



Morgan Sindall

CEFN SAESON SCHOOL

Dormouse Survey Report





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Dormouse Survey Report

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EXECUTIVE SUMMARY

Morgan Sindall have been granted planning permission to construct a new school building for children 11-16 within the grounds of the existing Cefn Saeson Comprehensive. This will involve the demolition of the existing comprehensive school and reinstatement of the school, including playing fields and multi-use games area (the Site location shown on Figure 1). Outline planning permission has been granted for this, hereafter referred to as the 'Proposed Development'.

WSP UK Limited (hereafter referred to as 'WSP') was commissioned by Morgan Sindall to undertake a Preliminary Ecological Appraisal (PEA) in January 2019. During the PEA, suitable habitat for dormice was identified on Site. As more hedgerow removal is anticipated to result from the Proposed Development, WSP were commissioned to conduct targeted hazel dormouse *Muscardinus avellanaria* surveys from May to October 2019 to inform hedgerow removal requirements.

Fifty dormouse nest tubes were installed in suitable woodland and hedgerow habitat in May 2019 (see Figure 2 for Dormouse Tube Locations) and were removed in late October 2019. The tubes were checked for the presence of and evidence of hazel dormice (characteristic nests and opened nuts), monthly from June until October 2019. No dormice or evidence of dormice were identified during any of the survey visits. Numerous tubes had been used by wood mice *Apodemus sylvaticus*.

The survey results indicate that dormice are absent from the Site. However due to the presence of suitable habitat for the species, it is that any hedgerow removal proceeds under a Precautionary Method of Working (PMoW) supervised by an ecologist with a Natural Resources Wales (NRW) dormouse licence.

If a dormouse or dormouse nest is found at any point during the works, all activity must cease and an ecologist be consulted. A NRW-issued European Protected Species Licence may be needed to enable works to continue if dormice are found.

1. INTRODUCTION

1.1. PROJECT BACKGROUND

- 1.1.1. Morgan Sindall have been granted planning permission to construct a new school building for children aged 11-16 within the grounds of the existing Cefn Saeson Comprehensive. This will involve the demolition of the existing comprehensive school and reinstatement of the school, including playing fields and multi-use games area, hereafter referred to as the 'Proposed Development'.
- 1.1.2. Landscaping, habitat creation and enhancements for the school include tree, hedgerow and species-rich grassland creation. Full details are provided in the BREEAM Land use and Ecology Report (WSP, August 2019).
- 1.1.3. WSP UK Limited (hereafter referred to as 'WSP') was commissioned by Morgan Sindall to undertake a Preliminary Ecological Appraisal (PEA) of the habitat at Cefn Saeson School, Neath (National Grid Reference: SS 77265 96139); hereafter referred to as 'the Site' (see Figure 1). Suitable habitat for dormice was identified on Site during the PEA. As more hedgerow removal is anticipated as part of the Proposed Development, WSP was commissioned to conduct targeted dormouse surveys from May to October 2019 to inform hedgerow removal requirements.

1.2. ECOLOGICAL BACKGROUND

- 1.2.1. The Site currently comprises several school buildings with associated structures, and amenity grassland flanked by hedgerows and a woodland corridor. To the west of the Site are residential areas and to the east of the Site are open grassland fields/pasture. The B4287 road runs alongside the southern boundary of the Site. No hazel dormouse records were returned from the desk study. However suitable habitat for nesting and foraging dormouse was identified on Site in the form of a woodland corridor and hedgerow habitat at the Site boundaries.

1.3. BRIEF AND OBJECTIVES

- 1.3.1. Morgan Sindall commissioned WSP to complete a dormouse survey in accordance with good practice guidance (English Nature (now Natural England), 2006) to:
 - Establish whether dormice are present or likely absent from the Site; and
 - If present, evaluate the value of the Site for dormice and make recommendations as to how proposals should account for dormice with respect to legislation, planning and biodiversity policy.
- 1.3.2. The results of this survey, and subsequent recommendations, are included within this report.

2. METHODS

2.1. OVERVIEW

- 2.1.1. To establish whether dormice are present or likely absent dormouse tubes were installed within suitable habitat on the Site in May and checked monthly until late October 2019. The survey work was completed in accordance with current good practice guidance (English Nature (now Natural England), 2006).

2.2. DORMOUSE SURVEY

- 2.2.1. Fifty dormouse tubes were installed within the Site in May 2019, installed at 20m spacing within suitable habitat (comprising woodland and species-poor hedgerows). Tubes were attached to branches of a variety of native woody species including hawthorn *Crataegus monogyna*, field maple *Acer campestre*, goat willow *Salix Caprea* and oak *Quercus robur*. The survey was designed to ensure effective coverage of the Site as a whole.
- 2.2.2. All nest tubes on the Site were surveyed once a month under suitable weather conditions between June and October 2019. This duration of survey ensured sufficient points (>20) were achieved to demonstrate likely absence in accordance with best practice guidance (English Nature (now Natural England), 2006). The points refer to an index of probability of detection, whereby a score is given for each month that the tubes are in place, and the total score is therefore the sum of all the months that the tubes are left in place.
- 2.2.3. During each survey tubes were checked for presence of dormice or evidence of dormice, for example characteristic nests or opened nuts.
- 2.2.4. A limited amount of hazel *Corylus avellana* was recorded on Site. During the autumn survey any hazelnuts encountered were checked for characteristic signs of opening by dormice.

2.3. DATES OF SURVEY AND PERSONNEL

- 2.3.1. The dormouse survey was led by an experienced surveyor holding Natural Resources Wales (NRW) survey licence number; 79413:OTH:SA:2018. The surveyor has 11 years' experience of ecological survey, including extensive dormouse survey experience and has held a dormouse survey licence since 2010.
- 2.3.2. Dates of survey are summarised in Table 1 below.

Table 1 - Dates of survey

Survey Number	1	2	3	4	5	6
Date	31 May 2019 (survey set-up)	28 June 2019	29 July 2019	22 August 2019	30 September 2019	25 October 2019

2.4. NOTES AND LIMITATIONS

- 2.4.1. A total of 18 tubes had fallen / were recorded missing and were reinstalled in July (9 tubes) and August 2019 (9 tubes). Chanin and Woods (2003) identify that the length of time tubes are deployed is less important than the time of year they are deployed. Leaving them out from May to the end of October will give the highest probability of detecting dormice if they are present. This includes a minor peak of tube use in May and a more substantial one in August and September. They also state that it is best to ensure that tubes are removed no earlier than October. As a minimum Chanin and Woods (2003) recommend that tubes are installed before the end of July and finally checked after the end of September.
- 2.4.2. As the majority of missing tubes were re-deployed in time for the August / September peak in activity, this is not considered a significant limitation to the results. The addition of checking hazelnuts for signs of dormice reduces this limitation further.

3. RESULTS AND EVALUATION

3.1. RESULTS OF DORMOUSE SURVEY

- 3.1.1. No dormice or evidence of dormice (nest material or dormouse opened nuts) were found within any nest tube on the Site; therefore, dormice can be considered likely to be absent from the Site. Raw survey data is included in Appendix A.
- 3.1.2. The dormouse tubes were on Site from May to October 2019 and therefore an index of probability of detection score of 20 was achieved (see Table 2 below). Absence of dormice should only be assumed if a minimum score of 20 is achieved (English Nature (now Natural England), 2006).

Table 2 – Index of probability for finding dormice present in nest tubes in any one month

Month	May	June	July	August	September	October	Total
Score	4	2	2	5	7	2	22

- 3.1.3. Several nest tubes contained wood mice *Apodemus sylvaticus*, as well as their nests and nut caches. Wood mice nests were identified in tube 48 on the 29/07/19 and 22/08/19, in tubes 15, 46, 48 and 43A on the 30/09/19, and in tubes 6, 15, 16, 20, 42, 43 and 48 on the 25/10/19. A wood mouse cache of hawthorn nuts was identified in tube 44 on the 30/09/19 and the 25/10/19. Wood mice were identified in tubes 11 and 47 on the 25/10/19.
- 3.1.4. Hazelnuts collected during the autumn survey were identified as being gnawed by wood mice or bank vole *Myodes glareolus* (showing characteristic parallel lines).

4. IMPLICATIONS FOR DEVELOPMENT

4.1. OVERVIEW

- 4.1.1. Dormice are considered likely absent from the Site however may be present in the wider environment (due to suitable habitat in the vicinity and the Site being within the dormouse distribution range (English Nature (now Natural England), 2006)). Therefore, whilst a derogation license from Natural Resources Wales is not required, the low risk of dormice using hedgerow habitat should still be considered throughout the Proposed Development.

4.2. LEGAL COMPLIANCE

- 4.2.1. Dormice are afforded a high level of protection under the Conservation of Habitats and Species Regulations 2017 (the 'Habitats Regulations'), the legislation means that it is an offence to:
- *'Deliberately capture, injure or kill a wild dormouse;*
 - *Deliberately disturb wild dormice; 'disturbance of animals includes in particular any disturbance which is likely:*
 - *(a) to impair their ability —*
 - *(i) to survive, to breed or reproduce, or to rear or nurture their young; or*
 - *(ii) in the case of animals of a hibernating or migratory species, to hibernate or migrate; or*
 - *(b) to affect significantly the local distribution or abundance of the species to which they belong.'*
 - *Damage or destroy a breeding site or resting place used by this species.'*
- 4.2.2. Protection is also afforded under the Wildlife and Countryside Act 1981 (as amended) with respect to disturbance of animals when using places of shelter, and obstruction of access to places of shelter.
- 4.2.3. Due to the high level of protection afforded to dormice and their habitat, mitigation for this species is governed by a strict licensing procedure administered by NRW (normally, planning permission must be obtained before a licence can be sought). Licencing is subject to three tests, as defined under the Habitats Regulations, these must also be applied by the planning authority before granting permission for activities affecting dormice. For permission to be granted the following criteria must be satisfied:
- The proposal is necessary *'to preserve public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment';*
 - *'There is no satisfactory alternative';* and
 - The proposals *'will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range'.*
- 4.2.4. The dormouse is also listed as a Species of Principal Importance (SPI) for the Conservation of Biodiversity in Wales in accordance with Section 7 of the Environment Wales Act (2016). Under Section 7, public bodies have a duty to have regard for the conservation of SPI when carrying out their functions.

- 4.2.5. Given the likely absence of dormice from the site, there is a negligible risk of infringing the legislation that protects them.

4.3. PLANNING POLICY COMPLIANCE

- 4.3.1. At the national level Planning Policy Wales' (Edition 10; 2018) Biodiversity and Resilience of Ecosystems Duty (Section 6 Duty) states that *'Planning authorities must seek to maintain and enhance biodiversity in the exercise of their functions. This means development should not cause any significant loss of habitats or populations of species, locally or nationally and must provide a net benefit for biodiversity'*.
- 4.3.2. At a local level, the Neath Port Talbot (NPT) Local Biodiversity Action Plan (LBAP) pledges to *'enhance, through partnership work and the planning process, any species or habitat found in NPT that has European or UK legal protection, is listed on the Welsh Government list of habitats and species of principal importance in Wales, known as the Section 7 list, or is of particular local importance and specifically chosen by the NPT Biodiversity Forum'*.
- 4.3.3. Avoidance and mitigation measures are recommended in Section 5 to enable the Proposed Development to remain compliant with the above legislation and planning policy.

5. MITIGATION AND ENHANCEMENT

5.1. AVOIDANCE AND MITIGATION MEASURES

- 5.1.1. The Proposed Development includes the retention and protection of the majority of woodland and hedgerow boundary habitat. Retained habitat will be protected during the construction phase in accordance with BS5387:2012 '*Trees in relation to design, demolition and construction – Recommendations*'.
- 5.1.2. As hedgerow removal is required along the Site's southern boundary, it is recommended that all enabling works affecting this (hedgerow clearance and excavation) is carried out under an ecological watching brief. This would involve a competent ecologist with a NRW dormouse licence, being on Site whilst those works are carried out. A Precautionary Method of Working (PMoW) will be employed. This will include all vegetation being hand-searched by the ecologist for dormouse nests immediately prior to any clearance. A Toolbox Talk (TBT) will be delivered by the ecologist to relevant site operatives, detailing the legislation and PMoW to be followed.
- 5.1.3. The PMoW will specify different working methods depending on the time of year that the works are to take place, i.e. during winter when dormice are hibernating or during the active season for dormice.
- 5.1.4. It is recommended that vegetation clearance take place over the winter months (considered to fall between October to March inclusive, weather dependant). Under this scenario the ecologist would search the ground for hibernation nests prior to works. Should the works occur in the active season for dormice (April to November), the ecologist would search vegetation for above-ground summer nests.
- 5.1.5. Should dormouse presence be confirmed at any point during the works, all works must cease and an ecologist be contacted for advice. A European Protected Species Licence (EPSL) from NRW may be required to enable works to continue.

5.2. ECOLOGICAL ENHANCEMENT MEASURES

- 5.2.1. As dormice are likely absent from the Site, no enhancement measures targeted at this species are considered necessary.
- 5.2.2. However, Planning Policy Wales (2018) states that the development plans should '*provide for the conservation of and where appropriate, enhancement of biodiversity...identifying opportunities to conserve important local habitats and species...*'.
- 5.2.3. The development landscaping includes the creation of a range of species-rich habitats in line with local and national policy. Wildlife friendly landscaping, ecological enhancement and management measures have been incorporated into the Proposed Development and are reported separately in the BREEAM Land use and Ecology Report (WSP, August 2019). These enhancement measures include the creation of a hedgerow habitat network, tree planting and species-rich grassland within the Proposed Development using native species of local provenance.

6. CONCLUSIONS

- 6.1.1. The Site comprised a school complex building with several associated structures surrounded by amenity grassland and areas of hard standing. The Site was bordered with habitats assessed as suitable for supporting dormice; these comprise a woodland corridor and species-poor hedgerows.
- 6.1.2. Dormouse presence / likely absence surveys were undertaken on the Site between May and late October 2019 to inform hedgerow removal requirements. No dormice or evidence of dormice was identified during surveys and dormice are considered likely to be absent from the Site.
- 6.1.3. To mitigate the low risk of dormice utilising hedgerow habitat, any hedgerow removal is to proceed under a PMoW, with an ecologist being present on Site during vegetation clearance.
- 6.1.4. The PMoW will detail two methods to be employed depending on whether works are to take place during the active or hibernation periods for dormice.
- 6.1.5. All vegetation should be checked for the presence of dormouse nests immediately prior to clearance. Should a dormouse or dormouse nest be found at any point during the works, all works must cease and an ecologist be contacted for advice. A NRW EPSL may be required to enable works to be concluded, under this scenario.
- 6.1.6. Enhancement and wildlife friendly management measures have been incorporated in the school landscaping. These include the creation of a hedgerow network within the school grounds, species-rich grassland creation and tree planting. They are reported in the BREEAM Land use and Ecology Report (WSP, August 2019).

7. REFERENCES

7.1. PROJECT REFERENCES

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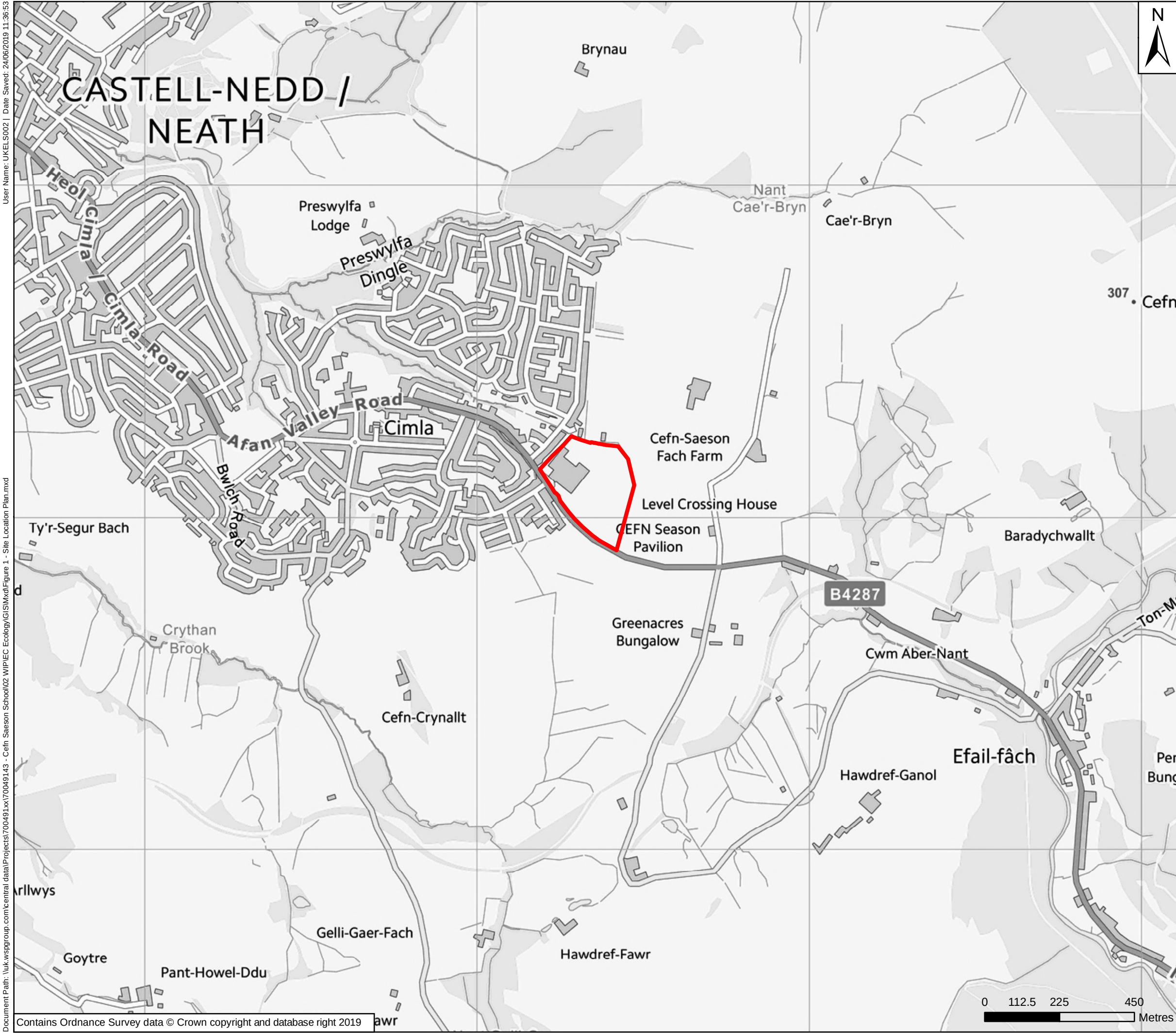
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8. FIGURES

Figure 1 - Site Location Plan

Figure 2 - Dormouse Survey Results



Key



Redline Boundary



Client:	MORGAN SINDALL (CONSTRUCTION) PLC		
Project:	CEFN SAESON COMPREHENSIVE SCHOOL PRELIMINARY ECOLOGICAL ASSESSMENT		
Title:	SITE LOCATION PLAN		
Drawing No:	FIGURE 1	Drawn:	KB
Date:	05/11/2019	Checked:	GH
Scale:	11,043 @ A3	Approved:	PD



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N

Key

Redline Boundary

Dormouse Tube

wsp

Client:

MORGAN SINDALL (CONSTRUCTION) PLC

Project:

CEFN SAESON COMPREHENSIVE SCHOOL
PRELIMINARY ECOLOGICAL ASSESSMENT

Title:

DORMOUSE TUBE LOCATION

Drawing No:

FIGURE 2

Date:

27/11/2019

Scale:

1,362 @ A3

Drawn:

ES

Checked:

GH

Approved:

PD

Appendix A

RAW DATA

wsp

Table A-1 – Raw data

Tube Number	Tree Species Common Name	Tree Species Latin Name	Survey Results				
			1 (28.06.19)	2 (29.07.19)	3 (22.08.19)	4 (30.09.19)	5 (25.10.19)
1	Hawthorn	<i>Crataegus monogyna</i>	Empty	Empty	Empty	Empty	Empty
2	Hawthorn	<i>Crataegus monogyna</i>	Empty	Missing	Replaced	Empty	Empty
3	Hawthorn	<i>Crataegus monogyna</i>	Empty	Empty	Empty	Empty	Empty
4	Hawthorn	<i>Crataegus monogyna</i>	Empty	Empty	Empty	Empty	Empty
5	Hawthorn	<i>Crataegus monogyna</i>	Empty	Empty	Box leaves, no nest	Empty	Empty
6	Hawthorn	<i>Crataegus monogyna</i>	Empty	Empty	Box leaves no nest	Empty	Loose leaves most likely WM
7	Hawthorn	<i>Crataegus monogyna</i>	Empty	Empty	Empty	Empty	Empty
8	Hawthorn	<i>Crataegus monogyna</i>	Empty	Empty	Empty	Empty	Empty
9	Hawthorn	<i>Crataegus monogyna</i>	Empty	Empty	Empty	Empty	Empty



Tube Number	Tree Species Common Name	Tree Species Latin Name	Survey Results				
			1 (28.06.19)	2 (29.07.19)	3 (22.08.19)	4 (30.09.19)	5 (25.10.19)
10	Hawthorn	<i>Crataegus monogyna</i>	Empty	Empty	Empty	Empty	Empty
11	Hawthorn	<i>Crataegus monogyna</i>	Empty	Wood missing/ replaced	Empty	Empty	Loose leaves & WM
12	Maple	<i>Acer sp</i>	Empty	Empty	Empty	Empty	Empty
13	Hawthorn	<i>Crataegus monogyna</i>	Empty	Empty	Empty	Empty	Empty
14	Maple	<i>Acer sp</i>	Empty	Empty	Empty	Empty	Empty
15	Hawthorn	<i>Crataegus monogyna</i>	Empty	Empty	Empty	Loose leaves most likely WM	Loose leaves most likely WM
16	Hawthorn	<i>Crataegus monogyna</i>	Empty	Empty	Empty	Empty	Loose leaves most likely WM
17	Maple (Replaced Hawthorn)	<i>Acer sp</i>	Empty	Not found	Replaced	Empty	Missing
18	Hawthorn	<i>Crataegus monogyna</i>	Empty	Taken down and put back up	Empty	Empty	Empty
19	Hawthorn	<i>Crataegus monogyna</i>	Empty	Taken down and put back up	Empty	Empty	Empty
20	Hawthorn	<i>Crataegus monogyna</i>	Empty	Taken down and put back up	Empty	Check nut back in office, not DM	Loose leaves most likely WM



Tube Number	Tree Species Common Name	Tree Species Latin Name	Survey Results				
			1 (28.06.19)	2 (29.07.19)	3 (22.08.19)	4 (30.09.19)	5 (25.10.19)
21	Hawthorn	<i>Crataegus monogyna</i>	Empty	Taken down and put back up	Empty	Empty	Empty
22	Hawthorn	<i>Crataegus monogyna</i>	Empty	Wood missing/ replaced	Empty	Empty	Empty
23	Hawthorn (Replaced Oak)	<i>Crataegus monogyna</i>	Empty	Missing	Replaced	Empty	Empty
24	Goat Willow	<i>Salix caprea</i>	Empty	Missing	Replaced	Empty	Empty
25	Goat Willow	<i>Salix caprea</i>	Empty	Empty	Empty	Empty	Empty
26	Oak	<i>Quercus robur</i>	Empty	Empty	Empty	Empty	Empty
27	Cotoneaster		Empty	Empty	Empty	Empty	Empty
28	Goat Willow	<i>Salix caprea</i>	Empty	Empty/ repositioned	Empty	Empty	Empty
29	Holly	<i>Ilex aquifolium</i>	Empty	Empty	Empty	Empty	Empty
30	Oak (Replaced holly)	<i>Quercus robur</i>	Empty	Missing	Replaced	Empty	Empty
31	Oak (Replaced oak)	<i>Quercus robur</i>	Empty	Missing	Replaced	Empty	Empty
32	Oak (Replaced willow)	<i>Quercus robur</i>	Empty	Missing	Replaced	Empty	Empty

Tube Number	Tree Species Common Name	Tree Species Latin Name	Survey Results				
			1 (28.06.19)	2 (29.07.19)	3 (22.08.19)	4 (30.09.19)	5 (25.10.19)
33	Oak	<i>Quercus robur</i>	Empty	Empty	Empty	Empty	Empty
34	Oak	<i>Quercus robur</i>	Empty	Empty	Empty	Empty	Empty
35	Guelder Rose	<i>Viburnum opulus</i>	Empty	Empty	Empty	Empty	Empty
36	Oak	<i>Quercus robur</i>	Empty	Empty	Empty	Empty	Empty
37	Goat Willow	<i>Salix caprea</i>	Empty	Empty	Missing?	Empty	Empty
38	Goat Willow	<i>Salix caprea</i>	Empty	Empty	Empty	Empty	Empty
39	Oak	<i>Quercus robur</i>	Empty	Missing	Empty	Empty	Empty
40	Bramble	<i>Rubus fruticosus</i>	Empty	Empty	Missing?	Empty	Empty
41	Dead tree		Empty	Missing	Replaced	Empty	Empty
42	Hawthorn	<i>Crataegus monogyna</i>	Empty	Taken down and put back up	Empty	Empty	Loose leaves most likely WM
43	Hawthorn	<i>Crataegus monogyna</i>	Empty	Empty	Empty	Empty	Loose leaves – no structure WM
44	Maple	<i>Acer sp</i>	Empty	Empty	Empty	Large cache of hawthorn nuts with parallel lines (WM)	Loose nest with cache of nuts collection

Tube Number	Tree Species Common Name	Tree Species Latin Name	Survey Results				
			1 (28.06.19)	2 (29.07.19)	3 (22.08.19)	4 (30.09.19)	5 (25.10.19)
45	Hawthorn	<i>Crataegus monogyna</i>	Empty	Empty	Empty	Empty	Empty
46	Maple	<i>Acer sp</i>	Empty	Empty	Empty	Loose leaves no structure likely WM	Empty
47	Field Maple	<i>Acer campestre</i>	Empty	Empty	Empty	Empty	Loose leaves & WM
48	Hawthorn	<i>Crataegus monogyna</i>	Empty	Y- Likely WM nest, lots of hawthorn leaves and no structure or other species	Loose leave with no structure, likely WM	Loose leaves most likely WM	Loose leaves most likely WM
49	Hawthorn	<i>Crataegus monogyna</i>	Empty	Wood missing/ replaced	Empty	Empty	Empty
50	Hawthorn	<i>Crataegus monogyna</i>	Empty	Empty	Empty	Empty	Empty
13A	Hawthorn	<i>Crataegus monogyna</i>	N/A	N/A	New put up	Empty	Empty
43A	Hawthorn	<i>Crataegus monogyna</i>	N/A	New put up	Empty	Loose leaves most likely WM	Empty



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