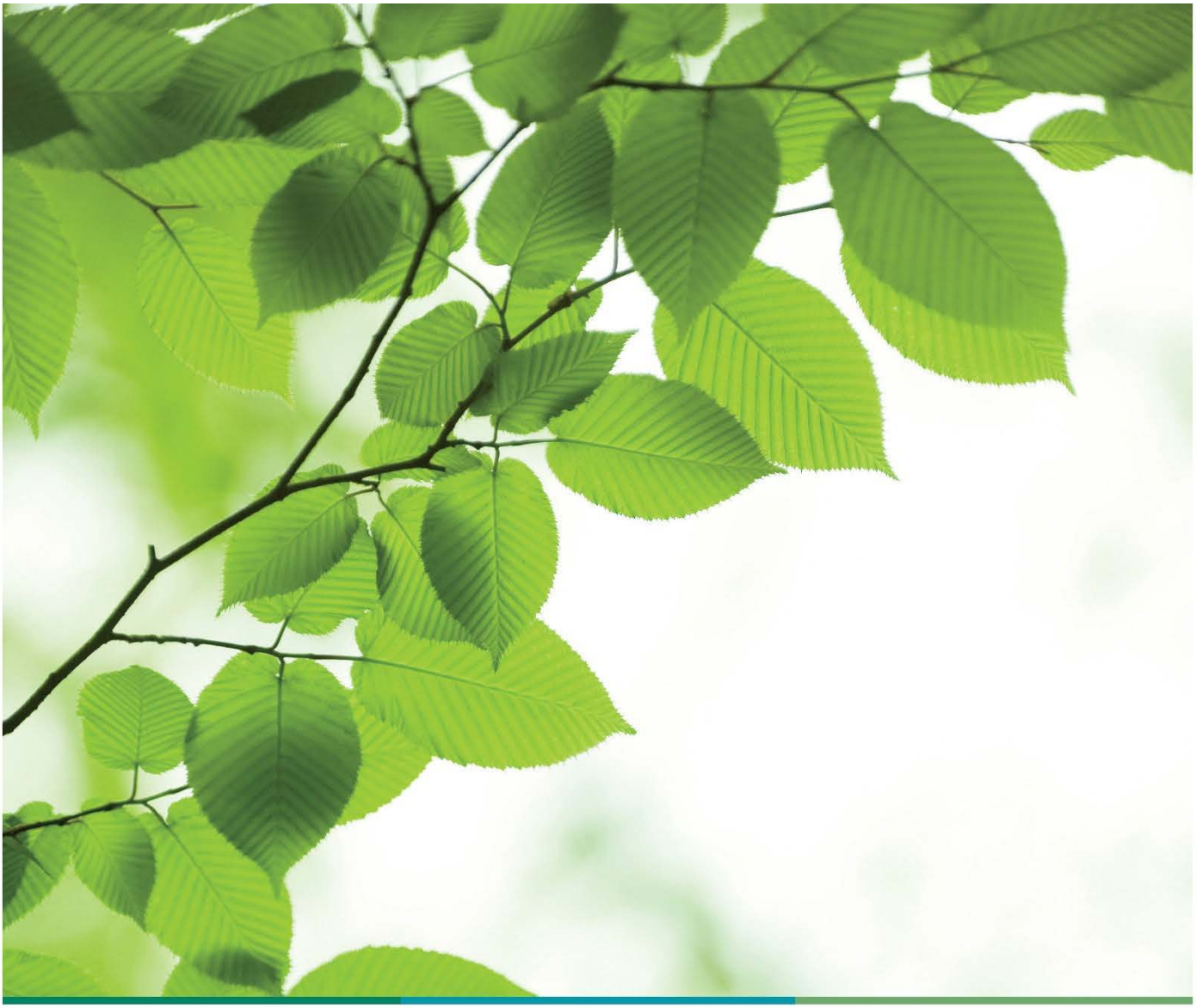


Bat Mitigation Strategy

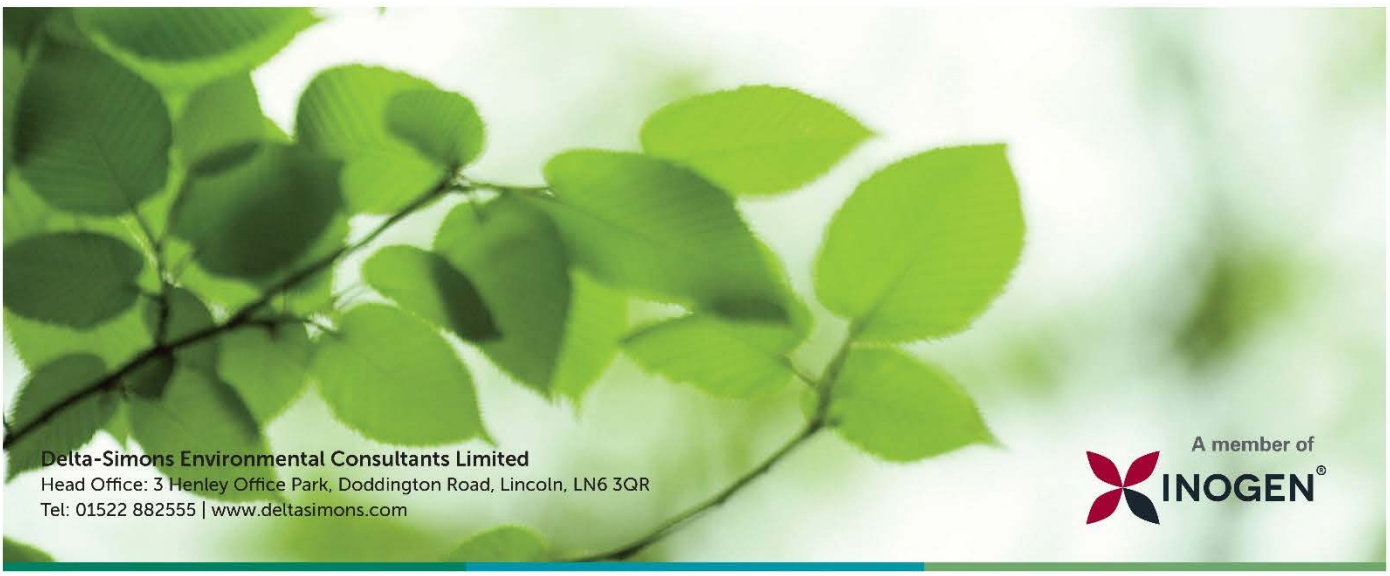
Wheelwright Centre, Kirklees College, Dewsbury

Presented to **MMR Construction Limited**

Issued: October 2019

Delta-Simons Project No. 19-0651.06

deltasimons



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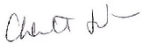
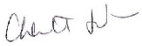
Report Details

Client	MMR Construction Limited
Report Title	Bat Mitigation Strategy
Site Address	Wheelwright Centre, Kirklees College, off Birkdale Road, Dewsbury, WF13 4HG
Project No.	19-0651.06
Delta-Simons Contact	Jonathan Spencer (jonathan.spencer@deltasimons.com)

Quality Assurance

Issue No.	Status	Issue Date	Comments	Author	Technical Review	Authorised
1	Final	18th October 2019				
				Jon Spencer Principal Ecologist	**Charlotte Sanderson-Lewis Associate and Ecology Team Leader**	**Charlotte Sanderson-Lewis Associate and Ecology Team Leader**

About us

Delta-Simons is a trusted, multidisciplinary environmental consultancy, focused on delivering the best possible project outcomes for customers.

Specialising in Environment, Health & Safety and Sustainability, Delta-Simons provide support and advice within the property development, asset management, corporate and industrial markets. Operating from ten locations - Lincoln, Birmingham, Bristol, Dublin, Leeds, London, Manchester, Newcastle, Norwich and Nottingham - we employ over 75 environmental professionals, bringing experience from across the private consultancy and public sector markets.

Delta-Simons is proud to be a founder member of the Inogen® Environmental Alliance, a global corporation providing multinational organisations with consistent, high quality and cost effective environmental, health, safety, energy and sustainability solutions. Inogen assists multinational clients by resolving liabilities from the past, addressing today's requirements and delivering solutions for the future. With more than 200 offices located on every continent, more than 6,430 staff worldwide, and projects completed in more than 120 countries, Inogen provides a single point of contact for diverse markets as Automotive, Chemical, Consumer Products & Retail, Financial, Food & Beverage, Healthcare, Insurance, Manufacturing, Non Profit Organisations, Oil & Gas, Real Estate, Services Firms, Technology and Transportation, among others.

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1.0 Introduction

1.1 Purpose and Scope of the Survey

Delta-Simons Environmental Consultants Ltd was instructed by MMR Construction Limited ('the Client') to produce a bat Mitigation Strategy for the Wheelwright Centre at Kirklees College, off Birkdale Road, Dewsbury, WF13 4HG (hereafter referred to as the "Site"). This follows the nocturnal bat surveys undertaken during the 2019 peak active bat season by Delta-Simons in July – August 2019 (Delta-Simons Project no. 19-0651.05), and also at the request of Kirklees District Councils ecologist (see Appendix A) in order to inform a planning application for the refurbishment of a number of buildings and demolition of others at the Site.

1.2 Site Description

The Site is centred at Ordnance Survey (OS) grid reference SE 23765 22542, to the north-west of Dewsbury town centre in West Yorkshire. The Site covers an area of 2.16 hectares (ha) and comprises two distinct areas, since several buildings in the west surrounded by hard standing with ornamental planting and trees on the boundaries, and amenity grassland playing fields in the east bounded by scattered trees and scrub. The Site was previously occupied by Kirklees College until July 2018. Since then the Site has been vacant. There are areas of hardstanding around the buildings in the west which comprise the access road and former car parking. The access road continues to the north and north-east of the Site. Playing fields in the east of the Site have soft landscaping on the north-western, western and south-western boundaries, comprising mainly of mature trees and ornamental planting, whilst mature scattered trees could be found forming the southern and eastern boundaries.

Further amenity grassland can be found directly to the north of the Site, and Halifax Road lies immediately beyond the eastern boundary with residential properties beyond. Birkdale Road and residential properties can be found beyond the southern boundary, whilst further residential properties are immediately to the west of the Site.

1.3 Proposed Development

It is understood that the Main Building and the 1980's extension on the western aspect are to be renovated and repurposed for 65 residential apartments, with the 1960's extension on the northern aspect to be demolished. Additional car parking may be provided in the east of the Site where the playing field are currently located.

2.0 Legislation and Policy

2.1 Bats

All bats are protected under Section 9(4)(b) and (c) of the Wildlife and Countryside Act (WCA) 1981 (as amended) and by the Conservation of Habitats and Species Regulations 2017.

It is an offence to:

- Destroy or damage a breeding site or resting place of a bat;
- To intentionally or recklessly obstruct access to any place of shelter or protection for bats;
- To deliberately disturb bat species;
- to intentionally or recklessly disturb a bat whilst in its place of shelter or protection; and
- Deliberately capture, injure or kill a bat.

It should be noted that a breeding site or resting place of a bat is protected whether or not bats are present, as long as it is likely that they will return, and any activity or works damaging or destroying such a breeding site or resting place are likely to require a Natural England European Protected Species Licence (EPSL).

3.0 Bats Background Information and Potential Impacts

3.1 Bat Roost Potential – 2019

The BRP of the three buildings on-Site undertaken by Delta-Simons found that the Main Building and 1980's extension was assessed as having moderate BRP, whilst the 1960's extension was assessed as having low BRP.

3.2 Nocturnal surveys – 2019

One was on recorded on the western aspect (Roost 1), and supported a single common pipistrelle *Pipistrellus pipistrellus*, which was recorded emerging from, and returning to, the roost during the nocturnal survey visits. The second roost (Roost 2) was located on the northern aspect of the Main Building, adjacent to the 1960's building, where a common pipistrelle was recorded emerging from, and returning to, gaps between coping stone and guttering.

A total of two small roosts were recorded to be used by individual common pipistrelle bats, see Table 2 and Figure 1.

Table 1 – Summary of Roosts Located at the Site

Roost Reference	Location	Species	Peak count	Roost Classification	Photograph
1	Western aspect of the Main Building, under a barge bound beneath a gable, within the courtyard.	Common pipistrelle	1	Day	1
2	Northern aspect of the Main Building, on the western facia. Gaps between coping stone and gutter along 3 m stretch.	Common pipistrelle	1	Day	2

The roosts support common and widespread species and are both day roosts, which are likely to be used occasionally by lone males or non-breeding females. The roosts are all considered to be of low conservation status, with individual bats anticipated to move between the different roost sites regularly.

3.3 Potential Impacts

3.3.1 Construction Impacts

The proposed redevelopment and demolition of buildings on-Site will result in the disturbance of two small bat roosts in the Main Building, as well as the loss of potential roosting features in other buildings across the Site. it is anticipated that the roof is to be retained in its current condition, however, if the unsupervised removal of the roof structure of the Main Building takes place there is the potential to disturb and/or kill a small number of common pipistrelle (1-5) using the crevices as a day roost.

3.3.2 Operational Impacts

It is anticipated that without mitigation in place during the operational phase of the development, there is the potential to deter all bat species from roosting within habitats immediately within and adjacent to the Site due to light-spill and increased anthropogenic activity. Furthermore, those bat species continuing to utilise Site edge habitats, or habitats on Site, for foraging and commuting, will be limited to light tolerant bat species.

4.0 Protection Measures for Bats

4.1 Mitigation Measures

4.1.1 Demolition and Refurbishment Works

A European Protected Species Licence (EPSL) will be obtained from Natural England prior to any works commencing to the buildings. This will require adequate mitigation and compensation to be incorporated into the proposed development plan in order to negate any adverse impacts upon bats.

A method statement detailing the below points will be prepared as part of the EPSL application:

- Works to the Building will be undertaken during the active bat season (April-October, inclusive).
- Worker/Contractor inductions (i.e Tool Box Talk) will be given by the named ecologist on the licence, or their accredited agent, and the contractors will be informed of the contents of the method statement prior to the commencement of works.
- A dawn survey will be undertaken of the buildings on the morning works are due to proceed on the buildings, by the named ecologist on the licence and accredited agents. Should overnight weather conditions not be suitable for bats to be active the night before works are due to be undertaken, and a dawn survey is not completed, no further works will be undertaken that day.
- A thorough inspection of potential bat roost features will be undertaken by the named ecologist (and/or accredited agents) using a torch and endoscope, as required.
- Prior to any works to the sensitive areas, the named ecologist (or accredited agent) will undertake thorough inspections of potential bat roosting features using the scaffolding, torch and endoscope as required. Tiles at the base of the roof line and any bricks removed from the eaves will be done so by hand under the supervision of the named ecologist (and/or accredited agent).
- In the event that a bat(s) is found, works will stop in that area. The licenced bat ecologist will capture the bat with gloved hands, assess the bat for injuries and put the bat safely into a bat bag (small cotton draw-string bag) and place it safely into a secure box with air-holes. Provided the bat is uninjured it will then be placed into one of the bat boxes at the Site. If the bat is injured, the bat will immediately be taken to a local veterinary practice.

Anticipated construction working hours are 07:30 to 18:30 Monday to Friday, and between the hours of 8:30 and 14:30 on Saturdays. It is anticipated that during the main active bat season (April-October, inclusive), demolition and/ or construction works will generally cease, or be winding down before dusk when bats emerge and will not begin before dawn when bats return to roosts. Therefore, artificial lighting will not be required, and there are not anticipated to be any negative effects upon bat foraging and commuting behaviour from noise across the Site since demolition and construction works will not coincide with bat activity. In certain circumstances, for example, in late autumn or early spring when daylight hours are limited but weather conditions may be suitable for bats to be active, there may be a brief overlap between bat activity and on-Site construction works. During this period lighting may be required to enable the construction works to progress. In these circumstances, lighting will be directional and avoid unnecessary light spill onto the adjacent habitats.

4.1.2 Mitigation and Compensation

It is anticipated that the existing roosts at the Site are to be retained as the works are predominately to the interior of the Main Building and no roosts were recorded on the 1960's and 1980's extensions. However, there is a risk of disturbance from the demolition works, should the proposals change, and the roofs need to be replaced or altered then there is a risk that the two roosts will be damaged or lost.

It is recommended that two mitigation bat roosts (Schwegler 1FF bat boxes, see Appendix C, or similar approved product) will be installed on trees to be retained along the vegetated corridor at the western Site boundary withi approximately 70 m of the current roost sites in order to provide a safe place to release any bats found during the soft strip of suitable features. These will be installed before the works commence.

4.2 Enhancement Strategy

To enhance the ecological value of the Site and provide additional roosting opportunities for bats following the proposed development two further bat boxes (Schwegler 2FN, or similar approved product, see Appendix C) will be installed on trees along the vegetated corridor at the western Site boundary in order to provide additional roosting opportunities for bats that may utilise the vegetated areas for commuting and foraging.

4.3 Lighting

To prevent any adverse impact upon the two roosts located on the Main Building, the lighting plan for the Site must be functional and directional only and kept to a minimum servicing the public areas of the proposed development (as required for safety and security). It should be achieved through the use of cowells or hoods, if necessary, to ensure no light spill onto roost locations, nor towards the retained or planted vegetated corridors.

The proposed lighting plan, see Figure 3, indicates that there will be no light spill from the development onto the two roost locations, nor onto the proposed compensatory and enhancement roosts that will be installed on trees for bats at the western Site boundary. However, there will be light spill from the proposed car park onto the existing car park and adjacent buildings, which are currently lit for security, therefore, this will have no increased adverse impact on commuting or foraging bats to that currently. It is anticipated that light spill to the south and east of the building will be minimal and will, therefore, have a limited impact on any commuting and/ or foraging bats associated with the trees on Birkdale and Halifax Roads.

The lighting strategy has been designed to use the Italo lantern and Quarto bulkheads which are available in 2700°K. It is understood that there will be no upward light spill, and the design will give an average light level of 1 - 2 lux on the vegetation to that forms the western and northern Site boundaries.

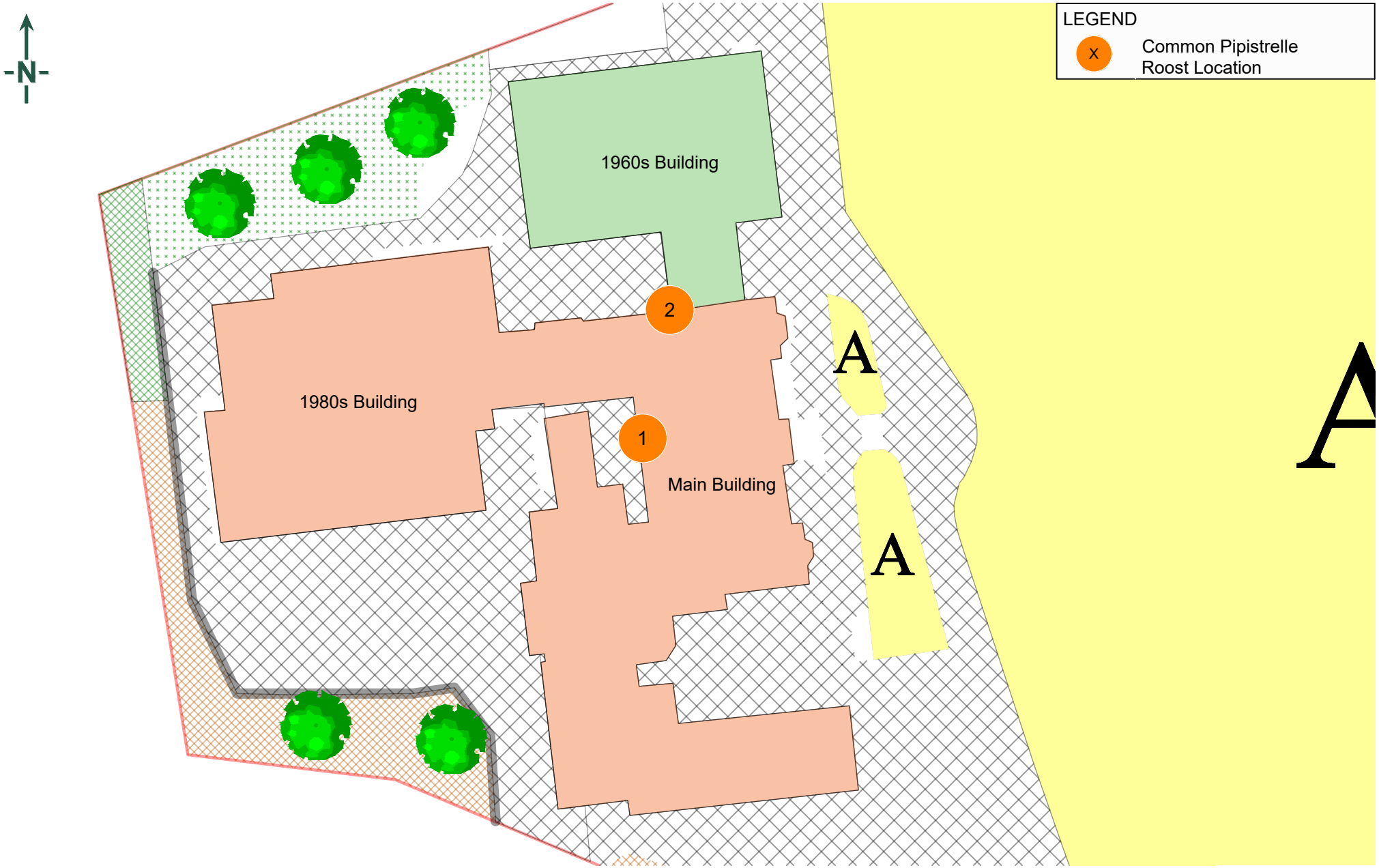
5.0 Disclaimer

The recommendations contained in this Report represent Delta-Simons' professional opinions, based upon the information referred to in Section 4.0 of this Report, exercising the duty of care required of an experienced Ecology Consultant.

The behaviour of animals can be unpredictable and may not conform to characteristics recorded in current scientific literature. This Report, therefore, cannot predict with absolute certainty that animal species will or will not occur in apparently suitable locations or habitats or that they will not occur in locations or habitats that appear unsuitable.

This Report was prepared by Delta-Simons for the sole and exclusive use of the Client and for the specific purpose for which Delta-Simons was instructed as defined in Section 1.0 of this Report. Nothing contained in this Report shall be construed to give any rights or benefits to anyone other than the Client and Delta-Simons, and all duties and responsibilities undertaken are for the sole and exclusive benefit of the Client and not for the benefit of any other party. In particular, Delta-Simons does not intend, without its written consent, for this Report to be disseminated to anyone other than the Client or to be used or relied upon by anyone other than the Client. Use of the Report by any other person is unauthorised and such use is at the sole risk of the user. Anyone using or relying upon this Report, other than the Client, agrees by virtue of its use to indemnify and hold harmless Delta-Simons from and against all claims, losses and damages (of whatsoever nature and howsoever or whensoever arising), arising out of or resulting from the performance of the work by the Consultant.

Figure 1 – Location of Bat Roosts



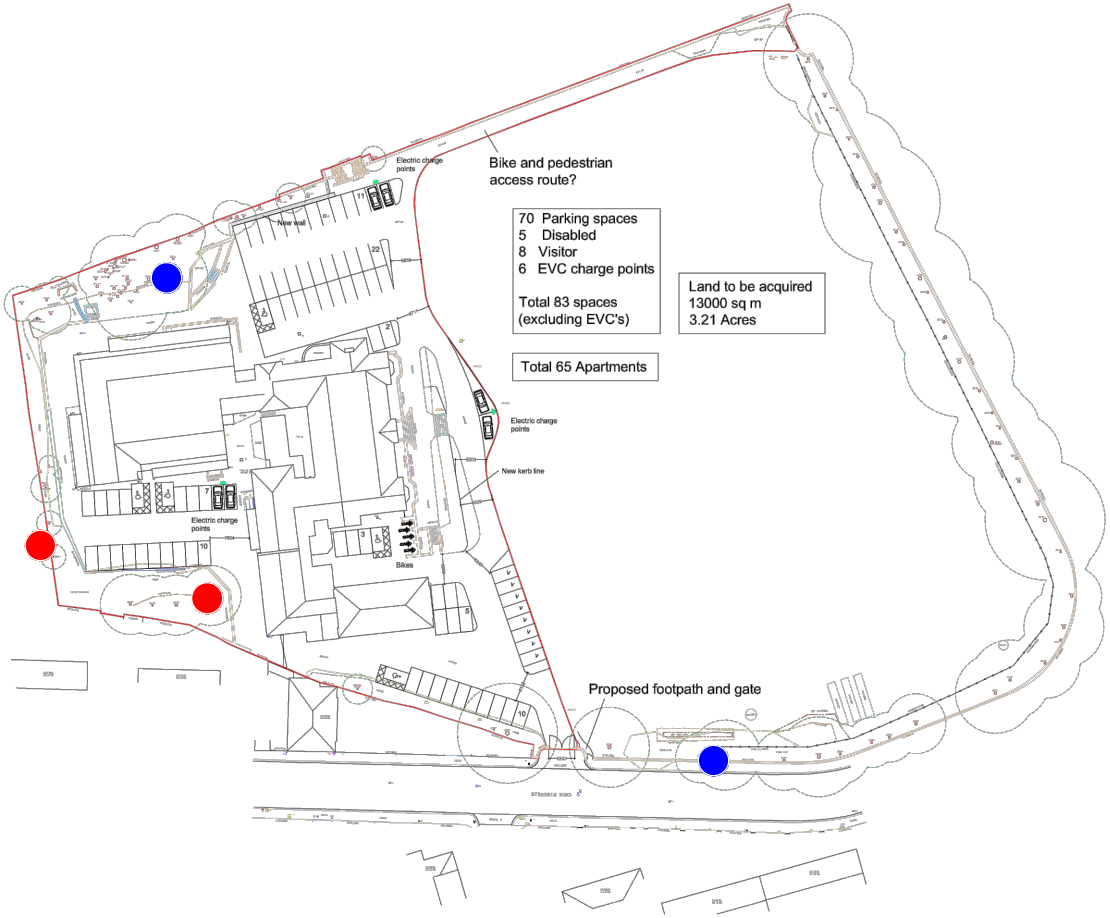
Site Plan Provided by Client

deltasimons
Environment - Health & Safety - Sustainability

TITLE:
Location of Bat Roosts
Wheelwright Centre
Dewsbury

DRAWN BY: CD	SCALE: Not to Scale	PROJECT NO: 19-0651.06	
CHECKED BY: JS	REVISION: 1	FIGURE NO: 1	
DATE: 09 October 2019			

Figure 2 – Indicative Locations of Bat Boxes



NOTES:

Do not scale from this drawing, use figured dimensions only.
It is the Contractors responsibility to check all dimensions on site.
It is the Contractors responsibility to ensure compliance with the Building Regulations.
This drawing is to be read in conjunction with all Structural Engineers drawings.
This drawing is to be read in conjunction with all BDA's relevant drawings and schedules

REVISIONS:

KEY:-

Site Boundary

Rev F 14/06/2019
6no Electric charge points added. Bike and pedestrian route added. RP

Rev E 09/05/2019
Cycles store relocated, parking no's increased. RP

Rev D 07/05/2019
60s Building demolished to provide parking numbers. RP

Rev C 02/05/2019
General update to suit P-01 RP

Rev B 25/04/2019
Parking updated following for planners comments. RP

Rev A 16/04/2019
Parking updated following meeting with Chris Yarrow. RP

LEGEND

- Location of Mitigation Bat Boxes
- Location of Enhancement Bat Boxes

CLIENT:	PROJECT:
MMR Construction Ltd.	Residential Conversion
LOCATION:	DRAWING TITLE:
Wheelwright Center, Birkdale Road, Dewsbury WF13 4HG	Site Location Plan

SCALE: 1:1250 @ A4	DRAWN: CB/ RP
DATE: April 2018	CHECKED: AL
DRAWING N°: 321/MMR- P-00f	
A B C D E F	

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Website: www.beckwithdesign.co.uk

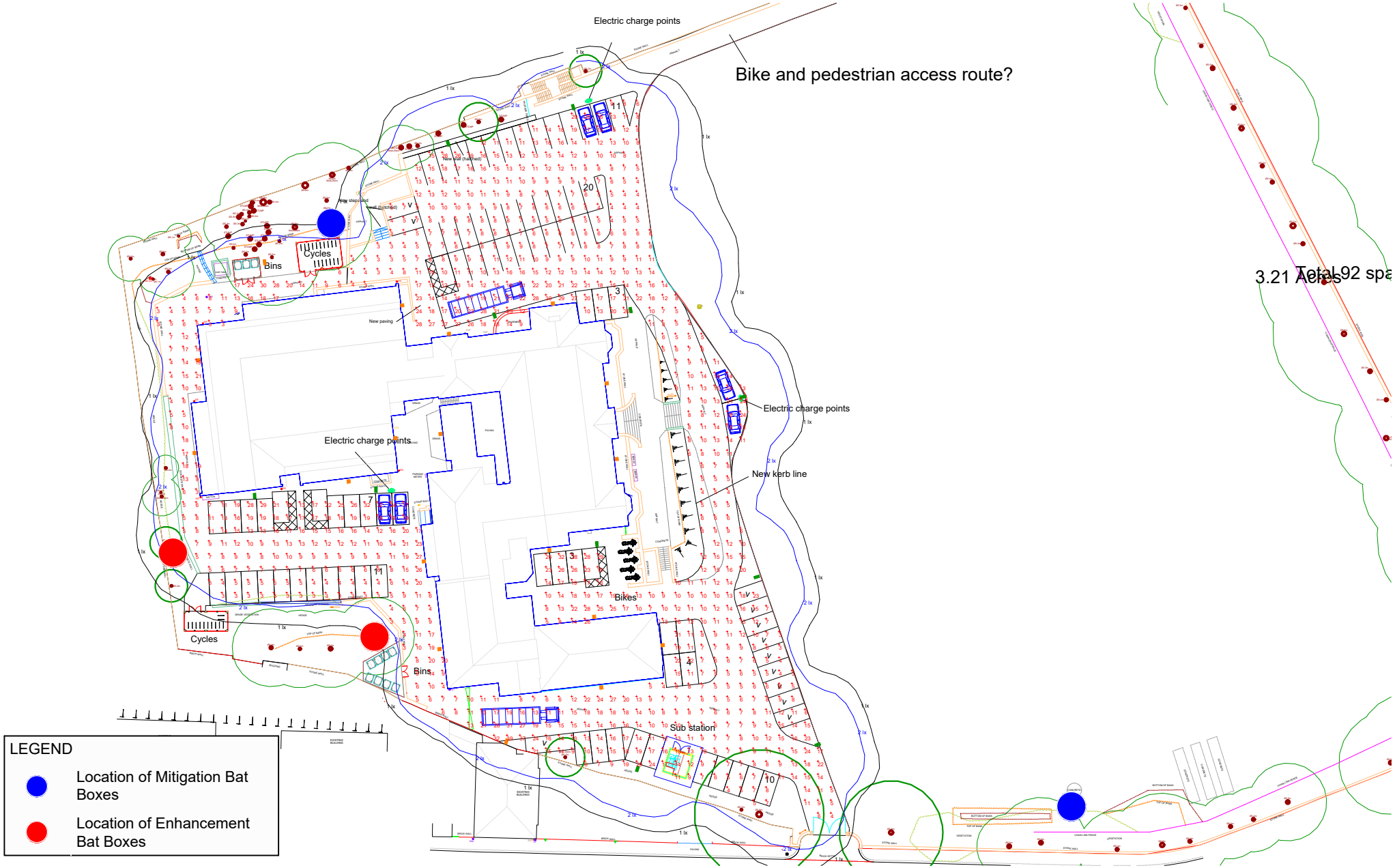
Site Plan Provided by Client

deltasimons
Environment - Health & Safety - Sustainability

TITLE:
Indicative Locations of Bat Boxes
Wheelwright Centre
Dewsbury

DRAWN BY:	SCALE:	PROJECT NO:
CD	Not to Scale	19-0651.06
CHECKED BY:	REVISION:	FIGURE NO:
JS	1	2
DATE: 09 October 2019		

Figure 3 – Lighting Strategy



Site Plan Provided by Client

deltasimons
Environment - Health & Safety - Sustainability

TITLE:
Lighting Plan
Wheelwright Centre
Dewsbury

DRAWN BY: CD	SCALE: Not to Scale	PROJECT NO: 19-0651.06	
CHECKED BY: JS	REVISION: 2	FIGURE NO: 3	
DATE: 15 October 2019			

Appendix A – Kirklees District Council Ecologist Response

Consultation Response from Biodiversity Officer **KC Ecology**		
2019/92587 Wheelwright Centre, Birkdale Road, Dewsbury, WF13 4HG		
Alterations and partial demolition to convert existing building to form 65 residential units, installation of mezzanine floors, associated landscaping works (soft & hard landscaping) and car parking layout (within a Conservation Area)		
Date Responded: **19/09/2019**	**Responding Officer:** **Tom Stephenson**	**Responding Ref:**

Assessment and Advice

The application is supported by bat survey information that indicates the presence of two bat roosts of low conservation value, and identifies likely disturbance to both of these roosts. It is not clear if the proposed works will result in the loss of these roots, but the report includes recommendations to maintain the value of the site for foraging and roosting bats post development.

There is no information to demonstrate that the recommendations of the report have been incorporated into the design of the scheme, in particular the lighting design is not in line with these recommendations.

I would suggest that the applicant submits a Mitigation Plan showing how the recommendations of the report have been incorporated in to the design. Following this, it will be possible to condition that works are undertaken in accordance with this plan and under an appropriate mitigation licence.

Appendix B – References

References

BS 42020:2013 Biodiversity. Code of Practice for Planning and Development

The Conservation of Habitats and Species Regulations 2017 (as amended) HMSO

Wildlife and Countryside Act 1981 (as amended), HMSO.

BS 42020:2013 Biodiversity. Code of Practice for Planning and Development

Bat Conservation Trust. (2011). *Bat Surveys – Good Practice Guidelines, 2nd Edition, Surveying for Onshore Windfarms*, Bat Conservation Trust.

BCT and Institution of Lighting Professionals (2018). Bats and artificial lighting in the UK

BCT (2014) Artificial lighting and wildlife Interim Guidance: Recommendations to help minimise the impact artificial lighting.

Collins, J. (ed.) (2016) *Bat surveys for Professional Ecologists: Good Practice Guidelines, 3rd Edition,* The Bat Conservation Trust, London.

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

Stone, E.L. (2013) Bats and lighting: Overview of current evidence and mitigation guidance.

The Conservation of Habitats and Species Regulations 2017, HMSO

Wildlife and Countryside Act 1981 (as amended), HMSO.

Appendix C – Types of Bat Boxes

Types of Bat Boxes

Suitable Bat Boxes

Bat Box Design	Information
	Schwegler 2FN bat box The 2FN is a large bat box with both a wide access slit at the base and an access hole on the underside. Made from WoodcretePLUS, a natural material which is strong and insulating yet breathable to provide the bats with a safe environment with stable temperature and humidity levels.
	Schwegler 1FF bat box The rectangular shape of the 1FF bat box makes it suitable for hanging on either trees or buildings. Made of natural WoodcretePLUS to provide a natural stable environment for roosting bats. The flatness of this box provides a narrow crevice-like internal space suitable for pipistrelle and noctule bats.