LANDSCAPE AND ECOLOGICAL MANAGEMENT PLAN

at

Colne Vale Business Park
Huddersfield
West Yorkshire
England
HD3 4NY

Client:
Colne Vale Contractors Ltd.

Client Address:
The Yard
Colne Vale Business Park
Colne Vale Road, Milnsbridge
Huddersfield
West Yorkshire
England
HD3 4NY

JCA Ref:
21850a/ElC

Date of Report:
08/04/2024

JCA Limited
Arboricultural & Ecological Consultants

Quality Assurance

Version	**Report Completed:**		**Checked:**	
	Date	Name	Date	Name
001	02/04/2024	Eleanor Clark	02/04/2024	Rick Westwood
			08/04/2024	Adam West

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

Contents

1 Introduction

1.1 Background

1.1.1 In **March 2024**, JCA Ltd were commissioned by **Colne Vale Contractors Ltd.** to produce a Landscape and Ecological Management Plan (**LEMP**) for **Colne Vale Business Park, Huddersfield, West Yorkshire, HD3 4NY** hereafter referred to as 'the Site'. Kirklees Council requested the following to be included within the LEMP.

There shall be no commencement of the development hereby permitted until a Habitat and Landscape Management Plan has first been submitted to and approved in writing by the Local Planning Authority. The submitted plan shall include the following:

- *Site role and responsibilities;*
- *Good practise guidelines for construction works;*
- *Specification of measures that will result in the creation of features of ecological value as part of the development of the site (including bat and bird boxes);*
- *Specifications of a proposed lighting strategy to avoid habitat suitable for bats and birds;*
- *Pollution Prevention Measures to be put in place for works near the river Colne to protect any fauna it may support;*
- *An invasive species biosecurity and management plan in line with best practice; • Recommended timings of works to avoid ecological constraints such as nesting birds, roosting bats and hedgehogs; and,*
- *Ongoing monitoring and remedial measures.*

The development shall not be brought into use until the approved plan has been implemented and completed. The approved plan shall thereafter be retained in accordance with approved details for the lifetime of the development.

Reason: In the interests of protecting and enhancing Biodiversity Net Gain, protected species, and terrestrial and water habitats, in accordance with Policies LP29, LP30 and LP33 of the adopted Kirklees Local Plan and policies within Chapter 15 of the National Planning Policy Framework.

1.1.2 To support the fulfilment of the above, the following have previously been undertaken:

- A Preliminary Ecological appraisal (PEA) was undertaken in March 2024 by JCA Ltd. (JCA ref: 21850/ElC).

1.1.3 Utilising the information from the above survey work, this current report details a Landscape and Ecological Management Plan (**LEMP**) with respect to the surrounding habitats and avoiding harm and disturbance to nesting birds, bats,

badgers, hedgehogs, and other species and to avoid the possible spread of invasive non-native species during the course or works. The post-construction habitat creation, enhancement, monitoring, and management of the site is to be considered in separate reports and is not included within this document.

1.3 Details of Proposed Development

1.3.1 The scheme is the construction of three industrial units.

1.3.2 Under the current plans scattered trees will be removed to facilitate the development.

1.4 Scope of report

1.4.1 This report is compiled in accordance with guidance outlined in the National Planning Policy Framework (NPPF) so that the development considers the value of ecosystem services and enhance ecological networks.

1.5 Summary of Baseline Ecology Likely to Be Affected

1.5.1 The PEA conducted by JCA Ltd. (JCA ref: 21850/ElC) 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 discussion of the ecology on Site.

1.5.2 Statutory Designated sites

1.5.3 There are no internationally designated sites with 2km of the Site. Gledholt Woods Local Nature Reserve (LNR) is located approximately 1.83km northeast of the Site. However, due to the distance from the of the LNR from the Site and the small-scale nature of the development, it is very unlikely the LNR will be affected by the development.

1.5.4 The Site falls within the Special Site of Scientific Interest (SSSI) Impact Risk Zone. The proposed development does not fall under the criteria listed as likely impacts to sites under this level of designation. As such, sites under these designations are not considered vulnerable. Therefore, consultation with

Natural England is not required.

1.5.5 Non-statutory Designated sites

1.5.6 Four non-statutory nature conservation sites are present within 2km of the Site, which can be seen in Table 1 below.

Table 1: Non-statutory designated sites within 2km of the Site.

Site Name	Distance (m) from Site	Reasons for Designation
Huddersfield Narrow Canal LWS	0.03km south	Open standing water and its value for the appreciation of nature
John Wellfield Quarries LGS	1.78km south	Historical associations, education value and aesthetic characteristics
Gledholt Woods LWS	1.83km northeast	Local Nature Reserve (LNR)
Low Westwood Pond LWS	1.87km southwest	Species rich standing water

Key:
LWS – Local Wildlife Site
LGS – Local Geological Site

1.5.7 Habitats

1.5.8 No Habitats of Principal Importance (as listed on Section 41 (S41) of the of the Natural Environment and Rural Communities (NERC) Act 2006), were found within or adjacent to the Site. The PEA conducted by JCA Ltd. (JCA ref: 21850/ElC) described the following habitats on Site (The UK Habitat Classification, Habitat Definitions Version 2.01, UKHab, 2023).

- u1b – Developed land; sealed surface
- u1b6 – Other developed land

1.5.9 Species

1.5.10 The PEA identified the Site's potential to support the following species:

- Fish – The Site does not have habitat suitable for supporting fish, however the Site is bordered by the River Colne and Huddersfield Narrow Canal. Pollution during the construction phase of the development could adversely impact fish present in the River Colne and Huddersfield Narrow Canal to the north and south of the Site.
- Bats – The Site itself was found to have negligible potential for foraging and commuting bats, however, the Site is bordered by the River Colne and Huddersfield Narrow Canal which have high potential for foraging and

commuting bats.

- Otter – The Site does not have habitat suitable for supporting otter, however, the Site is bordered by the River Colne and Huddersfield Narrow Canal. Pollution during the construction phase of the development could adversely impact otters present on the River Colne and Huddersfield Narrow Canal to the north and south of the Site.

- Water vole – The Site does not have habitat suitable for supporting water vole, however, the Site is bordered by the River Colne and Huddersfield Narrow Canal. Pollution during the construction phase of the development could adversely impact fish present in the River Colne and Huddersfield Narrow Canal to the north and south of the Site.

- Hedgehogs – The habitats on site do not provide suitable sheltering and foraging habitat for hedgehog. However, the woodland adjacent to the site provide suitable habitat. Hedgehogs can travel several kilometres in a night; therefore, the Site may be used by commuting hedgehogs.

- Invasive species – No Invasive Non-Native Species (INNS) listed under Schedule 9 of the Wildlife and Countryside Act 1981 were identified during the survey; however the survey was undertaken outside of the primary growing season for INNS.

1.6 Scope of the LEMP

1.6.1 This LEMP has been produced to remove or reduce the ecological impacts of construction works for the proposed development with regards to surrounding habitats and to avoiding harm and disturbance to the species mentioned in **Section 1.5.6** and to avoid the possible spread of invasive non-native species during the course or works.

2 Aims and Objectives

2.1 Aim

2.1.1 Preservation and enhancement of the Site's ecology, with regards to:

- Roosting, commuting and foraging bats.
- Commuting badgers.
- Commuting, and sheltering hedgehogs.
- Other species, such as foxes.
- Invasive species.
- The integrity of the surrounding habitats.

2.2 Objectives

2.2.1 To ensure no breach of UK wildlife legislation occurs on Site for the duration of the proposed development.

2.2.2 To protect bats, badgers, hedgehogs, and other species from harm and disturbance and prevent the possible spread of invasive non-native species caused by the proposed development and construction works.

2.2.3 To minimise damage to the surrounding habitats as part of the final development.

2.3 Ecological Constraints

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

2.3.2 <u>National legislation</u>

- Nesting birds are protected under the Wildlife and Countryside Act 1981 (as amended).
- Bats and their roosts are protected under the Conservation of Habitats and Species (as amended) (EU Exit) Regulations 2019 and Schedule 5 of the Wildlife and Countryside Act 1981 (as amended).
- Badgers are protected under Schedule 6 and 6ZA of the Wildlife and

Countryside Act 1981 (as amended), the Protection of Badgers Act 1992, and the Wild Mammals (Protection) Act 1996.

- Hedgehogs are protected under Schedule 6 of the Wildlife and Countryside Act 1981 (as amended) and the Wild Mammals (Protection) Act 1996.

- Otters are protected under the Conservation of Habitats and Species (as amended) (EU Exit) Regulations 2019 and Schedule 5 of the Wildlife and Countryside Act 1981 (as amended).

- Water vole are protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and are listed under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006.

- Certain fish species are protected under Schedule 5(a) and 5(e) under the Wildlife and Countryside Act 1981 (as amended) and are listed under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006.

- Foxes and other species are protected from cruelty under the Wild Mammals (Protection) Act 1996.

- Invasive non-native species are designated as a Schedule 9 species under the Wildlife and Countryside Act 1981 (as amended).

2.3.3 Planning considerations

There are no habitats on-Site considered to be of principle importance under the Natural Environment and Rural Communities (NERC) Act 2006 habitats of principal importance.

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 (Chapter 15).
- Bradford Council's Environmental Policy and procedures.
- Policy EN2: Biodiversity and Geodiversity, of the Bradford Council Adopted Core Strategy.
- Policy EN8: Environmental Protection, of the Bradford Council Adopted Core Strategy.
- 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 LEMP, 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 LEMP.

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 LEMP.

4 Operational Control Procedures

4.1 General

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

- Site establishment.
- Site housekeeping.
- Pollution prevention.
- Protection of existing environmental features.

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 Site Housekeeping

4.3.1 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.

4.4 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 surrounding environment.

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

To prevent any possible chemicals from entering surrounding habitats, use on Site must be limited where possible. If chemical use and refuelling is unavoidable the appropriate preventative measures must be in place to prevent any possible spills, this includes a plan to quickly combat any chemical or fuel spill that may occur.

The use of herbicides should also be limited where possible. For vegetation removal, manual removal should be adopted. This is to limit possible herbicide runoff into surrounding habitats.

4.5.2 Birds

There is no vegetation on Site to support nesting birds. However, the woodlands and scrub adjacent to provide suitable habitat for nesting birds. If any vegetation removal is to take place outside the Site it should be undertaken outside of the bird nesting season (1st February to 31st August, inclusive). If this is not possible, a pre-construction Site walkover should be conducted by a suitably experienced ecologist to search for the presence of active birds' nests. Any such nests must remain *in situ* until all young have fledged with a buffer of undisturbed vegetation surrounding it. The size of the buffer will depend on the species present as different species are more sensitive to disturbance than others.

4.5.3 Bats

Inappropriate lighting in the vicinity of the woodlands, and rivers adjacent to the Site can cause disturbance to bat populations and individuals. At first instance, night-time working should be avoided. If this is not possible, any additional lighting that might be required onsite should not add to existing night-time light levels in proximity to the woodlands, scrub and surrounding habitats A wildlife friendly lighting design scheme should also be incorporated into the proposed development plans. Below, we have prepared guidance in line with the

information provided by the Institute of Lighting Professionals (ILP, 08/23) to aid in planning lighting schemes with the aim of further limiting the impact that lighting may have on local wildlife populations post development.

It is important to avoid:

- Uniform levels of luminance across the Site.
- Metal halide and florescent lighting.
- Upward tilting lighting that increases skyline luminance.

Instead, the following should be installed:

- Dark buffer zones.
- Screening in the form of vegetation, fences, and structures.
- Appropriately designated darkened areas.
- Luminaries absent of UV elements.
- LED luminaries with a sharp cut-off, low intensity, and good rendition.
- Peak luminaire wavelength at a minimum of 550nm.
- Downward directional luminaires with upward light ratios of 0%.

The most important element of the lighting scheme is that no light spill is to fall onto the buildings, woodlands, scrub, retained trees or surrounding habitats.

Dark corridors are to be incorporated into the lighting scheme for the development, along the boundaries, to facilitate passage of commuting bats into the surrounding landscape.

4.5.5 Hedgehogs

To permit hedgehog migration and safe passage of hedgehogs through the Site, any excavations created during the development stage must be covered at night or appropriate escape routes implemented. Planks are to be placed at a 45-degree angle for hedgehogs and other species to escape safely.

4.5.6 Other Species

To avoid death and harm to other species during the development, any burrows to be impacted should be destroyed systematically by hand to avoid death and harm of individuals. For earthworks on potentially active burrows/dens the following method statement must be followed.

A spade should be used to collapse the burrow/den 30cm at a time. For every 30cm removed, a waiting period of 1 minute should follow as to allow any animals to flee from the area, should they be present. Work should continue as above until the end of the burrow/den is reached.

4.5.7 Invasive species

No INNS were identified on Site at the time of the survey. If INNS are identified during the construction phase of the development, works should cease immediately and advise sough from an Ecologist.

Invasive non-native species can be eradicated by a variety of methods, such as chemical control or physical removal. Treating with chemicals requires applications of herbicide over successive growing seasons until the infestation is eradicated. The physical removal of INNS is best achieved by a specialist contractor. Not only the plants themselves but also the soil in which they were growing and to which their seeds or bulbs may have spread must be considered contaminated waste. This can only be transported by an appropriately licenced waste carrier and disposed of at an appropriately licenced waste treatment facility.

5 Creation of Ecological Features

5.1 Summary

5.1.1 In total **four** bird boxes have been recommended. The location of each faunal box to be erected can be seen in **Appendix 2**.

5.1.2 The proposed building is to be constructed of metal and there are no mature trees on Site, therefore no bat boxes have been recommended.

5.2 Bird Boxes

5.2.1 In the UK there are approximately 600 species of bird, each occupying a different habitat and present in a different region of the country. A small number of will quickly adopt new nest boxes, but only when the right box design is selected and situated correctly. Each species prefers a specific nest box design, with different dimensions and hole sizes. It is recommended that a breeding bird survey is carried out on Site to inform and produce a robust and tailored LEMP for this Site.

5.2.2 Standard bird boxes: Birds such as most tit species, tree sparrows and nuthatches prefer standard nest boxes with a small hole opening and a perch at the entrance. The size of hole can vary depending on the bird species.

5.2.3 Open-sided boxes: Birds such as robins, wrens and blackbirds will only nest in boxes with an open front design. These should be positioned within dense vegetation, below 2m high. Robins and wrens prefer smaller boxes (25 x 15 x 12 cm) and Blackbirds larger boxes (30 x 18 x 15 cm). Therefore, a mix of box sizes should be selected.

5.2.4 **Two** standard bird boxes and **two** open-sided boxes should be placed on the boundary fence (see **Appendix 2**).

Table2: Bird nesting opportunities to be installed as part of the Proposed Development.

Bird Box	Number to be Installed	Description	Details
Vivara Pro Barcelona WoodStone Open Nest Box (or comparable design) 	2	Unlike a traditional wooden nest box, these boxes will not rot away or deteriorate and are guaranteed for 10 years. This robust material safeguards against attacks from predators such as woodpeckers, cats and squirrels, whilst also providing a well-insulated interior with a consistent internal temperature (important for breeding). These open nest boxes are suitable for wrens, robins, spotted flycatchers, pied and grey wagtails, song thrushes and blackbirds.	Dimensions Height: 240mm Width: 190mm Length: 175mm
Vivara Pro Seville 32mm WoodStone Nest Box (or comparable design) 	2	Unlike a traditional wooden nest box, these boxes will not rot away or deteriorate and are guaranteed for 10 years. This robust material safeguards against attacks from predators such as woodpeckers, cats and squirrels, whilst also providing a well-insulated interior with a consistent internal temperature (important for breeding). These 32mm hole nest boxes are suitable for blue tits, tree sparrows, house sparrows, great tits, blue tits, nuthatches, coal tits and pied flycatchers and they are available in brown, green or grey to complement both natural woodland and garden settings.	Dimensions Height: 310mm Width: 200mm Length: 200mm Weight: 6.9kg Entrance hole diameter: 32mm

5.3 Hedgehog shelter

5.3.1 Hedgehog numbers have declined by 90% over the past 50 years due to several factors including habitat loss, fragmentation, and parasites. Providing shelter and a means of dispersal in gardens will encourage hedgehogs to visit the Site and utilise the natural space.

5.3.2 Hedgehog access holes: Access to natural habitats has become increasingly limited for hedgehogs, as fences and walls block their dispersal. It is recommended to create a 13x13cm access hole at ground level into fences in

each garden to allow hedgehogs to freely move between green spaces (Bunnell, 2014).

6 References

JCA Ltd 2024. *Preliminary Ecological Appraisal* (PEA) (JCA ref: 21850/ElC).

Guidelines for surveys and report writing:

British Standards Institute (BSI), (2013) *BS 42020:2013, Biodiversity - Code of practice for planning and development*. London.

Chartered Institute of Ecology and Environmental Management (CIEEM), (2017) *Guidelines on Ecological Report Writing*. Winchester.

UKHab Ltd (2023) *UK Habitat Classification Version 2.01 (at https://www.ukhab.org)*.

Websites:

Advice on protected species is consolidated at:

DEFRA. (2016). *Magic.defra.gov.uk*. Available at: http://magic.defra.gov.uk/MagicMap.aspx.

The RSPB. (2023). Available at: http://www.rspb.org.uk/.

Gov.UK. (2023). *Environmental management: Wildlife and habitat conservation*. Available at: https://www.gov.uk/topic/environmental-management/wildlife-habitat-conservation.

Gov.UK. (2022) *Protected species and development: advice for local planning authorities.* Available at: https://www.gov.uk/guidance/protected-species-how-to-review-planning-applications

Within this detailed guidance on licensing information is available on licences for the following protected species:

- Badgers
- Bats
- Beavers
- Dormice
- Great crested newts
- Natterjack toads
- Otters
- Reptiles
- Water voles
- White-clawed crayfish
- Wild birds

As well as:

- Invasive non-native (alie species
- Deer
- Freshwater fish
- Invertebrates
- Plants

Species Specific Information:

Badgers:
Chartered Institute of Ecology and Environmental Management (CIEEM). (2013). *Competencies for Species Survey: Badger*. Available at: https://cieem.net/wp-content/uploads/2019/02/CSS-BADGER-April-2013.pdf.
Natural England. (2007). *Badgers and Development: A Guide to Best Practice and Licensing.* Available at: http://www.wildlifeco.co.uk/wp-content/uploads/2014/03/badgers-and-development.pdf.

Bats:
Bat Conservation Trust and Institute of Lighting Professionals. (2023). *Guidance Note 08/23: Bats and artificial lighting in the UK*. ILP, Rugby. Available at: Guidance Note 8 Bats and Artificial Lighting | Institution of Lighting Professionals (theilp.org.uk)

Bat Conservation Trust. (2007). *Bats, Development & Planning in England.* Bat Conservation Trust, London. Available at: https://www2.oxfordshire.gov.uk/cms/sites/default/files/folders/documents/environmentandplanning/countryside/protectedspecies/batsdevelopmentplanning.pdf.
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Mitchell-Jones, A.J. & McLeish, A.P. (2012) *The Bat Workers' Manual.* Pelagic Publishing, Exeter.

Dormice:
Bright, P., Morris, P. and Mitchell-Jones, A. (2006) The dormouse conservation handbook (2nd edition). English Nature: Peterborough. Available at: https://ptes.org/wp-content/uploads/2014/06/Dormouse-Conservation-Handbook.pdf.

Great Crested Newts:
Amphibian and Reptile Conservation Trust and ZSL Institute of Zoology. (2017). *Advice note 4 (revised) - Amphibian Disease Precautions, A Guide for UK Fieldworkers. Available at: https://www.arguk.org/info-advice/advice-notes/324-advice-note-4-amphibian-disease-precautions-a-guide-for-uk-fieldworkers-pdf-2/.*
Langton, T., Beckett, C. and Foster, J. (2001). *Great Crested Newt Conservation Handbook.* Available at: https://www.froglife.org/wp-content/uploads/2013/06/GCN-Conservation-Handbook_compressed.pdf.

Otters:
Natural England. (2007). *Species Information Note SIN006, Otter: European protected species.* Available at: http://downloads.gigl.org.uk/website/NE_EU_otter.pdf.

Reptiles and Amphibians:
Baker, J., Beebee, T., Buckley, J., Gent, T. and Orchard, D. (2011). *Amphibian Habitat Management Handbook.* Available at: https://freshwaterhabitats.org.uk/wp-content/uploads/2018/06/amphibian-habitat-management-handbook-full.pdf.
Edgar, P., Foster, J. and Baker, J. (2010). *Reptile Habitat Management Handbook.* Amphibian and Reptile Conservation, Bournemouth.
English Nature. (2004). *Reptiles: guidelines for developers.* Available at: https://www2.oxfordshire.gov.uk/cms/sites/default/files/folders/documents/environmentandplanning/countryside/protectedspecies/reptilesguidelinesdevelopers.pdf.
Gent, A.H., & Gibson, S.D., *eds. (2003). Herpetofauna Workers' Manual.* Peterborough, Joint Nature Conservation Committee.

Water Voles:
Gaskin, J.L. (2016). *Water Vole Conservation and Management: Lessons From Four Case Studies.* Available at: https://publications.aston.ac.uk/id/eprint/30446/1/Gaskin_J.G._2017.pdf.
Natural England. (2022). *Water voles: advice for making planning decisions*. Available at: https://www.gov.uk/guidance/water-voles-advice-for-making-planning-decisions.
Stoddart, D.M. (1970). Individual range, dispersal in a population of water voles (Arvicola terrestris (L.)). *Journal of Animal Ecology, 39*(2), 403-425. Doi: 10.2307/2979.
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Strachan, R. and Holmes-Ling, P. (2003). *Restoring water voles and other biodiversity to the wider countryside.* Wildlife Conservation Research Unit, Oxford.
Strachan, R., Moorehouse, T. and Gelling, M. (2011). *Water Vole Conservation Handbook (3rd edition)*. Wildlife Conservation Research Unit, Oxford.

White-clawed Crayfish:
Peay, S. (2002). *Guidance on Habitat for White-clawed Crayfish and its Restoration*. English Nature & Environment Agency.

Relevant Legislation:

Wildlife and Countryside Act 1981, c. 69 (as amended). Available at: http://www.legislation.gov.uk/ukpga/1981/69

Countryside and Rights of Way Act 2000, c.37. Available at: http://www.legislation.gov.uk/ukpga/2000/37/contents

The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019, no. 579. Available at: https://www.legislation.gov.uk/ukdsi/2019/9780111176573

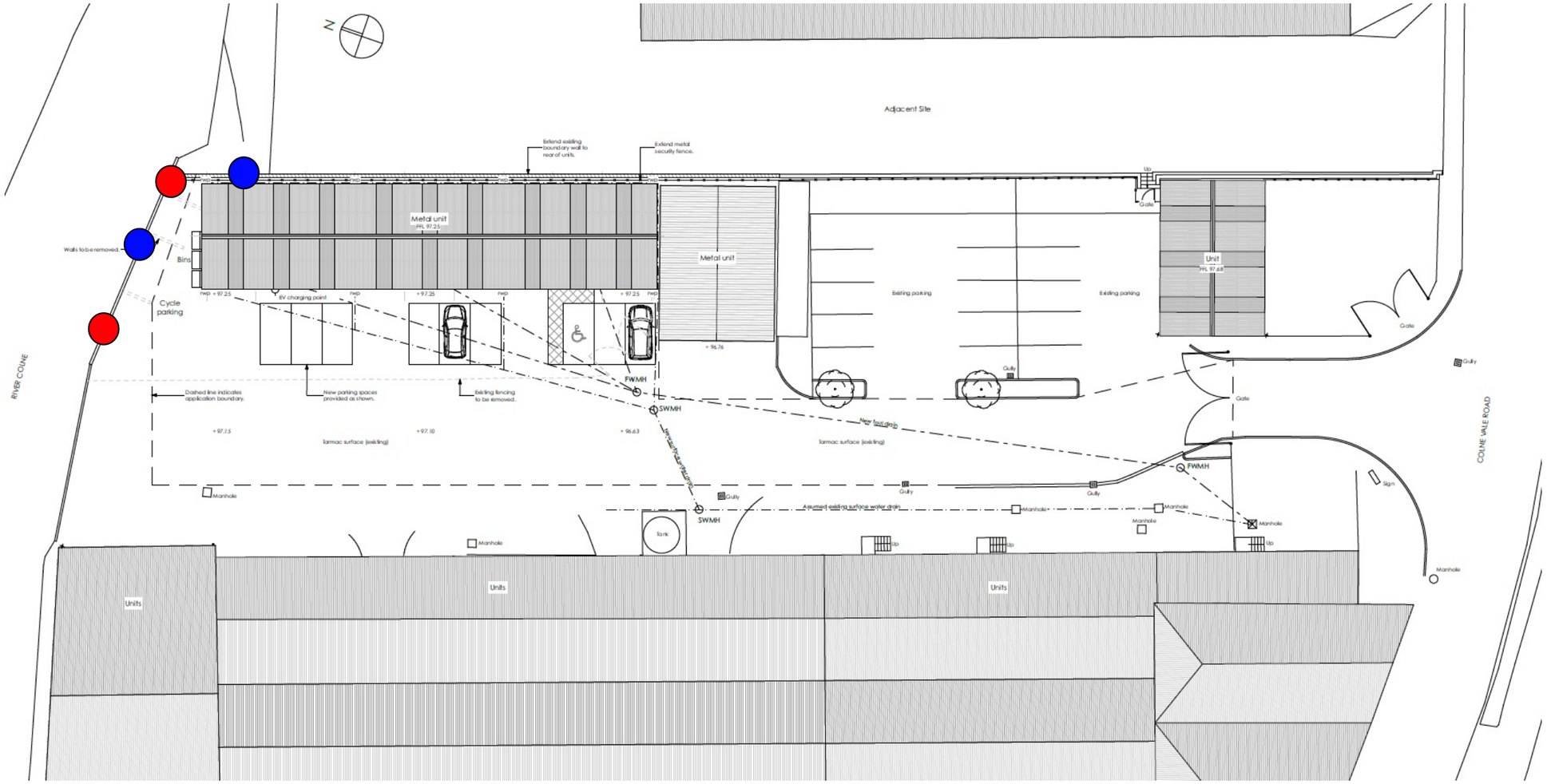
Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (as amended). Available at: https://www.legislation.gov.uk/eudr/1992/43.

Protection of Badgers Act 1992, c. 51. Available at: http://www.legislation.gov.uk/ukpga/1992/51.

The Hedgerow Regulations 1997, no. 1160. Available at: http://www.legislation.gov.uk/uksi/1997/1160.

Appendices

Appendix 1: Faunal Box Plan



Site name & address

Colne Vale Business Park
Huddersfield
West Yorkshire
HD3 4NY

Key

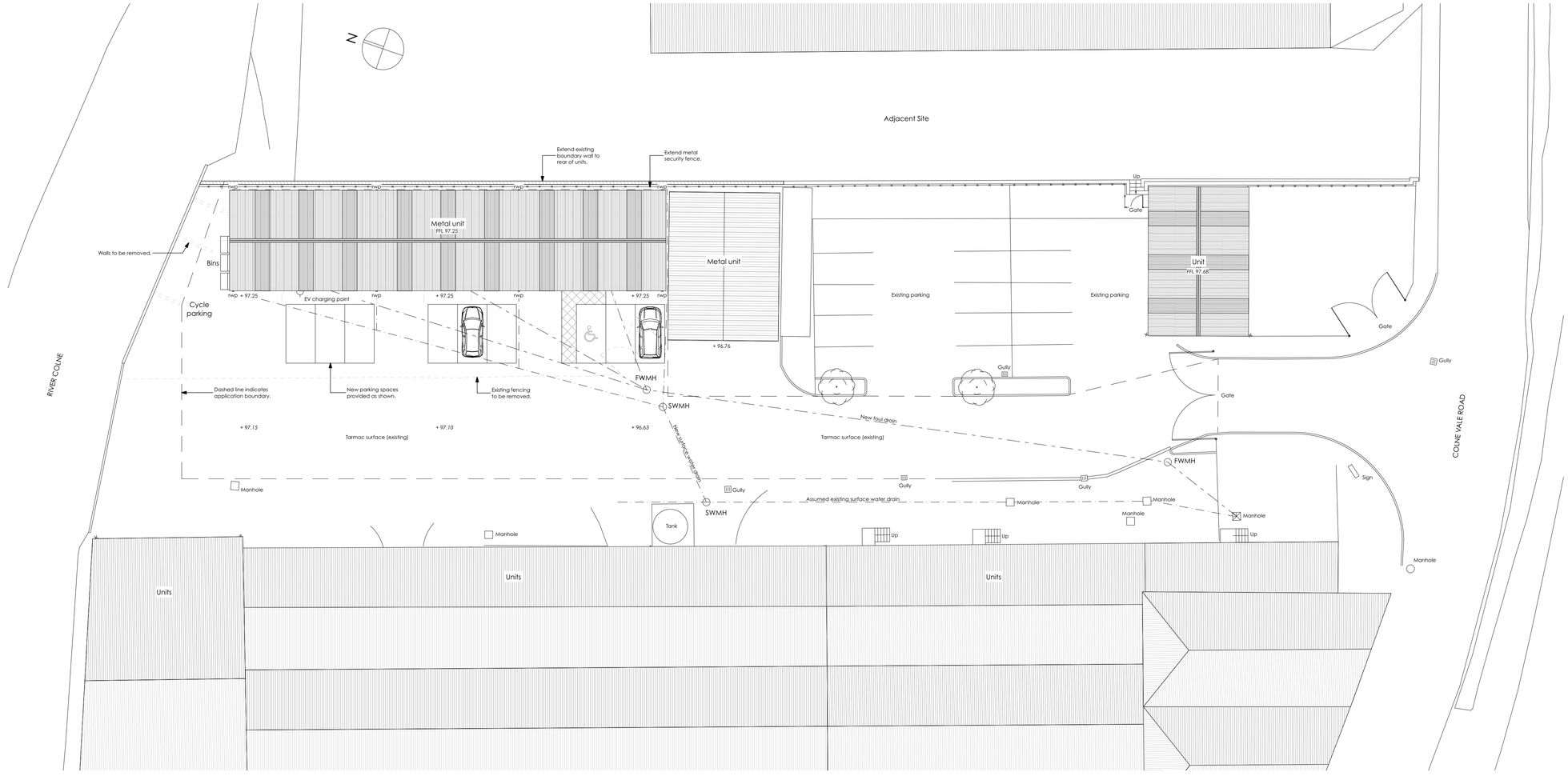
- Vivara Pro Barcelona WoodStone Open Nest Box
- Vivara Pro Seville 32mm WoodStone Nest Box

Site Colne Vale Business Park	Client Colne Vale Contractors Ltd.
Project 21850a LEMP	Author EIC
Plan ref 21850a/EIC	Revision 001

Appendix 2: Proposed Development Map

General Notes

ALL DIMENSIONS MUST BE CHECKED AND VERIFIED ON SITE PRIOR TO COMMENCEMENT OF WORK AND DESIGNER TO BE NOTIFIED OF ANY DISCREPANCIES.



Plan 1:200

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Revision	Description	Issued	Checked	Date

Client:
Mr C Thwaites

Project:
Colne Vale Business Park,
Colne Vale Road,
Milnsbridge

Drawing:
Proposed Units - Site Plan

Drawing Status:

PLANNING

Date:	Scale @ A1:	Drawn by:
JUL 23	1:200	AB
Project No:	**Drawing No:**	**Revision:**
237	(0-) 02	

BA Bamford Architectural Ltd.

07725022034
enquiry@bamfordarchitectural.co.uk
bamfordarchitectural.co.uk

Appendix 3: Author Qualifications

Adam West, Principal Ecologist

BSc (Hons) Animal and Wildlife Management, ACIEEM.

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 Batchelor's degree in Animal and Wildlife Management, 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 and a Natural England Level 2 bat survey class licence.

Eleanor Clark, Consultant Ecologist

BSc (Hons) Biology, MSc Biodiversity, Ecology & Ecosystems, MRSB.

Eleanor gained her undergraduate degree in biology in 2017 from the University of Portsmouth before going on to complete an MSc in Biodiversity, Ecology & Ecosystems at the University of York in 2019. Eleanor has 3 years of experience in ecological consultancy with experience surveying for a range of protected species. Eleanor holds a Natural England Level 1 great crested newt licence and is working towards her bat licence.

Rick Westwood, Graduate Ecologist

BA (Hons) History and Politics

Rick gained his undergraduate degree in History and Politics in 2001 from Leeds Metropolitan University before going on to complete a PGCE in History at the University of Leeds in 2003. After 18 years in secondary education and the NHS, Rick began assisting on bat emergence surveys in 2023, after which, he gained employment as a Graduate Ecologist at JCA Ltd.

The Information and advice which we have prepared and provided is true and has been prepared and provided in accordance with the CIEEM's Code of Professional Conduct. We confirm that the opinions expressed are our true and bona fide opinions.

Signed

.....

Eleanor Clark *BSc (Hons) MSc MRSB*

02/04/2024

Reviewed by

.....

Rick Westwood *BA (Hons)*

02/04/2024

Reviewed and authorised by

.....

Adam West *BSc (Hons) ACIEEM*

08/04/2024

For and on behalf of ***JCA Ltd***

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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

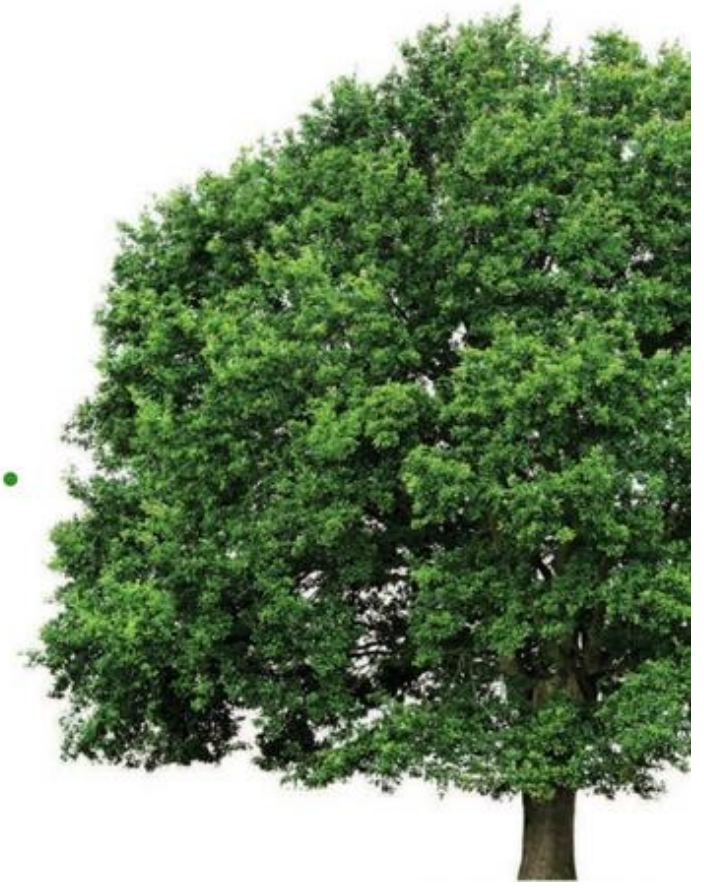
- Ancient Woodland Management
- Veteran Tree Management

Tree Health and Pest and Disease Management

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

JCA Limited

Arboricultural & Ecological Consultants



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