

# An Updated Ecological Assessment & Mitigation Report for Peterchurch Primary School

Aim: To establish the presence or absence of bats & birds in the building & importance of adjacent habitats.

Peterchurch Primary School Peterchurch Hereford HR2 0RP

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## 1. Introduction

As part of the planning application for the Peterchurch School Redevelopment it is necessary to survey all the buildings and areas to be directly affected by the proposed development, to establish whether there are any protected species currently using the existing buildings or any priority habitats on the site.

This ecological report should be read in conjunction with the Tree Survey & Arboricultural impact Assessment & Tree Protection Plan by HEC Report No 22121.

## 2. Methodology of Surveys

The surveys of the buildings & land were originally carried out on the 11<sup>th</sup> & 26<sup>th</sup> November 2021; Since then, the site has been re-surveyed on 3<sup>rd</sup> September & 10<sup>th</sup> December 2024 by Ros Willder MCIEEM & CEnv, Bat Licence number CLS03109 of Willder Ecology & Natasha James Ecologist & Licence number 2019-43685-CLS the weather was sunny. The daytime surveys began at 10:30 am.

A detailed daytime survey was carried out of the buildings and any areas which would potentially be affected by this proposal. This was done by a thorough visual inspection of all the buildings using a strong hand-held torch.

In addition, a frequency division bat detector and endoscope were used, where appropriate, to enable further detail examination of the walls & roofs. The area around the buildings was also surveyed and the adjacent habitats assessed.

An extended Phase one habitat survey was carried out for the whole site. The survey followed the standard Phase One Habitat Survey methodology (JNCC, 2010) and focused on:

- A habitat survey to determine type, quality and extent of habitats present (using the DAFOR scale, which is Dominant, Abundant, Frequent, Occasional & Rare). Botanical lists of each habitat type where appropriate.
- A survey to determine the presence of, or the potential for the site to support protected animals which include the following:-

- Potential for reptile or amphibians particularly great crested newt.
- Potential for Badgers to use the site such as evidence of setts, latrines, tracks etc
- Potential for breeding birds or bats to use the site.

In addition to the Daytime surveys three bat activity surveys were carried out of the school buildings on the 8<sup>th</sup> June 2022 & the 5<sup>th</sup> July 2022 & 3<sup>rd</sup> September 2024 by four bat workers Ros Willder Bat Licence number CLS03109, Natasha James Licence number 2019-43685-CLS, Dave Smith CLS 137061, George Rudd (14 years ecological bat survey experience) & Jason Sawyer (2 years of bat survey experience) & Beth Hempshall Licence CLS10925 see full details of surveys in section 3.3.

A pond search was carried out to identify ponds within 250m & 500m of the site, the results of which are discussed in Section 4 and shown on the Pond Search map is shown in Appendix Three.

A designated site search was also carried out using the Hereford Archive and Record Center and the results are discussed in section 4 and shown in Appendix four.

A Biodiversity Net Gain calculation was carried out & is available in a separate spreadsheet & report but a summary of the results are shown in section 5.2 & an overall gain of 26.01% was achieved.

# 3. Results of Surveys.

## 3.1 Examination of the main School buildings and outbuildings

The main School building is comprised of several parts there is the Old original school building and more modern additional extensions that have been added.

#### Peterchurch Primary School building one

The old original part of the school was built in 1850 & is shown on the report's cover photo & below in figure one. It is a two-storey pitched building comprised of traditional red brick with a traditional slate roof, part of the western elevation the building was painted however this is peeling off as shown in the cover photograph. The slate roof on the front elevation section was replaced 5+ years ago & has tight fitting tiles, in contrast to the old rear elevation roof that has several gaps. There is a single storey stone building with a slate pitched roof to the rear with gaps in the ridge line as shown below in figure one. They is also a modern red brick flat roofed extension also shown below in figure one. There are also a number of external security lights on the buildings as shown below in figure one.



Figure 1 – The old school building (Building 1) with two single storey extensions

All the windows and doors are well sealed on both the main building and the extensions. However, the slate roof on the old building to the rear and the stone extension do have several gaps at the pitch of the roofs & behind the barge boards.

**Internally** The lower storey of building one has plastered walls that are all painted & in daily use. There is electric strip lighting and a false ceiling with a grid system and square tiles.



The classrooms are well sealed as shown in figure two below.

Figure 2 – classroom on the lower storey of building one

The upper storey of the building is used for storage & lined with painted boarding and timbers and has electric strip lighting as shown over the page in figure three a.

The other part of the roof is a large attic space which was examined from the doorway that leads into it as the floor of the attic was unsafe to walk on (see hazard tape in figure three b over the page). The apex is painted white & no evidence of bats or birds were evident in this area.



Figure 3a - The used roof space in building one



Figure 3b – The attic area of the roof space

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## Peterchurch Primary School building two

Adjacent to the old school building there is a modern red brick building as shown below in figure four. This building has an unusual barn like curved sheet roof with ridges & the roof overhangs slightly over the bricked wall which is then sealed by metal barge boards as shown below in figure four. The building has large white PVC windows and modern red brick walls & is therefore completely well sealed as shown below in figure four.



Figure 4 – main school block (Building 2) adjacent to the old school building

Internally the building has more school classrooms and has a varnished timber lined roof as shown over the page in figure five with a plastered ceiling in the other classrooms as shown over the page in figure six.

The class rooms are naturally well lit from the glazed windows & in addition there is electric lighting throughout in all the classrooms, with the painted walls and lined roofs that appeared to be very well sealed as shown in figures five & six over the page.



Figure 5 – Internal of building section 2



Figure 6 – internal of section 2

## Peterchurch Primary School building three

Adjoining building section two is a modern red brick building which houses the school office and reception area & some additional classrooms as shown in figure seven below. This modern single storey building has a roof line that overhangs the walls & is comprised of tight-fitting concrete interlocking roof tiles & is also well sealed by barge boards at the edge of the roof.

The windows are all PVC framed & glazed and there are external lights & security cameras on the walls as shown below in figure seven.



Figure 7 – The school office block

Internally all the walls are plastered & painted throughout with electric strip lighting & are in daily use

**The Nursery** on the site is a temporary prefab building as shown in figure eight below. The building is painted green and is very well sealed. The walls are Zinc insulated wall panels. The PVC windows and doors are all glazed and sealed. The building has a flat roof as shown in figure eight.

The nursery area is fenced off from the adjacent playground with wooden picket fencing as shown below in figure eight. Adjacent to the nursery there is a small timber tongue and groove garden shed with a bitumen felt roof as shown below in figure eight. The shed is well sealed and has no windows.



Figure 8 – the school nursery building

**The temporary classroom** shown over the page in figure nine is another prefab type building. Like the nursery it is also painted green but unlike the nursery the Temporary classroom has a rough render on the walls. It has PVC windows and doors but the timber ramped access to this classroom was unsafe and unusable with Hazard tapes as shown over the page in figure nine.





Figure 9a & 9b - The temporary classroom with unsafe access ramp removed by 2024

#### Polytunnel

On the site there is one polytunnel. The Polytunnel, has bare ground and is used for growing vegetables. The poly tunnel is open at both ends as shown below in figures 10 a & b. The polytunnel is metal framed and a polythene cover which was shown to have deteriorated slightly by 2024 as shown below.



Figures 10a & b – polytunnel 2021 & 2024



**The Schools Swimming pool** is housed in a curved metal structure which has corrugated Perspex sheeting and concrete floor base as shown below in figure eleven.



Figure 11 – swimming pool building

There is a timber tongue and groove shed on the southwest elevation at the entrance to the swimming pool as shown above in figure eleven and over the page in figure twelve.

The timber section adjacent to the swimming pool polytunnel is well sealed and has a large LED flood light as seen in figure twelve over the page. The roof is flat and covered with bitumen felt. The shed has a PVC glazed window and a timber door as shown over the page in figure twelve.



Figure 12 – the shed adjacent to the swimming pool

Due to the high levels of natural & artificial light throughout the building & the well-sealed swimming pool and shed it is not surprising that there was no evidence of use by either bats or nesting birds within the swimming pool buildings.

The majority of habitats by the buildings are concrete paths with small flower boarders but it addition to this there are a number of trees across the site as shown on the Phase one habitat map in Appendix two & individually detailed in the Tree Report.

All the building's locations are shown on the Phase on habitat map in Appendix two.

## 3.4 Examination of the Land

#### The Playground

The large hard standing playground sits on the southeast of the site in between the school office building and the nursery with a small boat structure as shown in figure thirteen below.

There is another timber tongue and groove garden shed at the edge of this playground by the temporary classroom. It has a pitched roof is covered in bitumastic felt as shown below in figure thirteen.



Figure 13 - Photo to Show the playground & garden sheds

There is also another large area of hard standing to the south east of the site used as a carpark for the school as shown in figure fifteen & the main access drive onto the site at the front of the school building by the main road & shown in figures four & nineteen & on the Phase on habitat map in appendix two.

To the north east of the playground there is also a fenced off old pond area that has become bramble covered by the eastern boundary & the pond is overgrown and discussed further in section four of this report. Adjacent to the nursery building and the playground is **the playing field**.

The grassland habitat is classed as a species poor Amenity grassland. It is comprised of Daisy, Creeping Buttercup, Hawkbit, Ribwort Plantain, Yorkshire Fog, Red Fescue, False Oat Grass, Yarrow, Fly Garrick Mushrooms & Rye Grass. The grassland is shown below in figure fourteen.

There are areas of bare ground within the sward and the field is regularly close mown as it is used as a playing field.



Figure 14 – The playing field

All the habitats on the site are shown in the Phase one Habitat Plan in Appendix two together with the boundaries of the site.

The boundaries of the site are predominately comprised of fences & trees with Boundary one being located on the South-eastern side.

Boundary two is located on the north-eastern side along the edge of the playing field.

Boundary three is on the north-western boundary.

Boundary four is on the western edge of the site and boundary five is by the roadside.

All the boundary habitats are described below and shown on the Phase one habitat plan in appendix two.

**Boundary One –** is comprised of a tall metal fence with a line of trees adjacent to the car parking area comprised of; Sycamore, Ash, Blackthorn, Hazel, Field Maple and a bramble patch. Boundary one is shown in figure fifteen below. Each of the trees & shrubs are marked as T3 to T15 in the Tree report by H.E.C. These trees have recently been confirmed as being owned by the adjacent site.



Figure 15 – Boundary one

**Boundary two** – Is comprised of recently felled line of trees due to the electric power line running across the site (seen in figures fourteen & seventeen). As such there are just shrubs remaining along the fence line comprised of; Hawthorn, Dogwood, Holly, Hazel, Beech and Blackthorn and one young Cherry tree & a young Rowan. A close up of the remaining shrubs along Boundary two is shown in figures sixteen a in 2021 & figure sixteen b 2024 below. This Boundary has developed well from individual shrubs into a hedgerow along the fence in the last three years.



Figure 16a - showing the playing field with B2 fence and shrubs



Figure 16b – showing B2 fence and shrubs with good

**Boundary three** on the northwestern side of the site is a wide patch of trees (including those reduced & felled by the power line) including Cypress, Hazel, field maple & Sycamore with a narrow bramble & nettle patch, as shown below in figure seventeen a in 2021. More recently the amenity grassland has been planted up with young trees & the area is now used for forest school as shown in figure seventeen b in 2024.



Figure 17a – Boundary three



Figure 17b – Boundary three & forest school play area amongst the saplings

**Boundary four –** Is marked by a fence line with Hazel, Blackthorn, Holly, Willow, & Sycamore shown in figure eighteen below, there is a plum tree adjacent to Polytunnel one. The boundary continues with a cypress only hedgerow adjacent to the swimming pool & the carparking area by the oldest part of the school with two young plum trees.



Figure 18 – Boundary four in the North eastern part

**Boundary Five** – the boundary along the front of the school that runs along the car parking and driveway areas is a neatly cut hedgerow that is comprised of Hawthorn, Hazel, Ivy, Blackthorn, & Cypress with an adjacent Ash & Sycamore tree. Boundary five is shown over the page in figure nineteen.

In addition, there is a group of trees by the school building by the entrance to the carpark comprised of Silver birch, Apple & Cypress trees for full details see the tree plan in the tree report.



Figure 19 – Boundary five

Boundary five by the access road off the main road by the carpark .All the boundaries are marked on the phase one habitat map.

## 3.3 Evening bat surveys

<u>1<sup>er</sup> Evening Bat Activity Survey – Peterchurch School</u> 0/06/2022	1 <sup>st</sup> Evening Bat Activity Survey – Peterch	urch School 8/0	6/2022
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Temperature: Start: 18.2 ° C End: 14 ° C,

Cloud cover: 0%, Wind: 0.9 m/s

Surveyors: Jason Sawyer (JS), Ros Willder (RW), Beth Hempshall (BH), Dave Smith (DS) Positions: RW- East, BH- South, DS- North, JS- West.

Sunset 21:28 (Start: 21:00 End: 23:00)

21:51	Common Pipistrelle (CP) heard not seen.
21:57	CP flew through front garden of school and towards car park.
21:58	CP x2 heard not seen from behind at edge of site.
22:01	Silent bat (CP) flew Southwest to Northeast past front of school.
22:03	CP foraging constantly at the edge of school garden on Northern boundary.
22:04	Noctule (N) x2 flying overhead and CP foraging at the edge of school garden to the rear.
22:06	CP flew over school roof Southeast to Southwest.
22:07	CP foraging through school garden at the front.
22:08	Soprano Pipistrelle (SP) flying through garden from South to North from car park.
22:15	CP foraging around the rear of the old school building & swimming pool vegetation.
22:16	CP foraging around the rear of the old school building & swimming pool vegetation.
22:22	CP foraging around North-eastern Garden of school grounds.
22:31	CP foraging around Northeast of school grounds.
22:32	Myotis bat heard not seen.
22:38	CP foraging around garden at front of school.
22:45	All Quiet.
22:55	CP foraging along tree line North of site.
23:00	Survey finished.

No emergences recorded from the school buildings

#### 2<sup>nd</sup> Evening Bat Activity Survey – Peterchurch School

Temperature Start 19.8 • C End 12.6 • C

Cloud cover 0% Wind 0 m/s

Surveyors: Jason Sawyer (JS), Ros Willder (RW), Dave Smith (DS), George Rudd (GR)

Positions: DS- North, RW- West, GR- South, JS-East

Sunset 21:32 (Start: 21:15 End: 23:00)

21:52	Common Pipistrelle (CP) emerged ( <b>E</b> ) from Gable South of (old) school building (by TV ariel).
21:58	CP E from corner of roof on West elevation by old ivy growth next to Gable end.
21:59	CP E from corner of roof by Western Gable end.
22:01	CP flying past South to North.
22:02	CP flying past front of schoolhouse South to North.
22:02	CP foraging near garden sheds at edge of site.
22:10	Soprano Pipistrelle (SP) flew around modern school buildings Southeast to Northeast.
22:11	CP flew past schoolhouse North to West.
22:15	SP flew down the side of schoolhouse East to West.
22:16	SP flew between schoolhouse Gable end and corrugated sheeted school building gable end East to West.
22:16	CP x2 foraging through Garden North to South.
22:20	CP flying over buildings between schoolhouse and corrugated building East to West and then back between Gable end West to East.
22:24	SP flying along edge of school garden to the rear of schoolhouse building.
22:27	CP foraging in schoolhouse garden at front.
22:29	CP foraging around through Garden at the front of the schoolhouse and then around trees in the Northwest corner.
22:31	Brown Long Eared bat (BLE) flying past trees at the edge of site.
22:32	CP foraging North of schoolhouse.
22:36	CP x2 foraging through schoolhouse garden North to South.
22:38	CP foraging North of schoolhouse by vegetation and trees.
22:39	CP foraging around in front of schoolhouse and past trees to the North of site.

22:43	SP x2 flew past Gable end of schoolhouse South to North and CP flying over roof of schoolhouse North to West.
22:44	Noctule (N) flying high over site.
22:47	CP flying between Gables of schoolhouse and corrugated school building North to South.
22:50	SP foraging by trees to North of schoolhouse.
22:51	CP foraging through school garden at front.
23:00	Survey finished.

Notes- Total emergence from school: CP x3 as shown below



Figure 20 – Emergence point of CP bats in 2022 & 2024 & BLE in 2024 in purple

#### Updated Evening Bat Activity Survey – Peterchurch Primary School 03/09/2024

Surveyors: Ros Willder (RW), Karen Sullivan (KS), Asriel Cooper (AC), Joanna Willder (JW)

Equipment = Song Meter bat, Bat Box Duet Heterodyne x2, Bat Scanner, Echo meter touch pro & Night fox whisker digital night vision.

Positions: RW- North, KS-East, AC- South, JW- West

Wind: 0 m/s with occasional gusts of up to 1 m/s.

Cloud cover: 60% Temperature: Start 19.5°C End 14.4°C

Sunset: 19:52 (Start: 19:37 End: 21:22)

19:58	Buzzard flew over and landed on roof and flew off.
20:06	Common Pipistrelle (CP) emerged ( <b>E</b> ) from front of old school building (at edge of roof) and flew Southeast.
20:07	CP <b>E</b> from ridge line (of old schoolhouse) under ridge tile on Eastern elevation and flew South.
20:10	Noctule (N) flying high over site North to South and CP foraging past building to the rear.
20:12	CP foraging around play area to the front of the old schoolhouse building.
20:12	CP x2 <b>E</b> from roof of old schoolhouse building to the rear and CP foraging around the rear of old school building.
20:16	Robin sat on fence at front of school building.
20:17	CP foraging flew from North over swimming pool building and foraged around school building roofs.
20:18	CP foraging up and down past Northern side of old school building.
20:20	CP flying past from rear to front and back again of old school building until 20:21.
20:23	CP x2 flew from South along low roofing and returned around and then foraged along trees on the Northern boundary.
20:25	CP flying along driveway to school very rapidly.
20:26	N flying high over site from North to East.
20:27	Silent bat appeared at corner of roof possible <b>E</b> but late for a CP so possible Brown Long eared bat (BLE).

20:30	CP x2 foraging inside play area at front of old school building and then flying past school building through staff car park and then back again on North and West.
20:31	CP x3 foraging all around old school building.
20:32	CP constant foraging up and down and around old school building.
20:33	Silent bat (likely BLE) <b>E</b> from ridge line and flew low to the ground through play area.
20:35	CP constantly foraging all around site and through courtyard of school.
20:36	CP constantly foraging all around site and through courtyard of school.
20:38	Brown Long Eared bat (BLE) foraging in courtyard at front of school.
20:39	Soprano Pipistrelle (SP) flying from South to North through site and CP foraging all around buildings.
20:43	CP still foraging through staff car park and into playing fields and N flying high over site.
20:46	CP and SP foraging briefly through site South to North past school.
20:47	Myotis (possible Natterers bat) flying around trees to the North of site.
20:55	N flying high over site and CP foraging around site to the East over roof.
20:59	CP flying past Northeast of building and then foraging around trees.
21:07	N flying high over site and CP foraging all around old schoolhouse building.
21:11	SP and CP foraging along Northern side of school buildings.
21:12	SP foraging along trees by Northern Boundary of the site and CP foraging to the rear of school buildings.
21:15	N flying high over site and CP x2 foraging in front play area of school.
21:17	N flying high over site and CP flying through site North to South.
21:20	CP foraging by trees in the staff car park.
21:22	Survey Finished.

Notes: CP x4 emerged & BLE x2. As shown in figure four

# 4 Pond & Data search results & Ecological Assessment 4.1POND SEARCH

A pond search was carried out, using the MAGIC map service from Natural England, to within a radius of 500m of Peterchurch school.

This showed there is one pond within the 500m search radius of the site, it is situated 480m to the southeast of the site, however as it is separated from the site by a main road and a smaller road both of which would be considered as physical barriers that would prevent any newt migration on to the site.

The old onsite pond was created in 2014 and appeared to have almost dried up & is known to dry up in spring & summer each year due to its small size (2m by 2m) and dense covering with bramble and grasses, as shown in the photo in figure twenty-one a below.

During the summer of 2024 the school carried out works to restore the pond by cutting away the brambles & removing the tall grass around the pond in order to try & retain the pond which had some water when the site was visited in December 2024 as shown below in figure 21b.



Figure 21a – The old school pond in 2021 Figure 21b – school pond in 2024

As the School is surrounded by predominantly hard standing and close mown amenity grassland the proposal will have limited impact on any suitable Great Crested Newt (GCN) habitat, the pond has started to be restored & whilst it provides low suitability for GCN it is at least holding water in winter & has been opened up will be of benefit in the future & only other nearest pond is 480m away divided by a main road, therefore the likelihood of GCN being present on site is still considered to be negligible.

## 4.2 THE DATA SEARCH

Although there were no Special sites of Scientific Interest SSSI, or Special Areas of Conservation SAC identified within a 4km radius of the site there were Local Wildlife sites as detailed below:-.

The local wildlife sites were a Roadside Verge Nature Reserve 8 designated for great leopard's-bane situated 1km away.

Green's & Wallstone Woods, Whitewall Coppice Special Wildlife Sites (SWS) an area of ASNW is situated 1km away from the site.

The River Dore SWS is situated the closest to the site within 300m away as shown in appendix four & also more clearly on the Pond search map in appendix three.

Moccas Park & adjoining woodland is situated 2kms away from the site.

The Species records nearest to the site (within 0.5 – 1km away) included Brambling, Common Pipistrelle bat, August thorn moth, West European Hedgehog, Red Kite, Blue tit, Fairy Shrimp, Dark-barred Twin carpet moth, & Brown trout & Bullhead.

The data search was carried out using the Herefordshire Biological Records Centre and the full data search findings are included in appendix four.

# 4.3 Ecological Assessment

All the modern school buildings, the temporary classroom building, the nursery, the swimming pool & the garden sheds & adjacent areas of hard standing (paths, carparking areas & playgrounds) & close mown grassland have negligible suitability for use by any European protected species such as bats or amphibians such as Great Crested Newts. This is due to a lack of suitable cracks & crevices & dark undisturbed areas within the buildings & the areas of hard standing provide no cover or suitability for Great crested Newts. In addition, all the buildings (listed above) on site showed no evidence or suitability for nesting birds.

However, the oldest part of the school building (Building one) on the southwest two-storey building part was identified as having a low potential to be used by bats (see Photo on front cover & in figures 1 & 3a & 3b). Whilst the attic areas showed no signs of bats roosting it is not possible to rule out the potential for bats to be using the areas between tiles & the lined roofs on the rear elevation due to the gaps between tiles although the likely hood of bats using the front elevation is considered to be negligible due to this part of the roof having been replaced (8yrs ago) & therefore being very tight fitting. In addition, the single storey stone rear extension with a slate tile was also found to have plenty of gaps in the ridge tiles.

As such three bat activity surveys have been carried out on 8<sup>th</sup> June & 5<sup>th</sup> July 2022 & 3<sup>rd</sup> September 2024 to establish if bats are absent or present in the oldest part of the school buildings. Although as this is a phased proposal due to parts of the school needing to remain operational during the proposed new building works are unlikely to be carried out to the building for a period of time, but as bats are protected this must be established before any works can begin see appendix one legal protection of bats & their roosts.

The first evening survey found no bats emerging from the school buildings, but the second survey found 3 Common Pipistrelles Emerging from the apex of the southern gable end & the corner of the roof at the western gable end of the oldest part of the school building as shown in figure 20. The third/update survey found 4 Common Pipistrelle bats & 2 Brown long eared bats as shown in Figure twenty. As well as swifts nesting at the northwestern corner of the roof in 2021.

As a bat roost by low numbers of bats has been confirm any works to this part of the school buildings will require a Bat mitigation Licence from

Natural England to be applied for & received once planning permission has been granted.

A Mitigation strategy will be required to show how the dismantling works can proceed to the oldest part of the school building without any potential harm to the individual bats & nesting birds & new bat roosts & nesting spaces for swifts created in the new school building as compensation as detailed in the mitigation section 5.1.

There will be no adverse impacts on any amphibians including GCN by this proposal as no ponds will be affected by this proposal as the only pond on site appears to have dried up & is confirmed as being dry in the spring & summer months and has only recently been restored & there are no ponds that are connected by habitats to the site within 500m of the site, the site is predominately hard standing and close mown grassland managed as a playing field as such the likelihood of any adverse impacts on GCN is considered to be negligible.

The building of the new school building (as the proposed building location shows) will only result in the direct loss of amenity (close mown) grassland & hard standing which is of low ecological value for wildlife.

The habitats of most value on the site are confined to the Boundaries of the site, although with the wholescale removal of the trees by the power line contractors along Boundary two in 2021 this is greatly reduced to just the remaining individual trees along the Boundary one, the short section of mixed trees & shrubs along Boundary three & the individual trees along Boundary Four as well as some of the individual trees at the front of the school.

The final design for this proposal will retain the majority of the boundary trees (the majority of the trees along Boundary one by the carpark are owned by an adjacent site currently under a planning application by Barrett) as such the proposal will result in the loss of close-mown amenity grassland & hard standing for the new school building & no loss of any priority habitats on the land suitable for European protected species.

Whilst the building of the new school building will not result in loss of priority habitats, the dismantling of the oldest part of the school building will result in the loss of bat roosts used by 3-4CP & 2 BLE as such both mitigation & compensation will be required & this will be designed into the replacement new building & Licence required to dismantle this part of the school building ( see section 5.1 Mitigation).

In addition, the proposal will not adversely affect any Sites of Special Scientific Interest or Special Protection Areas as there are no SSSI within a 2km radius & no SPA's within a 4km radius & the nearest Local Wildlife Sites including the River Dore (which is divided from the site by a main road) can be easily protected by ensuring that no materials are stored or mixed in any areas other than the area of hard standing, a Construction Environmental Management Plan will be produced to ensure there is no potential for run off from site into the River Dore during any proposed construction works can be a pre-commencement condition.

Although the current proposal does not appear to directly impact on any priority habitats, or designated sites this does not mean that biodiversity enhancements should not be incorporated to secure a real biodiversity gain for the wider wildlife benefit.

## **5** Conclusion, Mitigation & Enhancements including BNG

The proposal is limited to works within areas of hard standing & close mown amenity grassland which is well-lit area by the school (for security). The modern school buildings and their adjacent areas of hard standing & close mown grass are of limited value to wildlife, as such the proposal will not have any adverse effects on the wider area or any of the local Wildlife site River Dore (which is divided from the site by the main road) or any priority habitats or any European protected species such as Bats or amphibians or reptiles in the wider area.

The lack of evidence of any Bat activity within the modern buildings & there lack of suitability suggests that there are no bats currently using the modern buildings for roosting; this may be due to the high natural light levels due to the curved sheeted & Perspex roofs and the site being well-lit from external lights and the construction being comprised primarily of modern red bricks & prefab which are well sealed providing no cracks or crevices and the roofing sheets having adverse thermal properties for bats. As such it can be concluded that the modern buildings have negligible suitability for bats.

Even though no evidence of bats was found in the modern buildings, and the majority of the adjacent habitats are hard standing & close mown amenity grassland, surveys have been carried out for the oldest two storey school building & mitigation to compensate for the loss of bat roost used on an occasional basis by 4 Common Pipistrelle bats & 2 Brown Long Eared bats as well as a precautionary approach to dismantling works to the roofs of the modern buildings should also be taken so these impacts can be avoided all together as detailed in section 5.1 Mitigation.

It is also important to note that whilst the nursery & the classroom building closest to the playground will need to be demolished, the oldest two storey part of the school building will be retained whilst works are carried out to building the new school building & will not be dismantled until July 2026.

Although the school buildings are surrounded by hard standing & close mown amenity grassland & no amphibian (including GCN) habitat will be affected by the proposed new school building & the likelihood of any GCN being on site is concluded to be negligible a precautionary approach is recommended due to the close proximity of the River Dore Special Wildlife Site (SWS) & to avoid any potential harm & as such a CEMP is proposed to ensure no impacts.

There was no bird nests found within any of the modern buildings to be affected by the proposals therefore there is no restriction on the timing of any works to dismantling of the modern school buildings, but the older school building will have to carried out under a Bat Mitigation Licence & supervision of the named ecologist on the Licence & outside of the main birds nesting season to avoid any harm to the nesting swifts a precommencement check will be carried out.

Even though the works are deemed to have minimal impact to the local site this does not mean that enhancements cannot be designed to enable a clear biodiversity gain for wildlife as part of this proposal see section 5.2.

# 5.1 Mitigation strategy & a precautionary approach

No works to the old two storey school building will be carried out until a Bat Mitigation Licence has been applied for & granted from Natural England & all works will follow the mitigation as detailed below. In addition, no dismantling of the old school roof will occur during the main bird nesting season March to August due to the nesting swifts (unless found to be absent following a pre-commencement check) & bats (May to August).

All persons involved in the works to the site shall receive a detailed 'Toolbox Talk' on Nesting birds, Bats, Amphibians & reptiles & the River Dore Special SWS from Ros Willder of Willder Ecology, or a similarly qualified ecologist.

The toolbox talk will cover the following: -

- the full legal protection of Nesting birds, Bats & amphibians & reptiles & the River Dore SWS & its local importance for wildlife.
- the lifecycle of Bats, their identification & their identified roosting areas in the old school building
- Details of where the bat roosts are located & the nesting swifts in the old school building & how to avoid harm to them this will include precommencement checks
- Compensatory integral lbstock boxes in the Gable ends of the new school building
- The requirements of the Bat Mitigation Licence such as direct supervision of any works to the roof dismantling of the old school building by Ros Willder & timing works outside of when the bats are present
- The lifecycle of amphibians (& Great Crested Newts) & reptiles & what habitats they will be found in & how to identify a GCN.
- What to do if evidence of either Bats or nesting birds are found during works in any of the modern buildings
- What to do if amphibians, reptiles are unexpectantly found during works

 Where all materials should be stored & mixed on site to avoid any potential for run off from site during building & dismantling works to the school as detailed in the CEMP

A CEMP will be submitted to the LPA for approval as part of this application & a bat mitigation Licence will be applied before any works begin to the oldest part of the school building. This will include any roof dismantling works to the old school building will be overseen by Ros Willder of Willder Ecology or a similarly qualified ecologist. If any unexpected finds such as GCN or bats in any of the modern buildings are found all works will cease until Natural England has been contacted and way forward agreed which may include an additional license application to permit the works to continue.

External lighting is planned as per the lighting plan 100583-DGL-EX-DR-E-6300 to minimise additional light spill into the surrounding area and will only be used on occasional evenings (parents evening & events) in the winter for health & safety or near the bat mitigation that is required & provide natural dark skies in the area as an enhancement to the wider areas.

### **5.2 BIODIVERSITY ENHANCEMENTS**

Although no bats or birds were found in the modern Buildings & the old school building has had its Bat activity surveys carried out & both bats & birds have been identified as using it as part of the enhancements for the proposal bird boxes such as swift boxes & bat boxes will be incorporated into the new school building as well as open fronted bird boxes incorporated into the new building & bug hotels & hedgehog houses in the hedge lines as shown in appendix five.

As an enhancement for bats an integral bat bricks will be included at the top of the walls & lbstock bat boxes incorporated into the gable ends & bat bricks rear walls to encourage future use of the building by bats as shown in Appendix five.

Species rich native hedgerows (Field maple, Hazel, Dogwood, Blackthorn, Hawthorn, Spindle) will be planted as per the landscape plan. A series of native trees will be planted as shown on the proposed Landscape plan.

Whilst there will always be a requirement for playing fields & playgrounds as part of the school environment the design of these should include a much greener approach that provides incorporated wildflower rich grassland areas where practical as well as the football/netball pitches so that ideally forest school groups can continue to use the site.

The existing restored pond will be further enhanced ideally with native aquatic plants incorporated & the low fencing maintained for wildlife.

The new building will ideally also be designed using a passive heating system.

If all the recommendations are followed no harm will occur to any designated sites in the wider area or EPS & enhanced provision will be made for future use by both bats and birds as an overall enhancement for biodiversity to the site.

The Biodiversity Net gain as part of this proposal has secured a BNG 26.01% as shown in the summary over the page.

FINAL RESULTS					
Total net unit change (including all on-site & off-site habitat retestion, creation & enhancement)	Habitat units	0.38			
	Hedgerow units	1.43			
	Watercourse units	0.00			
Total net % change (including all on-site & off-site habitat retermion, creanon & enhancement)	Habitat units	26.01%			
	Hedgerow units	182.09%			
	Watercourse units	0.00%			
Trading rules satisfied?	Yes	Yes 🗸			

Unit Type	Target	Baseline Units	Units Required	Unit Deficit	
Habitat units	10.00%	1.45	1.60	0.00	
Hedgerow units	10.00%	0.79	0.87	0.00	
Watercourse units	10.00%	0.00	0.00	0.00	1

No additional area habitat units required to meet target  $\checkmark$ No additional hedgerow units required to meet target  $\checkmark$ No additional watercourse units required to meet target  $\checkmark$ 

### APPENDIX ONE LEGAL STATUS OF BATS & BIRDS

### LEGAL PROTECTION OF BATS

The Wildlife and Countryside Act 1981 (WCA) transposes into UK law the Convention on the Conservation of European Wildlife and Natural Habitats (commonly referred to as the 'Bern Convention'. The 1981 Act has been amended several times, most recently by the Countryside and Rights of Way [Crow] Act 2000, which added 'or recklessly' to S 9 (4)(a) and (b).

All species of bats are listed on Schedule 5 of the 1981 Act, and are therefore subject to the provisions of section 9, which make it an offence to:

- Intentionally kill, injure or take a bat
- Possess or control any live or dead specimen or anything derived from a bat Intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection by a bat
- Intentionally or recklessly disturb a bat while it is occupying a structure or place which it uses for that purpose

**The Conservation of Habitats and Species Regulations 2017** which consolidate the Conservation of Habitats and Species Regulations 2010 with subsequent amendments. The Regulations transpose Council Directive 92/43/EEC, on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive), into national law and came into force on 30th November 2017.

All bats listed on Annex IV of the Directive, and some are also listed on the Annex II. The latter Annex relates to the designation of Special Areas of Conservation (SACs) and covers **Greater** and **Lesser Horseshoe bats**, **barbastelle** and **Bechstein's** bat.

Inclusion on Annex IV ('European protected species) means that member states are required to put in place a system of strict protection as outlined in Article 12; this is done through inclusion on Schedule 2 of the Regulations. Regulation 53 makes it an offence to;

- Deliberately capture or kill a bat Deliberately disturb a bat
- Damage or destroy a breeding site or resting place of a bat
- Keep, transport, sell or exchange, or offer for sale or exchange alive or dead bat or any part of a bat

# LEGAL PROTECTION OF BIRDS

The Wildlife and Countryside Act 1981 is the main instrument for the protection of wild birds in the law of England, Wales and Scotland.

It protects all wild birdsof whatever species (certain exceptions apply within the act).

Barn Owls are listed on Schedule 1 which gives them special protection.

The act makes it an offence "if any person intentionally- Kills, injures or takes

(handle)any wild bird;

Takes, damages or destroys the nest of any bird while that nest is in use or being built; (barn owls do not 'build' a nest but may make a nest scrape) or

Takes or destroys an egg of any wild bird"

It is also an offence "if any persons have in his possession or control-

any live or dead wild bird or any part of, or anything derived from, such a bird; or An egg of a wild bird or any part of such an egg" (s 1 (2)).

### **LEGAL PROTECTION OF AMPHIBIANS AND REPTILES**

Reptiles are protected from killing and injury (two species are fully protected, this includes, but is not confined to:

Disturbance and deliberate destruction of their habitat) under The Wildlife and Countryside Act 1981 (as amended).

The Conservation (Natural habitats &c.) regulations 1994 (the habitats Regulations were recently updated by The Conservation of Habitats and Species regulations 2017

Amphibians such as Great crested newts are fully protected, including protection against:

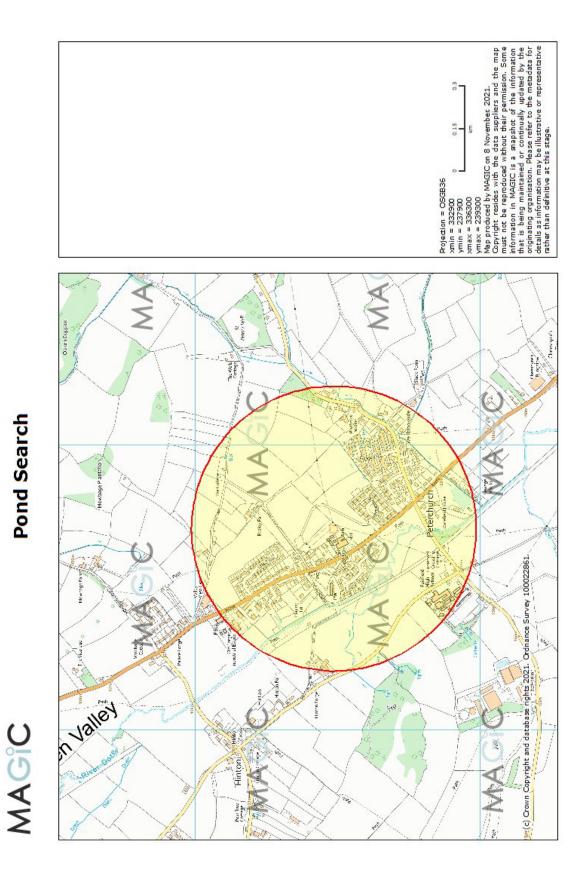
- Deliberate disturbance
- Deliberately killing or capturing
- Deliberately taking or destroying eggs
- Deliberately damaging or destroying breeding sites and places of shelter.

Licensing from Natural England

A Licence simply permits an action that is otherwise unlawful. A licence should be applied for if, on the basis of survey information and specialist knowledge, it is considered that the proposed activity is reasonably likely to result in an offence (killing, breeding site destruction, etc – see above). No licence is required if, on balance, the proposed activity is unlikely to result in an offence (this is from the great crested newt mitigation guidelines).

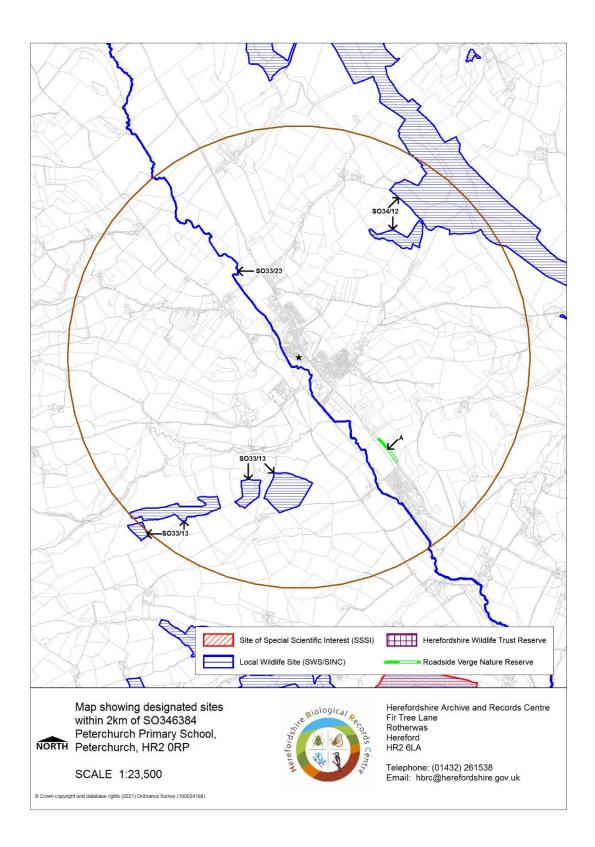
# APPENDIX TWO PHASE ONE HABITAT MAP

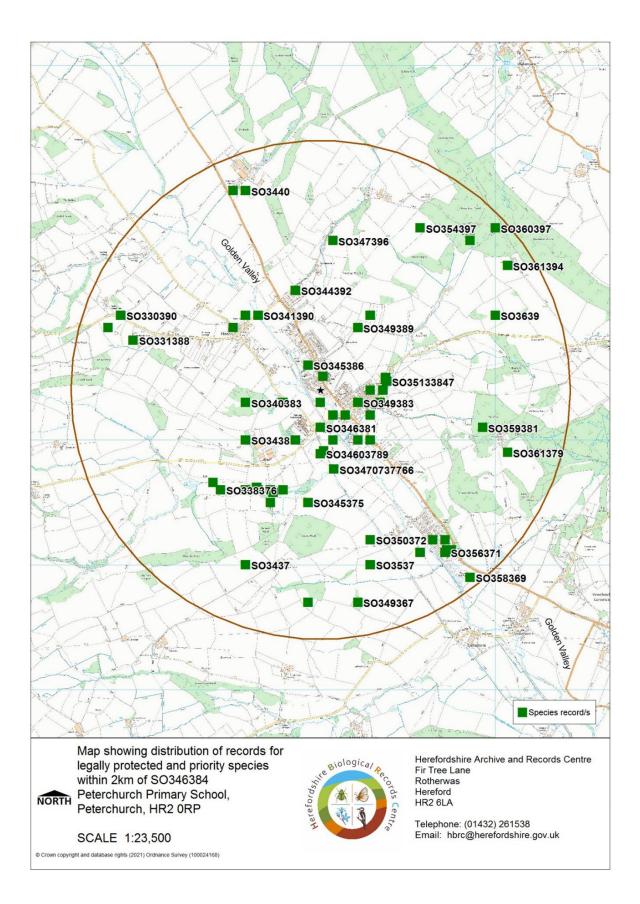




# **APPENDIX THREE POND SEARCH MAP**

# APPENDIX FOUR DESIGNATED SITE SEARCH MAP





# **APPENDIX FIVE PROPOSED ENHANCEMENTS**



# Native Species rich hedges & native fruit trees & wildflower areas

See Wildlife pond design, hedgehog houses & insect houses & Integral Bat & bird box details over the page



To be positioned in the walls facing trees & hedges ideally on the apex of the gable ends



#### Type 27 Schwegler Brick Box

Box should be cemented into a wall in a building or underneath a bridge or tunnel in relatively humid conditions. Useful for incorporating into new buildings to attract bats, or provide new roost sites during building renovation. Contains a single internal wooden panel to simulate a crevice for roosting. Front panel is removable for cleaning. Dimensions: 265H x 180W x 240D mm. Entrance hole: 55×26mm. NHBS Price: £41.95 including VAT

To be positioned at the top of wall away from direct light spill

#### WoodStone Build-in Open Nest Box

WoodStone Build-in Open Nest Box is designed for use in new build or renovations. The nest box is intended to be built into walls to provide nesting cavities. This provides much needed nesting cavities for species such as Robins, Wagtails and Black Redstarts. Constructed from FSC certified WoodStone this nest box will not deteriorate like a traditional wooden nest box. NHBS Price: £17.95 including VAT.





To be positioned at the top of the wall



Hedgehogs' houses to be positioned within the boundaries



to be positioned on the new building walls

#### Designing your wildlife pond



The siting, depth profile and pond surrounds are of great importance if the pond is to be successful at attracting a range of wildlife.

#### Siting the pond

Where? An ideal place for a pond is on level ground, in an open, sunny area, the sunnier the better, and well away from any trees. To achieve a range of conditions, it may be beneficial to choose a spot that receives a little shade at some point during the day. A location that is already damp or waterlogged is not really suitable, being at risk of constant flooding. An area that is too shady will inhibit the growth of essential oxy-genating and other plants.

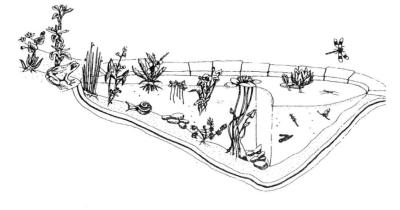
#### Pond profile

Depth. This is very important. To be attractive to wildlife, a pond should have sides with gentle slopes, not steep ones. If the pond is quite small, shallow sloping edges should be on one side at least. Extensive shallow areas 30cm wide and 4-20cm deep; especially to the south and west. A deeper zone at a minimum 60cm depth and ideally 100cm or more.

#### Around the pond edges

Providing extra habitats around the edge of the pond will be of great benefit to wildlife. These can be created by: Placing stones, logs and tall plants in spots all around the pond edges. Allowing some long grass of other vegetation to grow up on at least one side of the pond. Building scalloped pond edges rather than a straight ones - these will provide many different micro-conditions with variations in shade and depth and temperature. Best of all, creating an accompanying unsubmerged bog area to the north-north east side of you pond. (Details are given below)

For ease of maintenance and pond-watching, it is sometimes best to have one relatively formal edge to your pond, with a straighter edge and incorporating paving, gravel path or short turf. The size of the pond is less important than including the features outlined above into the design. Although larger ponds will generally support more wildlife a small garden pond will still be an effective home for many creatures.



Damselfly nymph

Freshwater shrimp

Water boatman









Ramshorn snail

garden pond - R Burkmar