

Green Infrastructure Assessment

Caerleon Comprehensive

November 2025

Ecology | Green Space | Community | GIS

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Report Produced for

**Willmott Dixon Construction
Limited**

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Issue:

V1

Date:

November 2025

Project:

ETH25-472



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SUMMARY

Purpose of the Report	This Report has been produced by Ethos Environmental Planning on behalf of Willmott Dixon Construction Limited. It provides an assessment of the existing and proposed green infrastructure associated with the proposed development at Caerleon Comprehensive School.
Description of the scheme	The site is a school comprising of a series of buildings, hard standing and green infrastructure. The development proposals for the site include plans to adapt the school in regard to the Building Bulletin 98 (BB98) 1 “Building Framework for Secondary School Projects”.
Key existing GI features on/around the site	The key GI features on site include the grassland area, four individual trees, line of trees along the southeastern boundary and ornamental hedgerows along the southwestern boundary separating the development site from the playing pitches associated with the school. The key GI features in the immediate zone of influence include grassland, pond and woodland habitats associated with the school and the adjacent golf course, amenity grassland, trees and hedgerows associated with parks and communal spaces, allotments, the River Usk is located 550m west of the site, adjacent to the golf course and the River Lwyd is located 820m. In the wider area, the significant GI features include the Severn Estuary, Llandegfedd Reservoir, St Julien’s Park and Little Bullmore Wood.
Summary of proposed GI interventions	The development will retain 0.088 ha of grassland and create rain gardens, trees, ornamental planting, hedgerows and amenity grassland predominately around the perimeter of the site.
Conclusion	Assuming the implementation of proposed green infrastructure the proposed development is therefore in accordance with relevant national and local planning policies in relation to GI infrastructure.

1 INTRODUCTION

- 1.1 This Green Infrastructure Assessment (GIA) report has been prepared by Ethos Environmental Planning (Ethos) on behalf of Willmott Dixon Construction Limited. The GIA was written by Joe Bamforth MSc BSc (Hons), Senior Ecologist, and approved by Jim Phillips, Managing Director at Ethos.
- 1.2 The report provides the results of a GI assessment in relation to the proposed development of Caerleon Comprehensive School (Central Grid Reference ST 33495 90579), hereafter referred to as 'the site' and shown in Figure 1. Ecological surveys have been undertaken by Ethos on the site in October 2025, comprising a desk study, Habitat Classification survey and structure inspection.
- 1.3 Previous surveys were undertaken in 2024 by Ecology Wales and comprise a Preliminary Ecological Assessment and Bat Emergence Survey.
- 1.4 The site layout and the landscape scheme have been prepared by HLM Architects and the arboricultural assessment by Steve Ambler and Sons Tree Specialists Ltd.
- 1.5 The site comprises 1.74 hectares and includes areas of hardstanding in the form school buildings, access and parking, grassland areas, vegetated garden, individual trees and ornamental hedgerows.



Figure 1 Site location

2 POLICY AND LEGISLATION

2.1 National Policy

2.1.1 Planning Policy Wales (Edition 12, February 2024) sets out the planning policies of the Welsh government.

2.1.2 Chapter 6 includes policies on Biodiversity and Ecological Networks. The key requirements include:

- Net Benefit for Biodiversity (NBB): securing net benefit for biodiversity through a step-wise approach, the importance of assessing ecosystem resilience in development and strengthening use of the DECCA framework;
- Increased Protection: strengthened approach to the protection of SSSIs, with a higher bar of protection to ensure where there are adverse impacts on the features for which a site has been designated, this should be refused;
- Trees and Woodlands: closer alignment with the stepwise approach, along with promoting new planting as part of development based on securing the right tree in the right place' and further regard to local authority tree strategies; and
- Green Infrastructure: stronger emphasis on taking a proactive approach to green infrastructure, identifying key outputs of green infrastructure assessments with planning applications.

2.1.3 Chapter 6.2 includes policy specifically on green infrastructure:

- Planning authorities must, as part of adopting a strategic and proactive approach to green infrastructure, biodiversity and ecosystems resilience, produce up to date inventories and maps of existing green infrastructure and ecological assets and networks.
- Green Infrastructure Assessments should also draw from the evidence base provided by NRW's Area Statements and Nature Network Maps, Well-being Assessments and locally and regionally collected green infrastructure data and mapping already underpinning local authority approaches to green infrastructure.
- Considering how significant benefits can be delivered through green infrastructure will be a key aim of the assessment and will require collaboration with other stakeholders, including those across administrative boundaries.
- The nature emergency identifying and demonstrating how a net benefit for biodiversity will be secured.

2.2 Local Policy

2.2.1 The Newport Replacement Local Development Plan 2021-2036. Relevant policy from the local plan is PS15 Green Infrastructure and Biodiversity (detail within Appendix 1).

3 PREVIOUS SURVEYS

3.1 Structures inspection and subsequent emergence surveys were conducted by Ecology Wales in May – September 2024 and summarised below:

- A single common pipistrelle was recorded emerging from Structure K in September;
- Buildings D3, A & G were considered to be of Low potential for roosting bats.
- Buildings D1, D2, & H were considered to be of Moderate potential

3.2 Full details can be found in the associated reports (Ecology Wales 2024a &2024b)

4 EXISTING GREEN INFRASTRUCTURE

4.1 Introduction

- 4.1.1 The following section provides a summary of the ecological results undertaken by Ethos Environmental Planning in October 2025 and Steve Ambler and Sons Tree Specialists Ltd in June 2024. The full surveys results are provided within Caerleon Comprehensive Technical Note V1 (Ethos Environmental Planning, 2025) and Tree Survey, Categorisation & Constraints Report (Steve Ambler and Sons Tree Specialists Ltd, 2024).

4.2 Habitat Classification Survey

- 4.2.1 The habitat survey was carried out on 29th October 2025, according to the Phase 1 and UKHab Classification systems. The survey included a detailed assessment of the land within the development boundary, including a description and mapping of all key features and habitat types. The survey was carried out to identify the range of habitats within the site and the predominant and notable species of flora.
- 4.2.2 The site comprises of the following habitats as classified in UKHab (shown in Figure 2 below) with the Phase 1 equivalent in bold:
- Urban – Developed land; sealed surface / **Hardstanding or Buildings**
 - Urban – Artificial unvegetated, unsealed surface / **Gravel**
 - Urban – Introduced shrub / **Introduced shrub**
 - Urban – Vegetated garden / **Amenity grassland**
 - Sparsely vegetated - Ruderal/ ephemeral / **Ephemeral/short perennial**
 - Grassland – Modified grassland / **Amenity grassland**
 - Individual Trees – Urban Trees / **Scattered trees**
 - Hedgerow – ornamental and non-native hedgerow / **Intact species poor hedgerow**
 - Hedgerow – Line of Trees / **Defunct species poor hedgerow with trees**

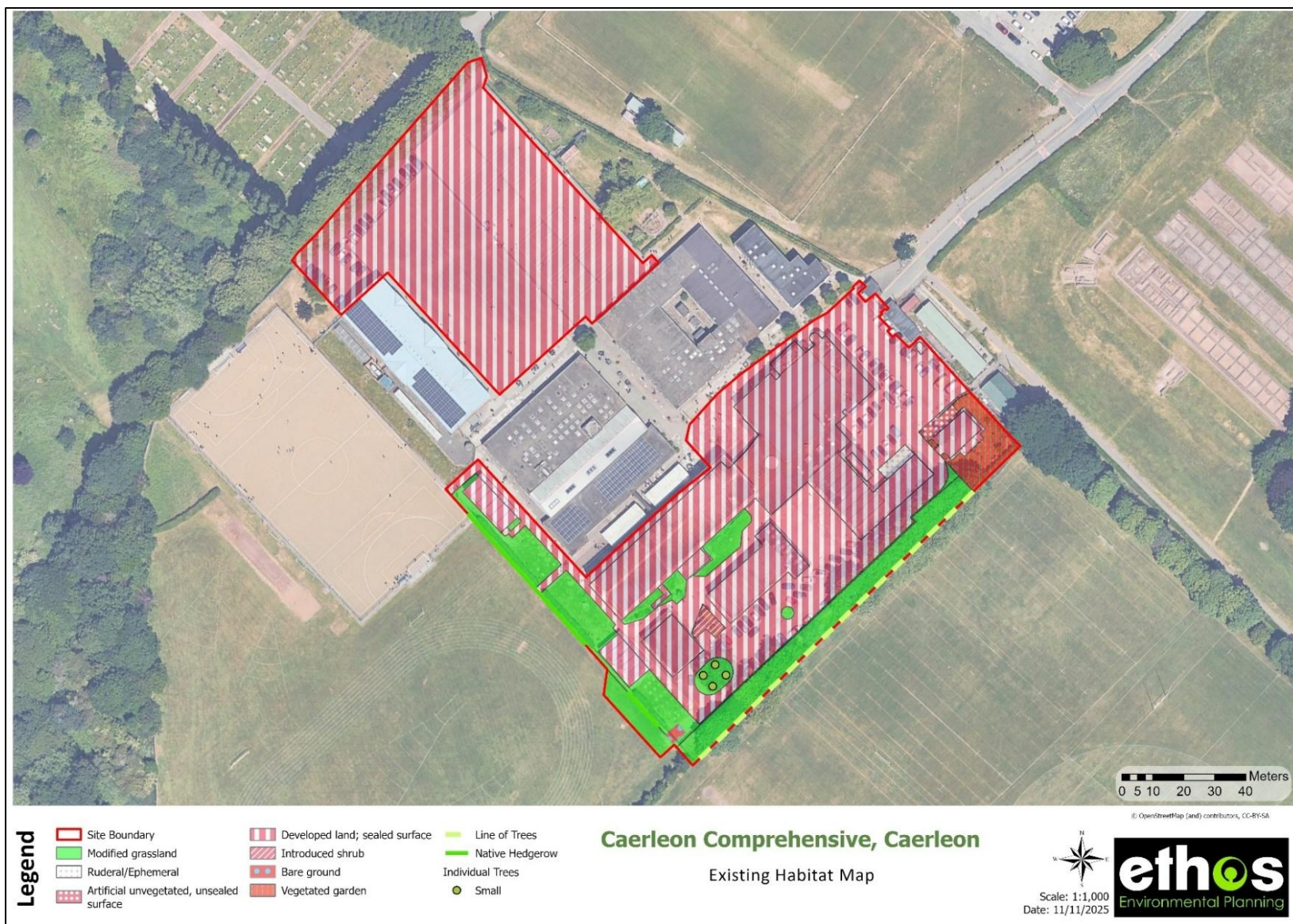


Figure 2 Existing habitats

Developed Land Sealed Surface / Hardstanding and Buildings

- 4.2.3 The majority of the site comprises of built structures and associated hardstanding, such as footpaths, play areas, roads and parking.

Artificial Unvegetated Unsealed Surface / Gravel

- 4.2.4 A small area of gravel is present along the front of Building L.

Vegetated Garden / Amenity Grassland

- 4.2.5 Surrounding Building L is a residential garden comprising of low diversity grassland and ornamental trees, shrubs and hedgerow typical of such land use. This is proposed to be removed to facilitate the development.

Modified Grassland/ Amenity Grassland

- 4.2.6 Areas of low diversity grassland dominated by perennial ryegrass (*Lolium perenne*) are present along the eastern and southern boundaries and along Building A in the centre of the site, other species resistant to trampling typical of such grassland, such as white clover (*Trifolium repens*), dandelion (*Taraxacum officinale agg.*), and greater plantain (*Plantago major*), were also present on the sward. These areas of grassland are intensively managed and heavily damaged from footfall and vehicular access. The majority of the modified grassland is proposed to be removed to facilitate the development. A total of 0.088ha of modified grassland along the line of trees will be retained post development.

Ruderal/ Ephemeral / Ephemeral/ short perennial

- 4.2.7 A small area of ephemeral vegetation dominated by mosses with creeping ruderal species, is present at the front of Building K in the eastern corner of the site. The area includes scattered ornamental shrubs, some of which have been cut back to the base. This is proposed to be removed to facilitate the development.

Introduced shrub

- 4.2.8 Areas of ornamental planting, comprising of low growing and larger cypress species is present between Building G and H, with a small linear area along the front of Building L. This is proposed to be removed to facilitate the development.

Individual / Scattered Trees

- 4.2.9 Four small birch (*Betula pendula sp.*) trees are present in the southern corner of the site. These four trees are proposed to be removed to facilitate the development

Ornamental and Non-native Hedgerow / Intact Species Poor Hedgerow

- 4.2.10 An ornamental beech (*Fagus sylvatica*) hedgerow runs along the southwestern boundary. This is proposed to be removed to facilitate the development

Line of Trees / Defunct species poor hedgerow with trees

- 4.2.11 A line of mature trees dominated by sycamore lies along the southeastern boundary of the site. This will be retained as part of the development.

4.3 Tree Survey

- 4.3.1 The arboricultural survey identified 44 individual trees, 13 groups of trees and one hedge within the site and the wider landownership of the school (Figure 3).
- 4.3.2 Four small existing trees (T5, T6, T7, T8) conflict with the design proposal's build area and will need to be removed.
- 4.3.3 Currently the quality of these trees has been impeded by soil compaction and limited root area due to the schools car parking arrangement.
- 4.3.4 The removal of these trees would be offset by the introduction of trees and planters in the new courtyard area created.

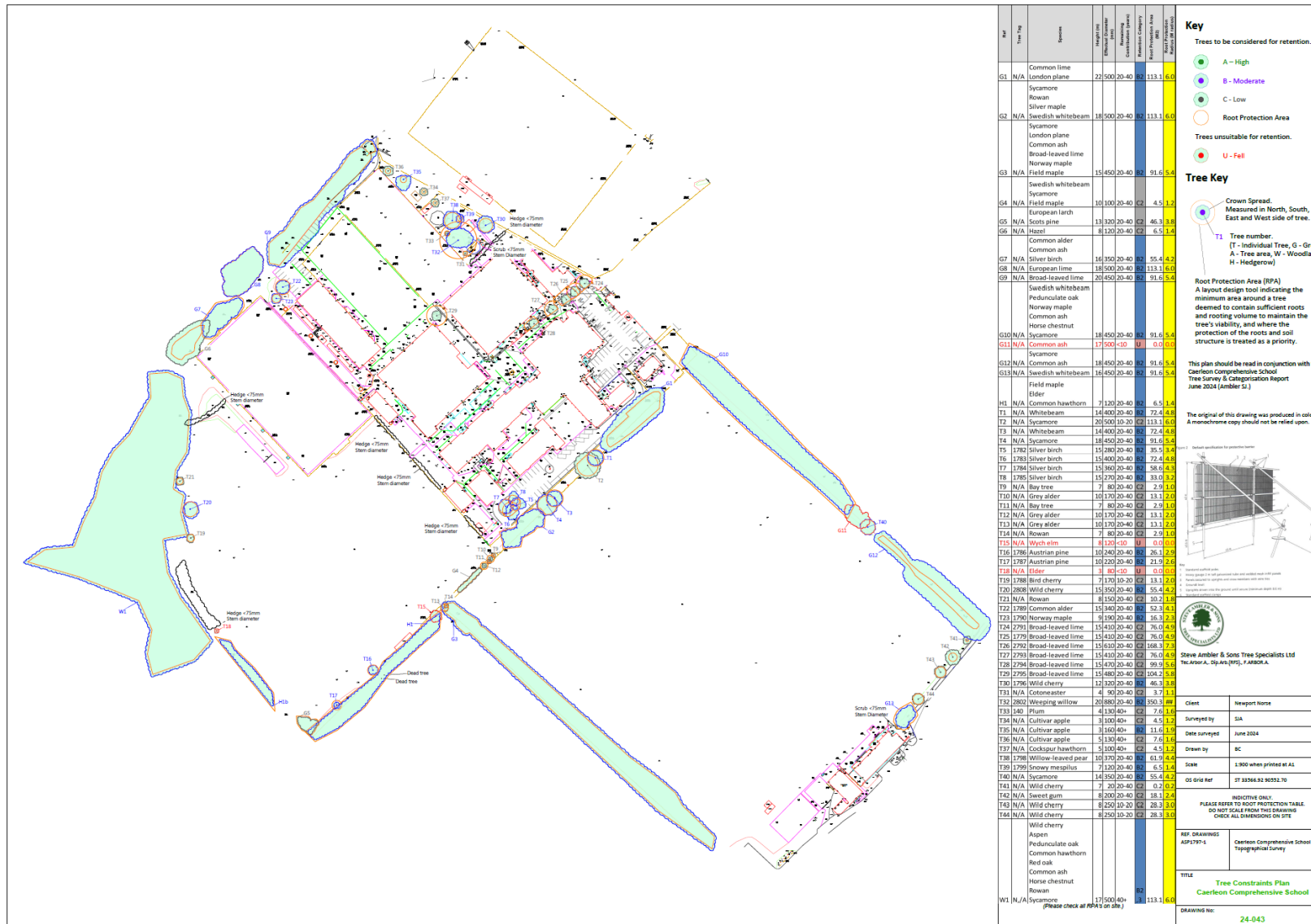


Figure 3 Arboricultural survey

4.4 Green Infrastructure in the wider area

Designated sites

- 4.4.1 The site is located 550m from the River Usk Special Areas of Conservation (SAC) Sites of Special Scientific Interest (SSSI). The River Usk is connected to the site by the habitats associated with the Caerleon Golf Course and school playing fields. Due to the scope of the works, the River Usk and connecting habitats will not be impacted by the proposals.

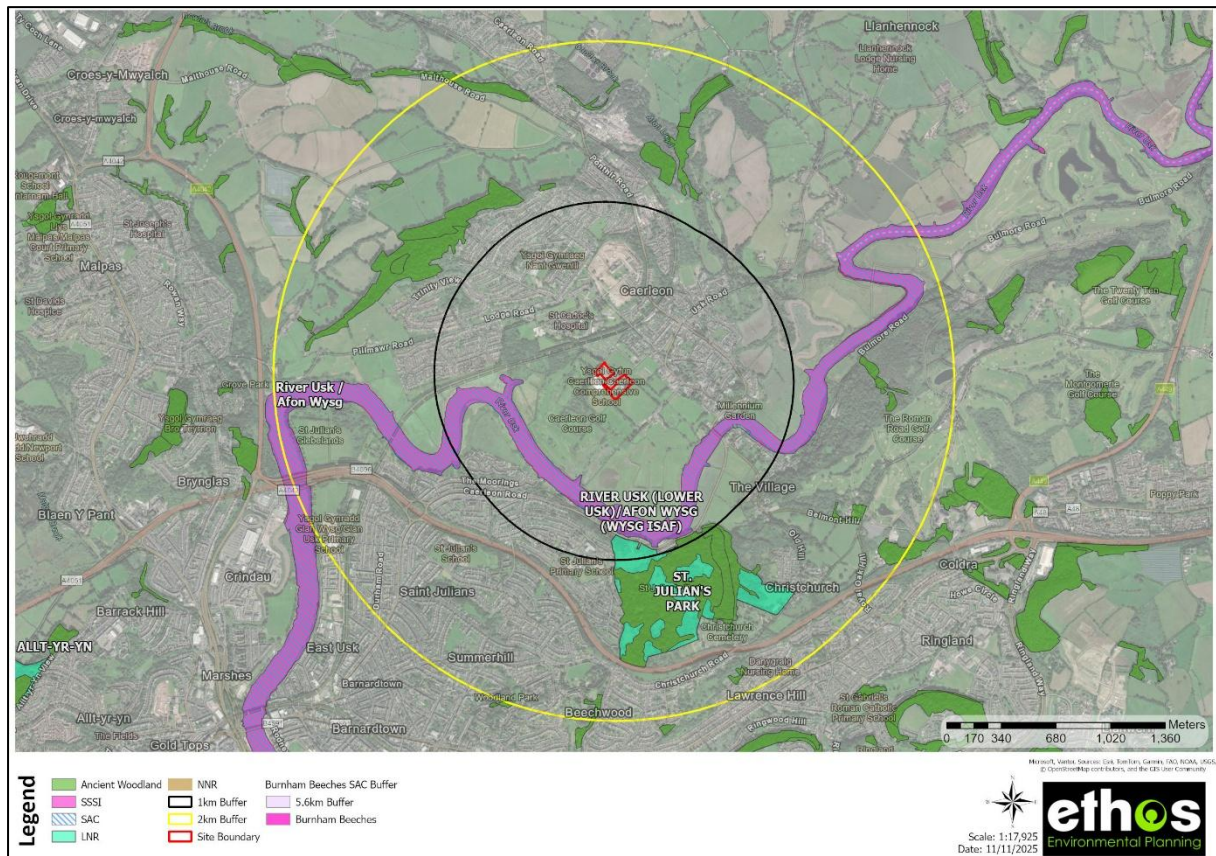


Figure 4 Designated sites

Local green infrastructure

- 4.4.2 Within the wider area there are multiple local green infrastructure habitats including grassland, ponds, woodlands, hedgerows and riverine habitats.
- 4.4.3 The site is surrounded by the school sports pitches, Caerleon Golf Course and the River Usk floodplain to the southwest, south and southeast. These comprise a mosaic of grassland and woodland habitats intersected with ponds, scattered trees, hedgerows and riverine habitats. The northwest, north and northeast of the site is a cemetery, allotments, playing field, bowling green and amenity greenspace associated with a roman barracks.
- 4.4.4 Within 1km of the site there are woodland blocks, hedgerows, urban trees and amenity green space associated with Caerleon, a woodland belt associated with the railway line,

the River Lwyd and associated floodplain and large woodland blocks, grassland and riverine habitats associated with St Julien's Park.

- 4.4.5 All identified green infrastructure is connected the site via suitable habitat and/or public rights of way. Due to the scope of the works, the local green infrastructure and connecting habitats will not be impacted by the proposals.

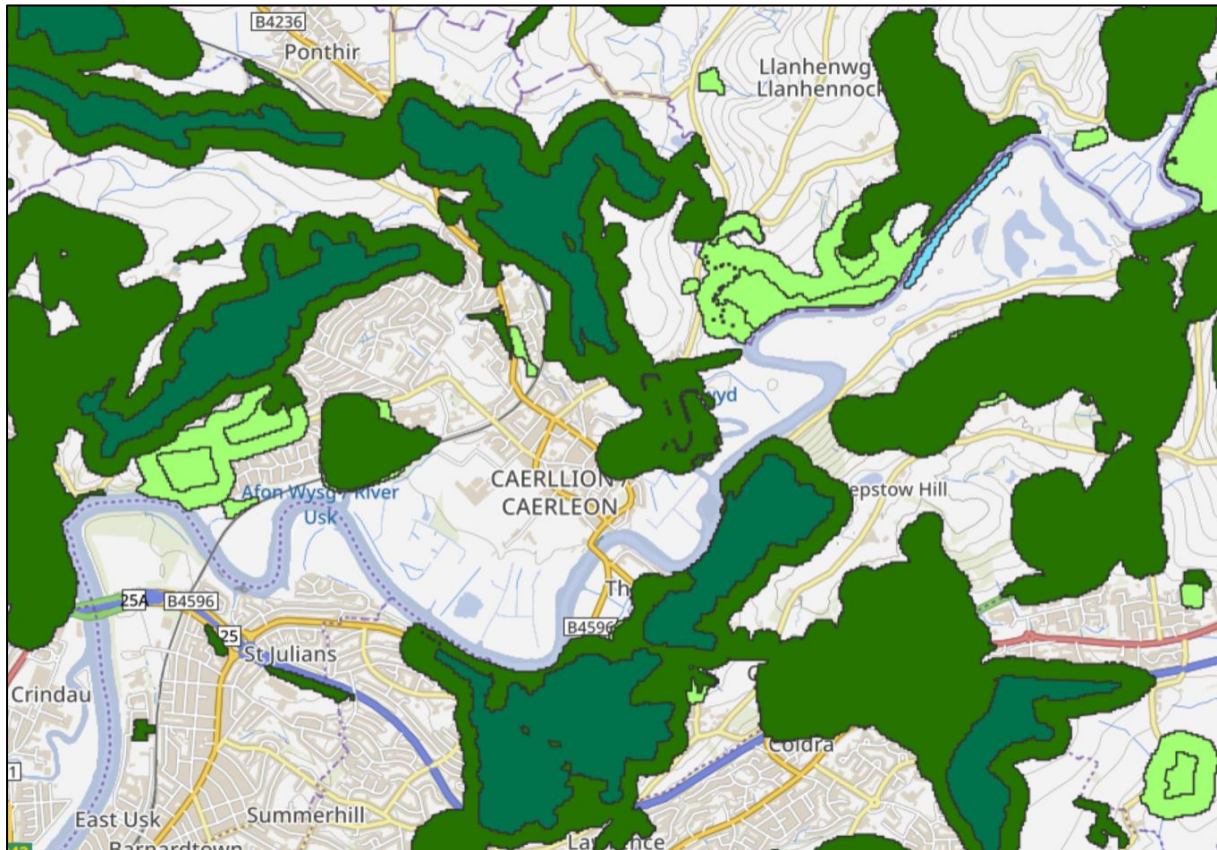


Figure 5 Data map Wales¹

4.5 Protected Species

Bats

- 4.5.1 An updated structures inspection was completed on 29th October 2025, to assess any notable changes to structures on site and inform licensing requirements.
- 4.5.2 Building K (figure 6) was previously recorded as supporting a single common pipistrelle roost (Ecology Wales 2024b). During the recent inspection of this building in 2025, a single pipistrelle bat was observed roosting within the structure at the same feature as recorded during the 2024 emergence surveys (Figure 6).
- 4.5.3 Two bat droppings were found on the wall and door frame of the north elevation of building D1 beneath a space behind fascia boards with a grill along the bottom, several

¹ (https://datamap.gov.wales/maps/new?layergroup=geonode:nrw_habitat_network#/) accessed 19/11/2025

holes along the length of the grill allow bats ingress to the space behind the fascia. The feature is considered to support low numbers of pipistrelle bats in line with other roosts found on site (Figure 6).

- 4.5.4 No other evidence of bats was recorded during the inspection of the remaining structures. No significant changes to the structures since the previous inspection were recorded.
- 4.5.5 Four birch trees are present the south of the site, the trees are semi-mature but lacked damage or other suitable potential bat roosting features.

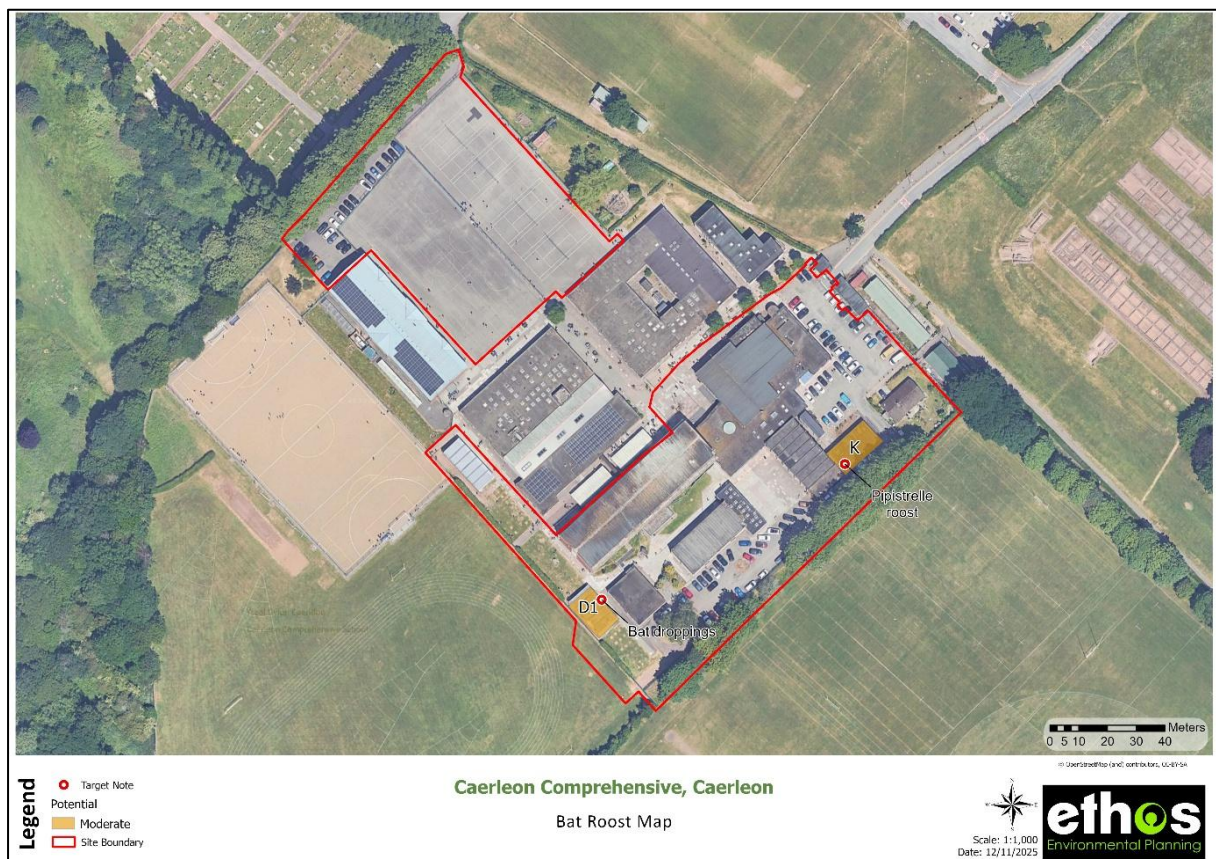


Figure 6 Bat roost location map

- 4.5.6 Due to the presence of a bat roost on site, a protected species licence is required from Natural Resources Wales prior to the demolition of the Buildings K and D1.

Other protected species

- 4.5.7 The site offers limited suitable habitats to other protected species with potential commuting habitat for hedgehog and badger identified and nesting bird provisions on the current roofs of the school and trees and hedgerows on site. Precautionary working methods and timing of works can avoid impacts to these protected species.

4.6 Limitations

- 4.6.1 The habitat survey was completed in October, outside of the optimal botanical period. However, given the context of the use of the site and managed nature of habitats present it is considered that the green infrastructure of the habitats present have been fully assessed, and as such the timing of the survey is not considered a significant constraint.

5 SITE LAYOUT

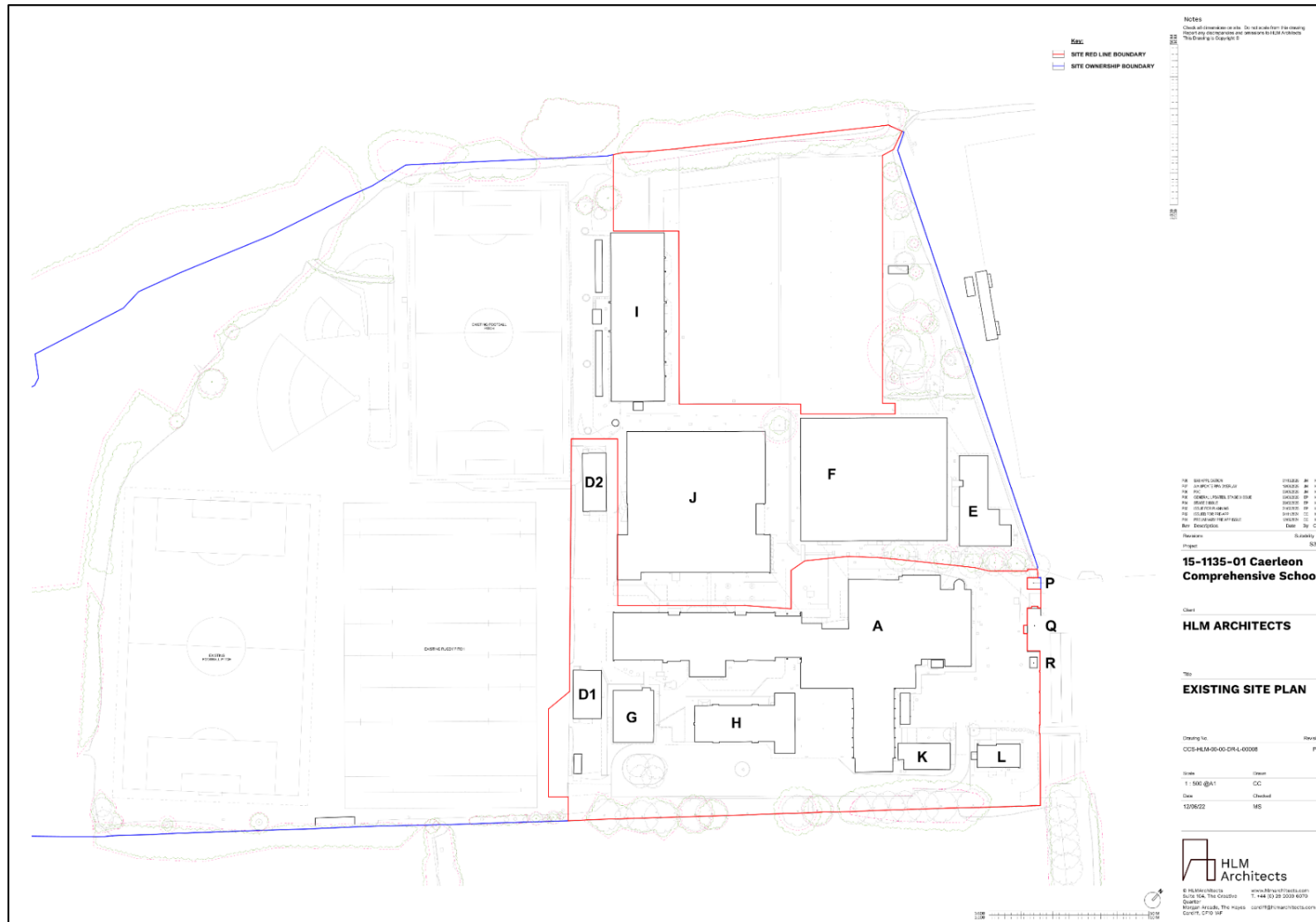


Figure 7 Existing site layout

- 5.1 The existing secondary school site will undergo a range of changes involving the introduction of new built form and sports facilities, and improved access points. Areas of soft and hard landscape specifically for secondary pupils will integrate with the new building and existing site, to create a coherent site plan. The landscape strategy will address a number of aspects essential to the development of a high quality and well-functioning facility with the needs and care of children and young adults at its core. These include:
- General Landscape Principles;
 - Access and Movement;
 - Security and Safety;
 - Hard Informal and Social Areas;
 - Soft Informal, Social and Habitat Areas;
 - Hard and Soft Outdoor PE Areas.
- 5.2 Construction work will inevitably reduce the Secondary school's external spaces temporarily. Therefore, careful consideration will be given to phasing to provide access to as much of the external environment as is deemed safe during construction.
- 5.3 The landscape will connect with and respond to the new school building creating a cohesive and positive environment. The design will introduce new areas for outdoor teaching, sport, play, socialising, and relaxation. The overall site plan will also connect the new school building to existing facilities. New landscape areas and features will sit sensitively within the site and will be robust in nature and of a high aesthetic quality. Careful consideration of maintenance and material longevity will influence the choice of hard and soft landscape materials.

Key Areas

- New Entrance Plaza;
- Outdoor Dinning;
- Courtyard Space for Informal and Social Activity;
- New Sports Facilities.

Hard Landscape

- 5.4 The external landscape will aim to function as an extension to the school buildings by offering teaching and study spaces as well as areas for sport, play, socialising, relaxation and reflection. These external spaces will incorporate entrance points providing access to the buildings' circulatory spaces across the site and areas for congregation during break times. The areas will have to cater for large numbers of children whilst providing a variety of scales of space and types of activity.

Soft Landscape

- 5.5 The soft landscape strategy will create a framework to connect the new school building with the external context of the existing school, and to create a cohesive landscape character within the site.
- 5.6 Planting provides seasonal and sensory diversity with chosen species providing visual interest, through form, colour, texture and movement. Tree and shrub planting could provide shelter from the weather and create a sense of enclosure. Planting areas can be used to subdivide areas of surfacing and tree planting may be sited in planting beds to enable access to adequate air and water and reduce reliance on artificial irrigation. Existing trees will be retained where possible, and new planting species will be selected to diversify existing species on-site and encourage wildlife such as birds, bees and other insects.

6 LANDSCAPE STRATEGY

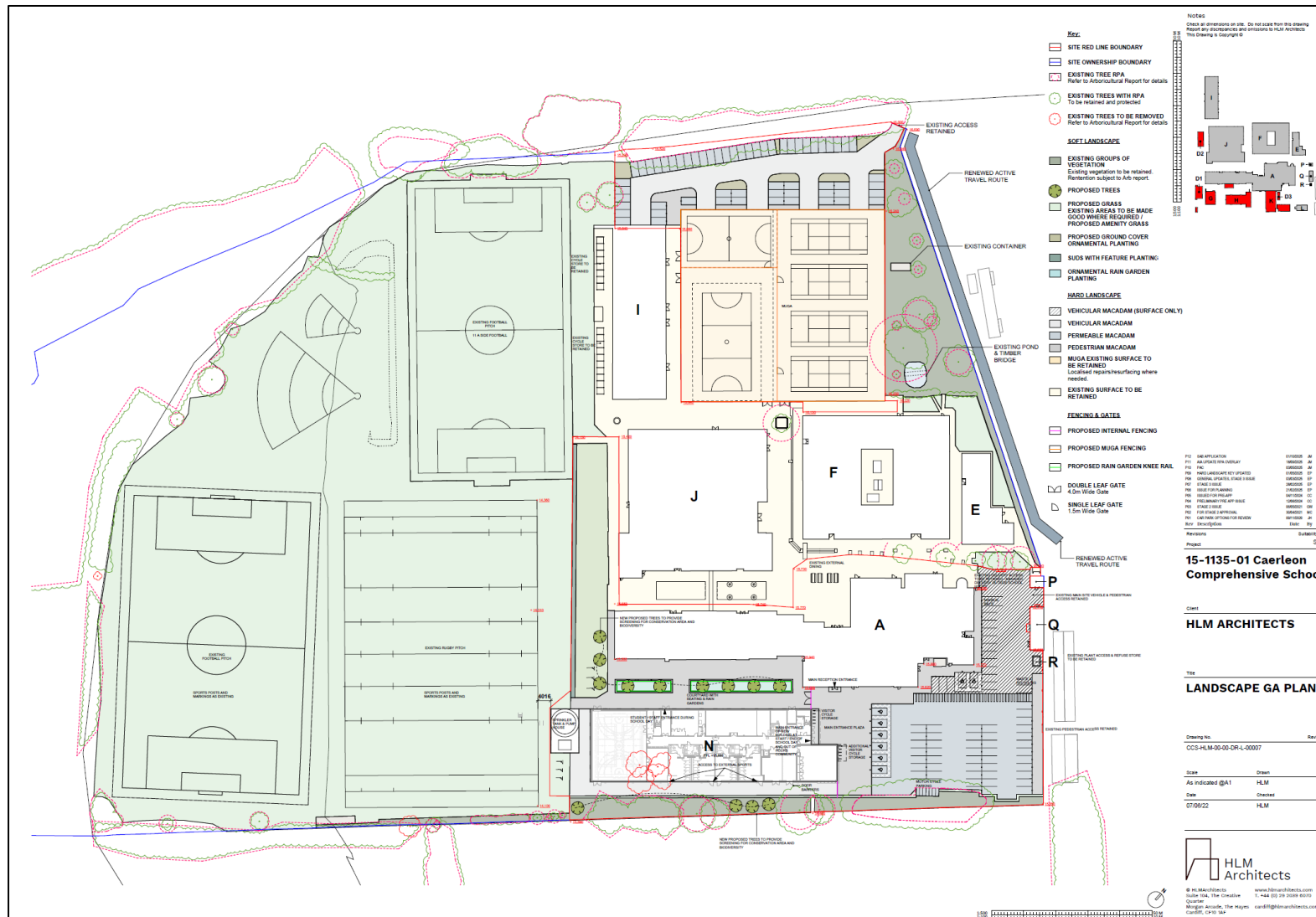


Figure 8 Overall site ownership landscape strategy

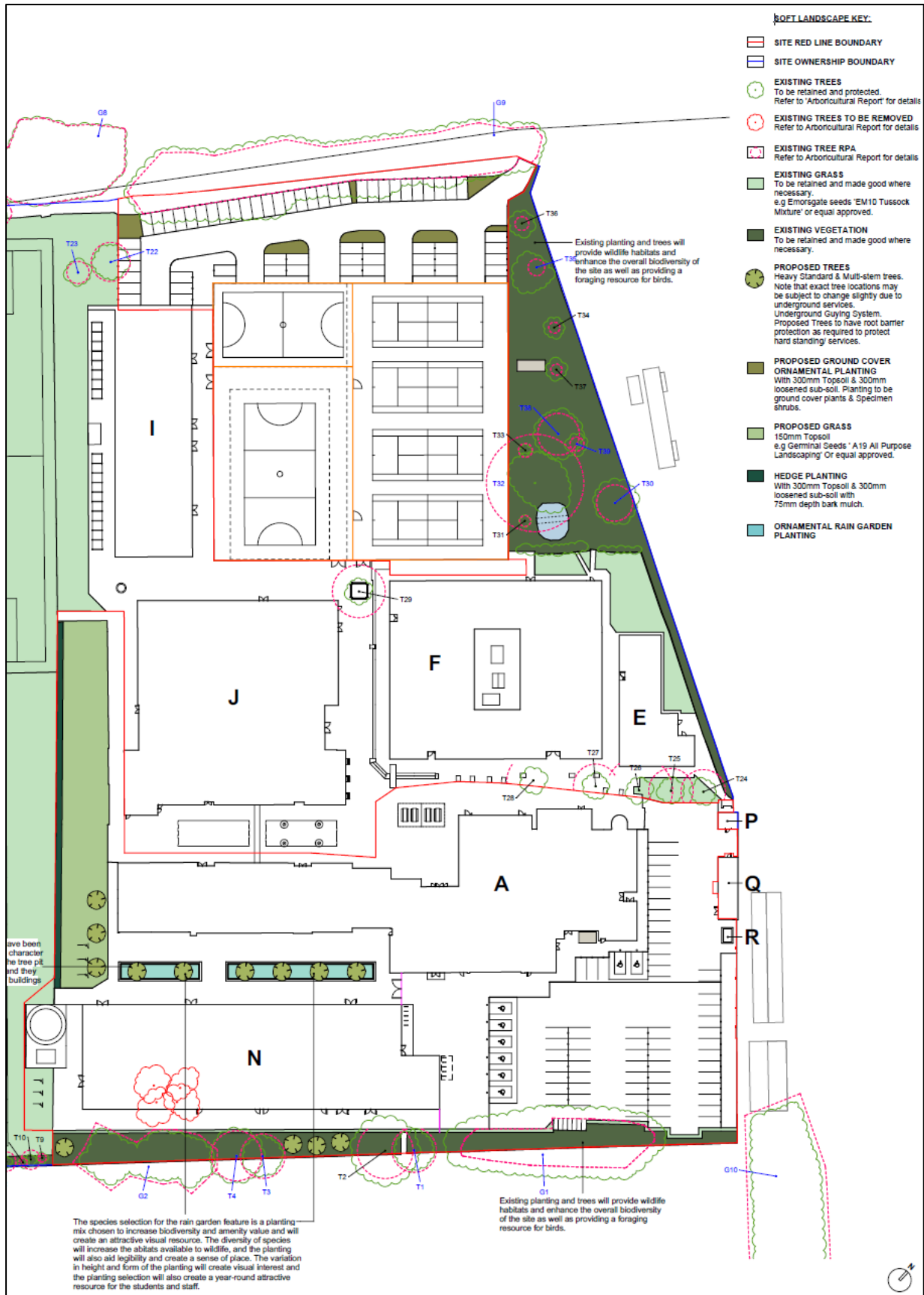


Figure 9 Redline landscape strategy

- 6.1.1 The layout and landscape for the project has been developed by HLM Architects with input from the project team of specialists in ecology and arboriculture. This landscape strategy has been prepared with ecological input from Ethos Environmental Planning and arboriculture input from Steve Ambler and Sons Tree Specialists Ltd.
- 6.1.2 The proposed layout includes retaining the grassland and line of trees along the southeastern boundary of the site, maintaining a connective corridor between the school playing fields and the grassland of the roman barracks. Grassland and native hedgerow and three trees are proposed along the southwestern boundary of the site between the development and the playing pitches.
- 6.1.3 Introduced shrub/ ornamental planting will be located around the proposed car parking to the northwest of the site and rain gardens will be created within the school grounds towards the south of the site.
- 6.1.4 The retained and proposed grassland and trees will provide wildlife habitats and enhance the overall biodiversity of the site as well as providing a foraging resource for bats, hedgehog, badger, birds and invertebrates.
- 6.1.5 Proposed native species tree planting enhances the visual character and provides ecological enhancement for foraging and nesting birds and foraging and commuting bats. The tree pit incorporates a valuable drainage layer, and they help to reduce heating/cooling needs of buildings through shading.
- 6.1.6 The species selection for the rain garden feature is a planting mix chosen to increase biodiversity and amenity value and will create an attractive visual resource. The diversity of species will increase the habitat available to wildlife, and the planting will also aid legibility and create a sense of place. The variation in height and form of the planting will create visual interest and the planting selection will also create a year-round attractive resource for the students and staff.

7 GREEN INFRASTRUCTURE STATEMENT

- 7.1 A stepwise approach was utilised in the preparation of the site layout and landscape strategy has been followed. The first stage was to identify and assess the value of existing green infrastructure. The retention of existing GI was a priority wherever possible, in accordance with Step 1: Avoid and Step 2: Minimise.
- 7.2 Mitigation for the habitats and species follows the stepwise approach Step 3: Mitigate/Restore.
- 7.3 Enhancement opportunities for the habitats and species follows the stepwise approach Step 4: Compensate.

Habitats of ecological value

- 7.4 The main GI loss on site relates the four trees, grassland and ornamental hedgerows. The loss of these GI features is mitigated for with the proposed planting habitat creation identified in the Landscape Strategy (Figure 7) and detailed below.
- 7.5 To mitigate for the loss of the four trees, 13 newly planted trees will be planted within the retained and created grassland area and in the rain gardens. It is recommended that the newly planted trees of native of local provenance.
- 7.6 To mitigate for the loss of the ornamental hedgerows, a new native hedgerow will be planted along the southwestern boundary of the site. The hedgerow will be managed and maintained to ensure it benefits wildlife, such as ensuring good basal growth, good height and width and cutting to avoid key ecological windows such as nesting birds (March to September) and tree fruiting (March to November). It is recommended that the hedgerow is managed between February and March.
- 7.7 To mitigate for the loss of the amenity grassland, the retained grassland will be made good where necessary and new grassland will be created. The created grassland and restoration of the existing habitat will be sown with a suitable seed mix such as Emorsgate EM10 Tussocky Mixture.

Ecological Provisions

- 7.8 It is recommended that four integrated bat boxes are included within the new buildings, and these are located with varying aspects to provide a range of roosting conditions for bats using the Site. This will be detailed and secured through the NRW bat licence application. Two of the integrated bat boxes will be compensation for the lost roosts and two are enhancements for bats.
- 7.9 Further biodiversity benefits could be achieved through installing an insect hotels, two open fronted bird boxes, a cluster of four integrated swift bricks and two bat boxes on trees within the Site. All species provisions are provided in Figure 10.

- 7.10 Lighting should be targeted and avoid light spill into non-target areas, particularly those of value to bats and other species such as the hedgerows, line of trees and grassland areas.



Figure 10 Ecological Provisions Map

Table 1 Landscape asset and green infrastructure assessment

Landscape asset	Green infrastructure element	Function	Ecological benefit
Ornamental planting	Trees/ vegetation	• Contribution to Placemaking • Calming and Inspiring	Foraging hedgehog, badger and invertebrates, nesting and foraging birds and foraging and commuting bats.
Amenity grassland	Grassland	• Wildlife Habitat • Calming and Inspiring • Exercise • Health and Wellbeing • Nutrient Cycling • Wildlife Habitat • Contribution to Placemaking	Foraging bats, hedgehog, badger, birds and invertebrates.
Rain garden	Sustainable drainage	• Cleaning Water and Air • Flood Mitigation • Contribution to Placemaking • Calming and Inspiring • Nutrient Cycling	Amphibians, invertebrates, foraging birds and foraging and commuting bats.
Tree planting	Trees/ vegetation	• Wildlife Habitat • Contribution to Placemaking • Cooling and Shade • Calming and Inspiring • Health and Wellbeing • Nutrient Cycling • Wind break • Cleaning Water and Air	Nesting and foraging birds, foraging and commuting bats.
Hedgerow with trees	Trees/ vegetation	• Wildlife Habitat • Contribution to Placemaking • Cooling and Shade • Calming and Inspiring • Health and Wellbeing • Nutrient Cycling	Nesting and foraging birds, foraging and commuting bats, hedgehog, hibernating reptiles and amphibians

Landscape asset	Green infrastructure element	Function	Ecological benefit
		• Wind break • Cleaning Water and Air	
Green roof	Bryophyte/vegetation	• Wildlife Habitat • Cleaning Water and Air	Foraging bats and birds, invertebrates.

8 CONCLUSION

- 8.1 This GI Statement has been produced to support the planning application and contains details of how the proposals will result in a Green Infrastructure Net Benefit. The proposals are compliant with Planning Policy Wales Edition 12 (February 2024) and the Environment (Wales) Act 2016 Section 6 duty, as well as local policy PS15 Green Infrastructure and Biodiversity of the Newport Replacement Local Development Plan 2021-2036.

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APPENDIX 1 POLICY

Planning Policy Wales (PPW) provides the strategic framework for land use planning in Wales, emphasizing the importance of biodiversity protection and enhancement in the planning process. The policy establishes clear objectives for integrating biodiversity considerations into planning decisions and development proposals, ensuring that development is sustainable and contributes to the resilience of ecosystems.

Key points related to biodiversity in **Planning Policy Wales** include:

1. **Sustainable Development:** Planning decisions must promote sustainable development, balancing environmental, social, and economic factors to meet present needs without compromising future generations' ability to meet their own.
2. **Biodiversity and Ecosystem Resilience:** The policy stresses the need to protect and enhance biodiversity and ecosystem resilience. All development should align with the Welsh Government's Biodiversity Strategy and contribute to long-term environmental sustainability.
3. **Conservation of Biodiversity:** Developments must avoid harm to biodiversity, especially to species and habitats protected by national and international legislation, including the **Habitats Directive** and **Wildlife and Countryside Act**. The PPW supports the implementation of the mitigation hierarchy (avoid, mitigate, compensate) to address any potential negative impacts on biodiversity.
4. **Protected Sites and Species:** Planning authorities are required to safeguard designated sites, such as **Sites of Special Scientific Interest (SSSIs)**, **Special Areas of Conservation (SACs)**, and **Special Protection Areas (SPAs)**. Any development proposal should assess potential impacts on these sites and protected species, ensuring that they are not adversely affected.
5. **Local Biodiversity Action Plans (LBAPs):** Local authorities are encouraged to incorporate **Local Biodiversity Action Plans** into their planning decisions. These plans guide local biodiversity conservation and highlight species and habitats that may require special attention during development.
6. **Green Infrastructure:** The policy promotes the creation and protection of **green infrastructure** (GI), including parks, wildlife corridors, and other ecological networks. Such infrastructure supports biodiversity and provides critical ecosystem services, contributing to the overall sustainability of development areas.
7. **Biodiversity in Design and Landscaping:** PPW encourages the integration of biodiversity into the design and landscaping of developments, using native plant species and incorporating features that provide habitat for wildlife.
8. **Climate Change and Biodiversity:** The policy highlights the interconnectedness of biodiversity and climate change, advocating for the development of resilient environments that can withstand the impacts of climate change, such as habitat fragmentation or shifts in species distributions.

In summary, **Planning Policy Wales** mandates the consideration of biodiversity in planning and development decisions. This includes the protection and enhancement of ecosystems, the safeguarding of protected species and habitats, and the promotion of green infrastructure, ensuring that developments align with sustainability and biodiversity conservation goals.

Local Policy

PS15 Green Infrastructure and Biodiversity

Development will protect and enhance Newport's green infrastructure and biodiversity assets to ensure the integrity and connectivity of this multi-functional resource is maintained and strengthened and positively managed. Green infrastructure is key to Newport's character, distinctiveness and sense of place, and can include:

- *Parks, playing fields, green play areas and open spaces*
- *Trees (including street trees), woodlands, hedgerows, soils and landscaping*
- *Strategic recreational routes, cycleways, active travel and the public rights of way network*
- *Sustainable drainage systems*
- *Growing spaces including allotments, community orchards and larger public and private gardens*
- *Undeveloped countryside and coastline*
- *Landscape, geological and heritage features which contribute to the City's setting*
- *Strategically important river valleys of the Usk and the Ebbw*
- *Biodiversity interests including designated sites and the connectivity of priority habitats and species*
- *Roadside verges, roundabout islands and screen planting along roads.*

Protection and conservation of green infrastructure needs to be reconciled with the benefits of development. Proposed development should therefore ~~demonstrate how green infrastructure has been considered and integrated~~ into a placemaking approach; that there is a Net Benefits for Biodiversity; and how the resilience of ecosystems can be maintained. If development results in loss of diversity, extent, connectivity and condition of green infrastructure, appropriate compensation will be required.

Potential conflicts between different elements of green infrastructure should be reconciled as part of any development, and where appropriate, a Green Infrastructure Statement should set out how the layout and design of the scheme will contribute to, or be compatible with, any published local or regional Green Infrastructure Strategy.

APPENDIX 2 ECOLOGICAL PROVISIONS SPECIFICATION

Species Group	Feature	Species	Description	Installation	Provision
Birds	CJ Wildlife open-front box	Wren, Robin, Spotted Flycatcher, Pied Wagtail, Grey Wagtail, Song Thrush, Black Redstart, Redstart	Woodstone box with removable front panel & 10 year guarantee. 19cm (w) x 24cm (h) x 17.5 cm (d) - Weight: 4kg	Place the box on a tree or wall at approx. 1.5m high amongst vegetation. The box should be partly concealed. For Spotted Flycatcher, place at a 2m height. Avoid the nest entrance facing strong sunlight and prevailing wind.	
Birds	S Brick: Bird Nesting Brick - Action For Swifts	Swift, House Sparrow, Blue Tit, Great Tit and House Martin	Integrated, universal nest box for cavity nesters - species customisation upon request; 1 brick and cavity size - Chamber material: Galvanised Steel - Weight: <2kg - Facings: Brick slip or Stone slip (your own brick or near equivalent) or Render. - Lightweight and made to order. - Easy retrofit.	Built into structures at a height of 5m with a clear flight path beneath the entrance hole. Ideally provide in a colony of 2-3 boxes.	

Species Group	Feature	Species	Description	Installation	Provision
Bats	1FR Schwegler Bat Tube	Pipistrelle species, Brown Long-eared, Daubenton's, Natterer's	Integrated provision which provides a more spacious roost space for bats which prefer cavity boxes. A summer box suitable for the warmer months and less likely to be used over the winter; • Unit dimensions: 20 x 12.5 x 47.5 cm (L X W x H) • Entrance dimensions: 9 x 2 x 15 cm (L X W x H) • Weight: 9.8 kg • Material: Woodcrete with integrated wooden panel, paint any colour.	Installed between 3-6m in a sunny and sheltered spot. Ideally positioned close to vegetation features such as hedges and treelines.	
Mammals	Double Crevice Bat Box	Pipistrelles, Barbastelle	Suitable for the warmer months and less likely to be used over the winter. Designed to be suitable for crevice-dwelling bats; • Unit dimensions: 16 x 10 x 33cm (L X W x H) • Weight: 1.4kg • Material: FSC Plywood	Installed between 3-6m in a sunny and sheltered position. Situated on a building or tree near vegetation.	

Species Group	Feature	Species	Description	Installation	Provision
Invertebrates	MiniBeast HQ	Invertebrates	Bespoke bug hotels of every design, size and cost available; • Freestanding or integrated • Can be made self-made on site from various materials e.g. pallets, bricks, plant pots, logs, pine cones, straw etc). • Can be crafted ready-made by contractors e.g. wooden structure with chambers with various materials and pre prepared drilled logs, canes etc).	Different invertebrates will use the hotel depending on its location. Some prefer damp and cool whereas others before warm and sunny E.g. Solitary bees prefer the sun. Visiting Buglife website for instruction recommended.	