



## Channel View Regeneration Project

### **Design & Access Statement**

April 2021



# Preface

This Design and Access Statement has been prepared by Powell Dobson Architects and its design team on behalf of Cardiff Council. The vision and desire for the regeneration of Channel View Estate is to create a recognisable, legible, desirable place to live and visit. Channel View can become a place with a clear identity in terms of urban design concept and architectural language, and a benchmark for high quality design and placemaking.

It can become an accessible and well-connected to the wider city through new and improved green infrastructure networks and safe pedestrian and cycle routes between communities.

We can create a greener, more sustainable neighbourhood focused around a series of high quality community spaces encouraging incidental, social interaction through a variety of different uses for the benefit of the whole community – new and existing. Providing ‘living streets’ creating life between buildings. And we can create contemporary, sustainable, desirable homes that are designed to improve well-being through access to green spaces and nature, with layouts have the flexibility to adapt to the changing pattern of family living. This document sets out our vision, summarises the opportunities and constraints of the site, and identifies the key structuring elements and how they have developed into the proposals submitted as part of the application.

The document supports a hybrid application for outline planning permission for residential and mixed use development at Channel View Estate, Cardiff and full planning permission for Phase 1, set out within the document and application material.

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# Site Location

# 1. Site Location

Channel View Estate is located the South-West of the city of Cardiff, in the suburb of Grangetown. Grangetown is one of the largest suburbs of Cardiff, which was originally developed as one of the 'five towns of Cardiff' in the mid-19th Century having previously been an area of marshy farmland. Grangetown developed after 1850, the year Penarth Road and the bridges over the River Taff and River Ely were constructed, linking Cardiff to the north east with Penarth to the south west.

The specific site of Channel View Estate and the adjoining Marl Park are located within the heart of Grangetown, which itself occupies a prominent position on Cardiff Bay, to the west. Whilst the neighboring districts and former industrial fringes of Grangetown have seen significant development, the core of Grangetown has not seen major intervention since the original terraced streets were constructed in the latter half of the 19th Century. Channel View Road and South Clive Street were constructed in the middle of the 20th century, with Channel View Estate starting being developed in the 1970's.



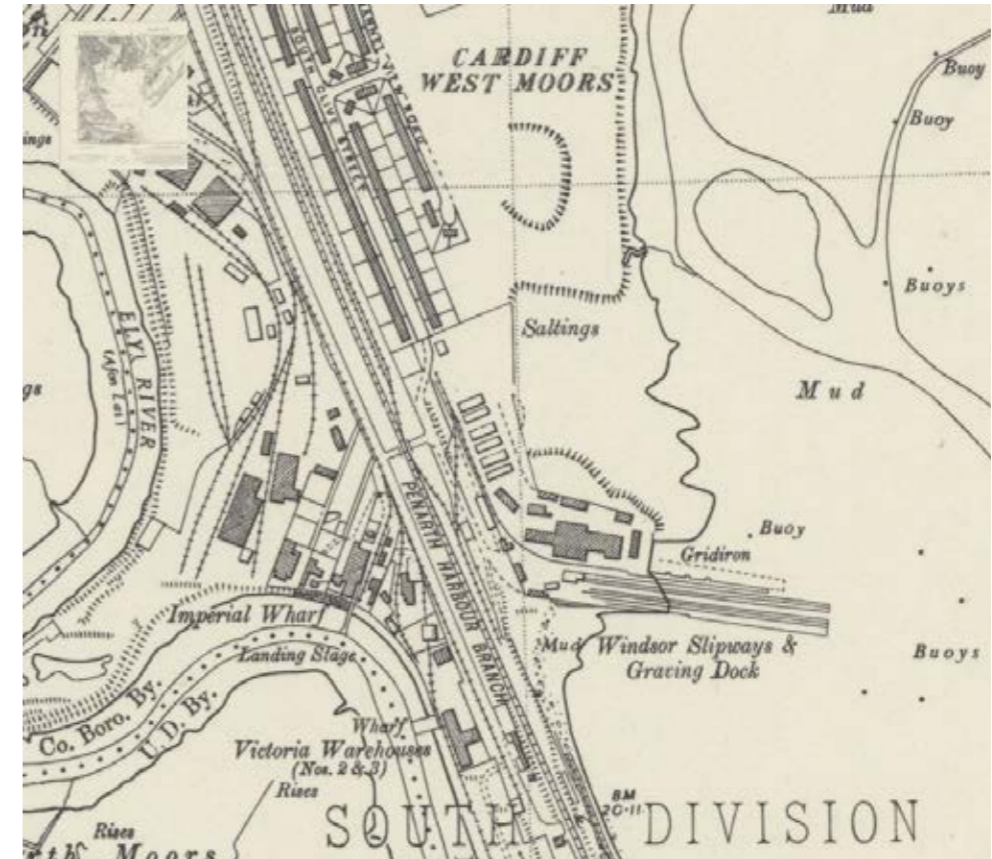
Map - 1899



Map - 1922



Map - 1947



Map - 1949

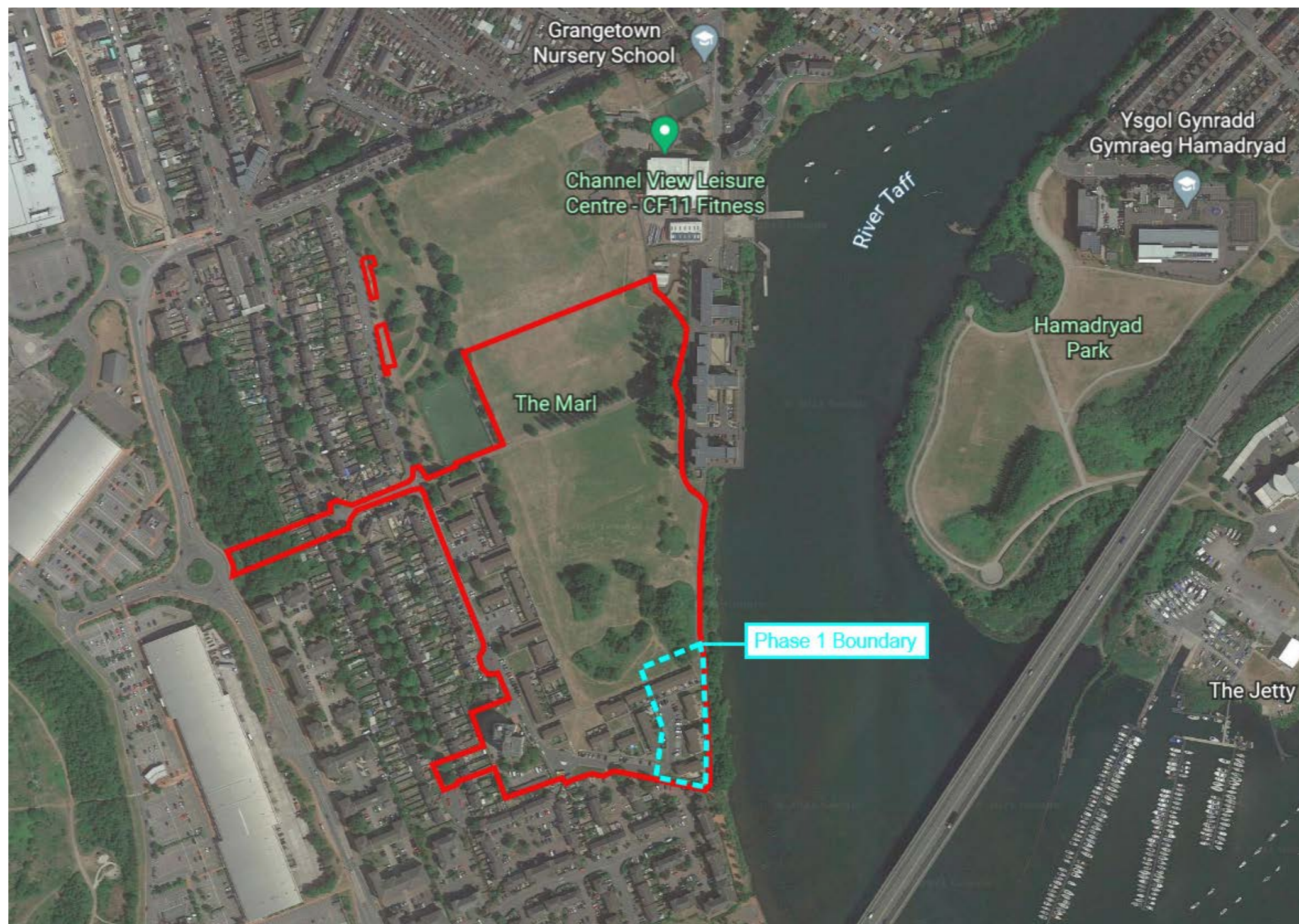
To the North of the site lies part of the Marl Park, containing the majority of the playing pitches, including a 3G artificial pitch directly adjacent to the site, abutting Channel view road, from where the main access is taken. Further North is Ferry Road, one of the main highway arteries in Grangetown, connecting the city center to the East via the A4119 Clarence Road bridge, to the Cardiff Bay retail parks to the West and beyond to the A4232 Grangetown Link Road, serving the South and the West of the city, connecting to the M4 corridor.

The east of the site is characterised by the close relationship to the River Taff, with the Taff trail path running parallel between the river and the development edge. On the opposite bank of the river is Hamadryad Park, which is another large open recreational green space in the City. Further to the East is the Cardiff Bay Link Road Fly, linking the Bay to Penarth.

To south of the site are the relatively new developments of Winsor Quay, and Prospect Place. Whilst these are close in proximity, the poor connectivity results in these communities feeling quite distant.

The west of the site is characterised by the existing properties on Channel View Road and South Clive Street, which are an important setting and provide immediate context to the new proposals. Further west are the more recent housing developments along Ferry Road and a retail park, providing a range of local services and facilities.

The detailed application area of Phase 1 is located on the South of the site, taking the most prominent location overlooking the river Taff estuary, feeding Cardiff Bay beyond.





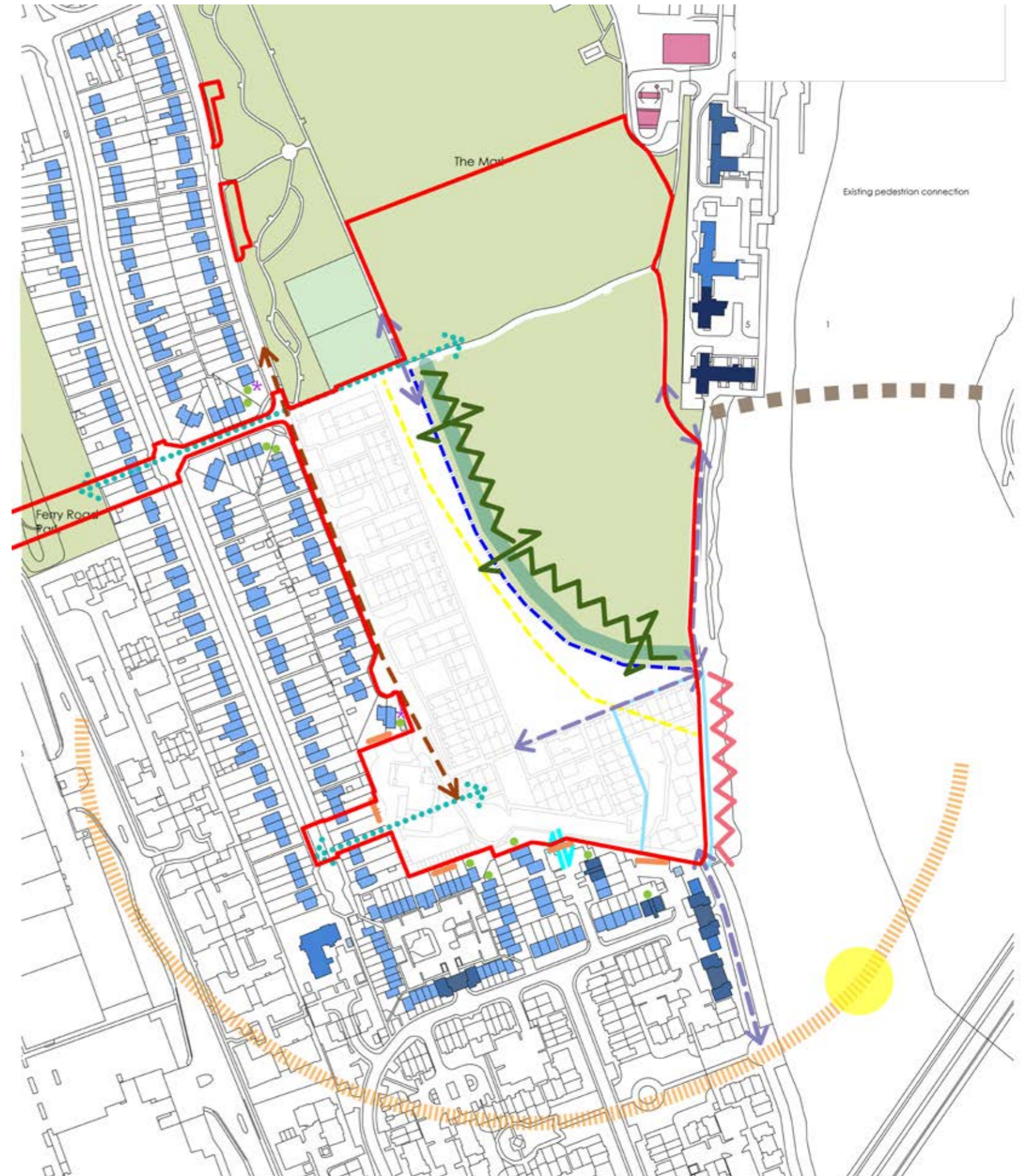




# Site Analysis

## 2.1 Constraints and Opportunities

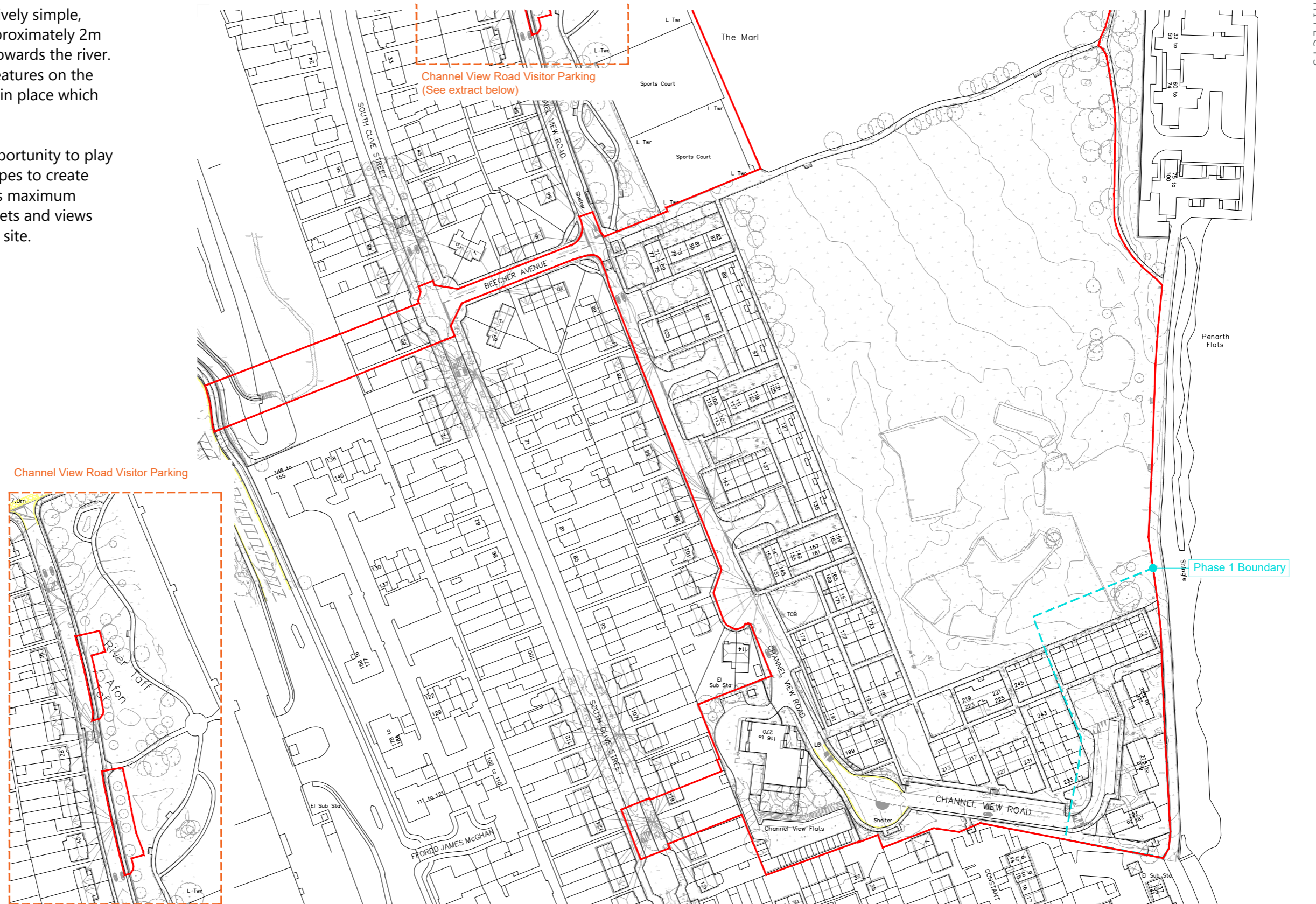
A thorough investigation and appraisal of the site has been undertaken which has identified existing constraints as well as the opportunities and principles for the successful development of the site and adjoining land within the allocation. The plan opposite illustrates the key opportunities and constraints that have influenced the development of the masterplanning proposals.



## 2.2 Topography

The topography of the site is relatively simple, being mostly flat, with a fall of approximately 2m across the site from west to east towards the river. There are however existing built features on the site, where retaining elements are in place which will need to be addressed.

The flat topography allows the opportunity to play with building heights and roof scapes to create an artificial topography that allows maximum potential to exploit the natural assets and views located within and adjacent to the site.



## 2.3 Landscape and Ecology

### Features of the site

The site can be divided into 4 site character zones, which are described below, also refer to Figure LA.05 site context plan:

- **Site Character Zone 1: Channel View tower block** - The main feature of the zone is the 14 storey tower block in the southwest of the site, which is viewed from the surrounding townscape extending above existing features. The appearance of the tower block could be considered typical of the circa 1960s tower blocks with exposed concrete broken up by sections of brick. Surrounding the tower block is associated hard landscape, parking areas and garages to the south, and maintained amenity grass with scattered semi-mature ornamental trees.
- **Site Character Zone 2: Radburn housing layout** - In the west and south of the site is residential housing consisting of 2 storey redbrick terraces with low pitched roofs set out in a rigid geometric pattern. The houses are backed on to the Marl with the front of the properties orientated towards car parking areas or small areas of public open space comprised of amenity grass with occasional trees. Straight footpaths connect the housing, car parking areas, and public open spaces with a straight footpath around the perimeter of The Marl.
- **Site Character Zone 3: The Marl park** - In the eastern half of the site is the southern half of The Marl public open space, which is comprised of amenity grass with a rugby pitch, tree and vegetation groups in the south, and an informal footpath around the perimeter. Adjacent to the east of the park is the Cardiff Bay Trail along the River Taff.
- **Site Character Zone 4: Residential roads** - In the most west extent of the site are the residential roads consisting of part of Channel View Road, Beecher Avenue, and small sections of South Clive Street that includes some properties. The roads are lined by 2 storey post-war properties with small front gardens. South Clive Street is also lined by mature trees. The east side of Channel View Road is adjacent to the north part of The Marl and the Radburn housing layout to the south.

### Ecology

The site and its context have been surveyed during 2020 in accordance with the categories specified for a Phase 1 Habitat Survey (Joint Nature Conservation Committee, 2010). Existing habitats within the site are primarily urban with little or no natural habitat. The River Taff is assessed as of County importance as a Site of Importance for Nature Conservation (SINC). Other features such as the small woodland at Ferry Road Park, plantations, scrub and parkland and street trees are of Local importance. Collectively the gardens are assessed as of Local importance and are a Cardiff LBAP habitat. The amenity grassland, unimproved neutral grassland, swamp and hardstanding are of negligible importance.

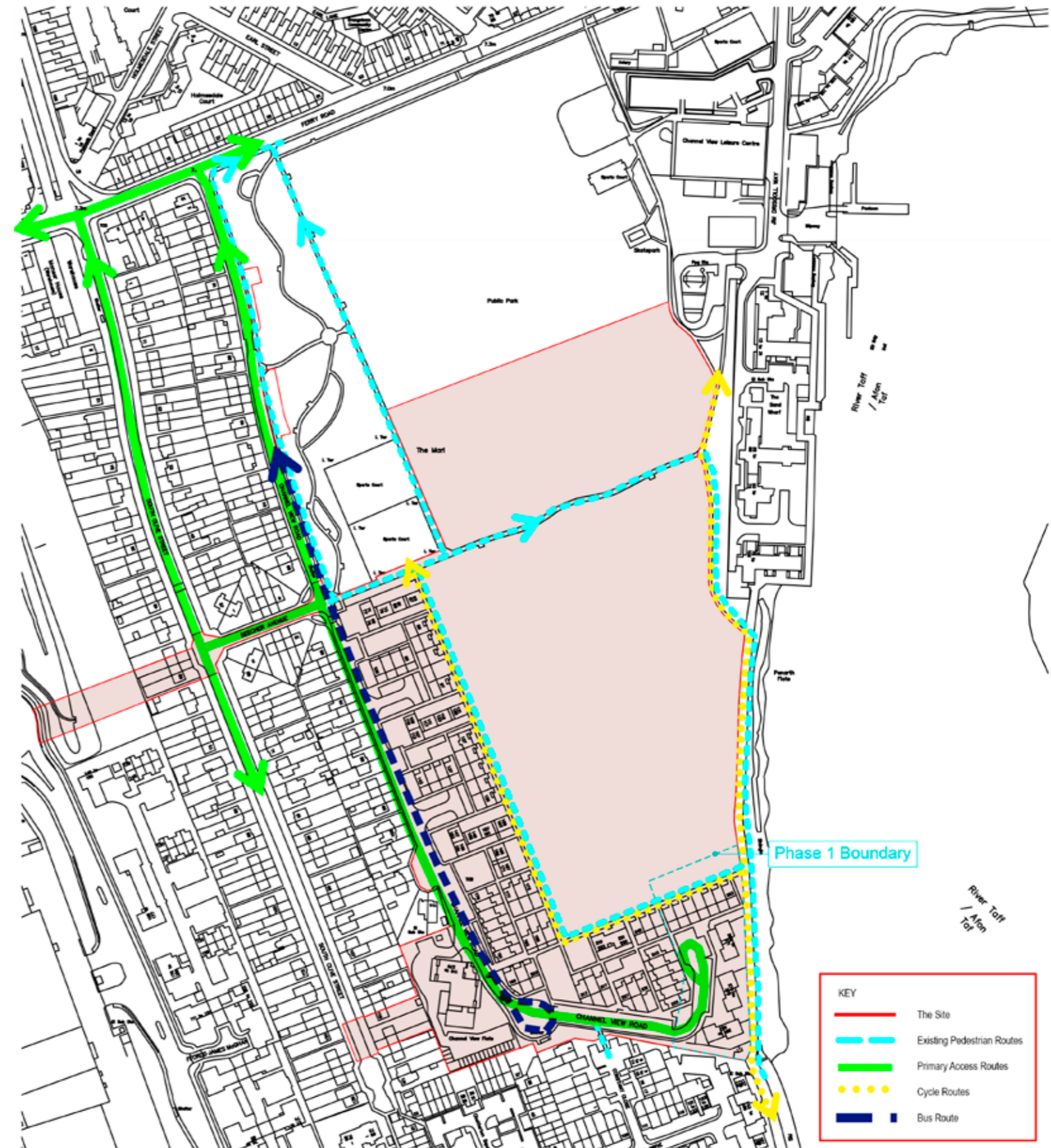
The potential for Protected & Notable Species has been identified during the Phase 1 Habitat Survey. Further detailed surveys have been carried out for bats where properties offered a higher suitability for roosting during summer months. Measures are proposed within the development proposals to mitigate the potential effects on Protected & Notable Species.



## 2.4 Access and Movement

Access to the site is currently at the intersection between Channel View Road and Beecher Avenue. The main vehicular access is taken from Channel View Road, which is served by a local bus service. Access can also be taken via Beecher Avenue onto South Clive Street, providing an alternative route to Ferry Road, which is the main highway route in the area. There are no other vehicular connections into or out of the site, resulting in effectively a large cul-de-sac arrangement serving Channel View Estate itself.

There are a few pedestrian and cycle connections to neighbouring developments, however these are poorly laid out and lit, providing insecure and venerable points, which have been subject to antisocial behaviour over the years.



## 2.5 Other Considerations

Archaeology & Cultural Heritage.

On the banks of the river, directly adjacent to the development and the Marl lies the shipwreck of the Louisa, a timber and iron ship which operated during the latter half of the 19th century transporting Canadian timber to Britain until she sank at the mouth of the Taff where it runs into the bay. It was permanently submerged by the impoundment of the Cardiff Bay Barrage in 2001 and was declared a Scheduled Ancient Monument.

## 2.6 Policy context

The planning policy framework for the determination of this application is provided by the content and scope of National Planning Policy, which is contained within the tenth edition of Planning Policy Wales (PPW) 2018 and its associated Technical Advice Notes (TANs), together with the Local Planning Policy and its supplementary planning guidance.

A summary of the relevant national and local policy is included below. For a full review of pertinent policies, please refer to the accompanying Planning Statement.

### Planning Policy Wales

National planning policy is contained within the Ninth edition of Planning Policy Wales (PPW), published by the Welsh Government in December 2018. PPW is supported by 24 topic-based Technical Advice Notes (TANs), which are also relevant. PPW is the Welsh Government's principal planning policy document, setting out the context for sustainable land use planning policy, within which Development Plans are prepared and development control decisions are taken.

### Technical Advice Notes

This application has been prepared in deference to the latest version of TAN 12 (Design), which was updated in March 2016, and the suitability of the proposals in this design context are demonstrated in this Design and Access Statement. TAN 18: Transport has also been considered in the preparations of this application.

### Local Development Plan

Section 38(6) of the Planning and Compulsory Purchase Act 2004 requires that planning application decisions should be made in accordance with the development plan unless material considerations indicate otherwise. The statutory development plan for this site is provided in the Cardiff Local Development Plan (2006 - 2026). The LDPs Vision is:

"By 2020...Cardiff will be a world class European capital city with an exceptional quality of life and at the heart of a thriving city-region".

The LDP has agreed seven strategic outcomes that, if achieved would represent ultimate success and the realisation of the vision. The outcomes are that:

- People in Cardiff are healthy;
- People in Cardiff have a clean, attractive and sustainable environment;
- People in Cardiff are safe and feel safe;
- Cardiff has a thriving and prosperous economy;
- People in Cardiff achieve their full potential;
- Cardiff is a great place to live work and play; and
- Cardiff is a fair, just and inclusive society.

A list of the key strategic policies relevant to this development are contained within the adjacent table :

### Supplementary Planning Guidance (SPG)

The following SPG documents are considered to be relevant in the consideration of this application:

Archaeology and ACS Areas SPG  
 Cardiff Residential Design Guide – January 2017 SPG  
 Ecology & Biodiversity Technical Guidance Note  
 Green Infra Structure SPG and supporting TGNs November 2018  
 Managing Transportation Impacts SPG – January 2017  
 Managing Transportation Impacts SPG – July 2018  
 Planning for Health and Wellbeing SPG – November 2017  
 Soils And Development Technical Guidance Note  
 Trees And Development Technical Guidance Note - Nov 2018  
 Waste Collection and Storage Facilities SPG – October 2016

Strategic Policies	
KP 1	Level of Growth
KP 2	Strategic Sites
KP 3 (B)	Settlement Boundaries
KP 4	Masterplanning Approach
KP 5	Good Quality and Sustainable Design
KP 6	New Infrastructure
KP 7	Planning Obligations
KP 8	Sustainable Transport
KP 12	Waste
KP 13	Responding to Evidenced Social Needs
KP 14	Healthy Living
KP 15	Climate Change
KP 16	Green Infrastructure
KP 17	Affordable Housing
KP 18	Natural Resources
H3	Affordable Housing
EN 3	Landscape Protection
EN 6	Ecological Networks and Features of Importance for Biodiversity
EN 7	Priority Habitats and Species
EN 8	Hedgerows and Trees
EN 9	Conservation of the Historic Environment
EN 10	Water Sensitive Design
EN 12	Renewable Energy and Low Carbon Technologies
EN 13	Air, Noise, Light Pollution and Land Contamination
T 1	Walking and Cycling
T 5	Managing Transport Impacts
C 5	Provision for open space, outdoor recreation, children's play and sport
C 6	Health
C 7	Planning for Schools

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# 3 Masterplan Framework & Placemaking Vision

# 3.1 Vision

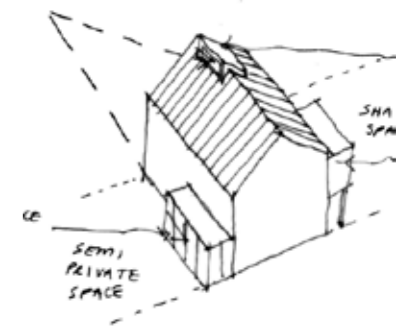
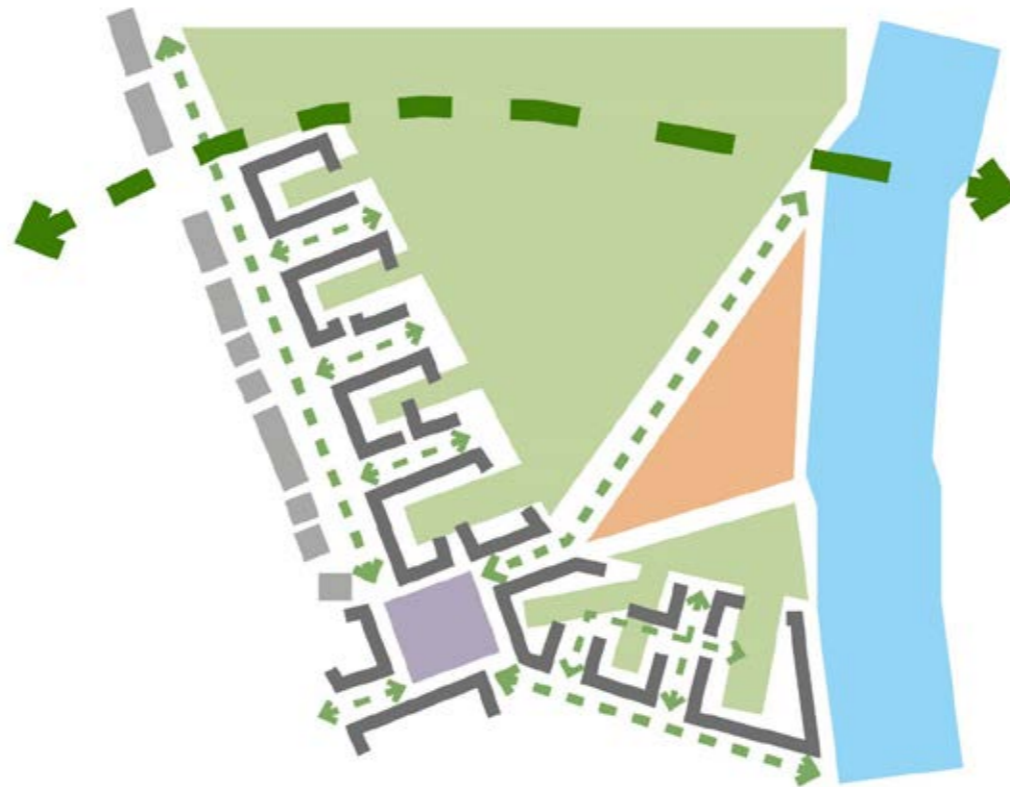
## To Build on Key principles of Existing Masterplans:

- Widening of Channel view – creation of an “avenue” to structure development
- Creation of a “destination piece” of public realm to orientate the development
- Creating key connections between Channel View Road and The Marl – secondary streets
- Density/scale near river edge
- New footbridge to link The Marl and Hamadryad Park



## To Strengthen these Foundation Principles with 4 Themes of Our Vision:

- **Urban Green Connectivity** – wider green infrastructure network linking the city and connect the 3 parks: Grangemoor, Heol Ferry and Hamadryad.
- **Identity** – the “greening” of Channel View to improve the estate’s connection with The Marl.
- **“Living Streets”** – life between buildings to create a greener more sustainable neighbourhood
- **Sustainable, Flexible and Biophilic Living** – a “place” to foster a healthy, balanced and cohesive community



## 3.2 Masterplan Structuring Elements

The Masterplan has been developed around a number of structuring elements that help provide distinct character, legibility, and identity in order to ensure a real sense of place. Each of these structuring elements is explained in more detail in the following sections.



### Main street: Avenue

The continuation and redevelopment of Channel View Road as a tree lined 'avenue' to structure the development.

The widening of Channel view from Ferry Road to our site, by utilising the tree lined edge of the park as a new verge with a new footpath/cycleway along side it.

New formalised visitor parking for the park and pitches provides an improved outlook for existing residents and creates a gateway to mark the approach to this new neighbourhood.

Within our site verges to both sides of the formal avenue create an improved outlook for existing residents, and a high quality setting for the new homes with opportunities for rain gardens, swales, and structure planting



### Main Square

A new square creates a sense of place deep within the site

Formed at the junction of the Main Avenue, a new connection to South Clive Street, the route out to the destination space within the Marl and the improved pedestrian connection into Windsor Quay to the South.

Opportunities for increased scale around this square as a transition between Channel View road, the Main avenue, and the River Frontage to the West.



### Housing Squares

Creation of housing squares designed around private shared community green spaces focusing on biophilic design, incorporating growing space and play for residents only, pulling The Marl, and its influence through the development.

These development parcels front both the Main Avenue and the park, and are accessed from the secondary shared surface streets.

They are designed to accommodate a range of housing typologies, including houses, flats, and hybrid blocks to allow flexibility in future phases Through the housing squares typology the masterplan is flexible enough to accommodate a number of mix options.

Each square has the potential to be explored around a different theme, in both architecture and landscape character adding richness to the street scene and supporting the creation of a distinct new neighbourhood.



### River Frontage

The location for phase 1, the replacement for the tower block. Increased scale, creates a landmark feature of this edge, highly visible from around the area and the wider Bay

Make the most of river views by setting the liner edge of the blocks back from the river edge maximising the number of new homes that have a river views,

Opportunity for striking, distinct, architecture

Potential for commercial ground floor uses here adjacent to the park, the Cardiff Bay trail and the new footbridge across the river.



### Green Infrastructure

Urban green connectivity will create a Green Infrastructure network with a landscape strategy for 'Living Streets' focused on SuDS features: amenity value, drainage, biodiversity.

Create a new focus within the Marl as high quality City Park and the setting for the regeneration of Channel View.

Street trees to green' the arrival and create a strong landscape character to the Main Avenue. Principle and incidental public open spaces contribute to legibility and character along this main route through the site

Introduce a series of community green spaces within the housing squares focusing on biophilic design incorporating growing space and play for residents only.

The grain of the proposed development extends through the 'The Marl', 'pulling' the green space and its influence through the development.



### City Wide Connectivity

Create a Green Infrastructure Framework to link Channel View to its wider surrounding communities with new pedestrian and cycle links.

A new East-West pedestrian and cycle link connects 3 parks: Grangemoor, Heol Ferry and Hamadryad, to the Marl and provides a green route between the Taff and Ely Trails

Allow space for the integration of a new footbridge connection across the river to create safe pedestrian and cycle routes between communities on both sides of the river and Cardiff Bay beyond

Provide a new bus route connection from Channel View road to South Clive Street

Provide improved meaningful pedestrian connections into Windosr Quay to the South

## 3.3 Key Placemaking Principles

The proposals have been developed in conjunction with the current National and Regional planning policy regarding placemaking which include:

- Planning Policy Wales – Edition 11 (PPW11)
- Cardiff Residential Design Guide SPG – 2017

PPW11 defines placemaking as:

“Placemaking is a holistic approach to the planning and design of development and spaces, focused on positive outcomes. It draws upon an area’s potential to create high quality development and public spaces that promote people’s prosperity, health, happiness, and well being in the widest sense. Placemaking considers the context, function and relationships between a development site and its wider surroundings. This will be true for major developments creating new places as well as small developments created within a wider place. Placemaking should not add additional cost to a development, but will require smart, multi-dimensional and innovative thinking to implement and should be considered at the earliest possible stage. Placemaking adds social, economic, environmental and cultural value to development proposals resulting in benefits which go beyond a physical development boundary and embed wider resilience into planning decisions.”

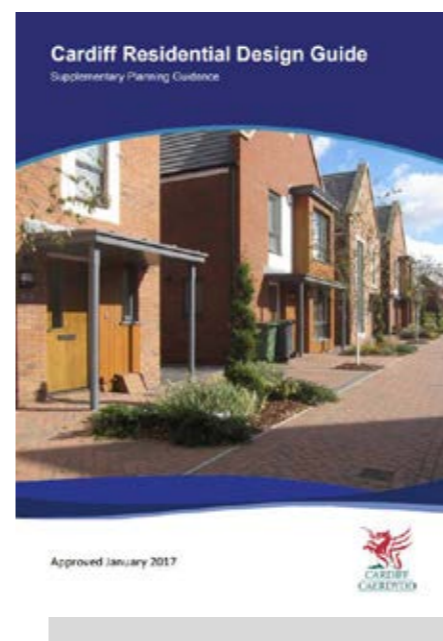
As lead consultant of the design team, Powell Dobson Architects are also signed up to the Placemaking Wales Charter developed by Welsh Government and the Design Commission for Wales in collaboration with the Placemaking Wales Partnership – a multi-disciplinary group representing professions and organisations working within the built and natural environment.

The Charter includes six placemaking principles that those who sign-up agree to promote as part of their support for placemaking.

- **People and community**  
The local community are involved in the development of proposals. The needs, aspirations, health and well-being of all people are considered at the outset. Proposals are shaped to help to meet these needs as well as create, integrate, protect and/or enhance a sense of community and promote equality.
- **Location**  
Places grow and develop in a way that uses land efficiently, supports and enhances existing places and is well connected. The location of housing, employment and leisure and other facilities are planned to help reduce the need to travel.
- **Movement**  
Walking, cycling and public transport are prioritised to provide a choice of transport modes and avoid dependence on private

vehicles. Well designed and safe active travel routes connect to the wider active travel and public transport network and public transport stations and stops are positively integrated. Mix of uses Places have a range of purposes which provide opportunities for community development, local business growth and access jobs, services and facilities via walking, cycling or public transport. Development density and a mix of uses and tenures helps to support a diverse community and vibrant public realm.

- **Public realm**  
Streets and public spaces are well defined, welcoming, safe and inclusive with a distinct identity. They are designed to be robust and adaptable with landscape, green infrastructure and sustainable drainage well integrated. They are well connected to existing places and promote opportunities for social interaction and a range of activities for all people.
- **Identity**  
The positive, distinctive qualities of existing places are valued and respected. The unique features and opportunities of a location including heritage, culture, language, built and natural physical attributes are identified and responded to





## 3.5 Design development

The design process for Channel View Regeneration has taken place over several years and has followed the circular approach advocated within TAN 12: Design of 'Appraising Policy context – Vision – Appraisal – Assessing Design Issues – Detailed Design'.

The proposals have evolved through discussions with Cardiff Council, and with reference to its LDP and Residential Design Guide. They have also been refined through discussions with other stakeholders including DCFW and through public consultation. A summary of the key development stages are as follows:

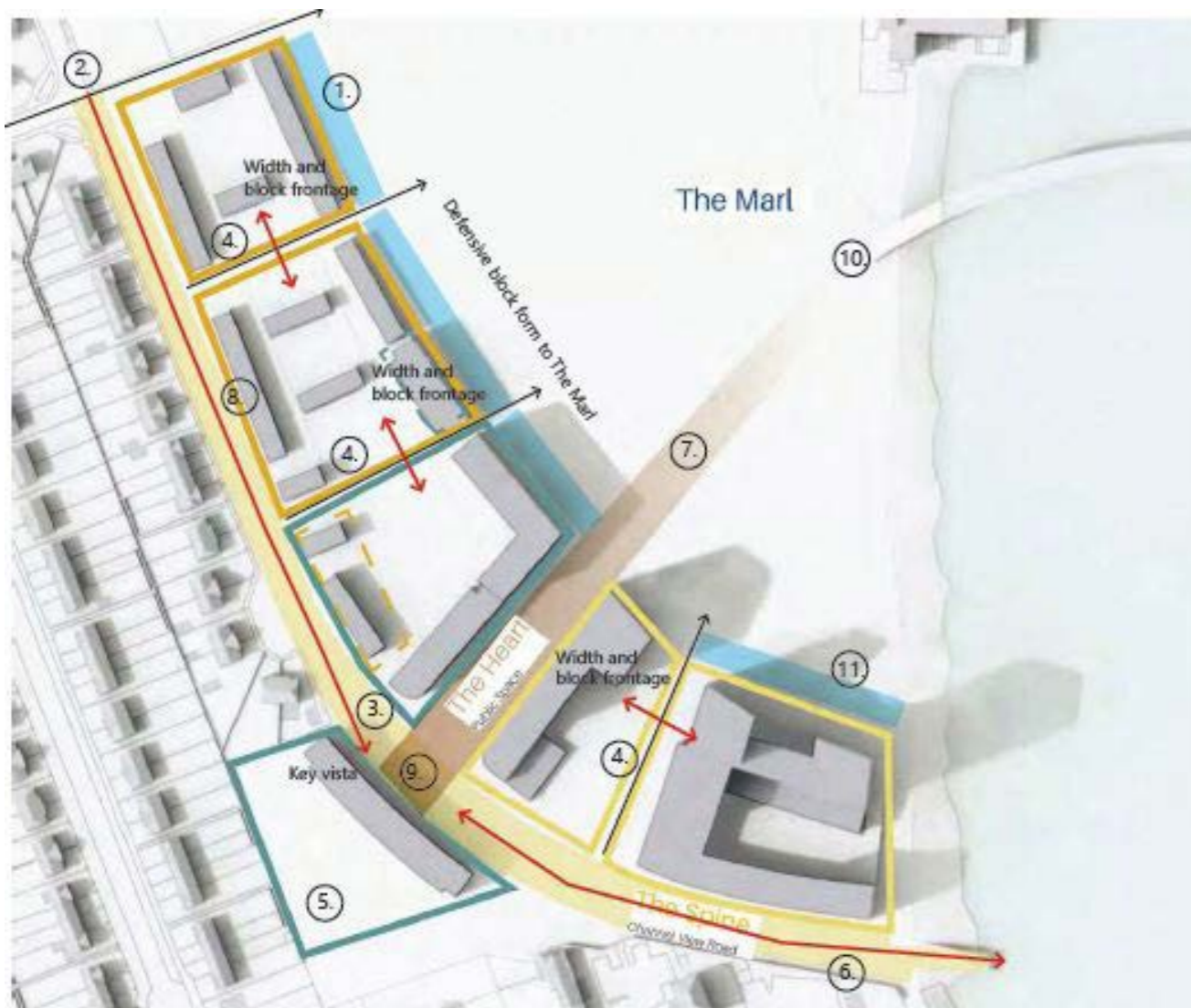
### Masterplan

April 2018

An initial feasibility report was prepared by Austin Smith Lord Architects, which established some of the early principles for the site, including the potential for a pedestrian footbridge over the river Taff.

2019

Following a review of the ASL feasibility masterplan, Cardiff Council Placemaking Team carried out a review of the site and developed the masterplan further. This introduced some additional key principles into the site such as the green avenue to Channel View Road, central square and park destination space. This also established the principle of using some of the existing park land for the development, however offsetting this with internal POS for the use by residents.



April 2020

Following the appointment of a new design team to take the scheme forward, Powell Dobson carried out an extensive review of the previous prepared masterplan information and put forward a new vision for the site. This focused on the same key design principles of the green avenue to Channel View Road, central square and park destination space, however strengthening the urban green connectivity through the use of shared living streets throughout the development and the park edge. There was also a focus on the wider city connectivity, with the introduction of connections through to South Clive Street for Channel View Road and from Beecher Avenue to Ferry Road. The later forming a strategic cycle / footpath connection between the Taff and the Ely river trails, linking the 3 parks of Hamadryad, The Marl and Grangemoor.



June 2020

Following consultation with Cardiff Council Placemaking and Urban Design Teams as well as public consultation and other stakeholder feedback the masterplan went through another round of design development. The initial masterplan proposals were well received and the focus of these changes were around improving physical and visual connectivity with the park and river. A focus was also placed on the sustainable future of the community and the benefits of Biophilic Living, with the introduction of formal and informal green spaces in close proximity to the dwellings. This included the use of shared communal gardens for some development blocks





October 2020

There were a number of further consultation meetings with Cardiff Council Placemaking and Urban Design Teams as well as other stakeholder meetings. The scheme was also presented to the Design Commission for Wales and feedback incorporated. The scheme also went through further technical compliance changes regarding the bus route access and drainage requirement. Additional landscape detail was also added the site, including detailed proposals for the Marl.

### Phase 1

2020

The principles of the Phase 1 block structure were developed within the masterplanning process for the wider site. This established the design rationale of 2 blocks, one larger anchor block, containing the majority of the communal community facilities, and a second smaller satellite block for more independent living. Following the masterplan development coming to a fixed state, the detail design of the phase 1 blocks commenced, looking at internal configurations and room arrangements. Initial designs were presented to Cardiff Council, which included feedback from internal departments, including occupational therapy and housing management. This feedback was incorporated over a number of iterations. Further changes resulted from technical input from other design team members, including specific M&E requirements and fire strategy compliance.



## Solar Shading

One of the significant feedback responses received from Cardiff Placemaking Team regarding the phase 1 tower blocks was the impact of solar shading on the rest of the proposed development. A series of solar shading studies were carried out, and changes to the block massing was undertaken. The orientation of the tower blocks was explored and the heights of the lower links reviewed to minimise impact on future neighbouring dwellings. Other design solutions were tabled, including duplex units to the ground floor, with habitable rooms on facades which maximise direct sunlight potential. This principle should be carried out on future phases.

### Phase 1 Shadow Study



Shadow Study June 08:00h

Shadow Study June 12:00h

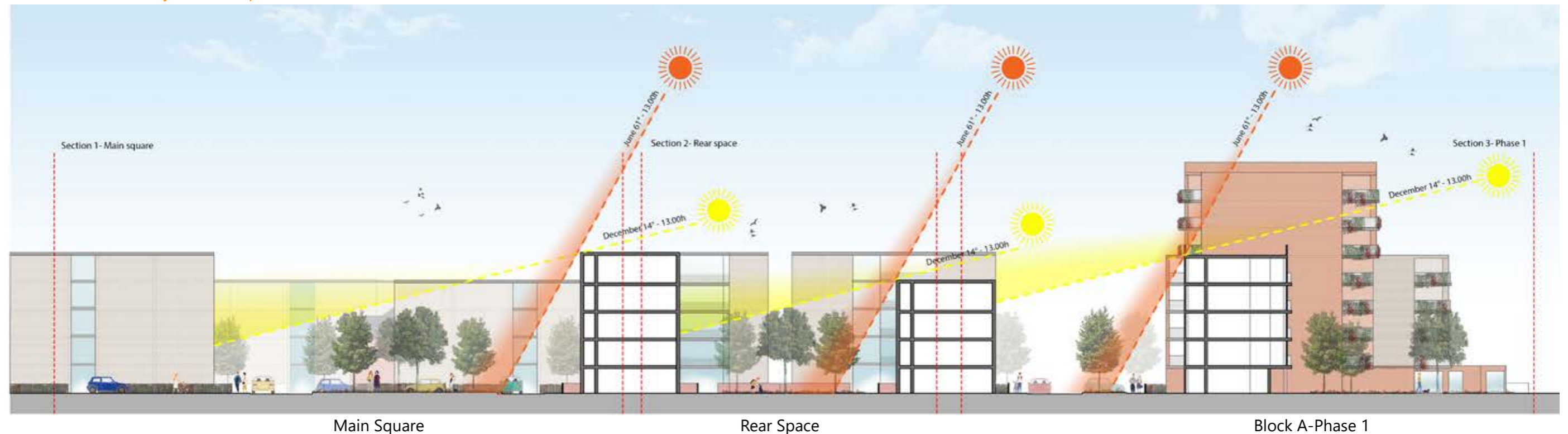
Shadow Study June 16:00h

Shadow Study March 08:00h

Shadow Study March 12:00h

Shadow Study March 16:00h

### General Shadow Study - Densest part of the site



Main Square

Rear Space

Block A-Phase 1

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# 4 The Proposal

## 4.1 The Masterplan

This section sets out design guidance to inform the detailed design, beginning with the Illustrative Masterplan opposite. The development parameters are set out in the following section. The illustrative masterplan sets out the key placemaking principles developed through the design process incorporating the indicative highway network, block structure and landscape strategy. The main elements are as follows:

**1) Spine Road Avenue** – In line with the vision established within the early masterplan work, the width of Channel View Road will be increased to help improve vehicle and pedestrian connectivity through the site. This road has been sized appropriately to accommodate the bus service currently serving the neighbourhood. The avenue will be created through the use of tree lined green verges and transitional green spaces, acting as key wayfinding route.

**4) Green Streets** – The proposals will create a Green Infrastructure network with a landscape strategy for 'Living Streets' focused on SuDS features: amenity value, drainage, biodiversity as well as informal seating and play. Street trees will 'green' the arrival and create a strong landscape character to the Main Avenue. Principle and incidental public open spaces contribute to legibility and character along this main route through the site. The grain of the proposed development extends through to the 'The Marl', 'pulling' the green space and its influence into the development. This will create more user friendly and intimate green nodes within the development, offsetting the loss of open space to the Marl.

**6) Shared Communal Gardens** – The scheme proposes the use of private, shared communal gardens for the flats with pedestrian, visual and landscape link to the Marl. This allows a collectively larger area of open space to be shared amongst residents than providing individual spaces per block. The added benefit of this is that it widens the sense of neighbourly community, by providing a space that can be congregated by different people from various blocks and tenures, providing opportunities for social interaction which is an extremely important health and wellbeing benefit. Each development block promotes flexible block typologies, allowing the masterplan to alter as the site and construction progress and allows changing typologies to be plotted depending on need and market conditions. Active frontages to both outside edges and inner courtyards for increased surveillance and security.

**10) Upper Marl Improvement Works** – It is proposed that this area of the Marl will be reserved for park improvement works, including upgrading of playing pitches and drainage. In doing so, some playing pitches could be moved and or re-orientated.

**2) Main Square** – The central main square will act as the principle transport hub for the site. It is positioned at the intersection between existing and proposed movement routes, incorporating the main spine road, link road to the destination space and pedestrian / cycle route to Winsor Quay. It is the intention that the main bus stop for the site will be located here, to reflect the importance of the space. The Main Square is also location for the potential shop, benefiting from the increase footfall in this area.

**5) Park Edge Shared Surfaces** – These informal streets will provide access and servicing to the dwellings adjacent and fronting onto the park. This is an important edge and the transition from park to development has been carefully considered. These shared surface streets will be informal in character, with the priority given to the pedestrian. Localised buildouts and street narrowing has been encouraged to reduce the impact of hardstanding on the landscape setting. These streets will also be enhanced by the use of permeable green frontages to properties, SuDS and rain gardens and informal localised play.

**7) South Clive Street Link** – The masterplan proposes a new vehicular connection onto South Clive Street, linking the two communities. This provides an important through route for the site, removing the historic cul-de-sac arrangement of Channel View estate. It is proposed that this road would provide single way access for the bus and well as two way pedestrian and cycle movement.

**11) Phase 1** – Phase 1 is located on the South East of the site, directly adjacent to the river and southern Marl boundary. This location also is the most suitable for phasing and demolition of the existing estate, to allow existing residents to move into the new development. The orientation and block design has been considered to maximise the location and its connection to the natural setting.

**3) Destination Space** – The early masterplan work established the principle of a destination space for the Marl. This has been retained and developed further through the design collaboration process. This space would be seen as feature space for use by the residents, but also the wider community who would travel to this point to enjoy the natural setting and view across the bay. It sits as the mid-point of the new pedestrian / cycle route linking the 3 parks of Hamadryad, The Marl and Grangemoor as well as the intersection with the Taff Trail, so would be a key node in active travel. The proposals put forward a design of an urban beach, with informal seating and play. To enhance the importance of this as a space, the proposals introduce a Café / Community Hub to the ground floor of the adjacent phase 1 block, supporting the destination aspect that people would travel to use.

**8) Ferry Road Link** – A pedestrian / cycle link is proposed from South Clive Street, on the axis of Beecher Avenue, to Ferry Road. This important connection provides the new route connecting the 3 local parks, as well as the only direct cycle route connecting the Taff and Ely river trails.

**9) Lower Marl and Rugby Pitch** – The lower Marl, directly adjacent to the built elements of the masterplan currently contains a rugby pitch, historically used by the CIACs rugby team. It is proposed that the rugby pitch will be re-orientated and upgraded to allow sufficient offsets for the development. The surrounding areas are earmarked for improvement works, including new tree and meadow planting and SUDs features if required.

**12) Phase 1 Green Link** – Separating the two phase 1 blocks is a green transition space which will be used as a link from the Taff trail to the development. This is also broadly in the location of the wreck of the Louisa ship, which provides a suitable location for potential art or sign installation.

**13) Potential Footbridge Connection** – The masterplan allows for the potential of a new pedestrian footbridge over the river Taff to Hamadryad Park. This is part of the wider aspirations for the site and is being brought forward under a separate application installation.



## 4.2 Masterplan Design Parameters



### Mix and Quantum

The site has the potential to support a wide mix of unit types and tenures. Unlike many other river front sites in urban areas it has the supporting community infrastructure to attract families, including schools, doctors surgeries and open spaces.

Through the housing squares typology the masterplan is flexible enough to accommodate a number of mix options. This initial option is based on replicating the previous masterplan mix of houses, replacing the existing and providing some new, and a mix of apartments including the replacement for the tower. Current mix provides 359 new homes:

<b>Phase 1</b>	<b>79 x 1 &amp; 2 bed flats</b>
<b>Remaining Phases</b>	<b>66 x 2,3 &amp; 4 bed houses</b> <b>211 x 1 &amp; 2 bed flats</b>
<b>Total</b>	<b>356 new homes</b>

### Scale

In line with the original vision, scale increases around the Main square and towards the River Frontage, across the site the scale ranges from 2-12 storeys

- 2 Storey
- 3 Storey
- 4 Storey,
- 5 Storey
- 6-12 Storey

### Frontage Character

Areas of distinctive frontage character can be overlaid onto the Masterplan structure to add richness to the streetscape and support legibility and distinctiveness. These can include:

- The Main Street: Avenue
- The Main Square,
- The River Frontage
- Park Edge

### Potential Areas of Uplift

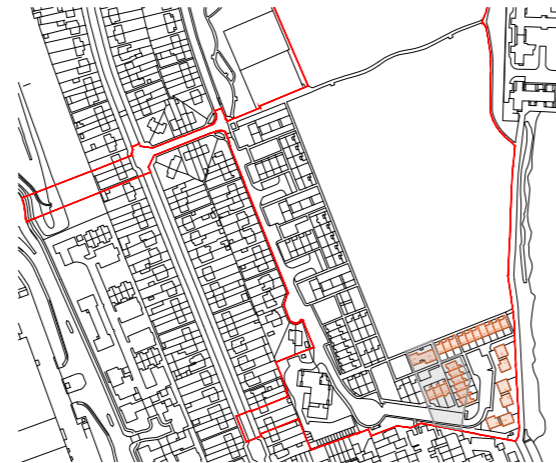
Key areas of where an uplift in design and material quality is appropriate to support the character of key spaces and frontages.

- A. The Main Street: Avenue
- B Main Street: Vista
- C The Main Square,
- D. The River Frontage
- E Park Edge



# 4.3 Phasing

The phasing of the development has been given careful consideration working with the existing community to allow the successful re-allocation of dwellings. This has generated a number of phases required to manage the demolition and construction whilst allowing the existing residents to stay on site if required



Phase 1 Demolition Proposal



Phase 1 and Phase 2 Demolition Proposal



Phase 2 and Phase 3 Demolition Proposal



Phase 3 and Phase 4 Demolition Proposal



Phase 4 and Phase 5 Demolition Proposal



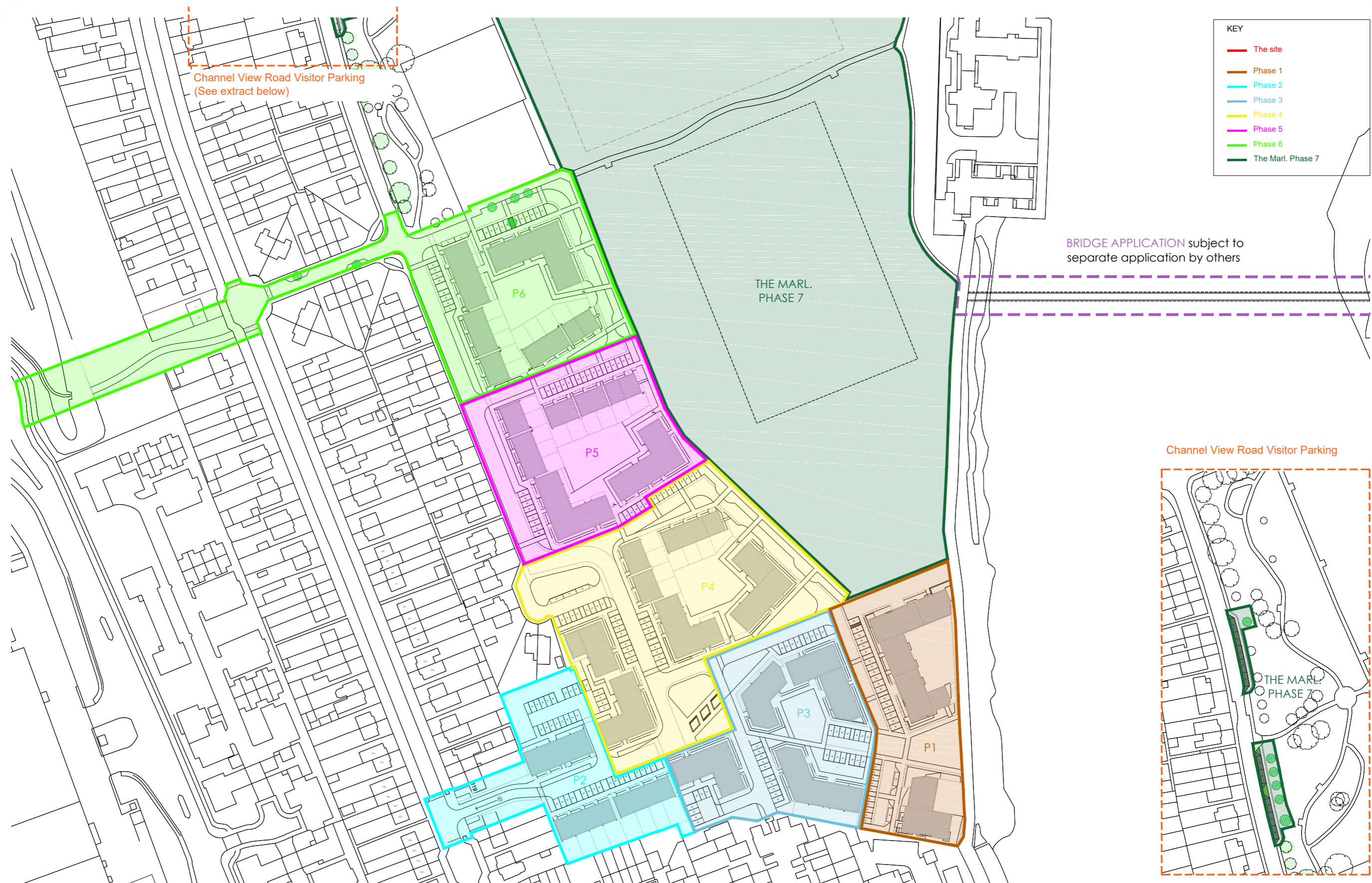
Phase 5 and Phase 6 Demolition Proposal



Phase 6



Phase 7 (The Marl)



## 4.4 Landscape & Ecology

The landscape strategy for Channel View integrates landscape, drainage and biodiversity into a green infrastructure framework. The site-wide landscape proposal has been developed as landscape typologies for Living Streets, the Marl, Communal Gardens and Residents' Gardens for the over 55's development within Phase 1.

### The Marl

- The Marl is physically connected into the development via a permeable park edge. Visual connections between Channel View, The Marl and the Taff are formed by vistas through the landscape. These vistas also provide the movement framework for pedestrians and cyclists. The Marl would include a range of landscape features, elements and structures, focusing on planting and grassland types. Trees would be positioned in avenues to reinforce the vistas from within the development and out into the Marl, and back into the development from within the Marl. Drainage features would also be provided within the Marl to add to amenity and biodiversity value. These would include planting, specimen shrubs and information boards.
- Depressions within the Marl would attenuate runoff at the surface with gentle 1:3 / 1:4 sides. Shallower depressions would be in isolated areas to create standing water / wetland features for aquatic plants / biodiversity enhancement. Footpaths adjacent to the SuDS would include timber structures / information boards, such as information about SuDS, or Wreck of Louisa.
- Tree planting species associated with SuDS features would include Honey Locust (*Gleditsia triacanthos* Draves Street Keeper) and Spaeth Alder (*Alnus spaethii*). The trees would be positioned in rows to provide those vistas. Prominent trees would include Purple Norway Maple (*Acer platanoides* 'Crimson King'), London Plane (*Platanus x hispanica*), Oak (*Quercus robur*), Field Maple (*Acer campestre*) and Small-leaved Lime (*Tilia cordata*).
- Trees would also be positioned at nodes / entry points into the Marl, and to provide an 'end feature' of the vistas which extend outwards from the development. Species could include visually distinct species such as Wild Cherry (*Prunus avium*), Crab Apple (*Malus sylvestris*), and Sweetgum (*Liquidambar* sp.).

### Living Streets

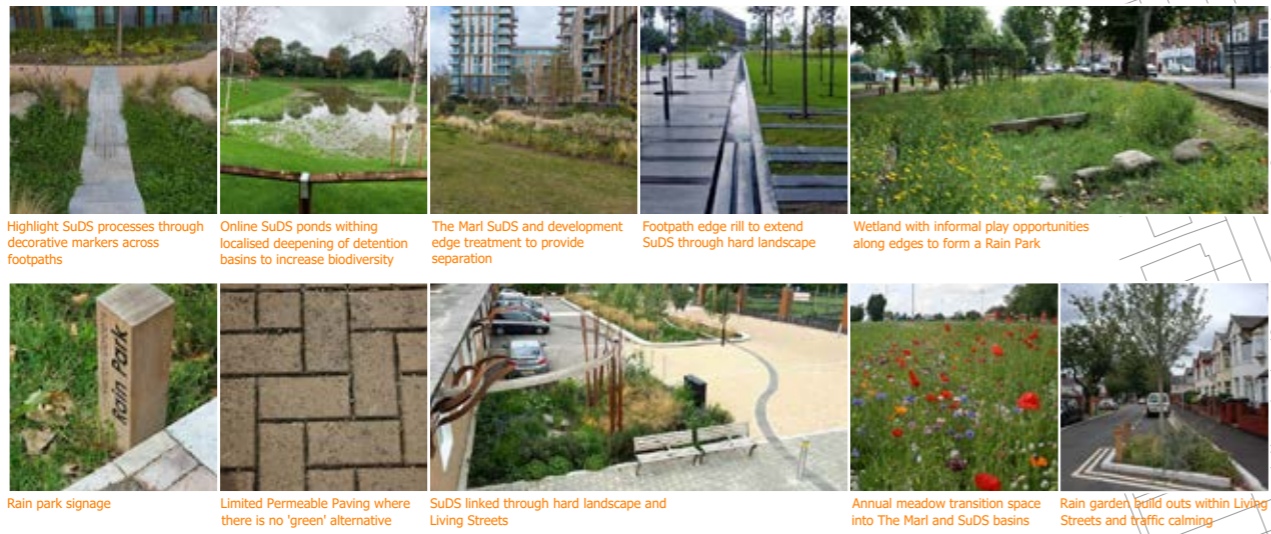
- Living streets are a key element of the biophilic design approach designed to bring green space through the development from the Marl, providing access to nature and space for SuDS, play and outdoor social interaction. These are pedestrian focused environments with direct access to the Marl and connecting the estate with the wider neighbourhood. The linear connections between the Marl and Channel View Road will draw green space through the estate, creating a sense of place for the neighbourhood and the wider community.
- Structure planting along roads and junctions would be provided to incorporate a mixture of evergreen and deciduous, robust and low-maintenance shrubs. Architectural foliage would be provided to carry the design theme of the Marl into the development. Amenity around the proposed buildings would incorporate a mixture of shrubs, herbaceous plants and grasses. A colour pallet would be established to reflect the orientation of the proposed buildings. Focal/ feature plants to be provided as appropriate.
- Rain gardens within and around the development would incorporate features for play, boulders/ steppingstones, landform, 'bridges', and a variety of planting. Information boards could be positioned within the rain gardens throughout the site. Specimen shrubs within rain gardens could include hazel coppice and/or other cobnuts and filberts. Other species could include golden-twig dogwood and Siberian dogwood for rich yellow and red stems during the winter months.

### Communal Gardens

- The Communal Gardens are designed to offer outdoor amenity space specifically for residents living within the adjacent flats. The spaces extend components of green infrastructure into the development offering a visual connection with nature for all residents of the estate. Rain gardens extending into these spaces will add to the amenity value and biodiversity of the spaces. Each garden will include spaces which encourage outdoor social interaction with different spaces for growing vegetables and fruit. Opportunities for outdoor play in the gardens are based on interaction with nature and imaginative play.

### Residents' Gardens for the Community Living Building.

- The gardens for the Community Living Buildings are provided at ground level and as rooftop terraces at the floor 5. They will be communal spaces with areas for growing vegetables, planting, sitting and social interaction with other residents. Hedge planting within the courtyard would provide footpath route delineation and to enclose the growing space. Low-level shrub planting / SuDS features would include a variety of shrubs, herbaceous plants and grasses. Sensory planting would be provided where possible throughout



Highlight SuDS processes through decorative markers across footpaths

Online SuDS ponds withing localised deepening of detention basins to increase biodiversity

The Marl SuDS and development edge treatment to provide separation

Footpath edge rill to extend SuDS through hard landscape

Wetland with informal play opportunities along edges to form a Rain Park

Rain park signage

Limited Permeable Paving where there is no 'green' alternative

SuDS linked through hard landscape and Living Streets

Annual meadow transition space into The Marl and SuDS basins

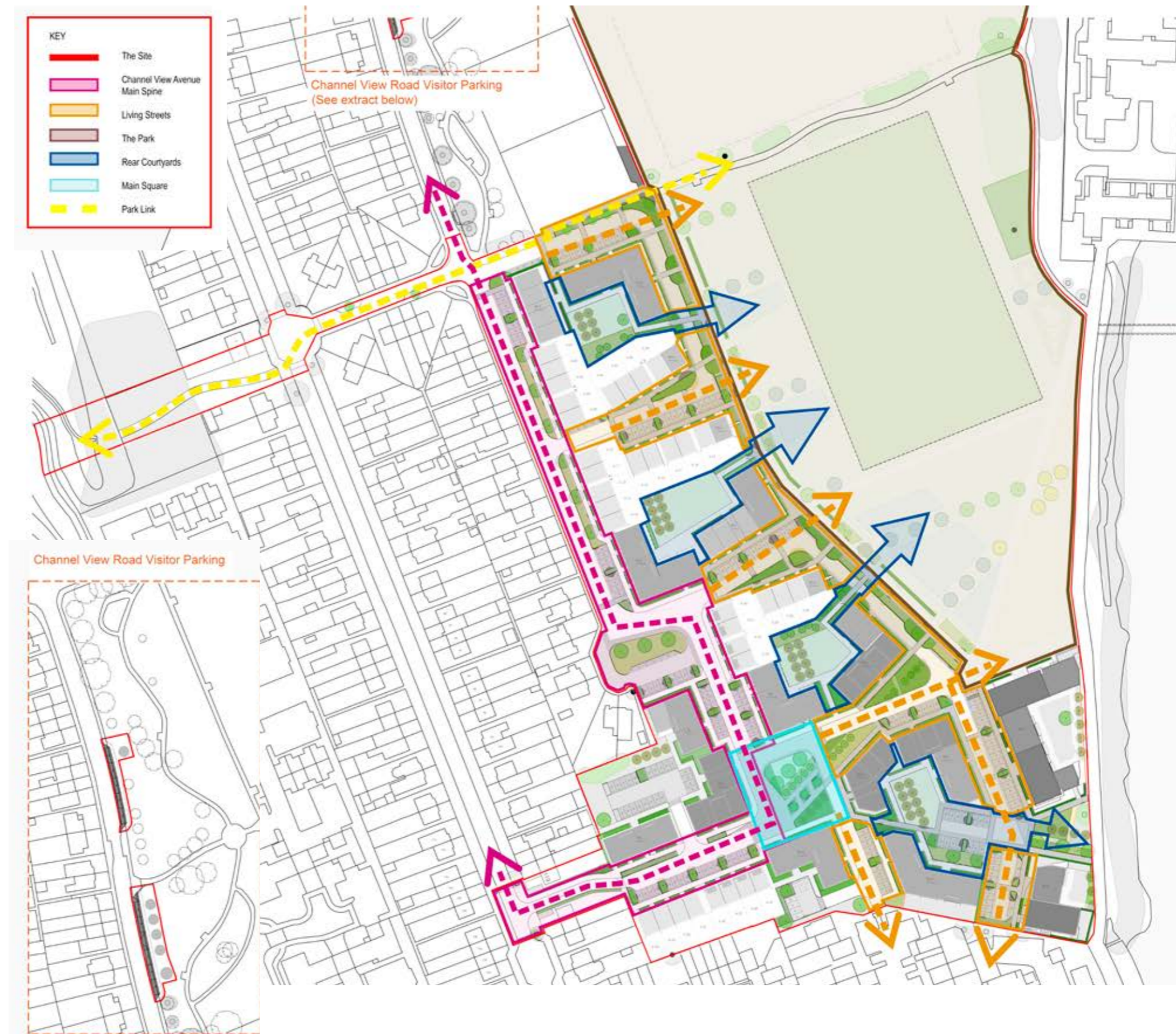
Rain garden build outs within Living Streets and traffic calming

## 4.5 Green Infrastructure

Whilst there is limited instances of green infrastructure on the current Channel View Estate, the close relationship with the Marl and the river edge provides a unique opportunity to enhance these spaces and improve the green connectivity within the site.

The scheme provides a number of elements of green infrastructure improvements as follows:

- Create a new focus within the Marl as high quality City Park and the setting for the regeneration of Channel View.
- Street trees to green' the arrival and create a strong landscape character to the Main Avenue.
- Principle and incidental public open spaces contribute to legibility and character along the main routes through the site.
- Introduction of a series of community green spaces within the housing squares focusing on biophilic design and incorporating growing space and play for residents only.
- The grain of the proposed development extends through the 'The Marl', 'pulling' the green space and its influence through the development.



## 4.6 Accessibility

The existing estate suffers from poor connectivity to wider travel networks and adjacent communities. The development proposes a number of solutions to improve the accessibility within the scheme and the surrounding context.

- **Channel View Road**

Channel View road is the principle vehicular access route to and from the development. Its current form is constrained, with a narrow carriageway. This is exasperated by significant resident on street parking. The proposals allow with the widening of Channel View Road to the sufficient width to allow a bus route fully into the development. It is proposed that the north of Channel View Road will provide some dedicated visitor bays for users of the park, to alleviate some of the on street parking problems.



- **South Clive Street Connections**

A new vehicular connection onto South Clive Street is proposed. This provides an important through route for the site, removing the historic cul-de-sac arrangement of Channel View estate. It is proposed that this road would provide single way access for the bus and well as two way pedestrian and cycle movement. A pedestrian / cycle link is proposed from South Clive Street, on the axis of Beecher Avenue, to Ferry Road. This important connection provides the new route connecting the 3 local parks, as well as the only direct cycle route connecting the Taff and Ely river trails.

Ferry Road - South Clive Street - Beercher Avenue



South Clive Street



- **Bridge**

The masterplan allows for the potential of a new pedestrian footbridge over the river Taff to Hamadryad Park. This is part of the wider aspirations for the site and is being brought forward under a separate application.



## 4.7 Character Areas

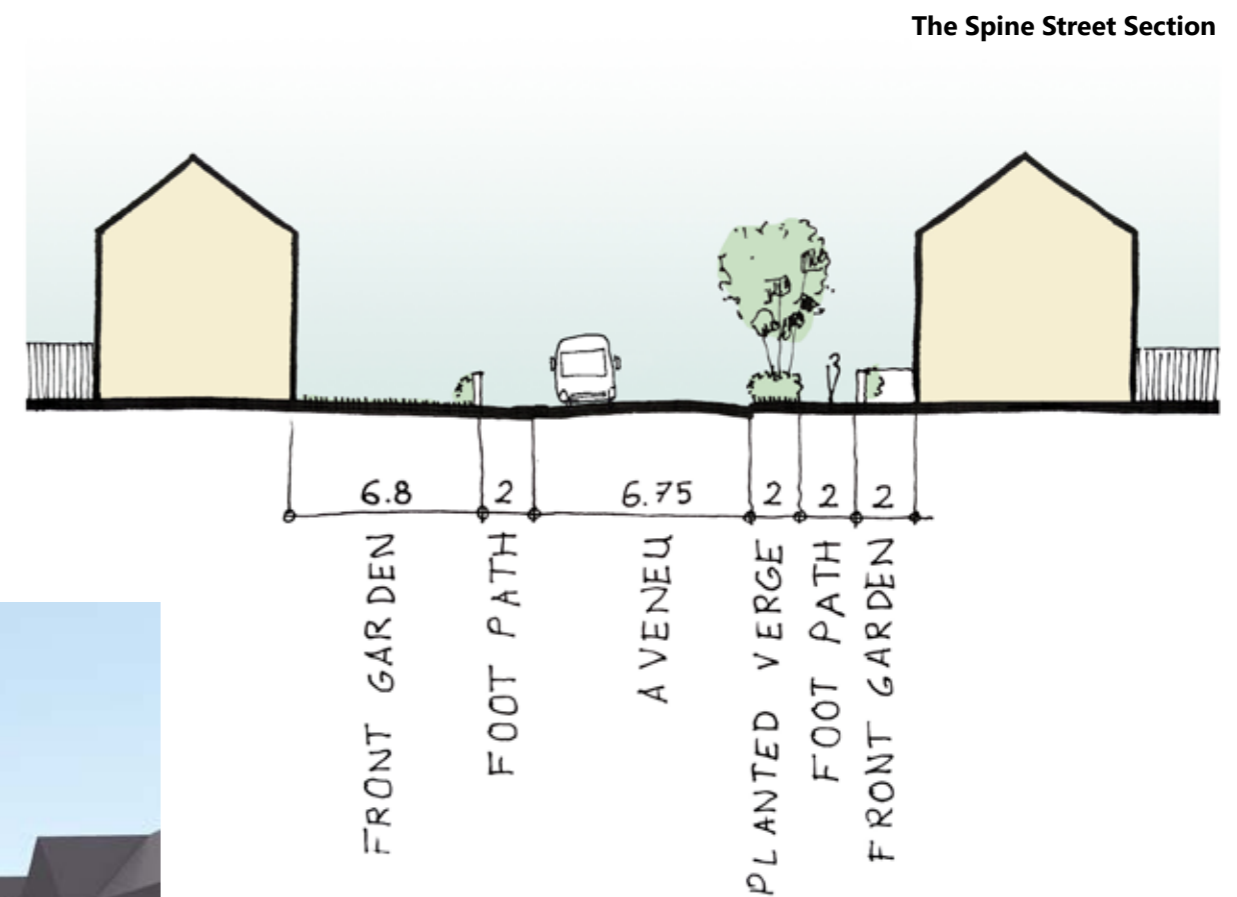
The site is characterised by 4 principle character areas which are broadly traditional in form with contemporary detailing in terms of their architectural language. The material palette and detailing is informed by the wider vernacular of the surrounding site. The character areas can be summarised as follows:

1. The Spine Street
2. Park Edge
3. Main Square
4. River Frontage

The core the character is further broken down through the street hierarchy with the opportunity for additional refinements in architectural language and detailing.

### The Spine Street

The spine street will be low to medium density, responding to the adjacent context of existing Channel View Road properties. In areas where the main spine street deviates away from the existing properties, additional scale can be used to highlight key vistas and focal corners. The architecture will be generally contemporary with traditional influences, with a residential house proportion. The primary building material will be brick, with the use of brick detailing and secondary materials used to express key elements such as entrance cores and balconies. The continuous green verge and formal green spaces will enhance this character as a key movement route through the development.

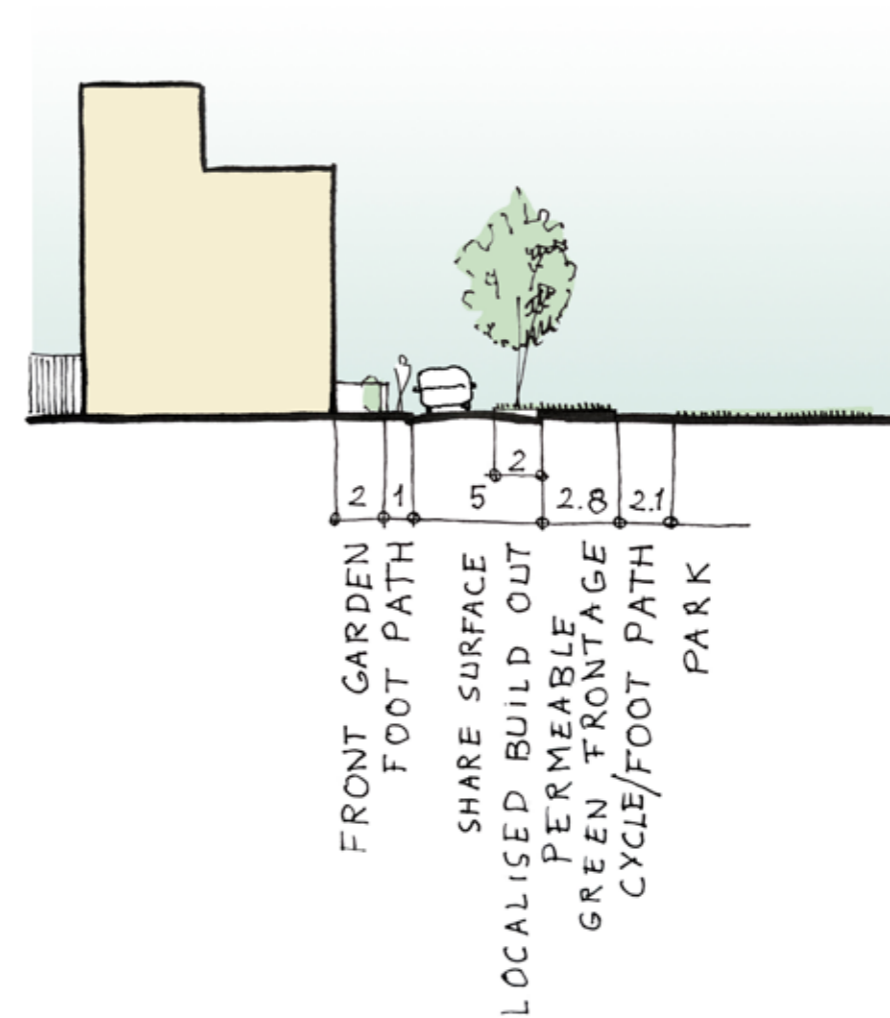


## The Park Edge

The character of the park edge will be broadly medium density, to reflect the wider setting and optimise potential views over the park. The areas to the south of the site, nearing the main square can be higher density, matching the street scape of the other characters in this area. The blocks themselves will have a regular consistent frontage to the park, however gaps and splays to the communal gardens and green streets are encouraged, allow in the park to bleed into the development. The architecture will be generally contemporary with traditional influences, with generally a residential house proportion, however top floor setbacks and roof terraces can be added to add architectural interest and exploit the views over the park. . The primary building material will be brick, with the use of brick detailing and secondary materials used to express key elements such as entrance cores, setbacks, terraces and balconies.



The Park Edge Section

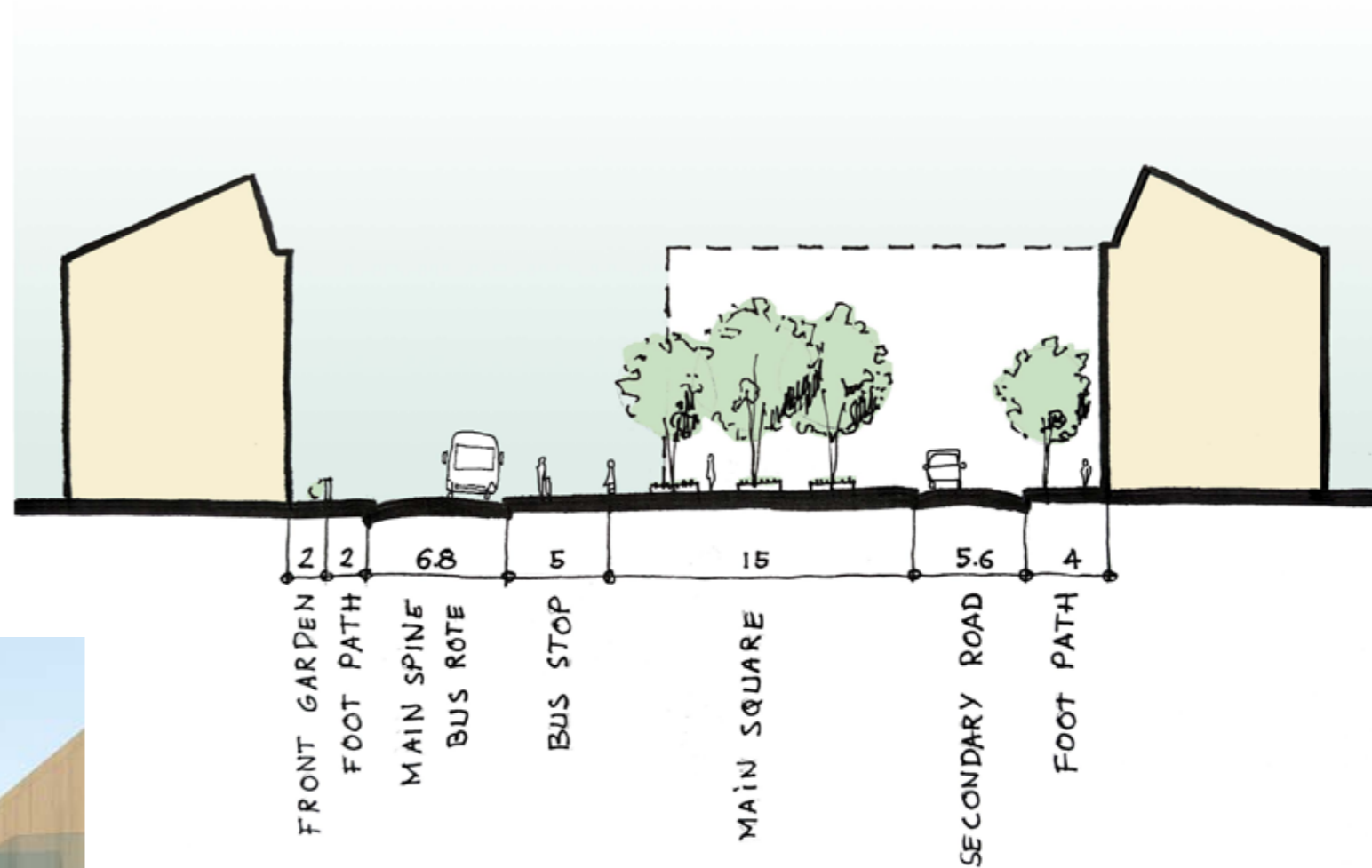




## Main Square

The main square is characterised by the opportunities for increased scale around this square as a transition between Channel View road, the Main Spine and the River Frontage to the West. This is area will be the key movement hub for the site, and its scale should be generous to reflect its importance. The architecture will be contemporary with contrasting materials and feature details used to create variation between the blocks and express key corners and views. . The primary building material will be brick, with the use of brick detailing and secondary materials used to express key elements such as entrance cores and balconies. Whilst higher in scale, different roof arrangements and setbacks should be used to create interest and play in the massing form. Alternative cladding materials can be proposed for upper floors where providing the different roof scape variety

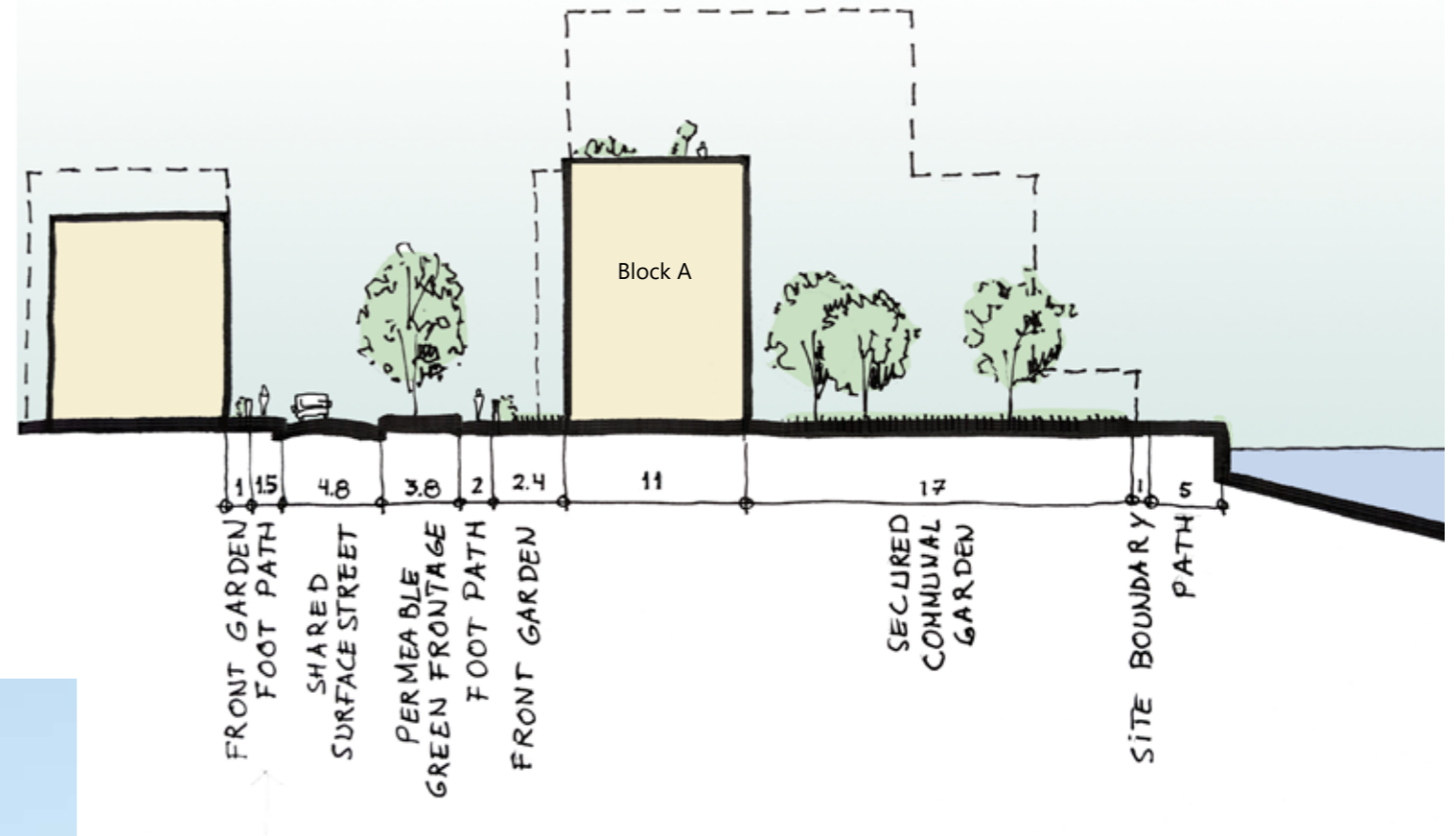
Main Square Section



## River Frontage

The river frontage character area is characterised by the connection and proximity to the river. Building forms, openings and balconies should be positioned to maximise this potential. The densest part of the site, towers of up to 8-12 stories are permitted on the river edge frontage, to create landmark buildings visible from the surrounding landscape. Architecturally the buildings will follow a similar language used on the rest of the site in terms of proportion and materials, however contrasting cladding materials are permitted to be used to create larger architectural features, such as the linking of building elements, to allow the detail to be read from distant views.

Block A-River Frontage Section



## 4.8 Sustainability

This section details the options available as part of the energy strategy to work towards achieving the Client's aspirations for energy targets, Low Carbon or Net Zero Carbon targets, fuel poverty and affordability for the Channel View redevelopment residential scheme in Cardiff.

The scheme will be developed on the principles of the energy hierarchy to drive down carbon emissions as a result of building use. The energy target for the scheme will be based on the anticipated Part L 2025 requirement of 75-80% improvement on the current Part L standard. Provision will also be made for adaptability in the future to enable Net Zero Carbon to be achieved for operational energy.

We understand that climate change is an important issue and that there are things we can do to address this in the proposed design. It is intended that the scheme will be designed with renewable energy and efficiency in mind using a range of features as follows:

- Highly insulated buildings, keeping energy use to a minimum, saving money for future residents.
- Utilising solar panels where possible to generate electricity.
- Ground / Air / Water source heat pumps to provide clean cheap energy for heating homes.
- Possible future connections to district wide heating network

