

GREEN INFRASTRUCTURE STATEMENT APPLICANT: Castell Group



Introduction

dp landscape architecture [DPLA] have been commissioned by Castell Group to provide a Green Infrastructure Statement in accordance with the requirements set by the latest version of Planning Policy Wales to support the proposed residential development on the site located off Heol Aneurin, Caerphilly. An assessment of the existing landscape and surrounding context was undertaken on 18th April 2024 by Dan Patterson BA [hons] DipLA MLI. The assessment comprised a site walk-over and brief desktop study.

Edition 12 of Planning Policy Wales, the latest version of the framework, was published in February 2024. PPW is the principal national planning policy document which sets out the land use policies of the Welsh Government, the main thrust of which is to ensure that the planning system contributes towards sustainable developments. The latest version imposes a duty on competent authorities to conserve and enhance biodiversity, and introduces a requirement for all planning applications to be accompanied by a green infrastructure statement. Specifically, para 6.2.12 states that:

“A green infrastructure statement should be submitted with all planning applications. This will be proportionate to the scale and nature of the development proposed and will describe how green infrastructure has been incorporated into the proposal. In the case of minor development this will be a short description and should not be an onerous requirement for applicants. The green infrastructure statement will be an effective way of demonstrating positive multi-functional 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.”

The purpose of this Statement is therefore to set out the Green Infrastructure proposed as part of this planning application, and demonstrate how this is to be incorporated into the proposed development. It should be read in conjunction with DPLA drawing; 1219.01; Soft Landscape Proposals.

Existing site

The existing site is located to the north west of Caerphilly, with access off the Heol Aneurin. The former sports and social club site mainly comprises vast areas of hardstanding, associated with its previous use and has some trees, vegetation and hedgerows along some of its boundaries. It is bounded by Caledfryn Way to the north, Heol Aneurin to the east, Penyrheol Community Centre to the south and a small parcel of green space to the west.

The existing landscape and GI features include areas of scrub and poor quality trees along the northern boundary, an area of amenity grass along the eastern boundary, average quality trees to the south and some small, poor quality trees along the western boundary.

The trees to the north [T1, T2, T3 and T4] will be removed however these are noted as Category U and / or unsafe for retention. The poor quality trees along the western boundary, also noted as Category U will also be removed. The area of scrub to the north [G5], the trees to the south [G8, T9 and T10] and the amenity grass to the east will be retained.



The site will be enhanced by the introduction of new native tree planting as well as native hedging, new shrubs, plants known for wildlife value, wetland plant mixes and other habitat types.

View SSW from the site looking towards the Community Centre and the existing trees along the southern boundary.

Green Infrastructure Strategy

Green infrastructure (GI) is defined by Planning Policy Wales as a “network of natural and semi-natural features, green spaces, rivers and lakes that intersperse and connect places”. This can include natural habitats ranging from grasslands, wetlands and woodlands to parks, open spaces, playing fields, street trees, rain gardens, allotments and private gardens”.

Due to the nature of the proposed development, a large proportion of the site will be taken up by the residential block and the associated access roads and parking, however the new layout creates sufficient space for soft landscaping and these areas will be maximised to meet the GI objectives.

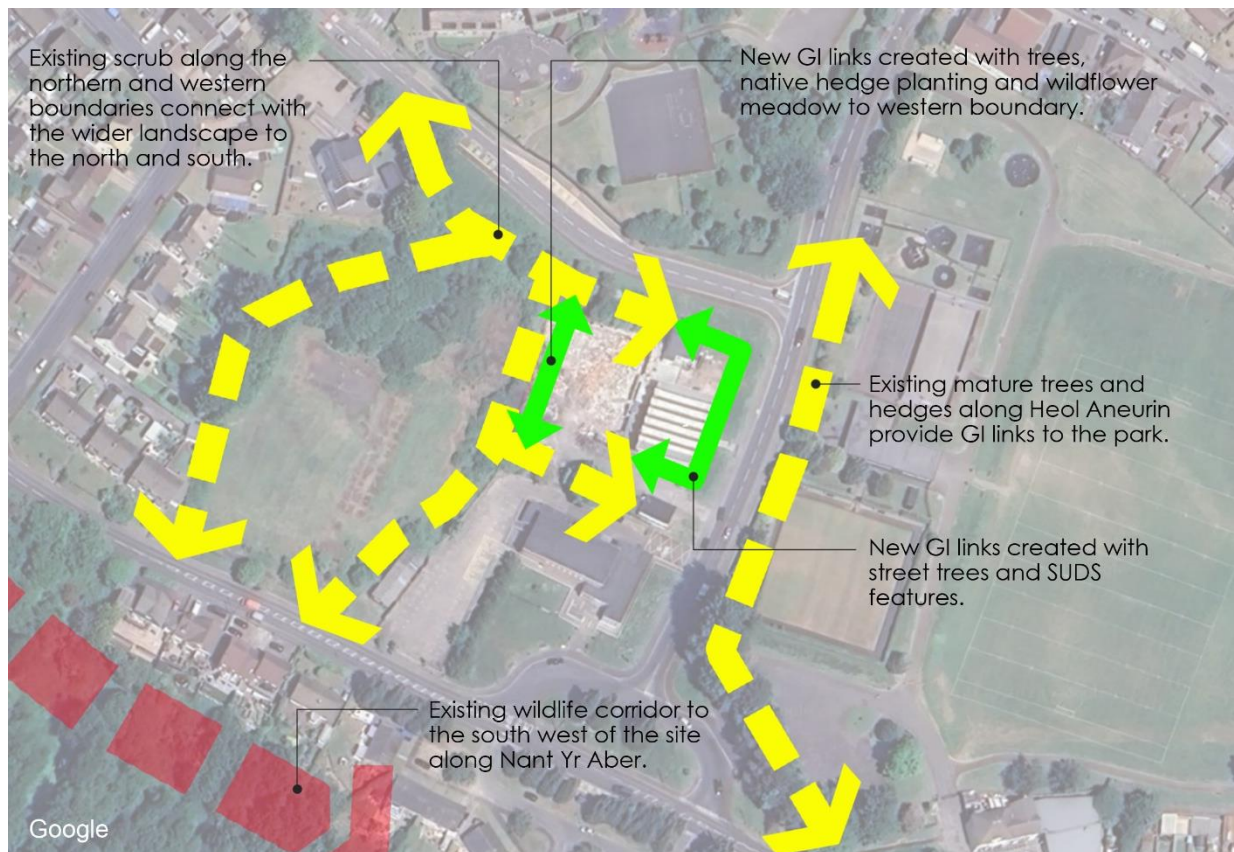


Figure 01 – Design Principles.

The site benefits from the existing vegetation along the northern, southern and western boundaries, as indicated in Figure 01 above.

These are the most significant existing landscape features within and just off the site and provide important GI links with the surrounding landscape and existing well established wildlife corridors such as Nant Yr Aber to the south west of the site.

The existing boundary planting will be retained where possible, protected and enhanced so that new Green Infrastructure can connect directly with the wider ecological network. This will be achieved by introducing enhanced landscape areas and a series of GI links through the site and along its boundaries.

The site will also be enhanced by the introduction of new native tree planting as well as native hedging, new shrubs, plants known for wildlife value, wetland plant mixes and other habitat types.

This report uses the following five principles of Green Infrastructure as a guide to inform the landscape designs to ensure the landscape maximises the benefits to people and wildlife.

The five principles:

- Multi-functional
- Adapted for Climate Change
- Healthy
- Biodiverse
- Smart & Sustainable

Multi-functional:

The landscape design includes a range of GI features for the benefit of people and wildlife. These include native tree planting to improve amenity as well as providing summer shade and a food source for wildlife.

The planting design includes ornamental shrubs and those that are known to support wildlife. This will improve amenity and tie in visually with the adjoining landscape. This planting also provides safe routes through the site for mammals and foraging opportunities for local fauna.

Street trees, shrub planting and rain gardens are proposed to provide GI links through the site.

Native hedges are proposed along the western and northern boundaries which will provide a food source and nesting opportunities for birds as well as providing new ecological and GI links through the site.

Finally, areas of wildflower meadow are proposed to the west and north of the site which will further enhance the site's Green Infrastructure.

The combination of the above measures will enhance biodiversity across the site and demonstrates every effort is being made to create a multi-functional landscape.



Landscape features to benefit people and wildlife.

Adapted for Climate Change:

The drainage design for the site includes a Sustainable Urban Drainage System. [SUDS]. The design comprises a series of rain gardens around the building.

This gives us an excellent opportunity at surface level to create rich wetland and grassland habitats capable of holding water on site. This will improve and manage water quality, enhance biodiversity as well as providing amenity for the people using the site.



Rain Garden planting.



RE3 River Floodplain / Water Meadow' by Germinal Seeds or similar.

Healthy:

The underlying principles of the landscape design for the site are to create an attractive setting for the new development for the benefit of all users.

This will be achieved by retaining and enhancing existing landscape features where possible and introducing new native tree and shrub planting as well as native hedging as described earlier.

The combination of the above GI features will contribute positively to the amenity of the site and to the wellbeing of those who live there and / or visit.

Biodiverse:

The planting scheme includes a large number of native species and species noted for wildlife value. These features include trees, shrubs, hedges and wetland habitats across the site.

The existing planting infrastructure to the north, south and west [apart from the Cat U trees] will be retained and enhanced. It will also be maintained to ensure a healthy biodiverse site in the long term, which in turn will benefit local ecosystems and the wellbeing of people.

In addition to the habitats created through the planting design, the site will also include other ecological measures. Bat and bird boxes and invertebrate refugia will be provided and will be installed on the new building.



Bat / bird boxes and invertebrate refugia.

Smart & Sustainable:

The planting design for the development has been carefully considered to ensure that it is not reliant on artificial irrigation.

The only exception to this could be during the establishment period, where, during periods of prolonged dry weather, the young plants may require some watering to prevent loss and to aid their successful establishment. In these circumstances, the watering should be carried out using harvested rainwater where possible.

Landscape Proposals

An extract of the soft landscape proposals drawing is copied below and clearly describes the design intent for the planting areas.



Figure 02 - Extract from DPLA drawing 1219.01

Key measures include:

- Native tree planting around the site. This provides an attractive setting for the development and adds to the existing landscape infrastructure.
- The retention, protection and enhancement of the existing vegetation to the north, south and west. This provides a softened boundary, assists with screening and maintains ecological links.
- Shrub planting including species known for wildlife value. This softens building frontages and enhances biodiversity.
- The inclusion of wetland areas such as rain gardens provides amenity and creates important ecological habitats.
- Native hedging to the western and northern boundaries links existing Green Infrastructure and provides a food source and nesting opportunities for birds.
- Wildflower meadow areas to the west and north of the site further enhances biodiversity on site and supports bees and butterflies.

The combined effect of the above measures will be the creation of a species rich landscape, appropriate to the scale and nature of the proposed development.

Conclusion

The existing landscape has been assessed and important existing features have been identified. All endeavours have been explored to ensure that key features will be retained and enhanced where possible and as appropriate, as part of the new landscape proposals for the site.

The impact of the new development will be mitigated by creating new planting zones, hedges and other landscape features, which will improve biodiversity, provide important ecological habitats and enhance the amenity value of the site as per the requirements of PPW.

The successful establishment of the landscape design for the site will provide a network of healthy, multi-functional and biodiverse green spaces, capable of delivering a wide range of environmental and quality of life benefits for people and wildlife.