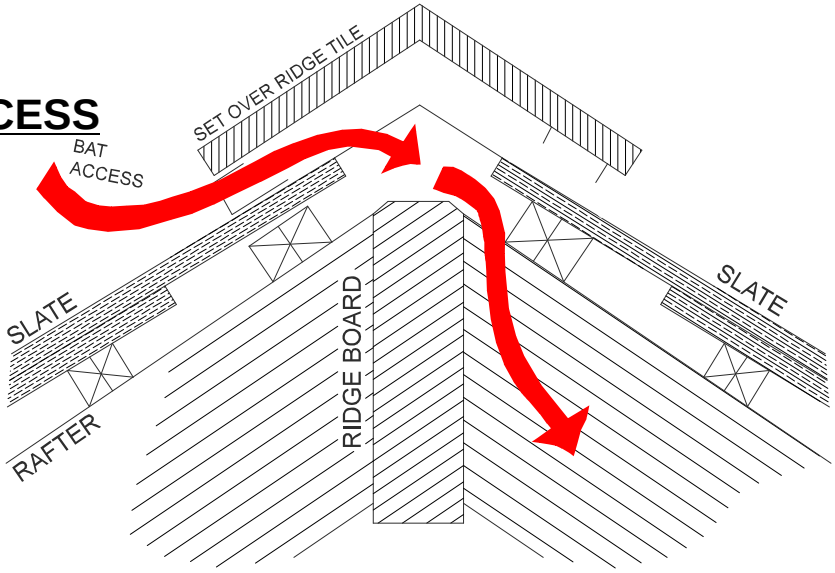
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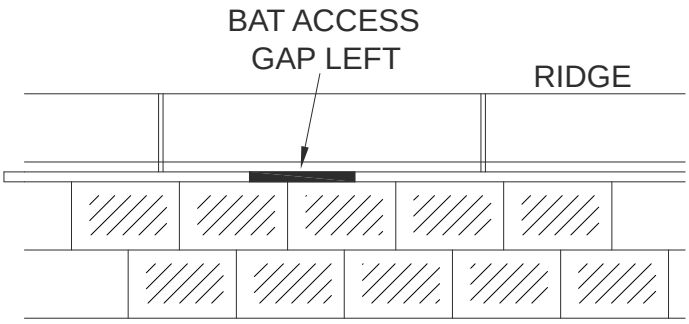
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Figure 3

RIDGE TILE ACCESS





Mattin Maclean Ltd.

Bowden Hey Mill
Chapel-en-le-Frith, Derbyshire.

RIDGE TILE ACCESS POINT

Not to Scale @ A4 KG / KG 12.08.2011

Figure 4

J:\4786\REPORT\FIGURE 1 - SITE LOCATION PLAN.cdr

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