

**GREEN INFRASTRUCTURE STATEMENT
CONCERNING “PLOT 1” OF THE MASTERPLAN
FOR THE DEVELOPMENT AT CARDIFF PENINSULA
*For Planning***

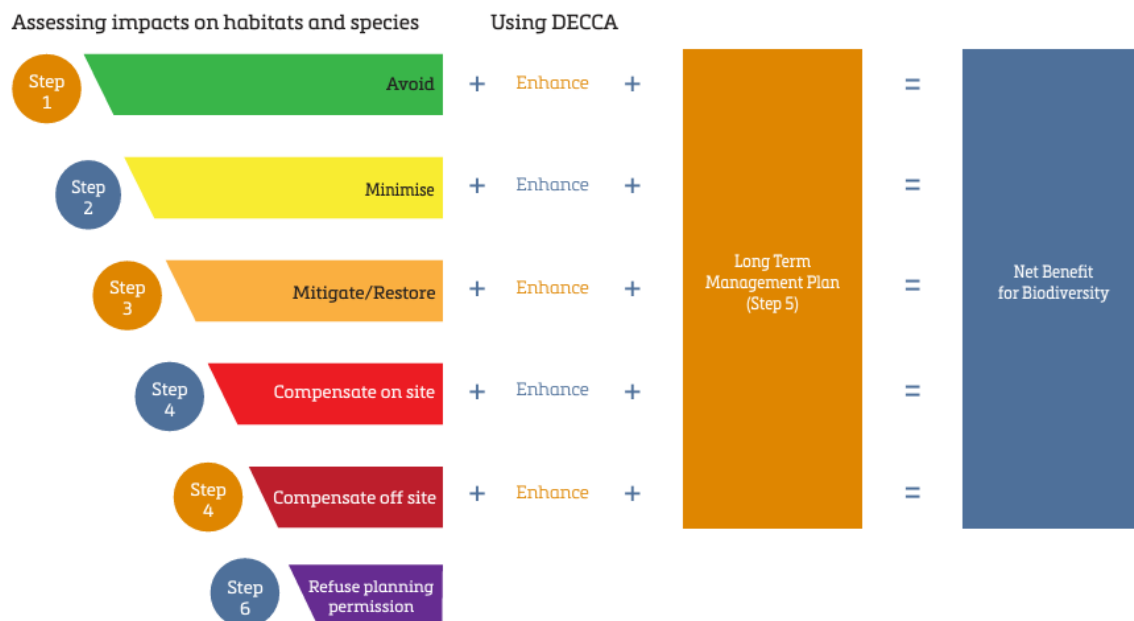
Introduction

This Green Infrastructure Statement (GIS) has been prepared by Cameo and Partners Ltd, Landscape Architects and the Ove Arup and Partners Ecology team on behalf of Orion Land & Leisure Limited in support of the planning application for a proposed meanwhile use on a site on Empire Way (referred to as “Plot 1” on Cardiff Peninsula in recognition of recent planning policy changes in Planning Policy Wales (PPW) Chapter 6. The proposed development consists of senior living accommodation with associated car parking, cycle parking, and landscaping

Policy Documents

Changes to Chapter 6 include the additional requirement to submit a GIS with all planning applications. The new paragraph 6.2.12⁽¹⁾ states that the GIS ‘will be proportionate to the scale and nature of the development proposed and will describe how green infrastructure has been incorporated into the proposal’ and that ‘the green infrastructure statement will be an effective way of demonstrating positive multifunctional outcomes which are appropriate to the site in question and must be used for demonstrating how the Step-wise approach (Paragraph 6.4.15) has been applied’.

Figure 12: Summary of the Step-Wise Approach



The graphic above is a copy of Figure 12 from PPW edition 12 showing a visual representation of the step-wise approach.

Additionally, PPW 12 sets out that “planning authorities must seek to maintain and enhance biodiversity in the exercise of their functions. This means development should not cause any significant loss of habitats or populations of species (not including non-native invasive species), locally or nationally and must work alongside nature and it must provide a net benefit for biodiversity and improve, or enable the improvement, of the resilience of ecosystems. All schemes applying for planning permission must demonstrate they have achieved a net benefit for biodiversity as defined in the ‘DECCA’ Framework¹ – Diversity, Extent, Condition, Connectivity and Aspects of ecosystem resilience – for each broad ecosystem type as set out in the Environment Wales Act, local planning policy and within NRW guidance^{2, 3}.

There is no specific guidance on how a GIS should be produced and what specific topics should be followed, only that in the new paragraph 6.2.13 of Chapter 6 it states that ‘In most cases the green infrastructure statement should highlight any baseline data considered and surveys and assessments undertaken, including but not limited to, habitats and species surveys, arboricultural surveys and assessments, sustainable drainage statements, landscape and ecological management plans, open space assessments and green space provision and active travel links’ and ‘Development proposals should be informed by the priorities identified in green infrastructure assessments and locally based planning guidance’.

Chapter 6 also refers to the Building with Nature standards in that they’ represent good practice and are an effective prompt for developers to improve the quality of their schemes and demonstrate the sustainable management of natural resources’.

Cardiff’s Green Infrastructure Supplementary Planning Guidance (SPG) (June 2017) sets out Cardiff Council’s approach to the consideration of green infrastructure in relation to new developments. It provides further guidance to Policy KP16: Green Infrastructure set out in the Cardiff Local Development Plan 2006 – 2026 and will assist in securing the provision of sustainable development across the City as part of the Liveable Cities agenda.

¹ CIEEM (2022) Welsh Government’s Approach to Net Benefits for Biodiversity and the DECCA Framework in the Terrestrial Planning System. <https://cieem.net/wp-content/uploads/2022/08/Net-Benefits-briefing.pdf>. [Accessed Nov 2023].

² Garrett HM, and Ayling SC. 2021. Terrestrial and freshwater Resilient Ecological Networks: a guide for practitioners in Wales. NRW Report No. 483.

³ Natural Resources Wales (NRW). (2016) The State of Natural Resources Report (SoNaRR): Assessment of the Sustainable Management of Natural Resources. Technical Report. Chapter 4. Resilient Ecosystems.

The Well-being of Future Generations (Wales) Act 2015 also places a duty on public bodies in Wales to carry out sustainable development. In this Act “sustainable development” means the process of improving the economic, social, environmental, and cultural well-being of Wales by taking action, in accordance with the sustainable development principle, aimed at achieving the well-being goals. These well-being goals are key for the GIS to consider, along with ensuring that as required by the Environment (Wales) Act 2016 that public authorities to seek to maintain and enhance biodiversity to promote the resilience of ecosystems when undertaking their functions. This includes consideration of species and habitat listed under Section 7 of the Act as those of ‘principal importance’ to conserving and enhancement biodiversity in Wales (hereafter referred to as Section 7/Priority Habitats and Species).

Scale and Nature of Development

The proposed development is c0.85ha, located on an existing car park (the location of the development along with the landscaping plan is shown in Figure 1 with site photos shown in Figure 2). The proposals are for a full planning application for senior living accommodation with associated car parking, cycle parking, and landscaping. The landscape proposals are provided as part of the planning application and should be read in conjunction with this GIS.

Further details on the location of the site, its existing use, the baseline ecological value and future proposals are contained in the following key reference documents included in the application:

- Design and Access Statement (specifically: location plan, landscape plans and sustainable drainage design);
- Landscape General Arrangement Plan (CPM-CAM-10-100L-DR-L-PL-0100 Rev 06)
- Ecological Impact Assessment (EclA) (specifically: baseline habitats, quality and condition and ecosystem resilience assessment).

Key Elements of the Design in Relation to Green Infrastructure

There are a number of key aspects of the design proposal that directly relates to green infrastructure:

1. Public open space – a c10m wide flowering lawn, enhanced with species rich wildflower areas and individual trees between Empire Way and the River Ely waterfront forming a new green link. The private gardens include a communal allotment (small raised beds for ease of access).
2. New public access path and active travel boardwalk along the River Ely connecting Cardiff Pointe and riverfronts outside Cardiff Pointe and International Whitewater Centre and beyond.
3. Substantial increase in soft and biodiverse areas compared to existing use as a car park.
4. Biodiversity:
 - a. Green/blue roofs to the building seeded with native species rich wildflower turfs.
 - b. 3nr invertebrate ponds managed to provide biodiversity benefits.

- c. Tree and hedge species selection – selected for year-round benefit with native species prioritised to maximise benefits to bird and invertebrates (spring flowering to autumn fruiting).
 - d. Flowering lawns and native wildflower areas– the grass areas seeded with a mix of native species, including plant species favoured by brown-banded carder bee *Bombus humilis* which have been found at the site.
 - e. Mammals – ground cover network of shrubs and herbaceous planting to assist safe passage for mammals including hedgehog *Erinaceus europaeus* around the site.
 - f. Bats – the lighting strategy has been designed to minimise potential effects on bats following best practise guidelines and additional dark foraging habitats provided on the green roof. Integrated bat boxes will be provided in the development.
 - g. Birds – integrated bird boxes provide additional suitable nesting opportunities for a wide range of species.
 - h. Insects – dead wood from site won material to be provided within landscaped areas, and insect hotels located throughout the site to provide overwintering habitat for invertebrates.
5. Active travel – the points of access onto the site tie into the existing pedestrian and cycle routes nearby.
 6. Sustainable Drainage – all surfaces are porous with surface water run-off discharging directly to soft ground or linear open swales adjacent paths through public open space.

Summary of the Ecological Baseline

The site in its baseline condition largely comprises the hardstanding area of the car park, with an area of dense scrub and trees and semi-improved grassland along the riparian edge. The land is separated from the water by sheet piles, with the land being an estimated circa 4m above the average water level. Some scrub and trees are also present along the north boundary, including a defunct beech hedge.

Key species present at the site or in close proximity to the site include;

- Foraging and commuting bats
- Foraging and commuting otter *Lutra lutra*.
- Breeding birds
- Fish
- Invertebrates
- Small mammals

Green Infrastructure Assessment

Table 1 summarises the Step-wise approach taken to the Green Infrastructure design and ecological design in order to provide a Net Benefit for Biodiversity (NBB) and ecosystem resilience. Ecological baseline data collected in 2022 and 2023 was used to inform the site selection process including: Extended Phase 1 habitat survey, vegetation survey, preliminary bat roost assessment, bat activity survey, otter survey, breeding bird and wintering bird survey.

For further detailed information on species, habitats, ecosystem resilience assessment and impact assessment please refer to the Plot 1 EclA and accompanying drawings. Key sections of the EclA relevant to Table 1 are: Embedded Avoidance and Mitigation Measures (Section 7, in particular Section 7.2.5 Habitat Retention and Creation) and Ecosystem resilience assessment (Section 10).

Table 1: Step-wise Approach to Green Infrastructure Ecological Design

Element of GI Or ecological receptor present	Current extent	Post development extent	Step-wise Approach, step or steps reached	Additional mitigation or enhancements	Ecosystem services provided, benefits relating to Building With Nature (BWN) standards, and anticipated change in Diversity, Extent, Condition, Connectivity and Aspects of ecosystem resilience (DECCA)
<i>Site Selection and design approach</i>	During design development the Step-wise approach was followed; the project design team consulted the Arup ecologists early in the design process, such that as many ecological impacts as possible were avoided early on through careful design. Sensitive ecological receptors were identified and avoided as far as possible, for example buildings were set back from the River Ely as much as possible, due to it being an important habitat for bats, otter and fish. Additionally, a small area of scrub was retained in the northeast of the site, along with retention of as many existing trees as possible. Species requirements and their habitats were factored into the design process, with the avoidance of impacts being prioritised. Where it was not possible to avoid an impact entirely, the design next sought to mitigate and restore, prior to then compensating for on site. Enhancements were then also designed in line with the step-wise approach. Green roofs have been included for biodiversity and to provide benefits to foraging bats, invertebrates and plants, and the landscaping plan was designed to provide increased ecological connectivity around the Plot 1 site for key species. Ponds and wildflower are provided for invertebrates. The lighting design is also sensitive to foraging and commuting bats.				
<i>Designated Sites and priority habitats within the wider landscape</i>	<p>Severn Estuary Special Area of Conservation, Special Protection Area and Ramsar Site*</p> <p>Severn Estuary Site of Special Scientific Interest (SSSI)*</p> <p>Cwm Cydfin, Leckwith SSSI</p> <p>Cardiff Bay Wetlands and Hamadryad Park Local Nature Reserve (LNR)*</p> <p>River Ely Site of Interest for Nature Conservation (SINC)*</p> <p>Cogan Spur SINC</p> <p>Grangemore Park SINC</p> <p>Factory Wood SINC</p> <p>Cardiff Bay Wetland & Reserve SINC*</p> <p>River Taff SINC*</p> <p>Reservoir Wood SINC</p> <p>Leckwith Pond & Marsh</p> <p>B-Lines</p> <p>*hydrologically connected through surface water outfalls and Cardiff Bay.</p> <p>Rivers and waterbodies within site boundary (River Ely and Taff, Cardiff Bay)</p>	No change	<p>Step-wise Approach: Avoid and Minimise</p> <p>Minor works only proposed within the River Ely SINC, including the installation of a pedestrian boardwalk and one small surface water overflow. Buildings were set back from the water's edge as much as possible and lighting designed to be sensitive to bats and minimise light spill to the river corridor and therefore any potential disturbance to species including bats or otter.</p>	<p>Any impacts minimised through proposed SuDS such that water quality post development is the same or better than existing.</p> <p>Construction best practise to prevent pollution reaching designated sites.</p>	Benefits of boardwalk described under 'waterbodies' in below sections.

<p>Amenity grassland</p>	<p>46 m²</p>	<p>822 m²</p>	<p>Step-wise Approach: Mitigate/Restore and Enhance</p> <p>46 m² of low value amenity grassland will be removed and replaced with a greater extent (822 m²) of amenity grassland with enhanced value ‘flowering lawns’ due to the higher diversity of plant species which will include vetches, clovers and other low growing species including bird’s-foot <i>trefoil Lotus corniculatus</i>, selfheal <i>Prunella vulgaris</i>, lawn chamomile <i>Chamaemelum sp.</i> and red clover <i>Trifolium pratense</i>. Managing this area so that short stemmed species can flower will provide a nectar source for pollinators and improve diversity of species compared with the baseline.</p> <p>Connectivity will be improved as this habitat now extends along almost the entire west boundary of site.</p>	<p>The condition of habitats will be improved through a Landscape and Ecological Management Plan (LEMP) which will monitor and ensure habitats are achieving a better condition with biodiversity benefit prioritised.</p>	<p>BWN S1 – Optimises multifunctionality and connectivity. Enhanced species rich amenity grassland can also be used by people so serves a dual purpose.</p> <p>BWN S7 – brings nature closer to people. Amenity grassland is available for people to exercise on or use for relaxation.</p> <p>Ecosystem Services - provision of habitat for native pollinators.</p> <p>Ecosystem Services – interception of surface water, well-being.</p> <p>DECCA – Expected increase (+)</p>
<p>Scrub/hedge/ shrub/herbaceous</p>	<p>879 m² scrub 35 m hedge 0 m² shrub 0 m² herbaceous</p>	<p>83 m² scrub 169 m hedge 1,137 m² shrub 361 m² herbaceous</p>	<p>Step-wise Approach: Avoid, Mitigate and Enhance</p> <p>83 m² of scrub in the northeast corner of site will be retained along with some existing trees, thus avoiding impacts where possible. The rest will be removed.</p> <p>Mitigation and enhancements are carried out as follows:</p> <p>The existing defunct single species hedge on site of 35m in length (categorised as of low retention value within the arboriculture report) will be replaced and extended with 169m of species rich native hedgerow. At least five native species will be used for example such as hawthorn <i>Crataegus monogyna</i>, holly <i>Ilex aquifolium</i>, dog wood <i>Cornus sanguinea</i>, guelder rose <i>Viburnum opulus</i>, buckthorn <i>Rhamnus cathartica</i>, wild privet <i>Ligustrum vulgare</i>, hazel <i>Corylus avellana</i> and honeysuckle <i>Lonicera periclymenum</i> chosen to provide wildlife benefits including food sources for birds and nectar sources for invertebrates.</p> <p>1,137 m² of new shrub planting is proposed with native species prioritised. This has been designed around the edges of the development in order to provide enhanced connectivity around the site for hedgehog, as well as providing opportunities once mature for bird nesting sites and food sources.</p> <p>361 m² of new perennial herbaceous borders are proposed to be located along the waterfront to the south and also along the north edge. The inclusion of herbaceous borders will increase diversity through it being a new habitat with a wide range of flowering species which will provide nectar sources for pollinators.</p> <p>Connectivity of scrub/hedge/shrub/herbaceous will be improved as this habitat now extends around the majority of the site, compared with just along the waterfront in the baseline. This will improve connectivity for species such as birds, bats, invertebrates and hedgehog by providing wildlife and foraging corridors around the edges of the development.</p>	<p>The condition of habitats will be improved through LEMP which will monitor and ensure habitats are achieving a better condition with biodiversity benefit prioritised.</p> <p>Additional enhancements include the provision of dead wood and bee bricks/or living blocks within or directly adjacent to these habitats that can be used by microorganisms, invertebrates, reptiles, amphibians and small mammals.</p>	<p>BWN S1 – Optimises multifunctionality and connectivity. Landscaping is both species rich and increases connectivity.</p> <p>BWN S11 – delivers wildlife enhancement through increasing the diversity of species in that area and improving the habitat for invertebrates.</p> <p>Ecosystem Services - provision of habitat for native pollinators.</p> <p>Ecosystem Services – interception of surface water, well-being</p> <p>DECCA – Expected increase (+)</p>
<p>Grassland and green roof</p>	<p>579 m² grassland</p>	<p>218 m² wildflower grassland</p>	<p>Step-wise Approach: Mitigate and Enhance</p>	<p>The condition of habitats will be improved through LEMP which will monitor and ensure</p>	<p>BWN S3 – Maximises environmental net gains - provides net benefits for biodiversity and ecosystem resilience through the design and provision of species-</p>

	0 m ² green roof	1,251 m ² wildflower green roof	<p>Removal of 579 m² of semi-improved grassland will be mitigated with the creation of 218 m² of new native wildflower planting at ground level along the west edge of the development and 1,251 m² of green roofs, created on top of the residential areas and seeded with native wildflower.</p> <p>Seed mixes will be native and of high diversity, designed to support invertebrates throughout a long flowering season, including species known to be favoured by brown banded carder bee such as common knapweed <i>Centaurea nigra</i>, red bartsia <i>Odontites vernus</i> and red clover.</p> <p>On the green roofs it is intended that the substrate used will be low nutrient, vary in depth, and topography will be varied locally to encourage diversity and create microclimates. In addition, solar panels will be installed on all green roofs, it is expected that they will be spaced approximately 1.5m apart, this will further improve the diversity and microclimates available to plant and invertebrate species, due to the contrast between shaded and sunny areas, and also the non-uniform run off of water. Despite literature on bio-solar roofs remaining limited, initial studies have shown an increase in invertebrate/floral diversity on bio-solar roofs compared to purely green roofs⁴.</p> <p>The green roof will improve connectivity by providing habitat at a different level as well as providing a foraging resource for bats. The ground level wildflower areas will extend along the western edge providing improved connectivity and foraging resource for wildlife including hedgehog</p>	<p>habitats are achieving a better condition with biodiversity benefit prioritised.</p> <p>Additional enhancements include insect hotels placed within these habitats to provide overwintering resources for invertebrates.</p>	<p>rich habitats with greater diversity and condition than the baseline which will in turn provides improved adaptability, resistance, or recovery for these habitats, and the fauna they support, from climate-related pressures and demands such as flooding and drought.</p> <p>BWN S7 – brings nature closer to people, wildflower areas are located by the main pedestrian entrance to the site, along existing access routes.</p> <p>BWN S11 – delivers wildlife enhancement through increasing the diversity of species in that area and improving the habitat for invertebrates.</p> <p>Ecosystem Services - provision of habitat for native pollinators.</p> <p>Ecosystem Services – interception of surface water, well-being</p> <p>DECCA – Expected increase (+)</p>
Allotment	0 m ²	12 m ²	<p>Step-wise Approach: Enhance</p> <p>12 m² of allotment space will be provided, this will allow residents to grow vegetables and flowers, and encourage a sense of connection to the landscape through growing.</p> <p>Although the primary purpose of an allotment is to grow food, allotments provide a valuable resource for wildlife, helping to form habitat mosaics (along with the other site landscaping) and will offer some additional alternative habitat niches and provide some level of food and shelter for wildlife.</p> <p>Allotments are located within an area of hardstanding and will provide stepping stones for wildlife within this area with a small increase in connectivity compared with the baseline.</p>	None	<p>BWN S1 – Optimises multifunctionality and connectivity. Provides a community benefit as well as providing increased connectivity for wildlife within a hard surfaced area.</p> <p>BWN S5 – creates distinctive places.</p> <p>Ecosystem Services – food production, well-being.</p> <p>DECCA – Expected increase (+)</p>
Trees	26	65	<p>Step-wise Approach: Avoid, Mitigate and Enhance</p> <p>7 species of tree are present in the baseline according to the arboricultural report including elm cultivar <i>Ulmus sp.</i>, Italian alder <i>Alnus cordata</i>, common alder <i>Alnus glutinosa</i>, beech <i>Fagus sylvatica</i>, goat willow <i>Salix caprea</i>, maiden hair tree <i>Ginkgo biloba</i> and Corsican pine <i>Pinus nigra</i>.</p> <p>11 trees will be retained and 15 trees will be removed (noted as being of low retention value in the arboricultural report). 54 new trees will be planted</p>	<p>The condition of habitats will be improved through a LEMP which will monitor and ensure habitats are achieving a better condition with biodiversity benefit prioritised. Under the LEMP the trees should remain healthy and reach maturity, allowing their full benefits to be realised.</p>	<p>BWN S2 – positively responds to the climate emergency - through carbon sequestration during the operational phase.</p> <p>BWN S7 – brings nature closer to people, trees are in areas easily accessible to pedestrians and residents.</p> <p>BWN S9 – delivers climate resilient water management.</p>

⁴ Connop, S, Lindsay, RA, Nash, C, Newport, DJ. (2015). Initial insights on the biodiversity potential of biosolar roofs: a London Olympic Park green roof case study. *Israel Journal of Ecology and Evolution*. DOI: 10.1080/15659801.2015.1045791

			<p>around the edges of the proposed development, with a focus on those to the north and west edges to provide increased connectivity for birds and bats.</p> <p>The planting of native species with local provenance will be prioritised for new trees and proposed species include hornbeam <i>Carpinus betulus</i>, common alder, rowan <i>Sorbus aucuparia</i>, silver birch <i>Betula pendula</i>, wild cherry <i>Prunus avium</i>. Elm (new horizon resistant to dutch elm disease <i>Ulmus sp.</i>) and white willow <i>Salix alba</i>. The trees will provide food sources for birds as well as providing shading to reduce the urban heat island effect. No significant change to diversity of tree species anticipated.</p> <p>Trees will form new potential flight lines for bats and increase connectivity for bats, birds and hedgehog down the north, west and east edges of the site.</p>		<p>Ecosystem Services - improved water quality, interception of water, evapotranspiration, urban cooling and shade from canopy cover, wind breaks, well-being.</p> <p>DECCA – Expected increase (+)</p>
Waterbodies	253 m ² river Ely 0 ponds	253 m ² river Ely 3 ponds	<p>Step-wise Approach: Minimise and Enhance</p> <p>There are no existing ponds on site. The river Ely is present on the south boundary. A boardwalk will be installed above the River Ely on the south edge of site, at the top of the sheet piles. This will not change the location of the riverbank. It will provide a new active travel link and bring people closer to water and nature. Any impacts to otter and bats will be minimised by the lighting strategy. The boardwalk will be circa 4m above the average water surface.</p> <p>Two small micro ponds will be created, to provide standing water on site for wildlife, providing some opportunities for botanical diversity and aquatic invertebrates. These should be topped up as required throughout the year to retain water during dry periods.</p> <p>One larger pond will be created, to be large and deep enough to provide suitable habitat for dragonflies (around 2m x 3m) and be managed to maximise biodiversity value, in particular to provide habitat for amphibians and invertebrates. Ponds will be located in different areas of the site in order to provide drinking sources for wildlife and wildlife stepping stones across the site.</p>	<p>The condition of habitats will be improved through LEMP which will monitor and ensure pond habitats are achieving a better condition with biodiversity benefit prioritised.</p> <p>The larger pond is sited in a central area, bringing people closer to nature and wildlife.</p>	<p>BWN S1 – Optimises multifunctionality and connectivity. Through providing a missing link in the landscape for the benefit of people.</p> <p>BWN S7 – brings nature closer to people, the boardwalk will allow pedestrians to enjoy the river Ely SINC corridor and extends the local active travel network.</p> <p>BWN S10 – brings water closer to people. Ponds integrated into development and boardwalk allows closer access to the water.</p> <p>BWN S11 – delivers wildlife enhancement through increasing the diversity of species in that area and improving the habitat for invertebrates within ponds.</p> <p>Ecosystem Services - interception of water, well-being</p> <p>DECCA – Expected increase (+)</p>
Bats	Common pipistrelle <i>Pipistrellus pipistrellus</i> , soprano pipistrelle <i>Pipistrellus pygmaeus</i> , Nathusius' pipistrelle <i>Pipistrellus nathusii</i> , and noctule <i>Nyctalus noctula</i>) foraging close to the site	No significant change	<p>Step-wise Approach: Avoid, Minimise, Mitigate and Enhance</p> <p>Bat activity on the site informed the requirement for a dark corridor for bats to be provided along the south edge of the site on the water corridor.</p> <p>Ecology team worked closely alongside the lighting designer, following the mitigation hierarchy in order to avoid and then minimise the light spill to the surrounding area and to the proposed dark corridor to a minimum. When it was not possible to avoid lighting an area, mitigation measures were used for external lighting to reduce lighting to a minimum including (but not limited to) choice of warm white light sources of 2700K or lower, selecting luminaires that lack UV elements and using directional lighting. Following this if required blanking plates were added and lighting columns reduced (e.g. to avoid lighting green roofs). Finally additional screening was provided through landscaping (trees) placement of trees to further reduce light spill to the surrounds.</p>	<p>Additional enhancements include bat boxes, proposed to be integrated into the building facades to provide suitable roosting habitat for a range of species that use the site.</p>	<p>BWN S1 – Optimises multifunctionality and connectivity. New green roofs improve connectivity of foraging habitat and lighting strategy has minimised lighting to the river Ely wildlife corridor to maintain connectivity.</p> <p>BWN S7 – brings nature closer to people, providing integrated bat boxes to the development and additional landscaping which provides potential for bats to move through the development.</p>

			Additional dark foraging habitat has been provided on the green roofs and through the landscaping as described in the habitat sections above.		
<i>Otter and Fish</i>	Otter commute at edge of River Ely and fish in River Ely	No significant change	<p>Step-wise Approach: Avoid and Minimise</p> <p>Impacts avoided through site selection process. New boardwalk changes the distribution of pedestrians around the site bringing them closer to the water at this location however lighting strategy and location of boardwalk at a high level above the water avoids and minimises and potential impacts.</p>	<p>Any impacts minimised through proposed SuDS such that water quality post development is the same or better than existing.</p> <p>Construction best practise to prevent pollution reaching the watercourse.</p>	N/A
<i>Breeding Birds</i>	Various species	No significant change	<p>Step-wise Approach: Avoid, Mitigate and Enhance</p> <p>Avoidance of an area of scrub to the northeast. Provision of extensive additional habitats suitable for foraging as described in the habitat sections above.</p>	<p>Additional enhancements include swift boxes, house martin boxes, house sparrow nest boxes and general bird boxes, proposed to be integrated into the building facades to provide suitable nesting habitat for a range of species.</p>	BWN S7 – brings nature closer to people, providing integrated bird boxes throughout the buildings.

Whereas the scale and nature of the development is relatively small the intended use is directly aligned to the seven inter-connected well-being goals for Wales (as set out in *The Well-being of Future Generations (Wales) Act 2015*) illustrated in the diagram below. The proposal makes provision for more active and passive activity, offers employment opportunities, and provides enhanced ecological diversity as well as other benefits.



Diagram 1 The seven inter-connected well-being goals for Wales

<https://www.gov.wales/well-being-of-future-generations-wales>

Summary

The assessment of the design proposals has been made. By bringing an area of redundant land into active use meets the primary objective of PPW12 to provide the intended multi-functional benefits.

The key elements of the design listed above is a significant improvement in creating a sense of place, provision of public amenity and significant net benefit to biodiversity.

The proposals are considered likely to fulfil the objectives of PPW12 and related local policy KP16.

Figure 1 Location Plan



Figure 2 Site Photos



