FORMER TATA STEELWORKS SITE



DESIGN & ACCESS STATEMENT



PREFACE

TAN 12 defines a Design & Access Statement (DAS) as 'a communication tool which outlines how the design of the proposal has been considered from the outset of the development process and how the objectives of good design have been used to inform this'.

This DAS has been prepared by Hammond Architectural Ltd (HAL) on behalf of Walters Land Limited (Walters) to support an outline planning application for the extensive regeneration of the former Tata Steelworks site in Pontarddulais, delivering new housing that will integrate with the existing community at Pontarddulais.

The site is allocated within the Swansea Local Development Plan as part of a wider allocation covering two plots under SDA: South of Glannffrwd Road, Pontarddulais. The site is the smaller of the two plots which make up the overall allocation.

WALTERS

Walters Land Limited is a family run South Wales based company which specialises in civil engineering, plant hire and sales, and development. The specialist residential development arm of Walters work collaboratively with house developers and social housing providers to plan and deliver development projects. Their extensive track record of civil engineering and development schemes enable them to utilise their skills with all aspects of the scoping, planning, remediation, environmental and delivery phases, designing and delivering major infrastructure and residential projects.

PROJECT TEAM

From the project outset, a range of specialist consultants were assembled by Walters to analyse the site context and inform the design and rationale behind the development. The core project team is summarised as follows:

- Hammond Architectural Ltd: Masterplanning
- Apex Transport Planning Ltd: Transport Assessment
- JBA Consulting: Flooding
- Phoenix Design Partnership Ltd: Drainage
- Intégral Géotechnique: Site Investigation
- Hunter Acoustics: Noise & Vibration
- Sylvan Ecology: Aboriculture & Ecology
- EDP: Heritage

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This document is broadly structured in a way that follows the Welsh Government (WG) guidance documents: Design & Access Statements in Wales, published April 2017 and 'Site & Context Analysis Guide published March 2016.

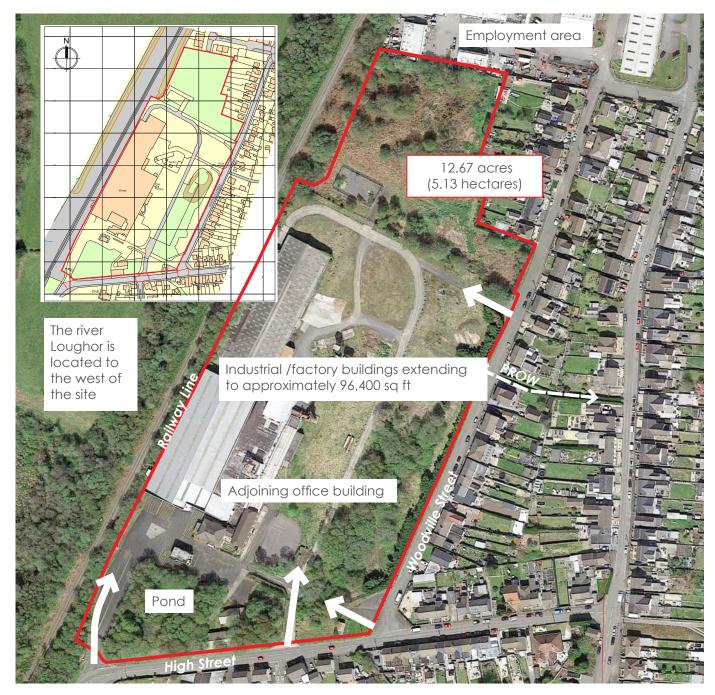
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1. THE SITE & SURROUNDINGS

The site is located in Pontarddulais, approximately 180m north of Pontarddulais Rail Station. The site is approximately one mile east of Junction 48 of the M4 with access via the A4138 and Iscoed Road. The site is a broadly level and rectangular with an area of approximately 12.67 acres (5.13 hectares). The site consists of a self-contained industrial/factory facility, previously utilised by Tata Steelworks. Access to the fenced site is provided through two main entrances from the south, leading to High Street/Station Road, and two minor entrances on the eastern boundary, accessible from Woodville Street. The site area measures approximately 5.13 hectares. The location of the site is provided below.

SITE LOCATION



 ${\bf Photographs\ taken\ form\ Preliminary\ Ecological\ Appraisal,\ prepared\ by\ Sylvan\ Ecology.}$

1. Close up of large area of semi-improved grassland with relatively well-maintained sward (SNG3) $\,$



2. Overview of grassland area (view north)



3. Overview of dense scrub (DS3): species composition is dominated by young trees , with frequent hawthorn and bramble.



7. Close up of tall ruderal vegetation



9. Aerial view of poor hedge along eastern edge of site



4. Aerial view of Broadleave Woodland (BW1) outside the application site on the western site boundary, behind a metal fence.



5. Overview of two storey, hipped roofed, stone and brick house (confirmed bat roost).



 ${\it 6.}~Overview~of~a~stand~of~trees~(ST3)~along~the~northern-most~field~boundary~containing~(mature~and~semi-mature~ash,~hawthorn,~and~silver~birch).}$



8. Overview of spoil mounds



10. View of south-western entrance



SITE SURROUNDINGS

The site is predominantly bounded by residential areas to the east and the south.

To the north is an industrial / employment area.

This comprises mainly local independent occupiers including DGHeath Timber Products, Trade Services Direct, A&P Electrical Supplies and Tate Refrigeration Ltd.

The western boundary is bordered by a railway line.

The site comprises a self-contained and fenced industrial/factory building of steel frame construction made up warehouse, lower height warehouse/production area, internal storage and office. There is also an adjoining two storey office building, along with some single height 'lean-to' storage.

In total, the buildings on site comprise approximately 96,400 sq ft (8,956 sqm) with site coverage of approximately 30%.

The site was formally occupied by Tata Steelworks and has historically generated movements onto the network for industrial purposes, including from HGVs. The site has two main accesses from the south onto High Street / Station Road, with two minor accesses onto Woodville Street on the eastern boundary. All accesses are informal priority junction type arrangements.

The indicative location of the site in its local context is provided on page 7.

DESIGNATIONS

In terms of designations, to the south of the site is a committed housing site as well as a smaller non-statutory housing site.

To the west, beyond the railway line is a landscape protection area and minerals safeguarding area. The proposed development will not interfere with either designation.

The are no environmental designations that affect the application site. The closest being the Loughor Corridor Site of Importance for Nature Conservation (SINC) located 0.1km and Waungron Marsh SINC located 0.5km from the site

WIDER STRATEGIC ALLOCATION SITE

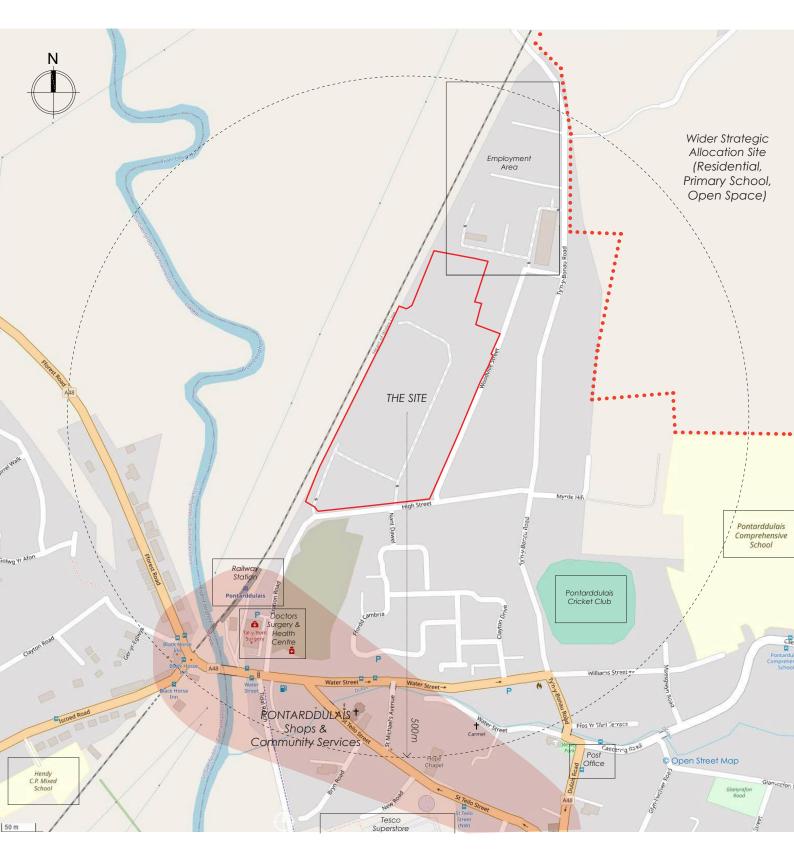
To the north east of the site, a large area of land is being developed by Persimmon Homes. The land forms part of the wider LDP allocation under SD A: South of Glannffrwd Road, Pontarddulais.

The proposed development would include residential units, a primary school, leisure and recreation facilities and public open space.

EXISTING EMPLOYMENT AREA LOCATED TO THE NORTH OF THE SITE.



NEIGHBOURHOOD STRUCTURE PLAN MAPPING FACILITIES WITHIN WALKING DISTANCE OF THE SITE



2. DEVELOPMENT SUMMARY

The redevelopment of the former Tata Steelworks site will deliver up to 150 new open market and affordable residential dwellings with a mix of house types and street layouts; extensive areas of open space and landscaped areas; and enhanced site access arrangements. At this stage, all matters, aside from the main access, are reserved for subsequent approval. The proposed framework for development is summarised below and illustrated on pages 9 in the form of a Development Framework Plan. An indicative, Illustrative Masterplan is presented on page 10 showing how the development could be accommodated in accordance with these principles.

MOVEMENT & ACCESS

The proposed residential development prioritises accessibility and connectivity, ensuring smooth vehicular access into through a new upgraded junction on High Street and a secondary access on Woodville Street.

The development places a significant emphasis on pedestrian and cycle connections, featuring a robust network of pathways and crossings seamlessly integrating with surrounding routes. This strategic approach will facilitate residents' access to frequent bus and train services located to the south of the site, promoting public transport usage, reducing dependency on private vehicles and encouraging sustainable, active travel practices within and beyond the community.

To bolster connectivity in the wider area, the project includes the creation of a Spine Street, improving links between Glanffrwd Road, Tyn y Bonau Road, and Station Road. Woodville Street will be enhanced with shared foot/cycleways and green infrastructure, with provision for an internal route linking Woodville Street to the northern boundary, creating a comprehensive internal road network. The plan also allows for a potential link through the employment site in the future, ensuring adaptability and extended connectivity.

Internally, a central Primary Street will enhance pedestrian movement, serving as a focal point within the community. The wider street network will be visually appealing and easily navigable, promoting comfort for residents and visitors alike. Pedestrian-friendly streets designed to slow traffic speeds and enhance safety will foster a sense of community and encourage interaction among residents. Landscaped streets with defined routes will create an inviting atmosphere, elevating the overall quality of life for residents.

GREEN INFRASTRUCTURE & LANDSCAPE

The proposed green infrastructure and landscape strategy focuses on creating diverse open spaces tailored to various community needs, including recreational areas, event spaces, and relaxation zones, providing residents with a range of options. In particular, the Southern Gateway features parkland and nature spaces that serve as gathering areas, enhancing the community's overall well-being. Creative play areas such as Local Equipped Area for Play (LEAP) zones and Local Area of Play (LAP) are designed to promote outdoor activities and stimulate children's creativity. Additionally, woodland trails and green links are integrated to enhance outdoor connections and encourage community engagement with the natural environment.

The strategy incorporates green streets featuring bioretention verges, rain gardens, and street trees. These elements not only contribute to the aesthetic appeal of the community but also enhance sustainable water management, promoting ecofriendly practices. Furthermore, opportunities to celebrate the site's history and incorporate local culture are woven into the design, fostering a unique and cohesive community identity.

BUILT FORM

The development is set to deliver up to 150 new open market and affordable homes. The proposed design places a strong emphasis on sustainability. The architectural form and treatments within the development will have its own character, whilst also drawing inspiration from the local vernacular, ensuring that the scheme seamlessly integrates with the existing surroundings while also prioritising sustainable building practices.

Key frontages will be strategically enhanced through a range of architectural elements and innovative landscaping techniques, highlighting their importance in the overall design. Carefully selected materials will be chosen not only to reflect the site's history and the area's character but also to provide practical advantages for maintenance and sustainable integration with the environment.





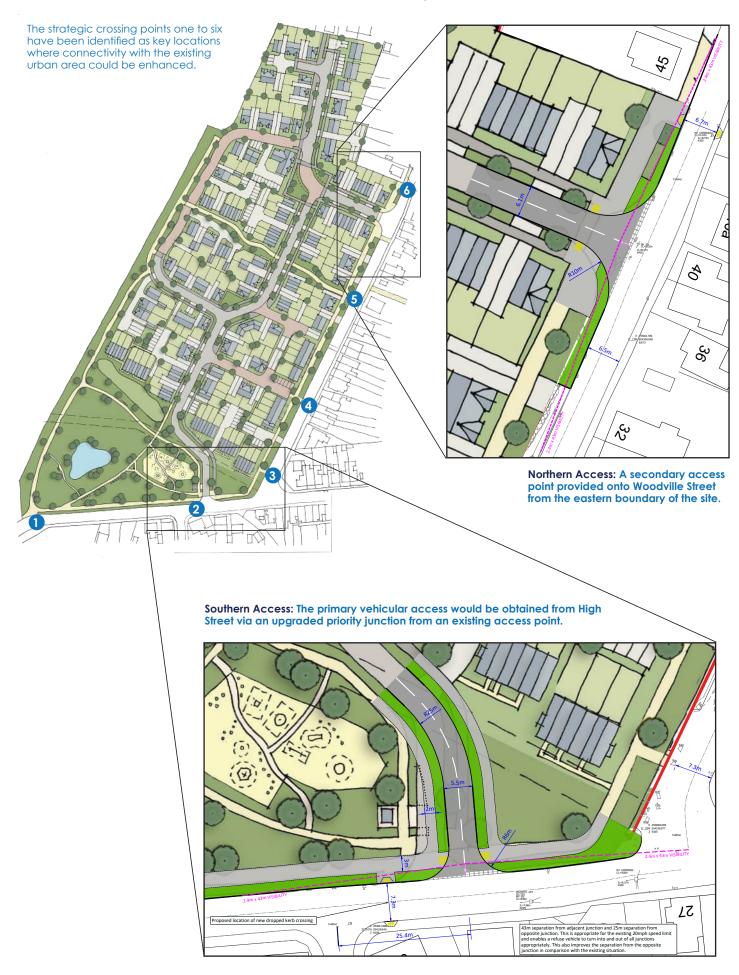








Access & Connectivity



3. VISION & BRIEF

The development vision for the former Tata Steel Works site is one of 'discovery', 'transformation' and 'integration'. A new neighbourhood designed for sustainable living, walking and cycling will help rejuvenate the area and create a strong, new social connection for the community of Pontarddulais. Central to the vision will be distinctive new landscapes, imaginatively designed to connect with the existing woodland corridor. The hidden pond and habitat will be enhanced. Playful, amenity spaces and corridors will be created for people, flora and fauna. Streets and spaces will be framed by trees.



Identity:

- Deliver distinctive character areas which create a sense of place.
- Develop a strategy that 'greens' the site and incorporates the sites green-blue boundaries as a distinctive feature, providing attractive open spaces and recreational experiences.
- Celebrate and enhance the unique identity of the local area, incorporating historical and cultural elements such as tracing the route of the rail sidings to reflect the site's unique character.

Mix of Uses:

- Sustainably locate residential and recreational spaces, adjacent to an existing residential community and employment area.
- Flexibly design homes to allow residents to work from home and help create a vibrant and self-sustaining community, with easy access to a diverse range of businesses and nearby job opportunities.

Location:

- Regenerate a brownfield site that is wellconnected to existing urban infrastructure and amenities.
- Promote walking, cycling, and local public transport connection, reducing the need for car-dependent travel.
- Incorporate extensive areas of green space and recreational areas, easily accessible by existing and future residents.



SOUTH TO TOWN CENTRE / RAILWAY / BUS STATION

FLOWERS

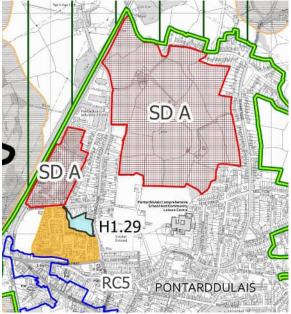
RESIDENTIAL

COMMUNITY



4. PLANNING CONTEXT

The site is allocated within the Swansea Local Development Plan as part of a wider allocation under SD A: South of Glannffrwd Road, Pontarddulais. SD A is allocated for a total of c. 486 residential units, incorporating a primary school, leisure and recreation facilities, public open spaces and other commercial uses. The allocation areas are shown below. This site forms the smaller parcel of SD A to the southwest, with the larger parcel of SD A to the northeast being developed by Persimmon Homes.

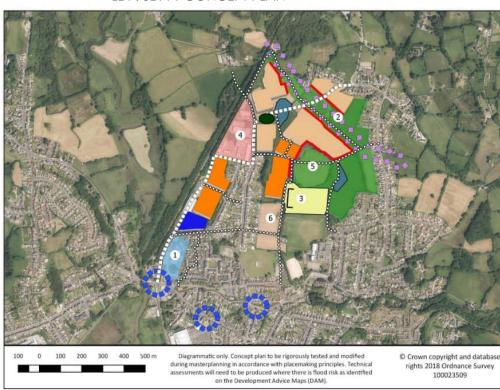


Key requirements of the allocation:

- Deliver internal spine street and associated junctions, to run broadly North East to South West through the development from Glanffrwd Road to Tyn y Bonau Road and Station Road.
- Contribute towards improvements to Pontarddulais Railway Station.
- Off-site highway improvements having regard to the requirements arising from the necessary Transport Assessment and as identified in the Transport Measures Priority Schedule.
- On and off-site measures to provide good quality, attractive, legible, safe and accessible pedestrian and cycle linkages in accordance with Active Travel design including the linkages identified in the Transport Measures Priority Schedule references AT1, AT2 and AT3, to the school and Railway Station to the West of the District Centre, and along the East-West Green corridor and linear park.

LDP: SDA 1 CONCEPT PLAN





- 1 Less vulnerable uses due to flood risk on Clayton works site to complement town centre
- 2 Linear park along route of high pressure water main
- 3 New school in central location to serve new and existing communities
- 4 Enhancement of existing employment area
- 5 Public open space on high point
- 6 Outside current SDA site future development opportunity

The following polices and guidance are considered relevant to the proposals:

Relevant Planning policies:

- Future Wales: The National Plan 2040
- Policy 2 Shaping Urban Growth and Regeneration -Strategic Placemaking
 - Policy 9 Resilient Ecological Networks and Green Infrastructure
 - Planning Policy Wales (Edition 11, February 2021)
- TAN 2: 'Planning and Affordable Housing' (June 2006)
- TAN 5: 'Nature Conservation and Planning' (September 2009)
- TAN 10: 'Tree Preservation Orders' (October 1997)
- TAN 12: 'Design' (March 2016)
- TAN 15: 'Development and Flood Risk' (2004)
- TAN 18: Transport (2007)
- Joint Mid Wales Local Transport Plan 2015-2020.
- Active Travel (Wales) Act 2013.
- Well-Being of Future Generations (Wales) Act 2015
- Manual for Streets (MfS1 and 2) (2007 & 2010).

Other key policy considerations:

- Welsh Government Circular 016/2014: The Environment (Wales) Act 2016
- The Active Travel (Wales) Act 2013
- The Well-being of Future Generations Act (Wales) 2015

Local Development Plan

Swansea Council Local Development Plan (LDP) was adopted on 28th February 2019 and is the prevailing development plan for the City and County of Swansea. The site is allocated as part of a Strategic Development Area (SD A: South of Glanffrwd Road, Pontarddulais).

To support the assessment of the application, the most relevant policies of the LDP include:

- PS1: Sustainable Places
- PS2: Placemaking and Place Management
- PS3: Sustainable Housing Strategy
- SD1: Strategic Development Areas
- SD 2: Masterplanning Principles
- SD A: Land South of Glanffrwd, Pontarddulais
- IO1: Supporting Infrastructure
- Policy. H2: Affordable Housing Strategy
- H3: Affordable Housing
- SI1: Health and Wellbeing
- SI3: Education Facilities
- SI6: Provision of New Open Space
- SI8: Community Safety
- HC1: Historic and Cultural Environment
- HC3: Development in the Welsh Language Sensitive Area
- ER1: Climate Change
- ER8: Habitats and Species
- ER11: Trees and Development
- T1: Transport Measures and Infrastructure

- T2: Active Travel
- T5: Design Principles for Transport Measures and Infrastructure
- T6: Parking
- EU2: Renewable and Low Carbon Energy Technology in New Development
- EU4: Public Utilities and New Development
- RP1: Safeguarding and Public Health and Natural Resources
- RP2: Air, Noise or Light Pollution -
- RP3: Water Pollution and the Protection of Water Resource
- RP5: Land Contamination
- RP9: Sustainable Waste Management for New Development

Supplementary Planning Guidance

The following adopted Supplementary Planning Guidance (SPG) is of most relevance to the proposed development:

- Placemaking Guidance for Residential Development
- Placemaking Guidance for Householder Developments
- Planning Obligations
- Car Parking Standards
- Planning For Community Safety
- Biodiversity and Development
- Trees, Hedgerows and Woodlands SPG

Specifically, the Placemaking Guidance for Residential Development October 2021 provides guidance on how key placemaking objectives and policy requirements set out in the development plan and national policy can be integrated into proposals, including: Development density; Place-led streets; Biodiversity gain and enhancement; Green Infrastructure; Sustainable Drainage Systems; Privacy, amenity and comfort.

Planning History

The site has an extensive planning history associated with the previous, longstanding use of the site as an aluminium factory complex. Whilst the site's past use is significant to its condition and to the context that it sits within, the site's detailed planning history is of limited significance to the proposed development.

5. TOPOGRAPHY & LEVELS

The site's topography slopes from the highest point in the north-eastern corner, to the lowest point in the south-western corner. An excerpt is provided below. Dense and continuous scrubland, along with trees, are depicted in green, while the site's contours and levels are indicated in orange/grey. Existing buildings are hatched blue.

TOPOGRAPHICAL SURVEY ANNOTATED TO DRAW OUT KEY FEATURES & LEVELS



6. INFRASTRUCTURE & DRAINAGE

This section provides a brief overview of the key flooding, drainage and infrastructure constraints informing the development of the site. Further detail can be found in the accompanying reports. The key infrastructure constraints relate to the brownfield nature of the site, requiring remediation; flooding and drainage.

FLOOD RISK

JBA Consulting prepared an FCA (ref. JQE-JBAU-XX-XX-RP-Z-0001-S3) supporting development proposals:

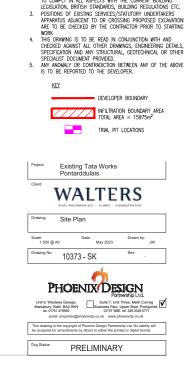
- Proposed area of development: 3.93ha brownfield land with hard standing and former industrial buildings.
- River Loughor flows south of the site; River Dulais flows west through Pontarddulais and into River Loughor.
- Development classed as highly vulnerable (TAN 15) in DAM Zone C1; permitted with Justification Test.
- Low to moderate risk of groundwater, river, and surface water flooding; no risk from reservoirs or tidal flooding, no evidence of sewer flooding.
- Flood defences exist along River Dulais and River Camffwrd; ground levels raised to 9.03mAOD.
- Development plateau flood-free in all TAN15 design events, limited flooding in water-compatible public open space.
- Detailed hydraulic modelling ensures no increased flooding elsewhere.
- FCA meets all TAN 15 requirements and acceptability criteria; proposed development aligns with Planning Policy Wales aims.

DRAINAGE STRATEGY

Phoenix Design Partnership Ltd has prepared a DS (ref. 10373), which concludes the following:

- The site is located within Flood Zone C1, minimum ground level of 9.03mAOD has been set;
- An existing Welsh Water surface water sewer crosses through the south of the development;
- Existing site surface water drainage discharges through an existing culvert to the west through the railway line;
- Site investigation and soakaway testing has been carried out. The northern section of site will be able to infiltrate;
- Site drainage system will require SAB approval and adoption;
- Discharge into the existing culvert will be reduced as flows will be restricted to a calculated QBAR rate which considers existing urban extents. A 30% betterment will be required as per the Welsh Government standards; and
- Foul drainage will discharge via existing connection into the combined sewer to the south.





GROUND CONDITIONS

Preliminary Conclusions and Recommendations
Following demolition of the existing buildings, and based
on the findings of the site investigation, it is recommended
that the site is subjected to a turn and compact earthworks
reclamation in order to create a suitable development
plateau for the proposed development.

At this stage, the following works are considered:

- Across the central and southern areas of the site, breaking out of hardstanding and residual obstructions (foundations, pits, pipes, walls, etc.) to a minimum of 2.0m below proposed remediation plateau level, followed by sorting, crushing and processing of acceptable demolition material to a suitable grade for re-use on site as structural fill.
- Excavation of made ground to typically 1.0m to 1.2m below ground level will be required, with removal to typically 2.0m to 2.7m locally. Soft silt/clay bands will be required to be removed to approximately 1.0 to 1.5m below proposed reclamation plateau.
- Processing of all stockpiled materials for reuse on site, subject to geotechnical suitability.
- Reduced levels should be proof rolled, any soft spots/ areas should be removed.
- Any reduced formations should then be brought back up to the required level with suitable acceptable materials, placed and well compacted in layers in accordance with the Department of Transport (DTp) Specification for Highways Works.
- Foundations within the site will likely comprise traditional strip/ trench fill foundations within the northern site area and raft foundations on re-engineered fill in the central/ southern site area.
- All gardens and areas of soft landscaping to be capped by minimum of 600mm of clean soils in the central and southern areas of the site, potentially reducing to 300mm in the northern part of the site, in areas where made ground is absent, and subject to appropriate testing.
- Japanese knotweed has previously been identified on site and it is recommended that a full vegetation survey is undertaken. It is recommended that treatment with an appropriate herbicide is carried out at an early stage in order to reduce the spread of Japanese Knotweed.

UTILITIES

Existing utilities plans are provided in accompanying reports. The presence of an existing surface water easement crossing through the site requiring a 6m no build easement. Overhead cables to the north are to be relocated/undergrounded.

AIR QUALITY

Based on assessment undertake at outline stage, it is considered that air quality does not pose a constraint to redevelopment of the Site as proposed.

NOISE

Hunter Acoustics Limited has undertaken noise and vibration surveys at the site, the results of which are set out in the report prepared to support the application.







7. ECOLOGY & LANDSCAPE

A Preliminary Ecological Appraisal (PEA) (ref. J0023-PEA-v1.2) and an Arboricultural Report (ref. J0023-Arb Report-V1.1) has been prepared by Sylvan Ecology to support the outline planning application. In summary, the site is considered to be of low ecological value with the habitats on site with the highest ecological value being broad-leaved trees, woodland and the pond.

PRELIMINARY ECOLOGICAL APPRAISAL

In terms of protected species, the report confirms the following:

Bats

An external examination of the on-site buildings found that bats are known to be roosting in one of the buildings on site.

Trees with bat roost potential were identified.

Suitable bat foraging/commuting habitat occur throughout the site.

As a result, it is recommended that woodland habitat be incorporated into the new design and any trees scheduled to be lost should be inspected for bat suitability.

For the buildings, bat emergence surveys have been undertaken to determine species present, abundance and distribution across the site to devise a suitable mitigation strategy.

Birds

Birds' nests were noted during the site visit within the hedgerows and woodland. However, subject to adopting the recommended precautionary mitigation measures, birds will not preclude the site's development.

Reptiles

Based on the desk study records and the habitat present on site, there is a low possibility of reptiles being present within the boundary vegetation.

However, habitats suitable for reptiles will be subject to presence/absence surveys and should reptiles be identified on site, the survey findings would be used to devise a suitable mitigation strategy.

Dormice

The woody areas within the site are isolated and provide negligible potential for dormouse.

Geat Crested Newts

There is a pond within the application site, however there is a negligible network of drainage ditches and ponds within the surrounding area. Therefore, based upon the desk study records and the habitats present on and off site, there is a low possibility of GCN within the application site.

Habitats suitable for GCN breeding will be subject to presence / absence surveys using eDNA analysis. Should GCN be identified on-site, the survey effort will need to increase to establish a population estimate, which would be used to devise a suitable mitigation strategy.

Invertebrates

Based upon the desk study records and the habitats present on site, the site is considered unlikely to support any important populations of notable invertebrate species. Invertebrates are not therefore anticipated to preclude development of the site.

Badger

No evidence of badger setts or badger foraging were recorded within the site and the site is considered to have low suitability for badger sets due to its open nature. However, it is possible that badgers occasionally access the site at night to forage.

Wild mammals

No mammal signs were noted during the survey; however, the site may be used by other wild mammals such as hedgehog, which, in 2007, were added to the UK BAP priority species list, on account of its rapid decline. Based upon the desk study records, other notable species which have been recorded include stoat, weasel, and polecat.

It is recommended that good building practices are adopted during the construction phase to safeguard any individual animals which venture onto the proposed development area.

Invasive Species

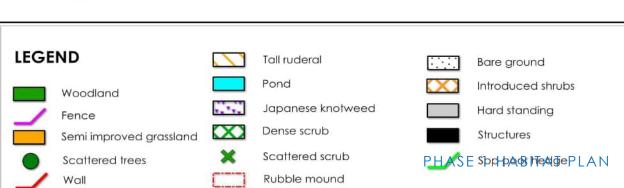
Japanese knotweed was located within the southeast of the site and so a further invasive species survey will be required.

In conclusion, providing the recommended mitigation measures and surveys are adopted, relevant nature conservation legislation will not be contravened, ecological impacts of the development will be reduced to a minimum and ecological issues are not, based upon the available information, anticipated to preclude the site's development.

PHASE ONE HABITAT MAP







Aboricultural Report

The Arboricultural Report concludes that the trees on site are dominated by areas of overgrown willow scrub and, as a result, many have grown too close to each other which has adversely impacted their growth, and or been subject to unsympathetic pruning. T

he condition of these trees and the groups has been classified in line with B.S.5837. The table in the report sets out that there are no category A trees. There is one category B1 tree on site, which will not be affected by the development proposals. All other individual trees are category C1.

There is a category B1 group of trees located around the pond that will need to be cleared to deliver the development proposals. However, this is in an area where no housing development is proposed but proposals would see the area brought forward as open space – seeking to enhance the pond area and its surroundings to deliver an open gateway into the site that would also see many trees provided to compensate the loss.

The report also notes that species diversity is low as the majority of the trees on site are from overgrown scrub and consist primary of willow or other fast growing species.

Heritage

An Archaeological Assessment (ref. edp8269_r0002a) has been prepared by EDP to support the application. The report confirms that The Site does not contain any designated historic assets (World Heritage Sites, Scheduled Monuments, Listed Buildings, Registered Historic Landscapes, Registered Parks and Gardens or Conservation Areas) that would pose a constraint to development.

Available baseline information records four non-designated historic assets within the Site. However, only two of these historic assets relate to extant archaeological remains within the Site:

- Extant archaeological remains associated with the Glamorgan Works (GGAT01225w) comprise two stone built buildings likely associated with the original 1870s tin plate works, as well as segments of the eastern stone boundary wall to the Glamorgan Works. The two historic buildings are of low significance based on their limited architectural and historic interest and the remaining segments of the boundary wall are of negligible significance based on its practical function and limited historic interest; and
- The presence of one of the southern, former reservoirs to the Glamorgan Works, recorded as 'gravel pits' by the HER (GGAT10086w). The present-day condition of the extant pit consists of a water-filled hollow enclosed by woodland vegetation. This feature is of negligible significance, reflecting associated landscaping features associated with the Glamorgan Works during its operation.

The Site has been identified to have a very low potential for Prehistoric to medieval remains and moderate-high potential for post-medieval to modern remains. Any encountered remains would likely comprise late 19th century to 20th century industrial remains (e.g. building platforms, building foundations, railway spur foundations, waste pits). These would be of very low to low significance.

Overall, there would be loss of known, low value archaeological remains from the development within the Site. These would be associated with the demolition of the two historic buildings and boundary wall within the Site associated with the Glamorgan Works (GGAT01225w), identified to be of low and negligible significance, respectively. In addition, the potential for buried unknown archaeological remains to be subject to alteration and/or destruction from groundworks associated with the proposed development has also been identified. As such, these adverse impacts would be considered as part of the planning balance as per Paragraph 6.1.25 of Planning Policy Wales (PPW) 11. Otherwise, the proposed development is compliant with national and local planning policies as set out in Section 2 of this Archaeological Assessment.

EXISITNG BUILDINGS & LANDSCAPE ON SITE



8. ACCESS & MOVEMENT

A Transport Assessment (TA) prepared by Apex Transport Planning Ltd accompanies this application. The assessment provides a full appraisal of active travel infrastructure and public transport connectivity which is summarrised below. The TA concludes the site is situated in a highly sustainable location. The walking & cycling routes surrounding the site provide an opportunity for potential future residents to sustainably travel to and from the site. Potential future residents of the site can access a good frequency of bus and train services, linking to a variety of destinations including local destinations.

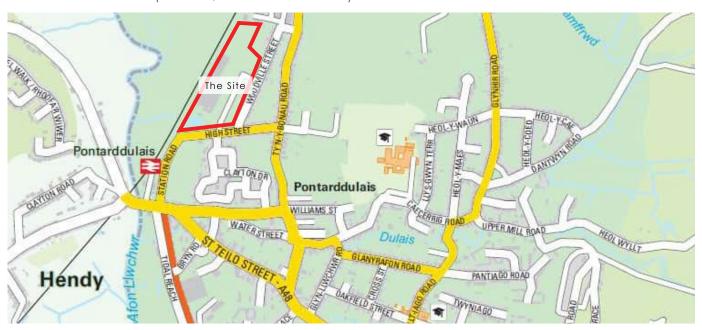
WALKING & CYCLING

- The area is well-suited for walking and cycling, offering potential for short car journeys to be replaced.
- Existing footways and crossings link the site to surrounding facilities. Pedestrian access is available from High Street and Woodville Street, both with 2m wide footways and street lighting. Additionally, High Street connects to Station Road, leading to Pontarddulais Rail Station and Water Street.
- Water Street has quality footways on both sides, linking to key facilities in the town centre.
- Nant Dawel and Ffordd Cambria provide an alternative pedestrian route to the south, connecting to Water Street and St Teilo Street.
- The area is safe for pedestrians, making it attractive for future residents who prefer walking and encourages access to essential facilities and public transportation.

CYCLE ROUTES & INFRASTRUCTURE

- Current alignment and geometry of surrounding streets deemed suitable for cyclists on the carriageway.
- Existing 20mph speed limit in the area, promoting safer
- Well-lit streets create a low-risk environment for pedestrian and cyclist trips during nighttime.
- Swansea Bay Cycle Map (2018) detais on-road advisory cycle routes and active travel routes (on-road and off-road).
- On-road cycle routes along A48 connect to further paths within Pontarddulais.
- These routes are part of the wider Cycle Swansea Bay network.

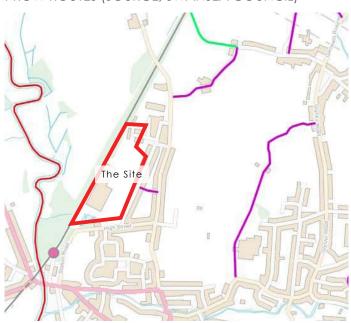
SWANSEA CYCLE MAP (SOURCE, SWANSEA COUNCIL)



PUBLIC RIGHTS OF WAY (PROW)

- There are some public rights of ways within the vicinity of the site, from which residents can benefit from further alternative routes for walking.
- A key route would be the public footpath which connects
 Woodville Street to Tyn y Bonau Road, this would be linked
 into the site via a crossing and a footway cycleway through
 the site to a new Active Travel Route on the western
 boundary. As such, this would enhance this route for existing
 residents connecting to the Rail Station and other facilities to
 the west.
- The public rights of way within the vicinity of the site are shown right.

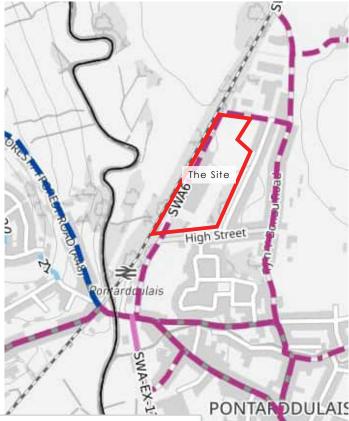
PROW ROUTES (SOURCE, SWANSEA COUNCIL)



FUTURE ACTIVE TRAVEL IMPROVEMENTS

- Welsh Government DataMap Wales shows existing and proposed Active Travel Network Maps (ATNM).
- Route SWA6 is a proposed future walking and cycling route adjacent to the western boundary of the site.
- Southbound, the route connects to Station Road and Water Street, linking beyond to an existing route along Tidal Reach.
- The Proposed Development includes a section of Route SWA6 within the western boundary, connecting to the north.

ATR MAP (SOURCE DATA.MAP.GOV WALES)





Existing walking routes
Existing cycling routes
Existing walking and cycling routes

Future walking routes
Future cycling routes
Future walking and cycling routes

PUBLIC TRANSPORT

The site also good public transport links, which provide a suitable, attractive, and realistic alternative to travelling by car. This will assist in constraining vehicle generation and reduce the need for residents to travel by or own a car. It will also benefit and attract residents that would prefer to travel by public transport.

BUS

- Closest Bus Stops: Located on Water Street at Pontarddulais bus station, within a 400m walk (5 minutes).
- Bus Services: Serviced by 16, L3, and X13 Cymru Clipper buses. Combined services offer good frequency, connecting to various locations including Swansea, Llanelli, Gowerton, Gorseinon, Tycroes, and Fforestfach.
- Journey Times: Pontarddulais to Swansea bus station: Approximately 40 minutes. Pontarddulais to Llanelli: Approximately 50 minutes.

RAIL ACCESS

- Closest Station: Pontarddulais Rail Station, approximately 400m south of the site, accessible within a five-minute walk.
- Train operator: Transport for Wales.
- Connections: Trains connect to Swansea, Shrewsbury, Llandovery, and Llanelli.
- Journey Times: Approximately 40-50 minutes to Swansea, 14 minutes to Llanelli, 25 minutes to Gowerton, and 11 minutes to Ammanford.

- Frequency: 12 train services from Pontarddulais per day, operating between 06:21 to 23:29.
- Attractiveness for Commuting: Feasible and attractive for commuting, especially to Swansea and Llanelli, but also for leisure, retail, or business travel.

SITE CONNECTIVITY

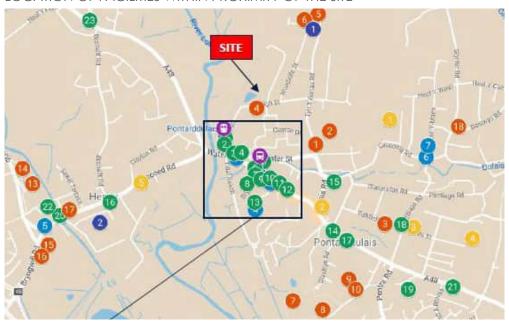
To demonstrate the site's connectivity, the Transport Assessment map facilities within appropriate distances which are accessed via suitable and established routes. These are summarised below. Ref to TA for full list.

A significant number and variety of facilities are accessible via active travel routes, adhering to Welsh Government guidelines.

- Within 800m (10-Minute Walk): Residents can access shops, Tesco Superstore, nursery, hairdressers, post office, park, pharmacy, gym, community centre, employment area, rail station, and bus station.
- Additional Facilities within 2km: Large employment site, schools, sports clubs, dentist, food stores, and leisure/education facilities within appropriate walking or cycling distance.

The site can be classified as a 'walkable neighbourhood,' meeting Welsh Government and MfS guidance, demonstrating the site's highly sustainable nature.

LOCATION OF FACILITIES WITHIN PROXIMITY OF THE SITE



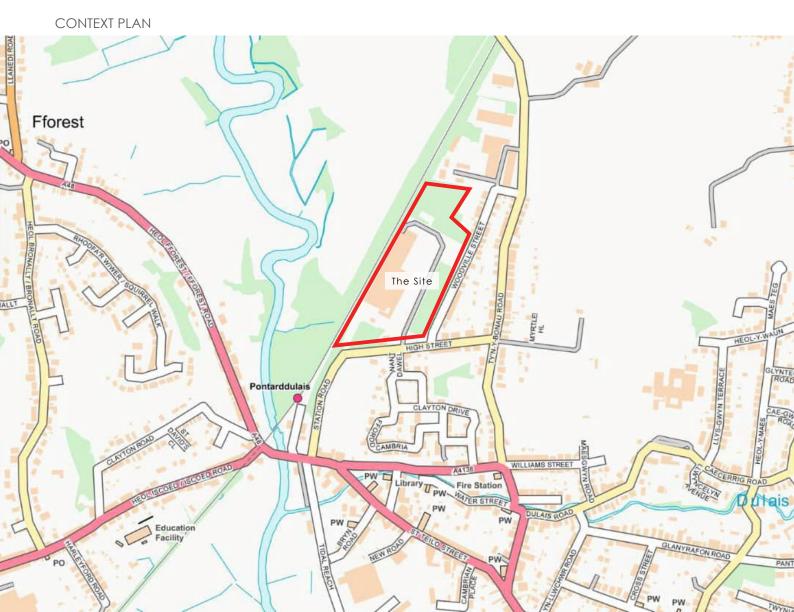
Numbers correlated to Table4-1 in the Transport Assessment

9. BUILT FORM & CHARACTER

The project site is located within an established urban area distinguished by a mix of residential and commercial developments. The residential section of the area primarily comprises two-story detached and semi-detached houses, with occasional terraced homes. Some residences towards the south of the area even feature three-story structures. The architectural style of these dwellings predominantly incorporates brick, stone, and rendered facades. Notably, houses along Woodville Street have a front landscape setback with some on plot parking. On High Street, west of the site, terraced homes are positioned at the back edge of the footpath, creating a more urban streetscape. To the north of the site, there is a distinct employment area characteriaed by larger structures that stand out amidst the predominantly residential surroundings. These industiral units feature sizable service entrances and surface-level parking areas, reflecting the functional aspect of the area. This diverse urban environment provides a rich context for the proposed project, allowing for thoughtful integration into the existing fabric of the community.

The plan below illustrates the site's placement within the broader landscape of Pontarddulais. The diverse architectural patterns are clearly discernible, showcasing a varied and rich built environment.

On the subsequent pages, photographs capturing the essence of the surrounding streets are presente. These images offer an overview of the area's mixed architectural style and character.

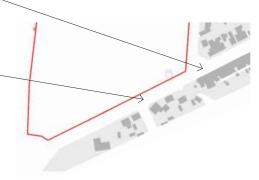


VIEWS ALONG HIGH STREET



Recent development, detached homes fronting street, on plot parking





VIEW WEST ALONG HIGH STREET

Southern edge of site boundary





VIEW NORTH ALONG WOODVILLE STREET



ANDA







VIEW NORTH ALONG FFORD CAMBRIA



VIEW WEST ALONG MYRTLE HILL TOWARDS HIGH STREET



10. CONSTRAINTS & OPPORTUNITIES

The key site constraints and opportunities presented by the site are summarised below and graphically presented on page 29. The early identification of site constraints and opportunities has informed the design process, helping capture the full value of site and create a site layout that is sustainable and deliverable.

GREEN / BLUE INFRASTRUCTURE & CHARACTER

- Create a significant, new area of realm at the site gateway. Promote habitat linkages and green corridors. Sensitively design multifunctional areas, integrating a choice of routes, allowing people to get active and close to nature. Where appropriate, retain and enhance existing trees and/ vegetation where appropriate adding a sense of maturity.
- 2 Retain and enhance existing pond, supporting wildlife.
- (3) Explore potential for integration of sustainable urban drainage attenuation features in the souther western corner of the developable area.
- Remove existing hedge/tree line along Woodville street and create a new green infrastructure corridor, incorporating new Avenue planting and sustainable urban drainage features.
- (5) Create a new east west areen infrastructure corridor through the site, liking to the existing PROW and the woodland buffer.
- 6 Create a new accessible woodland trail along the western boundary,
- 7 Create a series of green streets integrating landscape verges, suds features, and street tree planting.
- Incorporate ecological mitigation and biodiversity enhancement measures across the site. Use locally sourced native species that sympathetically add to the character of the place and helps biodiversity.
- (9) Explore opportunities to integrate interpretation and celebrate the history of the site.
- Remove existing hardstanding and enhance public realm on key corners / arrival points.

MOVEMENT & ACCESS

- 1) Utilise existing access points facilitating easy, sustainable travel to the town centre, public transport connecting and the surrounding residential area. Incorporate interpretation and wayfinding feature, encouraging use by the wider community.
- (2) Provide a new footpath along the western edge of Woodville Street connecting to the wider movement
- 3 Provide a new east-west foot and cycle route through the site liking to the existing PROW and the potential recreational trail.
- 4) Provide a new north-south foot and cycle path along the western boundary
- (5) Potential to create a new long distance recreational trails through, facilitating active travel and healthy lifestyles.

BUILT FORM

- (1) Remove redundant buildings and remediate the site.
- 2) Create a new, high-quality residential development that sensitively integrates with the site's landscape and townscape context.
- 3 Positively front areas of open space, uplifting building frontages
- (4) Sensitively back/side development onto the existing residential properties whilst ensuring no mutual overlooking or loss of privacy.
- (5) If necessary, limit noise exposure from employment area by careful siting of buildings, choice of design layout, treatment of boundaries and construction materials.

KEY



Woodland corridor



Existing screen vegetation forming barrier (refer to tree survey)



Waterbody (approx extent)



Landform



Existing buildings



Fence to site boundary



Wall to site boundary



Overhead cables (to be relocated/undergrounded)



SW Easement (no build zone)



Area containing Japanese Knotweed



Developable area outside flood plain Gently falling site levels (refer to



topographical survey)



Existing footpath bordering site



Existing vehicular access (potential location for new primary access)



Existing access, potential for ATR connection



||||||| Potential foot / cycle path / greenway linking PROW / Woodland



Residential properties backing onto



Employment buildings, potential acoustic considerations.



Potential Public Open Space (POS) focal space



Potential woodland trail / ATR



Potential future long distance ATR



Sun Path



11. CONCEPT DEVELOPMENT

In the initial stages of the design process, a set of fundamental principles was established to guide the development and inform site capacity testing. These key concept design principles are summarized as follows:

STRATEGIC CONNECTIONS

- Seamless Urban Integration: Place a strong emphasis on connecting with the surrounding neighbourhoods, ensuring the new development seamlessly integrates into the existing urban fabric.
- Community Facility Integration: Prioritise integration
 with existing community facilities and upcoming
 developments, focusing on establishing robust
 connections with existing and planned schools and open
 spaces.

GREEN INFRASTRUCTURE & CHARACTER

- Exsiting trees: Remove existing Leylandii along sites eastern edge, current acting as a barrier to integration with Woodville Street.
- Green Corridors: Develop new green infrastructure along Woodville Street, HIgh Street, the western woodland boundary and east west through the site, incorporating sustainable features and planting for ecological balance.
- Multifunctional Areas: Design versatile spaces with various routes, encouraging outdoor activities and connecting people with nature.
- Accessible Trails: Establish accessible woodland trails and green streets, integrating landscape features and tree planting for a pleasing environment.
- Biodiversity Enhancement: Implement ecological
 measures and enhance biodiversity across the site, using
 native species sympathetically to preserve the site's
 character. Preserve and enhance the existing pond,
 supporting local wildlife and maintaining natural water
 habitats.
- Create a new Park at the southern gateway: Establish a significant, new area at the site entrance, enhancing the site's character and welcoming visitors and maintaining natural water management.
- Sustainable Water Management: Integrate sustainable
 urban drainage across the site, locating attenuation in
 the lower southwest corner of the developable area.
 Integrate on-plot rain gardens, swales, and water
 attenuation areas, interspersed with green streets and tree
 planting to manage water effectively.

• Cultural Interpretation: Explore opportunities for interpretation, celebrating the site's history and cultural significance.

MOVEMENT & ACCESS

- Enhanced Access Points and Connectivity: Create new, improved access to facilitate easy, sustainable travel to the town centre, public transport, and nearby residential areas.
- New Footpaths and Cycle Routes: Create new east-west and north-south foot and cycle paths, connecting to existing and new routes and community facilities, including the wider SDA allocation, promoting active, healthy lifestyles.
- Connectivity Enhancement: Plan for future links, ensuring adaptability and extended connectivity. Explore options to introduce a Spine Street forming part of a wider link between Glanffrwd Road, Tyn y Bonau Road, and Station Road.
- Enhance Woodville Street with foot/cycleways and green infrastructure, and plan for future links, ensuring adaptability and extended connectivity within the site.
- Walkable Streets: Create a connected and visually clear neighbourhood that is pedestrian and cyclist-friendly.

BUILT FORM

- Recreate Urban Fabric through Site Remediation: Implement comprehensive site remediation processes to cleanse and rejuvenate the area, preparing it for the development of a new residential community. Develop a high-quality residential area that sensitively integrates with the landscape and existing townscape.
- Diverse, Vibrant Community: Foster a diverse community
 by offering a varied range of housing types and tenures,
 allowing for flexibility in styles and layouts. Ensure the built form
 contributes to the development's unique character while
 harmonising with its surroundings.
- Outward Facing Development: Orientate buildings positively toward open spaces and existing streets, enhancing the visual appeal and legibility of the area.
- Residential Sensitivity: Develop back/side areas of new buildings with consideration for existing residential properties, ensuring privacy and security.

Strategic Concept Plan



12. DESIGN DEVELOPMENT

Discussions with the Local Planning Authority (LPA) and the Design Commission for Wales (DCfW) led to the evolution of the development concept, with key themes focusing on placemaking principles, open space design, and the strategic implementation of the Spine Road and access points. Notably, the LPA expressed positivity regarding the street hierarchy and the placement of public open spaces and green corridors, especially near the gateway of the site and centrally through the site. Regarding the Spine Road and access points, discussions revolved around its strategic requirement and phased delivery, acknowledging the constraints of land ownership.







Site & Context Appraisal: The project's development strategy stems from thorough site investigations and meaningful stakeholder engagements, specifically addressing remediation and flooding constraints. Moreover, there is a strong focus on promoting green infrastructure and active travel connectivity, thereby enhancing the project's overall integration within the local context and community.

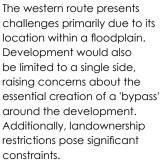
Pre-application Meeting 1. The vision and emerging concept design was presented to the LPA. Feedback received focused on planning, green infrastructure, placemaking and transport officers. Key areas for further consideration focused on access, Spine Street provision and integration, and open space provision.













The central route poses significant challenges due to the infrastructure and land intensive requirements for a Spine Street, considered excessive for a 150-dwelling scheme. Considerable placemaking concerns are raised, given it could create a barrier, limiting social interactions. The route would also significantly impact net developable area and viability.



The eastern route presents opportunities to enhance Woodville Street. Achieving double-sided development would foster integration with the existing community. The future connection of the route could be feasible through the existing street network.

Exploration of Spine Street Options:

Following the Pre-App meeting the development and viability testing of three Spine Street scenarios were undertaken. Land ownership constraints, flooding, placemaking and viability considerations were considered.

During Pre-application Meeting 2:

The favoured eastern option was tabled. Key changes included placing the Spine Street along High Street and Woodville Street; refined access arrangements including creating a secondary access onto Woodville Street; locating a LAP to the north; and enhancing the frontage onto the Southern Gateway. Feedback primarily centred on ensuring the northern connectivity of the route. The street hierarchy, placement of public open spaces, and townscape principles received substantial support.









Bus & HGV Tracking



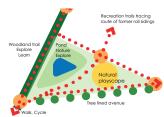




Swept Path Analysis: Swept path analysis was conducted at constraint points on Woodville Street and Tyn Y Bonau Road, involving a double-decker bus and an articulated vehicle. The analysis considered both clockwise and counter-clockwise one-way routes. Both vehicles successfully navigated corners/junctions in both directions. Notably, the presence of a one-way route around the town centre made this scenario typical for the area.







Cultural Heritage: The design focuses on celebrating the natural features and historical context of the site. Opportunities to retain and highlight distinctive elements like the hidden pond, greening the edges of the area to enhance the natural habitat, and promote ecology within the site have been identified. Other opportunities to story-tell or foster a metaphorical connection between nature and industry could be explored at detailed

DCFW Deign Review:

The Pre-App information was shared with Panel Members and a refined Masterplan was presented which identified an option where the secondary access could move further north and the Spine Street could be integrated within the development, connecting north should a link through the employment area be feasible in the future.

DCFW Panel members focused their comments on Surrounding Context and Connectivity, Sustainable Living and Environmental Strategy, Placemaking **Evolution and Design** Changes, Distinctive Landscape, Preserving Existing Character, Differentiation of Streets, and Pedestrian Safety.



Wider Concept plan illustrating connectivity with wider SDA / town centre







design stage.

13. THE PROPOSAL

The Development Framework drawing and the Land Use Framework presented on page 35 to 36 have been carefully developed to deliver a flexible framework for the site to be development, that responds to the site's constraints and capitalises on its potential, thereby allowing the site's character and sense of place to naturally unfold. The Illustrative Masteprlan presented on Page 37 is used to illustrate an example of how the development could be achieved in accordance with the framework. This and the following section summarises the key design parameters and placemaking principles, including the five objectives of good design outlined in TAN 12 (Character, Access, Movement, Environmental Sustainability and Community Safety).

LAYOUT

- The proposed layout has been developed with the following key considerations in mind:
- Creating a new sustainable, and diverse residential community that actively promotes social well-being and encourages healthy lifestyle choices
- Delivering a coherent layout that fosters connectivity, making the most of opportunities to seamlessly integrate with the surrounding movement network. This approach in turn champions active and sustainable modes of travel.
- Establishing a green infrastructure network that seamlessly connects with the existing hedgerow network and seminatural habitat, facilitating the movement of species throughout the landscape.
- Employing sustainable practices to effectively manage surface water flow across the site, channelling it toward the western corner.
- Orienting homes strategically to accommodate the installation of solar panels, thereby empowering the development to generate renewable electricity.
- Integrating and adhering to established easements, and flood constraints.
- Ensuring appropriate separation distances between houses, with special emphasis on maintaining appropriate distances between habitable rooms.
- The key features of the layout and proposed design are summarised on the following pages.

USE & AMOUNT

- Provision of up to 150 new homes, comprising a range of house types and tenures that will support the creation of a mixed, affordable community.
- A network of supporting infrastructure, incorporating green streets, open space for natural play (including a Local Equipped Area of Play (LEAP) and a Local Area of Play (LAP); and Sustainable Urban Drainage (SUDS) measures.

SCALE & DENSITY

- Homes will be typically two storey houses in keeping with the surrounding homes, with the potential to rise to 3 storeys in key places
- The proposed density is circa 40 dwellings per hectare based on an assessment of overall red line boundary.

CHARACTER

- A characterful neighbourhood design is proposed, with a strong sense of place.
- Complementary Architectural Forms will be supported, enhancing the setting, unifying development, and aiding wayfinding.
- A permeable layout and landscaped streets will provide safe, well-connected routes and visual interest, linking to key areas and local services.
- Further details and the character, place and appearance is provided in Section 14.





MOVEMENT & ACCESS

Attenuation area Green Link (East-West Greenway) Woodland Trail (Western boundary) Woodville Street Greening Primary Street Avenue Planting & SUDS Internal Street Landscape & SUDS Indicative tree planting

GREEN INFRASTRUCTURE

Southern Gateway Park

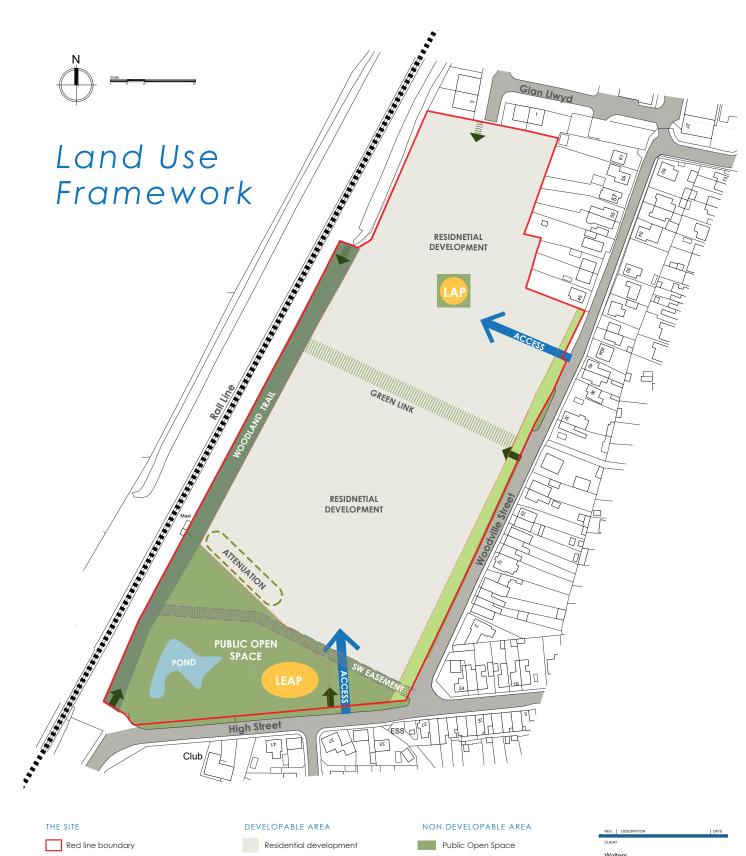
	Residential development	Ī
	Key frontages facing onto POS	-
	Street frontage / outward facing	-
	Woodland corridor (Western boundary)	-
	Open space network	
	Attenuation area / SUDS	
4	Green SUDS streets	
	Local Equipped Area of Play (LEAP)	
*	Local Area of Play (LAP)	
Den.	SW Easement	0
		di

USES & BUILT FORM

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CLIENT				
Walters				
Tata Steel Pontardulais				
Development Framework				
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dimensions must be taken in preference to scaled dimensions and any
incice are to be referred to Hammond Architectural Ltd. Contractors,
tractors and suppliers must verify all dimensions on site before
encing any work or making any workshop drawings.

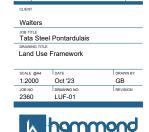








Local Equipped Play Area (LEAP)







LANDSCAPE & CHARACTER

The proposals seek to sensitively respond to the site's softer edges and deliver a new neighbourhood with a strong sense of place and greenery. The layout has been developed to work with site constraints and opportunities. This has in turn enable the character, appearance, and general feel of the site to evolve.

LANDSCAPE & OPEN SPACE STRATEGY

The masterplan allocates a wide variety of open space accordance with Fields in Trust guidelines. These spaces will incorporate informal and formal spaces such as recreational areas and play spaces that cater to different preferences and age groups within the community.

PARKLAND AND NATURE SPACES:

- The Southern Gateway provide large open areas for recreation, informal gatherings and play.
- Nature spaces surrounding a pond offer tranquility, encouraging residents to connect with the natural environment, fostering a sense of well-being.

PLAY & COMMUNITY SPACES

- A naturalistic Local Equipped Area for Play (LEAP) will encourage outdoor play and social interaction among children in a safe and natural setting, fostering creativity and physical activity.
- A formal LAP (Local Area Play) / Community Garden located to the north of the site will offer a play area for children and offer spaces for families to engage in outdoor activities, promoting a sense of ownership and community involvement. This diverse space will allowing residents to cultivate plants, fostering social bonds, and promoting sustainable living practices.

Proposed wild flower grassland, mown path, marginal planting creating habitat diversity and providing seasonal interest





Native/Semi native plantina. shrubs, grasses, ferns attractively adding to the landscape character. Specimen ornamental planting providing visual interest



WOODLAND TRAIL:

The western woodland trail will provide opportunities for residents to explore nature, promoting outdoor activities enhancing the connection between residents and the surrounding environment.

GREEN ROUTES AND GREEN STREETS:

- The Green Link and green routes will serve as pedestrian friendly pathways, connecting different parts of the community and offering an environmentally friendly way to travel.
- A network of green streets, incorporating landscape and trees into the urban landscape will promote walking, improving air quality, and enhancing the overall aesthetics of the neighbourhood.

SUSTAINABILITY

- Incorporation of native plants and wildlife-friendly habitats will promote biodiversity and create a thriving ecosystem within the community.
- Use of sustainable materials, energy-efficient lighting, and water-saving technologies will minimise environmental impact and promote eco-friendly living.
- Incorporating elements of local culture and history into the landscape design will help create a unique sense of place and identity for the community.

Formal landscape space linking two residential areas



Bioretention areas along pedestrian friendly street







FLOODING AND DRAINAGE STRATEGY

Ground levels on site will be increased in some areas to provide a minimum ground level of 9.03mAOD. This will result in a development plateau free of flooding in all TAN15 design events, including the extreme 0.1% AEP event. Flooding within the site will be limited to areas of water compatible public open space.

Schedule 3 of the Flood and Water Management Act has come into effect in Wales, mandating that the proposed surface water drainage design must receive SAB approval. It stipulates that surface water drainage systems must be designed in accordance with the Welsh Government's 'Statutory Standards for Sustainable Drainage Systems.' This entails selecting drainage systems for a specific site based on a hierarchy and considering factors related to biodiversity, maintenance, and amenity.

The proposed approach for managing surface water from the development includes a combination of biorention verges, rain

gardens, permeable paving, and a final detention basin with attenuation and infiltration properties.

The western trail and the southern part of the site are located within the flood area and will comprise multifunctional open space, incorporating the existing pond.

Within the development area, indicative features such as attenuation areas, bioretention verges, and rain gardens are proposed at this stage.

Foul drainage will discharge via existing connection into the combined sewer to the south

The exact details of the drainage strategy will be integrated into the scheme design during the reserved matters stage. For further information, please refer to the accompanying flooding and drainage reports.

Rain gardens through the site, managing surface water and enliveing the street.

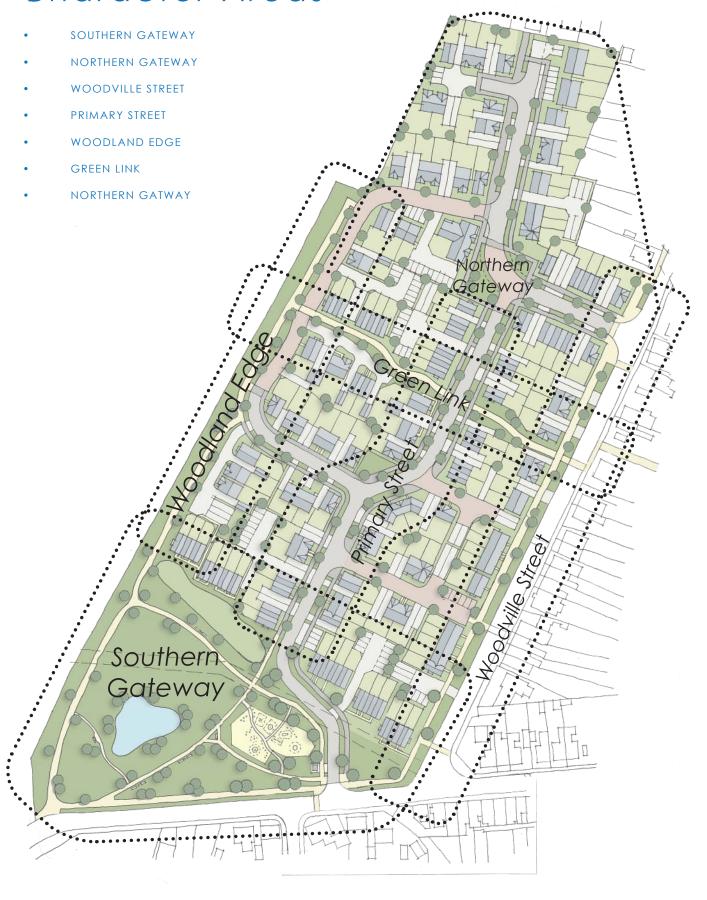




Pond set within natural open landscape



Character Areas



Southern Gateway

- The design of the Southern Gateway character area will create a distinct sense of arrival and identity.
- Upon entering the site, residents and guests will be greeted by a vast expanse of attractive new parkland, providing a green and welcoming environment. The parkland within the development will incorporate thoughtfully designed natural spaces, providing opportunities for play and relaxation, enhancing the quality of life for residents.
- The Local Equipped Area of Play (LEAP) area will provide a range of natural play experiences, with proper drainage, native landscaping, natural features, safe surfaces, and community engagement to ensure an inclusive, engaging, and well-maintained space for all.
- The existing pond in the area will undergo a transformation, revitalising it into a thriving ecological hub

- that fosters biodiversity and ecological sustainability.
- Integrated foot and cycle paths, tracing the former rail sidings, will seamlessly weave throughout the area, serving not only as recreational spaces but also promoting attractive active travel options.
- The homes within the development will feature contemporary architectural designs. These designs will incorporate an uplift in height and scale, accentuate robust building lines, repeated materials, and rhythmic patterns. This cohesive frontage will plays a significant role in shaping the neighbourhood's character.
- Refer to illustrative design principles plan on page 42 for further detail on the character of the space.

Informal, biodiversity rich areas supporting exploration



Integrating SUDS with gesthetic anneal





Wildflower planting, enhancing biodiversity, supporting pollinators, and beautifying the environment, promoting a healthier and more vibrant ecosystem for all.



Design a natural creative play space offering opportunities to draw on the rich history of the place, seamlessly integrating elements from the area's steelmaking past while immersing children in the wonders of nature, fostering both a deep connection to the environment and an appreciation for the areas industrial heritage.





Enhance the scale and strneghten the form of buildings facing the space, incorporate robust green infrastructure, and add appealing details to the public realm, creating a harmonious environment that balances architecture, nature, and community.





Create an interconnected network of pathways designed to encourage and facilitate physical activity, fostering healthier lifestyles. Provide accessible routes for walking, jogging, cycling, and other forms of exercise, thereby promoting overall well-being and encouraging people to engage in regular outdoor activities.



CULTURAL HERITAGE LINKS

From the outset the exploration of retaining existing buildings, was not pursued due to the condition, necessity for demolition and remediation.

Instead, the focus has shifted towards celebrating the historical context and exploring the natural context of the site.

At a strategic level, opportunities have been identified such as reclaiming the hidden pond, tracing the routes of the former sidings and greening the site to enhance the natural habitat, and re-establishing ecology within the site.

At detailed design stage, the landscape and public realm design could offer a multi-sensory experience, bridging the gap between the past and the present, providing visitors with a deeper understanding and appreciation of the area's steel-making legacy.

healthy lifestyles.

Examples could include:

- Tracing the routes of former sidings and incorporating them as recreational corridors within the Southern Gateway Park, connecting the past industrial heritage with the future recreational spaces
- Integrating reclaimed steel providing tangible connection to the steel-making past. This could serve as functional park elements (e.g. benches, artistic fencing, interpretation).
- Metallic hues / Geometric designs resembling steel grids, rivets, or factory floor patterns could be embedded into the materials, walkways, parks, fostering a metaphorical connection between nature and industry.
- Creating experience that transports visitors back to the industrial era, such as developing soundscapes within play areas or along trails that incorporate echoes of steel-making sounds, such as clanking metal, industrial hums, or steam hisses.
- Integrating storytelling elements, such as engraved plaques or QR codes, that narrate the personal stories of steelworkers and their contributions to the community.

the appeal of the area.

Early design concept where recreational trials mirror the route of the former sidings. CONTEXT SKETCH OF SOUTHERN GATEWAY Southern Gateway Park invites the community to a vibrant space where they can meet, learn, play and grow, while immersing themselves in nature. Architectural design, building scale, form, and orientation carefully considered to positively uplift and unify the space while optimising solar gain and facilitating energy generation. **Ecologically rich attenuation** area, where sustainable water management seamlessly coexists with flourishing biodiversity. **Woodland Trail** ECOLOG weaving along the western woodland boundary, a scenic link blending urban Energise living with nature. Recreational path tracing the route of the former sidings. New foot and cycle pathways Parking court discreetly connecting the site to the rail **New site access** and crossings that seamlessly positioned at the rear of building station and town centre. This blend with the surrounding footpath network to minimise the impact on the convenient route encourages and help connect the site to local existing gateway space and preserving residents to live sustainable, and planned facilities. :

Woodville Street

- The proposed development will establish a "Spine Street" connecting Woodville Street and Station Road, seamlessly integrating it with the existing and planned movement network to encourage sustainable travel and reduce local traffic congestion.
- Greater 'front-to-front' widths incorporating space for verges with trees on both sides will help provide differentiation from general streets.
- A shared foot/cycle path will be implemented connecting people to local services and the rail station, encouraging active travel.
- A long, wide bioretention/landscape verge will support the planting of larger specimen avenue trees and providing structure and rhythm to the street.
- A flexible zone could be created in front of the existing homes along Woodville Street, and footpath, integrating new street tree planting and on-street parking. Build-outs

- and/or informal crossings could be introduced to help create an attractive, lower speed environment.
- New homes will be designed to harmonise with the existing built form, including sections of terraces.
- Feature corner properties and an enhanced public realm will guide people into the new neighbourhood.
- The public realm along Woodville Street and High Street would be enhanced along the developments edge, prioritising the creation of a sociable pedestrian-friendly space that facilitates easy crossing and access to the new area of public open space.
- Opportunities to collaborate with local residents to raise awareness about the environmental and social benefits of tree planting and active travel improvements could be undertaken to help foster a sense of ownership and cohesion.





Opportunity to create sociable places and actively involve the community in the development of green infrastructure, promoting collective participation and enhancing environmental sustainability.







Harmonising architectural designs will elevate the streetscape. Incorporating diverse housing styles, such as terraces, will strengthen the connection with existing homes and the community, fostering a sense of unity and continuity.

Opportunity to elevate the existing streetscape, create secure crossing points and new pathways. Aesthetically pleasing green infrastructure, encouraging will help enhance connectivity and support active travel and fostering a vibrant, pedestrian-friendly and connected environment

CONTEXT SKETCH OF WOODVILLE STREET Woodville Street will be transformed into a vibrant and inviting green street that seamlessly links the new and existing community, fostering a strong sense of belonging and harmony among residents. The illustrative masterplan provides an example of how this could be achieved. Potential for future expansion of streetscape enhancements along Woodville Street Corner turner buildings carefully designed to serve as architectural focal points, harmoniously integrating with the surrounding streetscape while effectively guiding people into the site.

Terraced designs, thoughtfully integrated to complement the existing architecture, serve to reinforce the frontage, enhancing the overall aesthetic of the street

A new crossing that links existing Woodville Street and High Street

residents with the development,

residents to seamlessly connect

with surrounding facilities and schools, enhancing community

accessibility and cohesion.

while also enabling new

A strategic new crossing that seamlessly integrates with the existing Public Right of Way (PROW), ensuring secure passage into the site. This connection seamlessly links to the new Green Link, providing an appealing and inviting route for people to navigate through the site and access the Woodland Trail.

Expansive green infrastructure featuring broad bioretention and landscape verges designed to accommodate the planting of robust specimen avenue trees. This continuous green route will give a sense of structure and beauty to the street.

Shared walking and cycling route spanning the entire length of the eastern development, with strategically minimised access crossings to ensure a seamless and uninterrupted flow for pedestrians and cyclists alike.

Primary Street & Internal Spine Street

- The development will feature a centrally located Primary Street serving as a focal point and axis for the new community. The primary street will provide key local movement routes including planted verges with street trees to both sides plus on street parking where appropriate.
- The street will meander through connecting the primary southern access to the secondary eastern access.
- This key street will be an inviting route for residents and visitors characterised by footpaths and tree lined verges on both sides, offering opportunities for landscaping, seating areas, shade and community gathering spaces, enriching the street's character.
- Contemporary homes will be thoughtfully integrated, showcasing contemporary architecture and design,
 The occasional uplift in storey height, repetition of key forms, such as repeated gables and materials will help unify the overall aesthetic of the street, aid legibility and wayfinding and help fostering a strong sense of place.



The use of unified building materials and consistent setbacks, combined with parking located to the side, ensures a seamless and harmonious architectural integration. This thoughtful approach will help enhance the overall aesthetic appeal but also fosters a sense of unity, providing a welcoming atmosphere for people redesigning and moving through the area.







A key route through the site characterised by robust structural verge and tree planting, accentuating a clear hierarchy, while managing surface water and enriching the urban landscape.





Northern Gateway & Internal Spine Street

In this character area, a proposed Spine Street is set to be seamlessly integrated, linking the secondary access point on Woodville Street to a potential future connection in the northern employment area. The plan below shows an example of how this space could be designed.

- The creation of an arrival space could contrast to the more naturalistic Southern Gateway. In this layout, residents and visitors will enter a formal square. The space could incorporate play features (LAP) within an attractively landscaped environment, including trees for shade, colourful plants, and aesthetically pleasing features like benches. Additionally, there could be opportunities for community food growing, such as raised vegetable beds or a community garden, promoting sustainability and community engagement within the space.
- The street itself would boast a wide design to accommodate larger vehicles, bordered by lush tree-lined verges. To mitigate the impact of its generous width, the area could feature high-quality public realm treatments and traffic calming features, helping create a lowerspeed environment and ensuring a more intimate and welcoming atmosphere.
- Subtle changes in architecture and varied landscape frontage could be introduced to add distinction from the Primary street and visual interest while maintaining coherence.

Robust street frontage, homes strategically oriented to provide a positive and welcoming view of the Square and Primary Street. The integration of diverse house types, tenures, and corner turner designs will add architectural intrigue but also enlivens the space, making it dynamic and engaging for all.

Arrival Square designed to welcome visitors, providing a communal hub for gathering, play, and socialisation within the community. Detailed attention to public realm design guarantees seamless passage for larger vehicles, preserving the neighborhood ambiance and preventing the space from feeling excessively engineered for vehicular traffic.

Green street design that mirrors the primary street design, with strong street frontage and landscaped verge formally welcoming people into the site.

Potential future connection, kept in anticipation of potential requirements by the Local Planning Authority to accommodate any necessary a Spine Street / ATR connections, ensuring adaptability and compliance with future regulations.



DESIGN FLEXIBILITY

- During the design development stage, the northern access was planned as the primary route within the site, assuming that the Spine Street connection would be provided off-site within the surrounding movement network. See plan right.
- The current sketch proposal (presented on page 46) was then
 created to illustrate how larger vehicles could travel through the
 site, connection to the northern boundary. This requires a wide
 sweeping carriageway arrangement to facilitate HGV and/or
 buses
- To ensure the flexibility, if the internal Spine Street is deemed not necessary, this route could be redesigned as a continuation of the current Primary Street. The same street design principles would be applied; however, the need for wide turning areas would be eliminated, allowing for the creation of a tighter, urban form.



Public realm design tailored to foster a pedestrian-friendly, sociable space, ensuring secure movement while effectively managing surface water and promoting biodiversity.





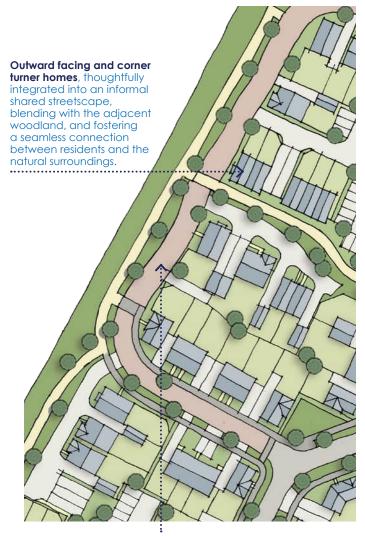






Woodland Edge

- Within the Woodland Edge character area a soft edge to the development will be established that harmoniously integrates with the existing natural landscape corridor.
- The preservation and enhancement of this natural corridor will be prioritised to create a sustainable, green connection between the community and Pontraddulais town centre.
- Within the lower recreational channel, a new trail
 that is both informal and recreational in nature will
 be provided. This trail should serve as a pathway
 for residents to enjoy outdoor activities while also
 encouraging sustainable travel options, connecting
 them to the town centre and rail station.
- The woodland corridor could incorporate interpretive elements, linking the site to its steel-making past while seamlessly blending with the natural surroundings. This fusion of heritage and nature will provide a unique experience for residents and visitors.
- Native woodland planting will be utilised to enhance the natural beauty of the area and promote biodiversity.
- Designing the public realm to follow shared space principles that combines landscape and planting will help soften the environment and slow down vehicle speeds. This approach will also help encourage doorstep play, community interaction, and a safe, pedestrian-friendly atmosphere.
- The illustrative masterplan right provides an example of how these principles could be achieved,



Shared meandering street allowing for informal placement of homes. This approach will create a visually appealing and inclusive environment that prioritises the needs of pedestrians.





Thoughtful architectural building design, orientation and material selection facing a woodland area emphasising seamless integration with nature.









Green Link

- The development will feature a purposeful east-west Green Link, serving as a key connection linking the secondary access point, the Main Street and the western woodland trail.
- The design of this route will exhibit a deliberate transition from a more urban and formal character on the eastern side to a more informal and relaxed character as it approaches the western woodland area,
- Along this route, carefully selected trees and landscaping will evolve, with a more informal playful, greening towards the western woodland edge, creating a harmonious transition from the from urban to more natural surroundings.
- To ensure visual coherence and continuity, the route will be unified in terms of materials throughout its length, offering a seamless and aesthetically pleasing journey for residents and visitors.
- The built form along the route will typically consist of twostorey structures, occasionally punctuated by three-story elements, enhancing legibility and adding visual interest to the streetscape, reflecting a diverse architectural character.
- By incorporating these design elements, the Green link will not only serve as a functional connection but also provide an engaging and well-integrated experience for those moving through the development, offering a variety of visual and sensory experiences along the







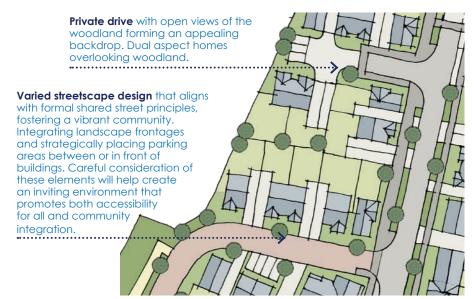


Originally, a Local Area Playground (LAP) was intended for the Green Link area (see inset image left). After discussions with the Local Planning Authority (LPA), it was relocated north to accommodate residents in the upper site, following Fields in Trust guidelines. The Design Commission for Wales (DCFW) preferred the LAP to return to the Green Link. The Development Framework permits flexibility, allowing the LAP location to be reconsidered at the detailed design stage, with developer and LPA agreement.

> Shared foot and cycle path promoting sustainable travel and healthy lifestyles.

Inner Residential Areas

- Across the development a Secondary Street typology could be incorporated if required, with landscape verge to one side, street trees, and the opportunity for on-street parking.
- The development will also incorporate a lower order 'Tertiary' shared street typology that provides access for residents. These narrower, residential-focused streets with lower traffic volumes will adopt more shared surface design principles, helping create a slower speed, pedestrian-friendly environment.
- Clear pedestrian pathways and crossings will be provided to ensure ease of access for all.
- Green Infrastructure (GI) build-outs like rain gardens and permeable surfaces, tree planting will be incorporated.
- Garden setbacks will vary to encourage greenery and add visual interest.
- Private drives will adopt an informal layout with low kerb upstand to allow shared use. Incidental planting will help create low speeds and create opportunities for doorstep play.
- Rear parking courtyards will be incorporated in areas to help enable
 the separation of cars from public areas, allowing residences to be
 situated close to the street and fostering cohesive street frontages.
- To ensure their effectiveness, parking courts will be designed as functional spaces, limiting their size to accommodate a maximum of 10 parking spaces and providing secure, overlooked accessible routes between each dwelling and its parking spot.
- The integration landscaping elements like trees, shrubs, high quality boundary/edge treatments and lighting will help creating a more pleasant environment.
- An inset plan displaying the illustrative masterplan is provided below
 for reference. It is important to note that the future design of these
 streets will be significantly influenced by the decisions made by
 the prospective developer. The details and aesthetics of the final
 outcome will be shaped during the detailed design stage.





Careful streetscape design will ensure safe pedestrian pathways, efficient green infrastructure, and well-managed parking facilities blend seamlessly in an aesthetically pleasing and functional manner









15. MOVEMENT & ACCESS

The proposed residential development aims to create a vibrant and accessible community. The design focuses on ensuring convenient access, promoting sustainable modes of transportation, and enhancing the overall connectivity within and around the site. The movement and access strategy is described below.

VEHICULAR ACCESS:

Vehicular access to the site will be facilitated through two points:

- Primary Access: Upgraded priority junction from High Street, ensuring a smooth flow of traffic.
- Secondary Access: Provided on Woodville Street from the eastern boundary, enhancing accessibility from multiple directions.

PEDESTRIAN AND CYCLE CONNECTIONS:

The development emphasises pedestrian and cyclist-friendly infrastructure:

- A robust network of pedestrian and cycle pathways, including new crossings, will seamlessly connect with the surrounding routes, encouraging sustainable travel for future residents.
- A central Primary Street will traverse the site, enhancing pedestrian movement and creating a focal point within the community.

WIDER CONNECTIVITY:

To enhance connectivity in the broader area the development allows for the creation of a Spine Street, improving connectivity between Glanffrwd Road, Tyn y Bonau Road, and Station Road:

- Woodville Street would be enhanced, with a new shared foot/cycleway and green infrastructure.
- An internal route could be accommodated within the site, linking Woodville Street to the northern boundary, creating a comprehensive internal road network.
- Provision for a potential link through the employment site, if available in the future could be achieved, ensuring adaptability and extended connectivity.

INTERNAL STREET NETWORK:

In accordance with the Swansea Residential Design Guide, the internal street network within the site will be designed to be visually appealing and legible.

A clear street hierarchy is proposed as outlined in the table right. This will ensure residents and visitors can move comfortably.

All streets will be pedestrian-friendly streets, designed to help slow traffic speeds and improve safety.

Streets will be designed to be accessible for all and foster a sense of community, making it easier for residents to interact and engage with each other

Landscaped streets with clearly defined routes will create an inviting atmosphere and enhances the overall quality of life for residents.

PUBLIC TRANSPORTATION ACCESS: Residents will have convenient access to public transportation:

- The development will establish a network of pedestrian and cyclist-friendly routes, along with crossings, allowing residents easy access to frequent bus and train services located to the south of the site, promoting public transport usage and reducing dependency on private vehicles.
- These routes will facilitate access to a variety of destinations, enhancing residents' mobility options and encouraging sustainable travel practices within and beyond the community.

Green infrastructure, including strategically placed structural planting, softens the streetscape, and assists in traffic calming measures by slowing down vehicle movement.



INCLUSIVE DESIGN STRATEGY

The inclusive design strategy outlined below demonstrates a commitment to promoting equality and inclusivity in accordance with the Equality Act and/or Public Sector Equality Duty.

The strategy expands on how accessibility benefits of the site can be maximised and an inclusive environment can be created that fosters a sense of belonging and social inclusion for existing and future residents.

KEY OBJECTIVES & PRINCIPLES

- Promote social cohesion, designing streets and spaces for community interaction and collaboration.
- Create an inclusive environment for residents of all backgrounds and abilities.
- Create a flexible framework that can support a variety of housing types and tenures, including affordable and adaptable units, for different needs.
- Develop pedestrian-friendly, accessible routes, prioritising walking, cycling and access to affordable public transport options.
- Engage with the local community and relevant stakeholders, including under-represented groups, through the planning process. Address specific needs and concerns raised by these groups in the design and development phases.
- Implement eco-friendly solutions to reduce utility costs, supporting low-income residents and reducing fuel poverty.
- **ACCESSIBILITY**
- Promote safe, convenient, active travel, ensuring easy access to essential services in Pontarddulais, such as healthcare, schools, and shops.
- Design a network of walking and cycling routes that

- connect to the existing movement network, notably existing footpath network, bus stops on Water Street and Pontarddulais train station.
- Design streets and shared surfaces to be pedestrianfriendly and accessible to all, with clearly visual and tactile cues to guide individuals with visual impairments and provide information about changes in elevation or direction.
- Provide new foot/cycle path along Woodville Street, reducing barriers to movement.
- Designing accessible entrances and pathways ensuring people with varying physical abilities can navigate and use a space comfortably and independently.
- Ensure that pathways and entrances are well-lit to aid navigation and enhance safety.

PUBLIC SPACES & PUBLIC REALM:

- Create inclusive public spaces that support people of all age, abilities and backgrounds.
- Incorporate green spaces and sustainable landscaping features that benefit the physical and mental well-being of all residents, including those with disabilities and sensory sensitivities
- Incorporate play areas with equipment suitable for children of all abilities, promoting social inclusion and interaction among families.
- Design inclusive seating and rest area areas and signage, that is accessible to everyone.
- Provide adequate lighting, clear sight lines, and visible security measures to help people feel safe and comfortable in public spaces.
- Promote public art and cultural expression that represents the diversity of the community.

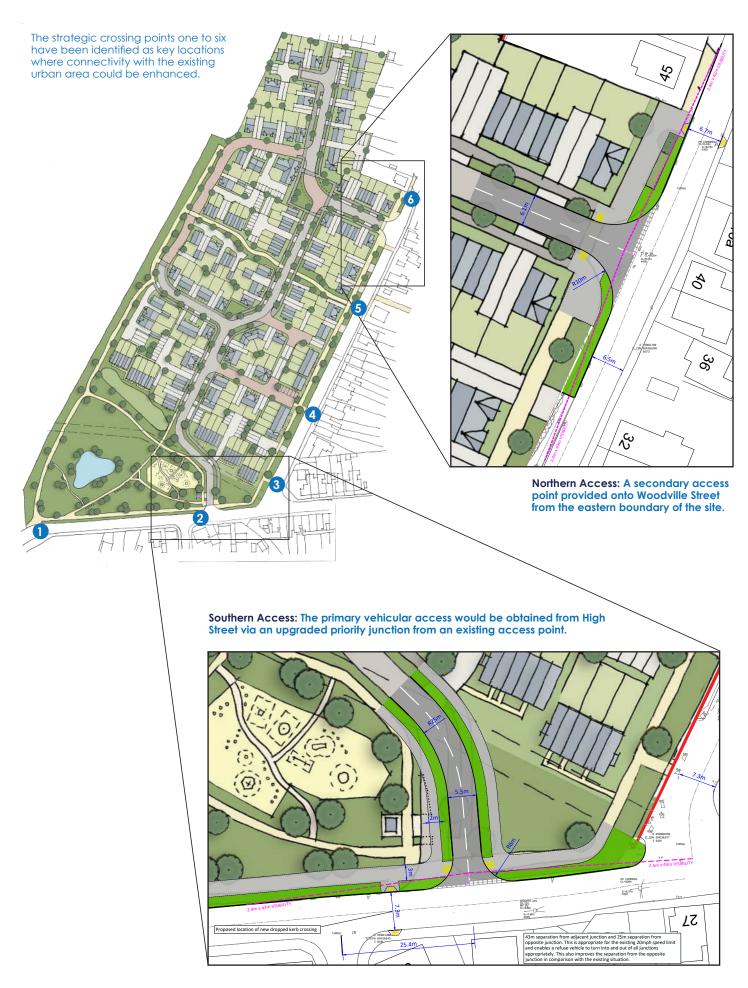
Accessible street featuring distinct changes in surface material, integrated tactile paving, combined with Sustainable Urban Drainage Systems (SUDS), ensuring a safe, inclusive environment.

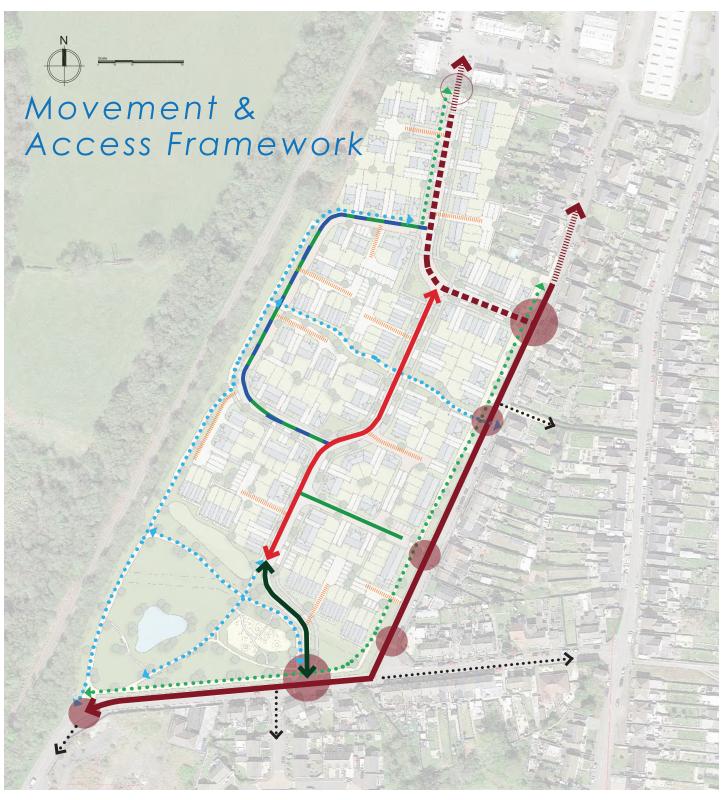




Open landscape serving as versatile space that facilitates various activities and gatherings, fostering social interactions and strengthening the community fabric.

Access & Connectivity











Potential future access to connect
Woodville Street / High Street Spine Street

STREET HIERARCHY & CONNECTION

High Street / Woodville Street Spine Street

Potential internal Spine Street

Potential future extension of Spine Street

Primary Street (Parkland)

Primary Residential Street

Secondary Street / Tertiary Shared Street

Private drives / Courtyard

Formal 3m shared foot/ cycle path along Spine Street

Recreational ATR connection

Connection to wider network, PT, community facilities



STREET DESIGN MATRIX

STREET TYPE	SPINE STREET: HIGH STREET	INTERNAL SPINE STREET: WOODVILLE STREET			
CHARACTER AREA	Southern Gateway	Woodville Street			
STREET DESIGN	 Existing carriageway (asphalt) circa 6.0m to 7.5m carriageway. Existing 2.0m footpath in front of existing residents. 3.0m shared foot/cycle way on development side. Occasional build outs/ cross overs can be accommodated to help calm traffic, aid pedestrian movements and accommodate landscape. Surface material change to demarcate crossings. 				
GREEN INFRA. / LANDSCAPE	 Landscape verge / Parkland on development side. Street trees to be incorporated within verge / parkland. 	 Wide bioretention / landscape verge (circa 3.0m 4.m wide) on Woodville Street development side. Street trees to be incorporated within verge / parkland. 			
FRONTAGE DESIGN	• N/A	Formal landscape setback (circa 2.0 to 3.0m) incorporating on plot landscape and/or private bio-planter.			
TOWNSCAPE / BUILT FORM	• N/A	 Formal, more regular in form. Typically 2 storey homes, rising to 3 storey around Southern Gateway / key focal areas. Diverse mix of apartments, terraces, semidetached and detached units Strong building line and sense of rhythm to the street scene. Buildings to unified in street scene by common building material and architectural detailing. 			
PARKING	• N/A	 Access permissible from Woodville Street and from within development. Parking on plot to side / rear / within courtyards Detached garages set behind the building line. Defined areas of on street parking could be permitted as per existing situation in front of existing homes . 			



STREET DESIGN MATRIX

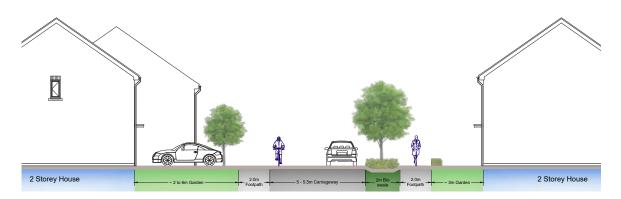
STREET TYPE	internal spine street	PRIMARY STREET		
CHARACTER AREA	Northern Gateway	Southern Gateway - Primary Street - Green Link - Northern Gateway		
STREET DESIGN	 6.0m carriageway, asphallt 2.0m footpath on both sides of carriageway Potnetial to widen section to 3.0m shared foot/cycle path, facilitating ATR connection between employment area and Woodland Trail. Occasional build outs/ cross overs can be accommodated to help calm traffic, aid pedestrian movements and accommodate landscape. 	 5.5m carriageway, asphallt 2.0m footpath on both sides of carriageway. Occasional build outs/ cross overs can be accommodated to help calm traffic, aid pedestrian movements and accommodate landscape. 		
GREEN INFRA. / LANDSCAPE	 Bioretention / landscape verge to both sides (circa 2.0m) Street trees to be incorporated within verge. Combination of asphalt / block paving to define key crossover spaces / focal spaces. 			
FRONTAGE DESIGN	 Formal landscape setback (circa 2.0 to 3.0m) incorporating on plot landscape and/or private bio-planter. Formal landscape setback (circa 2.0 to 3.0m) incorporating on plot landscape and/or private bio-planter. 			
TOWNSCAPE / BUILT FORM	 Formal, more regular in form. Typically 2 storey homes. Potential to increase scale around key focal areas. Diverse mix of apartments, terraces, semi-detached and detached units, strong building line and sense of rhythm to the street scene. Buildings to unified in street scene by common building material and architectural detailing. 			
PARKING	 Parking on plot to side / rear. On street parking permitted in bays. Detached garages set behind the building line. Rear parking courts. 			



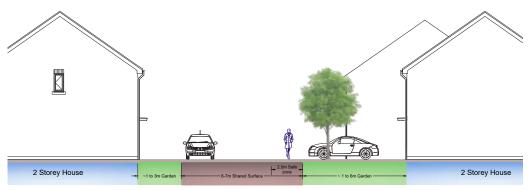
Internal Spine Street / Primary Street

STREET DESIGN MATRIX (CONT)

STREET TYPE	SECONDARY STREET *	TERTIARY SHARED STREET		
CHARACTER AREA	Internal Residential area served off Primary Street (*if required)	Internal Residential area served		
STREET DESIGN	 5.5m carriageway, asphalt 2.0m footpath on both sides of carriageway. Occasional build outs/ cross overs can be accommodated to help calm traffic, aid pedestrian movements and accommodate landscape. 	 Varied carriageway width, asphalt / block paving 2.0m safe walking route Build outs / cross overs can be accommodated to help calm traffic, aid pedestrian movements and accommodate landscape. 		
PUBLIC REALM & SUDS	 Bioretention verge / Rain gardens (circa 2.0m wide) to one side. Street trees to be incorporated within verge / build outs where possible. 	 Rain gardens Street trees to be incorporated within landscape zones, build outs, gardens where possible. 		
FRONTAGE DESIGN	 Varied landscape setback (circa 0.5m to 3.0m) incorporating on plot landscape and/or private bio-planter. 	Varied landscape setback (circa 0.5m to 3.0m) incorporating on plot landscape and/or private bio-planter.		
TOWNSCAPE / BUILT FORM	 Typically 2 storey homes Mix terraces, semi-detached and detached units to increase density. Buildings to unified in street scene by common building material and architectural detailing. 	 Typically 2 storey homes Mix terraces, semi-detached and detached units to increase density. Buildings to unified in street scene by common building material and architectural detailing. 		
PARKING	Parking on plot to side / rear.Detached garages set behind the building line.	 Parking on street in bays / on plot to side / rear. Detached garages set behind the building line. 		



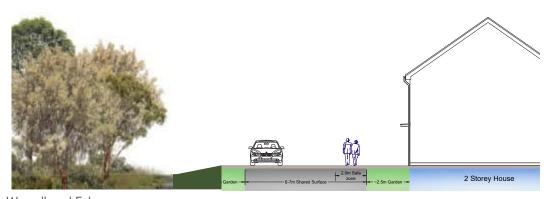
Secondary Street



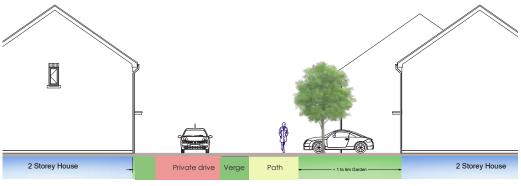
Shared Street

STREET DESIGN MATRIX (CONT)

STREET TYPE	TERTIARY SHARED STREET - WOODLAND EDGE	TERTIARY SHARED STREET - GREEN LINK			
CHARACTER AREA	Woodland Edge	Green Link			
STREET DESIGN	 Varied carriageway width, asphalt / block paving 2.0m safe walking route Build outs / cross overs can be accommodated to help calm traffic, aid pedestrian movements and accommodate landscape. 	 3.0m safe walking and cycling route Sections can be designed as car free areas Where access is required, Shared private drive carriageway, block paving 			
PUBLIC REALM & SUDS	 Rain gardens Street trees to be incorporated within landscape zones, build outs, gardens where possible. 	 Rain gardens Landscape zones Street trees to be incorporated within landscape zones, build outs, gardens where possible. 			
FRONTAGE DESIGN	 Varied landscape setback (circa 0.5m to 5.0m) incorporating on plot landscape and/or private bio-planter. 	Varied landscape setback (circa 0.5m to 5.0m) incorporating on plot landscape and/or private bio-planter.			
TOWNSCAPE / BUILT FORM	 Typically 2 storey homes Mix terraces, semi-detached and detached units to increase density. Less formal arrangement Buildings unified in street scene by common building material (rustic brown tonnes) and architectural detailing. 				
PARKING	 Parking on plot to side / rear. Detached garages set behind the building line. 	 Limited parking on plot to side / rear. Detached garages set behind the building line. 			



Woodland Edge



GREEN LINK

*Potnetial to create car free sections

16. BUILT FORM & APPEARANCE

This DAS is not intended to precisely define the built form and appearance rather set key guiding principles to inform the detailed design stage. Further details are provided in within Chapter 13.

DENSITY, SCALE & MASSING

The outline planning application advocates up to 150 new homes across the site. The proposed site targets an average density of 40 dwellings per hectare, with building heights typically at 2 storeys, aligning with the existing residential development in the area, where homes commonly consist of 2 storeys.

A range of housing types, size and tenures can be accommodated across the development to encourage a balanced community mix and add a richness in townscape; helping create a sense of place and aiding legibility and wayfinding.

Variations in building height, rising up to 3 storeys could be used to help reinforce key streets, spaces and corners, adding to the sense of place and aiding legibility and wayfinding.

While the exact development scale remains flexible, the adjacent Scale Parameter Plan identifies opportunities to vary the scale in different areas of the site.

In the Southern Gateway section of the site, connections to the station and town centre are particularly robust. Consequently, there is potential for increased density, scale, and/or massing. Raising the storey height, building height, or increasing massing could also help effectively define the new open space and create a welcoming entrance into the site.

Similar strategic considerations for uplift could also be applied along Primary Street, Spine Street, and/or other focal spaces, ensuring a cohesive, well-integrated, and easily understandable neighbourhood.

The following plot parameters schedule is made in respect of the outline planning application requirements to illustrate typical size parameters for the built components.

PLOT PARAMETERS

PLOT FOOTPRINTS:		STOREY HEIGHTS:			
Detached houses:		2-Storey Home:		4 Storey Flat	
Building width	6.0m to 15.0m	Floor to floor height	2.5m to 3.5m	Floor to floor height	2.5m to 3.5m
Buidlign depth	7.0m to 14.0m	Height to eaves	5.0m to 6.0m	Height to eaves	9.0m to 13.0m
S .	4.0m to 10.0m	Height to ridge Roof pitch	9.0 to 9.5m 25 to 40 degrees	Height to ridge Roof pitch	11.0 to 18.5m 25 to 35 degrees
Building depth Terraced houses:	7.0m to 11.0m	2 .5 Storey Home: Floor to floor height	2.5m to 3.5m		
S	4.0m to 6.0m 7.0m to 11.0m	Height to eaves Height to ridge Roof pitch	5.0m to 6.0m 8.0 to 11.5m 30 to 40 degrees		
e	6.0m to 30m 6.0m to 16.5m	3 Storey Home/ Flat Floor to floor height Height to eaves Height to ridge Roof pitch	2.5m to 3.5m 7.5m to 10.0m 9.0 to 13.5m 25 to 35 degrees		

This section identifies a series of high-level principles that will help achieve a vibrant and visually appealing residential neighbourhood layout:

LOCAL VERNACULAR

- The proposed architecture should be designed to complement the area and setting, establishing a defined character for the scheme.
- The scale, height, and massing should be integrated with the local context.
- Varied architectural form, unified through material palette and detailing will enhance the development's richness and identity
- A predominant material palette of brick, stone, and render within the area would be supported.
- Flexibility for the incorporation of other materials respecting traditional and contemporary styles could also be considered.
- Different architectural finishes and colours used strategically, could help aid legibility and wayfinding and help in the creation of focal spaces.

ARCHITECTURAL DIVERSITY:

- Variation in building position, roofscape design, gable features, and window proportions should be introduced to enhance visual interest within the streetscape.
- A range of 2 and 3 storey house types and flats should be designed to complement each other, creating variation in the streetscape and offering diverse living options.
- Variations in rooflines, window designs, and facade materials should be supported to promote diversity within the development.

SITNG, SCALE AND PROPORTION:

- An appropriate scale and proportions for buildings should be maintained to harmonise with the surrounding neighbourhood.
- Consideration of setbacks and spacing between buildings will help ensure a cohesive streetscape.
- Allow for slightly higher building density along the Southern Gateway.

KEY FRONTAGES & ELEVATIONS DESIGN:

- Emphasise key frontages with diverse built forms, massing, and detailed architecture.
- Maintain a consistent design language for buildings within specific character areas, street hierarchy.
- Carefully design corner buildings to offer visual interest, aiding wayfinding and enhancing overall legibility.
- Incorporate subtle architectural changes such corner buildings and gable treatments for diversity.
- Ensure well-proportioned elevations in alignment with the area's character and street hierarchy.
- Terminate views into and through the development with active building frontages or landscape elements.
- Carefully design front garden setbacks with greenery to soften visual impact and provide space for and space for personalisation.
- Integrate green spaces, front gardens and landscapes between the homes to help create a sense of enclosure, enhance the visual appeal and provide a buffer between the street and the new development.

GATEWAY DEVELOPMENT

- Homes framing the Southern Gateway could have a formal arrangement, framing the open space. Consideration of the integration of varying heights and roof forms will help positively enclose the space and add visual appeal. There is an opportunity to introduce some symmetry in the design, such as the introduction of terraced properties to help create a harmonious and visually pleasing appearance.
- Homes fronting the Green Link could adopt a more informal arrangement with varied architectural details and material palette to help create a more unique streetscape.
- Homes fronting the Woodland Trail could adopt a more informal arrangement, creating a loose, informal street structure by varying building positions and distances between structures.
- Homes facing Woodville Street could establish a cohesive streetscape with a strong, unified building line.







SUSTAINABILITY FEATURES:

- Encourage the use of eco-friendly building materials and energy-efficient designs to promote environmentally conscious development.
- Considers form and orientation to optimize solar gain, ensuring efficient utilization of natural sunlight throughout the space.

PUBLIC REALM

The development seeks to find a balance between movement, access and character of place.

- Streets and focal spaces will be designed to ensure safe routes and areas for vulnerable pedestrians are provided.
- Where appropriate, measures such as street planting; changes in the application and selection of materials; and street geometry will be introduced to help reduce vehicle speed. This will also help soften the appearance of the street and provide more sociable environments.
- Signage and street furniture will be kept to a minimum to avoid unnecessary street clutter.
- Where necessary, signs and street furniture will be carefully positioned to limit the impact on pedestrian movement.
- Refuse storage will be sensitively integrated into the street scene through the use of boundary treatments. Where houses are located on private drives, the bins will be kept in the gardens.
- Refuse collection will be typically via the main carriageway.
- Refuge collection points are provided for properties accessed off private drives. Communal points will be for collection only, therefore a structure will not be required.

PARKING

- Configure parking on plot, typically to the side or rear of homes, minimising driveway lengths where possible for a cohesive and organized appearance.
- Ensure clear sightlines in parking areas for natural surveillance, enhancing openness and visibility.
- Design parking courts with habitable rooms overlooking the area for enhanced security and safety.
- Differentiate spaces using varied surface materials for effective distinction.
- Different textures and colours promote wayfinding and purpose for each designated area.
- Strategically integrate greenery for a pleasant environment while maintaining visibility.
- Design adaptable layout to accommodate the need for future Electric Vehicle (EV) charging infrastructure, encouraging eco-friendly transportation and promoting community sustainability.







18. ENVIRONMENTAL DESIGN

The site is a brownfield site requiring remediation. The site is sustainably located within an existing settlement, in proximity to a range of services and facilities and public transport options. The environmental design strategy outlines key site specific objectives and principles and demonstrates a commitment to responsible, sustainable development.

KEY OBJECTIVES

- Undertake detailed assessments, highlighting findings such as soil contamination and potential hazards.
- Implement ongoing monitoring to track site remediation progress and sustainability goals, utilising data for informed decision-making.
- Remediating environmental issues in accordance with regulations.
- Transform the site into a sustainable and vibrant accessible.

WATER MANAGEMENT

- Identify flood-prone areas using historical data and local topography.
- Acknowledge areas with a "no-build zone" to protect against residential development.
- Address water management challenges, including groundwater contamination.
- Incorporate SUDS for minimal environmental impact and aesthetic improvements.
- Explore natural flood management like tree planting and wetland restoration.
- Plan rainwater recycling systems for on-site use.
- Encourage residents to participate in water saving initiatives and the preservation of green spaces.





BIODIVERSITY AND GREEN SPACES:

- Restore biodiversity through remediation of contaminated areas.
- Implement native plantings resilient to pollutants for local wildlife.
- Create wildlife habitats, e.g., bird and bat houses, to encourage diversity.
- Promote diverse plants for pollinators and ecosystem health.
- Maintain/Establish green corridors to facilitate the movement of wildlife between different area
- Include green infrastructure in SUDS for water quality and biodiversity.
- Encourage sustainable gardening and native plants.
- Develop a management and maintenance plan that actively involves residents in the vitality of green spaces.

TRANSPORT AND ACCESSIBILITY:

- Prioritise the development of an integrated active travel network that includes shared routes for pedestrians and cyclists.
- Connect the development to the local movement network, facilitating access to key destinations within the community, such as Pontarddulais town centre, rail station, bus stops and schools and shops.
- Incorporate shared spaces where pedestrians, cyclists, and vehicles can harmoniously coexist.
- Integrate safe secure bike storage facilities to promote cycling among residents.
- Ensure accessible design for all residents, including those with mobility challenges.
- Inform residents about sustainable travel choices.



ENERGY EFFICIENCY & CARBON PERFORMANCE:

- Create a flexible framework accommodating the potential future diversity in building types, methods and functions.
- Build to current buildings regulations, which include new energy efficiency ratings, new regulations for on-site electricity generation and overheating mitigation, and Welsh Development Quality Requirements (WDQR) for affordable homes.
- Promote energy-efficient design to reduce environmental impact. For example, optimising building orientations for solar gain and heat retention.
- Design buildings and infrastructure with retrofit-friendly features, allowing for the integration of future energy-efficient technologies.
- Address carbon emissions in construction and operation.



MATERIALS SELECTION

- Select materials that are safe and appropriate for the site's remediation needs.
- Choose materials with a low environmental impact, such as those with high recycled content or materials sourced locally to reduce transportation emissions.
- Consider the life cycle of materials, including their production, transportation, installation, maintenance, and end-of-life repurpose or recycling.
- Integrate materials that blend landscape, heritage and local architectural context and aesthetic preferences.



17. COMMUNITY SAFETY

In accordance with TAN 12, community safety can be achieved through careful site planning and detailed design. The design of the proposed layout will reduce the opportunity for crime and other anti-social behaviour.

CONNECTED STREETS AND SPACES

A connected network of streets and spaces is proposed, incorporating clear, direct routes which are desirable and more likely to be used. This approach will contribute to increasing personal safety and security of property, by encouraging pedestrian activity which helps to provide natural surveillance and a degree of self-policing.

The development is well connected to adjacent areas increase the opportunity and choice of users to socially interact, which assists in the development of neighbourhood identity and affinity.

BOUNDARY TREATMENTS

Buildings will be arranged to create a clear distinction between areas that are public and private. Within the inner mews areas dual aspect properties and careful detailing of the public realm and edges will help to clearly delineate between private and public space gives.

The proposed green infrastructure strategy will present people the opportunity to personalise spaces that they control whilst projecting an image of a well-kept and loved environment.

Treatment of enclosures must convey a positive image through quality of materials and design yet providing adequate security. The design of the proposed layout will reduce the opportunity for crime and other anti-social behaviour by maintaining surveillance of the scheme and incorporating secure gates, fences and enclosures. Hostile and defensive security measures are avoided.

Carefully considered landscape planting will make attractive streets that encourage social activity yet also deter access, where appropriate, in order to minimise the opportunity for unobserved crimes.

LIGHTING

In most cases lighting helps people feel more secure and reduces the fear of crime. It also increases chances of detection. Good lighting design plays an important part in creating a more comfortable and attractive environment that reduces the fear of crime. Adequate street lighting will be provided in accordance with the Local Authority Highway standards.

MANAGEMENT AND MAINTENANCE

Peoples' perceptions are affected by the appearance of places. A well maintained urban environment is essential in sustaining confidence and helping to control vandalism, crime and fear of crime.

Public areas such as streets and open spaces need to be sustainable and at time high maintenance design is not appropriate.

High quality materials are proposed to help create an enduring environment, requiring less maintenance where people are more inclined to take pride in their surroundings.





19. SUSTAINABILITY & WELLBEING

The proposals to regenerate the former Tata Steel Works site and the create a new residential neighbourhood commit to the Wellbeing of Future Generations Act's seven Goals and five Ways of Working. The following principles are considered in the planning, development, and management of the site. These principles will help create a sustainable, inclusive, and thriving community that benefits both current and future generations.

SEVEN GOALS

- 1. A Prosperous Wales: The development will seek to boost economic prosperity through the creation of construction jobs. The flexible design of homes will support remote working. Enhanced connectivity between the residential area, neighbouring commercial area to the north, and local businesses will support nearby businesses.
- 2. A Resilient Wales: The development will prioritise resilience to climate change and natural disasters through flood-resistant design, green-blue infrastructure, active travel options, and sustainable building practices that minimise energy use and greenhouse gas emissions, and foster well-being.
- 3. A Healthier Wales: The development will place a strong emphasis on enhancing the health and well-being of its residents achieved by fostering active living through the creation of easily accessible green space, pedestrian-friendly streets, and the incorporation of diverse recreational facilities. Additionally, the development will strive to enhance walking and cycling connectivity, guaranteeing convenient access to community healthcare facilities and services.
- 4. A More Equal Wales: A diverse community will be created through the strategic implementation of mixed tenure homes and community spaces in accessible locations. The accessibility of the site will help reducing transportation costs, help promoting social and equal opportunity for all.
- 5, A Wales of Cohesive Communities: The development will foster a strong sense of community through inclusive design, community spaces, and opportunities for social interaction. The design of open spaces present opportunities to promote cultural diversity and celebrate different backgrounds within the neighbourhood.
- 6. A Wales of Vibrant Culture and Thriving Welsh Language: The development incorporates a range of open space and accessible routes that could support cultural/recreational events and celebration of the Welsh language.
- 7. A Globally Responsible Wales: The development will implement sustainable practices, such as active travel, energy efficient design, waste reduction, environmentally conscious landscaping and water management.

FIVE WAYS OF WORKING:

- Long-Term Thinking: The proposals include a comprehensive masterplan that considers the long-term impacts of the neighbourhood on future generations, implementing sustainability and resilience measures for the continued wellbeing of residents.
- 2. Integration and Collaboration: Through the planning process, collaboration with local government, DCFW, stakeholders and residents will support the delivery of a inclusive neighbourhood design.
- 3. Prevention: The development considers preventative measures to address potential social and environmental challenges, such as flooding and crime prevention through environmental design.
- 4. Involvement of Future Generations: Through the detailed design stage, opportunities for involving local educational institutions in the future design of the site could be explored.
- 5. Consideration of Impact: A plan-led process is being followed, which relies on site context analysis and an iterative design process. This approach seeks to strike a harmonious balance between responsible development practices and the creation of sustainable neighbourhood design that enhances the quality of life for future residents.



20. CONCLUSION

This Design & Access Statement outlines the placemaking led approach undertaken for the planned redevelopment of the former Tata steelworks site in Pontarddulais.

The project involves the construction of up to 150 homes, open market and affordable homes; open space; and supporting infrastructure.

Grounded by a framework of sustainable design principles, the envisioned development aims to materialise as a well planned and aesthetically pleasing residential neighbourhood, prioritising the needs of residents, accessibility, wellness, and social engagement.

By taking into account the sites surrounding local, natural, and built environment, the proposed development aligns with the objective of fostering sustainability within the community.

The proposed development aligns with the guidelines of both National and Local Planning Policy and Guidance. This development plan actively contributes to the sustainable revitalisation of the area.

