



Preliminary Roost Assessment



Rock End Stables,
Biddulph Moor, Staffordshire,
ST8 7NW.

June 2026



Notice to readers

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Client Details:
Mr. Jonathan Hargreaves
Application area:
Rock End Stables, Biddulph Moor, Staffordshire, ST8 7NW.
OS Grid Ref:
SJ899570
Issue No:
Final Issue (2)
Date Issued:
June 2026
Author:
Mark Weston  Principal Ecologist

Surveyor capability

Ecological assessment and report preparation have been undertaken by a qualified ecologist who holds a First-Class Honours degree in Conservation Biology. He has over thirteen years' experience of working within the ecological consultancy sector undertaking protected species surveys and biodiversity impact assessments with regard to planning and the Law. The Principle Ecologist holds Natural England Class surveyor licenses for bats [Class License CL18 (Level 2) Reg. No. 2015-10722-CLS-CLS]; Schedule 1 listed Barn Owl [CL29/00586] and Great crested Newt [Class License Reg. No. Number: 2015-18995-CLS-CLS]. He is also an associate university lecturer in ecology and environmental sciences at the University of Derby in Ecology and a higher member of the Royal Society of Biology (MRSB). The actions of the surveyor on site and during the production of written reports are undertaken in accordance with the Code of Professional Conduct for the Chartered Institute of Ecology and Environmental Management (CIEEM).





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NON-TECHNICAL SUMMARY

1. Charnia Ecology was commissioned by Mr. Jonathan Hargreaves to carry out a Preliminary Roost Assessment (PRA) for bats and birds regarding a proposed development at Rock End Stables, Biddulph Moor, Staffordshire, ST8 7NW (NGR: SJ899570). A day time building inspection was carried out on 29th May 2026.
2. The proposed application considers demolition of existing stable block and construction of new self-build detached dwelling and ancillary part subterranean garage.
3. The single-storey, low elevation former stable block building was found to have negligible potential for roosting bats, being constructed of timber lathe with a corrugated sheet roof providing less than conducive stable microclimates to provide a resting place for bats overall. No evidence of bats or birds were recorded during the external and internal inspection.
4. Evidence of individual nesting passerine birds was recorded in the SE elevation stable compartment, although no evidence of Schedule 1 listed Barn owl or European swallow was noted.
5. In absence of mitigation, it is highly unlikely that the proposed development will result in an offence under Regulation 41 or 4, and It will not be necessary to apply for a bat mitigation licence from Natural England before works can proceed.
6. Given spatiotemporal variations and behaviour of some generalist bat species (e.g. common pipistrelle), the development should adopt care and vigilance during works. In the unlikely event that any bats are discovered during works, or suspicions arise about the possible presence of bats then ALL WORKS MUST CEASE IMMEDIATELY, and further advice should be sought from a suitably qualified ecologist before any further works can proceed.
7. The proposed application area is situated in Green Belt. Based on the scale of the intended development, no impact to any designated sites of conversation concern is however considered.
8. Negligible impact to foraging and commuting habitat for bats and birds is considered. The site is however located in a semi-rural environment being of low district brightness and should comply to lighting protocols outlined in this report [see Sections 38-40].
9. Demolition works should ideally be carried outside of the bird breeding season (March-September inclusive). Where this is not possible a check for nesting birds should be carried out in 24hrs prior to work commencing. In the event that nesting birds are found, then these should be left undisturbed until offspring have fully fledged. If necessary, and exclusion work zone of 4m should be adopted to reduce disturbance and minimize potential displacement of nesting birds.

Biodiversity Net Gain Feasibility

10. The red development area boundary equates to 613m² (0.0613ha) and comprises predominantly of previously developed land / man made surfaces (UK Habitats Definition u1d) with a biodiversity metric baseline value of zero with 130m² of modified grassland (non-priority habitat). The development will not impact a priority habitat with all existing hedgerows retained.
11. The development consists exclusively of a single dwelling that is self-build or custom housebuilding on an area no larger than 0.5 hectares and would therefore appear to be exempt from mandatory Biodiversity Net Gain (BNG) +10% requirement as defined in section 1(A1) of the Self-build and Custom Housebuilding Act 2015.
12. At this juncture, creation of 'green roofs' to the new garage and other flat roof sections of the new dwelling is proposed to compensate for any minor loss of non-priority habitat, while also reducing visual impact of the development on Green Belt.
13. In accordance with the Natural Environment and Rural Communities (NERC) Act 2006, the development should seek, where possible, to enhance biodiversity opportunities for local bat and bird populations. it is recommended that 2no. external bat boxes and a number of bird nesting boxes are incorporated into the proposed scheme [see Sections 48-49].
14. In addition to proposed 'green roofs', any additional landscaping should aim to provide additional ground cover for wildlife assemblages Any landscaping should, where possible, use native species and include plants that will encourage the foraging behaviour of bats (see Appendix).
15. No plant species listed on Schedule 9 of the Wildlife and Countryside Act 1981 should be planted during the landscaping of this development as listed by DEFRA.



1. INTRODUCTION

1. On behalf of the client Mr. Jonathan Hargreaves, a Preliminary Roost Assessment (PRA) for bats and birds was carried out by Charnia Ecology regarding a proposed development at Rock End Stables, Biddulph Moor, Staffordshire, ST8 7NW (NGR: SJ899570).
2. The objective of this report is to provide the client with information on any known or potential bat roosts and nesting birds nesting within the application area, and to outline any recommendations on how to proceed with the works in a legal and ecologically sensitive manner, should bats and/or birds be present.
3. A day time building inspection was carried out on 29th May 2026 by a qualified and licensed Ecologist (2019-41525 – Level 2 / Barn owl Licence registration number CL29/00586).

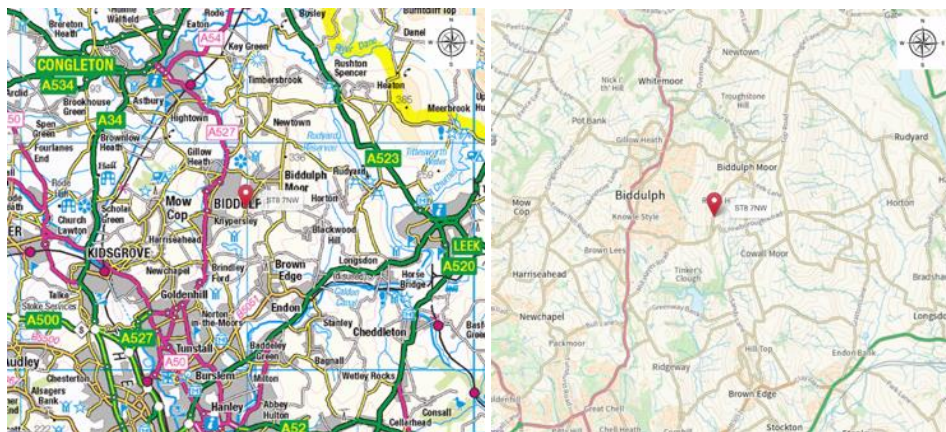


Figure 1 & 2. Location of proposed development area (red pin) in context to the wider landscape (source:OS Maps).

- *Proposed application*
- 4. Proposed demolition of existing stable block and construction of new self-build detached dwelling and ancillary part subterranean garage.
- *Site description*
- 5. Rock End Stables is located in a semi-rural area of Biddulph Moor, between Biddulph and Knypersely to the west and Lask Edge to the East. The site can be accessed immediately off New Street and comprises of a single storey, modular interlinked, wooden fabricated livery building with a footprint of ca. 91m² and an associated livery yard around the SW elevation and grassland paddock regions against the north elevation.



Figure 3. Outline of building proposed for development.

2. SURVEY METHODOLOGY

- **Aims of survey**

6. This report has been prepared with due consideration for various best practice guidance and methodologies including those of the Chartered Institute of Ecology and Environmental Management (CIEEM (2012), the emerging BS 42020; BCT Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn 2016/ 4th edition interim guidance notes). The aims of the survey are as follows:

• <i>Probability of bats and their roost sites being present at the proposed development site i.e. buildings and trees;</i>
• <i>To assess the roost status should bats be present;</i>
• <i>To assess potential commuting and foraging habit that may be subject to impact from the proposed development</i>
• <i>To provide an overall impact assessment in the absence of mitigation.</i>

- **Legislation and planning policy guidance** (see also Appendix)

7. As defined in Planning Policy Statement 9 (ODPM, 2005) (now superseded by the National Planning Policy Framework - NPPF 2012), Biodiversity and Geological Conservation sites of biodiversity conservation value and protected species are material considerations in the planning process. In March 2012, the National Planning Policy Framework (NPPF) was published and replaces the previous detailed Planning Policy Statement 9 (PPS9) although the guidance document 'Planning for Biodiversity and Geological Conservation: A Guide to Good Practice' ODPM 06/2005 has not been replaced by the Framework.
8. The NPPF promotes plan-making and decision-taking with a presumption in favour of sustainable development. In terms of biodiversity, sustainable development should not only achieve no net loss of biodiversity but incorporate proposals that achieve net gains for nature alongside the other social and economic needs of society.
9. Protected sites and species are a material consideration in determining planning applications, therefore all information relating to protected sites and species must be submitted with planning submissions for determination of the whole application. The NPPF promotes the approval of plans where applications can demonstrate that they are in accordance with up-to-date Local Plans and have addressed material considerations.

- **Bats**

10. All species of bat are listed in Schedule 5 of The Wildlife and Countryside Act (1981) and as such receive protection under Section 9 of this Act. It is a criminal offence to:

• <i>Deliberately capture, injure or kill a bat;</i>
• <i>Intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats;</i>
• <i>Damage or destroy a bat roosting place (even if bats are not occupying the roost at the time);</i>
• <i>Possess or advertise/sell/exchange a bat (dead or alive) or any part of a bat;</i>
• <i>Intentionally or recklessly obstruct access to a bat roost.</i>

11. A bat roost is interpreted as 'any structure or place, which any wild bat uses for shelter or protection' (i.e. buildings, trees, bridges, tunnels etc.). Bats tend to show a high fidelity to roosts; subsequently, legal opinion regards a roost to be protected whether or not the bats are present at the time. There are many types of roost used by temperate bats during their annual cycle. Any structures found having evidence of bats will be further evaluated to assess which of the following roost categories may be present onsite (if any):

Roost category	Description
Summer Maternity / nursery roost	<i>Used by breeding bats, where pups are born and raised to independence (Anecdotal evidence may support this prospect despite sub optimal survey period).</i>
Hibernation site	<i>Where bats may be found during over-wintering.</i>
Daytime Summer roost	<i>Used by males and/or non-reproductive females (seasonal limitations can prevent robust assessment of this roost status).</i>
Night roost	<i>Where bats rest between feeding bouts during the night but are rarely present during the day.</i>
Feeding roost	<i>Where bats temporarily utilize feeding perches and stations to eat an item of prey.</i>
Transitional (or swarming) site	<i>Where bats may be present during the spring or autumn</i>

Table 1. Bat roost status definitions.

12. Assessment also considers potential effects on Valued Ecological Receptors (VERs) and Zones of Influence (ZoI) during pre and post development, both onsite and off- site. The term Zone of Influence is used to describe the geographic extent of potential impacts of a proposed development.

• **Birds**

13. A PRA also considers all common wild birds which are protected under the Wildlife and Countryside Act 1981 (and as amended). This protection extends to bird nests during the breeding season, which makes it an offence to damage or destroy nests or eggs.

• Establish if birds are using the site;
• Locate nest sites, if present;
• Assess what types of activities were shown with the proposed application area;
• Assess suitable food resources and habitat requirements;
• Provide an impact assessment in the absence of mitigation.

14. Certain rare breeding birds such as Barn Owl *Tyto alba*, are listed on Schedule One of The Wildlife and Countryside Act 1981 (and as amended). Under this legislation they are afforded the same protection as common wild birds and are also protected against disturbance whilst building a nest or on or near a nest containing eggs and unfledged young. Survey protocol considers the following:

• Establish presence onsite;
• Establish potential nest sites (PNS);
• Locate any active roost sites (ARS);
• Locate any temporary roost sites (TRS);
• Assess potential feeding and dispersal habitats (PFH);
• Provide an impact assessment in the absence of mitigation.

• **Pre-survey data search**

15. Additional ecological data was sourced where necessary to understand any constraints that the proposed planning application may have on species and habitat in the wider landscape. The National (UK) and local (Staffordshire) Biodiversity Action Plans (BAPs) were also scrutinized for protected habitats and species relevant to the application area. A number of electronic sources sites were also consulted including; www.magic.gov.uk; www.naturalengland.org.uk; Google Earth and www.ordnancesurvey.co.uk.

- **Walkover survey**

16. A Preliminary Roost Assessment for bats and birds can be conducted throughout the year. Surveys incorporated the use of binoculars, torch, endoscope and ladders when necessary.

Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Inspection of Hibernation roosts- semi optimal survey			Limited activity-sub optimal	Summer roost emergence & re-entry surveys-Optimal survey period					Limited activity-sub optimal	Hibernation roosts- semi optimal survey	
<< Preliminary Roost Assessment >>											

Table 2. Annual survey optimality for bats.

- **External inspection of structure**

17. All potential roost structures (i.e. buildings) onsite (or within the Zone of Influence of the proposed development) were assessed, based on standard methodologies set out by Natural England, the Bat Conservation Trust (BCT) and the Joint Nature Conservation Committee (JNCC).

• <i>Type and age of building;</i>
• <i>Type of construction;</i>
• <i>Condition of roof i.e. missing or raised roof tiles;</i>
• <i>Condition of windows and doors i.e. broken panes;</i>
• <i>Potential ingress points around ridges and apex of the buildings;</i>
• <i>Evidence of bats (i.e. presence of live or dead bats, droppings, grease marks, urine stains, characteristic smell of bats;</i>

- **Internal inspection of structure**

18. An internal inspection of the structure considers areas which provide appropriate features and environmental conditions for bats and birds, and considers the following criteria:

• <i>To look for warm dark areas, joints, crevices, beams and cavities for possible bat roost sites and nests.</i>
• <i>To locate roost/nest sites.</i>
• <i>To listen for bats and birds.</i>
• <i>To examine floors, walls and structural elements for physical evidence of bats and birds;</i>
• <i>To record any anecdotal evidence (i.e. presence of live or dead bats, droppings, grease marks, urine stains, feeding remains and characteristic odour of bats.</i>
• <i>To look for warm dark areas, joints, crevices, beams and cavities for possible bat roost sites and nests.</i>

- **Structure rating**

19. In the absence of any evidence, trees and structures have been assigned a rating of suitability from negligible to high potential for supporting bats. The rating is based on the location of the structure in the surrounding landscape, the number and type of features suitable for use by bats and the surveyor's experience (See Appendix).

- *For example; a structure with a high level of regular disturbance and few opportunities for access by bats that is in a highly urbanised area with few or no mature trees, parkland, woodland or wetland would have negligible potential. Conversely, a pre-20th- century or early 20th-century building with many features suitable for use by bats close to good foraging habitat would have high potential.*

- **Habitat assessment**

20. The survey also assessed habitat quality on and around site in context to the wider landscape with regard to any important key habitat features used for commuting / foraging that may be affected by the proposed development i.e. linear features such as hedgerows, open water, grassland and woodland. Assessment also considers potential effects on any other potential structures / Valued Ecological Receptors (VERs) within the Zone of Influence (ZoI) during pre and post development for bats and birds (i.e. trees). The term 'Zone of Influence' is used to describe the geographic extent of potential impacts of a proposed development.

Habitat quality	Description
Optimal	<i>Presence of optimal habitat features such as unlit woodland, scrub, hedgerows, grassland and open water with excellent linkage to similar habitats within the wider landscape. Presence of high potential buildings/trees and/or known roosts within immediate landscape. Sites are generally rural in character.</i>
Moderate	<i>Presence of optimal habitat features such as woodland, scrub, hedgerows, grassland and open water with reasonable linkage to similar habitats within the wider landscape. Limiting factors may include size of site.</i>
Low	<i>Presence of some limited habitat features such as scrub or hedgerows, with minimal linkage to suitable habitats within the wider landscape.</i>
Negligible	<i>No suitable habitat present or, if present, highly degraded/fragmented. Minimal unlit areas with no linkage to suitable habitat beyond site. Generally urban in character.</i>

Table 3. Habitat assessment criteria.

- Mitigation**

- Should a likely significance of negative impacts to bats and/or birds be identified during the PRA, then further activity surveys may be necessary to fully demonstrate presence/ absence of roosting bats. Should bats be found to occur onsite, then a European Protected Species (EPS) development license issued by Natural England (NE) may be required prior to any works taking place.

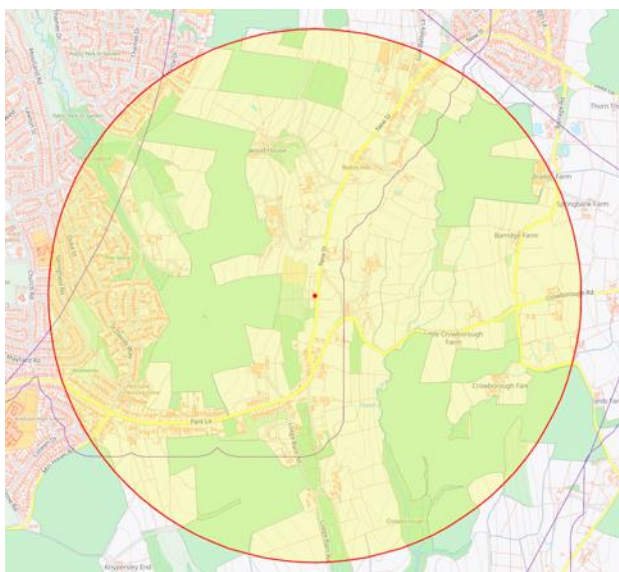
Low roost suitability or PRF-I	Moderate roost suitability	High roost suitability or PRF-M
May to August (structures)	May to September ^a , with at least one of surveys between May and August ^b	May to September ^a , with at least two of surveys between May and August ^b
a September surveys are both weather and location dependent. Conditions may become more unsuitable in these months, particularly in more northerly latitudes, which may reduce the length of the survey season. September surveys are likely to miss maternity roost due to dispersal before this time, but may pick up mating roosts. b Multiple survey visits should be spread out to sample as much of the recommended survey period as possible; it is recommended that surveys are spaced at least three weeks apart, preferably more. Survey timings should consider the prevailing conditions in the year of survey, which will vary geographically. In years with a cold spring, the surveys should not be started in early May or all completed in May. The surveys should maximise the possibility of detecting maternity roosts, which can switch roosts between pregnancy and lactation, and the optimum coverage includes the pre-parturition, post parturition and mating periods.		

Table 4. Roost suitability / survey effort criteria.

3. RESULTS

- Designated sites**

- The proposed development is situated in Green Belt. There are no international or national statutory designations within 1km of the application site, although a number of non- statutory designations and woodland inventories were recorded within the search radius.

**Figure 4.** Designated conservation areas in 1km radius of the proposed development.

- Bats**

23. Pre-survey data show no records of any bat roosts within the application area itself. Staffordshire biodiversity provide 72 records of 7/8 out of the 17 British bat species have been identified within a 1-2km radius of the proposed application area, some of which are listed in the Biodiversity Steering Group Report Volume 2 (Action Plans).
24. Pre-survey data finds seven British bat species are currently given UK BAP (2007) Priority Species Status. National Biodiversity Network and Staffordshire Wildlife Trust (SWT) records show that 11 of the 17 resident UK bat species occur in the county.
25. Pre-survey data show twelve records of three species of bat within a 1km radius between 1989-2010; Common pipistrelle, Brown Long-eared bat and Whiskered bat. All records would indicate single field sightings. No records of notable bat roosts were found onsite or within a within a 1km radius of the site, whilst the following UK BAP / non-UK BAP species are recorded within 2km (highlighted in orange):

UK BAP Common name	Species	County records within 1-2km
Brown long-eared bat	<i>Plecotus auritus</i>	YES
Barbastelle bat	<i>Barbastella barbastellus</i>	NO
Bechstein's bat	<i>Myotis bechsteinii</i>	NO
Noctule	<i>Nyctalus noctula</i>	YES
Greater horseshoe bat	<i>Rhinolophus ferrumequinum</i>	NO
Lesser horseshoe bat	<i>Rhinolophus hipposideros</i>	NO
Soprano pipistrelle	<i>Pipistrellus pygmaeus</i>	YES

Table 5. UKBAP Bat species recorded in a 1-2km radius.

Non-UK BAP Common name	Species	Recorded within 1-2km of site
Natterer's bat	<i>Myotis Nattereri</i>	YES
Daubenton's bat	<i>Myotis daubentonii</i>	YES
Whiskered/ Brandt's bat	<i>Myotis mystacinus/brandtii</i>	YES
Common pipistrelle	<i>Pipistrellus pipistrellus</i>	YES

Table 6. Non UKBAP Bat species recorded in a 2km radius.

- Birds**

26. Staffordshire Ecological data records show no Red and Amber lists of Birds of conservation Concern (BoCC) present within the application area or Schedule 1 listed birds including Barn owl.
27. Evidence of nesting passerine birds was recorded in the SE elevation stable compartment, although no evidence of Schedule 1 listed Barn owl or European swallow was noted.

- **Building structure rating**

28. The single-storey, low elevation former stable block building was found to have negligible potential for roosting bats, being constructed of timber lathe with a corrugated sheet roof providing less than conducive stable microclimates to provide a resting place for bats overall.
29. Internal compartments were found to be partially boarded over with plyboard and well illuminated by side windows and skylights. No enclosed internal roof void regions were found to be present. No evidence of bats was recorded externally or internally.



Figure 5. North elevation.



Figure 6. North-west elevation.



Figure 7. South elevation.



Figure 8. South-east elevation.



Figure 9. East elevation.

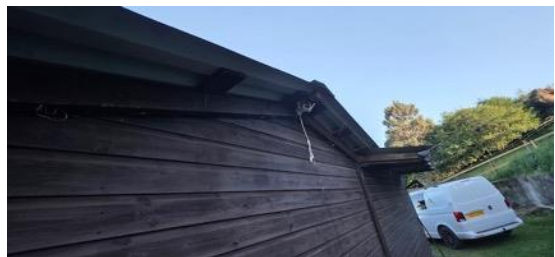


Figure 10. West elevation compartment.



Figure 11. Internal compartment on East elevation.



Figure 12. Internal compartment on west elevation.



Figure 13. Evidence of nesting birds in East compartment.



Figure 14. Mess room on northern elevation.

4. IMPACTS & RECOMMENDATIONS

- *Survey constraints*

30. No survey constraints were encountered during the daytime inspection.

- *Further surveys*

31. The Preliminary Roost Assessment considers the building has negligible potential to support roosting bats overall and moderate to high potential to support individual nesting birds that are considered common and widespread. No further survey effort is subsequently considered.

- *Designated sites*

32. Based on the scale and nature of the intended development, no impact to any designated sites of conservation value is considered.

- *Mitigation*

33. In the absence of mitigation, it is highly unlikely that the proposed development will result in an offence under Regulation 41 or 4, and it will not be necessary to apply for a bat mitigation licence from Natural England before works can proceed.
34. Given spatiotemporal variations and generalist behaviour of some synanthropic bat species, such a common pipistrelle, the development should however adopt care and vigilance during removal of the existing structure.

In the unlikely event that any bats are discovered during works, or suspicions arise about the possible presence of bats (i.e., between gable-end cavities and intermediate layers obscured by roofing underlay), then ALL WORKS MUST CEASE IMMEDIATELY, and further advice should be sought from a suitably qualified ecologist before any further works can proceed.

- *Foraging and commuting habitat*

35. Based on the scale and nature of the intended development negligible impact to any foraging and commuting habitat for bats and birds is considered.

Zone	Surrounding	Lighting Environment	Examples
E0	Protected	Dark	UNESCO Starlight Reserves, IDA Dark Sky Parks
E1	Natural	Intrinsically dark	National Parks, Areas of Outstanding Natural Beauty etc.
E2	Rural	Low district brightness	Village or relatively dark outer suburban locations
E3	Suburban	Medium district brightness	Small town centres or suburban locations
E4	Urban	High district brightness	Town/city centres with high levels of night- time activity

Table 7. Environmental light zones.

36. The site is however located in a semi-rural area (E2). Any additional post development must comply to protocols outlined in the Institute for Lighting Engineers document “Guidance for the Reduction of Obtrusive Lighting” (2005) [GN01:2011]; and Bat Conservation Trust’s “Artificial Lighting and Wildlife Interim Guidance: Recommendations to Help Minimize the Impact of Artificial Lighting” (2014) [GN8/18].

Environmental Zone	Sky Glow ULR [Max %] (1)	Light Intrusion (into Windows) Ev [lux] (2)		Luminaire Intensity I [candelas] (3)		Building Luminance Pre-curfew (4)
		Pre-curfew	Post-curfew	Pre-curfew	Pre-curfew	Post-curfew
E0	0	0	0	0	0	0
E1	0	2	0 (1*)	2,500	0	0
E2	2.5	5	1	7,500	500	5
E3	5.0	10	2	10,000	1,000	10
E4	15	25	5	25,000	2,500	25
ULR = Upward Light Ratio of the Installation is the maximum permitted percentage of luminaire flux that goes directly into the sky. Ev = Vertical Illuminance in Lux - measured flat on the glazing at the centre of the window. I = Light Intensity in Candelas (cd) L = Luminance in Candelas per Square Metre (cd/m ²) Curfew = the time after which stricter requirements (for the control of obtrusive light) will apply; often a condition of use of lighting applied by the local planning authority. If not otherwise stated - 23.00hrs is suggested. * = Permitted only from Public road lighting installations.						

Table 8. Obtrusive Light Limitations for Exterior Lighting Installations / General Observers

37. In general, any additional artificial lighting should be avoided onto nearby trees and hedges/shrubs and should not exceed 200 lumens (150 watts). Where possible, any security lighting should be on a timer setting and faced down to prevent spillage onto nearby habitats. Height of any lighting columns should not exceed eight metres. Low-pressure sodium lamps (SOX) fitted with hoods are recommended to direct light below the horizontal plane to minimize upward light spill.

• **Birds**

38. All common wild birds are protected under The Wildlife and Countryside Act 1981 (amended). Proposed works should ideally be carried outside of the bird breeding season (March-September inclusive). Where this is not possible, a check for nesting birds should be carried out in 24hrs before work commencing.
39. In the event that nesting birds are found, then these should be left undisturbed until offspring have fully fledged. If necessary, and exclusion work zone of 4m should be adopted to reduce disturbance and minimize potential displacement of nesting birds.

5. BIODIVERSITY NET GAIN FEASIBILITY

40. The red development area boundary equates to 613m² (0.0613ha) and comprises predominantly of previously developed land / man made surfaces (UK Habitats Definition u1d) with a biodiversity metric baseline value of zero with 130m² of modified grassland (non-priority habitat).
41. As defined in paragraph 17 of Schedule 7A of the Town and Country Planning Act 1990 and the Biodiversity Gain Requirements (Exemptions) Regulations 2024; the development would appear to be exempt from mandatory Biodiversity Net Gain (BNG) +10% requirement based on the following criteria:
- *The development consists exclusively of a single dwelling that is self-build or custom housebuilding as defined in section 1(A1) of the Self-build and Custom Housebuilding Act 2015.*
 - *The site has an area no larger than 0.5 hectares*
 - *No loss to linear habitats is proposed with all existing hedgerows retained.*
 - *The development will not impact a priority habitat.*

42. The design of the detached garage has a proposed footprint of 28.7m² which will result in minor loss of modified grassland of low distinctiveness (non-priority habitat).



Figure 15. Location of detached garage built into grassland embankment.

43. The design of the detached garage has a proposed footprint of 28.7m². At this juncture, creation of 'green roofs' to the new garage and other flat roof sections of the new dwelling is proposed to compensate for any loss / regarding of non-priority habitat, whilst also reducing visual impact of the development on Green Belt.
44. In accordance with the Natural Environment and Rural Communities (NERC) Act 2006, the development should seek, where possible, to enhance biodiversity opportunities for local bat and bird populations.
45. To enhance the site for local bat populations, it is recommended that 2no. external bat boxes are incorporated into the proposed scheme. The type and location of recommended bat boxes will need to be further determined subject to the finalized design of any approved scheme being fitted at height onto external elevations of building structures or mature trees within the land-holding area:



Figure 16. Beaumaris bat box **Figure 17.** Schwegler 2F universal tree mounted bat box.

- *Avoid placing boxes near artificial light sources, such as security or porch lights, which can disorient bats and attract predators.*
- *Do not install boxes directly above windows, doors, or walkways where droppings (guano) might accumulate inconveniently.*
- *Installing boxes with different aspects (e.g., one southeast, one southwest) provides bats with a range of temperature conditions to choose from as their needs change.*

- **Birds**

46. To secure future nesting sites for birds, the following nest boxes are recommended and should be erected at height (>3m) onto suitable mature trees within the land holding area or onto the existing building units where otherwise stated:

- **1no. integrated Swift nest box** (1no. per unit fitted to north facing gable)
- **2no. open-fronted nest boxes** (for Robins, wrens, flycatchers)
- **2no. closed nest boxes** (with assorted diameter entrance holes of 32-35mm / 25-28mm)
- **1no. Schwegler '1SP Sparrow Terrace' box** - best fitted directly under the eaves on a building's North, East, or Northeast-facing wall to avoid direct sunlight and overheating. They should be installed in a quiet, sheltered location, away from predators, ideally placed near thick hedges or shrubs for protection.

Further information with regard to sourcing and sighting of nest boxes can be found at:

- <https://www.rspb.org.uk/birds-and-wildlife/advice/how-you-can-help-birds/nestboxes/nestboxes-for-small-birds/making-and-placing-a-bird-box/>

- **Landscaping**

47. Private gardens can make positive contributions to biodiversity albeit appropriate planting and ongoing management cannot be secured in the long-term. In addition to proposed 'green roofs', any additional landscaping should aim to provide additional ground cover for wildlife assemblages.

48. Preference should be given to the use of native woody species, with an emphasis on species bearing nectar, berries, fruit and nuts, as these enhance the foraging opportunities for local bat populations and fauna in general (see Appendix).

49. No plant species listed on Schedule 9 of the Wildlife and Countryside Act 1981 will be planted during the landscaping of this development as listed by DEFRA.

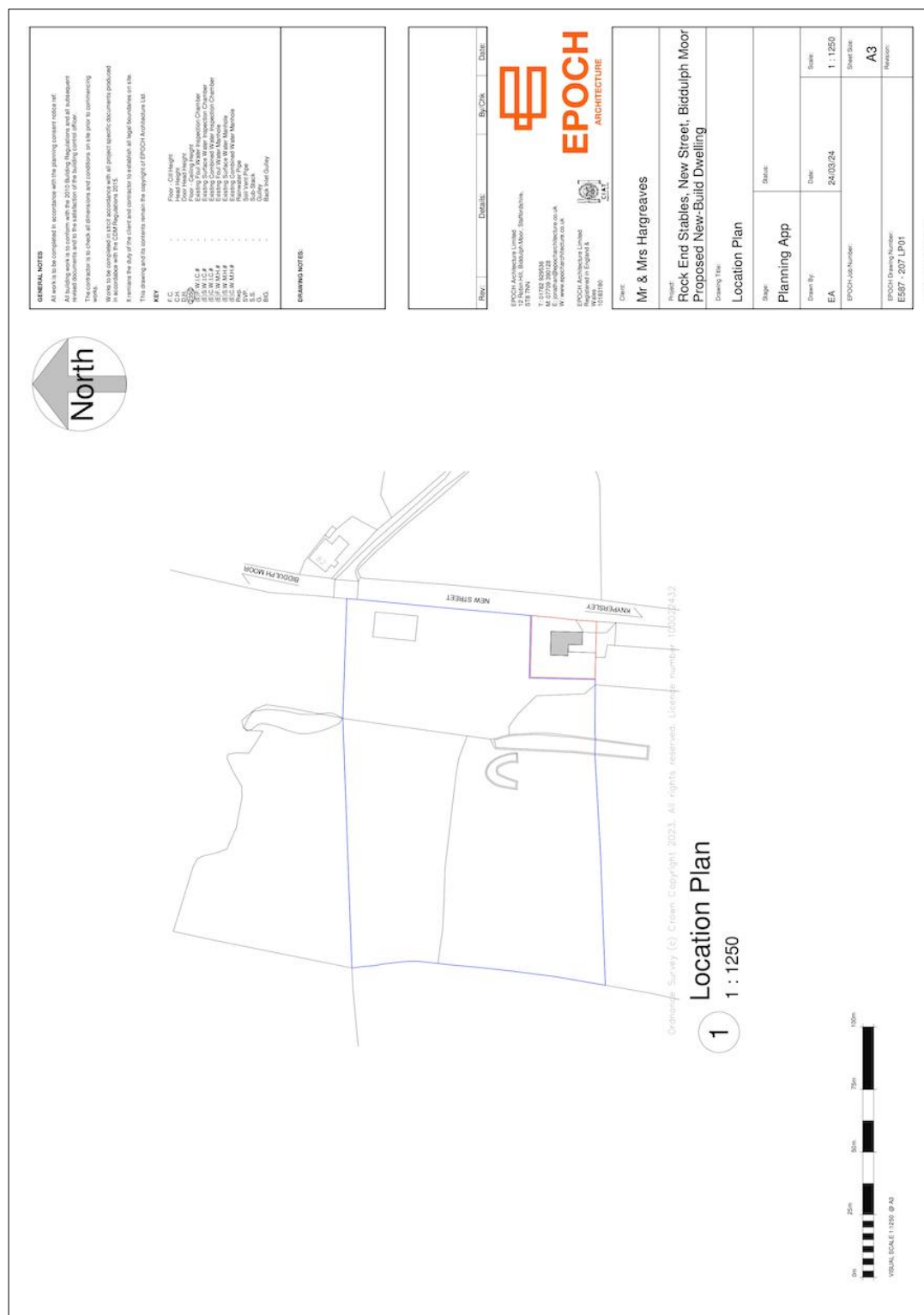
- For further details of Schedule 9 plants visit the Defra website: www.defra.gov.uk/wildlife-pets/non-native.

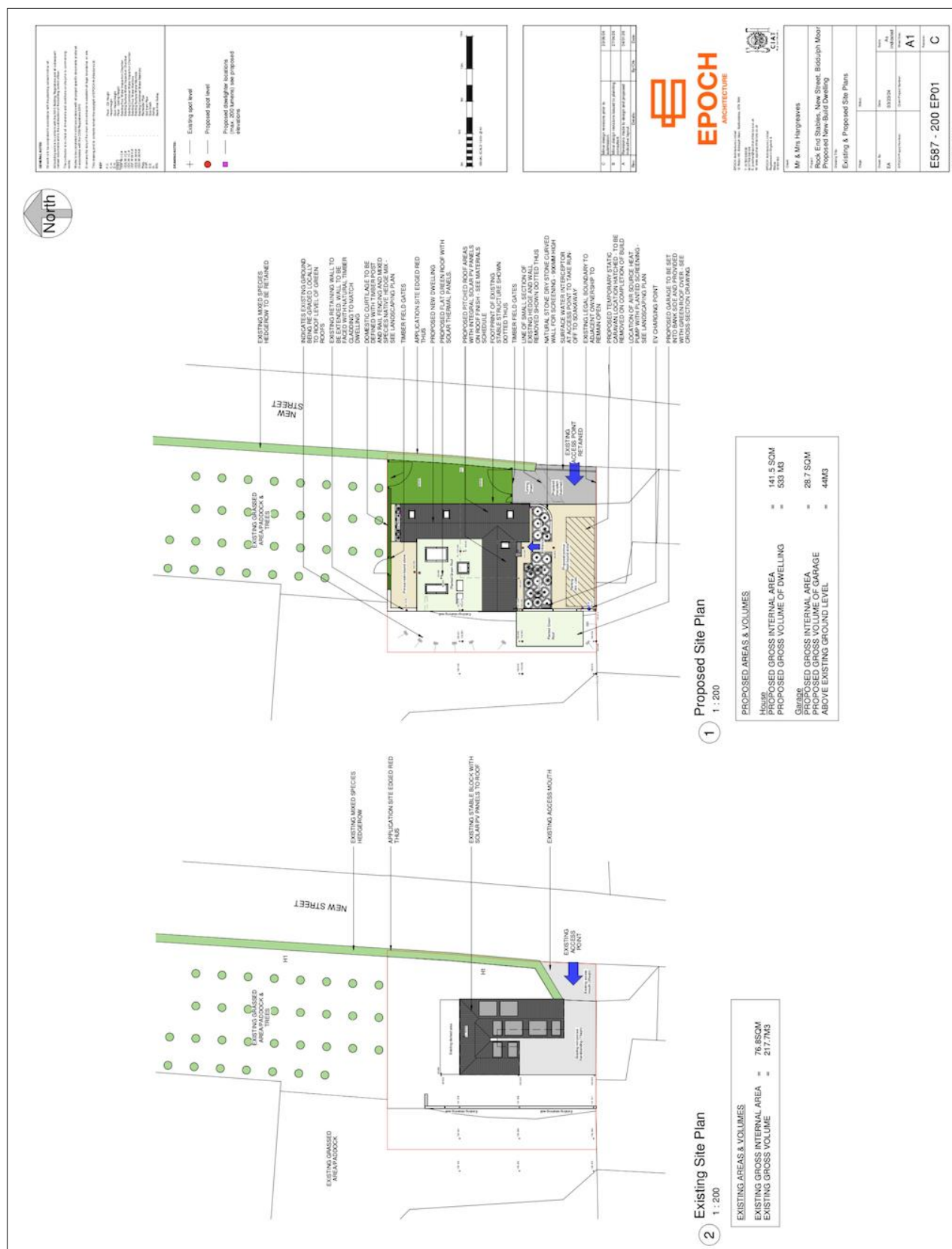
6. REFERENCES

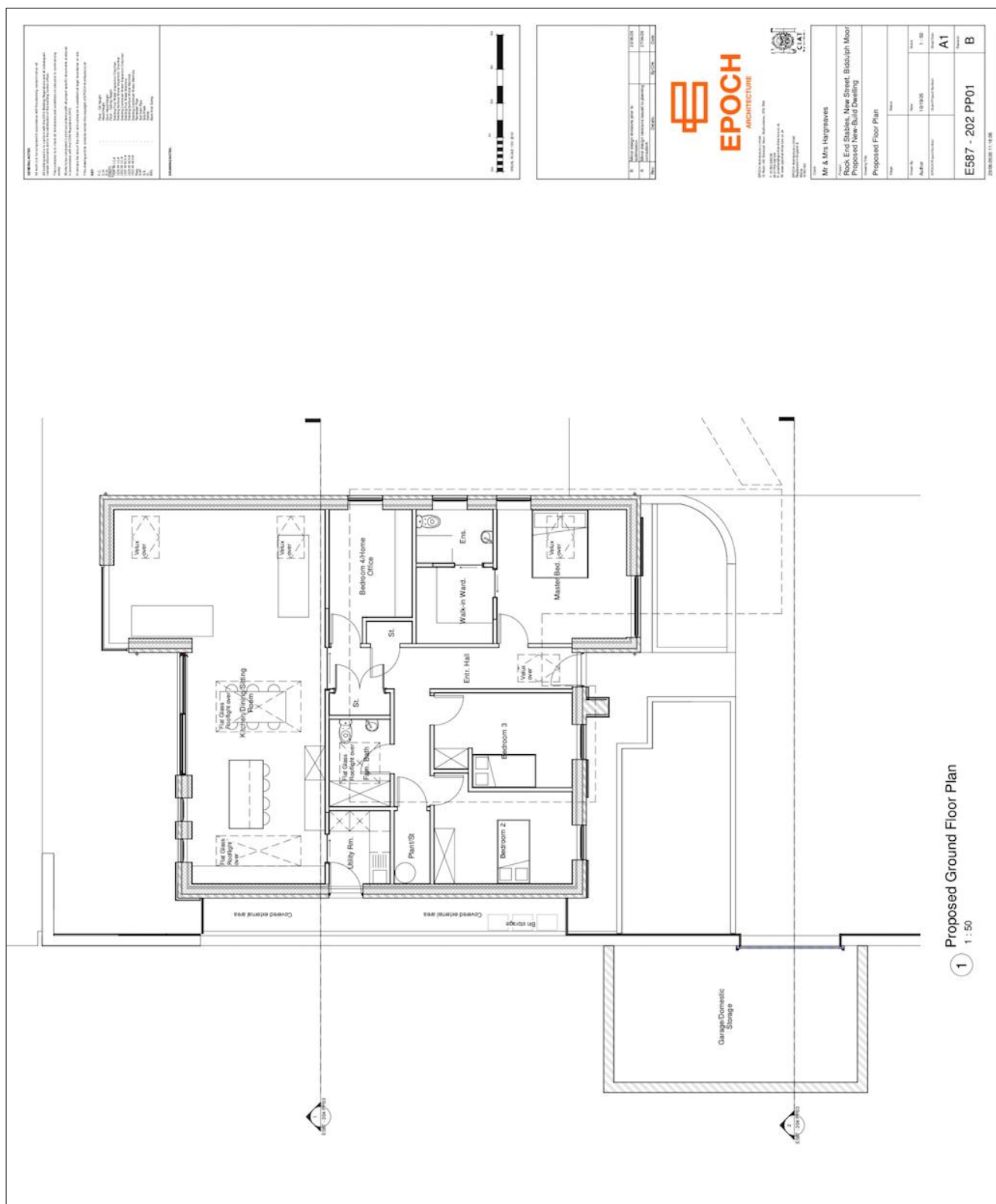
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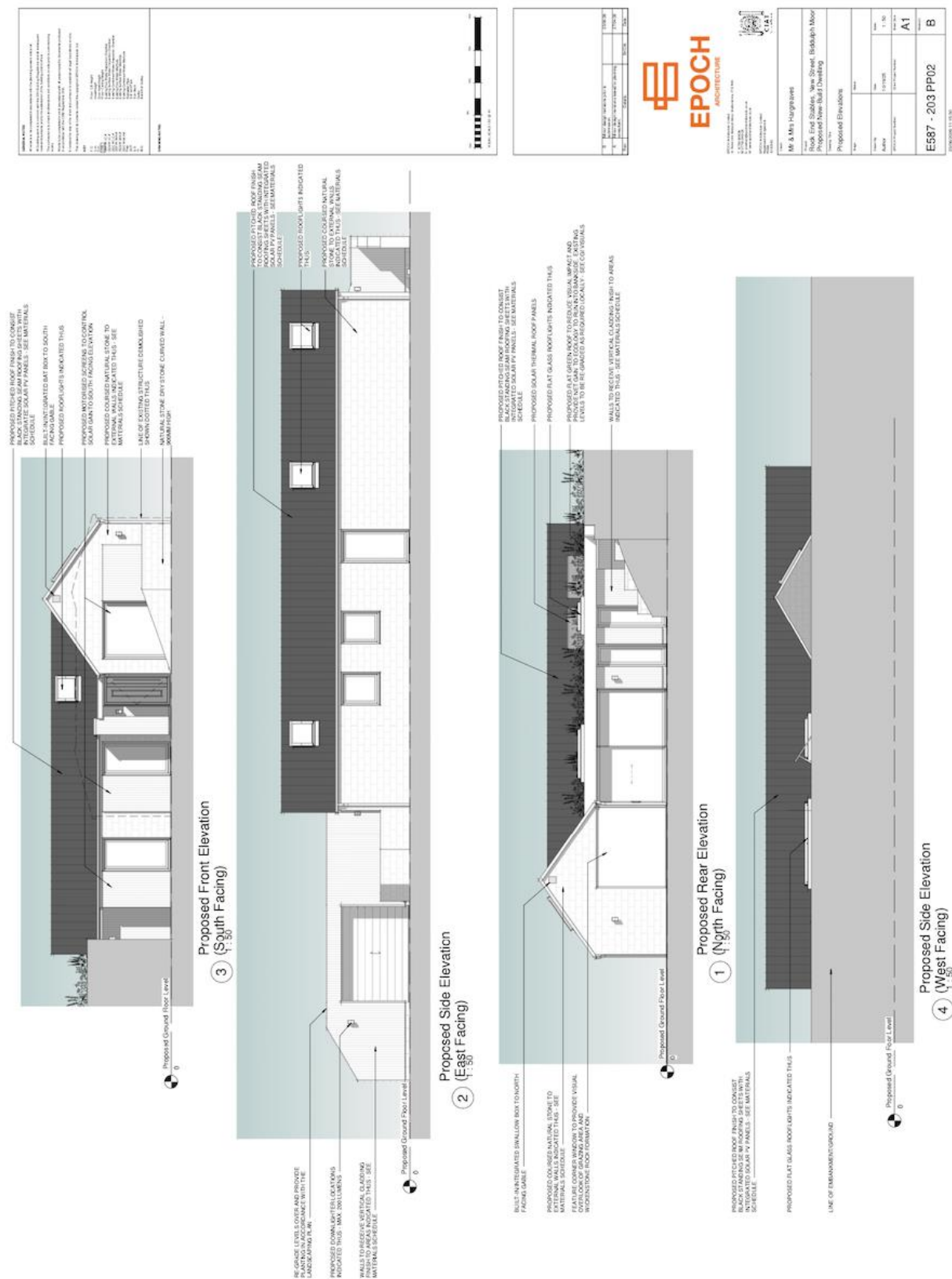
7. APPENDIX

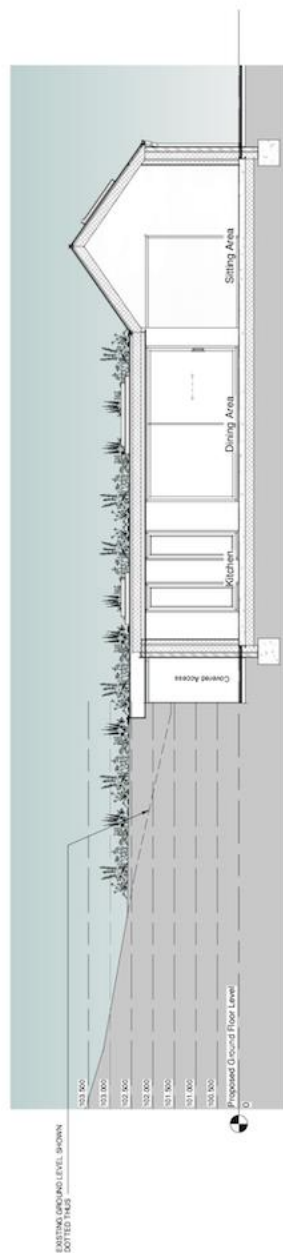
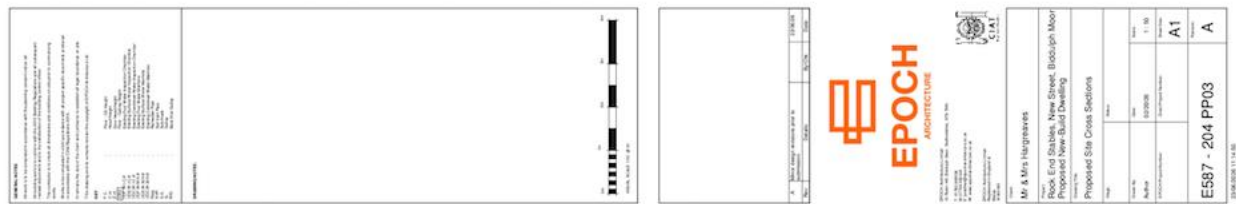
- *Maps & Plans*



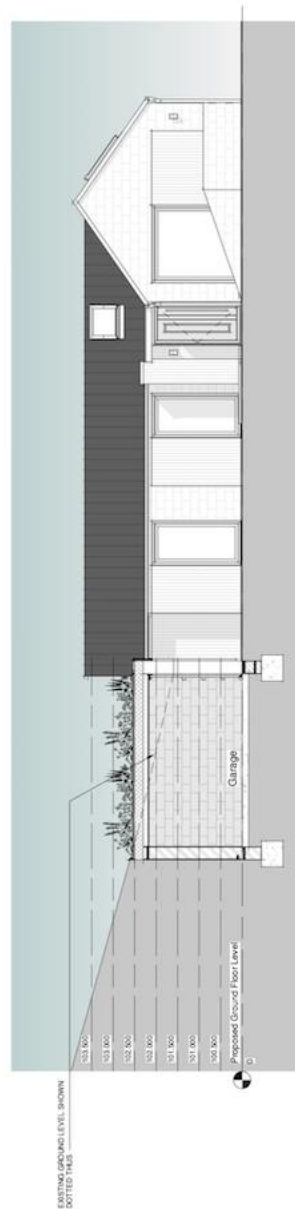








1 Proposed Section Through House & Embankment



2 Proposed Section Through Garage & Embankment

Client: Mr & Mrs Maguire Address: Rock End Stables, New Street, Biddulph Moor Project Name: Proposed New Build Dwelling Proposed Artist Impressions		Scale: 1:50 North Arrow: [North Arrow] Scale Bar: 0m 10m 20m
Project Details: Project No: ES87 - 205 PP04 Revision: A1 Date: 14/06/2026 Drawn by: [Name] Checked by: [Name] Approved by: [Name]		Scale: 1:50 North Arrow: [North Arrow] Scale Bar: 0m 10m 20m



Proposed Front Elevation (South Facing)



Proposed Rear Elevation (North Facing)

- **Policy guidelines**

National Planning Policy Framework, Section 11:	The recently published framework in 2012, replaces the previous Planning Policy Statement 9. Section 11: Conserving and enhancing the natural environment, reaffirms the Government's commitment to maintaining protections and preventing urban sprawl, retains the protection of designated sites and preserves wildlife, aims to improve the quality of the natural environment, and halt declines in species and habitats, protects and enhances biodiversity and promotes wildlife corridors.
Article 10 of the EC Habitats Directive:	The published Article requires government to develop features such as 'stepping stones' on the landscape, such as clusters of ponds, tracts of rough grassland or scrubland and vegetated railway line embankments.
Wildlife and Countryside Act 1981:	All species of bat are fully protected under the Wildlife and Countryside Act 1981, the European Conservation (Natural Habitats etc.) Regulations 1994, and the Countryside and Rights of Way Act 2000. This legislation makes it illegal to possess or control any live or dead specimens, to damage, destroy or obstruct access to any structure or place used for shelter, protection or breeding, and to intentionally disturb a bat while it is occupying a structure or place which it uses for that purpose.
Conservation of Habitats and Species Regulations (2010)	The Conservation of Habitats and Species Regulations 2010 consolidate all the various amendments made to the Conservation (Natural Habitats, &c.) Regulations 1994, in respect of England and Wales. It is an offence to possess, sell or offer, or transport for sale any European species of bat or any part derived from such a species. These Regulations also remove the 'incidental result defence'. In other words, it is no longer a defence to show that the killing, capture or disturbance of a species covered by the Regulations or the destruction or damage of their breeding sites or resting places was the incidental and unavoidable result of a lawful activity. Natural England can grant European Protected Species (EPS) licences in respect of development to permit activities that would otherwise be unlawful.
Natural Environment and Rural Communities Act (2006)	Under Section 40 of the Natural Environment and Rural Communities Act (2006), public bodies, including Local and Regional Planning Authorities, have a duty to 'have regard' to the conservation of biodiversity in England when carrying out their normal functions, which includes consideration of planning applications. In compliance with Section 41 of the Act, the Secretary of State has published a list of species considered to be of principal importance for conserving biodiversity in England. This is known as The England Biodiversity List, all of which make up the UK BAP Priority Species. Regional Planning Bodies and Local Planning Authorities will use it to identify the species that should be afforded priority to maintain, restore and enhance species and habitats.
Bird legislation	Most resident nesting birds are protected under the Wildlife and Countryside Act 1981, which protects birds, nests, eggs and nestlings. Some rarer species, such as barn owls, are afforded extra protection.

- **Roost habitat assessment criteria (BCT, 2016).**

Suitability	Description of Roosting Habitats	Commuting and Foraging Habitats
Negligible	Negligible habitat features on site likely to be used roosting bats.	Negligible habitat features on site likely to be used by commuting or foraging bats.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely be suitable for maternity or hibernation). A tree of sufficient size and age to contain PRFs but none seen from the ground or features seen with only very limited roosting potential.	Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or un-vegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by another habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat, but unlikely to support a roost of high conservation status.	Continuous habitat connected with the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat. A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions' and surrounding habitat.	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.

○ **Bat 'friendly' plant list**

List of species taken from the Bat Conservation Trust Leaflet: "*Encouraging Bats. A Guide for Bat Friendly Gardening and Living*" (BCT, Unknown)

*Plants marked * are hybrids or exotics that may be useful in the garden*

Flowers For Borders

*Aubretia (spring to early summer)	*Michaelmas daisy (summer to autumn)
Bluebell (spring)	*Night-scented stock (summer)
*Candytuft (summer to autumn)	Ox-eye daisy (summer)
*Cherry pie (summer to autumn)	*Phacelia (summer to autumn)
Corncockle	*Poached egg plant (summer)
Cornflower	Primrose (spring)
Corn marigold	Red campion (spring)
Corn poppy	*Red valerian (summer to autumn)
*Echinacea	Scabious (summer)
*Evening primrose (summer to autumn)	St John's wort (spring)
Field poppies (summer)	*Sweet William (summer)
*Honesty (spring)	*Tobacco plant
*Ice plant 'Pink lady' (early autumn)	*Verbena (summer to autumn)
Knapweed (summer to autumn)	*Wallflowers (spring to early summer)
Mallow (summer to autumn)	Wood forget-me-not (spring)
*Mexican aster (summer to autumn)	Yarrow (early summer)

Herbs

Angelica	Hyssop (summer to early autumn)
Bergamot (summer to early autumn)	Lavenders
Borage (spring to early autumn)	Lemon balm
Coriander (summer)	Marjoram (summer)
Fennel (summer to early autumn)	Rosemary (spring)
Feverfew (summer to autumn)	Sweet Cicely (spring to early summer)
English marigolds	Thyme (summer)

Trees, shrubs and climbers

*Bramble (climber)	Hazel (suitable for coppicing)
Buddleia (shrub)	Honeysuckle (native honeysuckle)
Common alder (suitable for coppicing)	Hornbeam
Dog rose (climber)	Ivy (climber)
Elder (small)	*Jasmine (night-scented)
English oak (large gardens only)	Pussy willow (suitable for coppicing)
Gorse (shrub)	Rowan
Guelder rose (shrub)	Silver birch
Hawthorn (suitable for coppicing)	

Wild flowers for pond edges and marshy areas

Bog bean	Marsh marigold (spring)
Bugle	Marsh woundwort
Creeping Jenny (spring to summer)	Meadowsweet (summer to early autumn)
Flag iris	Purple loosestrife (summer)
Hemp agrimony (summer)	Water avens
Lady's smock (spring to summer)	Water forget-me-not (summer to autumn)
Marsh mallow	Water mint (summer to autumn)

Annual life cycle of a temperate bat



JANUARY: Bats spend most of their winter hibernating, a state of inactivity characterized by lowering their body temperature, slower breathing and lower metabolic rate. **FEBRUARY:** Bats are still hibernating. They have little fat reserves left to live on now. They may leave the roost on warmer nights to find food and drink water. **MARCH:** Bats may begin to emerge and signs of limited activity can be seen. There are small numbers feeding it gets warmer. In bad weather, they may become torpid.



APRIL: Bats have mainly come out of hibernation and are hungry and active on most nights. They may be moving between several roost sites. They may become torpid (cool and inactive) again when cold. **MAY:** Bats are fully active and feeding. Females start forming maternity colonies and looking for suitable nursery sites, such as buildings or trees. Males will roost on their own or in small groups. **JUNE:** Female bats usually give birth to a single pup, which feed on their milk. Young bats are very small (less than an inch) with thin, slightly grey fur. Adult bats will catch thousands of insects each in a night.



JULY: Mothers continue to suckle young. Some young are growing fast and almost full-size; others are still very small. At around three weeks old, young bats are sometimes found on the ground as they learn to fly. **AUGUST:** At six weeks old, the young bats begin to disperse and bats move to mating roosts. **SEPTEMBER:** Mating season begins, with males of most species using special mating calls to attract females, which can include purrs, clicks and buzzing. Bats are also concentrating to storing up fat reserves for the coming months.

8. CONDITIONS AND DISCLAIMERS



"Foxglove Cottage", Boundary,
Nr. Cheadle, Staffordshire. ST10 2NU.

t: 01538 750514 / m: 07881 908263
email: mc.weston@hotmail.co.uk

- *Services*

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