

View centrally across site



View south along eastern boundary with River Taff



View north along western boundary towards pylon



3.6 CONSTRAINTS & OPPORTUNITIES

The early identification and analysis of site strengths, weakness, opportunities, and threats (SWOT) has informed the design process, helping capture the full value of site and create a site layout that is sustainable, accessible, and deliverable.

A SWOT analysis is summarised below with key elements graphically presented on page 23.

Refer to Section 6: Planning & Technical for further information on Site Context Analysis.

Strengths

- Sustainably located within an existing residential neighbourhood, accessed off an existing road network.
- Available, allocated brownfield land that could provide much needed housing and positively integrate with the wider Strategic Hoover Regeneration area.
- Close proximity to NCN Route 8 (Taff trail), existing bus stops and railway station facilitate easy access to varied local community facilities, services and employment opportunities.
- Attractively located within a valley setting, with long distance hillside views.

Weaknesses

- Existing HV Pylon and Overhead Cables on site. Potential to be viewed as visual detractor. Numerous water mains and sewers cross the site. Mineshaft located on site. Potential noise from peripheral industrial buildings.
- Protection measures will be required in the form of easement widths or diversions, assessment for the above constraints.
- Poor presence and linkage with river due to the backland nature of the site.
- Due consideration required to ensure existing trees and vegetation are retained/translocated where appropriate and possible.

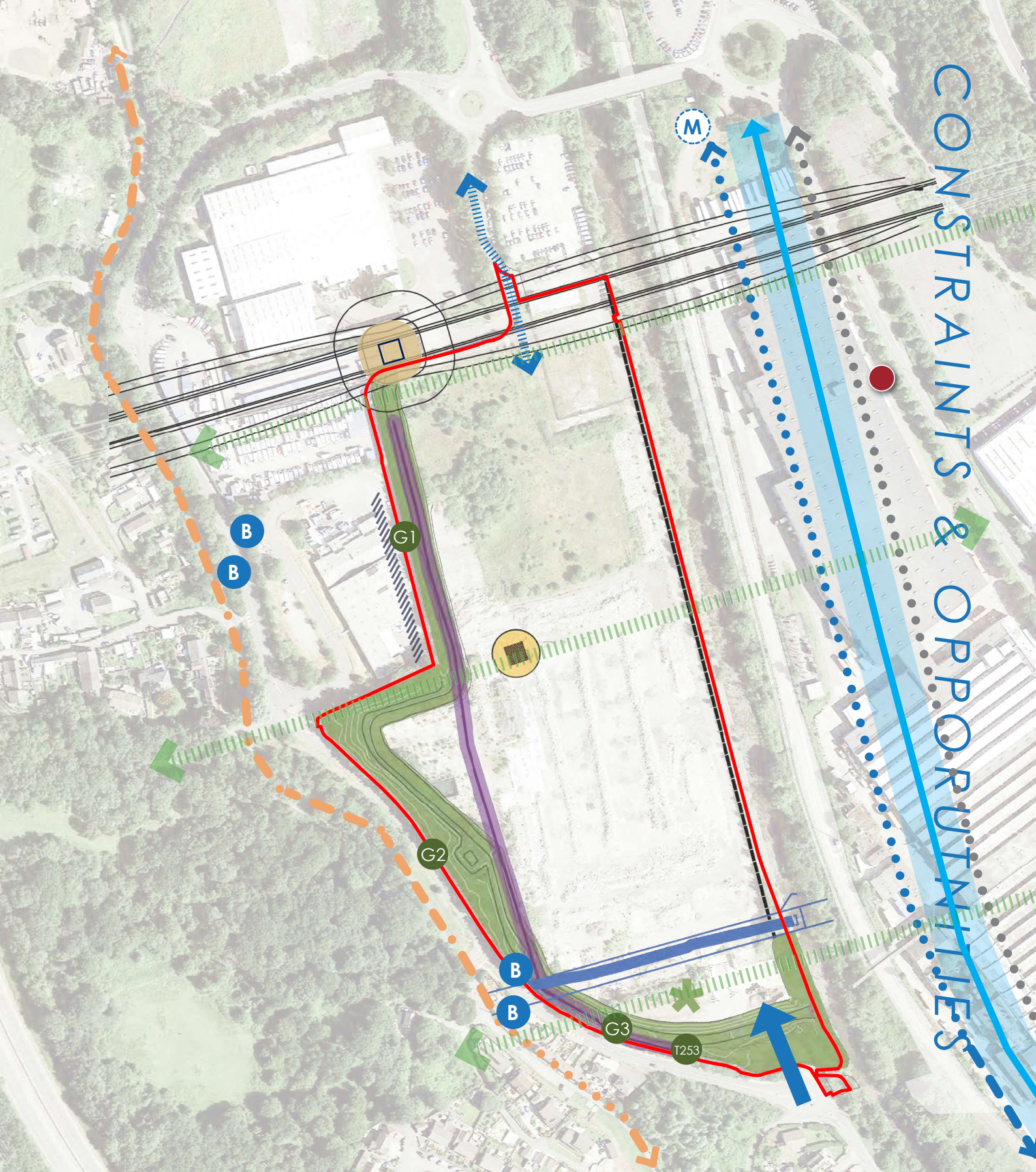
Opportunities

- LDP Policy SW6: Hoover Strategic Regeneration Area (HSRA) identifies the wider area can accommodate a major mixed-use development including residential.
- Potential to use the recently constructed Flood Alleviation Channel as a multifunctional GI corridor benefiting people and nature.
- Enhance the river corridor, providing access along the eastern edge of the site and improving the setting of the development and river.
- Create an open space network incorporating recreational opportunities and natural play provision for use by residents and the existing community.
- Improve links across and through the site for better connectivity between the surrounding streets and community.
- Improve drainage and flood risk by taking off large hard surface areas, creating more permeable surfaces and accommodate SUDS throughout.
- Enhance blue-green infrastructure for people and wildlife and incorporate ecological mitigation and biodiversity enhancement measures into emerging design proposals.
- Deliver high quality homes set within a more sustainable living environment, supporting reductions in waste, and water and energy usage, as well as supporting social cohesion.

Threats

- Soft ground conditions, contamination and underground obstructions from previous use will require remediation / diversion.
- Site levels will need to be raised.
- The site borders Afon Taff SINC 58 which includes areas of bankside habitats.
- Japanese knotweed present along most of the riverbank adjacent to the site.

CONSTRAINTS & OPPORTUNITIES



Development & Infrastructure

-  Existing HV Pylon & OH Cables
-  Combined sewer easement
-  Mineshaft -easement
-  Water main easement
-  Potential noise from factory
-  Wider regeneration of Hoover Site (LDP)

Landscape & Ecology

-  River Taff SINC
-  Existing trees, Flood Alleviation Channel, Future Multifunctional GI corridor
-  Grade B category trees (G1,2,3 & T253)
-  Potential attenuation basin location
-  Potential cross valley GI links

Movement & Access

-  Primary vehicle access
-  Non vehicular access, potential emergency vehicle access
-  Existing bus stop
-  Taff Cycle trail
-  Potential future foot & cycle ATR connection
-  Potential Foot / Cycle Bridge (LDP)
-  Potential future metro station (LDP)

4.1 PLACEMAKING

PRINCIPLES

The five objectives of good design (TAN12) are a set of principle considerations for this development, ensuring the development effectively responds to and assimilates with the local context.

In addition, the DCFW Placemaking Charter identifies six placemaking principles, which are also key guiding factors.

Hammond Architectural Ltd are fully conversant with TAN 12 and are signatories of the Placemaking Charter.

In accordance with the above, a set of site-specific principles and objectives have been developed for the site that support and promote placemaking across Dragon Park.

People & Community:

- Shape proposals in response to the engagement process to ensure the final scheme meets the needs of the future community.
- Provide a range of homes, attractive streets, and spaces to support community interaction and offer experiences that will help foster a sense of belonging and community

Location:

- Connect with existing and proposed infrastructure, supporting existing services and reducing the need to travel.

Mix of Uses

- Efficiently use land, providing a mix of housing types and tenures that suit local requirements and achieve an appropriate density.
- Create spaces where people of all ages can gather around to establish a sense of community.

Movement:

- Maximise active travel connections to existing movement network, helping to reduce car dependency and ensuring sustainable lifestyle are supported.
- Create an attractive and safe residential environment that is safe, easy to navigate and accessible to all, encouraging walking and reducing car dominance and vehicle speeds.

Public Realm & Landscape

- Build resilience through green-blue infrastructure.
- Incorporate generous amounts of multifunctional green corridors and space, connecting into the wider GI network.
- Sustainably manage surface water, promote biodiversity and allow people to come closer to nature, supporting people's well-being.
- Design streets and spaces as social places, adding a sense of playfulness and supporting people's well-being and happiness.

Identity

- Deliver distinctive character areas which create a sense of place.
- Develop a strategy that 'greens' the River Taff corridor and incorporates the sites green-blue boundaries as a distinctive feature, providing attractive open spaces and recreational experiences
- Positively define, front and animate streets and spaces and terminate key vistas with buildings or landscape.
- Reflect the cultural heritage of the site in the design of new development, including reflecting the Hoover Factory frontage in the built form (increased scale, brick) and drawing upon historic built form, and drawing upon historic built forms linear streets and terraced dwellings.

CONCEPT FRAMEWORK

RESIDENTIAL

EMPLOYMENT

GREEN SPACE

RESIDENTIAL COMMUNITY

RESI

FUTURE MIXED USE AREA

B

B

B

M

4.3 CONSULTATION

The Design Team submitted information to Merthyr CBC (LPA) and attended four Pre-App Design Review meetings on 29th March, 12th May, 26th May and 8 September 2022. Planning, SAB and highways officers were in attendance.

The main areas of design development and/or change focused around:

- The design of the central street and the need to reduce the linearity of the route.
- Assessing the design to consider the importance of key buildings, especially terminating vistas.
- To ensure buildings relate to the periphery better.
- Clarity on the strategy for POS, considering the character - informal and linear.
- Setting standards of decreased back-to-back distances and reduced parking levels.
- Rationalising dense areas.
- Consideration of the importance of quality boundary treatments.
- Setting the site entrance.
- Relationship with river.
- Plot specific amendments to improve form and street frontage.
- Ground floor toilet windows a concern generally – changes made where appropriate in most situations
- Canterbury to be drawn as a pair – this has been remedied, as with all house types
- Canterbury roof arrangement not clear – this has been shown more clearly and with some changes
- Harrogate/Hereford – concern over suitability within house type mix – healthy discussion resulted in their inclusion
- Rockfield – windows too small on front elevation – amended to improve
- Windermere – concern over detached unit – changes made to elevations
- Apartments – confusion over elevations and fenestration – clarified in drawings
- Street scenes required – provided within planning pack
- Meter boxes to be shown – now included on all house type drawings – mainly to side elevations unless mid terraced
- Minor changes to site layout as per previous correspondence

A selection of early concept plans is presented right/below, illustrating how the scheme has evolved.

The proposed scheme is presented in Section Five.

Statutory Consultee responses included:

- Trunk Road Agency
- Local Highway Authority
- The Coal Authority
- Natural Resources Body for Wales
- Cadw
- The Canal and River Trust
- Dwr Cymru
- Network Rail
- Fire Safety

4.4 PAC CONSULTATION

A full overview of the feedback received on the proposed development at PAC stage is contained in the PAC report.

Feedback from officers focused on:

- FOG design - elevations rationalised and drive through element shown.

The only design change required occurred as a result of DCWW comments. Plots 1 – 8 and 197 – 200 have been moved slightly northbound to account for the easement.

The NRW comments request a lighting plan which has been instructed and will accompany the planning application.

Two adjoining land owner responses were received which raised no comments relating to design.

DESIGN DEVELOPMENT



Dragon Park | Concept Framework



5.1 THE PROPOSED LAYOUT

Consent is sought for the development of **200 new homes** at Dragon Park. The residential development will comprise a mix of 1-to-5-bedroom homes, including 10% affordable.

A proposed layout has been created, illustrating how the site can be developed in a way that accords with the 'good design' principles. The proposed masterplan is presented on page 29 (see also drawing: Planning layout PL-01). The key features of the proposed development include:

1. Primary Point of Access

Accessed from the south via the roundabout connecting with Stanfield Close.

2. Southern Gateway: A generous area of open space will welcome people into the site from the south. This multifunctional space will retain existing vegetation and create a diversity of new habitats.

3. Community Street: The primary street will meander through the site from south to north. Urban and green in nature, this street will offer a attractive, people friendly environment.

4. Riverside Trail: This landscaped trail will provide an attractive setting to the river corridor and proposed housing, integrate the development into the surrounding community by foot, bike and nature.

5. Channel Park: An extensive recreational wildlife corridor will wrap around the western and southern edge of the site, connecting to the Taff riparian corridor and the wider countryside. This combined flood diversion channel; swale corridor

and service easement will enhance wildlife connectivity around the site and to wider countryside.

6. Central Park: Central Park will traverse the site east-west, connecting Channel Park with the Riverside Trail, Community Street and potential wider cross valley GI links. The space will offer recreational and natural play opportunities.

7. Park Link Streets & Private Drives: A series of lower order streets and private drives will lead off the Community Street providing access to homes and the wider open space and movement network.

8. Northern Gateway: A pedestrian and cycle link cut through the northern boundary of the site, connecting into a local access road and facilitating access to Taff and Trevithick Trails, Rhydycar Leisure Centre and Merthyr Tydfil. This route will also serve as an emergency vehicle access and right of way for Mon Motors.

9. Sustainable Urban Drainage Systems (SUDS): A mix of rain gardens, swales, and water attenuation areas will be integrated across the site.

10. Active Travel Route (ATR) Connections: Foot and cycle path provision will connect to the wider movement network and encourage active travel. An east-west recreational corridor will traverse the boundary, facilitating circular walks.

11. Infrastructure: The proposed development incorporates and adheres to utility easements and no-build zones. The development will include highway, shared surfaces and incorporate new utilities.



Accommodation Schedule					
House Name	Code	Beds	(NIA) ft ²	No of Units	Total Area
Open Market Units					
1 Bed Apartment	APT1	1	545	9	4905
Warwick	WAR	2	681	13	8853
Flat Over Garage	FOG	2	774	2	1548
Baglan	RAG	3	818	15	12270
Ascot	ASC	3	1018	18	18324
Hereford	HER	3	1055	4	4220
Chepstow	CHE	3	1057	28	29596
Rockfield	RDC	3	1024	17	17408
Cottage	COT	3	1040	7	7280
Canterbury	CAN	3	1274	14	17836
Harrogate	HAR	4	1360	4	5440
Radleigh	RAD	4	1534	14	21476
Lynton	LYN	4	1520	15	22800
Windermere	WIN	4	1517	14	21238
Kingsbridge	KNI	5	2043	6	12258
Sub Total				180	205487
Affordable Units					
House/Flat Name	Code	Beds	(NIA) ft ²	No of Units	Total Area
Social Rented Units					
Flats					
1 Bed Apartment	APT2	1	545	9	4905
2.1.1 GF	2.1.1	1	557	2	1114
2.1.1 F	2.1.1	1	624	2	1248
Houses					
4.2.1	4.2.1	2	861	7	6027
Sub Total				20	13294
Total				200	218781

ILLUSTRATIVE MASTERPLAN

5.2 LAND USE & AMOUNT

Dragon Park comprises a mix of uses, comprising a development of 200 homes, an extensive green infrastructure network, a strong walking and cycling network and associated infrastructure.

The Accommodation Schedule below for details on the mix and tenure.

5.3 CHARACTER & PLACE

TAN 12: Design (March 2016) identifies the following Character Objectives:

- Sustaining or enhancing local character;
- Promoting legible development;
- Promoting a successful relationship between public and private space;
- Promoting quality, choice and variety; and
- Promoting innovative design.

The proposed scheme upholds the above character objectives, creating a characterful development that is in keeping with the surrounding area whilst also creating a new place with its own identity.

The site comprises two key character areas:

- **Park Edge** (outer zone): A naturalistic area, sensitively integrating and celebrating the sites existing & new green-blue assets and offering opportunities for doorstep play and community cohesion.
- **Community Core** (Inner Zone): A more compact, diverse urban area, that incorporates a series of leafy green, calmed spaces that encourage social interaction.

Within these areas a series of character spaces are proposed. The following pages illustrate the proposed character of the development, identifying how subtle variations in the design approach will ensure Dragon Park will become an attractive and inclusive place.

Accommodation Schedule					
House Name	Code	Beds	(NIA) ft ²	No of Units	Total Area
Open Market Units					
1 Bed Apartment	APT2	1	545	9	4905
Warwick	WAR	2	697	13	9061
Flat Over Garage	FOG	2	774	2	1548
Raglan	RAG	3	842	15	12630
Ascot	ASC	3	1029	18	18522
Hereford	HER	3	1054	4	4216
Chepstow	CHE	3	1076	30	32280
Rockfield	ROC	3	1076	17	18292
Cottage	COT	3	1076	5	5380
Canterbury	CAN	3	1177	14	16478
Harrowgate	HAR	4	1360	4	5440
Radleigh	RAD	4	1387	15	20805
Lynton	LYN	4	1522	14	21308
Windermere	WIN	4	1425	14	19950
Knightsbridge	KNI	5	1873	6	11238
Sub Total				180	202053

Affordable Units					
House/Flat Name	Code	Beds	(NIA) ft ²	No of Units	Total Area
Social Rented Units					
Flats					
1 Bed Apartment	APT2	1	545	9	4905
2.1.1 GF	2.1.1	1	541	2	1082
2.1.1 FF	2.1.1	1	608	2	1216
House					
4.2.1	4.2.1	2	912	7	6384
Sub Total				20	13587
Total				200	215640



SOUTHERN GATEWAY & CHANNEL PARK DESIGN PRINCIPLES

The **Southern Gateway** to Dragon park will be naturalistic in character, wrapped by existing boundary trees and vegetation.

Rain gardens will be planted within and around the site roundabout, creating a welcoming entrance. A mix of trees, hedges and wildflower grassland will provide diversity of habitats.

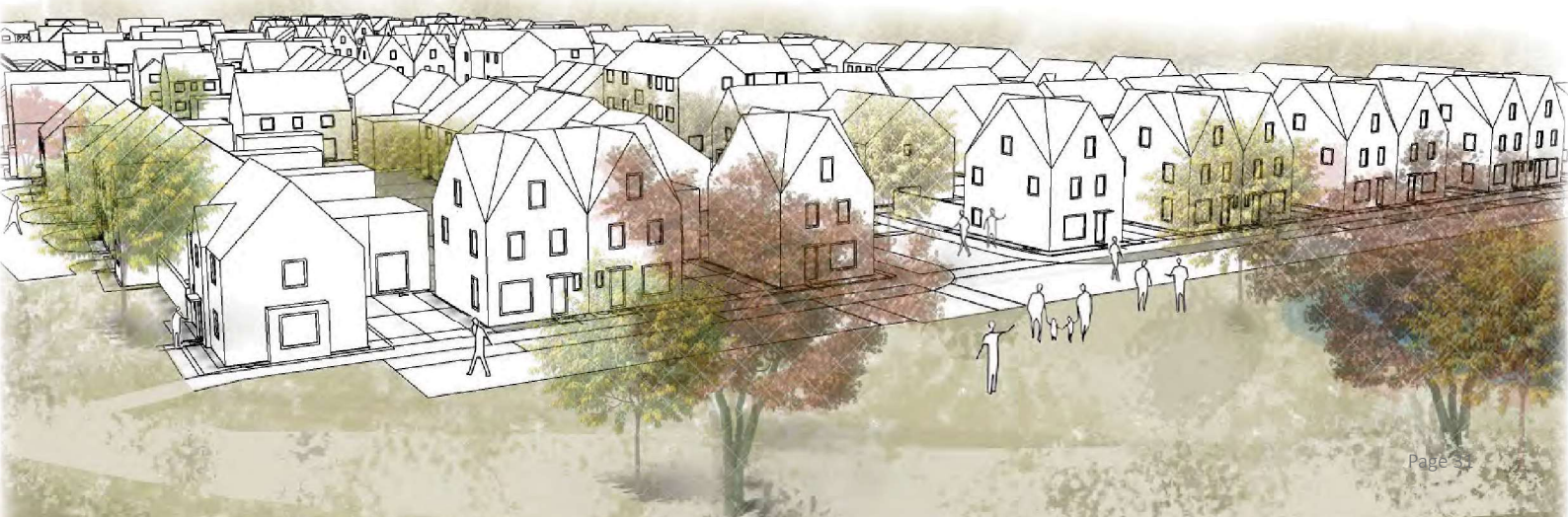
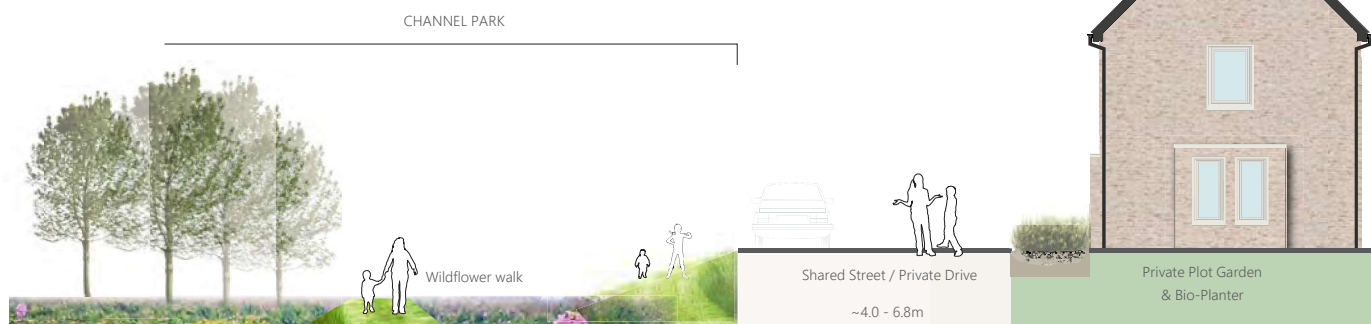
A large attenuation basin will form a centrepiece to the space. A sunken section will hold permanent water (1m deep in centre) providing valuable wetland habitat. Banks with varying naturalistic gradients will improve aesthetics, biodiversity and facilitate climbing out. The space will also act as a receptor site for translocated marshy grassland.

Extending out from the Southern Gateway, **Channel Park** will form a recreational wildlife corridor wrapping around the western edge of the site and connecting to the Taff riparian corridor and the wider countryside.

This multifunctional channel incorporates a combined service easement and wildflower swale corridor.

New woodland edge planting will soften views of the development from the west, and improve connectivity for bats and other wildlife species.

A wildflower mown grassland footpath will meander along the bottom of the channel, supporting recreational use. The space will be creatively designed to incorporate playful features.





RIVERSIDE TRAIL DESIGN PRINCIPLES

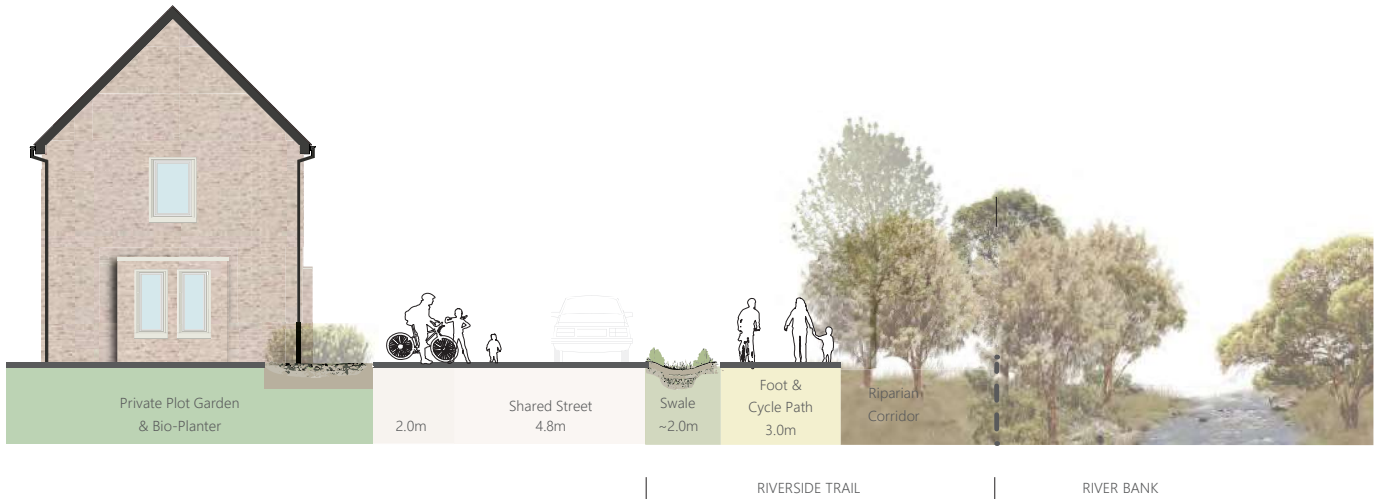
An extensive **Riverside Trail** is proposed along the length of the eastern boundary of the site.

The landscaped trail will provide an attractive setting to the River Taff corridor and proposed housing, integrating the development into the surrounding community by foot and bike.

The design of this route will celebrate the River Taff as a distinctive feature.

To help bring the sense of the river into the setting, the route will retain and extend the riparian vegetation where possible and incorporate a meandering foot/cycle path and linear swale features. The route will open-up at key intervals to help filter the natural edge into the development.

Sculptural waymarkers and playful, naturalistic landscape design will create an inviting, accessible and pedestrian-friendly experience for residents and the wider community to enjoy.



CENTRAL PARK DESIGN PRINCIPLES

A **Central Park** will traverse the site east to west, connecting Channel Park with the Community Street and Riverside Trail and linking into potential cross valley Green Infrastructure corridors.

This multifunctional space will be naturalistic in character, supporting recreational use and inviting doorstep play.

The space will connect to a future footpath and cycle link, encouraging healthy travel to school and work.

The existing stripped calcareous grassland will be used to develop new wildflower areas.

Swales will border the space and combine with planting. Small trees will preclude undue shade and allow pollinator species to thrive.





COMMUNITY STREET DESIGN PRINCIPLES

The **Community Street** will act as the primary north-south movement route through the site connecting into the wider neighbourhood.

A consistent and clear streetscape design will help create a people friendly environment that will be convenient and easy to navigate.

Changes in street design and surface treatments at entrances and crossing points will encourage walking, aid legibility and wayfinding, and help reduce vehicle speeds,

The route will be structured and defined by a linear arrangement of formal rain gardens, bio-planters and structural landscape.

Buildings will create active frontages to the street, contributing to a community's sense of place and offering natural surveillance.

Together the natural and built form will create the 'feeling of a living street' that offers both social and environmental benefits.



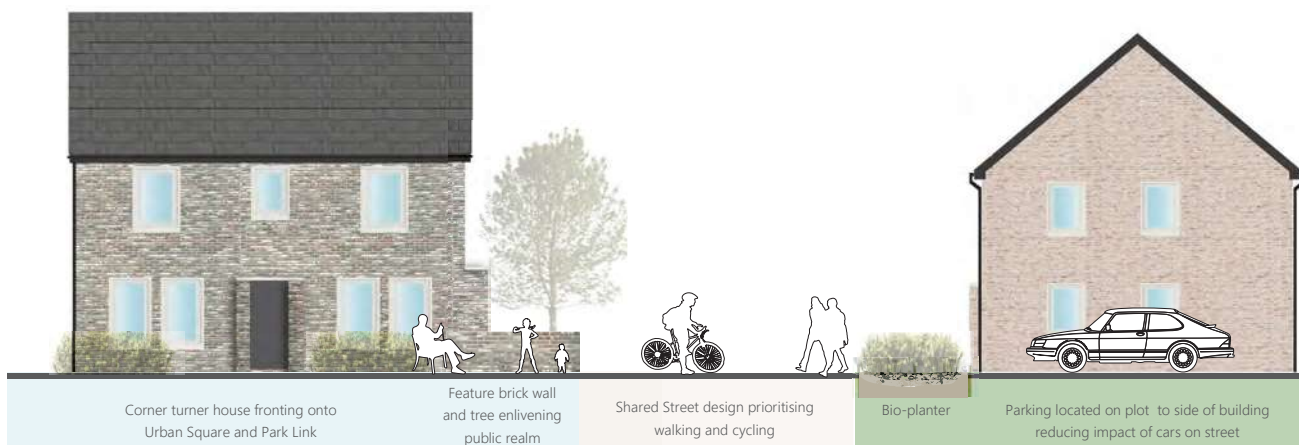
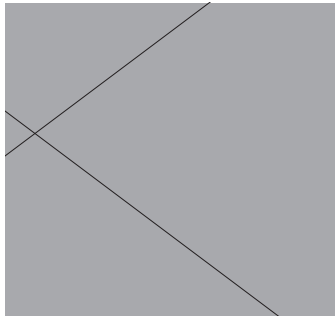
UPLIFT AREAS DESIGN PRINCIPLES

Along the **Community Street** a series a series of small, incidental uplift areas, including **Urban Squares** and **Focal Spaces** are incorporated.

Building elevations onto these spaces will be strong, with corner buildings designed to offers a higher level of enclosure and surveillance of the public realm.

Occasional uplifts in scale to 3 storeys will help create a denser, more urban feel, and aid legibility and wayfinding.

Careful treatment of architectural, landscape and public realm design will help create a distinct sense of place.



5.4 ACCESS & MOVEMENT

Access

In order to access the development, it is proposed to utilise and enhance the existing accesses to the site from the unnamed roads to the north and south of the development (see figure on page 37).

The main access, suitable for all modes, will be via Stanfield Close roundabout, to the south.

A pedestrian, cycle and emergency access is proposed to the north connecting to the The Willows roundabout.

It is anticipated that the two vehicular accesses to the site will also provide access for pedestrians and cyclists. It is also proposed to provide an additional pedestrian (and cyclist) connection along the western edge of the site boundary, and its location is shown in Figure 4.1 above.

The scheme allows for a potential future pedestrian and cycle access point to the north-east, via an extension to the Riverside Trail. This connection could facilitate circulate recreational walks around the River Taff.

Sustainable Modes of Travel

The site is highly accessible by walking and or cycling, offering sustainable healthy travel choices and reducing reliance on the private car.

A range of appropriate, safe and sustainable links are proposed, including an active travel connection along the River Taff that can connect in to the wider PROW/ATR network and existing bus stops.

Pedestrian footpaths are proposed on both sides of the carriageway throughout the development site, with the exception of those arranged as shared surface roads.

Areas of shared surface will encourage lower vehicle speeds and promote social interaction by creating an environment in which pedestrians can walk, or stop and chat. Within these spaces, safe walking routes will be demarcated.

Cycle parking will be provided in accordance with the adopted standards with cycle access and storage being a factor of dwelling design, for the residential element of the site.

Inclusive Design

The development will be convenient and enjoyable to use for everyone. Spaces will be created that encourage people to meet and interact with each other, helping to address issues surrounding loneliness.

The public realm will be sensitively designed to meet the peoples varied needs, such as sensory, memory, learning and mobility impairments.

Strong pedestrian, cycle and public transport connectivity will enable easy access to services and employment without reliance on a private car.

Parking Provision

In agreement with the Local Planning Authority during pre-application discussions, an appropriate level of on plot or courtyard car parking is integrated across the development.

Careful consideration has been given to where and how cars will be parked to ensure a high quality of a place.

Spaces are overlooked by surrounding properties, providing natural surveillance.

Deliveries & Servicing

It is anticipated that all servicing and deliveries will be undertaken from within the internal road layout.

Residential refuse will be collected on-street with residents placing their refuse on the kerbside on the allotted collection day.

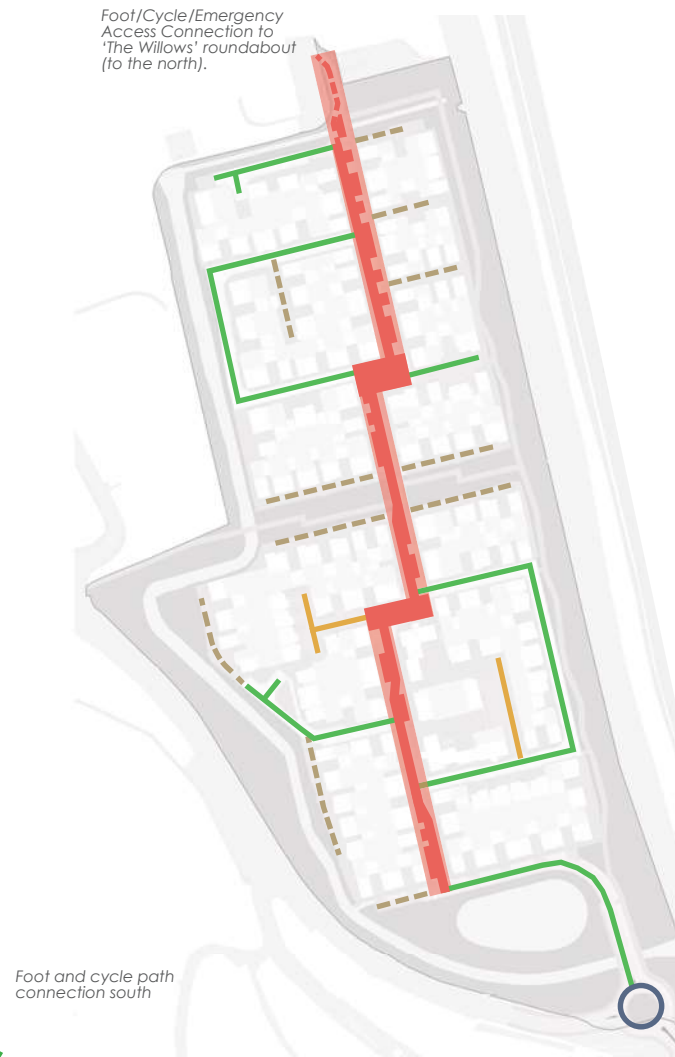
Refuse storage points have been provided at the private driveways, within easy walking distance for both residents and refuse operatives.

For apartments conveniently located, communal bin stores are proposed. Refuse will be collected from these points on collection day.

Active Travel Routes



Street Hierarchy



- Foot / Cycle path (3m)
- Footpath (2m)
- Shared surface with safe walking route (2m)
- Private Drive
- - - Informal mown footpath
- ➔ Foot / Cycle path connection
- ➔ Footpath connection
- POS Access/Connection
- B Bus stop

- Community Street
- Park Link
- Inner Court
- - - Private Drive

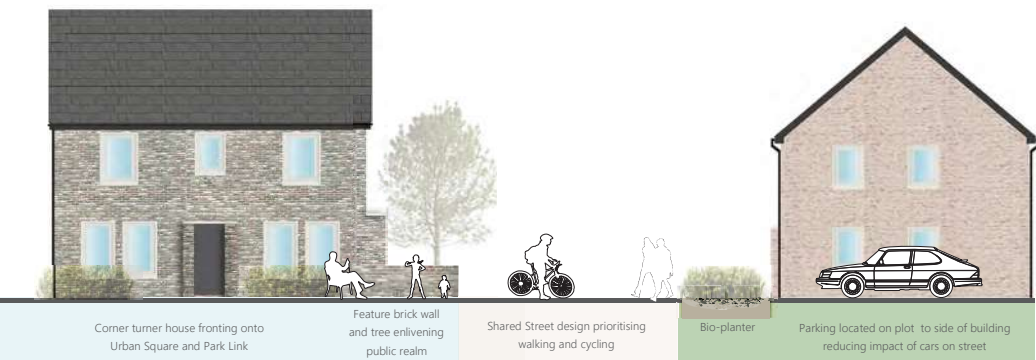
STREET DESIGN MATRIX

STREET TYPE	COMMUNITY STREET	INNER COURT	PARK LINK	PRIVATE DRIVE
CHARACTER AREA	Community Core	Community Core	- Community Core - Park Edge	- Community Core - Park Edge
STREET HIERARCHY	Primary Street - Local Access	Tertiary Street	Secondary Street	Private
STREET DESIGN	- Circa 5.5m carriageway. - Landscape verge. - Occasional build outs/ cross overs can be accommodated to help calm traffic, aid pedestrian movements and accommodate landscape. - Min 2.0m footpath on both sides of carriageway.	- Circa 6.8m shared surface design with demarcated 2.0m safe walking zone. - Occasional build outs/ cross overs introduced to help calm traffic, aid pedestrian movements / accommodate landscape.		- Min 3.8m shared surface design. - Occasional cross overs introduced to help calm traffic, aid pedestrian movements.
PUBLIC REALM & SUDS	- Rain gardens (circa 3.0m wide). - Street trees to be incorporated within verge / build outs where possible. - Combination of asphalt, block paving and private plot pervious paving.	- Street trees / landscape zones to be incorporated where possible. - Asphalt and/or block paving. - Private plot pervious paving. - Adoptable pervious paving shared drives. - Swale located within POS.		asphalt and/or block paving.
FRONTAGE DESIGN	- Varied landscape setback (circa 0.5m to 3.0m) incorporating on plot landscape and/or private bio-planter. - Hard boundary treatments to define key arrival / focal spaces.	- Varied landscape setback (circa 0.5m to 3.0m) incorporating on plot landscape and/or private bio-planter. - Soft landscape boundary (low hedge/planting)		
TOWNSCAPE / BUILT FORM	- Formal, more regular in form. - Typically 2 storey homes, rising to 3 storey in key locations. - Diverse mix of apartments, FOGs, terraces, semi-detached and detached units to increase density, strong building line and sense of rhythm to the street scene. - Buildings to unified in street scene by common building material (multi grey tones) and architectural detailing.		- Formal, regular form softening towards outer edge. - Typically 2 storey detached and semi-detached units. - Buildings unified in street scene by common building material (rustic brown tones) and architectural detailing.	
PARKING	- Parking on plot to side / rear. - Detached garages set behind the building line. - Rear parking courts.		- Parking on plot to side / rear. - Detached garages set behind the building line.	

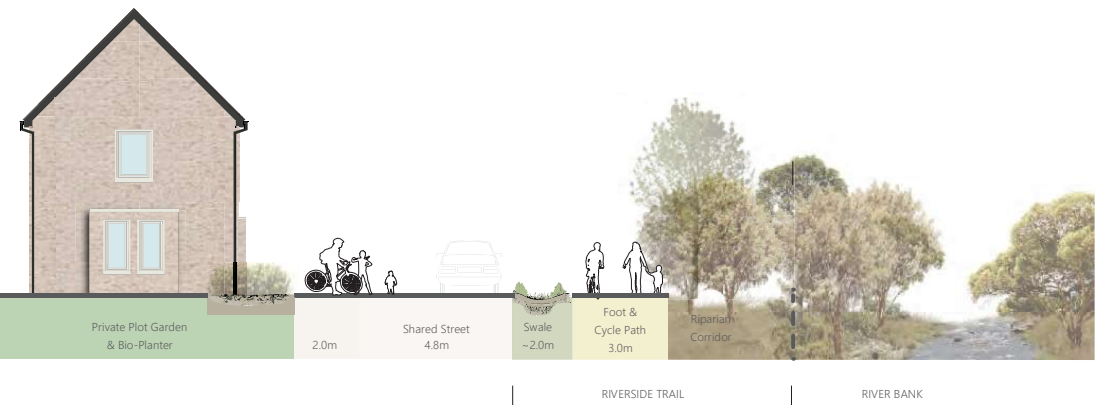
COMMUNITY STREET



PARK LINK



PARK EDGE: RIVERSIDE TRAIL



PARK EDGE: CHANNEL PARK

