Talbot Green

Green Infrastructure Statement

Carney Sweeny

61417

January 2026

TACP

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TACP (UK) Ltd
4th Floor James William House
9 Museum Place
CARDIFF
CF10 3BD

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S0 – Work in progress	**S1** – For coordination	**S2** – For information
S3 – For review and comment	**S4** – For approval	**FI** – Final

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List of Abbreviations

Abbreviation	Full Description
BS	British Standards
CIEEM	Chartered Institute for Ecology and Environmental Management
DECCA	Diversity, Extent, Condition, Connectivity, and Aspects
EcIA	Ecological Impact Assessment
EPS	European Protected Species
GI	Green Infrastructure
GLTA	Ground Level Tree Assessment
HRA	Habitat Regulations Assessment
HSI	Habitat Suitability Index
INNS	Invasive Non-Native Species
LAP	Local Area of Play
LDP	Local Development Plan
LVA	Landscape and Visual Appraisal
NPPF	National Planning Policy Framework
PEA	Preliminary Ecological Assessment
PPW	Planning Policy Wales
PRF	Potential Roosting Features
RCTCBC	Rhondda Cynon Taf County Borough Council
RPA	Root Protection Area
RPZ	Root Protection Zone
SINC	Site of Importance for Nature Conservation
SLL	Society of Light and Lighting
SPG	Supplementary Planning Guidance
SuDS	Sustainable Drainage Systems
TPO	Tree Preservation Order

1. INTRODUCTION

The Green Infrastructure (GI) Statement describes how the green infrastructure of the site (trees, hedges, and SuDs) has been incorporated into the development proposal for a new residential development for Land at A473, Talbot Green (OS Survey Grid reference ST 03944 82322).

A GI Statement is required on all developments following PPW12, the Environment (Wales) Act 2016 Section 6 to show that the development has a net benefit to biodiversity and green infrastructure. This information is not appropriate to seek 'retrospectively' by way of a condition and must be provided as part of the planning application process. The GI Statement is to be proportionate to the scale and nature of the development, and in the case of minor development such as householder applications, PPW12 states that this should not be an onerous requirement for applicants.

This GI Statement has been prepared by TACP (UK) Ltd. It is a simple statement proportionate to the scale and nature of the development proposed and describes how green infrastructure has been incorporated into the proposal.

2. SITE DESCRIPTION

2.1 Existing Features

Talbot Green is a town located in the heart of the county borough of Rhondda Cynon Taf. Historically a small village, this town is located off of Junction 34 of the M4 between Pontyclun and Tonypandy, with recent upgrades to the town leading to notable infrastructural and commercial developments such as the creation of Talbot Green Retail Park which created a destination shopping centre for residents across South Wales. Talbot Green falls under Llantrisant Community Council's administrative boundary. The town is located at the mouth of the Ely Valley between Llantrisant Forest and Llantrisant, with the River Ely running along the boundary of the town before continuing to Pontyclun. The River Ely runs 250m to the west of the boundary of the site.

The site comprises of a series of ecologically significant features such as broad-leaved woodlands, scrub, semi-improved grassland and open mosaic habitats which provide habitats for a variety of wildlife including bats, reptiles, amphibians and nesting birds, forming key ecological corridors. Furthermore, the site sits within 0.6km and to the west of, Pant Marsh SSSI (RCTCB Living Landscape) and 0.7km away from the Afon Clun SINC, sites particularly susceptible to local and ecological change.

Currently, the site sits between two commercial sites, with their associated hard and soft landscapes, Leekes Llantrisant to the south-west and Talbot Green Sainsbury's to the east. The site is currently overgrown and partially undisturbed with elements of broken ground providing ecological hibernacula opportunities for reptiles.

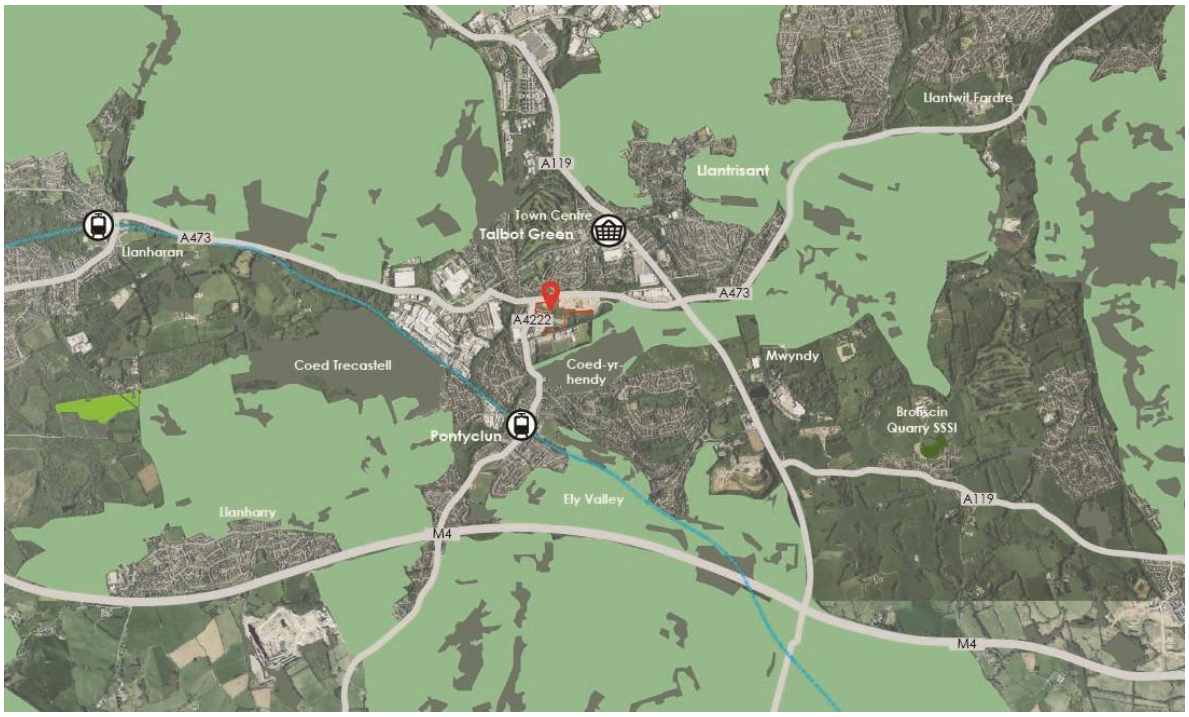
2.2 How the residential development at Talbot Green fits into wider landscape

Talbot Green forms a vital component of the wider green infrastructure network of the surrounding area. The area seeks to create a better connectivity network between the two

commercial developments along the site boundary whilst maintaining ecological corridors between Pont Marsh and River Ely and the other existing woodlands, hedgerows and watercourses that surround the site. The area seeks to maintain existing hedgerows and woodland blocks to support wildlife movement and promote habitat continuity across the site and into the surrounding landscape.

The site's broad-leaved woodland blocks and maintenance of existing scrub areas complement the surrounding disjointed woodland blocks within the urban townscape, maintaining and enriching ecological corridors, promoting biodiversity and preserving the landscape's character.

Figure 1: Talbot Green Site connection to the wider landscape



The new development will utilise existing commercial road networks for new access roads rather than creating new connections, to reduce further disturbing boundary vegetation to the north-west.

By integrating ecological and recreational functions, the new residential development creates a multifunctional landscape in which visual amenity, recreational access and habitat networks contribute to both the site's success and the wider area's connectivity.

North–South corridors: Hedgerows and smaller woodland blocks connect the residential development to woodland block (Coed-yr-Hendy) to the south and Llantrisant and Pontyclun Golf Club to the north.

East–West links: Footpaths and neutral grassland provide recreational connections between nearby settlements and commercial developments to the south-west and east along Cowbridge Road and Heol-y-Pant.

Core habitat areas: Broad-leaved Woodlands, scrub blocks and neutral grassland within the residential development act as nodes of high ecological value, feeding into the wider ecological network.

In alignment with Rhondda Cynon Taf Supplementary Planning Guidance: Design and Placemaking, the residential development contributes to the enhancement and protection of landscape and biodiversity, as mandated by the Environment (Wales) Act 2016 and the Well-being of Future Generations (Wales) Act 2015. The strategy emphasises the multi-functionality of green infrastructure assets, recognizing their role in delivering benefits such as sustainable food production, flood management, and providing access to nature.

Furthermore, RCTCBC SPG: Design and Placemaking, specifically 6.1.12, underscores the importance of maintaining positive characteristics of the local landscape and vegetation immediately adjacent to the site including the condition, scale, enclosure and important links to maintain green infrastructure and green corridors between new developments and surrounding local environment.

This project seeks to achieve strategic and local impact via greater connectivity between local resources and local amenities whilst maintaining strong wildlife corridors, existing boundary vegetation and local green networks to promote habitat networks and visual amenity within the local and wider area.

2.3 Relevant Local Planning Policies

2.3.1 Planning Policy Wales (PPW)

Planning Policy Wales (PPW) first published in 2018, was updated in February 2024 to Planning Policy Wales (Edition 12). PPW represents the overarching document for National Planning Policy in Wales and supports the Spatial Plan for Wales as set out in Future Wales: The National Plan 2040. The Well-being of Future Generations (Wales) Act 2015 influences the way new developments are planned; it demands that development and use of land contribute to improving the economic, social, environmental and cultural well-being of Wales.

PPW supports the commitment as set out in the Well-being of the Future Generations (Wales) Act 2015 to the achievement of sustainable development through appropriate planning. Identifying four overarching objectives – cultural, social, economic and environmental to be pursued in mutually supportive ways through the planning system.

The Future Wales Outcomes of specific relevance in relation to sustainability, the natural environment, landscape and visual issues are,

9 …in places that sustainably manage their natural resources and reduce pollution,
'The environmental, social and cultural value of our resources will be managed, maintained and enhanced, while economic benefits will be utilised sustainably and appropriately by promoting nature-based solutions and a circular economy.'

10 …places with biodiverse, resilient and connected ecosystems.
'The planning system will ensure wildlife is able to thrive in healthy, diverse habitats, both in urban and rural areas, recognising and valuing the multiple benefits to people and nature.'

PPW (Edition 12) sets out the land use planning policies of the Welsh Government with the primary objective, '*…to ensure that the planning system contributes towards the delivery of sustainable development and improves the social, economic, environmental and cultural well-being of Wales as required by the Planning (Wales) Act 2015, the Well-Being of Future Generations (Wales) Act 2015 and other key legislation and resultant duties such as the Socio-economic Duty.*'

Of relevance in relation to landscape and visual issues are the environmental objectives as set out in Section 6: Distinctive and Natural Places, specifically looking at

- Long term and chronic decline in biodiversity and habitat loss
- Adaptation to the effects of climate change, and;
- Recognising and addressing the factors influencing landscape change

It recognises that, '*The special and unique characteristics and intrinsic qualities of the natural and built environment must be protected in their own right, for historic, scenic, aesthetic and nature conservation reasons. These give places their unique identity and distinctiveness and provide for cultural experiences and healthy lifestyles.*'

Section 6.1: Recognising the Special Characteristics of Places: The Historic Environment; '*…preserve the special interest of sites on the register of historic parks and gardens*.'

Section 6.2: Green Infrastructure; notes that, '*The components of green infrastructure, by improving the resilience of ecosystems, can result in positive benefits to well-being including flood management, water purification, improved air quality, reduced noise pollution and local climate moderation, climate change mitigation and food production.' and that, 'The quality of the built environment should be enhanced by integrating green infrastructure into development through appropriate site selection and use of creative design*.'

Section 6.3: Landscape; '*ensuring that the value of all landscapes for their distinctive character and special qualities is protected;*'

Section 6.4: Biodiversity and Ecological Networks; '*…secure the maintenance and enhancement of ecosystem resilience and resilient ecological networks by improving diversity, extent, condition, and connectivity*', and, '*A proactive and creative approach towards facilitating the delivery of biodiversity and ecosystem resilience outcomes must be taken by all those participating in the planning process*.'

These principles then form the basis for Regional Planning and Local planning and delivery in the form of Strategic Development Plans, and Local Development plans put in place by the relevant local authority and providing specific detail and implementation of policy in the proposed development's locality.

2.3.2 Rhondda Cynon Taf County Borough Council Adopted Local Development Plan 2011-2021

The RCTCBC Local Development Plan (LDP) 2011-2021 was adopted on 2nd March 2011, to become the adopted development plan for the County Borough Council's administrative boundary, currently RCTCBC are revising the LDP to cover a period from 2022-2037 based upon the 2011-2021 Plan.

The RCTCBC LDP (2011-2021) Vision: Rhondda Cynon Taf will be a place where:

(1) An area of sustainable, cohesive communities who are healthy, well connected and who have equal access to high quality homes, jobs, services and facilities.

(2) An area more resilient and considerate to the challenges of climate change with protected and enhanced biodiversity and green spaces and a well-connected sustainable transport system.

(3) An area with a diverse and healthy economy, supported by vibrant and viable town centres and a flourishing tourism sector. An RCT that celebrates its heritage and is resilient for the future.

Relevant key objectives:

Objective 2: Provide an appropriate amount and mix of housing to meet local needs

Objective 4: Encourage healthy and safe lifestyles that promote well-being and improve overall health levels in RCT

Objective 5: Reduce the need to travel and promote more sustainable modes of transport

Objective 9: Promote and enhance biodiversity

Relevant key policies:

Policy SP1: Climate Change and Carbon Reduction

Policy SP2: Placemaking and Sustainable Communities

Policy SP4: Biodiversity and the Natural Environment

PolicySP5: Green Infrastructure and Open Space

Relevant key policies (from The RCTCBC Local Development Plan (LDP) 2011-2021:

Policy CS2: Development in the South

Policy CS3: Strategic Sites

Policy AW 5: New Development: Promotes high-quality, sustainable design, good site layout, and landscape integration.

Policy AW6: Design and Placemaking

Policy AW8: Protection and Enhancement of the Natural Environment

Policy SSA1: Development in the Principal Town of Pontypridd

Policy SSA3: Development in the Principal Town of Llantrisant/ Talbot Green

Policy SSA8- Mwyndy/ Talbot Green Area

Supplementary Planning Guidance (SPG)

Natural Environment SPG (2011): Details protection of SINCs, trees, hedgerows, and ecological corridors.

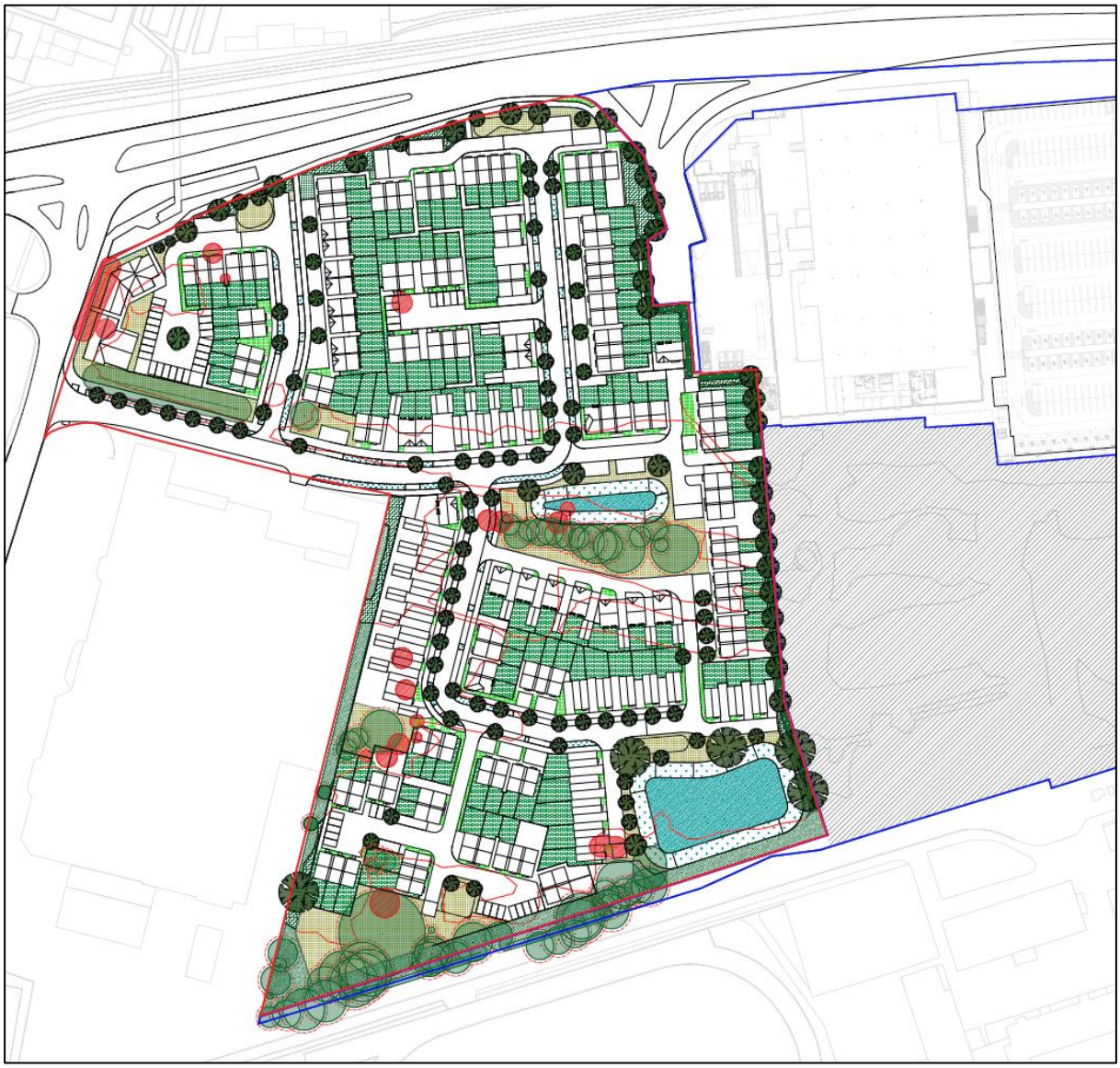
Design and Placemaking SPG (2011): Emphasises landscape structure, sustainable drainage, and soft edges to built form.

Sustainable Design SPG (2015): Encourages integrated GI, biodiversity enhancements, and SUDS.

3. GREEN INFRASTRUCTURE STRATEGY: THE PROPOSED DEVELOPMENT

The proposed residential development on the Land off A473 Talbot Green will provide a new residential development between the existing retail developments (Leekes Llantrisant on Cowbridge Road and Sainsbury's on A473). This new development will include new roadside vegetation, tree planting and preservation and enhancement of existing woodland blocks and scrub planting species, including the new associated landscaping and habitat creation.

Figure 2: Proposed landscape design for residential development of Talbot Green Site



The residential development at Talbot Green will be constructed on a brownfields site lying between two commercial developments, on land mainly constituting of rubble, scrub and grassland. The development will see the removal of areas of scrub, grassland and hard standing as well as some existing tree planting to allow for the residential development off the existing main access road. The associated SUDS development is proposed to include

raingarden verges, two attenuation basins and associated green space pockets including Local Areas of Play (LAP).

The raingardens will be enhanced using drought and waterlog tolerant tree species planting which will also provide avenue tree enhancements to the new road layouts, as well as seasonal interest, shade and aiding in water runoff control through strong verge planting layouts. The rain gardens will be seeded using locally prevalent species and suppliers where possible. Within the centre and the south-eastern corner of the site, seeded attenuation basins with 1:3 sloped embankments will provide opportunities to enhance existing green/blue infrastructure and biodiversity, these will be flanked by grassland areas and larger specimen tree planting to aid in the establishment of species rich and ecologically sensitive planting. The areas are not designed to hold permanent water and therefore are designed to be seasonally wet and support damp/ wet meadow at times of inundation and drought tolerant species during periods of long dry spells.

The Scheme will seek to retain boundary vegetation and scrub which will be enhanced where feasible, with new scrub and hedgerow planting introduced maintaining and supplementing the strong boundary vegetation and aid in the retention and enhancement of existing habitat corridors throughout the site and to wider landscape features beyond. This boundary vegetation will also be bolstered by the introduction of larger native tree species plantings along the boundary to buffer the development from noise and views across to the adjacent commercial developments as well as the A473 to the north and Cowbridge Road to the west.

The footpaths throughout the site are designed to be used by pedestrian, cyclists and for disabled use, as part of an active travel route providing an extension of the Llantrisant Community Route. This path will be maintained at a width of 2m wide using a suitable Active Travel route surface material. It is proposed that all users would share this space as well as having path surfacing material extend into the tertiary road crossings from the eastern boundary path near Sainsbury's commercial development to the western boundary on Cowbridge Road. It is suggested that segregation of path users would be visually intrusive and therefore require subsequent land increases that would have detriment effects on the local environment.

Lighting will be installed as part of the new residential development and proposed road layout. Lighting coordination should be considered to prevent detrimental effects on surrounding species of significance and preserve the natural character of the area.

4. SURVEY FINDINGS AND PROTECTION IN PLACE: GI BASELINE

4.1 Ecological surveys

4.1.1 Preliminary Ecological Appraisal (PEA)

Key aspects of the Preliminary Ecological Appraisal (PEA) include:

Purpose: To identify the presence of and potential for protected species within the scheme boundary required to support species licence applications, ecological impact assessment, method statements and consents to identify and categorise main habitats and features of ecological interest present to identify the requirement for further habitat and species surveys.

Methodology: Baseline information was gathered through desk study and field surveys, including a Phase 1 Habitat Survey (September 2025. The appraisal was carried out in accordance with the Guidance for Preliminary Ecological Appraisal (CIEMM, 2017) and the standard Phase 1 Habitat Survey Methodology (JNCC,2010) considering ecological value (International/European to Local), ecosystem services, and the magnitude and significance of potential impacts.

Key Ecological Findings:

Habitats: The site comprises broad-leaved woodlands, dense scrub communities, semi-improved grasslands, and open mosaic habitats on previously disturbed ground providing opportunities for ruderal species and scattered trees.

Bats: Mature trees may serve as roosting habitats for bats. If a roost is confirmed, an European Protected Species (EPS) derogation licence from Natural Resources Wales (NRW) will be required.

Nesting Birds: Woodland edges, scrub, and grassland offer suitable habitat for nesting habitats for birds.

Reptiles and Amphibians: Rubble piles, grassland mosaics, and waterlogged hollows provide suitable habitats for reptiles and amphibians.

Marsh Fritillary Butterfly: The presence of devil's-bit scabious indicates the presence of Marsh Fritillary Butterfly, a species of conservation concern given its proximity to local Sites of Importance for Nature Conservation (SINCs).

Invasive Species: The presence of several invasive non-native species (INNS) have been identified on the site, including Himalayan Balsam, Butterfly Bush and Cotoneaster, all of which are listed under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended).

Recommendations:

Further surveys are necessary, ground-level tree assessment should be conducted on all mature trees within the southern woodland and along the southern boundary with focus on the identification of Potential Roosting Features (PRFs), once suitable features have been identified follow-up inspections should be undertaken in line with best practice guidance.

Any other trees requiring removal or significant management should undergo pre-works checks by a qualified ecologist.

Night working should be avoided to prevent light disturbance to bats.

Rubble piles and associated habitats should be surveyed for the presence of reptiles. Rubble piles and associated habitats should not be disturbed during reptile active season (spring to early autumn), with any vegetation clearance or rubble management being carefully planned to minimise risk to reptiles.

Surveys of wetland areas in the south should be undertaken during the seasonal window to assess amphibian presence and potential breeding activity of amphibians.

Any vegetation clearance (tree works, scrub removal) should be scheduled outside bird breeding season with a pre-clearance nesting bird check conducted by a suitably qualified ecologist.

Targeted surveys for Marsh Fritillary Butterflies are recommended, due to the presence of devil's-bit scabious and the nearby SINCS, during their flight season (late May-early July) with a follow-up larval web surveys is to be undertaken in late summer to early autumn to confirm breeding activity and assess habitat.

Due to several INNS being recorded within the survey area, targeted INNS surveys should be undertaken during peak growing season (June-August) to map populations of Himalayan balsam, butterfly bush and cotoneaster. A site-specific INNS management plan should be developed.

4.2 Arboricultural surveys

4.2.1 Arboricultural Impact Assessment (AIA)

Key aspects of the Arboricultural Impact Assessment (AIA) include:

Purpose and Scope of Assessment: TACP UK Ltd conducted a tree condition survey in December 2025 in accordance with BS 5837:2012. The assessment aims to identify the quality and value of existing arboricultural assets to inform a constraints-led design approach for the site's redevelopment.

Existing Arboricultural Resource: The survey identified a total of 86 arboricultural features, including 79 individual trees, 4 groups, and 3 hedgerows. The quality of these assets is categorised as follows:

- Category A (High Value): 1 individual (a Pedunculate oak, T32) identified as a significant arboricultural and amenity asset.
- Category B (Moderate Value): 50 features (46 trees, 1 group, 3 hedgerows).
- Category C (Low Value): 31 features (28 trees, 3 groups).
- Category U (Unsuitable for Retention): 4 trees, including those suffering from advanced Ash dieback or structural instability.

Spatial Distribution and GI Strategy: The site is divided into two distinct arboricultural zones which have guided the proposed layout:

- Northern Zone: Predominantly contains self-seeded, low-value tree and scrub growth on existing hardstanding. GI strategy for this area involves directing development pressure here to facilitate the removal of low-quality growth.

- Southern Zone: Borders the neighbouring school and contains the site's most valuable assets, including the Category A Oak. The illustrative design prioritises the retention and long-term protection of these high-quality trees to maintain visual amenity and ecological connectivity.

Mitigation and Protection Measures: To ensure the successful integration of existing GI into the development, the following measures are recommended:

- Constraints-Led Design: The layout remains fluid to ensure the highest-quality trees are retained wherever practicable.

- Tree Protection Plan (TPP): Includes the installation of protective fencing and construction exclusion zones prior to any site works to safeguard root protection areas (RPAs).

- Arboricultural Method Statement (AMS): Detailed protocols for tree surgery (e.g., crown lifting for access), utility installation (following NJUG Volume 4 guidelines), and regular arboricultural monitoring during construction.

- Statutory Compliance: While no Tree Preservation Orders (TPOs) are present, all works must comply with the Wildlife and Countryside Act 1981 and European legislation regarding protected species such as nesting birds and bats.

Conclusion for GI Integration: The proposed development seeks to achieve a balance between housing requirements and the long-term protection of the site's most valuable trees. By focusing development on the lower-value northern section and implementing robust protection measures in the south, the scheme ensures the retention of key arboricultural assets as a core component of the site's Green Infrastructure

5. MITIGATION AND ENHANCEMENT MEASURES GREEN INFRASTRUCTURE STATEGY

Green Infrastructure (GI) is defined by the Town and Country Planning Association as follows: "*Green infrastructure is a network of multi-functional green space and other green features, urban and rural, which can deliver quality of life and environmental benefits for communities.*"

Key features: The key features of green infrastructure are that it is a network of integrated spaces and features, not just individual elements; and that it is 'multi-functional' – it provides multiple benefits simultaneously. These can be to:

- support people's mental and physical health
- encourage active travel
- cool urban areas during heat waves
- attract investment
- reduce water run-off during flash flooding
- carbon storage
- provide sustainable drainage

The extent to which green infrastructure provides these benefits depends on how it is designed and maintained, and the maturity and health of the elements (trees, planting, SuDS etc) that form it.

Table 1: Talbot Green Enhancements (See Appendix B for mitigation drawings)

Type	Location	Specifications
Planting Proposals	Within the residential development, where any grassland, shrubs and trees have been removed due to construction.	Any removed trees and shrubs must be replaced at a 3:1 ratio. Grassland removed during the construction process must be replaced. Introduction of species rich grassland planting in areas where grassland has been lost, within boundary vegetation understorey and within central and south-eastern green pocket spaces. Additional attenuation basin planting to be included, consisting of pollinator wildflowers and grasses suitable for seasonally wet areas such as SUDS proposals and basin edges. Rain gardens are to be proposed as part of the roadside verges to aid with site runoff and drainage proposals and include locally specified mixes and plant species where possible that are both drought and waterlog

Type	Location	Specifications
		tolerant to promote the site's biodiversity.
New / Existing Trees	Within the residential development, following further arboricultural surveys.	High quality trees to be retained. Mature trees RPZ to be protected during construction, removed trees to be replaced at 3:1 ratio. New tree planting should seek to promote local biodiversity and prevent monocultures, through mixed native and ornamental species planting.
Habitat connectivity / enhancement	Within the residential development, where any grassland, shrubs and trees have been removed due to construction.	Any trees, hedgerows, or shrubs that are removed will be replaced. Introduction of scrub enhancement and scrub planting along all boundary to promote cross-site habitat corridors and enhance any scrub lost through native scrub planting and the promotion of vegetation buffered and boundary tree planting along all site boundaries where possible. Tree planting to extend into the site green pockets beyond boundary vegetation through larger specimen tree planting to promote habitats throughout the site not exclusively within areas of boundary vegetation.
SuDS integration	Within the residential development, along the southern boundary and verges.	Introduction of raingardens within road verges to aid site runoff that will run into two on-site attenuation basins designed to be seasonally wet. Rain garden planting to consist of local species turf/seed mix where possible as well as additional rain garden specimen planting to promote pollinators and site biodiversity. Additional attenuation basins will be positioned within the central and southern boundary green spaces consisting of pollinator species, native

Type	Location	Specifications
		wildflowers and grasses suitable for seasonally wet areas.
Lighting	Along the streetscape of new residential development	Lighting to be installed within the proposed road layout and residential development, this should be sensitive to the surrounding landscape designations and species significance as well as existing landscape character.

5.1 Application of the Stepwise Approach

The project team has applied the Stepwise Approach to biodiversity in accordance with Planning Policy Wales (PPW12) and the Environment (Wales) Act 2016. This approach prioritises the **avoidance of ecological harm**, followed by **minimisation**, **mitigation**, and, where residual effects remain, **compensation and enhancement** to secure biodiversity benefits.

Step 1: Avoid – Establishing the Ecological Baseline and Identifying Constraints
Avoidance of impacts has been informed by a detailed understanding of the site's existing ecological value and sensitivities.

- **Habitat Baseline**: A Phase 1 Habitat Survey identified a mosaic of habitats including broadleaved woodland, dense scrub, semi-improved grassland, and areas of open mosaic habitat on previously disturbed ground.
- **Protected and Notable Species**: The site has potential to support bats (associated with mature trees), nesting birds (within scrub and woodland), reptiles and amphibians (within rubble piles and wet hollows), and Marsh Fritillary butterfly due to the presence of devil's-bit scabious.
- **Invasive Non-Native Species (INNS)**: Targeted surveys recorded Himalayan Balsam, Butterfly Bush, and Cotoneaster, all of which pose a risk to native habitats if not appropriately managed.
- This baseline has been used to identify sensitive receptors and areas where development impacts should be avoided entirely.

Step 2: Avoid and Minimise – Targeted Specialist Surveys
Further specialist surveys will be undertaken prior to finalising the design and commencing works, ensuring that ecological constraints are fully understood and impacts are avoided or reduced at source.

- **Trees and Bats**: Ground Level Tree Assessments (GLTA) will be undertaken on mature trees, particularly within the southern woodland, to identify Potential Roosting Features (PRFs).
- **Marsh Fritillary**: Targeted adult surveys (May–July) and larval web surveys in late summer will confirm presence and inform habitat protection measures.
- **Reptiles and Amphibians**: Surveys of rubble piles and wetland features will be undertaken during appropriate seasonal windows to establish presence and breeding activity.
- The outcomes of these surveys will directly inform layout design, construction methods, and mitigation requirements.

Step 3: Avoid – Constraints-Led Design and Site Layout
The development has been designed using a constraints-led approach to avoid impacts on high-value ecological features and maintain habitat connectivity.

- **Zonal Approach**: Development is focused within the Northern Zone, which is characterised by lower-value self-seeded vegetation and hardstanding, thereby avoiding encroachment into the higher-quality habitats of the Southern Zone.

- **Ecological Connectivity**: North–South and East–West green corridors are retained to facilitate wildlife movement between local Sites of Importance for Nature Conservation (SINCs) and the wider landscape.
- **Retention of Key Features**: High-value ecological assets, including the Category A Pedunculate Oak (T32), are retained and protected as part of the masterplan.

Step 4: Minimise – Construction Phase Safeguards
Where impacts cannot be fully avoided, measures will be implemented to minimise disturbance during construction.

- **Protective Measures**: Root Protection Areas (RPAs) will be fenced and construction exclusion zones established prior to any site clearance or groundworks.
- **Timing Restrictions**: Vegetation clearance will be undertaken outside the bird breeding season (March–August), and night-time working will be avoided to minimise disturbance to bats.
- **Ecological Supervision**: A suitably qualified ecologist will undertake pre-clearance checks for nesting birds and oversee works affecting rubble piles to safeguard reptiles.
- **Biosecurity Controls**: Strict biosecurity protocols will be implemented to prevent the spread of INNS, particularly Himalayan Balsam, during construction activities.

Step 5: Mitigate and Compensate – Biodiversity Mitigation and Enhancement
Where residual impacts remain, the scheme incorporates mitigation, compensation, and enhancement measures to deliver a measurable biodiversity benefit.

- **Replacement Planting**: Trees and shrubs removed will be replaced at a minimum ratio of 3:1, using a diverse palette of native and ornamental species to avoid monocultures.
- **Habitat Creation**: New habitats will include species-rich grassland, native scrub buffers, and pollinator-friendly planting within green spaces and Local Areas of Play (LAPs).
- **SuDS as Habitat**: Sustainable Drainage Systems (SuDS), including rain gardens and seasonally wet attenuation basins, will be designed to provide ecological value alongside water management.
- **Sensitive Lighting Design**: Lighting will be carefully designed to avoid light spill into retained habitats and commuting corridors, protecting nocturnal species.

Step 6: Compensate and Enhance – Long-Term Management and Monitoring
Long-term ecological resilience will be secured through an adaptive management and monitoring framework.

- **Monitoring Programme**: Annual ecological walkovers will assess vegetation establishment, species richness, pollinator presence, and habitat condition.
- **Adaptive Management**: Management prescriptions will be reviewed every five years and adapted where necessary, including the introduction of climate-resilient species if required.
- **Stewardship Arrangements**: Responsibility will transition from contractor-led aftercare (first 60 months) to long-term management by a private management company or residents' association.

5.2 DECCA Assessment – Supporting Ecosystem Resilience

DECCA (Diversity, Extent, Condition, Connectivity, and Aspects of ecosystem resilience) as required by Planning Policy Wales (PPW12) and the Environment (Wales) Act 2016.

5.2.1 Diversity (Habitats and Species)

The site currently supports a diverse range of habitats, including broad-leaved woodlands, dense scrub, semi-improved grasslands, and open mosaic habitats.

- **Enhancement:** The strategy introduces further diversity through species-rich grassland, pollinator-friendly wildflowers, and Sustainable Drainage Systems (SuDS) such as rain gardens and attenuation basins.
- **Species Support:** The design maintains habitats for a variety of wildlife, including bats, nesting birds, reptiles, and the Marsh Fritillary butterfly (linked to the presence of devil's-bit scabious).

5.2.2 Extent (Area and Volume)

The development prioritises the retention of high-value arboricultural features to maintain the existing extent of quality GI.

- **Zonal Strategy:** Development is directed toward the Northern Zone (predominantly low-value scrub and hardstanding) to protect the more ecologically significant Southern Zone.
- **Replacement Policy:** To ensure no net loss in extent, any trees or shrubs removed during construction will be replaced at a 3:1 ratio.
- **Expansion:** The inclusion of new green pockets and Local Areas of Play (LAP) increases the volume of managed green space within the site.

5.2.3 Condition (Habitat Quality and Health)

The proposal includes active measures to improve the physical and biological condition of the site.

- **Management of INNS:** A site-specific plan will be implemented to manage Invasive Non-Native Species, such as Himalayan Balsam and Japanese Knotweed, which currently threaten habitat quality.
- **Soil and Water Health:** The use of raingardens with drought and waterlog-tolerant species will manage surface water runoff and encourage natural infiltration, improving the local hydrological condition.
- **Monitoring:** Annual walkovers will assess vegetation health (% survival and species richness) and water quality to identify maintenance needs early.

5.2.4. Connectivity (Spatial Links)

The site is described as a "vital component" of the wider GI network, acting as a bridge between disjointed woodland blocks and commercial landscapes.

- **Ecological Corridors:** The plan maintains North–South corridors (connecting to Coed-yr-Hendy) and East–West links (connecting to the River Ely and nearby settlements).
- **Wider Network:** Strengthening boundary vegetation ensures habitat continuity with local Sites of Importance for Nature Conservation (SINCs), such as Pant Marsh SSSI and Afon Clun.
- **Active Travel:** Connectivity is further enhanced for humans through an extension of the Llantrisant Community Route, promoting carbon-neutral movement.

5.2.5. Aspects of Ecosystem Resilience (Adaptability)

The development adopts a forward-looking approach to ensure the landscape can withstand future pressures.

- **Climate Resilience:** Planting palettes will include climate-resilient species if the original selections underperform due to changing environmental conditions.
- **Adaptive Management:** Management practices are not "install-and-forget" but will be reviewed every five years and adapted based on monitoring data regarding biodiversity and storm impacts.
- **Long-Term Stewardship:** Responsibility shifts from the contractor to a private management company or residents' association to ensure the high-quality character and ecological function are maintained in the long term

6. BENEFITS AND OUTCOMES

6.1 Environmental Benefits

- Native planting schemes will attract pollinators and provide support for local urban wildlife.
- Replacement planting in areas where shrubs and trees have been removed will improve habitat connectivity and strengthen ecological networks along the proposed residential development and beyond to neighbouring SINCs.
- Sustainable Drainage Systems (SuDS), delivered through rain garden planting along roadside verges, these will drain into proposed attenuation basins within the central and southern green spaces and will help manage surface water runoff and encourage natural infiltration.

6.2 Social Benefits

- The proposed residential development will seek to reduce brown field sites lying dormant and promoting anti-social behaviour or illegal camping.
- The introduction and promotion of an active travel route and extension to existing active travel infrastructure (Llantrisant Community Route), contributing to improve pedestrian connectivity between two commercial developments, better health outcomes and potential reductions in healthcare and transport-related costs.
- Promotion of greener surrounding through landscape features retention and enhancement will promote visual quality and create a more attractive environment, encouraging walking and cycling within this area and supporting regular physical activity.
- Introduction of more residential development will increase social budget for local council as well as promote community pride in these spaces.

6.3 Economic Benefits

- Aesthetic and functional green spaces attract more residents into Talbot Green, promoting funding and social benefit opportunities.
- Reduced demand on stormwater infrastructure due to sustainable drainage systems (SuDS) decreases long-term public maintenance costs.
- Promotes active travel, potentially reducing healthcare and transport-related expenses

6.4 Contribution to Ecosystem Services

Table 2: Ecosystem Services

Building with Nature Standards / Themes	Principles	Alignment
Core Standards	Optimises Multifunctionality and Connectivity Positively Responds to the Climate Emergency Maximises Environmental Net Gain Champions a Context Driven Approach Creates Distinctive Places Secures Effective Place-keeping	Native planting to replace any removed vegetation. Creation of rain gardens and attenuation basins of associated planting. Carbon sequestration through increased biomass contributes to climate change mitigation by reducing CO_2 levels. Replacing trees at a ratio of 3:1 to maintain the character and distinctiveness of the wider Rhonnda Cynon Taf Borough and immediate Talbot Green area.
Wellbeing Standards	Brings Nature Closer to People Supports Equitable and Inclusive Places	Accessible green space. Improved connectivity to connect residents of Talbot Green and the surrounding communities (Llantrisant, Pontypridd, and Pontyclun) to local facilities, services and employment hubs
Water Standards	Delivers Climate Resilient Water Management Brings Water Closer to People	New rain gardens and attenuation basins reduce flood risk and improve water quality. Native planting that supports and improves water quality.
Wildlife Standards	Delivers Wildlife Enhancement Underpins Nature's Recovery	Native planting and ecological corridors support pollinators wildlife. Retention and enhancement of existing vegetation planting to retain and promote wildlife corridors.

7. MONITORING AND MANAGEMENT

7.1 Monitoring Effectiveness

7.1.1 Objectives:

- Assess ecological, hydrological, and social performance of the GI.
- Identify maintenance needs early.
- Ensure design intent and biodiversity targets are met.

7.1.2 Key Monitoring Metrics:

Table 3: Key Monitoring Categories

Category	Categories / Indicators	Monitoring Frequency	Reporting
Vegetation Health	% plant survival, canopy cover, species richness	Annual walkover (Sept / October)	Report with Photos
Water Management	Infiltration rate, runoff reduction, water quality (pH, suspended solids)	Twice annually (spring/autumn)	Report with water testing
Biodiversity	Presence of pollinators, bird usage, invertebrate diversity	Annually in summer	Report through ecological surveying and presence of pollinators during site visits
Public Use & Perception	Footfall counts, user satisfaction surveys	Annually	Users satisfaction report collection
Climate Resilience	Drought/heat tolerance performance, storm impact	Post-extreme-weather events	

7.1.3 Data Collection Methods:

- On-site inspections by certified landscape/ecological specialists.
- Citizen science engagement (local volunteers record wildlife sightings).
- Sensors for soil moisture and water flow (optional for automation).

7.1.4 Reporting:

- Annual GI Performance Report.
- Five-year review against baseline targets with recommendations.

7.2 Long-Term Management Strategies

7.2.1 Core Principles:

- Ongoing management and maintenance rather than a once-off 'install-and-forget' approach.
- Ongoing management adapted in response to observed results.
- Management practices to be reviewed and adapted based on performance monitoring and site observations.
- Long-term stewardship aimed at maintaining high-quality landscape character and ecological function.

7.2.2 Management Elements:

- **Maintenance Plan:**
  A detailed planting schedule covering irrigation, pruning, weeding, litter removal, replacement planting, and inspection of sustainable drainage features.
- **Monitoring Plan:**
  Regular assessment of planting performance, habitat conditions, and drainage functionality to inform adaptive planting.
- **Adaptive Planting:**
  Introduce climate-resilient species if original palette underperforms due to changing site conditions.
- **Habitat Connectivity:**
  Retention and enhancement of green links that contribute to wider ecological networks and wildlife movement.
- **Training and Handover:**
  Comprehensive handover from landscape contractors to the appointed management company or residents' association, including care manuals, plant schedules, and maintenance specifications.

7.2.3 Stakeholder Involvement:

- Oversight and coordination led by the private estate management company or residents' management body
- Opportunities for resident involvement through community planting days or local biodiversity initiatives.
- Engagement with local environmental groups or consultants for periodic ecological advice or biodiversity monitoring.
- Engagement with nearby schools/universities for biodiversity surveys.
- Partnerships with NGOs for specialist ecological input.

7.2.4 Funding Mechanisms for Sustainability

Short-Term (first 5 years)

- Maintenance covered within the capital project budget and/ or developer's defects liability period, including contractor-led care for the establishment phase (for first 60 months).

Long-Term (beyond 5 years)

- Funded through annual service charges or estate management fees collected from residents.

- Potential support through local partnership grants (e.g. biodiversity enhancement or community greening funds)
- Optional community-led fundraising or sponsorship initiatives to support ongoing ecological improvements.

7.3 Programme for Implementation

Table 4: Implementation Programme

Phase	Timeframe	Key Actions	Responsibility
Pre-Completion	Months -3 to 0	Install GI; establish plantings;	Contractor
Early Aftercare	Year 1–2	Intensive maintenance; quarterly monitoring	Contractor (under defects liability)
Handover	Month 24	Formal transfer of responsibility; training; handover of manuals	Contractor → Residents Association
Steady-State Maintenance	Year 3–5	Biannual monitoring; annual report; adaptive planting as required	Private
Long-Term Stewardship	Year 6+	Annual inspections; biodiversity surveys; funding reviews	Private (lead) + community/NGO partners
Major Review	Every 5 years	Comprehensive review; re-budgeting; strategy update	Private

7.4 Management, Aftercare Period, and Responsibility

- **Initial Aftercare Period**: 12 months (defects liability, contractor accountable for replacements and repairs).
- **Remainder of maintenance period:** Contractor responsible for ongoing maintenance
- **Transition Management**: Handover between contractor and private team before formal responsibility shift.
- **Long-Term Responsibility**: Private
  - **Lead Authority**: Private
  - **Technical Support**: Ecologists, horticulturists under private instruction.
  - **Community Role**: Volunteer stewardship days, wildlife logging.
  - **Accountability:** Annual GI report reviewed by a Green Infrastructure Steering Group (private and stakeholders).

8. CONCLUSION

- The proposed residential development at Talbot Green is designed to deliver a measurable net benefit for biodiversity and green infrastructure by integrating a multifunctional landscape strategy that aligns with Planning Policy Wales (PPW12) and the Environment (Wales) Act 2016.

- The proposed residential development of Talbot Green has been designed to integrate sensitively with the existing landscape and ecological features.

- Retention and enhancement of existing vegetation and habitats to minimise ecological disturbance and strengthen biodiversity value

- A central enhancement feature of the project is the prioritisation of high-value arboricultural assets for retention—specifically the Category A Pedunculate oak—while ensuring that any lost low-quality vegetation is replaced at a 3:1 ratio with mixed native and ornamental species to avoid monocultures.

- Ecological value is further bolstered through the creation of new habitats, including species-rich grasslands, native scrub buffering, and pollinator-friendly wildflower zones, which strengthen habitat connectivity between the site and local Sites of Importance for Nature Conservation (SINCs) such as Pant Marsh SSSI and Afon Clun.

- Furthermore, the scheme integrates Sustainable Drainage Systems (SuDS), such as rain gardens and attenuation basins, which manage surface water runoff while providing new, seasonally wet environments for damp-meadow species and invertebrates.

- By transforming an underused brownfield area and extending active travel infrastructure via the Llantrisant Community Route, the proposal seeks to provide a functional green space that supports both people and wildlife.

- the project fosters a resilient ecosystem that supports carbon sequestration, climate change mitigation, and enhanced community well-being

- The scheme enhances pedestrian and cycle connectivity between Cowbridge Road and Heol-y-Pant commercial development areas, supporting sustainable travel and access to nearby commercial areas

- Utilisation of existing access route via Leekes Llantrisant department store reduced new infrastructure requirements and associated ecological impact

- Ecological enhancement measures- such as habitat creation, sensitive surfacing treatments and native planting- contribute to improved habitat connectivity within the wider GI network.

- The introduction of Local Areas of Play seek to reduce the need for residents to travel outside of the scheme to recreational green space, whilst promoting accessible green areas and pocket play within the development that promote local biodiversity and governorship of greenspace.

- Where possible, the scheme minimises the potential landscape and ecological impacts by enhancing the connectivity of the wider GI network of Talbot Green

through in areas where connectivity is likely to be lost through residential development with proposed additional boundary scrub, hedgerow and tree planting.

- Overall, the development delivers measurable social, environmental, and health benefits while protecting and enhancing the landscape character and biodiversity of Talbot Green
- The scheme represents a well-considered addition to the local Green Infrastructure aligning with sustainability and placemaking objectives for the area.

9. REFERENCES

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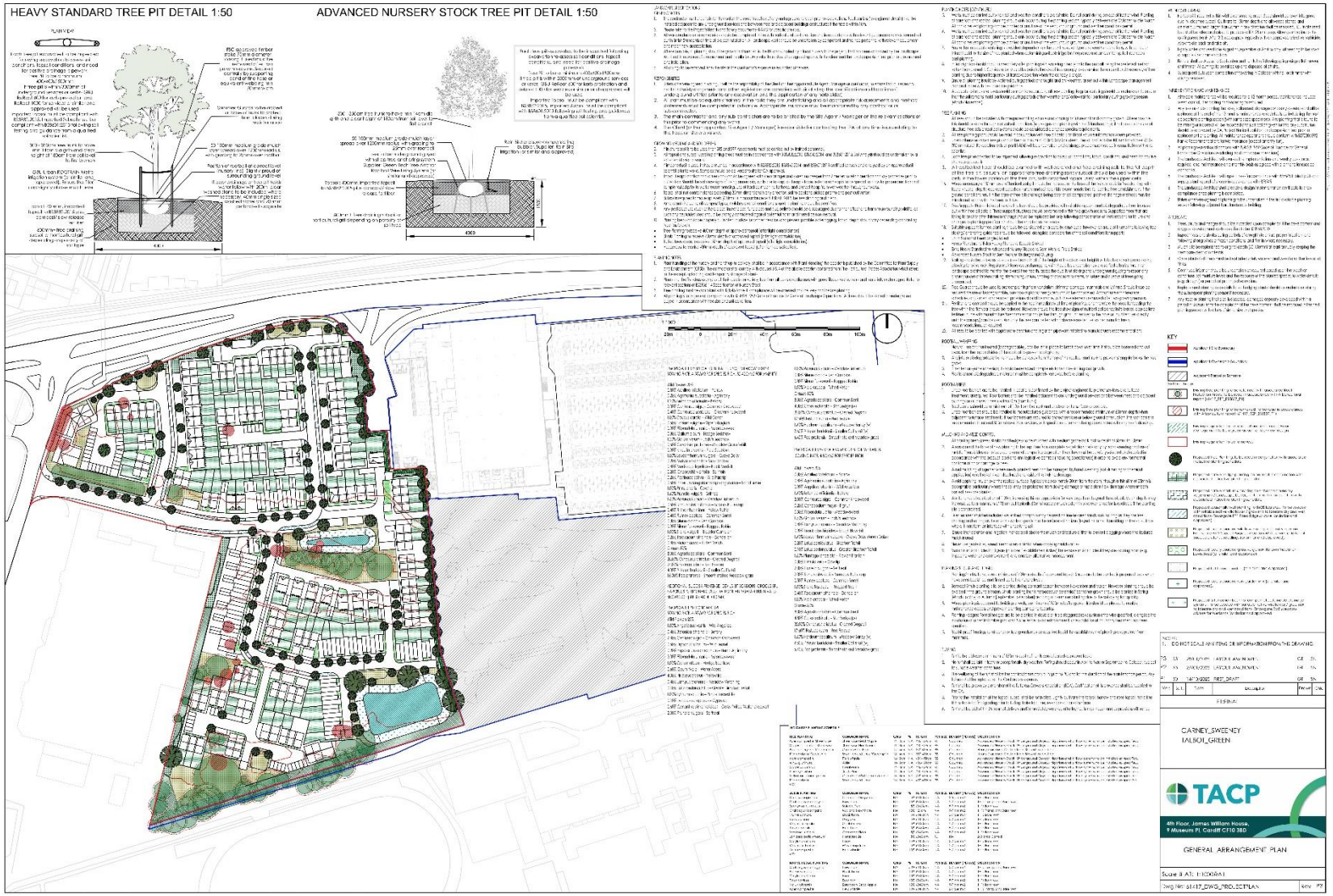
3. Llantrisant Community Council. Talbot Green Talbot Green – Llantrisant Community Council
4. Rhondda Cynon Taf Living Landscapes. Cors Pant Marsh Cors Pant Marsh | Living Landscapes RCT
5. Rhondda Cynon Taf County Borough Council (March 2011) Local Development Plan (up to 2021)- current until replacement with 2022-2037 Local Development Plan.
6. Rhondda Cynon Taf County Borough Council (March 2011) Supplementary Planning Guidance: Design and Placemaking
7. Rhondda Cynon Taf County Borough Council (March 2011) Supplementary Planning Guidance: Designing Town Centres
8. Rhondda Cynon Taf County Borough Council (April 2024) Revised Local Development Plan 2022-2037 Preferred Strategy

APPENDICES

Appendix A

Drawing Proposals

Figure 3: Talbot Green Landscape GA Plan



Appendix B

Site Photographs

Figure 4: Site photo positions

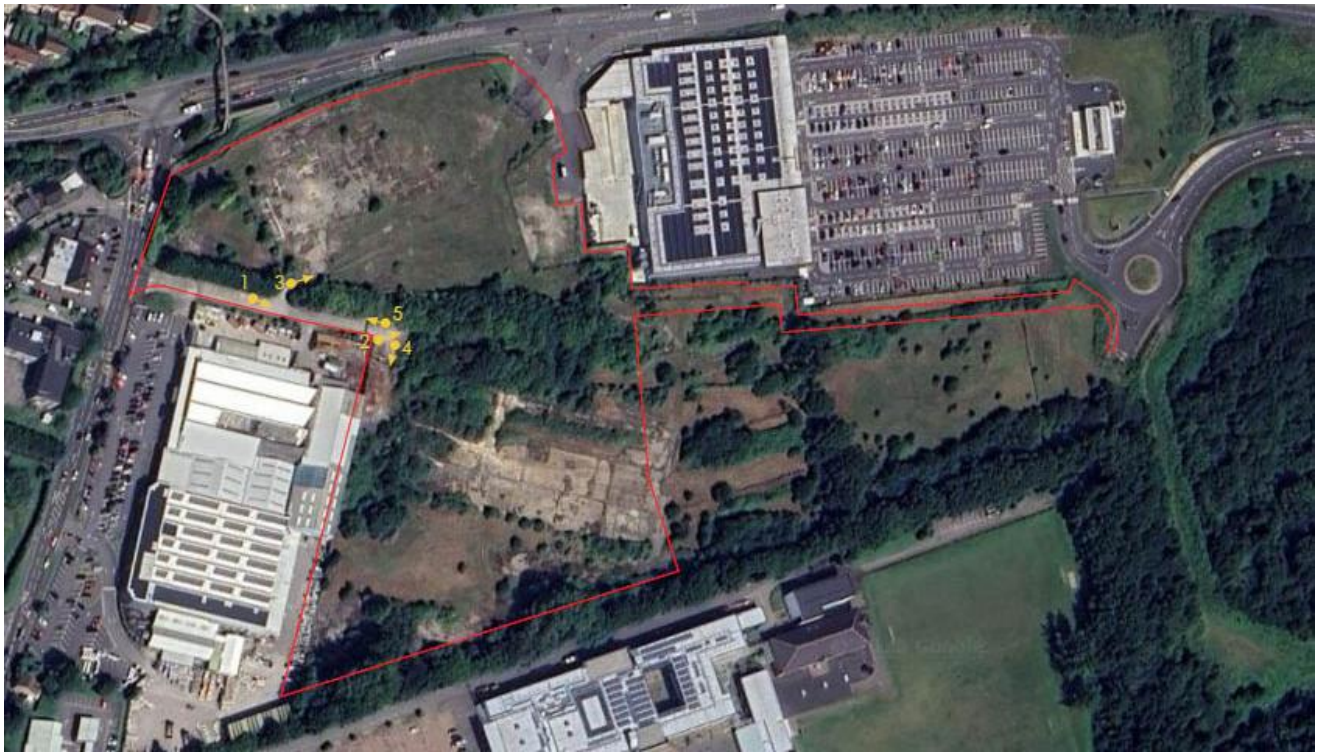


Photo 1: Existing entrance road to the western boundary along Cowbridge Road looking towards Eastern Boundary

Photo 2: Existing access road from Cowbridge Road, near centre of proposed site.

Photo 3: View through boundary fencing from access road looking towards north-eastern boundary and Sainsbury's service entrance

Photo 4: View through fencing from access road looking towards southern boundary

Photo 5: View from bottom of access road near centre of proposed site looking west back towards Cowbridge Road