

PRELIMINARY ECOLOGICAL APPRAISAL

&

PRELIMINARY ROOST ASSESSMENT

Former Gowerton Primary
School

Mount Street
Gowerton
Swansea
SA4 3EL

ON BEHALF OF:

**Rhodos Properties (No.27)
Limited**



| | | |
|-------------------------|--|------------------|
| Site Address | Former Gowerton Primary School, Mount Street, Gowerton, Swansea, SA4 3EL | |
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1 Executive Summary

- 1.1 Proposals are in place for the redevelopment of the former Gowerton Primary School. In order to assess the habitats and the building on site, as well as the presence or potential presence of protected species, a Preliminary Ecological Appraisal, and Preliminary Roost Assessment were undertaken in January 2026. The main school building and surrounding habitat were subject to assessment.
- 1.2 Daytime inspection of the school building found no live bats internally or externally. Evidence of possible feeding by bats was noted internally, by way of two herald moth wings. No bat droppings, staining or further insect remains were noted internally or externally. Overall, the building offers moderate suitability to be used by both crevice and non-crevice roosting bat species.
- 1.3 Therefore, a total of two dusk emergence/activity observations must be carried out on the whole building between the beginning of May and the end of August. It is recommended that these dusk observations are conducted in late May and late June to capture any maternity roost activity. Furthermore, it is recommended that two static bat detectors are placed inside the former school building for a total of two weeks in June.
- 1.4 Additionally, it is recommended that a total of two hibernation survey visits using endoscopes are carried out during the coldest months of the winter season (February to mid-March), these surveys must be conducted four weeks apart. This will include the installation of a static bat detector on the interior of the school building for a minimum two week period to monitor bat activity during milder nights when bats may forage or re-locate.
- 1.5 Habitat on site has been assessed as suitable for nesting birds, therefore vegetation clearance must be scheduled to be undertaken outside of the bird nesting season, which runs from March to August.
- 1.6 Due to the lack of suitable shelter and foraging habitat on site, with only discrete areas of scrub present, overall (excluding bats and nesting birds), the site is considered to be unsuitable for protected species. Precautionary measures for vegetation clearance are recommended, which includes a check by a suitably qualified ecologist prior to removal. This will ensure a sensitive approach to vegetation clearance, and in the unlikely event protected species or evidence of protected species is found, suitable advice and procedures must be sought and followed.
- 1.7 In order to comply with current Planning Policy Wales 12, it will be necessary to provide enhancements for biodiversity. Proposals for measures to promote wildlife and nature conservation are outlined in this report, and will be added upon once the further survey effort has been completed.

2 Introduction

- 2.1 Proposals are in place for the redevelopment of the former Gowerton Primary School site. Plans for the redevelopment have not yet been finalised, at the time of writing this report. The site is centred on National Grid Reference (NGR) SS 58658 96190, at an altitude of some 23m Above Ordnance Datum.
- 2.2 To inform the proposals for the site a Preliminary Ecological Appraisal (PEA), including a Preliminary Roost Assessment (PRA), was undertaken in January 2026. A principal objective of this report is to identify any development impacts which may arise in relation to the presence of legally protected species, namely bats and nesting birds, but also species such as badger (*Meles meles*), otter (*Lutra lutra*), dormouse (*Muscardinus avellanarius*), great crested newts (*Triturus cristatus*) and reptiles. Relevant recommendations are made in this report with respect to all ecological receptors.

3 Survey Team Experience

- 3.1 Lead surveyor and author of this report is Robert Morgan. Over twenty years' experience with bats, carrying out Preliminary Roost Assessments (PRA), dusk emergence observations, dawn surveys, transects and hibernation surveys. During this time Rob has gained additional experience radio tracking lesser horseshoe bats, monitoring of important local sites, checking bat boxes, ringing Daubenton's and Greater horseshoe bats. Rob has expertise in respect of dormice with over 30 years' experience monitoring dormouse boxes/tubes voluntarily and commercially at various different sites. Assessing habitat suitability for dormice and conducting nut searches to help establish presence. Licenced to disturb barn owls listed under Schedule 1 of the Wildlife and Countryside Act 1981 since 2017. He has extensive surveying experience with great crested newts, amphibians, birds, badgers, marsh fritillary butterflies, otters, reptiles, and water voles.

- 3.2 Undertaking the PEA element of the survey was Daniel White. Following qualification with distinction from the University of South Wales with an MSc in Wildlife and Conservation Management in 2021, Daniel joined Just Mammals Limited and is currently employed as an ecologist. As an enthusiastic herpetologist, Daniel has experience surveying for all widespread amphibian and reptile species in Britain, in addition to protected great crested newts and sand lizards. Beyond herpetofauna, Daniel has several field seasons experience surveying for bats and badgers, in addition to undertaking various botanical surveys.

4 Survey Methodology

- 4.1 A PEA and PRA were conducted on the 21st of January 2026. Details of the survey activities and weather conditions are provided in Table 2. Prior to the site visit, a desktop study was undertaken, which involved a standard search area of a 1km radius from the site (using a central grid reference), using the MAGIC website. Details of statutory sites designated for nature conservation were obtained. A record search was also commissioned from South East Wales Biodiversity Records Centre (SEWBRc).
- 4.2 The PEA comprised a survey employing the Phase 1 habitat survey methodology. This is a standardised technique for classifying and mapping British habitats. All areas within the site were inspected and assessed for indicators of ecological value, including the presence and/or field signs of any protected or rare habitats and species. The site was walked over, recording all plant species and features into a field notebook. Habitats and notes were drawn onto a map of the survey site and photographs were taken. A coloured Phase 1 habitat map was produced (see Appendix I).
- 4.3 The PRA element of the survey included an internal and external inspection of the Former Gowerton Primary School, with the aim of detecting any signs of bats, or nesting bird presence. With respect to bats, all outer surfaces of the building were examined from the ground, seeking signs of use, including bat faeces (droppings) on walls, ledges, doors, and sills. Urine staining on paintwork and window glass, or staining on the surfaces of exposed timbers, caused by oil from bat fur, were also searched for. A high-powered lamp and binoculars were used to examine Potential Roost Features (PRFs), and any gaps or crevices in the structure were inspected as closely as possible. The context of the building within the surrounding landscape was also assessed at this time. Further, the structure was considered for its potential to be used by bats for hibernation purposes.
- 4.4 The presence of nesting birds was also considered at the time of assessment. Surveyors recorded any signs of historic and current bird activity including nest-building, feeding at nest sites, and any indirect evidence such as nest remains, bird droppings, and feathers.

5 Site Description

- 5.1 Situated within the centre of Gowerton, a village four miles west of Swansea on the Gower Peninsula, the site is less than 0.3 ha in area and comprises the former Gowerton Primary School, outbuildings and surrounding areas of hardstanding. Vegetation on site is limited to plants growing through cracks or that are able to survive on the thin soils present on areas of hardstanding, in addition to small areas of scrub along the site's southern border, and that has developed within previously planted areas. The majority of the site is bounded by a stone wall, approximately 1m high. Several buildings are present on site, including the main school building at the site's centre, two single storey outbuildings to the west and south-west, and a larger two storey, flat rooved structure towards the south-eastern boundary of the site.
- 5.2 The main school building was subject to the Preliminary Roost Assessment. The main body of the school is stone built, L-shaped in design with various extensions and attachments on every elevation of the main structure. The main roof is pitched and covered with asbestos/cement fibre slates with clay ridge tiles. This roof is supported by a timber frame with timber purlins, rafters and tie-beams. A central ridge board is present from end to end and a bitumen lining membrane is present throughout the roof. Internally, many of the suspended ceilings have collapsed, or with the ceiling panels missing. The floors are covered with debris, glass etc due to damage by vandals. All of the windows are currently boarded. All barge boards, fascia boards and soffits are timber. The remaining rainwater products are all metal.
- 5.3 The eastern extension is pitched and connects directly onto the south facing slope of the main building, towards the southern end of this roof a tarpaulin sheet covers the ridge line for approximately 5m from the gable and down the eastern elevation to the chimney. It has asbestos/cement fibre slates, clay ridge tiles and a bitumen liner throughout. The roof is timber, with timber purlins, rafters and tie-beams. The barge boards, fascia boards and soffits are wooden and

the rainwater products are metal. Connecting to the eastern elevation of this extension is another flat roofed section that projects eastwards, the roof is covered with felt and it has wooden fascia boards on all sides. Also attached to the eastern elevation of this extension is a slate covered mono-pitched roof which extends along the gable wall of the L-shaped main building. This roof is supported by a timber frame, it is vaulted with no loft voids present. The underside of the roof is covered with lathe and plaster. It has wooden fascia boards and uPVC rainwater products.

- 5.4 Two smaller pitched extensions are connected to the main building via a flat roofed corridor that runs east to west along the southern elevation L-shaped structure. This corridor roof has several skylights on top that allow light to access the internal hallway, one of which is broken. Both extensions have pitched roofs with large loft voids that are covered with asbestos/cement fibre slates with clay ridge tiles. Again, these are supported by a timber roof frame, a bitumen lining membrane and central ridge board are present throughout both roofs. Wooden barge boards, fascia boards and soffits are present all around.
- 5.5 Connected to the north elevation of the main structure is a small flat-roofed attachment that is the reception/main entrance for the school. This entrance way is uPVC framed with double doors which is protected by metal roller-shutters attached to the front. Internally, there are suspended ceilings throughout. Externally, the flat roof is felt covered and likely constructed with a concrete roof which can be seen internally and externally. The fascia boards are considered to be wooden with uPVC capping. The window frames are uPVC and all of the windows are boarded.
- 5.6 Built against the western elevation of the main school building is a single storey extension with a double ridge and central valley. Internally these house the toilet blocks and rear entrance way to the yard on the west side of the school. These two pitched roofs are both covered with asbestos/cement fibre slates with clay ridge tiles. It is constructed with a mixture of stone and modern concrete block. The roof structure is simple with only timber purlins, rafters and ridge boards, a bitumen lining membrane is present within both loft voids. The barge boards and fascia boards are all uPVC. There is a single metal roller shutter door in the west facing wall of the southern section.
- 5.7 As would be expected given the location of the site within the centre of Gowerton, habitat connectivity is limited for terrestrial species. Residential housing borders the site to the north and east, and although small pockets of scrub and woodland border the site to the south and west, these isolated islands of habitat are themselves surrounded by housing. For arboreal species, bats and birds, habitat connectivity is enhanced by the presence of tree lines and hedgerows to the west, connecting the site to extensive areas of native broadleaf woodland to the west and south.

6 Survey Constraints

- 6.1 During the Preliminary Roost Assessment the main loft voids of the school building were considered unsafe to access due to the condition of the suspended ceilings below the loft hatches. Many of the internal suspended ceilings were damaged, had already collapsed, or were obstructed by debris or internal wiring etc, with a high risk of further collapse. All other parts of the building and site were fully accessible.

7 Desktop Study

- 7.1 A previous Preliminary Ecological Appraisal report by Barry Stewart and Associates Ecological Consultants written in 2018 has been reviewed as part of the desktop study. No other reports for the site have been made available or were viewed as part of the desktop study.
- 7.2 A record search was commissioned from SEWBReC (LERC Reference: 0256-697), to ascertain whether protected or priority species had been recorded at or close to the site.
- 7.3 The data set revealed a total of 711 protected and priority species records within 1km of the site, including a number of species recorded at the site itself, details for which are provided below:
 - Mammals accounted for 109 species records including priority species such as hedgehog (*Erinaceus europaeus*), badger (*Meles meles*), and polecat (*Mustela putorius*). European protected species including soprano pipistrelle (*Pipistrellus pygmaeus*), brown long-eared bat (*Plecotus auritus*), lesser horseshoe bat (*Rhinolophus hipposideros*), noctule (*Nyctalus noctula*), and common pipistrelle (*Pipistrellus pipistrellus*). Records of roosts for common pipistrelle, soprano pipistrelle, lesser horseshoe and brown long-eared bats were returned for the site, according to the grid references provided. There is a record from 2022 of a maternity roost for brown long-eared bats (21-100 animals) and a lesser horseshoe bat record of an unknown roost type and unknown numbers, as only droppings were found. The location

description of the common pipistrelle and soprano pipistrelle records (from 2024) suggest they are not in the survey area, it is therefore unclear if these records are for the site itself;

- Birds accounted for 401 species records, four of which are for the site itself; namely house sparrow (*Passer domesticus*), dunnock (*Prunella modularis*), lesser black-backed gull (*Larus fuscus*), and herring gull (*Larus argentatus*);
- Amphibians accounted for 9 records, including common toad (*Bufo bufo*), smooth newt (*Lissotriton vulgaris*), palmate newt (*Lissotriton helveticus*), and common frog (*Rana temporaria*). The closest amphibian record is of palmate newt within a garden pond 60m to the north of the site;
- Reptiles accounted for 11 records, including slow worms (*Anguis fragilis*), grass snake (*Natrix helvetica*) and common lizard (*Zootoca vivipara*). The closest record of a reptile is of a slow worm less than 70m from the site boundary;
- Invertebrates accounted for 94 records, including priority species such as buff ermine (*Spilosoma lutea*), rustic moth (*Hoplodrina blanda*), Dark-barred Twin-spot Carpet (*Xanthorhoe ferrugata*), Shaded Broad-bar (*Scotopteryx chenopodiata*) and Small Square-spot (*Diarsia rubi*), all have which have been recorded around 300m from the site;
- Vascular plants accounted for 85 species records, including invasive non-native arrowhead bamboo (*Pseudosasa japonica*), Himalayan honeysuckle (*Leycesteria formosa*), buddleia (*Buddleja davidii*), white stonecrop (*sedum album*), and Schedule 9 listed wall cotoneaster (*Cotoneaster horizontalis*) and Montbretia (*Crocasmia aurea x pottsii* = *C. x crocosmiiflora*), have been recorded at the wider site.

- 7.4 Sites of nature conservation interest within a 2km radius of Former Gowerton Primary School were identified using the web-based MAGIC database (www.MAGIC.gov.uk). These included sites with statutory designations of international importance (Special Areas of Conservation: SACs, Special Protected Areas: SPAs and Ramsar sites) and sites of national importance (Sites of Special Scientific Interest: SSSIs and National Nature Reserves: NNRs). There are two protected sites within a 2km radius, which are summarised in Table 1 below.

Table 1: Sites Designated for Nature Conservation

| Site and Designation (In Order of Distance) | Distance and Direction to Site | Primary Reasons for Designation |
|---|--------------------------------|---|
| Burry Inlet Loughor Estuary SSSI | Over 900m to the north west | Extensive areas of intertidal sand and mudflats and the largest continuous area of saltmarsh in Wales. Key reasons for designation include extensive intertidal mudflats, crucial habitats for rare species, and significant populations of oystercatcher, knot, and pintail. |
| Carmarthen Bay and Estuaries SAC | Over 900m to the north west | |
| Burry Inlet SPA, Ramsar site | Over 900m to the north west | |

- 7.5 Other, non-statutory sites, within 2km of the site include nine ancient semi-natural woodland sites, and four restored ancient woodland site. The closest Site of Importance for Nature Conservation is West Gowerton Woods, just under 200m away.

8 Survey Results

- 8.1 Survey was undertaken on the 21st of January 2026, by a small team of experienced and licensed ecologists. Details of the conditions under which survey was conducted is given in Table 2. Wind speeds given employ the Beaufort scale.

Table 2: Summary of Survey Activity and Weather Conditions

| Survey Type and Location | Dates | Timing | Weather Conditions |
|---|------------------------------|---|--|
| Daytime internal and external inspection including a potential roost assessment (PRA) | 21/01/2026 | 10:15 – 11:45 hours Greenwich Mean Time (GMT) | Air temperature: 12°C Cloud cover: 8/8 oktas Wind speed: F4, light breeze Conditions: Showers |
| Day time visual inspection, botanical survey and habitat assessment (PEA) | | | |
| Surveyors | Robert Morgan & Daniel White | | |

Preliminary Roost Assessment

- 8.2 Survey commenced with an internal inspection of the Former Gowerton Primary School, which found no live bats. Inside the southern section of the two small, pitched roofs of the school toilets, against the western facing concrete block gable wall was two Herald moth (*Scoliopteryx libatrix*) wings found against the block work. These two moth wings appeared to be deposited by bats, no bat droppings or any other evidence was noted in this area. No further evidence of bats was found internally, no

dead bats, bat droppings, staining or insect remains were noted, nothing was found to indicate the presence of a bat roost.

8.3 External inspection of the Former Gowerton Primary School found no live bats and no evidence of bats. Nothing was found externally to indicate the presence of a bat roost, no bat droppings were found on external surfaces. However, overall the building offers moderate potential to be used by both crevice and non-crevice roosting bat species and multiple features were noted. These features were identified as:

- The roof structures have multiple broken, missing, raised and slipped slates;
- Gaps beneath ridge tiles;
- Some of the ridge vents appeared large enough for small bats to access;
- Gaps between the stonework and the timber soffits on all gable end walls;
- Gaps around timber purlins;
- Gaps behind some of the boarded windows;
- Gaps in rotten timber barge boards, particularly on the southern elevation;
- Gaps beneath some of the end ridge tiles over gable walls;
- Several large openings in the roof structure that can allow non-crevice roosting bats to access the interior spaces of the building;
- Gaps beneath the timber fascia boards on the eastern mono-pitched roof;
- Gaps around the edges of the all roller shutter doors;
- Gaps beneath tight fitting barge boards;
- Low level vents on the north elevation of the flat-roofed section, some of which are broken and can provide access to wall cavities.

8.4 Two low level features were identified on the north facing elevation of the flat roofed section located at the north-east corner of the main building. Approximately 20cm off the ground there are several vents with metal grills situated along the bottom of the wall, two of these vents have been damaged and are open. This provides bats with opportunities to access the wall cavities at a low level on an elevation of the building that will not be subject to direct sunlight, this feature provides the stable conditions bats require for hibernation. Additionally, the school itself offers hibernation potential internally for crevice and non-crevice roosting bat species. The interior is no longer heated, and provides a cold, dark, humid environment, offering suitable conditions for hibernating bats. There are various points around the outer shell of the building that allow bats to access the interior.

8.5 Evidence of nesting birds was also considered during the survey of the former primary school, no active bird nests were found internally or externally. However, evidence of historic jackdaw (*Coloeus monedula*) activity within the building was noted. Inside the southern roof void of the toilet block located on the western elevation of the main roof, a small jackdaw nest was found. Although it was small in size compared to many jackdaw nests it was still considered likely to have been created by this species, and did not appear to be in use.

8.6 Additionally, an inactive grassy bird nest was noted on top of the stone work inside the northern roof void of the toilet block, situated on top of the west gable wall next to a timber purlin. This nest appeared old and is not considered to be active. Furthermore, a collapsed section of roof inside the western section of the main roof revealed the remains of an old inactive jackdaw nest that had fallen onto the floor, no structure remains.

8.7 During the external inspection, no bird activity associated with the former primary school was observed. Nothing was observed to show that any bird species was actively nesting at the property.

Preliminary Ecological Appraisal

8.8 Table 3 below provides details of the habitats recorded on site.

Table 3: Summary of Phase 1 Habitat Notes

| Habitat | Phase 1 Classification | Description of Area and Typical Species |
|---------|------------------------------|---|
| Type 1 | A2.1 Scrub, dense/continuous | This habitat is present around the main school building and along the southern end of the site. Species include butterfly bush (<i>Buddleia davidii</i>), bramble (<i>Rubus fruticosus</i>), willow (<i>Salix</i> sp.), ivy (<i>Hedera helix</i>), sycamore (<i>Acer pseudoplatanus</i>), herb Robert (<i>Geranium robertianum</i>), wood avens (<i>Geum urbanum</i>), white stonecrop (<i>Sedum album</i>), cut leaved cranesbill (<i>Geranium dissectum</i>), yew (<i>Taxus baccata</i>), Himalayan Honeysuckle (<i>Leycesteria formosa</i>), Portuguese laurel (<i>Prunus lusitanica</i>), hydrangea sp., lesser celandine (<i>Ficaria verna</i>), hart's tongue fern (<i>Asplenium</i> |

| | | |
|--------|---------------------------------|---|
| | | <p><i>scolopendrium</i>), ash (<i>Fraxinus excelsior</i>), birch (<i>Betula sp.</i>), leylandii cypress (<i>× Cuprocypris leylandii</i>).</p> <p>Target Note: wall cotoneaster (<i>Cotoneaster horizontalis</i>) is present within this habitat</p> |
| Type 2 | J5 Other habitat – hardstanding | <p>This habitat is present around the school building, and comprises the former play area and carpark of the school.</p> <p>Growing from the cracks; Yorkshire fog (<i>Holcus lanatus</i>), dandelion (<i>Taraxacum officinale</i>), creeping buttercup (<i>Ranunculus repens</i>), pendulous sedge (<i>Carex pendula</i>), herb Robert, daffodil (<i>Narcissus sp.</i>), nettle (<i>Urtica dioica</i>), lavender (<i>Lavandula angustifolia</i>), and valerian (<i>Valeriana officinalis</i>).</p> |
| Type 3 | J3.6 Buildings | Buildings present within the survey area are described above. |

- 8.9 A Phase 1 map is displayed in Figure 2 (see Appendix I). Photographs of the site are provided in Appendix II.
- 8.10 Ecological assessment included identification of the potential for protected species to be present. No active bird nests were observed during the survey. An old, cup shaped, bird nest was found within the scrub habitat. No bird activity was recorded at the time of the survey.
- 8.11 No reptiles were noted at the site. Habitat on site lacks suitable cover and foraging opportunities for this animal group.
- 8.12 No amphibians were observed at the site. Habitat on site lacks suitable cover and foraging opportunities for this animal group. A single known garden pond is present to the north of the site (approximately 60m away), as shown by the record search. This pond is not visible via aerial maps. No other known ponds are present within 500m of the site.
- 8.13 No evidence for the presence of protected terrestrial mammals was found on the site, including setts, nests, holts, worn tracks, spraints, latrines/dung pits, hair or nut cases that could indicate the presence of otter, badger or hazel dormouse.
- 8.14 No priority invertebrate species were noted during the survey. Suitable habitat for invertebrates is limited to discrete areas of scrub, and the few plants that grow from the cracks within the hardstanding.

9 Discussion and Conclusions

- 9.1 The site of the Former Gowerton Primary School is proposed to be redeveloped. The site currently comprises disused buildings that are in a poor condition. Habitat on site is limited to small areas of scrub, and hardstanding surrounding the central main school building. A PEA of the site and PRA of the main school building were carried out to assess potential presence of protected species. Desktop study, and field survey, were both used to evaluate the ecological value of the site which, overall, is considered to be moderate due to the suitability of the main school building for bats and the presence of historic bat roosts.
- 9.2 The impacts of current proposals are expected to be localised in nature, and are not likely to impact protected sites within 2km of the site.
- 9.3 No live bats were found internally or externally associated with the main school building. However, inside the southern of the two small, pitched roofs attached to the western elevation were two herald moth wings found against the blockwork of the western gable wall. These are thought to suggest possible feeding by bats. No bat droppings, staining or further insect remains were noted internally or externally. Constraints were noted due to the lack of accessibility to the whole of the main school structure due to Health and Safety concerns. Overall, the school building offers moderate suitability for both crevice and non-crevice roosting bat species. There are multiple features around the outer shell of the school building that bats can use to shelter, and also several openings around the roof structure that bats can use to access the interior. All species of bats in Britain, and their places of rest (roosts) are protected under the provisions of the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2019 (Amendment) (EU Exit). As such, where there is evidence of bats or potential for them to be present, further survey is required. Recommendations for which are provided below.
- 9.4 The data search revealed the presence of four historic bat roosts within the main school building for common pipistrelle, soprano pipistrelle, lesser horseshoe and brown long-eared bats. Both records from 2022 for a brown long-eared maternity roost at the school, and lesser horseshoe presence are considered correct as both species were noted in the Delegated Officer Panel Report under

Application 2022/0746/FUL which relates to a previous planning application for the site. Details of the record show that the presence of lesser horseshoe bat at the site was confirmed via DNA analysis only, no live bats were seen, and, as a result, the roost type was not confirmed, neither was the abundance of this species. The Delegated Officers Report also mentions the presence of at least four bat species present at the site. The records in 2024 for common pipistrelle and soprano pipistrelle at the site lack detail and although the grid reference provided is for the former Gowerton School site, the location is noted as Pontardawe, a town located some 12 miles to the north-east of the survey site. The exact location of these roosts is unclear. Furthermore, there is no information on bat surveys taking place in 2024, at the site. Although, it is entirely possible these two bat species are present in the area and could be roosting on site, without a previous bat survey report, or sufficient records, it is unclear if these species have been previously recorded roosting at the site. Further survey recommended below will determine the use of the school building by bats, identify roosts present and help to assess impacts and mitigation requirements.

- 9.5 Presence of bats at other times of year, apart from the summer was considered and the building is assessed to have a moderate level of suitability for use by crevice and non-crevice roosting bats for hibernation purposes. The features suitable for hibernation identified include the two vents that lead to wall cavities on the north facing elevation of the flat roofed section, located at the north-east corner of the main building, and the interior of the building itself. Internally, the building is cold, humid and dark due to the boarded windows, with access provided via various openings around the outer shell.
- 9.6 While no active nests were found within the survey site, the timing of the survey, very early within the bird nesting season, means this is unsurprising. A small nest was noted within the scrub, proving the suitability of this habitat for nesting birds. All nesting birds, their chicks, eggs, and nests, whilst in use or being built, are protected under the Wildlife and Countryside Act 1981 (as amended). Suitable provision for nesting birds must be considered within the proposals and following further survey of the site. Any active bird nests will be noted as part of the dusk observation surveys for bats. Recommendations for best practice regarding birds, are made below.
- 9.7 Due to the lack of suitable shelter and foraging habitat on site, with only discrete areas of scrub present, overall (excluding bats and nesting birds), the site is considered to be unsuitable for protected species. There is no suitable habitat present on site for reptiles and/or amphibians, due to a lack of dense vegetation for shelter and limited opportunities for foraging. Although there is a pond 60m north, the boundary stone wall restricts movement onto the site. Hazel dormouse has been considered, and it is thought unlikely that this species is present on site at this time. No records for this species were returned from the data search within 2km of the site, and although the site is immediately adjacent to an area of woodland, this woodland is itself somewhat isolated from the wider landscape due to the presence of roads and housing. Furthermore, suitable scrub habitat present on site is limited in terms of species diversity and density. Precautionary measures for vegetation clearance are recommended below. These measures will ensure a sensitive approach to vegetation clearance, and in the unlikely event a protected species is found, suitable advice and procedures must be sought and followed. Terrestrial mammals such as badger and hedgehog may pass through the site, recommendations for which are provided below.
- 9.8 Wall cotoneaster was recorded on site, and is listed under Schedule 9 of the Wildlife and Countryside Act 1981, which makes it an offence to plant or cause this species to grow in the wild. Recommendations are made below for its removal from the site.

10 Recommendations

- 10.1 The former Gowerton Primary School is a bat roost. Consequently, a total of two dusk emergence/activity observations must be carried out on the whole building between the beginning of May and the end of August. It is recommended that these two dusk observations are conducted in late May and late June to ensure any maternity activity is observed. Additionally, it is recommended that two static bat detectors are placed inside the former school building for a total of two weeks in June. This is considered to be the minimum level of extra assessment to comply with national guidelines and required to support the needs of the local planning authority.
- 10.2 Sufficient observers will be needed in order to watch key aspects of the property, and survey must be undertaken under appropriate climatic conditions in compliance with national guidelines. Survey must therefore be carried out on dry evenings, with relatively low wind speeds and at temperatures in excess of 8°C.
- 10.3 Furthermore, it is recommended that a total of two hibernation survey visits using endoscopes are carried out during the coldest months of the winter season (February to mid-March), these surveys

- must be conducted four weeks apart. As part of the hibernation survey, the guidelines require that a static bat detector is to be installed internally for a minimum two week period to monitor bat activity during milder nights when bats may forage or re-locate.
- 10.4 A check immediately prior to removal of any vegetation on site must be undertaken by a suitably qualified ecologist. Birds are likely to be nesting on site, and as such vegetation clearance must be scheduled to be undertaken outside of the bird nesting season where possible, which runs from March to August. If any vegetation requires removal within the bird nesting season, and an active nest is discovered, all works within a minimum 2m radius of the nest must be immediately stopped, and not recommenced until all chicks have fledged. If at any time during the works any protected species is found, all works must stop and advice sought from an appropriately licensed and experienced ecologist
 - 10.5 Nocturnal mammals may utilise the site on occasion for foraging or commuting, and therefore any trenches dug forming part of any groundworks during construction must be covered overnight or left with a 45° sloping side to prevent any animal from becoming trapped. Similarly, any unconnected pipes must be capped overnight to prevent any animal from becoming stuck. All new fencing installed around the site must also include gaps to facilitate the movement of mammals through the site.
 - 10.6 Wall cotoneaster is present. This plant must be eradicated from the site to prevent any further spread. Removal can be via physical removal or herbicide treatment. A professional should be contacted and advice sought.
 - 10.7 The likely presence of nocturnal animals, such as bats requires considerate design of a sensitive lighting scheme. Any new lighting columns installed must be affixed with cowls, hoods, or shrouds, to minimise upward light spill. Luminosity will be limited to the absolute minimum required by Health and Safety standards and will be timed to be extinguished for as long a period as possible at night. All lights must face downwards, and must not point directly at natural features. The ILP (2023) guidance notes provide details on lighting requirements for nocturnal animals. Further advice on lighting will be provided following the completion of the further survey for bats.
 - 10.8 In the absence of details plans for the site, general recommendations for landscaping are provided. Development of an area gives the opportunity to carry out further enhancements to benefit wildlife, especially during the landscaping process. Trees and shrubs must be planted within the soft landscaping areas and must be native to the region, therefore supporting local biodiversity. Taking into account the conditions present on site, Table 4 below includes a list of suitable native tree and hedgerow species, which can be planted as part of the landscaping process. It is essential that such plants are sourced locally, in order to reduce likelihood of importing diseases. Guidance on the selection of trees and establishment for landscape planting can also be taken from the Woodland Trust: Tree Species Handbook.

Table 4: Recommended Native Tree and Shrub Species

| Common Name | Scientific Name |
|-------------------|---------------------------|
| Field maple | <i>Acer campestre</i> |
| Alder | <i>Alnus glutinosa</i> |
| Barberry, common | <i>Berberis vulgaris</i> |
| Silver birch | <i>Betula pendula</i> |
| Downy birch | <i>Betula pubescens</i> |
| Dogwood | <i>Cornus sanguinea</i> |
| Hazel | <i>Corylus avellana</i> |
| Hawthorn, common | <i>Crataegus monogyna</i> |
| Spindle | <i>Euonymus europaeus</i> |
| Alder buckthorn | <i>Frangula alnus</i> |
| Holly | <i>Ilex aquifolium</i> |
| Wild privet | <i>Ligustrum vulgare</i> |
| Crab apple | <i>Malus sylvestris</i> |
| Black poplar | <i>Populus nigra</i> |
| Aspen | <i>Populus tremula</i> |
| Wild cherry | <i>Prunus avium</i> |
| Bird cherry | <i>Prunus padus</i> |
| Blackthorn | <i>Prunus spinosa</i> |
| Wild pear | <i>Pyrus communis</i> |
| Sessile oak | <i>Quercus petraea</i> |
| Pedunculate oak | <i>Quercus robur</i> |
| Purging buckthorn | <i>Rhamnus cathartica</i> |
| Eared willow | <i>Salix aurita</i> |
| Goat willow | <i>Salix caprea</i> |
| Grey willow | <i>Salix cinerea</i> |

| | |
|-------------------|--------------------------|
| Purple willow | <i>Salix purpurea</i> |
| Elder | <i>Sambucus nigra</i> |
| Rowan | <i>Sorbus aucuparia</i> |
| Wild service tree | <i>Sorbus torminalis</i> |
| Yew | <i>Taxus baccata</i> |
| Small-leaved lime | <i>Tilia cordata</i> |
| Wayfaring tree | <i>Viburnum lantana</i> |
| Guelder rose | <i>Viburnum opulus</i> |

- 10.9 It is important to implement good horticultural practice in any landscaping scheme, including the use of peat-free composts, mulches and soil conditioners. The use of pesticides (i.e. herbicides, insecticides, fungicides, and slug pellets etc.) must be discouraged where possible to prevent cumulative fatal effects to animals via the food chain, particularly invertebrates, birds and/or mammals. Any pesticides used must be non-residual.
- 10.10 Any enhancements make a positive contribution to local biodiversity and promote Biodiversity Net Gain targets as laid out in PPW 12, and Section 6 of the Environment (Wales) Act 2016. Enhancements must include sowing wildflowers that benefit British pollinators as part of the sites soft landscaping proposals and raised beds. Recent research into species that are used by wild bees (Nichols, Goulson and Holland, 2019) has demonstrated that a mix of 18 wildflower species was sufficient to support 100% of bee species observed. Table 5 below includes a list of the 18 wildflowers that were found to support the highest diversity of bee species surveyed. Wildflower seeds and plug plants must be sown/ planted where species are not likely to colonise the site naturally, and where possible must be of local provenance, to limit the import of disease and preserve regional genetic variation. Suitable seeds and plugs must be obtained from regional suppliers like Celtic Wildflowers, Welsh Organic Wildflowers or similar organisations.

Table 5: Recommended Wildflowers to Support Wild Bees

| Common Name | Scientific Name |
|-----------------------|----------------------------------|
| Kidney vetch | <i>Anthyllis vulneraria</i> |
| Harebell | <i>Campanula rotundifolia</i> |
| Greater knapweed | <i>Centaurea scabiosa</i> |
| Rough chervil | <i>Chaerophyllum temulum</i> |
| Pignut | <i>Conopodium majus</i> |
| Bindweed | <i>Convolvulus arvensis</i> |
| Smooth hawkbeard | <i>Crepis capillaris</i> |
| Wild carrot | <i>Daucus carota</i> |
| Meadow cranesbill | <i>Geranium pratense</i> |
| Hedgerow cranesbill | <i>Geranium pyrenaicum</i> |
| Musk mallow | <i>Malva moschata</i> |
| Wild marjoram | <i>Origanum vulgare</i> |
| Poppy | <i>Papaver rhoeas</i> |
| Primrose | <i>Primula vulgaris</i> |
| Charlock | <i>Sinapsis arvensis</i> |
| Perennial sow-thistle | <i>Sonchus arvensis</i> |
| Dandelion | <i>Taraxacum agg.</i> |
| Scentsless mayweed | <i>Tripleurospermum inodorum</i> |

- 10.11 Further enhancements and mitigation proposals for bats and nesting birds will be provided following the further survey works.

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Appendix I Site Maps and Plans

Figure 1: Aerial view of the site

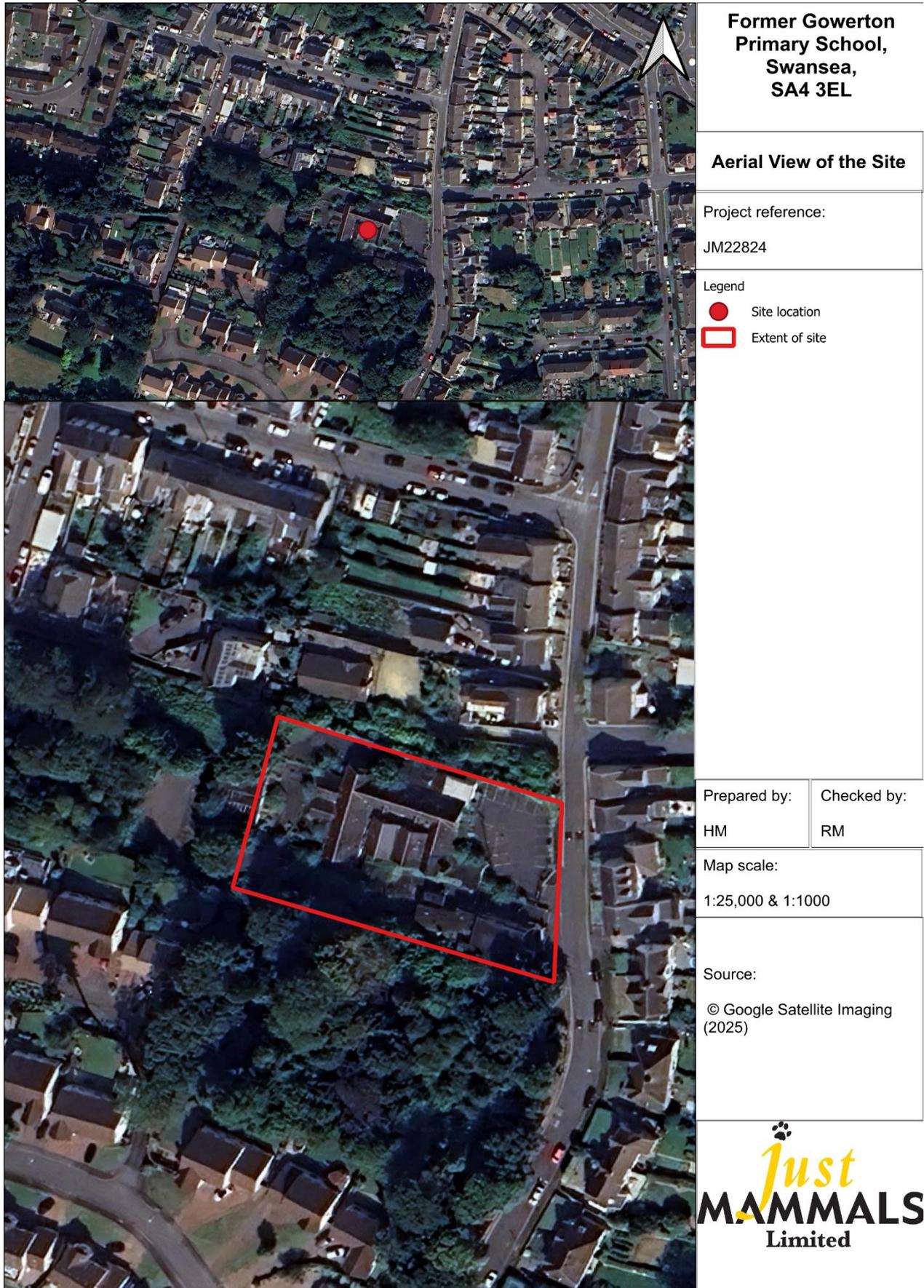


Figure 2: Phase 1 Habitat Map



Appendix II Site Photographs

Plate 1: Front east elevation of the school building



Plate 2: Eastern elevation mono-pitched roof



Plate 3: Western elevation of the school



Plate 4: South facing gable extensions



Plate 5: Flat-roofed extension at south-east corner



Plate 6: North gable and western slope of main roof



Plate 7: Internal view looking south



Plate 8: Internal view of collapsing suspended ceilings



Plate 9: Herald moth wings found internally



Plate 10: Jackdaw nest (inactive) found internally



Plate 11: Broken vent on north facing elevation



Plate 12: Northern boundary looking west



Plate 13: South-west corner looking east



Plate 14: South-west corner looking north



Appendix III Relevant Legislation

Bats

All species of bat in Britain, and their places of rest are protected under the provisions of the Wildlife and Countryside Act 1981 (WCA), Section 9(1), 9(4)(a) and 9(4)(b) as amended by Schedule 12 of the Countryside and Rights of Way Act 2000. Further protection is afforded by the Conservation of Habitats and Species Regulations (Amendment) (EU Exit) 2019. In relation to structures used by bats for shelter or protection (i.e. roosts), this legislation makes it an offence to either intentionally or recklessly damage, destroy or obstruct access to any site used by bats, whether bats are present at the time or not, or to intentionally or recklessly disturb bats within a roost.

Infringements under this legislation include building demolition, removal of hollow trees, blocking, filling or installing grills over old mines or tunnels, building alteration or maintenance work, re-pointing of stone walls, getting rid of unwanted bat colonies, re-roofing, remedial timber treatment, re-wiring or plumbing in roofs, treatment of wasps, bees or cluster flies (Mitchell-Jones, 1992; Childs, 2001). Greater horseshoe bat, lesser horseshoe bat, Bechstein's bat, greater mouse eared bat and barbastelle are included in Annex II of the Conservation of Habitats and Species Regulations (Amendment) (EU Exit) 2019 and hence require special protection.

Maximum penalties for committing offences relating to bats or their roosts can amount to imprisonment for a term not exceeding six months or to fines of up to Level 5 on the standard scale under the Criminal Justice Act 1982/1991 (i.e. £5000 in April 2001) per roost or bat disturbed or killed, or to both. Bodies corporate and their directors/secretaries are liable for offences under the 2017 Regulations and the WCA. Additionally, where such an offence results in the offender benefitting in a monetary form from the illegal action, confiscation or civil recovery of the proceeds can occur under the Proceeds of Crime Act 2002.

It is sensible to assess as soon as possible if bats are present at potential sites for development – preferable before the land is acquired. In some cases the period required for adequate survey work may span more than one calendar year. If a development, including demolition or change of use, is likely to impact on bats and their roosts then a licence will usually be required. Adequate survey results are a necessary input to any licence application.

The law with respect to dwellings and other structures is applied equally. Where disturbance is deemed likely to have a significant effect on bats to survive, breed and rear their young or will affect the local distribution and abundance of the species, a European Protected Species licence issued by Natural Resources Wales. A licence application must demonstrate that the development will not be detrimental to the maintenance and conservation status of the species concerned.

This explanation must be regarded only as a guide to the law. For further details, reference must be made to the Wildlife and Countryside Act 1981 (as amended), the Conservation of Habitats and Species Regulations (Amendment) (EU Exit) 2019, and the Countryside and Rights of Way Act 2000.

Wild birds

All wild birds, their eggs and nests are protected by The Wildlife and Countryside Act 1981 (as amended). It is an offence, with certain exceptions, to:

- intentionally kill, injure or take any wild bird;
- intentionally take, damage or destroy the nest of any wild bird while it is in use or being built;
- intentionally take or destroy the egg of any wild bird;
- sell wild birds or put them on display for sale;
- use traps or similar items to kill, injure or take wild birds; and
- intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building, or at a nest containing eggs or young, or disturb the dependent young of such a bird.

Penalties that can be imposed for criminal offences in respect of a single bird, nest or egg contrary to the Wildlife and Countryside Act 1981 (as amended) is an unlimited fine, up to six months imprisonment or both. In exceptional cases NRW and Natural England issues licences for specific purposes, so that legitimate work may be undertaken without breaking the law.

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