

Proposed Development at Former RCTCBC Offices, Clydach Vale, Tonypandy.

Green Infrastructure Statement

18/10/24

theurbanists

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Issue date	18/10/2024
Status	PAC Draft
Revision	-
Author	IW/ AT
Checked by	LH
Reference	2319

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1. Introduction and Background

This Green Infrastructure (GI) Statement is prepared by The Urbanists Ltd, on behalf of Rhondda Cynon Taf County Borough Council. It accompanies the full planning application for the new, English medium, mixed sex, ages 3 to 19 special school in Rhondda Cynon Taf (RCT) on a new site in Clydach Vale, Tonypany, CF40 2XX.

The purpose of a GI Statement ('the Statement') is to demonstrate how GI has been incorporated to provide a positive multi-functional outcome, which is appropriate to the site and its proposed development, and must also demonstrate how the Step-wise approach has been applied to ecological considerations.

This GI demonstration of those 'outcomes', 'appropriateness', and required processes means that this statement will illustrate how GI has been effectively considered throughout the design of the scheme. As required, this consideration, and statement to provide evidence of it, will be "proportionate to the scale and nature of the development proposed".

Planning Policy Wales Edition 12 provides the key legislative and national planning policy context for GI Statements. Local planning policy and guidance for Rhondda Cynon Taf provides details relating to the protection and enhancement of the natural environment. Other local policies and SPG are also relevant to GI, and will be additionally considered. Those local policies and guidance provide information on the key outcomes expected from GI, of which the Statement should regard and appraise.

The key outcomes of the GI considerations are to be reviewed with regard to three main areas of concern, relating to the ecosystem concepts of: biodiversity value, ecosystem resilience, and ecosystem services.

As PPW Edition 12 sets out:

"With careful planning and design, informed by an appropriate level of assessment, green infrastructure can embed the benefits of biodiversity and ecosystem services into new development and places, help to overcome the

potential for conflicting objectives, and contribute to health and well-being outcomes.”

The Statement is informed by the other relevant documents and drawings which accompany this planning application, including:

- Preliminary Ecological Appraisal
- Geotechnical and Geoenvironmental Report
- Design and Access Statement
- Roof Plans
- Preliminary Bat Roost Assessment
- Arboricultural Appraisal
- Proposed Landscape Plan
- External LUX plan
- Drainage Strategy

2. Policy and Legislative Context

This section sets out the key legislative, planning policy and guidance which inform the requirements and the approach to Green Infrastructure Statements.

2.1. Legislation

2.1.1. Environment (Wales) Act 2016

The act introduced an enhanced duty for public authorities in the exercise of their functions - the biodiversity and resilience of ecosystems duty (referred to as the section 6 duty).

Section 6 sets out the biodiversity and resilience of ecosystems duty of all public authorities in Wales, to seek to maintain and enhance biodiversity in their functions, and so promote resilience of ecosystems. Section 7 (Part 1) species and habitats of ‘principal

importance' for the purpose of maintaining and enhancing biodiversity, and which Welsh Ministers must encourage others to do.

2.2. National and Local Policy

2.2.1. Planning Policy Wales, Edition 12

Planning Policy Wales (PPW) is the principal planning policy document of the Welsh Government and informs all planning decisions and appeals. The current version of which is PPW Edition 12.

Chapter 6 of PPW 12 explains that a GI Statement should be submitted with all planning applications, and also explains the general standards that any statement should seek to meet.

It explains that GI comprises the:

“network of natural and semi-natural features, green spaces, rivers and lakes that intersperse and connect places...”

“...At the landscape scale green infrastructure can comprise entire ecosystems such as wetlands, waterways, peatlands and mountain ranges or be connected networks of mosaic habitats, including grasslands. At a local scale, it might comprise parks, fields, ponds, natural green spaces, public rights of way, allotments, cemeteries and gardens or may be designed or managed features such as sustainable drainage systems. At smaller scales, individual urban interventions such as street trees, hedgerows, roadside verges, and green roofs/walls can all contribute to green infrastructure networks” (par.6.2.1).

It further advises that:

“proposals should be informed by the priorities identified in green infrastructure assessments and locally based planning guidance” (para. 6.2.5).

It also sets out how proposed development should be assessed within, or potentially impacting upon, designated sites, including non-statutory designated sites. It introduces the 'Step-wise approach' which is expected to be applied to such consideration and therefore should be evidenced in any GI statement. This approach regards the resilience of ecosystems (ER) and therefore their ability to continue to deliver value from GI, when under pressure or differing demand.

It explains that, in terms of protection for non-statutory designated sites, which includes Site of Nature Conservation Interest (SINCs), development can be appropriate where adherence to the Step-wise approach is demonstrated (including a net benefit for biodiversity) and there is no reduction in overall conservation value of the designated area or feature.

The PPW Chapter 6 update also covers trees, woodland, and hedgerows, and sets out the expectations to retain and protect such assets, where they are capable of making a significant contribution to an area. Where loss occurs, replacement will be required in line with the standards and ratios set out, and any permanent removal is only appropriate where there would be significant and clearly defined public benefit. Compensatory planting is required to be proportionate to the proposed loss as identified through an assessment of green infrastructure value by way of three specific aspects of biodiversity, landscape (amenity) and carbon capture values.

2.2.2. Future Wales: The National Plan 2040

Future Wales (FW) - The National Plan 2040 was adopted in February 2021 as the national development framework (NDF) setting the direction of development in Wales to 2040. The NDF provides a strategy to address key national priorities through the planning system, including developing a vibrant economy, developing strong ecosystems, achieving decarbonisation and climate resilience and improving the health and wellbeing of communities.

Policy 9 of FW focuses on 'Resilient Ecological Networks and Green Infrastructure', and sets out that planning authorities should identify areas of importance and opportunities for Green Infrastructure, for safeguarding and enhancement.

Given that FW strategy and national priorities can be in part addressed through Green Infrastructure, any GI Statement would be expected to align with those and support the delivery of it, where possible.

2.2.3. Technical Advice Note 5 - Nature Conservation and Planning (1996)

TAN5 provides national guidance on how the land use planning system should contribute to protecting and enhancing biodiversity and geological conservation. The guidance indicates that biodiversity conservation and enhancement is an integral part of planning for sustainable development. The guidance advocates a collaborative approach where LPAs, developers and key stakeholders in conservation should work together to deliver sustainable development.

2.2.4. Rhondda Cynon Taf Local Development Plan up to 2021- Adopted March 2011

Local Development Plan policies and Supplementary Planning Guidance (SPG's) considered as potentially relevant to the proposed development are the following:

Local Development Plan Policies

CS10: Minerals:

Favours proposals that promote the sustainable use of minerals. The safeguarding of known resources, including unnecessarily sterilising them or hindering their future extraction.

AW2: Sustainable Locations:

Development proposals will only be supported in sustainable locations. These sites can be identified as having good access to key services and facilities, support the roles of

key settlements and are well connected to existing infrastructure and deliver improvements to services where necessary.

AW7: Protection and Enhancement of the Built Environment:

Development proposals which impact upon sites of architectural/ historical merit will only be permitted where it can be demonstrated that the proposal would enhance or preserve the character and appearance of the site.

AW8 Protection and Enhancement of the Natural Environment:

This policy directs the council to protect, conserve, enhance and manage natural heritage, in consideration of all development proposals.

AW10 Environmental Protection and Public Health:

Development impacting health or local amenity because of pollution, contamination or risks to the environment will need to demonstrate measures can be taken to overcome significant adverse impacts.

AW14 Safeguarding of Minerals:

Minerals shall be safeguarded from any development which would adversely affect their extraction.

NSA16: Redevelopment of Vacant/ Redundant Industrial Sites:

Proposals for the conversion or re-development of redundant and/ or vacant industrial sites will be supported where the development is compatible with other uses in the locality and there are no significant adverse impacts on the nearby amenities.

Supplementary Planning Guidance

Nature Conservation (March 2011):

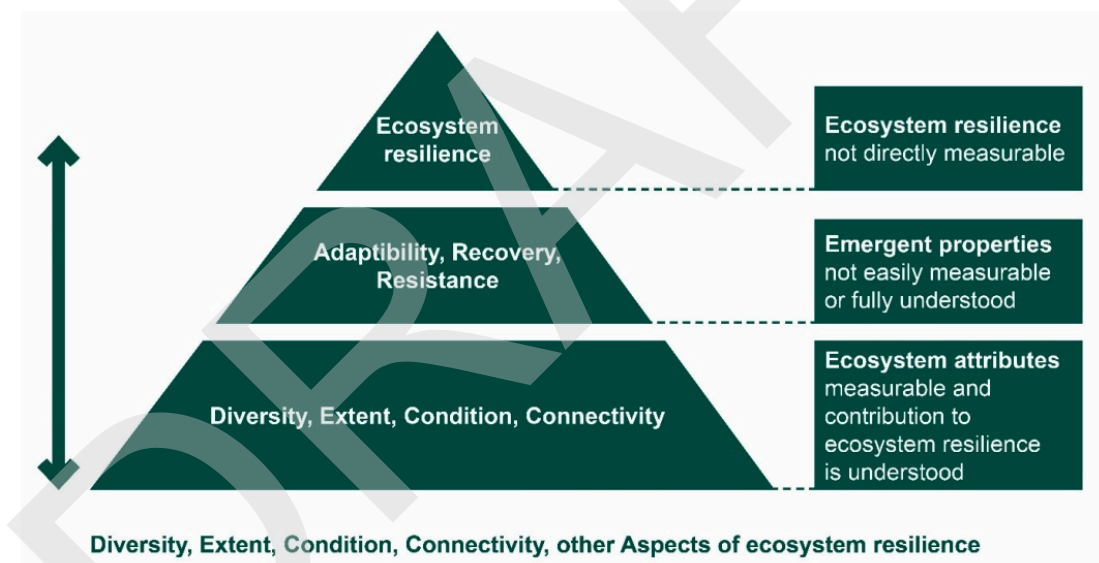
This SPG provides details of how development should protect and conserve the natural environment.

2.3. Frameworks, Approaches, and Best Practice Guidance

2.3.1. DECCA Framework and Ecosystem Resilience

This DECCA framework (see Figure 3 below) sets out 5 key considerations of habitats and species which lead to Ecosystem Resilience (ER). The first four are the attributes of Diversity, Extent, Condition and Connectivity of species (genetics and populations) and/or habitats. There is also the fifth combined aspect of Adaptability, recovery and resistance, which is an emergent combined property resulting from the other four attributes (see Figure 1 below), and which together (DECC & A) decide the level of ER.

Figure 1: Extract from Natural Resource Wales - *Ecosystem Resilience in a Nutshell 1: What is ecosystem resilience?*¹



ER is not itself directly measurable because of the extremely large number of influencing factors. The DECCA framework is a useful 'proxy method', providing a feasible and viable assessment of ER, using just a few measurable attributes, to enable the approximate consideration of ER more easily; so it may be used in practice.

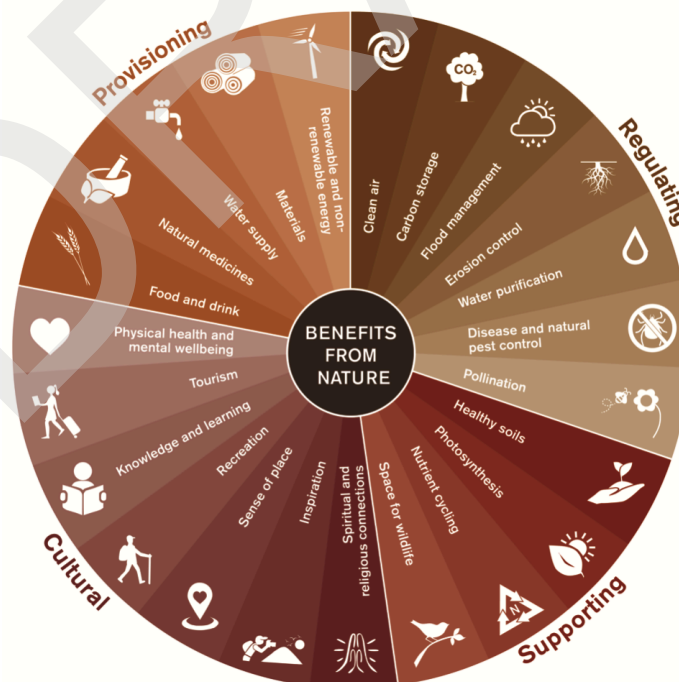
¹<https://cdn.cyfoethnaturiol.cymru/media/696279/ecosystem-resilience-in-a-nutshell-1-what-is-ecosystem-resilience.pdf>

2.3.2. Ecosystem Services Framework

Ecosystem Services (ES) is a framework which can be utilised as an effective means by which to understand the flow of benefits from Green Infrastructure to humans, and therefore more directly consider what is valuable to people and communities. They add a human layer to the understanding of the multi-functionality of GI, which allows a greater consideration of how this can be maximised and for who.

We experience ES as Cultural, Regulating, Provisioning, and Supporting services; as a common, and widely accepted, standard of division (see Figure 2 below). Cultural services are non-material benefits to society that help deliver cultural advancement. Regulating services are those that help moderate natural phenomena to the benefit of people. Provisioning services are those that deliver a material benefit to people, via the extraction of resources. Finally, Supporting services are those that ensure the continued production and maintenance of those other services; these can be thought of as those services which deliver ER.

Figure 2: Ecosystem Services (source: Nature Scot)



2.3.3. Biodiversity, Ecosystems, Ecosystem Resilience, and Ecosystem Services

As the Natural Resource Wales ‘State of Natural Resources Report (SoNRR)’² sets out, ER is important for the sustainability of ES. Both concepts are inherently linked to the structure of an ecosystem (its ‘Processes’ and resultant ‘Functions’). ER being an important emergent property of an ecosystem's physical and biological structure, and ES being a resultant beneficial outcome for people.

Ecosystems are fundamentally formed of biotic (animals and plants, etc.) and abiotic components (soil, rock, rivers, climate, etc.). Both of these influence the processes and functions of ecosystems, and these in turn influence resultant ER and realised ES benefits. The biotic-diversity (biodiversity) of a single or multiple habitat in an ecosystem, is largely more fragile (less resilient) and therefore at risk of development impacts than the abiotic components; although abiotic components are also important, and can also be at risk.

Under the Environment (Wales) Act, public bodies should seek to maintain and enhance biodiversity and the resilience of ecosystems. Multifunctional GI is set out as a means to maximise benefits from those aims, and therefore ES is additionally important. Within the Planning Policy Wales Ed. 12 Chapter 6 content, the specifics of a GI approach are further prescribed, and the components of a nature-based approach are established. Together these aims, considerations of frameworks, and requirements of policy contribute to a need to deliver good-quality design that incorporates GI.

2.3.4. Step-wise approach

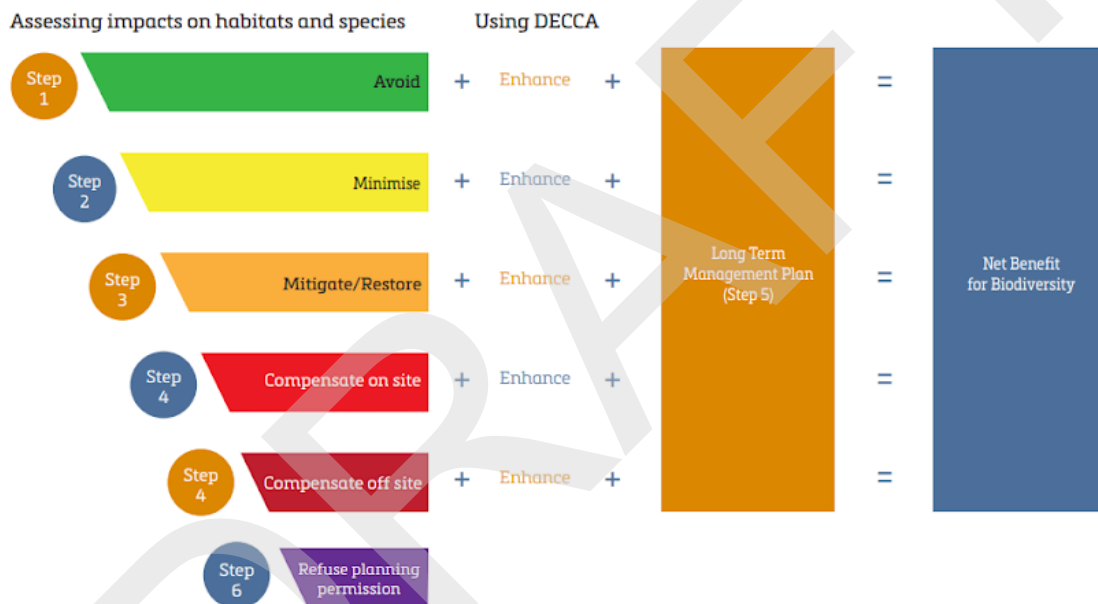
PPW Ed. 12 Chapter 6 requires the Step-wise approach to be demonstrated within proposed development designs. This approach sets out the procedure of initially following the ‘Mitigation hierarchy’ stages, to sequentially (as required): avoid, minimise, or mitigate/restore impact to habitats and species, or compensate on-site and as a last resort compensate off-site. At each of these stages, a proportional enhancement must be proposed that demonstrates the DECC[A] attributes. A long-term management

² <https://naturalresources.wales/media/679405/chapter-4-resilience-final-for-publication.pdf>

strategy is additionally required, that would ensure those measures proposed are deliverable; and would actually result in the level of Net Benefit for Biodiversity (NBB) and ER attributes that are described; as well as any resultant ES benefits gained.

Should the Mitigation hierarchy not be possible to follow (i.e. no stages of the hierarchy are possible) then planning permission should be refused. Should suitable enhancements relative to each stage of the hierarchy, and/or no suitable long-term management plan be possible, then a NBB is consequently unlikely to be possible and planning permission is, again, likely to be refused.

Figure 3: Step-Wise Approach - Extract from PPW Chapter 6.



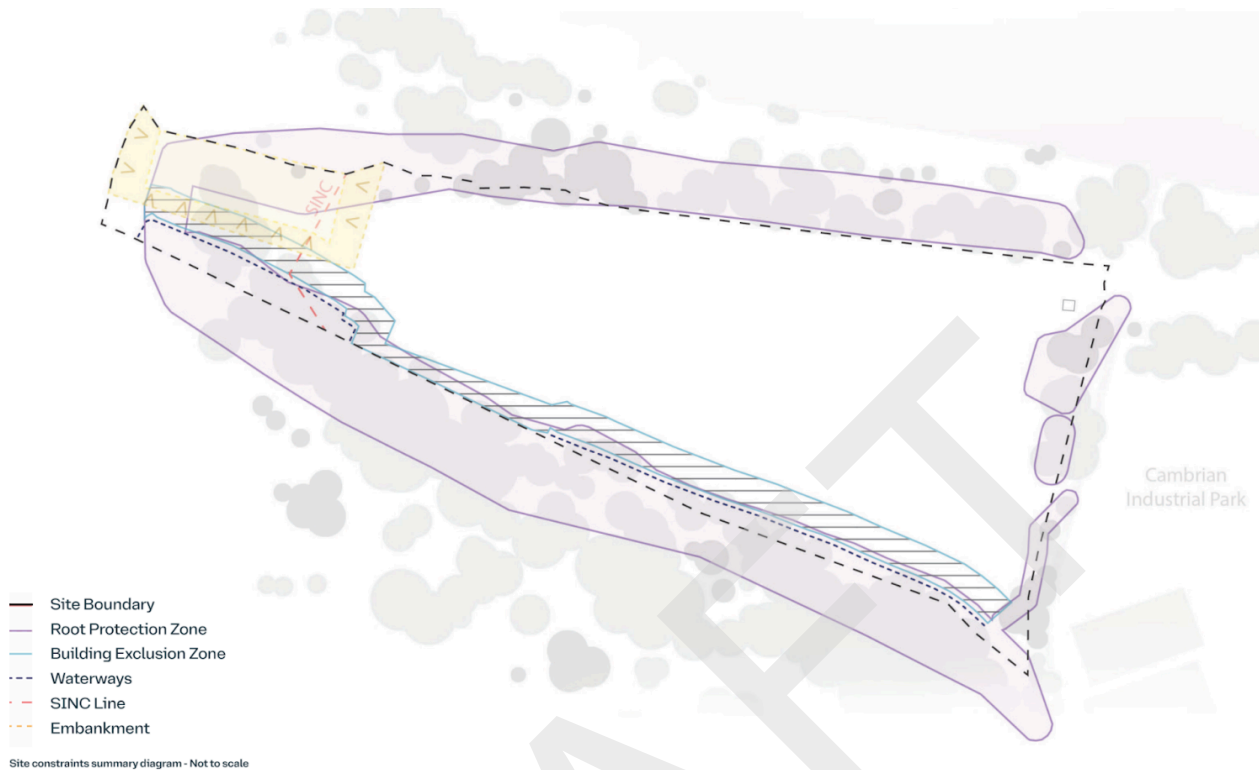
3. Site Baselines

This baseline consideration sets out a summary of the existing conditions of the proposed development site and wider relevant context, based on survey efforts and desk study. This regards habitats and species, Ecological and GI features, and their varying values and spatial scales of these (site importance up to larger areas importance). It also considers other information available, and summarises their influence on the design and overall consideration in later sections of this statement.

3.1. GI Policy and Guidance

Local Policy and Guidance sets out the boundaries of the SINC designation to the western edge of the site. The proposed design protects this area by avoiding impacts to this site's reasons for designation. To align with planning policy and guidance, the proposed design demonstrates the inclusion of design measures to enable east to west connections along the boundaries of the site, to allow the continuation of the corridor for wildlife. Opportunities for Green Infrastructure, that can serve both wildlife and the school's users, are considered appropriate. This to meet requirements of local policy and guidance, but also as something desirable for most. Likewise, general ecological benefits are desirable for the pupils at the school, allowing them to interact with nature, and need to be integrated into design to meet national policy requirements.

An ecological assessment was undertaken and appropriate priority species surveys (bats) were completed, which identified limited ecological sensitivity on the site; and that the previous Council buildings were suitable for demolition. The site has already been cleared of the previous Council buildings that were located there and an updated survey has been commissioned, to update and then reconsider the post-demolition baseline of the site. It is expected that this would be more degraded than the pre-demolition baseline state.

Figure 4: Site Constraints Summary- Drawing produced by AtkinsRealis

3.2. Ecological Baseline Summary

Accompanying ecological survey and reporting suggests that there are no protected species / important habitats within the site, with the exception of the important SINC habitats which are not considered further in this summary due to the removal of these from areas of potential development. The site has potential to support any protected and/or important species that could pass through the site or be nearby; taking advantage of existing connectivity of site habitats with the wider landscape and in particular connections to the surrounding SINC.

3.2.1. Ecological Site Appraisal and Survey

The preliminary ecological survey was conducted to set out the ecological context of the site for the purposes of the demolition of the former Council buildings. The surveys found a limited range of mostly common habitats, generally of amenity use, associated with the business park form of 'pre-demolition' (see below) development. The area of

SINC designated habitat in the site was not surveyed. The flowing ditch watercourse and its banks to the south of the site were of some greater ecological significance, although this was reduced by the presence of invasive Himalayan Balsam.

The majority of the site was occupied by the former Council building and associated hardstanding. The buildings were identified as having low-potential features, suitable for supporting roosting bats. Those buildings have now been demolished, in line with recommendation.

The adjacent country park areas, of which some are SINC designation, are partially linked to the site by the flowing ditch watercourse which runs along the southern boundary of the site. This ditch is surrounded by trees and scrub, and understorey species, and is partially culverted. The ditch itself contained some common and widespread aquatic or semi-aquatic species.

3.2.2. Ecological Recommendations

Considering the potential of the site's existing habitat for protected or otherwise important species, no specific avoidance of most habitats or features is considered required.

It is recommended that there is an avoidance of impacts, including lighting, to potential bat commuting and foraging corridors. This especially where that connectivity relates to potential crossing points along the southern and northern boundaries of the site. The replacement of lost potential for roosting bats and nesting birds is also recommended, by the provision of bat and bird boxes within the site.

A specific construction and environmental management plan is also recommended, to ensure there are no impacts to a wider area than the site, including those non-statutory designated sites with a potential hydrological connection to the site (the adjacent SINC).

3.3. Landscape GI Baseline Summary

The landscape value of the site has been considered in the Design and Access statement, which considers the factors which influence landscape GI values. The site is currently vacant, but was occupied by the former Council buildings. Access to the site is via the north-eastern corner of the site, which will be retained in the proposed development.

Of those elements within the site, the trees (especially at the site's edge) are of some greater amenity landscape value; although the site has no features of importance. The watercourse to the south is of some greater importance in the context of the low landscape value's generally within the site. There are very limited green spaces that exist within the site currently, mainly towards the perimeters of the site which are to be enhanced, or areas of SINC designated scrubs and grassland which are to be unimpacted. Of those areas where losses of amenity space are likely, these are lower quality green spaces. The proximity to adjacent or nearby green and blue corridors presents an opportunity for the site to contribute to wider networks of GI connectivity. By the form of the proposed development, key constraints can be respected and new opportunities to enhance them and other areas can be proposed. Those enhancements would target multifunctional biodiversity, ecosystem resilience, other environmental and social benefits from any proposed GI.

The Green Infrastructure onsite currently provides little in the way of ecosystem services, beyond the Regulating Services of trees and green cover to reduce erosion, intercepting some minor rainfall flows, and provide opportunities for clean air. The flowing ditch along the southern edge additionally allows for capture, some minor filtering, and appropriate movement of rainfall and run-off. There are also some Regulating Services provided by trees shade and evapo-transpiration cooling effects.

Similarly, those same habitats would provide some minor Supporting Services for wildlife and photosynthesis, but this is minimal on site because of the type/quality of those habitats; and the baseline of the site being mainly hardscape. Lots of value can be found at the site's boundaries, especially those woodland areas.

There is a very limited provision of Cultural Services at the site in its current form, the most prominent being views of the wider area's natural and semi-natural environments. Overall, it is the trees present within and adjacent to the site which provide the majority of the Ecosystem Services within the site currently, with little provided elsewhere.

3.4. Arboricultural GI Baseline Summary

The site has several existing trees of generally low value. The Tree Constraints Plan also sets out that there are three groups of Category C trees to the eastern edge.

There is a large group of Category B trees which wrap around the northern, western and southern borders of the site, and two Category U trees along the southern boundary. There is also a Category C tree along the northern edge. Beyond the site there is a dense woodland area surrounding the northern, southern and western edges.

3.5. SuDS GI Baseline Summary

The formal sustainable management of water within the business park site is currently non-existent, with drainage leading straight to multiple pipes which pass off-site. The southern watercourse does intercept run-off from southern and western slopes, and diverts this to the northern lake, which is designated as part of the SINC.

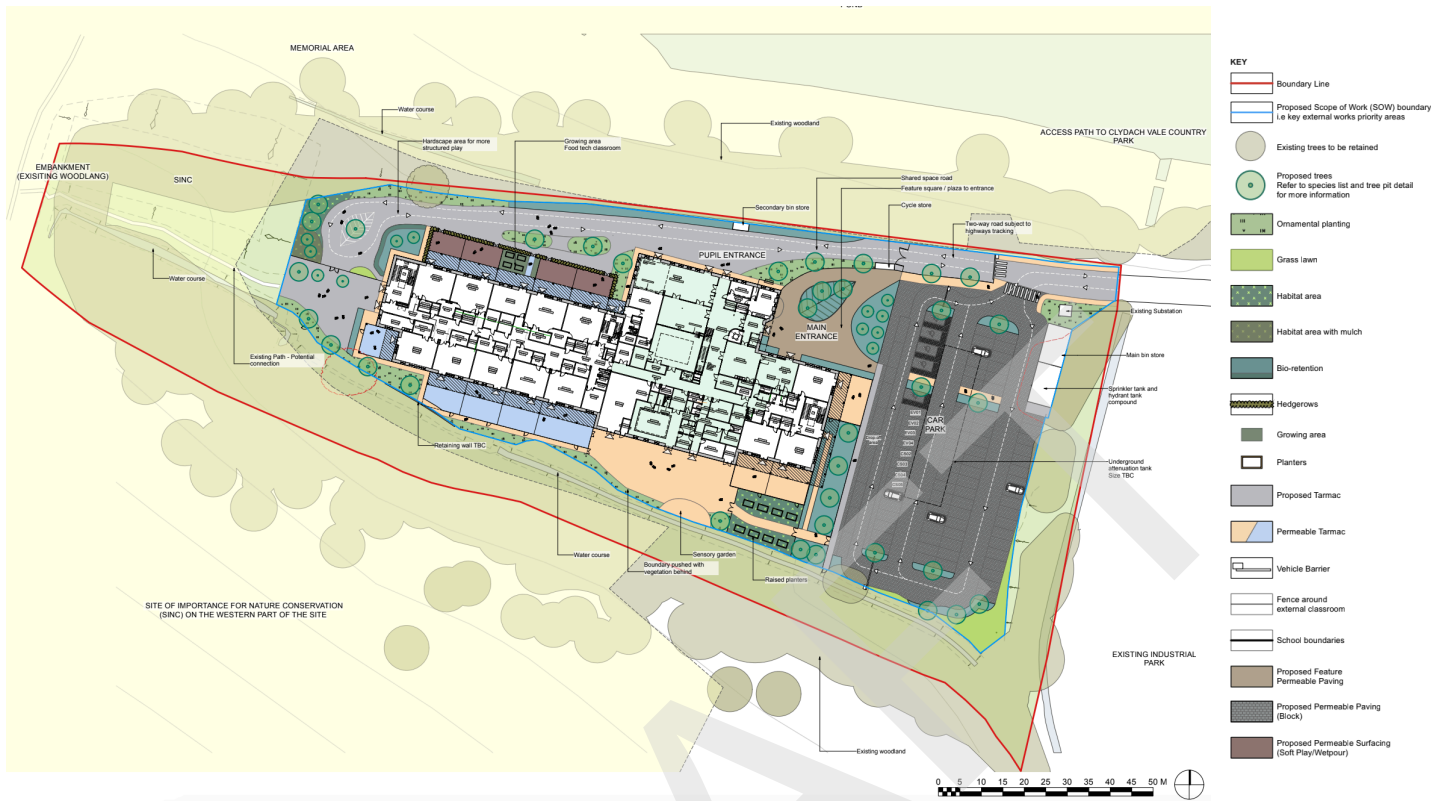
4. Proposed Scheme of Development

The proposed scheme includes the construction of an English Medium 3 to 19 special school; on the site of the demolished business park style council office and ancillary areas. Areas of existing hardstanding and amenity habitats are to be lost to the proposal, including existing parking which will be re-provided to meet the needs of the school. The proposed scheme can be seen illustrated at Figure 5 below.

The green corridors are to be preserved along southern / western and northern / western boundaries (where habitats exist), and for the most part the eastern boundary. New landscaping is also proposed, including play and amenity spaces, a sensory garden and landscape enhancements form a large part of the proposal. Those elements are integrated with the school to provide opportunities for education. There are areas of amenity planting along the edges of the site, with areas of permeable paving and SuDS.

Further below is a consideration of the proposed scheme from the differing specialist and framework aspects; required to illustrate compliance with the Step-wise approach, demonstrate multifunctionality, and review the specialist considerations to ensure that best practice is proposed.

Figure 5: Illustrative Masterplan, The Urbanists



4.1. Step-Wise Approach summary

The following is a summary, in relation to the proposed habitats post-development and the opportunities the scheme of proposed development present for species:

- the proposed scheme's Mitigation - avoidance, minimisation, mitigation or replacement, and compensation off or on site;
- enhancement - by way of Diversity, Extent, Condition, or Connectivity, and resultant Attributes of adaptability, resilience, and/or resistance to pressures;
- proposed long-term management principles to secure the above benefits; and
- multifunctionality of the above, with regard to the Ecosystems Services the proposal is considered to deliver.

This is followed itself by sections providing greater detail and analysis to support these summary. Those following sections are based on the specialist areas of consideration,

to enable a comparison against the baseline conditions and the Step-wise approach be illustrated in more detail.

4.1.1. Mitigation Hierarchy Summary

Avoidance	The majority of the trees are to be retained and any impacts to the SINC area, on or off-site, have been avoided.
Minimisation	Where possible the loss of trees has been minimised, as has the losses of existing opportunities for species and in particular the quality of habitat suitable for commuting bats.
Mitigation	Hedgerow and other amenity planting is proposed to mitigate loss of amenity habitats.
Compensation on / off site	The loss of some trees will be more than compensated for by new tree planting (above a 3:1 ratio), and new amenity or more naturalistic habitat to replace those lost.

4.1.2. DECCA Enhancements Summary

Diversity	<p>There is proposed to be an increased diversity between differing habitat types, increasing the range of habitat types within the site by increasing the density and also variety of planting areas. By also increasing the diversity of species in new and existing habitats, an increased diversity within habitats is proposed. An example of this is in new food growing areas, introducing a varied and seasonally changing array of species.</p> <p>An increased diversity in the features within the site, including bird and bat boxes, opens up an improved diversity of opportunities particularly for aerial species (birds and bats).</p>
Extent	The extent of tree and hedgerow habitats on-site have been increased, as has specifically the amenity planting areas. This increases the extent of GI possible within the site given the high constraints from the schools needs. There is proposed to be a loss of the extent of grassland area, although this modified by their likely degraded state after impacts of demolition (separate from this proposed), and the limited value of those prior to demolition; especially compared to the

	<p>increased extents of more diverse habitats.</p>
<p>Condition</p>	<p>New planting and features for key receptor bat species, and others that may be present more regularly or potentially present in the site, represent an improvement in conditions for these species; by provision of suitable habitats and opportunities. Suitable habitats have been chosen for varying wildlife benefits, but also for areas to be used by people, to ensure good conditions are practical in the high density development proposed.</p> <p>The overall condition for most habitats has therefore been maximised as appropriate. More naturalistic areas are to be created, by improvement of retained areas or creation of new such areas.</p>
<p>Connectivity</p>	<p>Tree and scrub at the east, south, west, and part of the north of the site, concentrates the connectivity benefits to east-west corridors; but also some small north-south corridors bridging between the SINC lakes and upper slopes of the valley. Those corridors connect to adjacent off-site habitats and their wider GI networks.</p> <p>The proposed development offers the chance for high quality (although more urban) transitional habitats, whereby more natural areas transition into a built environment that contains resilient and functional opportunities for wildlife. This could improve the connectivity for many species between higher valley woodland (south, west) and the lake (north), presenting an improved linkages for more mobile species, such as birds, bats, small mammals, and a range of invertebrates. The ability of the site to sustain a large variety of species through its high density and varied habitats helps support connectivity for wildlife in the wider area.</p>

4.1.3. Long-term Management Summary

The long term management is proposed for the benefit of wildlife. This will be detailed in full as part of a Landscape and Environmental Management Plan (LEMP), but is set out initially here. The mix of native and non-native climate resilient planting, will benefit wildlife through provision of either shelter, breeding, or foraging opportunities.

The management of amenity spaces within the school will largely need to be in line with the needs of the pupils. As such, the management of these areas is likely to only ensure

that the species compositions present is maintained, but won't be able to maximise the value of habitat structure or form for wildlife.

The management of areas of trees and woodland in areas outside the secure line, but within the wider site can be carried out in line with the principle of establishing diverse opportunities for wildlife. This could ensure that suitable species are coppiced on rotation, and that larger specimens or species that may grow large are kept in good health. Fruit species would be managed annually to ensure good health so as to maximise fruiting.

The green roof proposed would be managed in line with manufacturers guidance, in tandem with the needs of overlaying photovoltaic solar panels (where present). This would still likely produce a good quality sedum or grass based habitat, suitable for providing foraging and shelter opportunities for a range of invertebrates; and consequential benefits for predator species of these.

4.1.4. Ecosystem Services Summary

<p>Cultural</p>	<p>The proposed sensory garden, food growing areas and habitat exploration areas create spaces for learning and recreation. As well as this, these features of wildlife bring people closer to nature, providing physical and mental wellbeing benefits.</p> <p>The design of the building and locations of planting have been designed to bring the outside in, to produce a sense of the place being 'green and biodiverse' and connect to the surrounding environment.</p>
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<p>Regulating</p>	<p>SuDS drainage rain-gardens and the green roof located across the site will better manage and filter rainfall from within the site. The rain gardens in particular will help to capture, slow, filter and treat any contamination from increased surface run-off. Trees and other vegetation around the site would also contribute to both the management of rainfall in general and provide evapotranspiration cooling effects where present. Additionally, trees within the site would provide shade, and further cool urban areas, especially where that shade would fall on hardstanding or buildings. The above would all contribute to climate change resilience of the site, and development.</p> <p>Significant new tree planting, and other vegetation such as the green roof, would sequester and store carbon in both their masses and/or in soils.</p>
<p>Supporting</p>	<p>The significant areas of planting would assist in the formation of improved top soils on existing or newly uncovered / made ground and help secure improved nutrient cycling within the site. All landscaping and proposed features for wildlife would provide a habitat benefit for fauna over the existing baseline condition of the site.</p> <p>The diversity of native and non-native planting, and their conditions, would all help ensure there are significant opportunities for the supporting wildlife through provision of either shelter, breeding or foraging opportunities.</p> <p>The landscaping strategy has specifically included the consideration of suitable commuting corridors for bats at the south of the site, and proposed vegetation supporting this is designed to present an immediate and persistent enhancement of those opportunities.</p>
<p>Provisioning</p>	<p>A kitchen garden area has been implemented into the scheme so that children can interact with greenery as well as a provisioning service produced by growing edible vegetation that can be harvested and used on site; also creating a learning opportunity.</p>

4.2. Landscape GI Summary

The landscape strategy is detailed in the planning application accompanying design and access statement, including considerations of the opportunities and constraints of

the site, and wider area, and specifically the connectivity and diversity elements proposed that related to Ecosystem Resilience.

The proposed scheme includes extensive new native and diverse amenity planting, comprising a range of ornamental, shrub, hedgerow and tree species. This includes those native species green roof and areas of rain garden, as well as linear hedgerow and tree corridors connecting the site, acting as multifunctional GI features. These are beneficial to rainfall interception, filtration and attenuation, as well as biodiversity benefits for commuting bats and other more mobile species, respectively. This ensures both Regulating and Supporting Ecosystems service enhancements are delivered. Sensory gardens and kitchen gardens are designed to provide multifunctional biodiversity, educational and communal social space benefits. The integration of hardstanding areas for the provision of benches and other amenity features, with planting ensures that the space can be safely used by pupils, whilst also integrating with the wider landscape.

Overall a large multifunctionality is provided from the scheme, and is appropriate and sympathetic to the needs of the school and pupils; maximising the opportunities to gain value from the proposed habitats and planting within the school area.

4.3. Arboricultural Summary

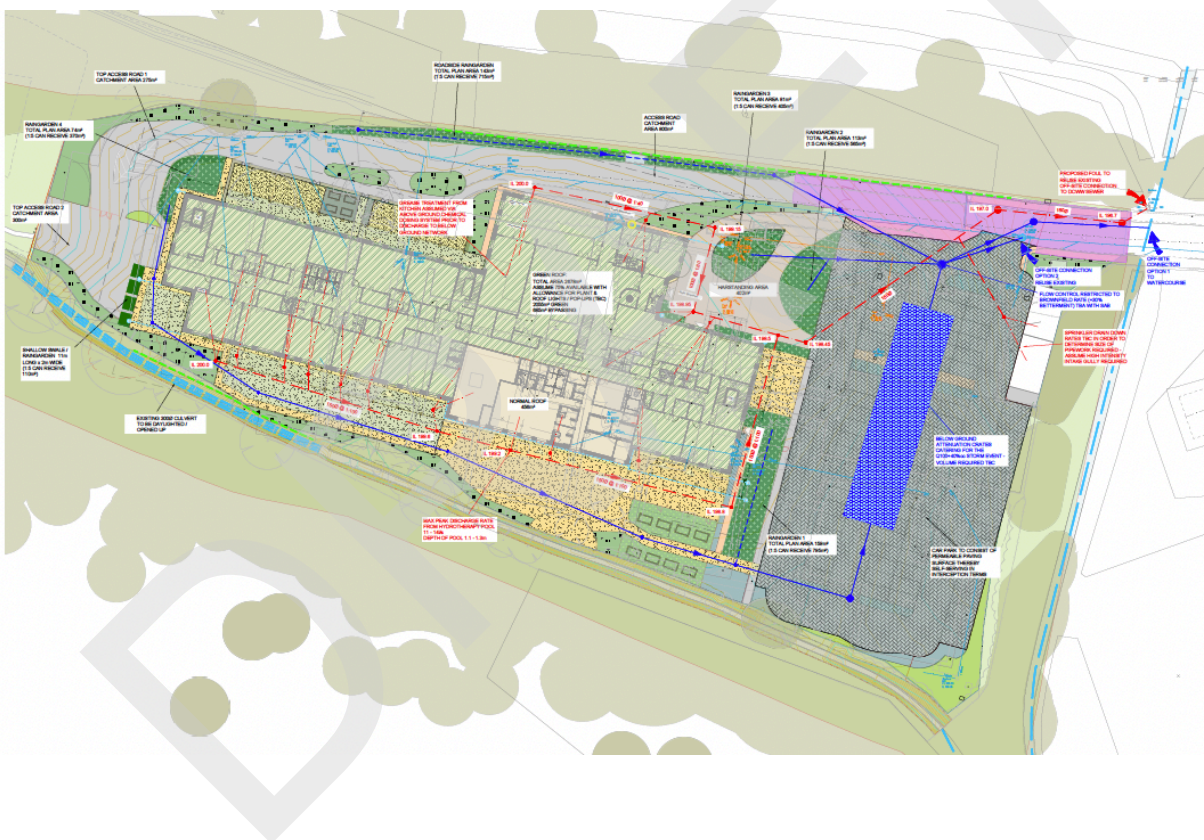
The vast majority of trees are to be retained, with the exception of the two Category U trees which are to be removed due to ill health. The group of Category C trees located in the north-eastern corner is slightly impacted by the building footprint and will be partially removed because of development needs.

The retained trees would be protected throughout construction. Those other trees are either considered unsafe and to be removed irrespective of development or are non-native and Compensation for the loss of that tree would comprise replacement tree planting across the site, at a level above the minimum three trees for each one tree to be removed; irrespective of the need to remove them because of development or for reasons of health.

4.4. SuDS Summary

It is proposed that new sustainable drainage system principles comprise a mixture of attenuation and infiltration within the site, treating the site run-off, and outflows then taken off-site via a condensed selection of the existing drain outlets. The proposed management measures include rain-gardens, green-roofs, and attenuation crates. The result would be an improved treatment and slowing of flows off the site, securing a betterment for the environment, improved safeguarding for areas downstream, and creating new ecological features in tandem.

Figure 6: Extract of Drainage Strategy, Cambria



4.5. Ecology Summary and Analysis

The proposed scheme has had a high consideration for the existing assets of potential biodiversity and ecological resilience significance within the site, retaining them where possible. The scheme proposes planting and features of benefit to wildlife, of a type and scale to enhance the overall biodiversity of the site. Those enhancements also

target opportunities to improve ecosystem resilience. Throughout the design process, the Step-wise approach to ecology has been followed and ensured.

The stream running along the southern edge of the site is proposed to be enhanced and retained. During construction this will be protected to ensure run-off does not have any adverse impacts, by its exclusion as a potential pollution pathway. This boundary is proposed to have wildflower planting, which will provide further habitat opportunities. There would be an improved number of differing habitat types, and therefore diversity between them, within the site; increased diversity of species within each habitat type; and, consequential enhancement of opportunities for a larger range of fauna, and the quality for those already potentially present within the site.

The positioning of the landscape elements has had a particularly high regard for the commuting and movements of bats. This has culminated in the reinforcement of what is potentially an existing green corridor at the southern edge of the site. That potential corridor joining the retained eastern edge habitats and their connectivity to wider areas, across the site into other habitats. New hedgerow and tree planting helps to ensure these corridors would be of a good condition.

Figure 7 - Proposed GI Landscape Strategy

All planting is proposed to be of a size, composition, and a condition whereby it can make an almost instant impact to the site, or at least minimise harm in the short-term from any habitat losses or other site changes. Trees of 2m in height or higher are to be planted to create a safe environment for the pupils. Likewise, areas are proposed to be sown with species mixes where specified at the first opportunity available.

The above is considered to offer suitable evidence of avoidance of any significant impacts to species that may be present on the site, including potential for birds, bats,, and less likely for hedgehogs, reptiles and amphibians. Likewise, the avoidance of impacts to those habitats that are of most significance in the existing site (most trees and hedgerow). Minimisation of impacts is had in the removal of only those existing trees and amenity/grassland habitats necessary. Suitable compensatory tree planting is to be provided, and new hedgerow would act as further mitigation in the short term; by

providing some of the same opportunities as trees, which would establish in the medium- to long-term.

New provision of bird and bat boxes within the site would help ensure there are new and diversified opportunities for roosting bats and nesting birds specifically. This would help to maximise the potential benefit of new planting, and especially looking to take maximum advantage of new green roofs which offer nearby feeding opportunities. This would be considered an enhancement of the condition quality and extent of opportunities; and significantly above the level of simple compensation needed for the potential loss of suitability for these species, by loss of the existing building or other habitats.

The benefits at site would likely be experienced more widely, due to the location within the existing surrounding environment. Simultaneously, there would be the improved connectivity of those site opportunities to nearby areas of other habitat potentially significant for wildlife. Those areas explicitly being the Clydach Vale Country park and Nant Clydach located north of the site. This is considered an enhancement of both those retained and new habitats, specifically for connectivity and condition of habitat in the site, and of benefit to the wider area.

5. Assessment

The site's relatively limited ecological (baseline) value at present makes the adherence to the Step-wise approach's requirement more simple to satisfy. As such, the scheme has looked to provide a highly considered and significant enhancement, in response to the relative ease of this. The Mitigation hierarchy to be considered and enhancement demonstrated at each 'stage', is demonstrated by the design journey illustrated in the Design and Access statement. This is further explored, and the multifunctional aspects of that approach illustrated, specifically in regard to the different areas of contribution, as set out above in Section 4 of this statement. The conclusion is that the proposed scheme would produce a significantly integrated enhancement of different habitats and the relative opportunities they present, and therefore a biodiversity and ecosystem

resilience enhancement. It would also produce some additional ecosystem service benefits which are themselves a betterment over those currently present within the site.

The proposed scheme is illustrated in Figure 5, which shows diverse areas of planting to be created, and the built/semi-natural habitats specifically proposed for the development site. The wider GI considerations of connectivity for both humans and wildlife can be seen illustrated at Figure 7.

Given the proposed developments' alignment with national and local policy GI requirements, the proposed development also accords with the UN Global Biodiversity Framework (2022). It meets key target areas: especially relating to reducing threats to biodiversity; but also sustains use and benefits sharing (to meet people's needs); and utilises tools and solutions for implementation and mainstreaming an ecocentric approach to proposed development.

5.1. Rhondda Cynon Taf County Borough Local Development Plan and SPG

Regarding the priorities of the local policies and SPG, the focus on protecting natural environments, of varying significance, is ensured throughout the proposed-development's scheme of design. Specifically these are LDP policies AW7, AW8, AW10 and the Nature Conservation SPG which have been complied with or adequately regarded (as required).

5.2. Legislative and policy consideration

A suitable NBB, and ER enhancement have been demonstrated through the application of the step-wise approach. Additionally, as part of the review of the site, and proposed design conception, suitable multi-functional benefits for both wildlife and people have also been considered by the framework of Ecosystem Services (ES). The proposed development has therefore adequately provided an enhancement of ES as part of the proposal; and adhered to good practice as part of this.

A general regard has been given as part of the design process to Section 7 habitats, BoCC Wales and Schedule 9 species that may be near the site, and have the potential to be impacted by the proposed development.

The scheme is therefore evidenced as complying with not only the requirement of PPW Chapter 6 but also other PPW chapters and the FW national policy, Local Policy as well as relevant legislation regarding or associated with aspects of Green Infrastructure. The proposed development also accords with the statutory duties of a local planning authority, with regard to Environment (Wales) Act 2016. A planning decision can therefore be positively made with regard to these considerations.

6. Conclusion

This GI Statement is considered to be proportionate to the scale and type of development proposed, and the comprehensive scheme of overall enhancement which is proposed. The statement sets out the measured baseline, the predicted impacts from the proposal and how these are managed within the design, and examines these via the mechanism of the step-wise approach, DECCA and ES frameworks. It also shows how the scheme complies with the relevant local policy context and any other aspects of PPW 12 beyond the GI Statement requirement. The scheme is considered to be an appropriate design, regarding GI, in the context of the site and local context or nearby/adjacent habitats of importance, and wider GI networks.