

**CONSTRUCTION
ENVIRONMENTAL
MANAGEMENT PLAN**

**at
Union Mills
Tanyard Road
Huddersfield
HD3 4NB**

**Client:
Acumen Designers & Architects**

**Client Address:
Old Leeds Road
Huddersfield
HD1 1SG**

**Client Contact:
01484 546000 (Tel)**

**JCA Ref:
13809e/AWe**

**Date of Report:
11/08/20**



Quality Assurance

JCA ref.	Desktop Survey Completed:		Site Surveyed:		Report Completed:		Checked:	
	Date	Name	Date	Name	Date	Name	Date	Name
13809e/AWe	N/A	N/A	N/A	N/A	11/08/20	Adam West	11/08/20	Joe Earnshaw

This report has been prepared and provided in accordance with the *British Standard 42020: Biodiversity – Code of practice for planning and development* and the *CIEEM's Code of Professional Conduct*

Risk Assessment Completed	
Bio-security Procedure Completed	
Lone Worker Procedure Completed	
	N/A

Contents

Contents	3
1 Introduction	4
1.1 Background	4
1.2 Site Description	4
1.3 Details of Proposed Development.....	4
1.4 Summary of Baseline Ecology Likely to Be Affected	5
1.5 Scope of the CEMP	6
2 Aims and Objectives.....	7
2.1 Aim	7
2.2 Objectives.....	7
2.3 Ecological issues.....	7
3 Environmental Management Framework.....	8
3.1 Environmental Policy.....	8
3.2 Environmental Aspects and Impacts.....	8
3.3 Training, Awareness and Competence	8
3.4 Evaluation of Compliance	9
4 Operational Control Procedures	10
4.1 General.....	10
4.2 Site Establishment.....	10
4.3 Boundary Fencing	11
4.4 Pollution Prevention	11
4.5 Protection of Existing Environmental Features	12
4.6 Site Housekeeping	12
4.7 Nature Conservation	12
4.8 Compensation and Enhancement.....	13
4.9 Landscape Design.....	13
4.10 Invasive Weed Eradication.....	14
5 References.....	16
Appendix 1: Phase 1 Habitat Map	18
Appendix 2: Author Qualifications	19



1 Introduction

1.1 Background

- 1.1.1 In July 2020, JCA Ltd was commissioned by Acumen Designers & Architects to produce a Construction Environmental Management Plan (CEMP) for a site located at Union Mills, Tanyard Road, Huddersfield, HD3 4NB, hereafter referred to as 'the site'.
- 1.1.2 To support the fulfilment of the above brief the following have previously been undertaken:
- Extended Phase 1 habitat survey and bat scoping survey
 - Bat emergence and re-entry surveys
 - Bat hibernation surveys
- 1.1.3 The Extended Phase 1 habitat survey and bat scoping survey (JCA, 2017) was undertaken in October 2017 by JCA. The bat emergence and re-entry surveys (JCA, 2018) were undertaken between May and October 2018. The bat hibernation surveys (JCA, 2019) were undertaken in January and February 2019.
- 1.1.4 Utilising the information from the above survey work, this current report details a CEMP with respect to designated sites, roosting bats, foraging birds and invasive species for the proposed development. The post-construction habitat creation, monitoring and management of the site is to be considered in separate reports and is not included within this document.

1.2 Site Description

- 1.2.1 Union Mills, Tanyard Road is situated 167m north of the centre of Milnsbridge, at grid reference: SE 11973 15894.
- 1.2.2 The site is in commercial use. Within the Union Mill building are a number of small businesses. The surrounding habitat is predominantly hard standing, which is currently used for car parking.
- 1.2.3 The site is surrounded predominantly by commercial and residential properties. To the east and south of the site are a number of mills which have been converted into residential properties. Adjacent to Union Mills is the River Colne.

1.3 Details of Proposed Development

- 1.3.1 The development proposed at this site is a conversion from commercial use (small businesses) to residential flats.



1.4 Summary of Baseline Ecology Likely to Be Affected

1.4.1 JCA's extended Phase 1 habitat survey and bat scoping survey report (2017) details the habitats and species present on site that are vulnerable to adverse impacts, either directly or indirectly, by the proposed works and provides a detailed discussion of the ecology of the site. The bat emergence and re-entry survey (JCA, 2018) report provides detailed information on bat roosting activity on site. As the bat hibernation surveys (JCA, 2019) found no evidence of hibernating bats on site, the ecological considerations of the proposed works have been based upon the extended Phase 1 habitat survey and bat scoping survey and bat emergence and re-entry survey reports .

1.4.2 Statutory designated sites

There are no statutory designated sites within 2km of the site.

1.4.3 Non- statutory designated sites

There are five non-statutorily designated sites within 2km of Union Mills. The closest non-statutorily designated site to Union Mills is the Huddersfield Canal. This is a Local Wildlife Site (LWS) and lies 80m to the south of the Union Mills site. The remaining non-statutorily designated sites are:

- Gledholt Woods LWS & Local Nature Reserve (LNR), approximately 1600m to the north east;
- Johnson Wellfield Quarries Local Geological Site (LGS), approximately 1800m to the south;
- Beaumont Park LGS, approximately 1800m to the south east; and
- Delves Wood LWS & Site of Wildlife Significance (SWS), approximately 1900m to the south

1.4.4 Habitats

An extended Phase 1 habitat survey was undertaken of the site in October 2017 by JCA (Appendix A – Phase 1 Habitat Map). The following habitats were recorded:

- Buildings
- Hard Standing
- Scattered Scrub
- Semi-Improved Grassland



1.4.5 Species

- Bats
- Japanese Knotweed *Fallopia japonica*

1.5 Scope of the CEMP

- 1.5.1 This CEMP has been produced to remove or reduce the ecological impacts of construction works for the proposed development with regards to designated sites, water voles, nesting birds and foraging birds.
- 1.5.2 Through the implementation of appropriate mitigation measures, detrimental impacts and breaches of current UK wildlife legislation will be avoided. Without these measures there is the risk of adversely impacting protected species, disturbing, injuring or killing nesting birds and causing the spread of an invasive non-native species (INNS).



2 Aims and Objectives

2.1 Aim

- Preservation and enhancement of the site's ecology, with regards to nesting birds and roosting/foraging birds which are an interest feature for Natura 2000 sites.

2.2 Objectives

- To ensure no breach of UK wildlife legislation occurs on site for the duration of the proposed development;
- To protect foraging birds, roosting/foraging bats and prevent the spread of an INNS resulting from the proposed development and construction works; and
- To minimise damage to adjacent habitats as part of the final development.

2.3 Ecological issues

The priority ecological issues i.e. those that have legislative requirements or planning considerations and are relevant to the site and the proposed works, are as follows:

2.3.1 National legislation

Bats and their roosts are protected under the Conservation of Habitats and Species (Amended) (EU Exit) Regulations 2019. Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) makes it an offence to cause or allow the spread of INNS.

2.3.2 Planning considerations

Natural Environment and Rural Communities (NERC) Act 2006 habitats of principal importance – One habitat adjacent to the site is considered to be a habitat of principal importance under the NERC Act 2006. This habitat is the River Colne which lies immediately to the west of the site.

NERC Act 2006 species of principal importance – There is suitable habitat to support species of principal importance within the proposed development site, i.e. bats and a wide range of passerine and wading birds.



3 Environmental Management Framework

3.1 Environmental Policy

3.1.1 The project will be carried out in accordance with the policies / objectives listed below:

- The National Planning Policy Framework;
- Kirklees Council's Environmental Policy and procedures;
- The designer's environmental policy and procedures; and
- During the pre-construction and construction phases, management of the project will also need comply with the Contractor's Environmental Policy and procedures.

3.2 Environmental Aspects and Impacts

3.2.1 Environmental objectives for the construction phase will be developed and should refer to legal compliance and environmental good practice, these will include:

- Zero pollution incidents; and
- Protect and where possible enhance biodiversity.

3.2.2 Procedures for monitoring construction processes against the project environmental objectives will be proposed by the Contractor and agreed with the Client Project Manager.

3.3 Training, Awareness and Competence

3.3.1 Site staff shall be competent to perform tasks that have the potential to cause a significant environmental impact. Competence is defined in terms of appropriate education, training and experience. Project specific training is required and the information provided in this CEMP, together with the findings of any pre-construction surveys or site checks may be used as part of this training.

3.3.2 Environmental awareness and training shall be achieved by:

- Site induction, including relevant environmental issues;
- Environmental posters and site notices;
- Method statement and risk assessment briefings;
- Toolbox talks, including instruction on incident response procedures; and



- Key project-specific environmental issues briefings.

3.3.3 All managers and supervisors will be briefed on the CEMP.

3.3.4 Method Statements will be prepared for specific activities prior to the works commencing and will include environmental protection and mitigation measures and emergency preparedness appropriate to the activity covered. The Construction Site Manager will review key Method Statements prior to their issue.

3.3.5 Method Statement briefings will be given before personnel carry out key activities for the first time.

3.4 Evaluation of Compliance

3.4.1 The Contractor will define procedures for regular site surveillance to evaluate performance against legal requirements and the requirements of the CEMP.



4 Operational Control Procedures

4.1 General

4.1.1 Specific management proposals to be included in the CEMP are to be developed relating to the following topics:

- Site establishment;
- Boundary fencing;
- Pollution prevention;
- Protection of existing environmental features;
- Site housekeeping;
- Nature conservation;
- Compensation & enhancement; and
- Landscape design.

4.2 Site Establishment

4.2.1 Facilities will be established by the contractor to minimise risks to the environment and promote efficient use of resources. This will include:

- Temporary protective fencing will be erected to delineate the working areas, site boundaries and protect sensitive features from disturbance.
- Provision of temporary offices, welfare facilities and secure storage of equipment.
- Any necessary fuel and oil will be stored in accordance with the Control of Pollution (Oil Storage) (England) Regulations 2001. Refuelling will only be undertaken in designated area, designed to contain contaminated runoff, and by trained personnel. Emergency spill kits will be readily available.
- Materials storage areas will be set up and managed.
- Waste segregation areas will be established utilising containers of an appropriate design to ensure that no waste can escape.
- Sewage effluent from the site office and welfare facilities will be removed from site, using a vacuum tanker, if no sewer connection is available.
- Temporary lighting will be designed to minimise spillage of light, and oriented



away from features of ecological importance and residential properties.

- The temporary site compound will be reinstated to its former condition, suitable for agricultural use, following completion of the project.

4.3 Boundary Fencing

- 4.3.1 The site boundary will be fenced as necessary for security, to prevent windblown litter or waste from polluting the wider environment and to exclude mobile species, such as otters and domestic pets, that may be trapped or harmed in excavations or around plant or materials.

4.4 Pollution Prevention

- 4.4.1 A pollution control and contingency plan will be developed by the Contractor to provide details of the measures to be implemented to prevent pollution and the actions to be taken in the event of an environmental incident or emergency. The pollution control plan will consider measures for reducing or removing impacts to the NERC 2006 priority habitat of the adjacent River Colne.
- 4.4.2 An 'environmental incident' is defined as any event, activity or condition that causes, or has the potential to cause harm to people, or damage to property or the environment. 'Pollution' is defined as any harmful impact on the local atmospheric, aquatic or land environment caused by release of hazardous or nuisance-causing substances or excessive noise and vibration.
- 4.4.3 Measures will be developed to control site runoff and prevent contamination. Account will be taken of the following good practice guidance: Regulatory guidance is available from GOV.UK . Current guidance explains how to: report an environmental incident, get permission to discharge to surface or groundwater, manage business and commercial waste, store oil and any oil storage regulations, discharge sewage with no mains drainage, work on or near water and manage water on land.
- PPG 1: Understanding your environmental responsibilities - good environmental practices.
 - GPP 5: Works and maintenance in or near water.
 - PPG 6: Working at construction and demolition sites.
 - GPP 21: Pollution incident response planning.
 - GPP 22: Dealing with spills.



4.5 Protection of Existing Environmental Features

- 4.5.1 Temporary fencing will be provided to protect existing environmental features to be retained. The fencing will be established prior to the start of the construction works. The location will be agreed on site with the Construction Site Manager and client. The fencing will be of sufficient durability to be in place for the duration of the works.
- 4.5.2 A solid barrier, at least 1.8m in height, is to be installed between the site and the River Colne. This fence is to be retained for the duration of the works to prevent visual disturbance to birds and bats foraging and commuting along the river. The fence should be inspected regularly and repaired as necessary for the duration of the works.

4.6 Site Housekeeping

- 4.6.1 A 'good housekeeping' policy will be adopted across the site. This will include the following requirements:
- No fires on site.
 - Disposal of waste in designated areas.
 - Removal of food waste and other rubbish at frequent intervals.
 - Maintenance of cleanliness surrounding the site.

4.7 Nature Conservation

- 4.7.1 Plans for managing any protected species are to be finalised, implemented and monitored. The Construction Environmental Manager is required to monitor ecological measures and ensure protected species are safeguarded.
- 4.7.2 Ecological surveys have been undertaken to establish whether protected species use the habitat types found within the site (section 1.4.4)
- 4.7.3 There are protected species using the site. These include (or recently included):
- Roosting, foraging and commuting bats;
 - Foraging/roosting birds which forage on site and on the adjacent River Colne.
- 4.7.4 Specific mitigation measures to prevent adverse impacts on protected species and high-quality habitats are set out below.
- 4.7.5 Site clearance will in general take place outside the bird breeding season (March to August, inclusive). If any clearance is necessary within the bird breeding



season, then it will only take place if the areas concerned have been checked by a competent ecologist and found not to contain any breeding birds. If an active nest is located it is to be left in situ with a buffer of undisturbed vegetation around it until all young have fledged. The buffer will depend upon the species and the distance will be subject to the judgement of the ecologist.

- 4.7.6 A habitat creation and management plan for the site is to be created at detailed design stage to help maintain and benefit protected and notable species.
- 4.7.7 Erection of a visual barrier to prevent disturbance of birds (detailed in section 4.5).
- 4.7.8 Night working should be avoided, and any artificial lighting should be directed away from the adjacent river.

4.8 Compensation and Enhancement

- 4.8.1 Some habitat will be lost due to the construction. To mitigate loss and disturbance, landscape measures will be further developed in the detailed design stage of the project to enhance habitats. Mitigation measures should aim to:
 - Compensate for any adverse effects of the scheme.
 - By the use of locally appropriate species, to create semi-natural habitats that reflect and complement those existing in the surrounding area.
 - Contribute to appropriate Local Biodiversity Action Plan (LBAP) targets.
- 4.8.2 The habitat which will be lost to the scheme is of low ecological value as comprises scattered scrub and semi-improved grassland subject to high levels of disturbance from human activity. The loss of this habitat will be compensated for by a landscaping plan which includes a more diverse range of native species.
- 4.8.3 Management of the site will be the responsibility of the building's owner who will ensure regular maintenance of the newly created landscaping.

4.9 Landscape Design

- 4.9.1 A Landscaping and Ecological Management Plan (LEMP) will be produced for the site. The design will aim to enhance the site's biodiversity and provide ecological benefit for LBAP species.
- 4.9.2 A scheme of landscaping will be included with the project detailed design proposals. The plant species used in the landscaping scheme will be native, of local provenance and appropriate to the local environment.



4.10 Invasive Weed Eradication

- 4.10.1 Invasive plant species are those plants listed under Schedule 9, Part II of the Wildlife and Countryside Act 1981 (as amended) or described on the Non-Native Species Secretariat (NNSS) website. Invasive species include giant hogweed, giant kelp, Japanese knotweed, Japanese seaweed, Himalayan balsam, horsetail and floating pennywort. Under the Wildlife and Countryside Act 1981 (as amended) it is an offence to plant or cause the spread of Invasive Plant Species in the wild and therefore it is a legal obligation to remove them.
- 4.10.2 During the extended Phase 1 habitat survey Japanese knotweed was identified along the western border of the site.
- 4.10.3 There are several strategies available for the safe control and removal of Japanese knotweed. The treatment method employed will usually reflect the speed at which Japanese knotweed removal is required. Single Season Herbicidal Treatment: This method involves targeting weaknesses in the plant's physiology with the use of herbicides over a six month period during the active growing period. Sites adjacent to water courses and trees must be treated using a tailored environmentally sensitive herbicide programme.
- 4.10.4 Environmentally Sensitive Areas: This method will involve a site specific eradication program in order to protect any environmentally sensitive features, such as watercourses, designated sites, woodlands and other ecologically important areas. This method will take two years to complete and will typically involve consultation with the Environment Agency and Natural England.
- 4.10.5 Integrated on Site Treatment: This method will involve excavating Japanese Knotweed from sections of the site required for immediate development and then relocating this to a more convenient part of the same site. The Knotweed will then be placed on a plastic membrane and allowed to re-grow to a size sufficient for herbicidal treatment (preferably the following growing season). Once this spoil has been fully treated it can be re-introduced to the site.
- 4.10.6 Soil Screening: This method is a sustainable, time efficient and effective method of removing vegetation from excavated soil. The soil is passed through a screening process after which spoil can be transported to a licensed land fill site, incinerated or taken to a biomass power station for fuel. The separated soil is then re-introduced to the same site. This method is only suitable for larger sites (in excess of 1,000m²).
- 4.10.7 On Site Burial: Suitable for sites in which on site space is limited and urgent removal is required. This is dependant however on features such as water table level and soil type. This method involves excavating the areas of Japanese knotweed, treating it once with a non-persistent herbicide and then transferring the spoil to a 5m deep pit located on site. The spoil is covered in a membrane and the pit in-filled.



- 4.10.8 Cell Encapsulation: This method is similar to the above (on site burial), but instead the pit need only be 2m deep and is lined with a heat joined membrane. Further heat joined membrane is laid on top of the spoil and the edges are sealed and the pit in filled. This method is only suitable where the burial site will not be excavated in the future. The exact location of this pit must be mapped, and the information stored.
- 4.10.9 Off Site Disposal: This method involves excavating the areas of Japanese Knotweed and burying the spoil in a licensed land fill site. This method will require detailed monitoring and post excavation herbicidal treatment. This is less cost efficient but yields fast results.
- 4.10.10 JCA Ltd highly recommends that any eradication programme for Japanese knotweed is conducted by a trained and qualified specialist. Japanese knotweed is a highly invasive species and can easily spread if its removal is undertaken incorrectly. Incorrect treatment of Japanese knotweed can result in hefty penalties, should works inadvertently cause it to spread into other areas.



5 References

JCA (2017) *Extended Phase 1 habitat survey and Bat Scoping Survey Report*. Ref: 13809/JB

JCA (2018) *Bat Emergence and Re-Entry Survey Report*. Ref: 13809a/JB

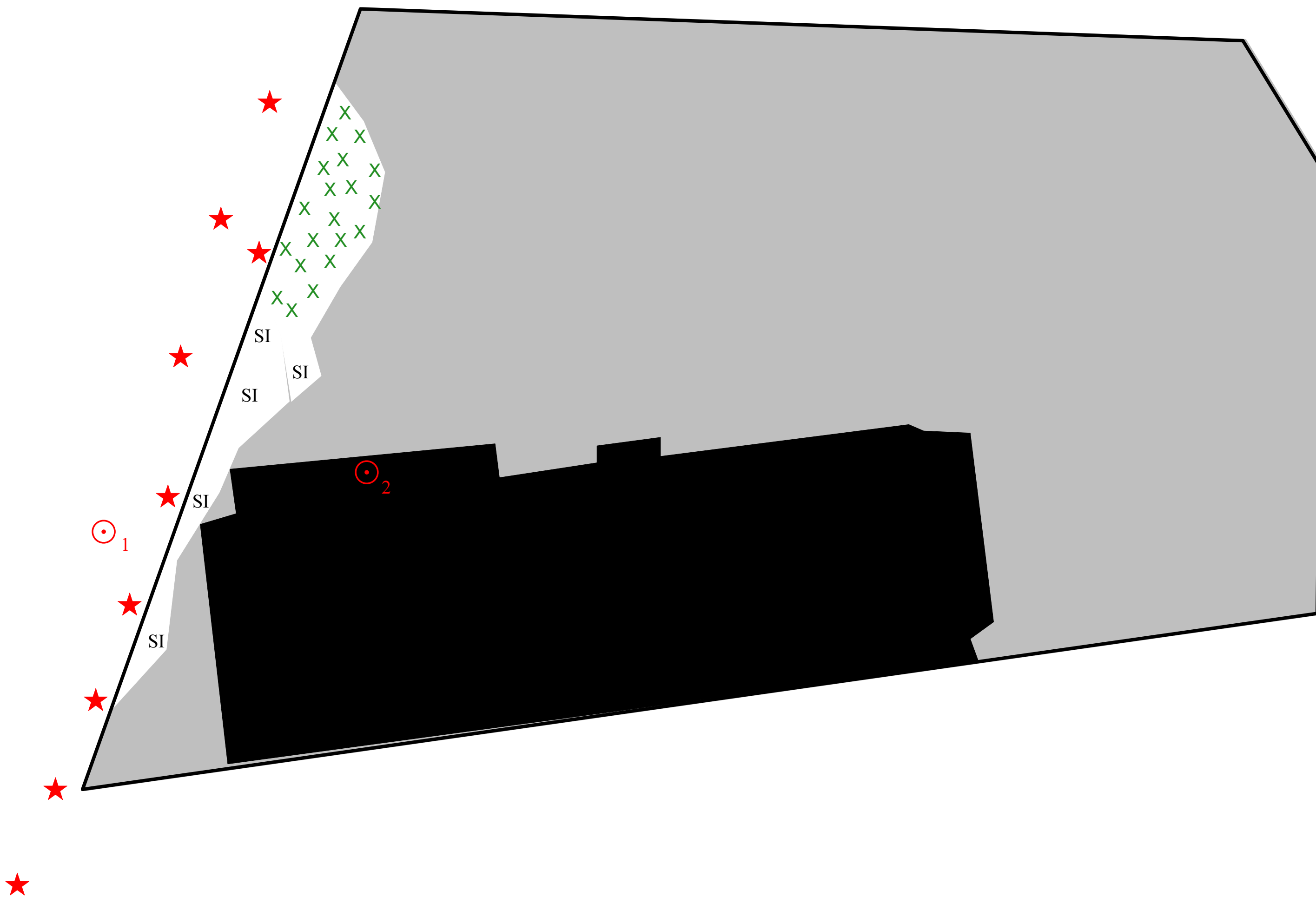
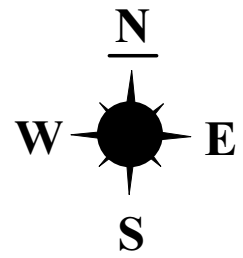
JCA (2019) *Bat Hibernation Survey Report*. Ref: 13809b/JB



Appendices

Appendix 1: Phase 1 Habitat Map





Appendix 1: Phase 1 Habitat Map

Address: Union Mills, Tanyard Road, Huddersfield, HD3 4NB

JCA Ref: 13809/JB

SCALE : 1:500

PAPER SIZE : A2

KEY

Buildings

Hard standing

Poor semi-improved grassland

Scattered scrub

Japanese Knotweed

Target note

JCA Limited

Arboricultural & Forestry Consultants

Appendix 2: Author Qualifications

Consulting Staff: Ecology

Adam West, Senior Ecologist

BSc (Hons) Animal and Wildlife Management.

Adam joined JCA to lead the expanding ecology department. Having returned to education as a mature student, Adam studied Countryside Management for two years before undertaking a Bachelor's degree, for which he was awarded First Class Honours. Adam has many years' experience in ecological consultancy, working on projects ranging from individual planning applications to national infrastructure projects. Adam holds a Natural England Level 1 great crested newt survey class licence, a Natural England Level 2 bat survey class licence (and the Scottish and Welsh equivalents) and a CSCS card. Adam is a member of CIEEM.

Joe Earnshaw, Graduate Ecologist

BSc (Hons), MSc Biodiversity and Conservation.

Joe joined the ecology department of JCA in 2018 after taking part in JCA's student training programme. He initially obtained a bachelor degree in Animal Management from Askham Bryan College, York. He has since furthered his education and brings to the company an MSc in Biodiversity and Conservation from the University of Leeds. Joe has expertise in aquatic invasive species identification and control.



I hope that this scheme and methodology provides all the necessary information, but should any further advice be needed please do not hesitate to contact the author.

Signed



.....

Adam West *GradCIEEM*

11/08/20

Reviewed by



.....

Joe Earnshaw *QualifyingCIEEM*

11/08/20

For and on behalf of **JCA Ltd**

Registered Office:

Unit 80
Bowers Mill
Branch Road
Barkisland
Halifax
HX4 0AD

Tel. 01422 376335
Fax. 01422 376232
Email: jon@jcaac.com
Web : www.jcaac.com





ECOLOGICAL SERVICES

Ecological Pre-Planning Services

- Phase 1 Habitat Surveys
- Great Crested Newt eDNA Sampling
- Protected species: Bat, Wintering and Nesting Bird, Badger, Amphibian, Otter, Water Vole, White-Clawed Crayfish, Dormice and Reptile Surveys.
- Preparation for Environmental Impact Assessment (EIA)
- Invasive Species Surveys
- Code for Sustainable Homes
- Butterfly & Insect Surveys

Ecological Post-Planning Services

- Biodiversity Enhancement Plans
- Protected Species Mitigation
- Ecological Management (Bat and Bird box installation and inspection)
- Planting Schemes
- Monitoring of bird or bat boxes.

ARBORICULTURAL SERVICES

Guidance for Architects & Developers

- British Standard 5837 Surveys
- Arboricultural Implications Assessments (AIA)
- Arboricultural Method Statements (AMS)

Advice for Engineers, Loss Adjusters and Insurers

- Tree Surveys for Subsidence
- Heave Assessment
- Tree Root Identification

Advice for Local Authorities and Social Housing

- Tree Safety Surveys
- Specialist Decay Detection
- Landscape and Orchard Design

Tree Advice for the Legal Profession

- Subsidence Litigation
- Personal Injury and Accident Investigation
- Expert Witness, Planning Inquiries and Appeals

Veteran Tree Management

- Ancient Woodland Management
- Veteran Tree Management

Tree Health and Pest and Disease Management

- Pest and Disease Surveys
- Tree Health Checks
- Disease Mitigation and Control



HEAD QUARTERS

Unit 80 Bowers Mill,
Branch Road,
Barkisland
Halifax, HX4 0AD

Company Reg No: 05005041
VAT No: 686 4674 78

