CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

at

Land at Denby Lane
Grange Moor
West Yorkshire
WF12 0NR

Client:
Orion Homes

Client Address:
5 Benton Office Park
Bennet Avenue
Horbury
Wakefield
WF4 5RA

JCA Ref: 21986b/JF

Date of Report:
25/09/2025

JCA Limited
Arboricultural & Ecological Consultants

Quality Assurance

Version	**Desktop Survey Completed:**		**Site Surveyed:**		**Report Completed:**		**Checked:**	
	Date	Name	Date	Name	Date	Name	Date	Name
Planning	N/A	N/A	N/A	N/A	19/09/25	James Foster	24/09/25	Alex Donovan

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*

Contents

1. Introduction

1.1 Background

1.1.1 In **August 2025**, JCA Ltd was commissioned by **Orion Homes,** to produce a Construction Environmental Management Plan (**CEMP**) for a site located at **Land at Denby Lane** hereafter referred to as 'the site'.

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

- A Preliminary Ecological appraisal (PEA) was undertaken in May 2024 by JCA Ltd. (JCA ref: 21986a/JF).

1.1.3 Utilising the information from the above survey work, this current report details a Construction Environmental Management Plan (**CEMP**) with respect to the surrounding habitats and avoiding harm and disturbance to the species mentioned in **Section 1.6.5** during the course or works.

1.1.4 The post-construction habitat creation, enhancement, monitoring, and management of the site is to be in separate reports and is not included within this document.

1.2 Site Description and Location

1.2.1 **Land at Denby Lane** is located at Ordnance Survey (OS) National Grid Reference **SE 22371 16247**, with nearby postcode **WF12 0NR**. The site is bordered to the north by hardstanding, defunct farm buildings and a small woodland. To the east by a small strip of woodland, scrub and Briestfield beck (which runs through a culvert) with arable grassland further afield. To the west by grassland, scattered trees and residential properties. To the south by residential properties with industrial units further afield.

1.2.2 The site's habitats currently consist of modified grassland.

1.3 Details of Proposed Development

1.3.1 The scheme is the construction of 21 semi-detached, detached and terraced residential properties with associated soft landscaping and access.

1.3.2 Under the current plans the existing modified grassland 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 2024 (NPPF) so that the development considers the value of ecosystem services and enhance ecological networks.

1.5 Roles and Responsibilities

1.5.1 Ecologist Responsible for CEMP

JCA Ltd. are the organisation responsible for the production of this CEMP. JCA Ltd. report on both ecological and arboricultural issues throughout the UK. All surveys and reports are undertaken and compiled in accordance with CIEEM's Professional Code of Conduct and the relevant survey guidance.

1.5.2 Landowner and Land Manager

The landowner and manager responsible for the site is Orion Homes Ltd.

1.5.3 Management Organisation(s)

Orion Homes Ltd are responsible for the implementation of the CEMP.

1.5.4 Local Planning Authority (LPA)

Kirklees Council are the LPA responsible for reviewing the CEMP.

1.5.5 Lines of Communication

Orion Homes Ltd are responsible as key contacts during the development.

1.6 Summary of Baseline Ecology Likely to Be Affected

1.6.1 The PEA conducted by JCA Ltd. (JCA ref: 21986a/JF) 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.

1.6.2 Notable habitats

No Habitats of Principal Importance (as listed on Section 41 (S41) of the Natural Environment and Rural Communities (NERC) Act 2006), were found within or adjacent to the site.

1.6.3 Statutory Designated sites

The MAGIC website revealed no internationally or nationally designated sites within 2km of the site.

The MAGIC website revealed that the site lies outside the Special Site of Scientific Interest (SSSI) Impact Risk Zone.

1.6.4 Non-statutory Designated sites

Records received from WYES revealed three non-statutory designated sites within 2km of the site, detailed in Table 2 below.

Table 1: Non-statutory designated sites within 2km of the site, returned from WYES.

Site Name	Distance (m) from Site	Reasons for Designation
Howroyd Beck Fields, Lower Whitley LWS	1370m North	Unmanaged acid grassland, lowland mixed deciduous woodland and running water habitats supporting a range of invertebrate species, including small heath butterfly which is a NERC S41 designated species.
Liley Wood LWS	1840m Northwest	Mixed deciduous replanted ancient woodland supporting abundant English bluebells.
Whitley Wood LWS	1900m Northwest	Replanted ancient mixed woodland that supports English bluebells.
Key: LWS – Local Wildlife Site		

The site is not included or adjacent to the West Yorkshire Wildlife Habitat Network or the Bat Alert Zone.

1.6.5 Habitats

The PEA conducted by JCA Ltd. described the following habitats on-site (The UK Habitat Classification, Habitat Definitions Version 2.01, UKHab, 2023).

g4 – Modified grassland: 10 – Scattered scrub, 14 – Scattered rushes, 81 – Ruderal or ephemeral, 106 – Mown, 114 – Drystone wall, 510 – Bare ground.

1.6.6 Species

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

- Invertebrates: The grassland on site offers foraging opportunities for a range of invertebrates. Ragwort was identified on site, which is the sole food plant for the cinnabar moth.

- Birds: The grassland on the site and the woodland and scrub to the east of the site have the potential to support nesting birds.

- Bats: The grassland on the site and the woodland and scrub to the east of the site have the potential to support commuting and foraging bat species.

- Badgers: The grassland on site offers commuting and foraging opportunities and the woodland to the east of the site has the potential for badger sett creation.

- Hedgehogs: The grassland on site offers commuting and foraging opportunities for hedgehogs and the woodland and scrub to the east of the site has hibernating opportunities.

- Brown Hare: The grassland on site has the potential to support commuting, foraging, sheltering and breeding brown hare.

1.7 Scope of the CEMP

1.7.1 This CEMP has been produced to remove or reduce the ecological impacts of construction works for the proposed development with regards to the surrounding habitats, and to avoiding harm and disturbance to the species mentioned in **Section 1.6.5** during the course or works.

1.7.2 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 the surrounding habitats, and protected species, including invertebrates, nesting birds, bats, badgers, hedgehogs and brown hare.

2. Aims and Objectives

2.1 Aim

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

- Invertebrates.
- Nesting birds.
- Commuting and foraging bats.
- Badgers
- Hedgehogs.
- Brown hare.
- Other species, such as foxes and domestic pets.
- 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 invertebrates, nesting birds, bats, badgers, hedgehogs, brown hare and other species from harm and disturbance 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 issues

2.3.1 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:

2.3.2 <u>National legislation</u>

- Invertebrates, such as cinnabar moth, are a Section 41 NERC priority species.
- Nesting birds are protected under the Wildlife and Countryside Act 1981 (as amended).
- Bats 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). Several species are also Section 41 NERC

priority species.

- Badgers are protected under the Protection of Badgers Act 1992 and also the Wildlife and Countryside Act 1981 (as amended).

- Hedgehogs are protected under Schedule 6 of the Wildlife and Countryside Act 1981 (as amended), the Wild Mammals (Protection) Act 1996 and are a Section 41 NERC priority species.

- Brown hare are protected under the Wild Mammals (Protection) Act 1996 and are a Section 41 NERC priority species.

- Other wild mammals, such as foxes, are protected from cruelty under the Wild Mammals (Protection) Act 1996.

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 2024.
- 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 to 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 good environmental 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 should be competent to perform tasks that have the potential to have 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.
- 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. Refueling 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.

- If a temporary site compound is to be installed it should be in an area of low ecological value, such as hardstanding and will be reinstated to its former condition, following completion of the project.

4.3 Boundary Fencing

4.3.1 The site boundary should be fenced with Heras fencing, as a necessity for security, to prevent windblown litter or waste from polluting the wider environment and to exclude mobile species, such as badgers, hedgehogs, foxes, 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 on the surrounding environment.

4.4.2 An 'environmental incident' is defined as any event, activity or condition that it 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 atmosphere, aquatic or land environment caused by the 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.

- GPP 1: Understanding your environmental responsibilities – good environmental practices.
- GPP 5: Works and maintenance in or near water.
- GPP 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 <u>Surrounding Habitats</u>

Protective Heras fencing, at least 1.8m in height, is to be installed around the development area. This fence is to be retained for the duration of the works to prevent

species such as badgers, hedgehogs, foxes, and domestic pets from commuting on site and to prevent construction works causing any damage to the surrounding habitats close to construction. The fence should be inspected regularly and repaired as necessary for the duration of the works.

Lighting should not fall onto the surrounding habitats close to construction.

If plant operations are unavoidable close to the surrounding habitats close to construction, they should only be done with light machinery to avoid pollution, excessive noise and vibration spilling into the surrounding environment. The use of dust suppression equipment is also recommended.

To prevent any possible chemicals from entering the surrounding habitats close to construction, use on site must be limited where possible. If chemical use and refueling are 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 the surrounding habitats close to construction.

4.5.2 Trees

Construction works are due to occur near trees that are to be retained. Tree protective fencing should be erected around the trees to be retained. This fencing is to remain in place for the duration of the construction period. The fence should be inspected regularly and repaired as necessary for the duration of the works. No construction activities or vehicle movements are to be permitted within the fenced off area. Lighting should not fall on the trees.

4.5.3 Invertebrates

Native scrub and wildflower planting (including ragwort species) is recommended to mitigate for the loss of habitat and floral variety which will affect many notable and generalist invertebrate species on-site, such as pollinators, whilst also providing for species which may forage on these invertebrates, such as bats and birds.

4.5.4 Birds

The vegetation and trees adjacent to the site provide suitable habitat for nesting birds. Works in or adjacent to these habitats should take place outside of the bird nesting season (1st March 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.

Bird nesting is often weather dependent, so it may occur outside the usual nesting

season if conditions are right. If works occur outside the bird nesting season and an active nest is found, works must cease, and a suitably qualified ecologist must be contacted. Site workers must be aware of the signs of nesting activity, which include:

- A completed nest with eggs, chicks, or a brooding adult.
- A nest under active construction.
- Adults displaying territorial and/or agitated behaviour, such as remaining in close proximity to potential nest sites, and persistently calling.
- Adults seen flying to and from a specific location carrying nest material, e.g. sticks, moss, feathers, sheep wool, etc.
- Adults seen flying to and from a specific location carrying forage, e.g. worms, caterpillars, other invertebrates.

4.5.5 Bats

All lighting must consider wildlife and be in accordance with the ILP Guidance GN08 (2023). A key point is the avoidance of internal and external light spill. Where possible, lighting should be timed, or on sensors and avoid the hours between sunset and sunrise, when bats are out foraging.

Lighting

No night working is to take place and no additional lighting be used at the site to avoid disturbance to commuting and foraging bats. If it is necessary to install additional lighting on site, these must be fitted with hoods, cowls, or shields to direct light into the working areas only.

Inappropriate lighting in the vicinity of bat roosts can cause disturbance to bat populations and individuals. As such, guidance in line with the information provided by the Bat Conservation Trust and Institute of Lighting Professionals (ILP) (2023) will aid in planning lighting schemes with the aim of limiting the impact that lighting may have on local bat populations.

Lighting Scheme

All lighting installed as part of the development will be in line with GN08 (2023). The following will be required:

- LED lighting will be used and light levels will be kept as low as possible. Metal halide, fluorescent sources will not be used.
- Lighting will be directed to where it is required.
- Only luminaires with no light output above 90 degrees and/or an upward light ratio of 0% and with good optical control will be used, luminaires will always be mounted on the horizontal, i.e. no upward tilt.

- Any external security lighting will be set on motion-sensors and short (1min) timers.

- Internal lighting within the new rooms will be recessed where installed in proximity to windows to reduce glare and light spill.

- Light sources will emit minimal ultra-violet light, peak higher than 550nm and be of a warm white spectrum (ideally <2700 Kelvin).

- The use of bollard or low-level downward directional luminaires is strongly discouraged.

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.

4.5.6 Badger, Hedgehog, Brown Hare and Other Species

To permit badger, hedgehog and hare migration and safe passage through the site, any excavations created during the development stage must be covered or appropriate escape routes implemented. Planks are to be placed at a 45-degree angle for hedgehogs and hares to escape safely. Any open pipes must be capped.

The protective Heras fencing installed on the site during the construction phase will exclude badger, hedgehog and other species, such as foxes and domestic animals from the construction zone.

The vegetation onsite provides high potential for breeding brown hare. The breeding period for brown hare is between February and September. A preconstruction site walkover no more than 24 hours prior to any vegetation removal is recommended and if removal occurs outside of the breeding brown hare period and leverets or hares are found, the removal must cease immediately, and a suitably competent ecologist contacted.

If any animal burrows are found on site (e.g. fox, rabbit): to avoid death and harm to other species during the development, any burrows of species other than badgers (badger setts are protected under the WCA and the Protection of Badgers Act and cannot be disturbed without a licence) to be impacted must be destroyed systematically by hand to avoid death and harm of individuals. In the highly unlikely event of discovery of a badger sett, works must immediately cease, and the advice of a suitably qualified ecologist must be sought. For earthworks on potentially active non-badger burrows/dens the following method statement must be followed:

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

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 A Preliminary Ecological Appraisal was undertaken to establish whether protected species use the habitat types found within the site (see **Section 1.6**).

4.7.3 There is potential for protected species to use the site. These include:

- Invertebrates may be impacted by the loss of foraging opportunities from the removal of suitable habitat (see section **4.5.3**).
- Nesting birds may be impacted by vegetation clearance (see section **4.5.4**).
- Commuting and foraging bats may be impacted by inconsiderate lighting practices (see section **4.5.5**).
- Badger, Hedgehog, Brown Hare and Other Species: these species may be impacted by any vegetation clearance and/or inconsiderate building practices (see section **4.5.6**).

4.7.4 Specific mitigation measures to prevent adverse impacts on protected species and habitats are set out below.

4.7.5 Native scrub and wildflower planting (including ragwort species) is recommended to mitigate for the loss of habitat and floral variety which will affect many notable and generalist invertebrate species on site and species which may forage on invertebrates such as bats and birds.

4.7.6 The vegetation on site provides high nesting potential for breeding bird species. In the UK, the key breeding period for birds is from 1st March until 31st August (depending on weather, species and behaviour). A preconstruction site walkover no more than 24 hours prior to any vegetation removal or demolition is required, and if removal occurs outside of the breeding bird period and birds are found, the removal

must cease immediately. 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.

4.7.7 Installation of barriers along the boundary, to protect the surrounding habitats. Also, around any trees where construction works are occurring in close proximity.

4.7.8 All lighting must consider wildlife and be in accordance with the ILP Guidance GN08 (2023).

4.7.9 Vegetation clearance should be conducted in a phased manner, and vegetation should be maintained with a short sward height until construction commences.

4.7.10 To permit badger, hedgehog and hare migration and safe passage through the site, any excavations created during the development stage must be covered or appropriate escape routes implemented. Planks are to be placed at a 45-degree angle for hedgehogs and hares to escape safely. Any open pipes must be capped.

4.7.11 A preconstruction site walkover no more than 24 hours prior to any vegetation removal is recommended and if removal occurs outside of the breeding brown hare period and leverets or hares are found, the removal must cease immediately, and a suitably competent ecologist contacted.

4.7.12 A spade must be used to collapse any burrow/den 30cm at a time (strictly excluding badger setts). For every 30cm removed, a waiting period of 1 minute must follow as to allow any animals to flee from the area, if any are present. Work must then continue as above until the end of the burrow/den is reached.

5. References

JCA Ltd 2024. *Preliminary Ecological Appraisal* (PEA) (JCA ref: 21986a/JF).

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), (2015) *Guidelines for Ecological Report Writing*. Winchester.

UKHab (2023) The UKHab Classification System Version 2.01. Available at: https://ukhab.org/

Websites:

Advice on protected species is consolidated at:
Environmental management: Wildlife and habitat conservation - GOV.UK (2016) *Gov.uk*. Available at: https://www.gov.uk/topic/environmental-management/wildlife-habitat-conservation

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

The RSPB (2016). Available at: http://www.rspb.org.uk/

Surveys and mitigation plans: protected species - Detailed guidance (2015) *Gov.uk*. Available at: https://www.gov.uk/guidance/surveys-and-mitigation-plans-protected-species

Within this detailed guidance on surveys and mitigation information is available on the following protected species:

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

Wildlife licences: when you need to apply - Detailed guidance (2014) *Gov.uk*. Available at: https://www.gov.uk/guidance/wildlife-licences

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

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

As well as:

- Non-native Bumblebee species
- Deer
- Freshwater fish
- Invertebrates
- Mink, coypu, muskrat and gr squirrel
- Plants

Species Specific Information:

Badgers:

Natural England, (2007) Badgers and Development: A Guide to Best Practice and Licensing.

Competencies for Species Survey: Badger, Chartered Institute of Ecology and Environmental Management CIEEM, 2013

Bats:

Bat Conservation Trust, (2007) Bats, Development & Planning in England. London.

Bat Conservation Trust and Institute of Lighting Professionals (2023) Guidance Note 08/23: Bats and artificial lighting in the UK. ILP, Rugby

Collins, J. (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines. 4th edition. Bat Conservation Trust, London.

Mitchell-Jones, A.J. & McLeish, A.P. (2012) The Bat Workers' Manual. Pelagic Publishing, Exeter.

Bats: surveys and mitigation for development projects, https://www.gov.uk/guidance/bats-surveys-and-mitigation-for-development-projects Accessed 2018-06-21

Dormice:

Bright, P., Morris, P. and Mitchell-Jones, A. (1996) The dormouse conservation handbook. Peterborough: English Nature.

Great Crested Newts:

Langton, T., Beckett, C. and Foster, J. (2001) Great Crested Newt Conservation Handbook. Halesworth: Froglife. pdf

Advice note 4 (revised) - Amphibian Disease Precautions, A Guide for UK Fieldworkers, Amphibian and Reptile Conservation trust, 2017. Accessed 2018-06-21

Otters: *Natural England, (2007) Species Information Note SIN006, Otter: European protected species.*

Reptiles and Amphibians:

Baker, J., Beebee, T., Buckley, J., Gent, T. and Orchard, D. (2011) Amphibian Habitat Management Handbook. 1st ed. Bournemouth: Amphibian and Reptile Conservation.

Edgar, P., Foster, J. and Baker, J. (2010) Reptile Habitat Management Handbook. 1st ed. Bournemouth: Amphibian and Reptile Conservation.

English Nature, (2004). Reptiles: guidelines for developers. Peterborough.

Gent, T. and Gibson, S. (ed.) (2003) Herpetofauna Workers Manual. Bournemouth: JNCC.

Water Voles:

Natural England, (2008) Water voles - the law in practice. Guidance for planners and developers.

Water Vole Conservation and Management: Lessons From Four Case Studies, Jemma Louise Gaskin, 2016

Stoddart, D.M. (1970), Individual range, dispersal in a population of water voles (Arvicola terrestris (L.)). Journal of Animal Ecology 39, 403-425.

Strachan, R. (2009), Populations and Persistence – Developing a Strategy for Conserving Water Voles in the UK, Presentation to Warwickshire Wildlife Trust, 2nd April 2009, Environment Agency, Wales

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 Edn, WILDCRU

White-clawed Crayfish:

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

Appendices

Appendix 1: UKHab Habitat Map

Site name & address

Land at Denby Lane, Grange Moor, West Yorkshire, WF12 0NR

Key

- Red Line Boundary

Habitats

- g4 – Modified grassland
- 10 – Scattered scrub
- 14 – Scattered rushes
- 81 – Ruderal or ephemeral
- 106 – Mown
- 114 – Drystone wall
- 510 – Bare ground

---- Drystone wall

Scale

0 10 20 m

Site Land at Denby Lane	Client Orion Homes
Project Preliminary Ecological Appraisal Report	Author JF
Plan ref 21986a/JF	Revision 0

Appendix 2: Proposed Development Map

Denby Lane, Grange Moor

Denby Lane, Grange Moor
Orion Homes

Housetype	number	Beds	Storeys	sqft	total	% mix
Preston	2	3	2	1002	2004	9.52
Bamburgh	6	3	2	1002	6012	28.57
Falmouth	1	3	2	1153	1153	4.76
Gosford	1	3	2	1161	1161	4.76
Wentworth	4	4	2.5	1184	4736	19.05
Tewkesbury	1	4	2	1241	1241	4.76
Cheltenham	2	4	2	1303	2606	9.52
Private total	**17**				**18913**	**80.95**
Edinburgh	4	3	2	858	3432	19.05
Affordable total	**4**				**3432**	**19.05**
Site total	**21**				**22345**	**100.00**

Site Area - Gross	1.5 acres	/ 0.6117Hectares
Density	34.33dph	
coverage	14,896 sqft per acre	

Path (um)

Path (um)

215.8m

Revision notes:		
Rev:	Date:	Notes:
E	28.02.24	.. 2024 Redrawn - CD
F	29.02.24	Plots 6 and 7 & 15 to 18 amended, 3m easement to eastern boundary added - CD
G	02.03.24	Plots 1 & 2 moved back to allow for the existing FW manhole/sewer - CD
H	15.05.24	Amended to suit Sandersons comments - CD
I	31.05.24	Plots 1 to 6 moved forward to make gap between plots 6 & 7 wider to accommodate drainage easement - CD

Revision notes:		
Rev:	Date:	Notes:
J	06.06.24	Plots 1 & 2 parking spaces amended and VP amended - CD

Revision notes:		
Rev:	Date:	Notes:
..	..	..

Date: Feb 24
Scale @ A3: 1:500
Drawn By: CD
Project: Denby Lane, Grange Moor
Drawing Number: Site layout
Revision: J

OrionHomes
SO GOOD TO COME HOME TO
Unit 5, Benton Office Park, Bennett Avenue,
Horbury, Wakefield, WF4 5RA, Tel: 01924 831030

Appendix 3: Author Qualifications

Adam West, Principal 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 Batchelor'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.

James Foster, Assistant Ecologist

BSc (Hons) Biology.

James gained his undergraduate degree in biology in 2012 from University of Leeds. James has plenty of experience in ecology, having worked countless projects of different scales all over the north and midlands. James has over 11 years of experience surveying anything from reptiles to hedgerows and holds a Great crested newt licence level 1 and is working towards his bat licence and barn owl licence.

Alex Donovan, Assistant Ecologist

MBiol BSc (Hons) Biology (Industrial)

Alex joined JCA in 2023 after graduating from the University of Leeds with a First Class Honours Integrated Master's degree in Biology, including an industrial placement year working in the Uplands Research Department of the Game and Wildlife Conservation Trust. Alex is a CIEEM Qualifying Member, and a member of the BTO's Bird Ringing Scheme and Nest Record Scheme. Alex holds a Natural England barn owl survey licence, and is working towards additional survey licences for bats, great crested newts, and white-clawed crayfish.

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

.....
James Foster *BSc (Hons)*

19/09/2025

Reviewed by

.....
Alex Donovan *MBiol BSc (Hons)*

24/0/2025

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: info@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

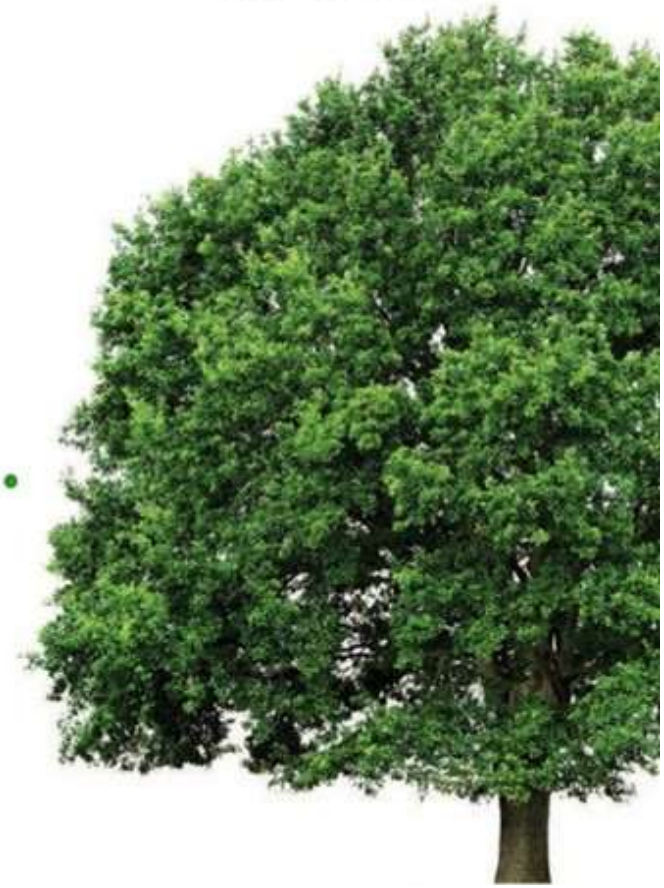
- Ancient Woodland Management
- Veteran Tree Management

Tree Health and Pest and Disease Management

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

JCA Limited

Arboricultural & Ecological Consultants



HEAD QUARTERS

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

Company Reg No: 05005041
VAT No: 686 4674 78