



GWYNFAEN 2

PENYRHEOL

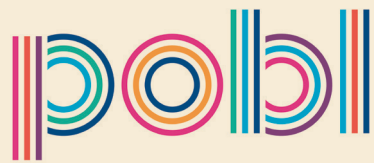


OCTOBER 2024



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Planning



Highways and Drainage

HAWKESWOOD
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Ecology



Arboricultural

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Report Ref: edp7068_r004			
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CONTENTS

Chapter 1: Introduction	1
Document Purpose and Structure	1
Our Vision	2
Strategic Location	3
Site Description	5
Existing Services and Facilities	7
Built Form Character	9
Chapter 2: Evaluation	11
PCW Principles for Placemaking	13
Technical Assessment	15
Opportunities and Constraints	23
Chapter 3: Design Evolution	25
Pre-application Comments	25
Dŵr Cymru Welsh Water (DCWW) Limitations	25
Follow up pre-application April 10, 2024	26
Design out Crime Officer (DOCO) Input	26
Design Responses to Feedback	26
Chapter 4: Proposals	27
Placemaking Approach	27
Architectural Character	29
Planning Layout	31
Green Infrastructure Statement	33
Landscape Proposals	35
External Materials Plan	37
Boundary Treatments	38
Streetscenes and Sections	39
Sustainability	41
SuDS	42
Chapter 5: Summary	43

CHAPTER 1: INTRODUCTION

This Design and Access Statement (DAS) has been produced on behalf of Pobl ('the applicant') and forms part of the Detailed Planning Application's (DPA) suite of documents for the Gwynfaen Phase 2 Residential Development ('the site').

Document Purpose and Structure

This document has been prepared in support of a DPA for the proposed residential development of 50 no. affordable dwellings, access, highways infrastructure, parking, landscaping, public open space, drainage and all associated works at Land off Brynafon Road, Penyrheol, Swansea.

In line with requirements set out within the Welsh Government (WG) document "Design and Access Statements in Wales", Technical Advice Note (TAN) 12: Design, and Section 7.3.7 of the Welsh Government's "Development Management Manual", the purpose of this Design and Access Statement (DAS) is:

- To provide a clear demonstration of how the objectives of good design have been addressed and how the proposal has been arrived at in a considered, logical and creative way that takes into account the site's context; and
- To ensure that the fundamental design principles of an application are clear and adequate evidence of the design quality of the proposal has been provided.

The DAS also explains the approach to access and how relevant policies have been taken into account, how any consultation relating to access has informed the design, and explains how any specific issues which might affect access to the proposed development have been addressed.

This document is structured as follows:

Chapter One: Introduction

Chapter One describes the applicants' over-arching vision for the site, its context and location and sets out the structure of the document.

Chapter Two: Evaluation

Chapter Two summarises the applicable placemaking and planning policy and summarised the technical studies undertaken by the consultant team across a range of disciplines which accompany the planning application. From these technical studies, a series of opportunities and constraints have been identified which have formed the basis of the design process.

Chapter Three: Design Evolution

This chapter documents the evolution of the design proposals from conceptual work and leading up to the proposed detailed planning layout. The design iterations are summarised along with the design inputs from pre-application advice received to date.

Chapter Four: Design Proposal

Chapter Four sets out in detail what the development proposals comprise and an overview of the approach to character, the architectural palette and drainage and landscape details.

Chapter Six: Summary

Chapter Six provides a concise summary of the key features and benefits of the proposals.



Our Vision

Gwynfaen 2 offers a sustainable and harmonious expansion of the Gwynfaen neighborhood, featuring high-quality, low-carbon, and affordable homes in a tranquil natural setting.

Connected to the existing Phase 1 development, Gwynfaen 2 respects the rural character of the site, blending seamlessly with its topography and natural features. A network of green infrastructure enhances the site's biodiversity and provides an opportunity to engage with the natural environment and spend time outdoors. These green spaces offer opportunities for recreation, social interaction, and learning, promoting healthy lifestyles and well-being for both existing and new residents.

The development incorporates energy-efficient and modern construction techniques to minimise its carbon footprint and provides a variety of affordable renting housing options, catering to a broad range of needs.

This expansion will ultimately create a modern neighborhood with a strong sense of place, that responds to its surroundings and fosters a sustainable way of living.

Well-being

A new sustainable neighbourhood integrated into the landscape to maximise biodiversity, promote healthy lifestyles for all and embrace the natural world.

Community

A place that offers a range of public spaces for interaction and exercise and a mix of homes to meet the needs of local residents.

Low carbon Living

Innovatively designed homes that integrate combustion free living, cutting-edge energy and drainage technology and provides sustainable travel options.

Strategic Location

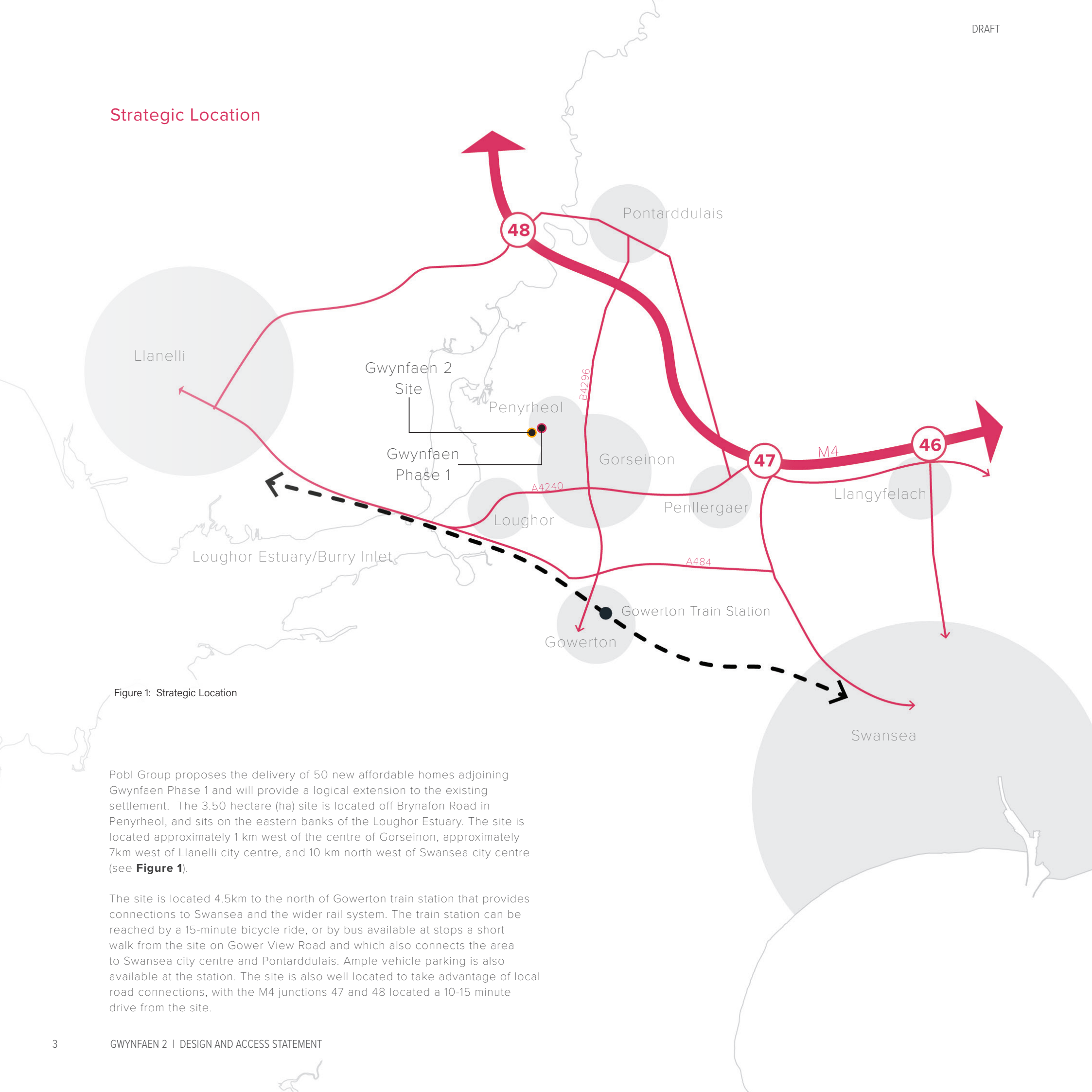


Figure 1: Strategic Location

Pobl Group proposes the delivery of 50 new affordable homes adjoining Gwynfaen Phase 1 and will provide a logical extension to the existing settlement. The 3.50 hectare (ha) site is located off Brynafon Road in Penyrheol, and sits on the eastern banks of the Loughor Estuary. The site is located approximately 1 km west of the centre of Gorseinon, approximately 7km west of Llanelli city centre, and 10 km north west of Swansea city centre (see **Figure 1**).

The site is located 4.5km to the north of Gowerton train station that provides connections to Swansea and the wider rail system. The train station can be reached by a 15-minute bicycle ride, or by bus available at stops a short walk from the site on Gower View Road and which also connects the area to Swansea city centre and Pontarddulais. Ample vehicle parking is also available at the station. The site is also well located to take advantage of local road connections, with the M4 junctions 47 and 48 located a 10-15 minute drive from the site.



Figure 2: Sustainable Location

The site is very well located within Penyrheol and provides plentiful opportunities for residents to make sustainable travel choices in order to access a variety of goods, services, recreation and public transportation. The development is consistent with the concept of a 20-minute neighbourhood, where the majority of people’s daily needs can be met locally within a short distance (15-20 minute journey by sustainable transport or active travel) of their home, an idea that is captured in the illustration on this page and summarised below:

- The community building/green at the Gwynfaen Phase 1 site is directly connected to Gwynfaen 2, and within a short 3-minute walk. In addition to the play provided on site, additional play space (Local Equipped Area for Play (LEAP)) is provided to the north end of Phase 1. Further recreational and play spaces can be accessed within a 15-20 minute walk of the site, including Glynmor Park at the Loughor Estuary, Parc Y Werin and Parc Melyn Mynach;
- Local shops on Frampton Road are a short 5-minute walk from the site, with shops in Penyrheol a further 7 minutes beyond. A larger selection of shops, stores and facilities are available in Gorseinon which is a 19-minute walk from the site;
- Existing bus service is available nearby with bus stops on Gower View Road, Brynafon Road and Beech Crescent with service between Swansea and Pontarddulais, and providing stops at Gorseinon High Street. In addition, Gowerton rail station can also be reached via this bus service, or by a 15-minute bicycle ride;
- Two primary schools are located within a 15-minute walk/5-minute bicycle ride of the site, and Penyrheol Comprehensive School is located a 25-minute walk and 7-minute bicycle ride away;
- The PRow network can be accessed directly from the site, and together with the existing roadway footpaths, provides excellent connectivity for pedestrians to local shops, public transportation and the wider PRow network.

Site Description

The site is located at the western edge of Penyrheol to the north of Brynafon Road as shown in **Figure 3**.

The site slopes from east to west [Photo 1], with the high point approximately 30m above Ordnance Datum (aOD) at the north east corner of the site, to approximately 14m aOD at the south west corner. The site is a single field currently used for livestock grazing, and bound by hedgerows and trees [Photo 2]. Areas of patchy woodland and mixed scrub occupy the western boundaries and northern edge of the site [Photos 3 and 4].

The site is bordered by new development to the east (Gwynfaen Phase 1) [Photo 5 and 6] and existing 21st Century development to the south and south-east on Brynafon Road and Min Yr Aber. Two homes to the south east face the site and overlook the southern portion of the site [Photo 7]. The eastern boundary is mostly scrub and poor quality hedgerow [Photo 8].

To the west, the landscape is predominantly agricultural in nature, comprising irregular fields of rough pasture, bounded by hedgerows, with the tidal marshes along the Loughor Estuary beyond [Photo 9].

A small watercourse runs along the western boundary [Photo 10], eventually draining into the Loughor River to the west of the site. An existing Public Right of Way (PRoW) passes to the west of the watercourse and to the north [Photo 11], and to the south of the hedgerow along the southern boundary [Photo 12], connecting to the wider PRoW network.

The site is traversed by several Welsh Water sewer pipes, and their associated access [Photo 13], which run across the eastern edge of the site from north to south.





Figure 3: Site Location

Existing Services and Facilities

Gwynfaen 2 is in a wholly sustainable location, having good access to a number of services and facilities located within a 20-minute walk (1,800m, see **Figure 4**), providing opportunities for residents to meet most of their basic needs without need of a car. These include:

- Local shops, a post office and take-aways located near the Brynafon Road/Frampton Road intersection are 400m from the site, with additional shops and food service uses located at the Frampton Road/A4240 intersection in Penyrheol, and in the centre of Gorseinon;
- Medical facilities nearby, including Gorseinon Hospital and several doctors surgeries in Gorseinon, are located within a 15-minute walk;
- Penyrheol Primary School on Frampton Road and Gorseinon Primary School on Brynawel Road are located near the site, and Penyrheol Comprehensive School is located approximately 1200m to the east;
- There are a number of playgrounds, parks and leisure facilities nearby, including a LEAP at the Gwynfaen Phase 1 site (located approximately 200m from the site boundary), Penyrheol Leisure Centre, Glanymor Park, Parc Melin Mynach and Parc-Y-Werin;
- PRoW follow the western and southern site boundary (part of the Heart of Wales Trail) and link to the wider PRoW network and the Wales Coast path in Loughor;
- Nearby cycle routes include the National Cycle Route 4 in Loughor and the Active Travel Route to the east of Gorseinon which provides direct bicycle access to the station at Gowerton; and
- The site is well served by buses with stops on Brynafon Road and Gower View Road within a 5-10 minute walk of the site providing regular services to Pontardullais, Gorseinon, Gowerton and Swansea City Centre, stopping at Gowerton Train Station located approximately 3.5km to the south.

Key to **Figure 4 on page 8:**

-  Site Boundary
-  Public Right of Way
-  Wales Coast Path
-  Active Travel/Bicycle Route
-  400m Isochrone (5-minute walk)
-  800m Isochrone (10-minute walk)
-  1,200m Isochrone (15-minute walk)
-  1,600m Isochrone (20-minute walk)
-  Primary/Junior School
-  Secondary School/Higher Education
-  Grocery/Convenience Shop
-  Medical Facility
-  Food/Take-away
-  Park/Leisure Facility
-  Community Building
-  Closest Bus Stops to Site



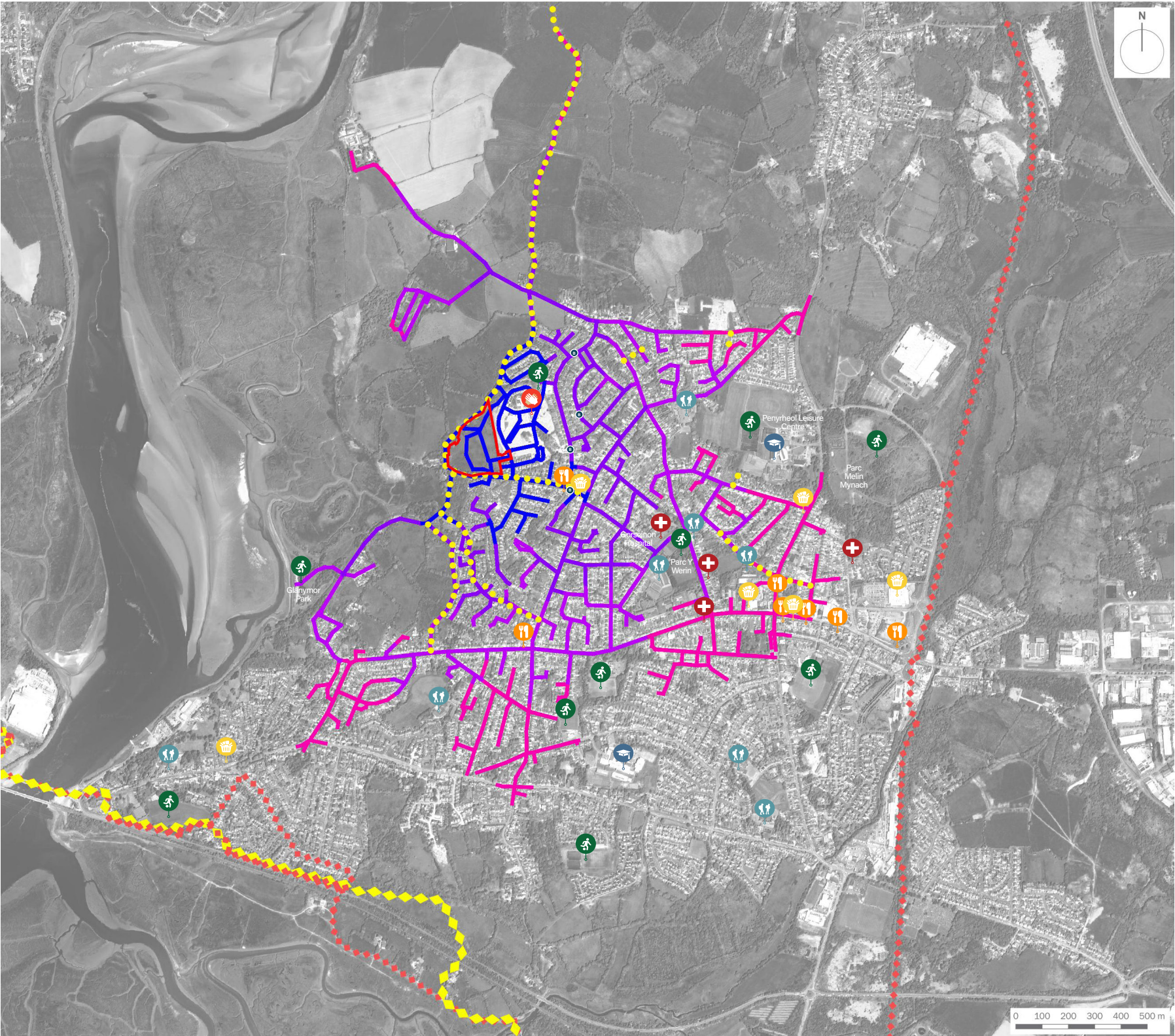


Figure 4: Local Services and Facilities

Built Form Character

The built form adjoining the site is of mixed character. Penyrheol is part of a continuous built up area which includes Gorseinon, Loughor and Garden Village. Penyrheol has a small cluster of High Street uses on Frampton Road. Gorseinon has a small historic core which grew around the coal mining and tinsplate industries of the 19th century with most local services concentrated in continuous terraces along High Street. Both of these areas have built form typical of the period.

Although there are small pockets or individual older detached and semi-detached buildings to be found, much of Penyrheol is formed of later pre and post war development lacking in any distinctive appearance and of varying quality. Building forms and styles consist of small terraces and semi detached dwellings with identical or similar house types.

Semi-detached dwellings are the dominant form of building typology with occasional bungalows concentrated in some areas. Newer, late 20th century in-fill development consists of mostly semi-detached and detached homes with occasional terraces. The predominant materials used in the vicinity are render and brick with occasional stone, sometimes with different facade treatments applied on the ground and first floors. White render and stone are typically used in locations towards the settlement periphery, particularly on older homes, with red and buff brick examples focussed on the more recent late 20th and early 21st century developments. Roof materials are predominantly a mix of grey or clay/brown tile.

As part of the Gwynfaen Phase 1 application in 2019, Stride Treglown Architects conducted an analysis of the quality and types of local vernacular to identify positive precedents for the architecture of Gwynfaen Phase 1. This analysis included an assessment of the local building forms in the wider areas surrounding Penyrheol. Precedent images, and appropriate vernacular forms and materials for the area were provided and are reproduced in summary on the following page. This work allowed for a better understanding of the architectural opportunity at Gwynfaen Phase 1 and how the scale, form and materials of the buildings could assist in easing the development into its surroundings.

The resulting building typology adopted for the Phase 1 development is a mix of detached, semi-detached and terraced homes. The contemporary materials palette is dominated by white render and wood cladding that gives Phase 1 a distinctive character.

As an extension of the Gwynfaen Phase 1 site, Gwynfaen 2 most appropriately draws upon the contemporary approach but should introduce variation in the palette of materials and forms to give this phase a slightly different character to set it apart from the earlier phase.



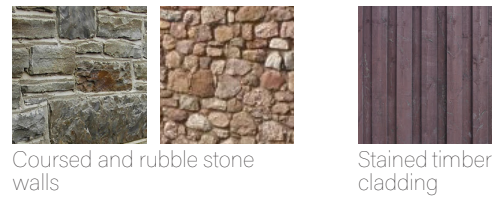


Vernacular Forms

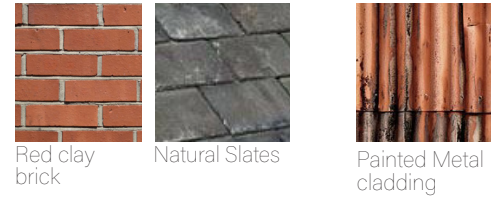


Vernacular Materials

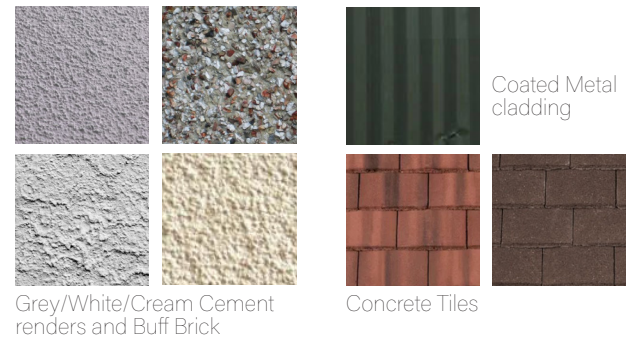
Traditional Materials



post - industrialisation



20th century materials



CHAPTER 2: EVALUATION

Current planning policy in Wales promotes sustainable development that enhances wellbeing by placing an emphasis on the creation of healthy, vibrant places. Placemaking is a critical foundation to designing such places, and is central to the delivery of high-quality and successful development and has shaped the masterplan for both phases of Gwynfaen. By implementing an environmentally-led approach to the masterplan, the resulting design is able to respond to its surroundings and produce a well-connected and sustainable neighbourhood that promotes healthy lifestyles and social cohesion.

Policy Context

The Planning system manages the development and use of land in the public interest, prioritising long term collective benefits and reconciling different interests. In Wales, Planning Policy Wales (PPW) establishes the key principles for the planning system, supported by the Technical Advice Notes. In Wales, the Development Plans apply the key principles of PPW to their plan areas and are shaped by evidence. Development plans are prepared at different scales:

- National Scale (Future Wales);
- Regional Scale (Strategic Development Plans); and
- Local Scale (LDP).

This site is located within Swansea and therefore will be considered against PPW, along with the Swansea LDP. The Planning Statement submitted as part of this DPA provides an overview of compliance with planning and placemaking policy, but the most relevant design policies include:

Welsh Government's 'Future Wales – The National Plan 2040' (FW)

Future Wales is a Spatial Plan, which means it sets a direction for where we should be investing in infrastructure and development for the greater good of Wales and its people and establishes 'Swansea Bay and Llanelli' as a National Growth Area.



FW came into force on 24 February 2021, key policies include:

- Policy 1 – Where Wales will grow;
- Policy 2 – Shaping Urban Growth and Regeneration – Strategic Placemaking;
- Policy 7 – Delivering Affordable Homes;
- Policy 9 – Resilient Ecological Networks and Green Infrastructure; and
- Policy 28 – National Growth Area – Swansea Bay and Llanelli.

FW enables the principles of sustainable development to be incorporated at all development stages and based on the seven strategic placemaking principles (see box to right for details). These placemaking principles underpin the placemaking objectives for Gwynfaen 2, in line with Policy 2 – Shaping Urban Growth and Regeneration – Strategic Placemaking, which aims to shape growth in the National Growth Areas. Furthermore, FW policy sets out the aim of achieving biodiversity and green infrastructure enhancements in our urban areas through effective nature based solutions.

Welsh Government Building Better Places (BBP) – Placemaking and the Covid 19 Recovery

The WG's policy direction towards better places and placemaking has been further highlighted in BBP, which emphasise the need for good quality places for people to live, work and relax in following the Covid 19 pandemic. This document highlights the theme of Placemaking throughout planning policy and emphasises the need for design quality, both in terms of health and wellbeing and in response to the climate and nature emergencies.

FW placemaking principles are:

- Creating a rich mix of uses within close proximity to each other to enable people to walk and cycle;
- Providing a variety of housing types and tenures that cater to varied lifestyles;
- Building places at a walkable scale, with homes, local facilities and public transport within easy walking distance of each other and with growth focused around town centres and public transport;
- Increasing population density, with development built at urban densities that can support public transport and local facilities. New developments in urban areas should aim to have a density of at least 50 dwellings per hectare (net) with higher densities in more central and accessible locations;
- Establishing a permeable network of streets, with a hierarchy that informs the nature of development and provides links in, out and through places;
- Promoting a plot based approach to development, which provides opportunities for the development of small plots, including for custom and self builders; and
- Integrating green infrastructure, informed by the planning authority's Green Infrastructure Assessment, that helps urban areas support ecosystem resilience.



Figure 6: PPW Themes Contributing to Placemaking (PPW12)

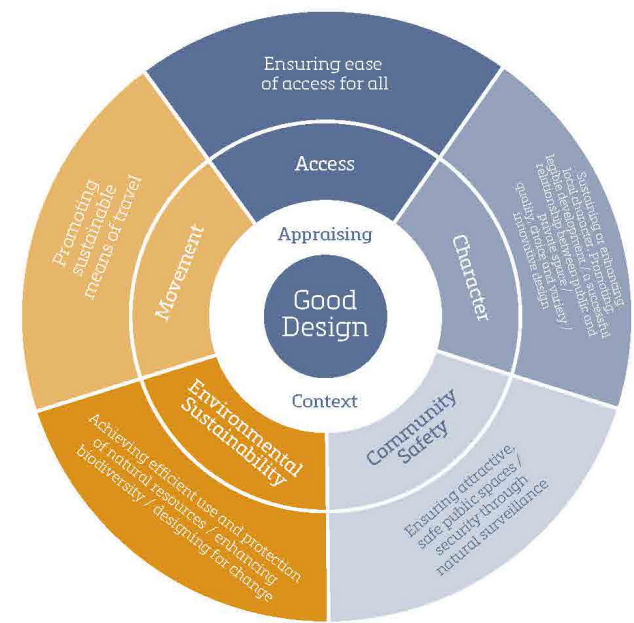


Figure 5: Objectives of Good Design (PPW12)

Planning Policy Wales Edition 12

PPW establishes the key principles for the planning system in Wales, LDPs apply these principles to their areas and shape them by evidence.

PPW states that *“the planning system should create sustainable places which are attractive, sociable, accessible, active, secure, welcoming, healthy and friendly. Development proposals should create the conditions to bring people together, making them want to live, work and play in areas with a sense of place and well-being”*.

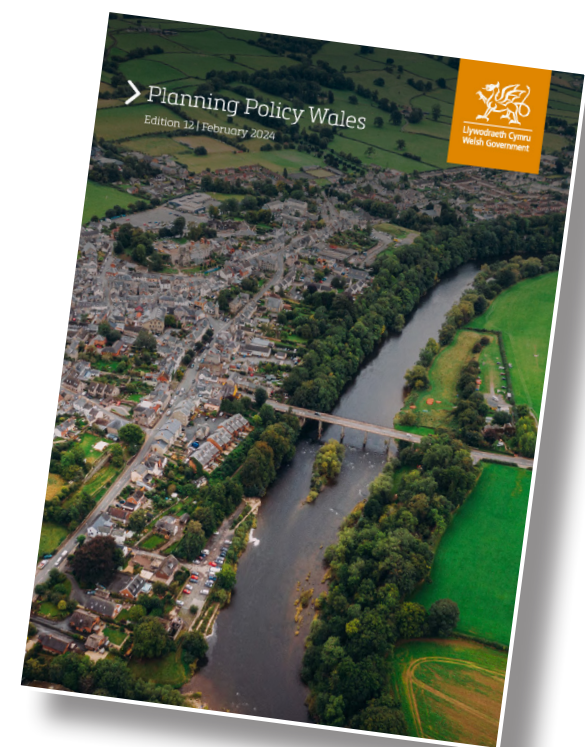
PPW also highlights the importance of good design, and how good design is fundamental to creating sustainable places where people want to live, work and socialise. PPW states that *“Design is not just about the architecture of a building but the relationship between all elements of the natural and built environment and between people and places. To achieve sustainable development, design must go beyond aesthetics and include the social, economic, environmental, cultural aspects of the development, including how space is used, how buildings and the public realm support this use, as well as its construction, operation, management, and*

its relationship with the surrounding area”.

PPW also provides a summary of the five key aspects of good design that should be applied to development proposals at all scales (see **Figure 5**).

PPW also establishes a set of key planning principles which embrace placemaking and facilitate the creation of the right development in the right place, which in turn enable the goals set out in the Well-being of Future Generations Act, and the national sustainable placemaking outcomes, to be met. The Well-being of Future Generations Act places a duty on public bodies to carry out sustainable development to ensure that the 7 Goals along with the Placemaking agenda in Planning can be achieved. The 7 Goals are illustrated in **Figure 8**.

The latest revision to PPW also sets out a range of GI related policies that aim to take a proactive approach to biodiversity and ecosystems resilience, placing GI at the centre of good design.



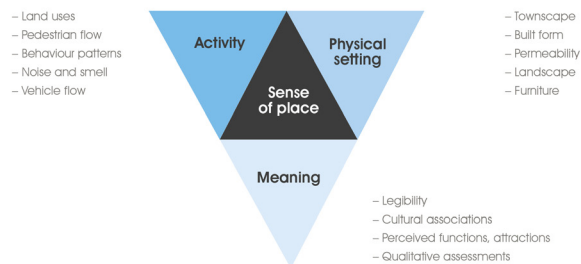
Placemaking Wales Charter

PPW also incorporates the Placemaking Wales Charter (PWC), that has been developed by the Design Commission for Wales (DCfW) in collaboration with WG and a range of stakeholders and organisations associated with the built environment and provides guidance on the key aspects of placemaking.

PWC identifies three key components to good places, namely the activities that occur in the place, the physical setting that makes up the place and the meaning and unique features of a place (see **Figure 7**).

PWC sets out a recommended range of strategies and activities that seek to maximise the opportunities for good places to emerge and flourish and which identify what is needed to help ensure that the physical form, activity and meaning of a place are addressed. The PWC highlights six principles for placemaking that address the physical form, activity and meaning of a place, these six themes are described to the right.

Pobl and EDP, as well as Swansea Council, are signatories to the PWC and by so doing support placemaking and the promotion of the six placemaking principles in the planning, design and management of new and existing places.



PCW Principles for Placemaking



PEOPLE AND COMMUNITY

The local community are involved in the development of proposals.

The needs, aspirations, health and well-being of all people are considered at the outset.

Proposals are shaped to help to meet these needs as well as create, integrate, protect and/or enhance a sense of community and promote equality.



LOCATION

Places grow and develop in a way that uses land efficiently, supports and enhances existing places and is well connected.

The location of housing, employment and leisure and other facilities are planned to help reduce the need to travel.



MOVEMENT

Walking, cycling and public transport are prioritised to provide a choice of transport modes and avoid dependence on private vehicles.

Well designed and safe active travel routes connect to the wider active travel and public transport network and public transport stations and stops are positively integrated.



PUBLIC REALM

Streets and public spaces are well defined, welcoming, safe and inclusive with a distinct identity.

They are designed to be robust and adaptable with landscape, green infrastructure and sustainable drainage well integrated.

They are well connected to existing places and promote opportunities for social interaction and a range of activities for all people.



MIX OF USES

Places have a range of purposes which provide opportunities for community development, local business growth and access jobs, services and facilities via walking, cycling or public transport.

Development density and a mix of uses and tenures helps to support a diverse community and vibrant public realm.



IDENTITY

The positive, distinctive qualities of existing places are valued and respected.

The unique features and opportunities of a location including heritage, culture, language, built and natural physical attributes are identified and responded to.

Figure 7: Components of Good Design (Adapted from Sense of Place Model, Pinter (1991)(PWC)

Technical Advice Notes

The WG Technical Advice Note (TAN) which are relevant to the proposed development include:

- TAN 2 – Planning and Affordable Housing 2006;
- TAN 5 – Nature Conservation and Planning 2009;
- TAN 11 – Noise 1997;
- TAN 12 – Design 2016;
- TAN 15 – Development and Flood Risk 2004;
- TAN 18 – Transport 2007; and
- TAN 20: Planning and the Welsh Language.

Technical Advice Note 12 – Design

TAN 12 advocates a process model for design drawing from a contextual analysis of the surroundings of a development to achieve a well designed, flexible and adaptable development.

The key aspects are:

- Access;
- Character (Amount, Layout, Scale, Appearance, Landscaping);
- Community Safety;
- Environmental Sustainability; and
- Movement.

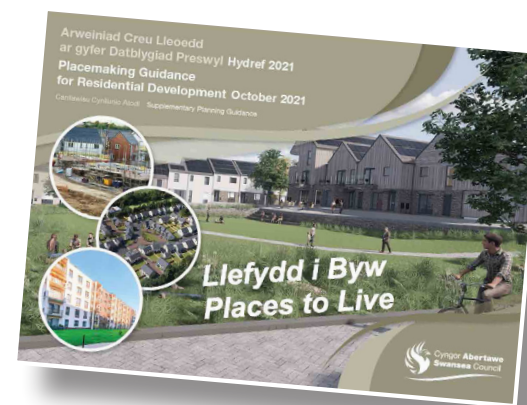
It also identifies the objectives of good design as:

- Ensuring ease of access for all;
- Sustaining or enhancing local character;
- Promoting legible development;
- Promoting successful relations between public and private space;
- Promoting quality, choice and variety;
- Promoting innovative design;
- Ensuring attractive, safe public spaces;
- Security through natural surveillance;
- Achieving efficient use and protection of natural resources;
- Enhancing biodiversity;
- Designing for change; and
- Promoting sustainable means of travel.

Swansea LDP

City and County of Swansea's LDP which was adopted in February 2019 is the statutory development plan for this site. The LDP also includes numerous policies relating to development and placemaking which have shaped the emerging masterplan and this DAS, these include:

- PS 1: Sustainable Places;
- PS 2: Placemaking and Place Management;
- PS 3: Sustainable Housing Strategy;
- SD 2: Masterplanning Principles;
- IO 1: Supporting Infrastructure and Planning Obligations;
- • CV2: Development in the Countryside
- • H6: 100% Affordable Housing sites
- • HC3: Development in the Welsh Language Sensitive Area
- H 2: Affordable Housing Strategy;
- SI 1: Health and Well-Being;
- SI 3: Education Facilities;
- SI 6: Provision of New Open Space;
- SI 8: Community Safety;
- ER 1: Climate Change;
- ER 2: Strategic Green infrastructure Network;
- ER 6: Designated Sites of Ecological Importance;
- ER8: Habitat and Species;
- ER9: Ecological Networks and Features of Importance for Biodiversity ;
- ER11: Trees, Hedgerows and Development;
- T1: Transport Measures and Infrastructure;
- T2: Active Travel;
- T4: Transport Interchanges;
- T5: Design Principles for Transport Measures and Infrastructure;
- T6: Parking
- T7: Public Rights of Way (PRoW) and Recreational Routes;
- EU4: Public Utilities and New Development;
- RP1: Safeguarding Public Health and Natural Resources;
- RP4: Water Pollution and the Protection of Water Resources;
- RP5: Avoidance of Flood Risk; and
- RP 10: Sustainable Waste Management for New Development



Supplementary Planning Guidance

Further to the adoption of the LDP, there is a range of Supplementary Planning Guidance (SPG) which further informs the policy position. Those which have been considered as part of this development include:

- Development and Biodiversity;
- Trees, Hedgerows and Woodlands;
- Placemaking Guidance for Residential Development;
- Planning for Community Safety;
- Planning Obligations; and
- Parking Standards.

Of particular importance in the design for this development is the Swansea Placemaking Guidance for Residential Development, which establishes a place-led approach to new residential developments. This SPG seeks **“to ensure delivery of the Swansea Local Development Plan (LDP) Vision of creating sustainable, distinct communities, supported by good quality built and natural infrastructure, community facilities and opportunities for recreation”**. It also aims to **“facilitate the Council’s placemaking aspirations” to ensure that the development of new homes are guided by “relevant placemaking and design principles”**. The SPG notes that an **“holistic Placemaking and Place Management approach should be applied in all areas and at a range of scales, in order to create a genuine sustainable legacy in accordance with the Well-being of Future Generations (Wales) Act 2015”**.

Policy Summary

Together, the policies, guidance, outcomes and principles that are woven throughout all levels of Welsh planning policy have provided the framework within which the masterplan for Gwynfaen 2 has been shaped. Together with the key objectives for the site and the application of good urban design principles, a well-designed place that puts placemaking, good-design, GI, health and wellbeing at the heart of the scheme and is presented in this DAS as part of a detailed planning application for the site.

Technical Assessment

Heritage

An Archeological Assessment (AA) has been completed for the project, which is summarised here. For details, please refer to the complete report.

No designated historic asset (i.e. World Heritage Site, scheduled monument, listed building, registered park and garden, historic landscape or conservation area) lie within, or intersect with,, the site. The baseline of the 1km study area has identified possible activity from the Bronze Age period onwards, of which Roman, and Post-medieval/Modern archaeology are the most prominent elements.

The Historic Environment Records (HER) indicate that the predicted course of a Roman Road (RR60d) runs northeast/south-west through the site. This road connected the fort at Neath with that at Loughor, Pontardulais, and Carmarthen. Sherman and Evans in their work on Roman Roads in Southeast Wales (2004), state that there is little physical evidence known for this road and the exact route is uncertain. Historic map regression also identified a structure or structures, associated with the Black Hill settlement, towards the site's southeastern boundary.

The site and surrounding landscape have undergone significant periodic ground disturbance work which is likely to have impacted upon potential surface and buried remains, both of the Roman road and other archaeological features from other periods. Nevertheless, the depth and intensity of the groundworks across the site is not known and the potential exists for archaeological remains to be well-preserved below the plough soil.

The 1km study area contains three designated historic assets for which a potential impact may arise because of changes to their setting. These comprise:

- Church of Saint Catherine (Grade II Cadw 26260);
- War Memorial (Grade II Cadw 26261); and
- Catholic Church of the Blessed Sacrament (Grade II Cadw 87524).

All of the above assets exist in an environment that is dominated and surrounded by modern features, either industrial units, or residential development. The significance of each of these assets now principally rests with the structure itself, as opposed to the environments in which it exists. The AA concluded that any proposed development will not meaningfully alter their setting as the greater proportion of these assets are located to the south-west of the site, and all sit within, and were originally constructed, in a heavily urbanised streetscape. This provides an impermeable screen between the properties and the sites and the proposed development will have a Negligible impact.

Within the wider 3km study area, the closest designated assets is St. Michael's Chapel (GM363). This small medieval chapel lies to the north-west and was once part of a medieval monastic grange, an area of largely agricultural land encompassing the application area. Despite this association, there are no tangible links to connect the two sites, and they do not share a visual relationship. Just over 1.7km to the west lies Pencoed Lead Works (CM282), on the banks of the Loughor River. This is the only designated asset with any potential visual connection to the site. The works themselves are

not discernible from the proposed development area, however, its location on the river bank offers some general views eastwards towards the site. The proposed development though will sit within, and be backed by, already existing urban development.

The AA concluded that there would be no indirect impact on any other designated assets and consequently, the effect of the proposed development is considered to be Neutral.

MITIGATION

The AA suggested that the design and layout should respect the landscape setting in which these monuments exist and mitigate any impact through natural boundary screening, additional hedgerow and tree planting, and the use of sympathetic construction material and colour schemes to help screen the proposal from the surrounding area.

Though the archaeology within the application area (Roman Road and the Black Hill structures) is considered medium to low, the proposed development would still have a Major impact on any potential archaeological remains surviving below plough soil depth and therefore the AA recommended that to mitigate against the impact of these ground works an archaeological watching brief should be carried out on any intrusive works that are required.

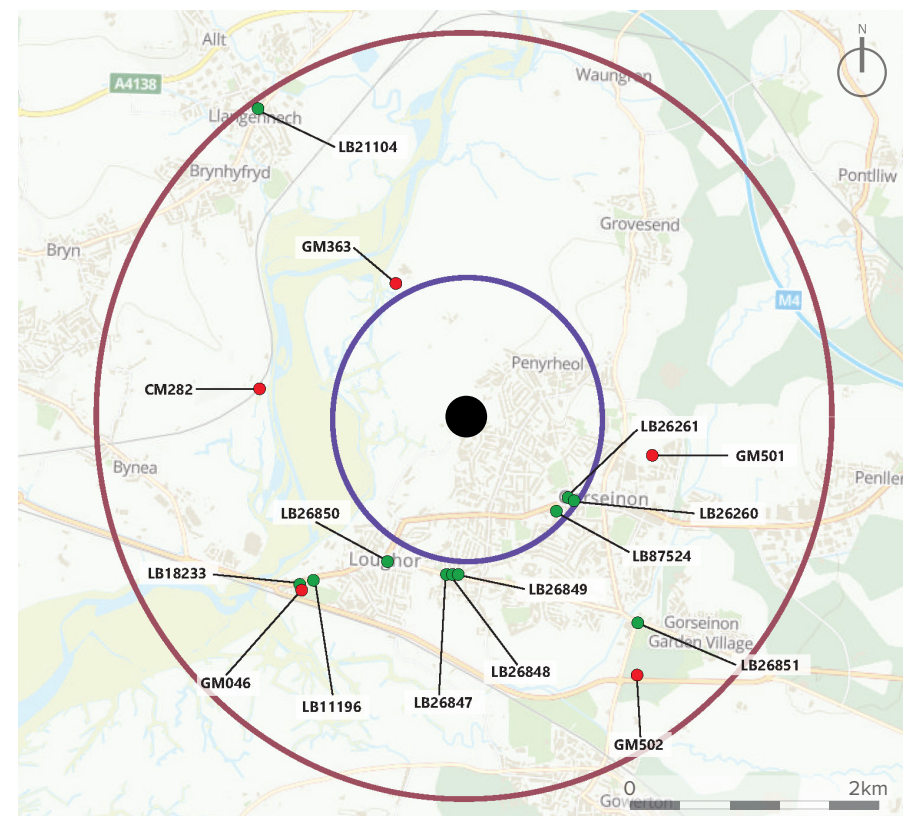
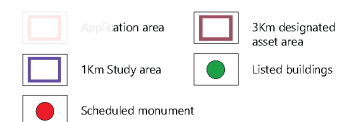


Figure 8: Designated Archaeological Sites



Agricultural Land Assessment

An agricultural land classification has been completed for the project and is summarised here. For details, the full report should be consulted.

The site is comprised of Subgrade 3b land, which does not fall within the definition of “Best and Most Versatile” agricultural land in PPW and is defined as lower quality land and is in an agricultural use of low intensity.

Arboriculture

An Arboriculture Report (AR) has been completed for the site and identifies the quality of the trees on the site, the impact the proposed design may have, and provides details regarding the protection of retained trees during construction work. The AR is summarised here, but the full report should be consulted for details. The survey identified a range of trees of differing quality, summarised in the table below and shown in **Figure 9**.

The AR assessed the impact of the proposed design and concluded that tree loss impact would be low, and that a very high proportion of the trees on site would remain. All but one of the trees identified for removal are low-quality trees (C Category). The AR also noted that the removal of a single moderate quality tree (B Category) can be readily mitigated by suitable compensatory tree planting and surrounding practical woodland management (i.e. invasive species removal etc.).

The AR noted that damage to the Root Protection Areas (RPA) can all be managed through the installation of tree protective fencing to ensure no significant long-term adverse impact will occur to any of the retained trees.

The AR concluded that overall, the design has considered the size and value of the trees on this site to minimise any future pressures to heavily prune or fell the higher-value trees. The design will not cause a long-term adverse impact on the local amenity of the area through tree loss. Mitigative tree, hedgerow and shrub planting will be required for the loss of the trees on this site through a combination of different diverse tree/shrub species and varied nursery-aged stock. The construction of the proposed development, whilst complying with the tree protection scheme, will ensure that no significant long-term adverse arboricultural impact occurs on the health of any retained trees on or adjacent to this site or the long-term amenity of the area.

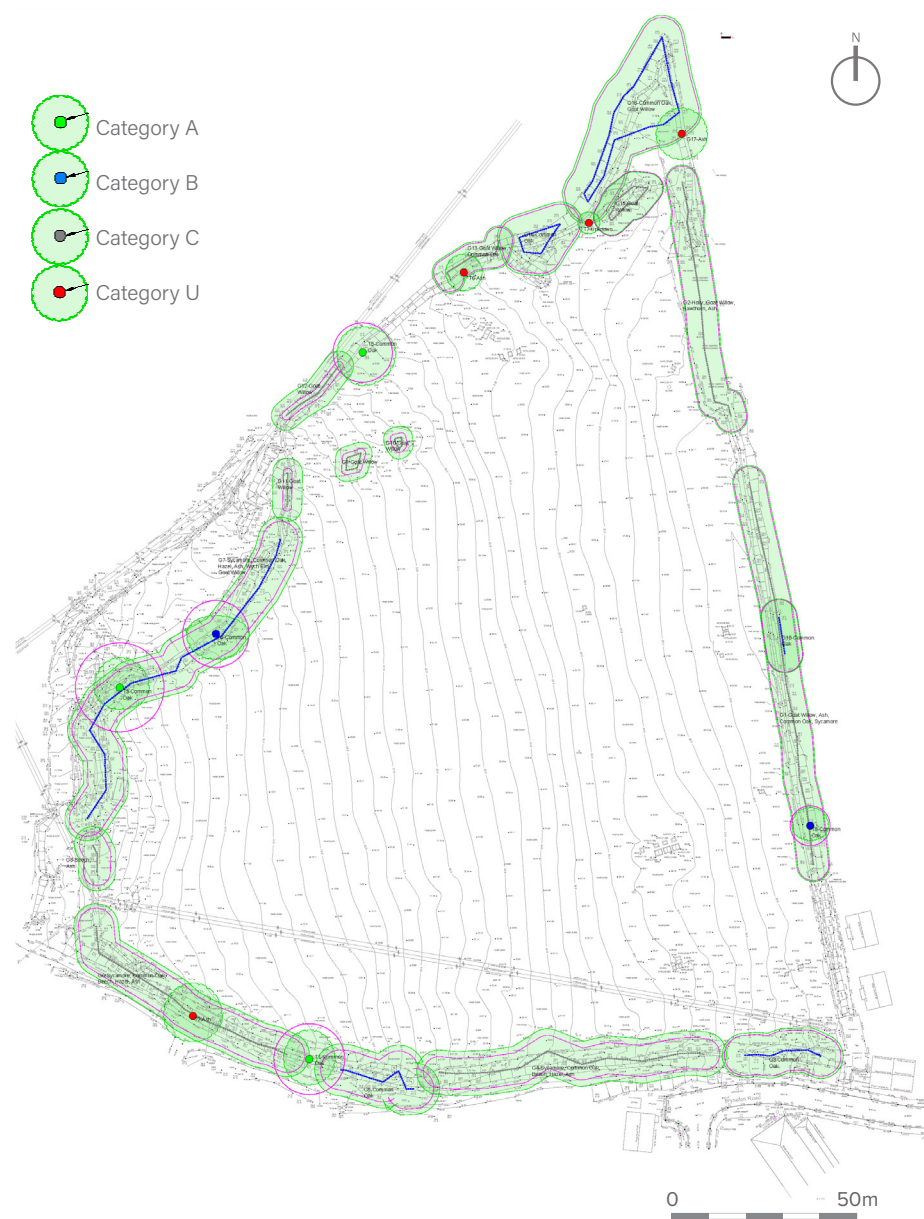


Figure 9: Tree Constraints Plan (extract, see AR for full drawing)

Tree Survey Summary Table						
Quality Category	Total Number of Individual Trees Surveyed	Total Number of Tree Groups Surveyed	Total Number of Tree Areas Surveyed	Total Number of Woodland Areas Surveyed	Total Number of Hedgerows Surveyed	Total
A : High (Most desirable for retention)	3	0	0	0	0	3
B : Moderate (Desirable for retention)	2	6	0	0	0	8
C : Low (Optional for retention)	0	11	0	0	0	11
U : Poor (Unsuitable for retention)	3	1	0	0	0	4

Ecology

Following a Preliminary Ecological Appraisal (PEA) carried out by Hawkeswood Ecology in January 2024 and subsequent informal consultation with Swansea Local Planning Authority Ecologists, Hawkeswood Ecology was instructed to carry out an updated grassland habitat assessment and protected species surveys on land at Gwynfaen Farm, Gorseinon.

The Site was previously grazed by sheep and is heavily disturbed by foul drainage works with the routes of pipes and underground tanks obvious in the landscape. The grassland is best described as improved and is dominated by agriculturally modified grassland, which has been poorly managed in recent years and only by sheep and pony grazing. As a result there is a reversion to species poor marshy grassland dominated by grasses and rushes.

The Site is bounded by hedgerows which are largely intact and continuous. They are not managed and to the north, west and south largely consist of mature trees and over-mature shrubs. It is in these that most interest lies with common breeding birds noted through the survey period.

A Special Protection Area (SPA) and Site of Special Scientific Interest (SSSI) is found adjacent to the site and is cited for being internationally and nationally important for wading birds and waterfowl.

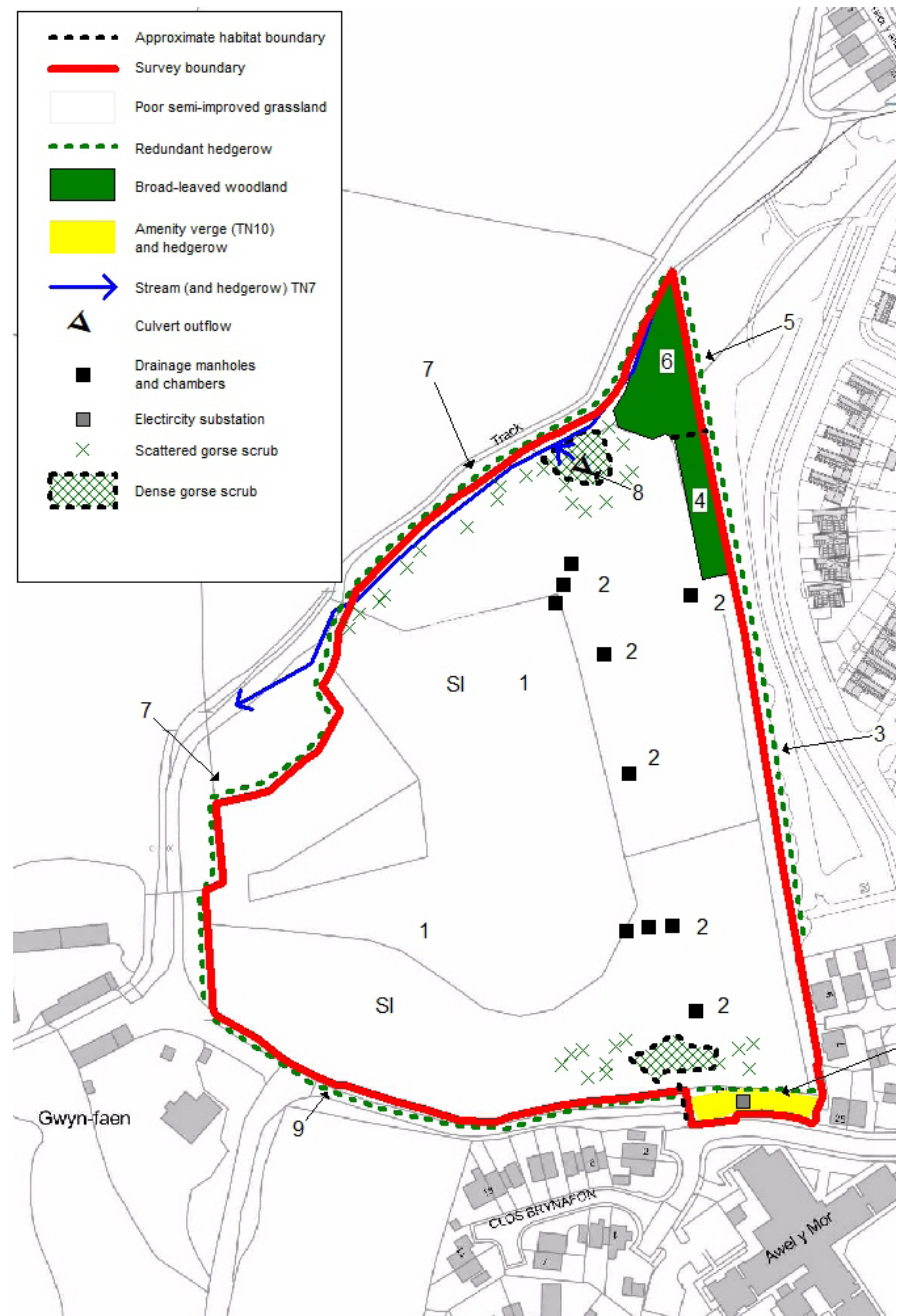


Figure 10: Phase 1 Survey Map (Hawkeswood Ecology)

BATS

Bat activity recorded to date has been fairly consistent but at relatively low levels with the main areas of use being the northern and southern wooded boundaries. Up to seven species of bat have been recorded with five positively identified with further analysis of *Myotis* species calls on-going to resolve which species of that group are present. The most commonly recorded species is common pipistrelle which is seen to forage throughout the night. Soprano pipistrelle is recorded infrequently, again throughout the night. *Myotis* species bats, sonograms most resembling those of whiskered bat, appear on the northern boundary regularly and with some frequency usually after midnight. A greater horseshoe bat was recorded in one period (July) commuting along the Site boundaries and noctule bats were recorded infrequently passing overhead.

In transect surveys bats are seen to forage along the northern and southern boundaries with infrequent passes noted along the eastern hedgerow (adjacent to Phase 1). Foraging in the open areas is rare and occurring late on in the transect surveys when dark (to avoid predation). Only common pipistrelle has been recorded in the open field. The wooded northeastern corner may be of value to bats and activity seemed most frequent in this location in June. Bats were commuting along both the northern and southern boundaries from the west where Gwynfaen Farm is located. Bats were also noted in May coming into the Site from the housing on Brynafon Road to the south of the Site; these were mainly soprano pipistrelle but only small numbers were noted.

With passive bat detectors there is no way to know how many bats were present, each recording represents a single pass which could represent multiple passes by a single bat or a few passes by a number of bats. The transect surveys suggest the former as at no point were more than two bats identified at any one time by an observer. With the surveys still being undertaken, the current findings are that the Site is not showing any evidence of being used by large numbers of bats.



BIRDS

An assessment of bird breeding habitat and value at other times of the year was made through the season with adventitious bird sighting noted. The Site is potentially important for birds being within 110 metres of the Bury Inlet RAMSAR Site (an internationally important wetland especially for wading birds). A number of features count against the Site being of value to estuarine birds; its agriculturally modified condition, the enclosed nature of the Site (many estuarine birds require open sightlines) and high levels of local disturbance from recreational use in the surrounding area. Throughout the survey period no birds associated directly with estuarine conditions have been identified from the Site, even at a spring high tide.

Concern over artificial light intrusion from the Site during construction and whilst in use can be effectively managed and this will form part of the Construction Environmental Management Plan. The Site is currently bounded by two footpaths which lead around the western boundary of the Site, with Gwynfaen Farm between the Site and the protected area. It is considered that levels of increased disturbance from the development will be insignificant and be of no impact upon the adjacent designated sites.

REPTILES

The reptile survey undertaken was a presence – absence survey. This is designed to simply see if a species is occurring on Site rather than assess population size. However, by using a large amount of mats over a long period of time, some assessment of population size can be made with care.

In this instance throughout the survey only 7 records were made, with four very likely being the same individual in one location. All were female slow worms and all adult animals. Given the number of mats put on site and a very small number of animals noted during the survey, an assumption can be made that the likely population slowworm on site is low. Neither any other reptile species or any amphibians were noted during the survey.



Landscape

A Landscape and Visual Appraisal (LVA) has been completed to identify the current quality and character of the site landscape, which is summarised here (for full details, please review the LVA).

The LVA notes that the site does not lie within an Special Landscape Area (SLA) or any other landscape protection policy area, and identifies several PRoW, bridleways, ecological and heritage designations within a 3km study area of the site. These are described briefly below and shown in **Figure 12**.

There are two connected PRoW bordering the site:

- PRoW LC96 follows the alignment of Brynafon Road and runs along the southern site boundary; and
- PRoW LC18 wraps around the site from the south-west to the northern corner. This route progresses north-east and joins PRoW LC17A.

Other PRoW in the vicinity of the site includes LC45 and LC46, which run parallel to each other, c.170m to the south of the site at the closest point. Further to the south-west, Bridleway LC123 is a circular loop that starts c.400m from the site at its closest point, from Gwynfaen Road and progresses into and around Glanymor Park.

The Wales Coastal Path and National Cycle Route 4 lie south-west of the site and both follow the same alignment across the Loughor Bridge. These routes are approximately 1.6km from the site at the closest point.

To the west of the estuary, the PRoW provides good connectivity from Bynea to Brynhyfryd/Llangennech across farmland and along minor roads. Elevations range from low, to the east of Bynea, to high around the south of Brynhyfryd/Llangennech. These north-south orientated routes which run parallel to the estuary are limited to oblique views towards the site only and these are often filtered, particularly those found along lower elevations.

Glanymor Park (and Foreshore car park) is an informal recreational park bordering the Loughor Estuary. The park is approximately 400m to the south-west of the site and includes the aforementioned bridleway and other informal walking routes. A sizeable amount of the parks northern boundary is enclosed by trees, and due to the levels as well as intervening vegetation, the majority of the park is not afforded views inland towards the site. The most northern extent of the park contains a narrow promontory, or raised promenade that overlooks the estuary and the wetlands bordering the park to the north and east. From the headland, there are views available towards the site.

Loughor Conservation Area is located over 1.5km to the south-west of the site, and it contains Loughor Castle, a Scheduled Ancient Monument which is accessible to visitors. The LVA suggests that tourists and recreational visitors to the castle are unlikely to experience any change as a result of the intervening vegetation and landform.



Figure 11: View from footpath LC123 in Glanymor Park looking north-east towards the site (see LVA for complete image)

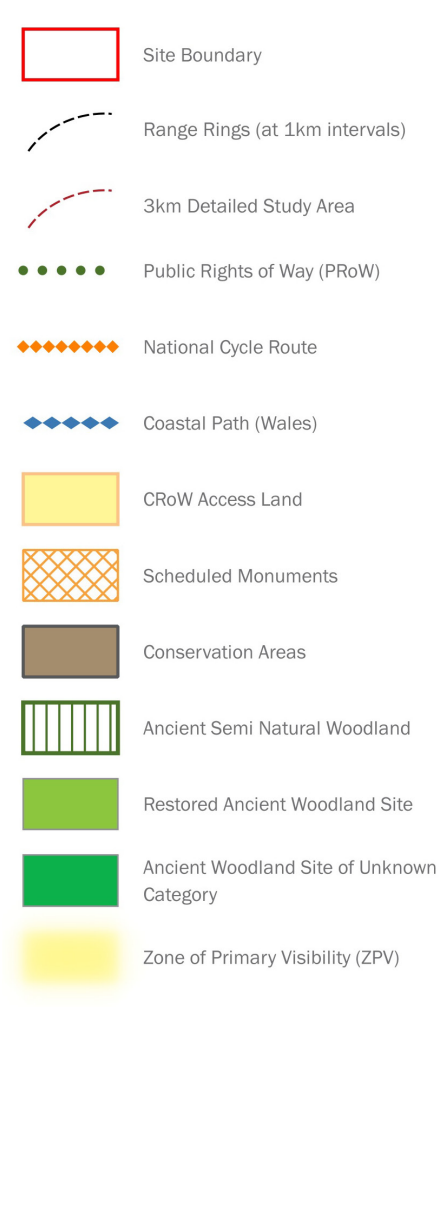


Figure 12: Landscape Related Planning Considerations

The LVA concludes that the following effects are likely:

- The character of the site is deemed medium sensitivity and will be subject to a large degree of change. Its greenfield character and use as grazing/pastureland will alter to accommodate new affordable housing;
- The character of the site's immediate context and surroundings will undergo very little change, post development. The site forms an extension to the residential development present within its surroundings (adjacent both to the east and south);
- In visual amenity terms, users of the public rights of way abutting the site boundary will experience a major change post development. This will reduce over time, as infill and reinforcement planting mature, and thus screens more of the site from these routes;
- Routes further west, namely the other side of the Loughor Estuary, although of high sensitivity, will experience little change due to the intervening distance. The development represents an extension to the urban edge, and does not extend above the existing ridgeline of Penyrheol; and
- There will be no considerable effects, in visual amenity terms, on nearby road users or residential receptors, given the abundant

housing development surrounding the site's boundaries, and limited intervisibility with the parcel itself. Rail users to the west of the estuary will also experience very little change following development.

- Beyond the adverse effects brought about by the development, the scheme brings about many positives in landscape terms to the character and use of the site. Although the character will largely change, new features such as reinforcement planting, attenuation basins, interactive rain gardens, community growing areas as well as formal natural play spaces which help to neutralise this change. The site will be used and enjoyed by more people, given it is a private enclosure as it stands. New planting will create habitats for wildlife and build upon those already in place within areas of open space. The proposals aim to retain the site's most valuable features and build upon them, namely the large boundary features.

The LVA concludes that the development can be accommodated within this site, having assessed the appropriateness of the proposals in landscape terms, within this setting. By including additional mitigation around the site's boundaries, it can be further integrated into its surroundings. Overall, the proposed development would not constitute an unacceptable impact in landscape and visual terms.

Highways

The proposed development highway access will be via a new priority junction constructed on the primary access road within the Gwynfaen phase 1 development, slightly north of where it connects to Min Yr Aber.

Road 01 has an east-west direction of travel, connected to phase 01 to the east and Road 02 to the west. The highway is 6.8m wide with 2m footways either side. There are two pedestrian crossings, one located to the east and one to the west. There is a vehicle crossing point to the north serving as a maintenance access track to the phase 01 attenuation basin, a vehicle crossing to the south serving a private drive for plots 1-6 and Road 04 is connected to the north. Highway drainage will be via a network of traditional gullies.

Road 02 has a south-north direction of travel, terminating to the south and north, the northern end provides access to a private drive serving plot 36-37. The carriageway is 6.8m wide with a 2m wide footway along its full length along the western side of the road, set back from the carriageway to accommodate highway rain gardens. There is a 2m footpath adjacent to the eastern kerbline at the northern and southern portions of the road, linked to the western footway via two pedestrian crossings. These pedestrian crossing points are located at the termination of the footway adjacent to highway raingardens located centrally along the length of the road on its eastern kerbline. The road provides access to plots 19-32 along its western edge. Highway drainage will be via a number of raingardens adjacent to either side of the carriageway.

Road 03 has an east-west into a north-south direction of travel, connected to road 02 to the east and terminating to the south via a turning head. The southern turning head provides access south to a private drive serving plots 47-50 and access west, to a maintenance access track to the attenuation basin. The highway is 5.5m wide with 2m footways either side. There is a pedestrian crossing located to the north east located near the junction with road 02. The road provides access to privates drives for plots 38-40 and 41-46, and parking spaces for plots. Highway drainage will be via a network of traditional gullies.

Road 04 has a south-north direction of travel, connected to Road 01 to the south and terminates to the north via a turning head. The northern turning head provides access east to a private drive serving plots 9-18. The bell mouth of Road 04 where it connects to Road 01, the highway is 5.5m wide with a 2m footway either side with an awareness strip and pedestrian crossing at the end of the bell mouth. The awareness strip serves as a traffic calming measure and to make drivers aware of the change in road type, from a tradition road to a shared surface. The shared surface is 5.5m wide with a 1m service strip to the west and a 1.5m service strip to the west. The road provides access to plots 7-8 along its western edge. Highway drainage will be via a network of traditional gullies.

All highways are proposed to be lit with carriageways and footways constructed from asphaltic concrete to Swansea highway Authority adoptable standards.

Drainage

From available mapping information it has been established that the nearest main watercourse is approximately 290m south west of the site, (the River Loughor) which flows east to west. This is connected to the site via a minor watercourse which runs along the northern and western boundary of the development flowing north east to south west.

A 225/1500mm diameter Dwr Cymru Welsh Water (DCWW) surface water sewer/oversized attenuation pipe is located within the site which flows south to north near the eastern boundary. This sewer discharges into the existing watercourse on the northern boundary at a restricted discharge rate of 5l/s. This sewer is solely associated with the neighbouring Brynafon Road development. Subject to agreement with Swansea SAB/DCWW it is proposed that this asset is removed and the flows from the existing Brynafon Road development diverted into the proposed development surface water drainage system.

There is an existing 150mm foul sewer crossing the site which is located near the eastern boundary and flows south to north conveying foul flows from the Brynafon Road development, this existing sewer has a spur off which also serves the phase 1 development to the east of the site. Subject to agreement with DCWW it is proposed that the asset solely serving the Brynafon Road development is removed and the flows diverted into the proposed development foul water drainage gravity system.

As well as the above foul and surface water sewers there are a number of large diameter DCWW combined sewers which run through the site flowing south to north. This infrastructure needs to remain in place and DCWW have been consulted and have confirmed the required easements. These have been taken into account when developing the proposed site masterplan.



The total site area is circa 3.5ha. Portions of the site will not be captured by positive drainage network and will continue to drain as existing greenfield. These areas have been discounted from the area used to calculate the global greenfield run-off rates for the site. The effective contributing area of the site is taken as 2.34ha. The adjacent Brynafon Road developments total site is circa 0.86ha with the effective contributing area of the development taken as 0.57ha.

- The greenfield runoff rates are as follows,
- 1 year return period 28 l/s greenfield run-off rate
- 30 year return period 57 l/s greenfield run-off rate
- 100 year return period 69 l/s greenfield run-off rate

The surface water runoff from Brynafon Road is proposed to be re-directed into the Gwynfaen Phase 2 development's new surface water drainage system in order to abandon the existing concrete storage pipe. The total discharge from the site will therefore be a combination of the greenfield runoff rate and the existing controlled flow rate from Brynafon Road.

- The greenfield runoff rates are as follows,
- 1 year return period 33 l/s greenfield run-off rate
- 30 year return period 62 l/s greenfield run-off rate
- 100 year return period 74 l/s greenfield run-off rate

The aim of the surface water drainage strategy is to mimic the natural catchment processes as closely as possible and the proposed system will be designed in accordance with the statutory "Sustainable Drainage Systems Standards for Wales" (SDSSW) document 2018, any local authority's SAB requirements and CIRIA's C753 SuDS Manual as well as meeting the requirements of Building Regulations, Document H.



In determining a suitable methodology for disposal of surface water flows from this development, it is necessary to explore the technical options outlined under Standard S1 in the statutory SDSSW document 2018 published by the Welsh Government. Based on the hierarchy it is proposed to discharge surface water runoff from the development to the watercourse near the northwestern corner of the site. Infiltration is not envisaged to be a suitable means of discharge from the site (based on testing undertaken for the adjacent phase 1 development) however this will need to be confirmed by the infiltration testing which will be carried out as part of the geotechnical site investigation. Whilst infiltration has been ignored when sizing drainage elements, raingardens are proposed to be unlined to utilise any available infiltration to attempt to reduce the load on the receiving watercourse.

Surface water runoff is to be attenuated from site to 33 l/s via a hydrobrake flow control on the gravity connection from the attenuation basin. This run-off rate will be maintained for all rainfall events up to and including the 1 in 100yr event with 40% allowance for climate change and urban creep.

The most sustainable method for the disposal of foul water generated by the proposed development is via the existing Dwr Cymru Welsh Water main sewer network which crosses the site. The proposed connection point (as advised by DCWW as part of the PPA consultation) is located outside of the site boundary, in the neighbouring Welsh Assembly Government (WAG) land to the north of the site. As the site falls east to west a pumping station will be required to ensure the proposed foul from the western lower area can discharge to the public sewer. 12no properties will contribute to the pumping station, which will require a DCWW type 2 pumping station.



Opportunities and Constraints

As part of the design development, a detailed site analysis has been conducted that takes into account the findings of the technical studies that have been undertaken and the opportunities presented by the site and its surroundings. Key elements of this analysis are illustrated graphically on **Figure 13** opposite and described below, and have been taken into account in the preparation of the detailed planning layout.

 ACCESS AND CONNECTIVITY	 LANDSCAPE AND VISUAL CONTEXT	 ECOLOGY	 BUILT FORM AND UTILITIES	 DRAINAGE
Link to the existing PRoWs that pass along the site's western and southern boundaries, providing easy access to the wider PRoW network and neighbouring parts of Penyrheol.	Retain and enhance existing site features and vegetation around the periphery of the site and incorporate them into the site's GI network.	Create a multi-functional GI network which connects and enhances connections across the site.	There are no conservation areas, historic parks and gardens, areas of archaeological sensitivity, scheduled monuments or listed buildings within proximity of the proposed development.	Use appropriate surface water attenuation measures and SuDS to create a naturalistic environment.
Create informal recreational pedestrian/cycle links through the site that provide direct access to Phase 1, the PRoW network and offer Active Travel connections to nearby services and facilities.	Opportunity to create a feature multi-functional GI space running through the development to provide space for play, exercise, SuDS and habitat.	Potential to connect the scheme into the wider GI network to preserve habitats and create new green corridors to connect areas of existing ecological value, particularly along the western boundary to enhance boundary vegetation.	Respect the landscape setting and opportunity to respond to the local vernacular and adjacent Gwynfaen development with an appropriate architectural form and building typology that incorporates local materials and details found within the Gower.	Integrate GI routes to convey water to basins, providing habitat for wildlife and creating an attractive public realm.
Provide single vehicular access to the site via a new street connection to the adjacent Gwynfaen Phase 1 development.	Opportunity to link site GI network to Phase 1 to create a well-connected and accessible GI amenity for both new and existing residents, providing a stronger sense of community and encouraging healthy lifestyles.	Design SuDS features and a drainage strategy to provide ecological bio-diversity as well as educational, visual and amenity benefit.	Opportunity for an attractive gateway into the site with appropriate density and the use of distinctive materials at key building locations to provide character.	Multi-functional SuDS provides opportunity to create feature for the site, leading character to the development.
Provide low-speed vehicle access through the site with a logical hierarchy to aid legibility.	Utilise the best characteristics of the site's landscape character to create a development of local character that integrates within its context – both man made and natural. Consider succession planting among existing boundaries trees to enhance hedgerows. Provide net gain for biodiversity by incorporating habitats valuable to wildlife within multi-functional GI corridors.	Opportunity to create new internal features within the site as multi-functional assets, with rain gardens providing significant areas of local GI.	Provide 12m offset to large underground sewer that runs through the site, but use restriction to create high-quality public open space that incorporates a variety of habitat and community spaces.	
	Reduce visual effects from the south-west with tree planting in the public domain, and creating green breaks within the development.	Opportunity to incorporate interpretive signs to educate residents about habitat and wildlife on site and in the area.	Design sensitively in the vicinity of the homes in the south east of the site that front onto the boundary. Consider landscaping and vegetation to soften any visual impact.	

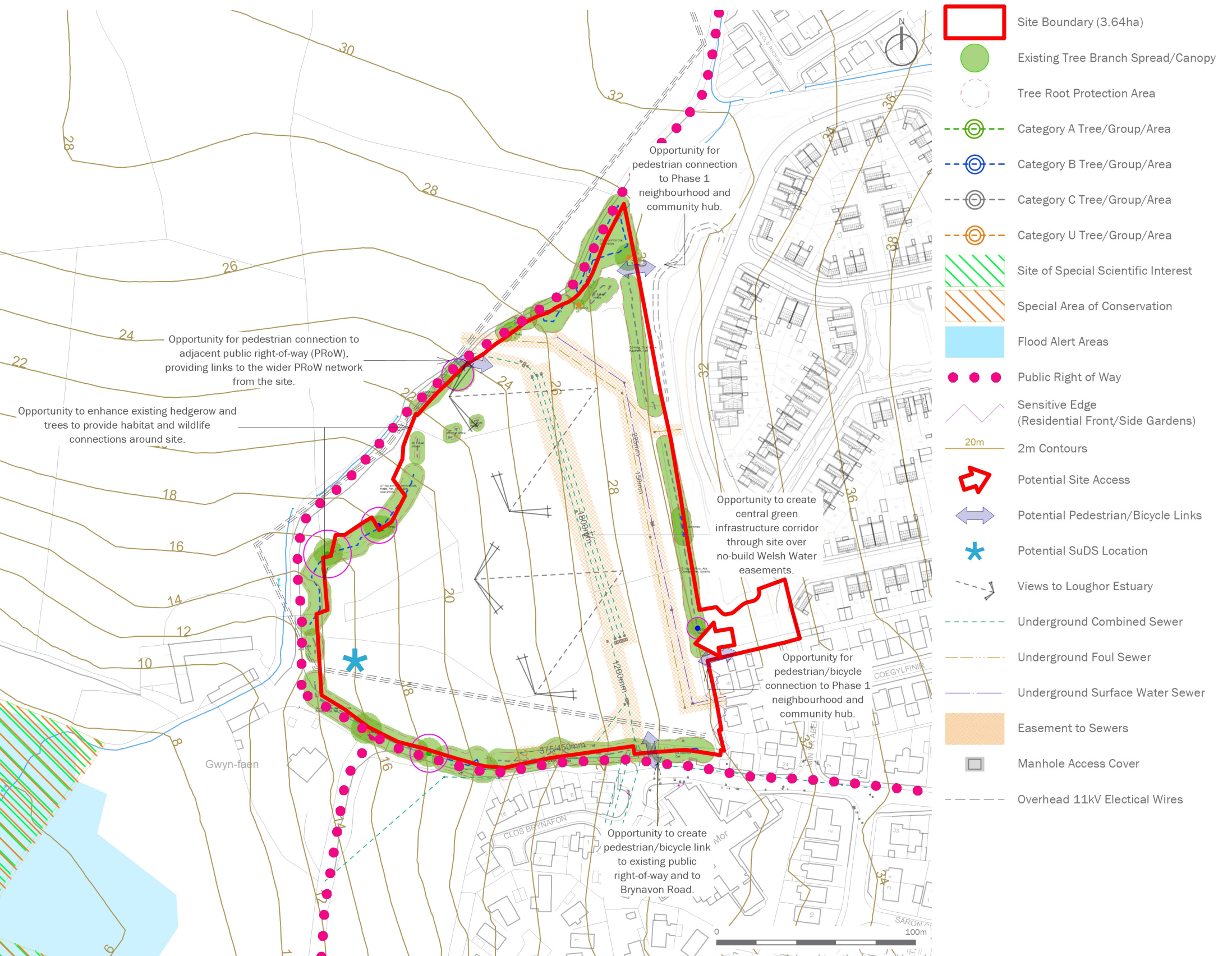


Figure 13: Opportunities and Constraints (edp7068_d014g)

CHAPTER 3: DESIGN EVOLUTION

Pre-application Comments

Initial designs were provided to Swansea Council on January 28, 2022 for pre-application consultation. Early designs had focussed on creating a neighbourhood that emphasised a GI connection from Phase 1, through the middle of the Phase 2 site, and ending at the western boundary. The design envisioned that this GI east-west corridor would be fronted by built form, with these buildings accessed from the rear by a series of shared surface streets (see **Figure 14**). This scheme also included 50 affordable homes, play and community growing space, and put forward an option to access the site from Brynafon Road as a potential alternative access arrangement.

Swansea Council Placemaking Officers responded to the scheme in a letter dated 27 June, 2022, the design related points raised are summarised below:

- The site has good connectivity to a range of services in Loughor and Gorseinon;
- The GI-led approach was welcomed and in line with LDP objectives, as was the approach to street level GI;
- GI proposals for the site would need to demonstrate how connectivity and ecosystem resilience to significant ecological designations would be retained and enhanced;
- Concerns were raised regarding the approach to fronts and backs of development and a redesign was suggested that would remove the 'Radburn' approach to homes fronting on green space;
- Future application would need to be supported by appropriate Ecological, Landscape and Arboricultural surveys;
- Transportation Assessment and Highways details would need to address parking, visibility, street cross-section and swept path analysis would need to be conducted; and
- Appropriate levels of play would need to be provided.

Following this feedback, the design intent was re-visited to address the placemaking comments received.

Dŵr Cymru Welsh Water (DCWW) Limitations

Following on from the initial pre-application advice, the design was re-visited and modified to remove any rear access plots from the plan. This was achieved by providing standard secondary streets to access the western edge of the site from a main access road located on the central sewer easement, as shown in **Figure 15**. However, consultation with DCWW and more detailed engineering investigation during this time revealed that the main access road could not be aligned on top of the main sewer easement as had been previously assumed. In addition, changes in level from east to west, combined with grading limitations presented by the sewer pipes, meant that the two east to west streets would not be feasible as designed. DCWW also identified further limitations on tertiary streets crossing the central sewer easements that necessitated additional design changes.



Figure 14: December 2021 Masterplan



Figure 15: October 2023 Masterplan

Follow up pre-application April 10, 2024

The design continued to evolve, moving the main access off the central sewer easement and provided access to the western edge of the development from a connection to the north. A follow-up pre-application meeting was arranged to present the revised scheme to offices from Swansea Council for input, the results of which are summarised below:

- The redesign was a welcome change from the 2022 design;
- Pedestrian connections between Phase 1 and 2 should be reviewed to ensure they are the most appropriate;
- Suggested that GI areas include SUDS features where possible if not constrained by DCWW easements;
- Discussed the design approach and need for clarity regarding material and architectural response;
- Agreement that GI was appropriate way of tying the sites identify together, suggested allotment area could be divided into two and overlooked;
- Play provision was discussed and agreed that a disaggregated natural play space would be better suited to the area than formal provision, which is already provided on adjacent site; and
- South eastern housing block adjacent to existing density properties was discussed and how best to limit mutual overlooking.

Design out Crime Officer (DOCO) Input

The Designing out Crime Officer also offered input on the March 2024 design, many of which are pertinent to the detailed stage of design, these are summarised as follows:

- Design parking to be well over-looking and limit public access to apartment parking areas;
- Pedestrian paths should be open, direct and overlooked;
- Address lighting and boundary treatment to define public areas and increase safety, rear and side boundaries to be secure; and
- Ensure landscaping and play are safe and avoid anti-social behaviour;

Design Responses to Feedback

In response to the input from Swansea Council and the DOCO review, additional refinement of the design was undertaken (see **Figure 17**). This included:

- Reducing the amount of overlooking in the south east corner of the site to include a small apartment building that has no windows in the elevation nearest the eastern edge of the site. Boundary planting in this area (as permitted over DCWW easement) to buffer the existing development;
- Eastern boundary secured with access only permitted for maintenance;
- North west corner arrangement changed to design out any publicly accessible space to the site boundary, with access limited for maintenance only to allow wildlife corridor along watercourse;
- Viewing platform to be created at secondary road terminus as a feature with views onto basin and western wooded area; and
- GI corridors to incorporate interactive rain-gardens, a range of habitat, play space and community growing/foraging

These concepts were taken forward and incorporated into the detailed planning layout and detailed landscape design presented in the following pages.



Figure 16: March 2024 Masterplan



Figure 17: July 2024 Masterplan

CHAPTER 4: PROPOSALS

Placemaking Approach

The vision for Gwynfaen 2 is to create a small new neighbourhood that is an extension to the adjacent Gwynfaen Phase 1 development but which has its own distinct character. The main placemaking elements and spaces within the new neighbourhood are illustrated below and on the following page.



- Community Gathering Spaces
- Community Growing
- Nodes for play/social interaction
- Play Space
- Safe Pedestrian/Bicycle Connections
- Pedestrian/Bicycle Movement
- Ecological Buffer/Opportunities for Biodiversity
- High-quality Public Realm/Open Space
- Edible Landscapes/Orchards
- Swales/Rain Gardens
- SuDS and Stream

Community Recreation Space.

Includes community allotments, orchards, ancillary storage, play and open space to bring people together and build a healthier community for all. Well-overlooked spaces for community gathering and local food production/exchanges create a focus for Gwynfaen 2 residents. High point on the site offers views to the Loughor Estuary.

Neighbourhood Green

Public open space overlooked by adjacent homes created to provide neighbourhood 'green' that offers opportunities for exercise, play and social interaction at this gateway location.

Raingardens and SuDS

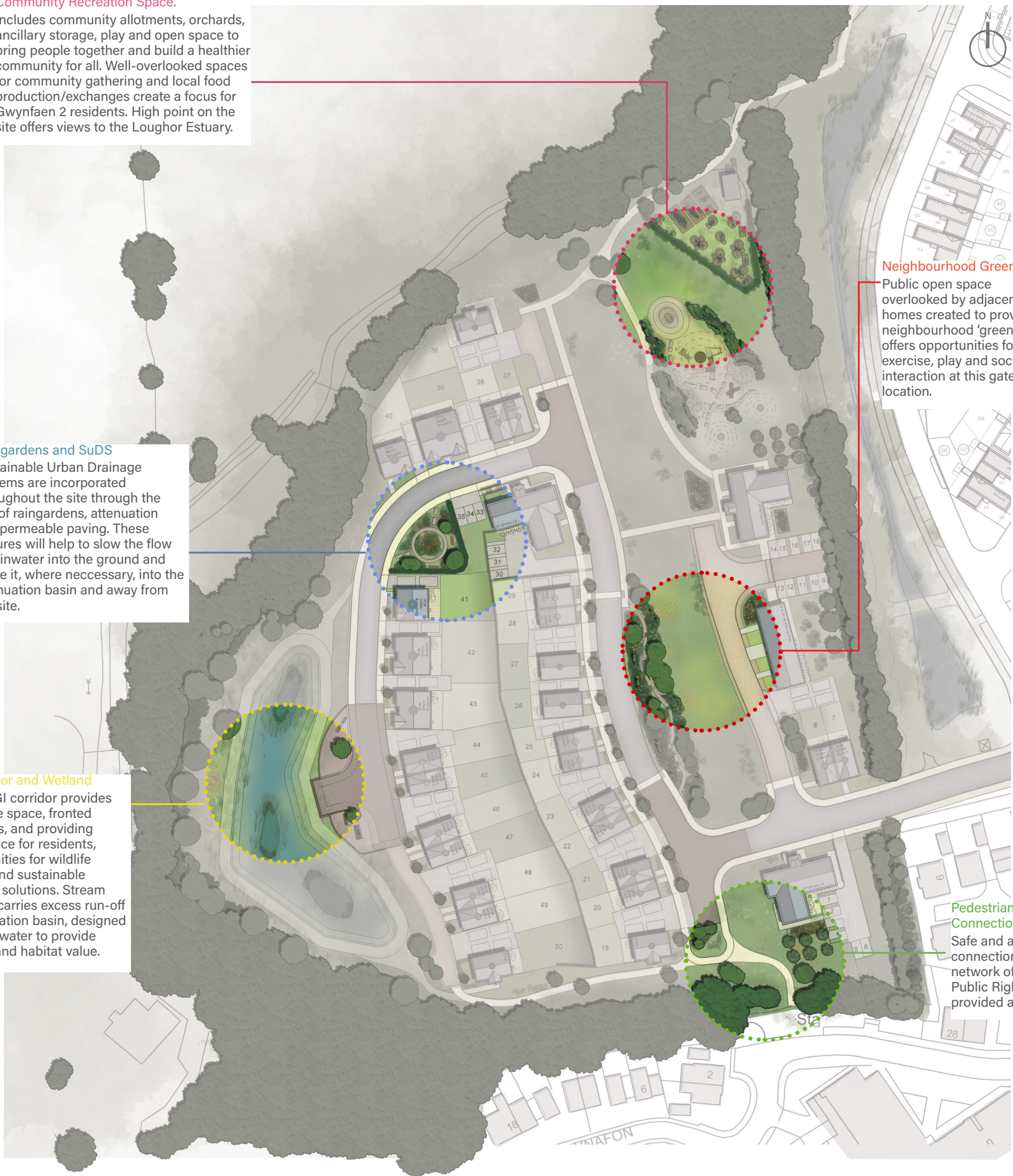
Sustainable Urban Drainage Systems are incorporated throughout the site through the use of raingardens, attenuation and permeable paving. These features will help to slow the flow of rainwater into the ground and guide it, where necessary, into the attenuation basin and away from the site.

GI Corridor and Wetland

Central GI corridor provides a car-free space, fronted by homes, and providing open space for residents, opportunities for wildlife habitat and sustainable drainage solutions. Stream channel carries excess run-off to attenuation basin, designed to retain water to provide interest and habitat value.

Pedestrian and Cycle Connections

Safe and accessible connections to the wider network of footpaths and Public Rights of Way are provided across the site.



Architectural Character

The character of Gwynfaen 2 aims to echo the contemporary forms of Phase 1, but with a modified materials palette in keeping with the location to give relate to Phase 1 but be unique from it. The materials swatch on this page suggests the mix of both local and contemporary elevational treatments found within the scheme.

A range of housetypes are being proposed:

- 1 and 2-bedroom Apartments, some wheelchair accessible;
- 2, 3 and 4-bedroom homes; and
- 2 and 3-bedroom Bungalows.



Ebony Dark Cladding or Similar Approved



Weber White Renders or Similar Approved



Composite Slate Roof Tiles



Brickwork Forterra Belgravia Gault Blend or Similar Approved



Figure 18: Illustrative Two Bedroom Home (semi-detached option shown)



Figure 19: Illustrative Three Bedroom Home





Figure 20: Artists Impression Looking North from SuDS Attenuation Area

Planning Layout

The following section provides a breakdown of this framework and how it responds to the challenges and wider benefits within the site as well as highlighting the specific house type mix breakdown.

The Planning Layout [see **Figure 21**] presents a structured framework to the development, considering all constraints and opportunities across the site, whilst serving as a roadmap to ensure that all necessary components are coordinated into the design.

House Type	Number	Wheelchair Accessible
Flats (22)		
1B2p Flat	18	
2B3p Flat	2	
1B2p Wheelchair Adapted Flat	2	Yes
Houses (23)		
2B4p House	4	
3B5ps House (Corner Turner)	2	
3B5p House (Gable Front)	4	
3B5p House	8	
4B6p House	2	
4B7p House	3	
Bungalows (5)		
2B3p Bungalow	2	
2B3p Wheelchair Adapted Bungalow	2	Yes
3B5p Bungalow	1	
TOTAL	50	

Key for **Figure 21**

- 1 Vehicular access to be provided from adjacent Gwynfaen Phase 1 site.
- 2 Substantial public open space provided through the site to soften edge of development, and to provide a connected GI amenity space for residents, to include play, community food production and SuDS.
- 3 Existing hedgerows retained and enhanced buffer planting provided as an ecological corridor and to maintain privacy.
- 4 Community orchard, allotments, ancillary storage and open areas provide space for gatherings and exercise and takes advantage of views to the Loughor Estuary.
- 5 Homes arranged to overlook open space and provide edge to the neighbourhood on the western edge of the site.
- 6 Green/blue corridors provides wildlife habitat and car-free space through the development and at site boundaries.
- 7 Pedestrian footpaths link to PRow and adjacent Gwynfaen Phase 1 development to ensure permeable development and car-free connections to surrounding facilities.
- 8 Sustainable drainage features designed to support the multi-functional green infrastructure.
- 9 'Viewing Area' and GI footpath loop around attenuation and open space to the west.
- 10 Swales and rain gardens provide sustainable GI throughout the masterplan and opportunity for planting.
- 11 Gateway space to new neighbourhood framed by built form, with alternative materials at access intersection to define space.



Figure 21: Planning Layout

Green Infrastructure Statement

PPW defines Green Infrastructure (GI) as: “...the network of natural and semi-natural features, green spaces, rivers and lakes that intersperse and connect places”

PPW edition 12, published in February 2024, requires that all planning applications are supported with a GI Statement. Paragraph 6.2.12 states: “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”.

A Green Infrastructure Statement has been undertaken, which seeks to:

- Summarise the baseline position in respect of the site. This will reflect the GI assets present, their condition and their functionality in respect of ecosystem services;
- Summarise the baseline position in terms of the wider connectivity of the site within the local/regional GI network and identify any specific or key roles which it fulfils in this regard;
- Describe the proposed development and any new GI to be integrated within it;
- Identify the effects of the development on GI assets and functionality and utilise the Step-Wise approach to consider how mitigation has been applied and a net benefit for biodiversity achieved; and
- Summarise the overall effect on GI.

Overall, habitat retention, enhancement and creation measures proposed will ensure extent, diversity and connectivity of those most valued habitat features on-site are maintained whilst continuing to provide suitable habitat for a range of protected and notable species, necessary to maintain viable populations resilient to future change. More broadly, measures taken will also ensure the protection and continued delivery of ecosystem service benefits on-site, particularly in respect of those regulating (e.g. carbon storage, climate regulation, air purification and water management), supporting (e.g. pollination, soil formation and decomposition) and cultural (e.g. health and well-being,) service benefits.

A Construction Environmental Management Plan (CEMP) will provide detailed mitigation and management proposals for the construction and establishment phases of the development proposals. A Landscape Management Plan (LMP), to be delivered at the discharge of conditions phase, will outline the ongoing management and monitoring prescriptions for the site for a minimum period of 25 years. This comprehensive approach is considered to fully meet the requirements of Step 5 of the Step-Wise approach.

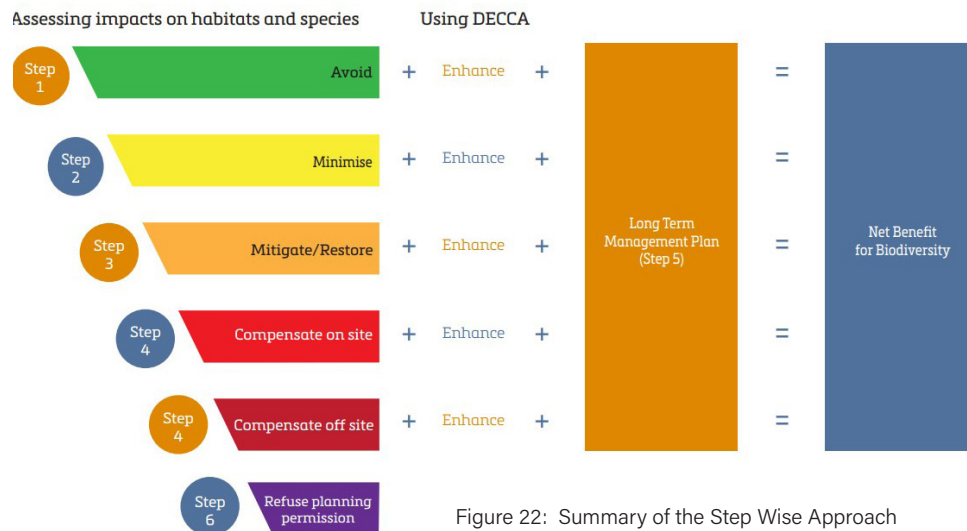


Figure 22: Summary of the Step Wise Approach





Figure 23: Artists Impression Looking North from Central Green Space

Landscape Proposals

The landscape proposals seek to enhance GI across the site, through the delivery of the following measures, which include:

- New planting of woodland, trees, shrub and scrub where appropriate, to include a diversity of native species of local provenance designed to create natural woodland edges, shrubby glades and dense and well-connected hedgerows considered favourable to wildlife, with species chosen to maximise structural and species diversity, fruiting/flowering potential and seasonal availability;
- Identification of areas of woodland, hedgerow, tree and scrub habitat to be targeted for appropriate management and maintenance over the long term so as to maximise the longevity and carrying capacity of the habitat resource; and
- Monitoring and assessment of habitat quality and/or monitoring of species associated with target habitats.

As well as the above measures regarding habitat provision, the scheme includes further enhancements to the GI baseline with regards to people and placemaking. The following elements form part of the emerging proposals;

- Interactive rain gardens and attenuation basins feature strongly, providing an additional 'play' element to the masterplan;
- Community 'Kitchen Gardens' provide a growing facility for future residents to engage with the surrounding landscape and green infrastructure;
- Community orchard provides the public with opportunities to harvest locally grown fruit and again engage with the landscape resource;
- Mown areas of amenity grass provide informal 'kickabout' spaces as well as retained tussock grassland spaces;
- Areas of landform mounding offer variety, visual interest and additional natural play features within the landscape;
- A Local Area of Play (LAP) is proposed within the central green corridor, offering a formal play space for future use; and
- Connection to existing PRow routes to provide residents with access to the wider PRow network and countryside, amenity and recreational value of the surrounding landscape.

These enhancements to the on-site GI will also augment Phase 1 GI to provide a connected and comprehensive open space and landscape area for the two adjacent sites. Phase 1 amenities include a LEAP, community green and amenity space around the attenuation basin to the immediate east of the site, all within a short 2-3 minute walk of Phase 2.

Key for **Figure 24**

	Application Boundary		Proposed Flag Paving To Front Gardens and Access Footpaths
	Proposed Native Hedgerow Planting Topsoil Depth: 450mm Mulch: 75mm Depth Bark Mulch		Proposed Balustrade 1100mm High Timber
	Proposed Amenity Grass Product: TBC or Similar Approved Supplier Rolawn Topsoil Depth: 150mm		Proposed Knee Rail Min 500mm High
	Proposed Species-Rich Meadow Grass Product: EM1 Basic General Purpose Meadow Mixture Supplier: Emorsgate Seeds Sowing rate: 4g/m ² Topsoil Depth: 150mm		Proposed Fence Timber closeboard fence
	Proposed Wildflower Grassland (TO ATTENUATION BASE) Product: EGS Meadow Grass Supplier: Emorsgate Seeds Sowing rate: 4g/m ² Topsoil Depth: 150mm		Proposed Retaining Wall Details TBC/Refer to Engineer's drawings for details
	Proposed Grassland (TO ATTENUATION BANKS) Product: EM8 Meadow Mix for Wetlands Supplier: Emorsgate Seeds Sowing rate: 4g/m ²		Proposed Hoggin Path 2m wide with timber edge
	Proposed Ornamental Shrub Planting Topsoil Depth: 450mm Mulch: 75mm Depth Bark Mulch		Proposed Earth Mounding To be formed with smooth flowing curves, with max 1:3 gradient to sides
	Proposed Native Shrub Planting Topsoil Depth: 450mm Mulch: Jute/Hessian Mulch Mats Density 4-6 per sqm		Seat/Bench
	Proposed Structural Shrub Planting Topsoil Depth: 450mm Mulch: Jute/Hessian Mulch Mats Density 4-6 per sqm		Picnic Bench
	Proposed Marginal/Aquatic Planting		Concrete Ring Raised Planters
	Proposed Rain Garden Planting		Indicative Below Ground Services Zone Refer to Consultant's drawings for details
	Existing Species-poor Marshy Grassland To be enhanced.		Play Space Buffer Zone 20m buffer zone to LEAP
	Proposed Block Paving To Shared Streets & Traffic Calming Areas		Proposed Retaining Wall Details TBC/Refer to Engineer's drawings for details
	Proposed Safety Surfacing Safety Matta Play Safety Tiles with Wear Tolerant Seed Mix		

- 1 SuDS Attenuation Basin
Designed with a permanently wet area to enhance biodiversity, planted with native marginal species to waterline and further native species to the banks, sown with grass for seasonally wet soils.
- 2 Proposed Rain Garden
As part of integrated SuDS on site. See engineer's drawing and specification for details.
- 3 Local Area for Play (LAP)
20m buffer from proposed dwelling.
- 4 Proposed Community Garden & Allotment
With raised concrete ring planters & raised sleeper beds.
- 5 Mown Grass Area for Play
Flexible-use space for informal play, adjacent to LAP.
- 6 Proposed Rain Garden
As part of integrated SuDS on site, rocky cascades with water channels, and stepping stone access to run-through planted areas. See engineer's drawing and specification for details.
- 7 Existing Species-poor-Marshy Grassland A
To be enhanced.
- 8 Primary Vehicular Site Access
- 9 Proposed Earth Mound
Approx. 1m high with max 1:3 banks gently graded into existing ground. Bank will provide natural buffer between proposed dwelling & LAP.
- 10 Community Orchard
To include a variety of edible fruiting tree species.
- 11 Private Communal Garden
Communal garden for adjacent residential building, bordered with hedging.



Figure 24: Detailed Landscape Proposals (edp7068_d022)

External Materials Plan

The following plan outlines the materials that will be used on the exterior of proposed residential dwellings within the scheme, in line with the Architectural Character section and materials palette found on page 29. Additionally, the plan highlights proposed surface materials within public realm and highways.










-  Dark Cladding or Similar Approved
-  Parex White Render or Similar Approved
-  Brickwork Forterra Belgravia Gault Blend or Similar Approved
-  Dark Grey Slate Roof Tile
-  Grey Tarmac
-  Light Buff Coloured Tarmac
-  Sureset Resin Bound Path or Similar Approved
-  Permeable Concrete Block Paving
-  Low Level Amenity Grass Path



Figure 25: External Materials Plan (edp7068_d021)

Boundary Treatments

The boundary treatments Plan below is a detailed breakdown of how the boundaries of proposed dwellings and public realm will be treated. This plan focuses on defining the edges of homes and creating an appropriate interface with surrounding areas. Masonry walls are used where defining a passage between public and private realm, with lower level walls and timber square posts providing a clear transition between public spaces.

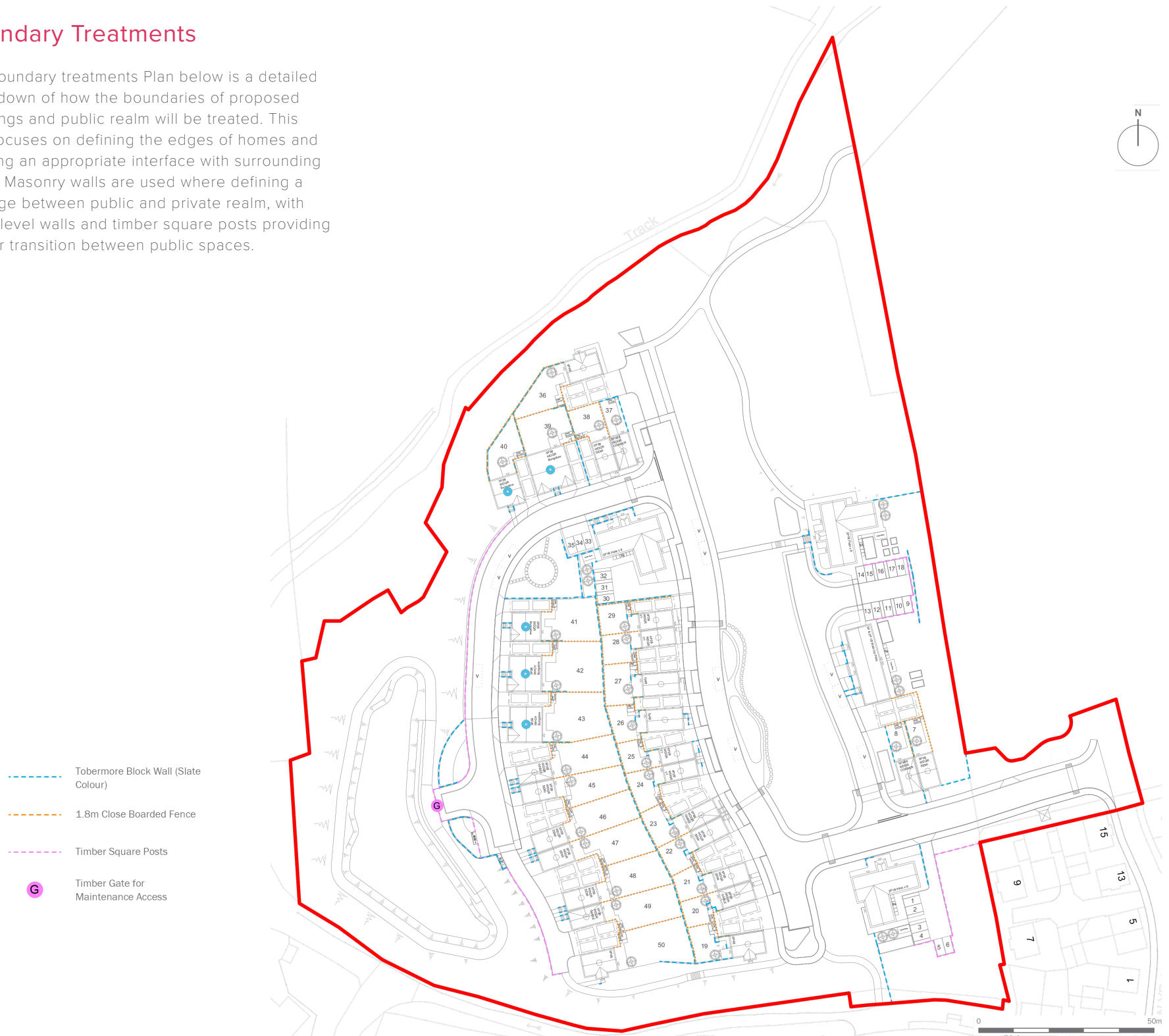


Figure 26: Boundary Treatments Plan (edp7068_d020)

Streetscenes and Sections

The illustrative Street Scenes and Site Sections on the following spread visually show how the proposed development sits within existing topography and the relationships between plots along the primary and secondary carriageways. The site section runs east-west through the centre of the site to show the level changes and proposals within it from the high point in the east to the low point in the west. .

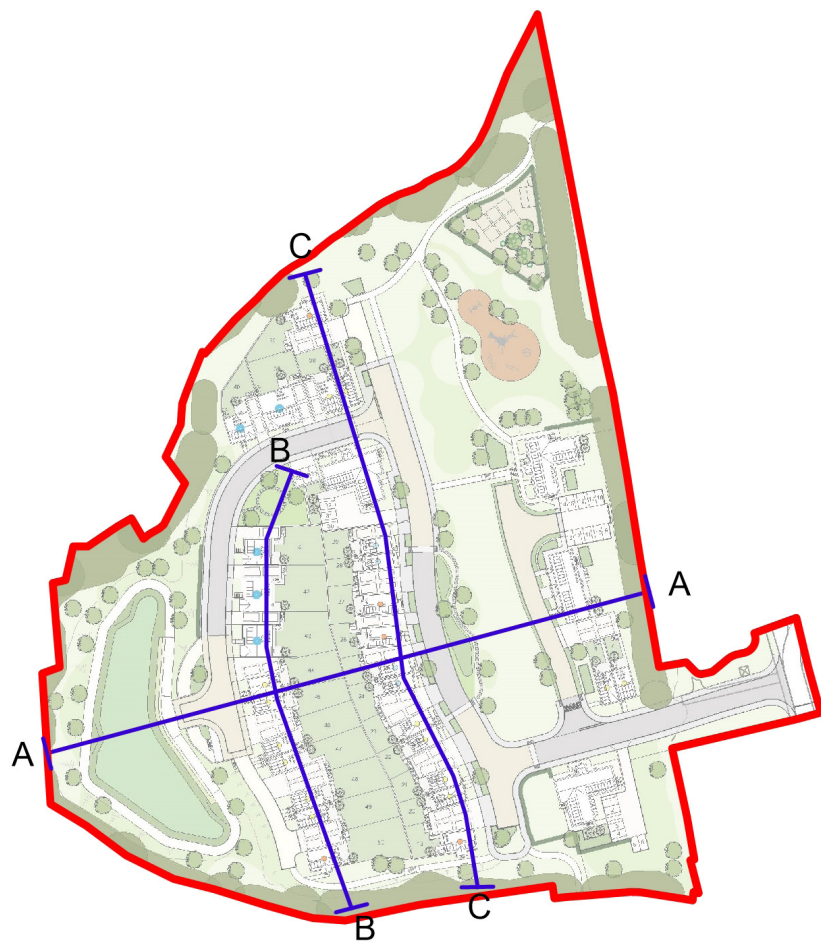


Figure 30: Street Scene Location Plan



Figure 27: Section A-A



Figure 28: Street Scene B-B



Figure 29: Street Scene C-C



Sustainability

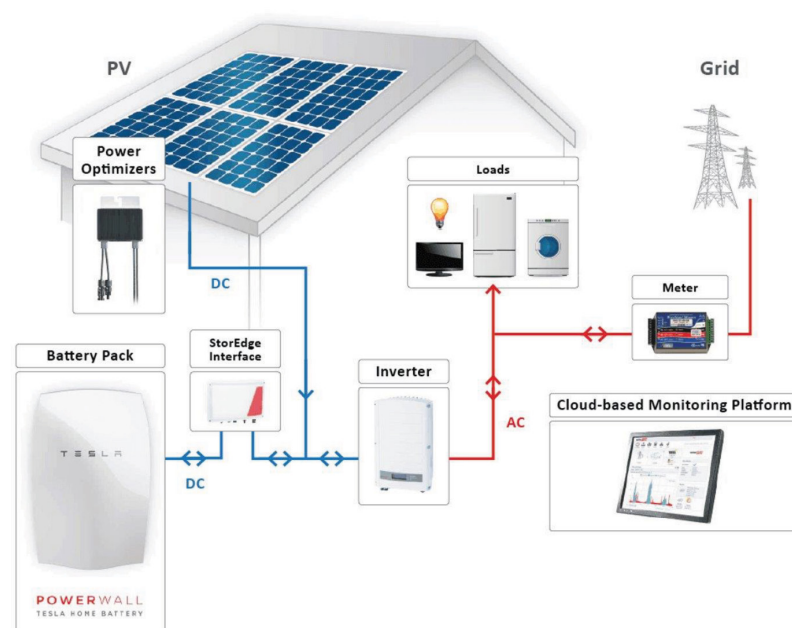
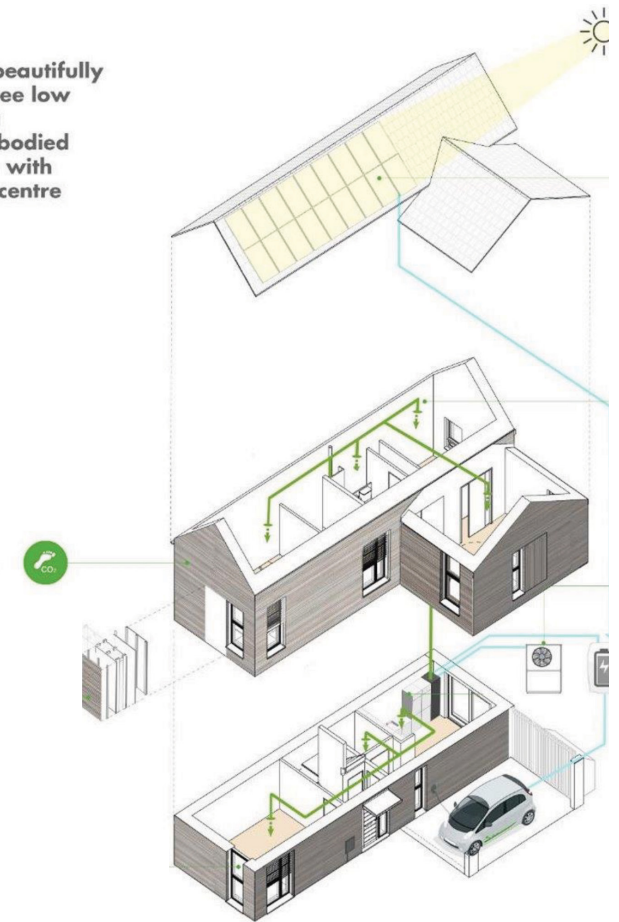
Gwynfaen 2 is envisioned to be a low-carbon, energy efficient and sustainable community.

Features of the development include:

- Operational energy demands are reduced, using a 'fabric first' approach, with high levels of insulation and air tightness. Homes are to meet EPA 'A' and SAP92 and designed to eliminate thermal bridging;
- All-electric systems, zero on-site combustion for homes and a clear path to net zero carbon future;
- Passive cooling or solar shading to bedrooms to prevent summer over-heating (CIBSE TM59 compliant);
- Smart-enabled home infrastructure and thermal storage facilitates the effective use of variable electricity tariffs saving residents money and making energy usage more efficient;
- Air-source Heat Pumps in all properties to provide sustainable power for heating and hot water demand;
- On-plot EV facilities with potential for two-way charging and integration with the grid;
- Solar photovoltaic panels generate zero carbon energy on site and offset consumption;
- Emphasis on using timber frame construction for the majority of homes to reduce embodied carbon;
- Use of local supply chains and some locally sourced timber products to support the circular economy; and
- Pobl is working with off-site manufacturers to standardise house frame design, to reduce waste, improve productivity and increase quality.

Our vision is to create beautifully designed combustion free low carbon housing using a complimentary low embodied carbon building system with energy efficiency at its centre

Embodied Carbon of construction materials reviewed using carbon life cycle assessment.



SuDS

The proposed site layout storage will be provided in the form of rain gardens, permeable paving, a basin and storage tanks. The main storage feature for the site will be the attenuation basin and tanks which will be located at the low point of the site to the west, with rain gardens/permeable paving being provided adjacent to the highway/on plots respectively providing further storage upstream of the main feature. Due to the configuration of the 1 in 100yr +40% event storage being beneath the proposed basin, the basin will be required to be lined. The liner will be located at least 300mm below finished ground levels to permit interception to occur within the basin.

Amenity and biodiversity benefits to the site will be provided in the form of rain gardens and the attenuation basin, these will maximise the available green infrastructure within the development site which will improve air quality and water quality of the site.



CHAPTER 5: SUMMARY

The development at Gwynfaen 2 will provide modern, low-carbon, affordable dwellings that operate in harmony with their surroundings, and which support a sustainable way of living. The development at Gwynfaen 2 will:

- Provide up to 50 affordable 2, 3 and 4 bedroom combustion free, low-carbon homes that exceed energy efficiency standards, generate their own power and include the latest smart energy technology;
- Offer flexible lifetime homes that provide accessible and adaptable accommodation for the widest range of residents and meets local affordable housing needs by offering bungalows, wheelchair accessible homes and general needs 2, 3 and 4 bedroom houses;
- Provide a sustainable development as a logical extension to the existing settlement at a compatible scale and with a design that compliments the character of the area;
- Retains existing hedgerows and trees and incorporates them within a network of multi-functional GI on site;
- Provides community spaces, allotments and orchards among extensive public open space that facilitate social interaction and draw people into the landscape;
- Creates an attractive, cohesive neighbourhood where exercise, walking and cycling are encouraged, promoting healthier lifestyles and choices;
- Seamlessly integrate with the surrounding communities and function as an extension to the Gwynfaen Phase 1 neighbourhood; and
- Integrates GI into the development and street network providing an attractive public realm that offers a range of spaces for play, rest and exercise.



POBI

