



Channel View Regeneration , Cardiff

Pre-Application Design Development Document – **September 2020**

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0. Introduction

This document has been prepared by Powell Dobson Architects and its design team to provide a narrative for the design development of the emerging masterplan.

We understand the Council’s vision and desire 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, identifies the key structuring elements of the masterplan and how they have developed into the emerging masterplan.



Project Team:

Architects & Masterplanners: Powell Dobson Architects

Landscape Architects: WYG

Structural & Civil Engineers: Cambria

M&E Engineers: McCann & Partners

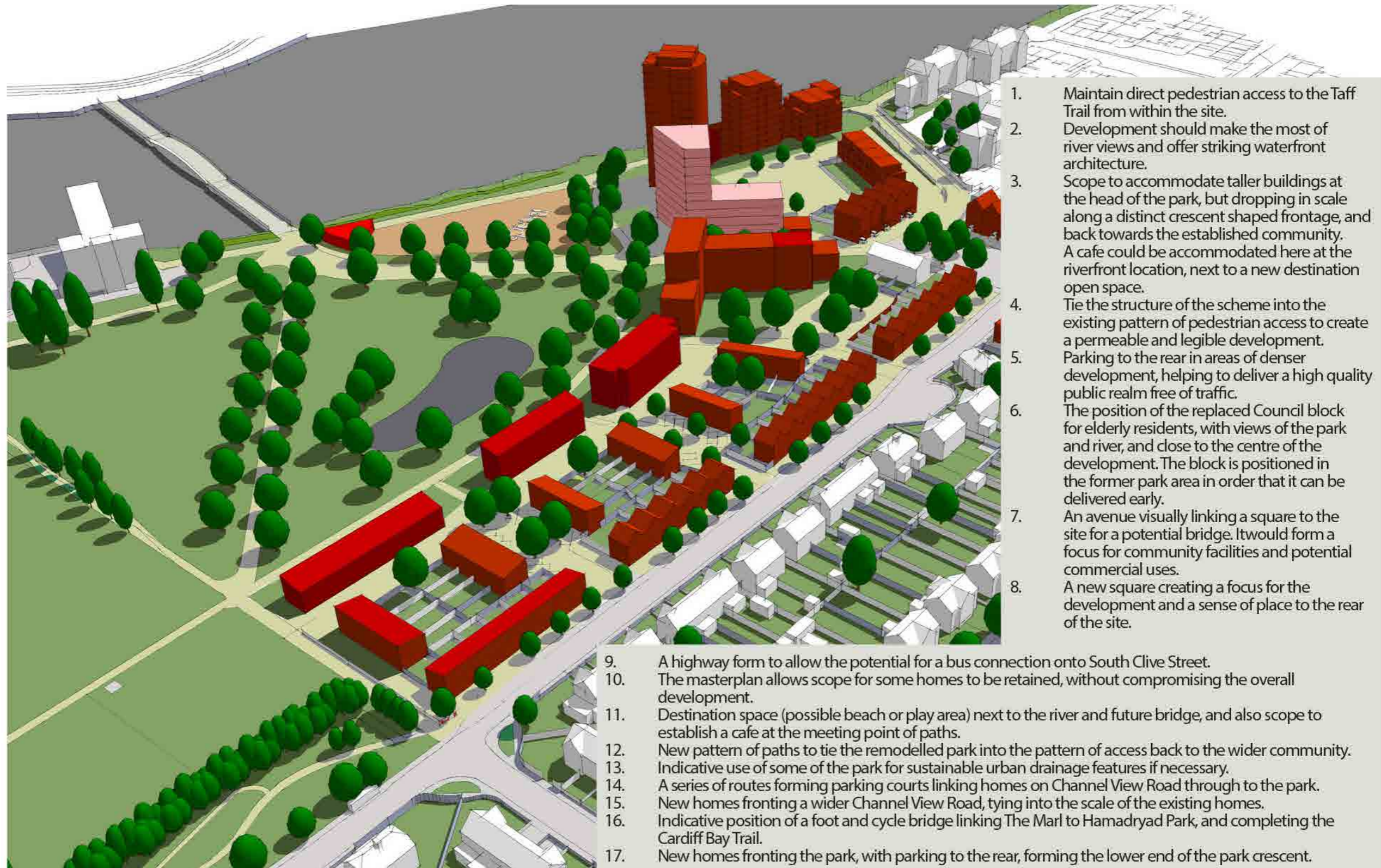
Project Manager & Cost Consultant: Blake Morgan

Planning Consultant: Amity Planning Consultants



1. Masterplan Framework & Vision

Previous Masterplan Framework



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

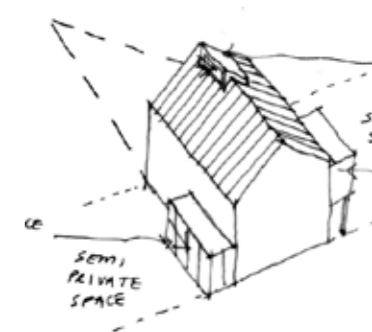
To Strengthen these Foundation Principles with 4 Themes of Our Vision:

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

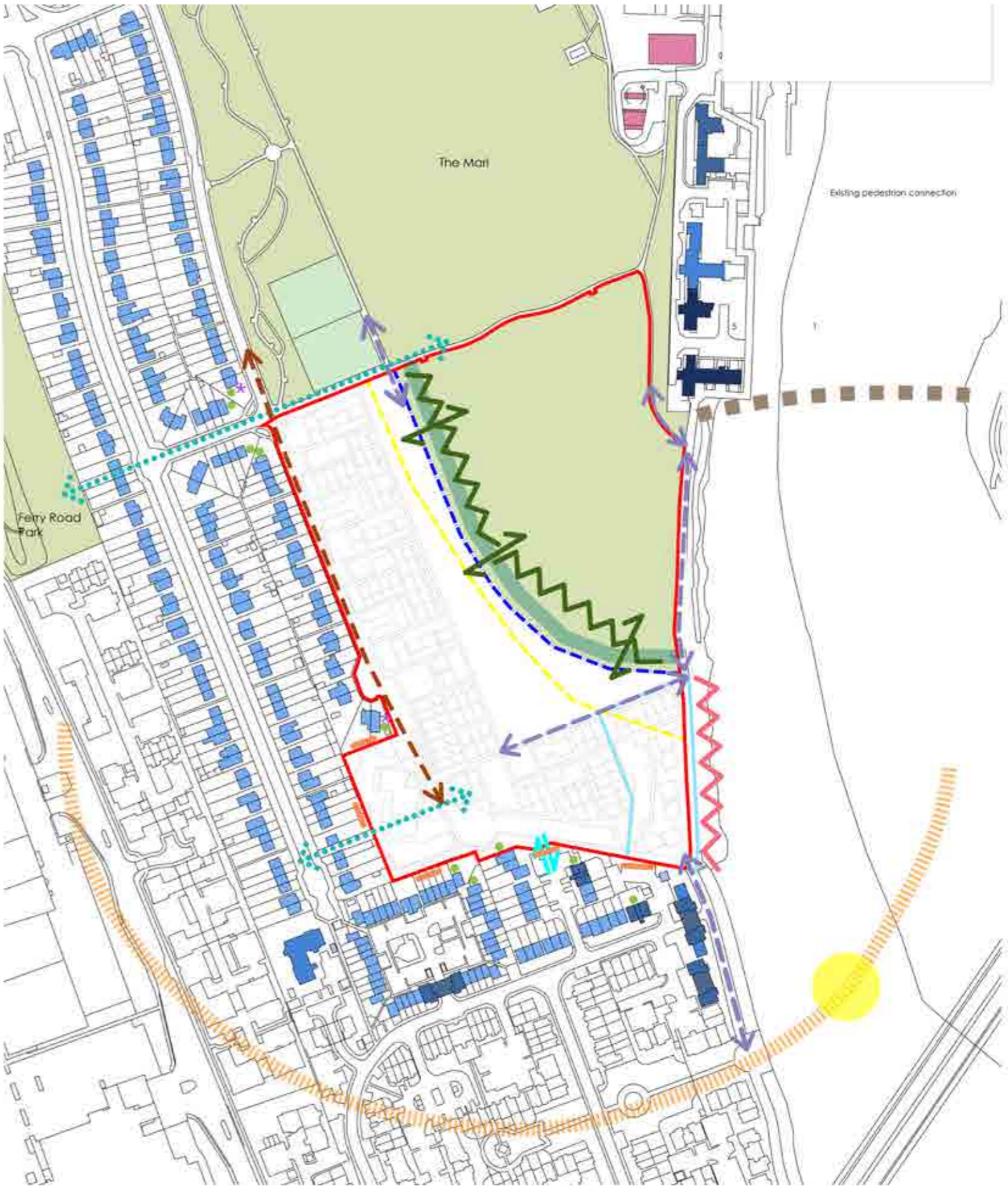
“Living Streets” – life between buildings to create a greener more sustainable neighbourhood

Sustainable, Flexible and Biophilic Living – a “place” to foster a healthy, balanced and cohesive community

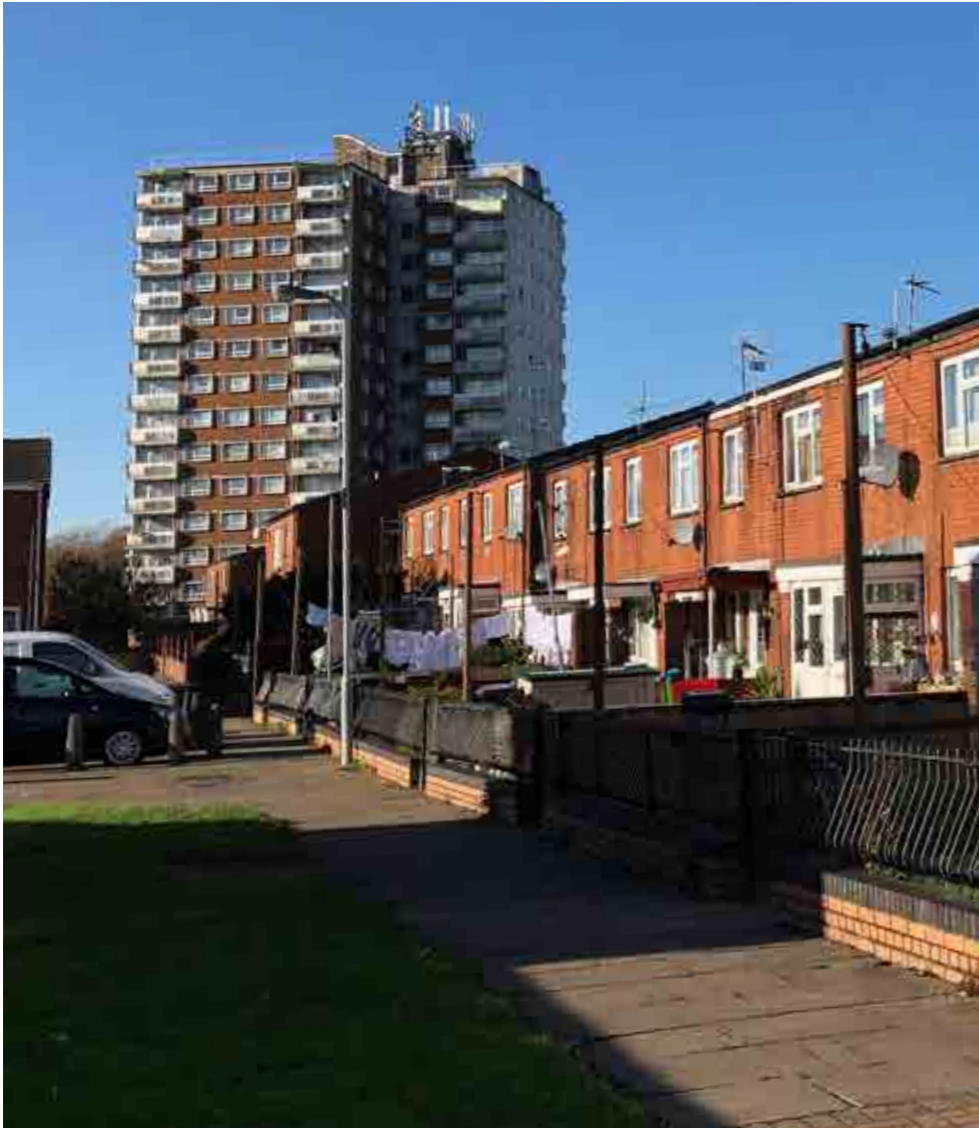


2. Opportunities & Constraints

Opportunities & Constraints Plan



Existing Site Photographs



Channel View



The Marl



Channel View Leisure Centre



Grangemoor Park



Hamadryad Park



3G Pitch, The Marl



View South towards the site

3. 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 Windsor Quay to the South

4. Design Development

Previous Masterplan Iteration 08.04.20



Precedent



Previous Masterplan Iteration 02.06.20

Widening of Channel View to create better approach and green avenue

New strategic East West pedestrian and cycle link

Secondary shared surface streets with opportunity for swales, rain gardens and raised planters

Increased private rear gardens for houses. No access to rear communal shared spaces

Main Street : Avenue increased to accommodate bus route tracking

Secondary space creates positive edge up against existing boundaries possibility of utilising for bus manoeuvrability

Main Square framed by apartments up to 4/5 storey

Storey heights revised to address density comments

Area redesigned and new secondary pedestrian route added

New vehicular connection into South Clive Street. Bus tracking checked.

Community green space at the heart of each housing square for shared use by flats only

Shared street open out to provide open aspect into park

3 storey units added to park edge to maintain scale.

Designs for park considered. See landscape section

Refuse tracking assessed and accommodated.

Splay added to building line to increase square visual size and provide more direct visual connection with destination space

Orientation of building amended to increase permeability into the development



Current Masterplan



5. 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 364 new homes :

Phase 1	77 x 1 & 2 bed flats
Remaining Phases	70 x 2,3 & 4 bed houses 212 x 1 & 2 bed flats
Total	359 new homes

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 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
- Secondary Streets

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

Uses Plan

In response to the feedback received, a further plan demonstrating the uses proposed has been prepared.

Whilst the majority of the site is proposed for residential development there is also provision for a social enterprise café, located on the ground floor of the main over 55's block, and a shop, located in the main square.

These locations have been chosen to appropriately support the functions of these uses. The enterprise café will support the destination space, linking the Marl to the development and beyond. The shop location supports the main square as the main transport interface for the development. The shop itself will be a flexible space, which can provide extra residential accommodation should there be no demand for the local shop, as the development is served by retail provision in the wider area.



Movement Diagram

In response to comments from transport and highways we have provided an additional movement diagram highlighting the key vehicular and pedestrian routes into and through the development.

The main spine road has been designed to accommodate bus manoeuvrability with secondary streets and shared surfaces tracked to accommodate a refuse vehicle and cars. An additional connection to South Clive Street has been shown. Currently this would be a bus / cycle / pedestrian connection only, to avoid increase the traffic flow to South Clive Street, however this can be increase to provide full vehicle connectivity if necessary. Other pedestrian / cycle connections have also been shown.



6. Green Infrastruscture & Open Space

Concept Landscape Strategy



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



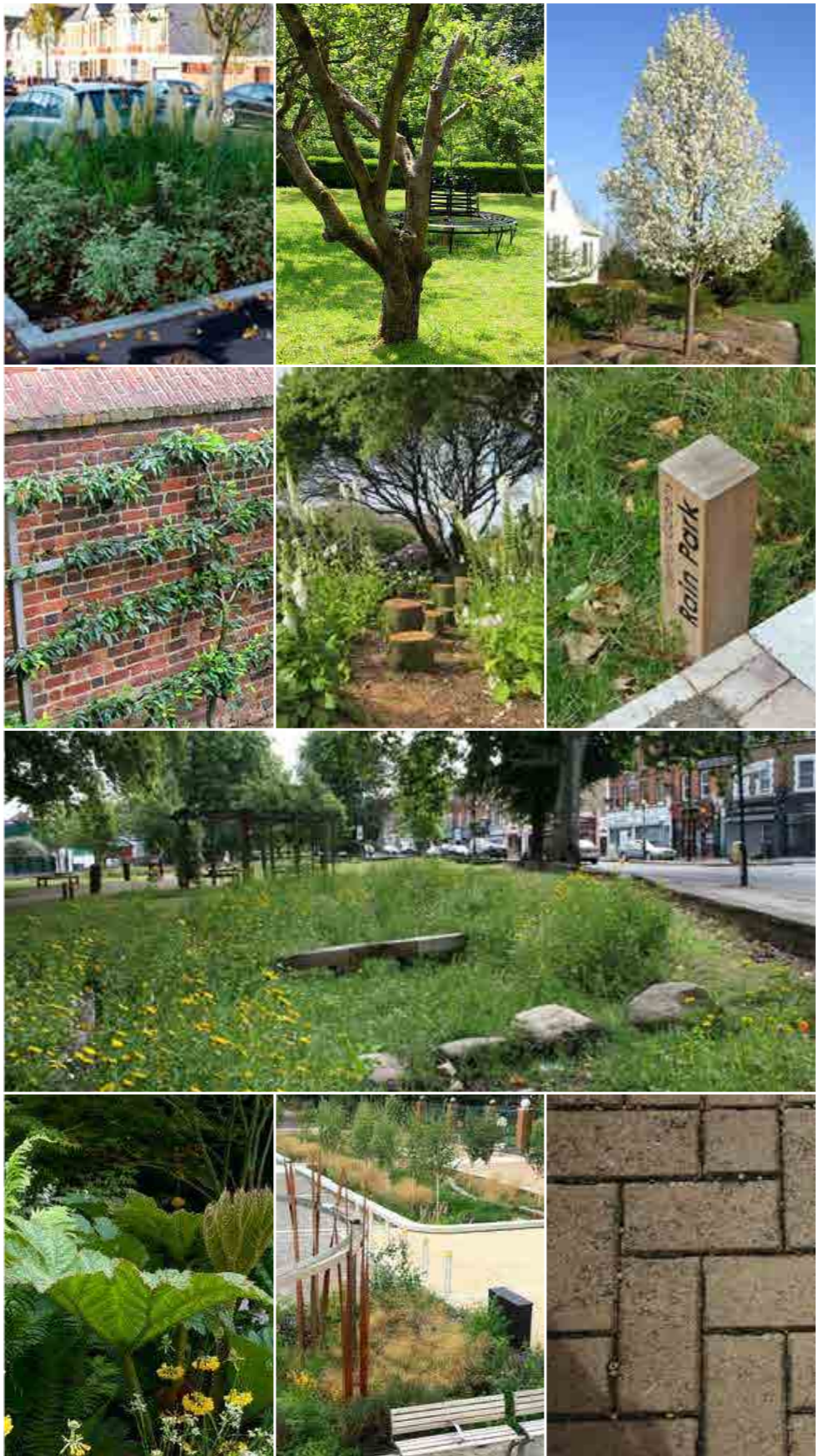
Annual meadow transition space into The Marl and SuDS basins



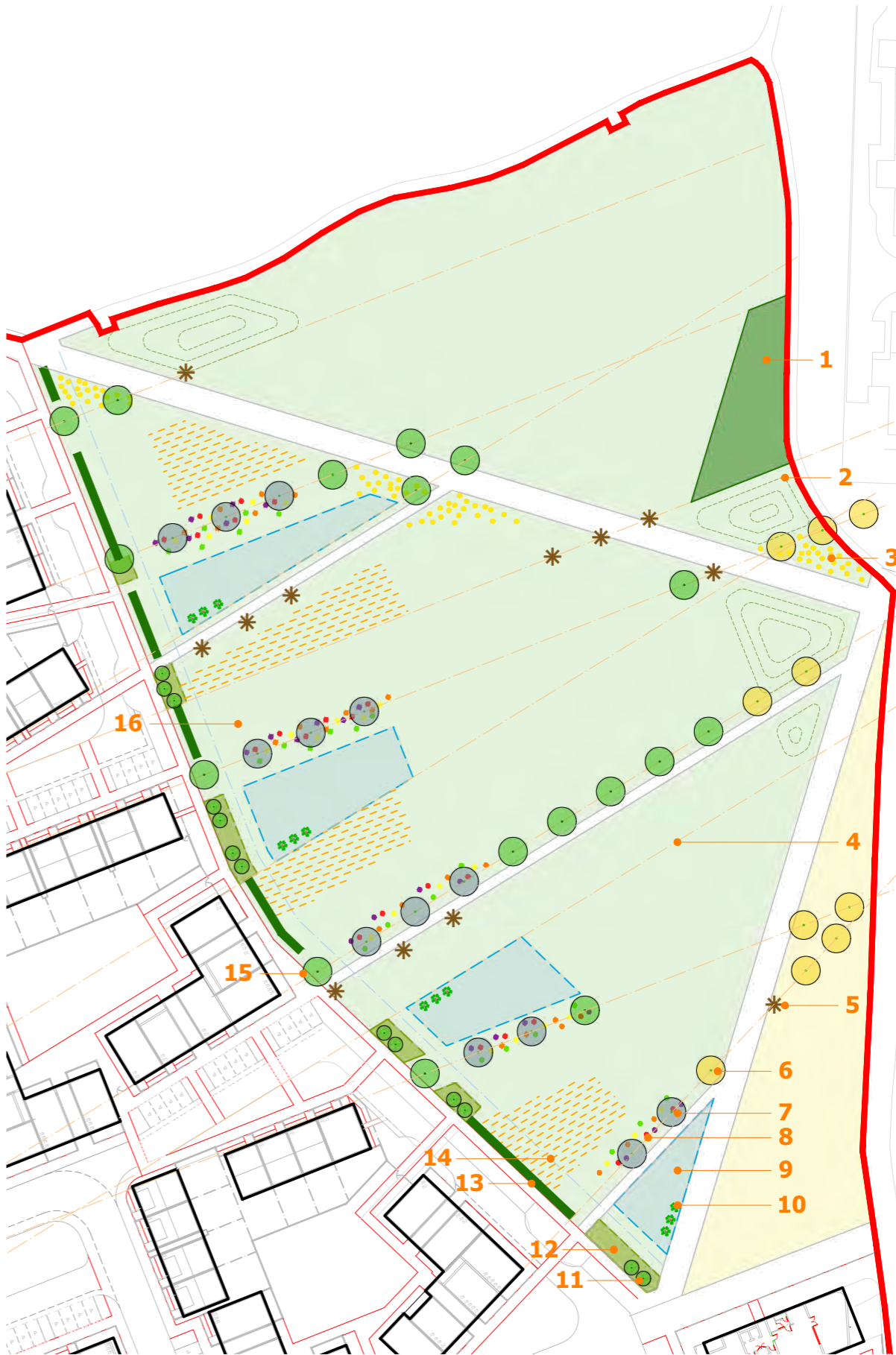
Rain garden build outs within Living Streets and traffic calming



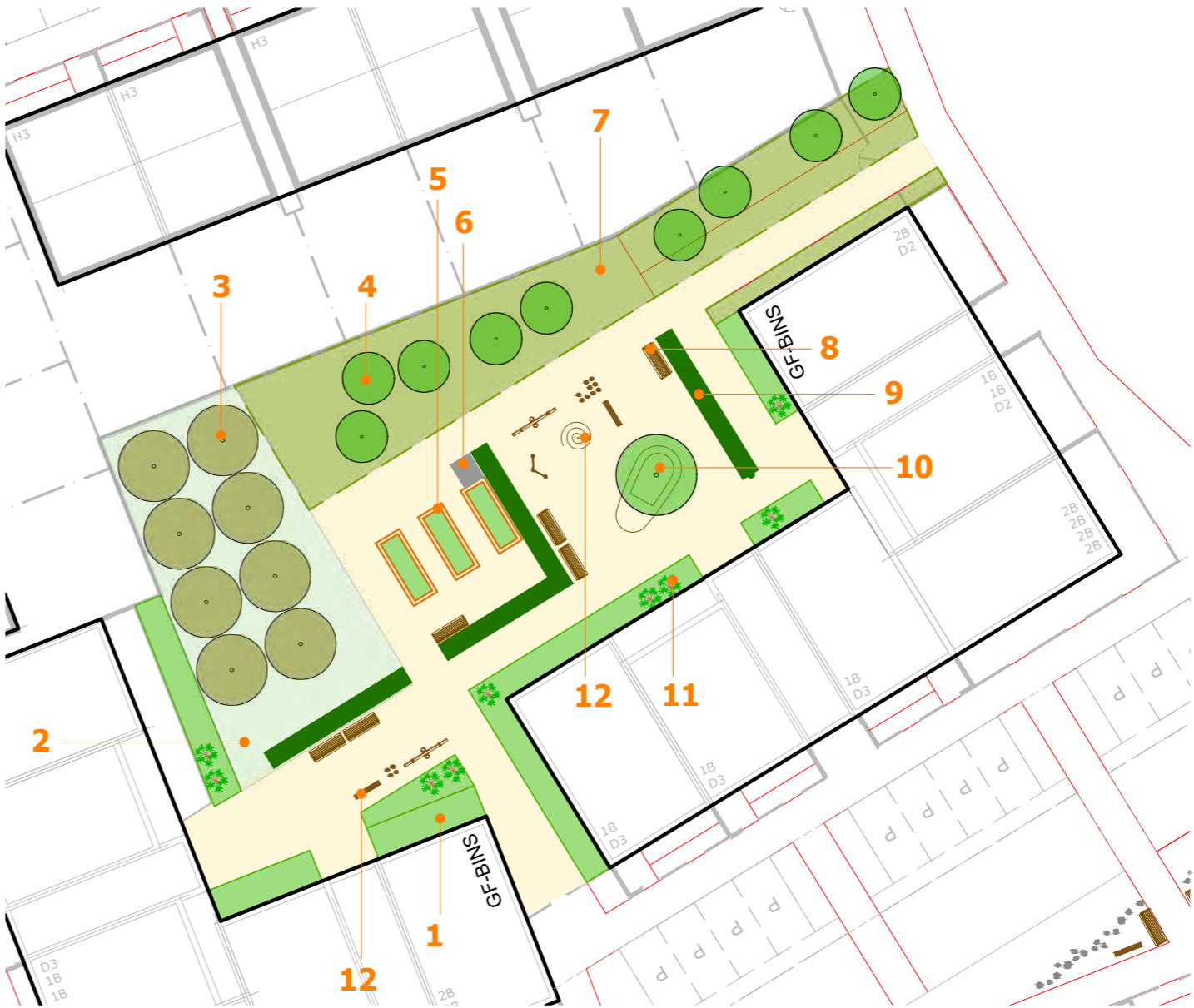
Living Streets Strategy



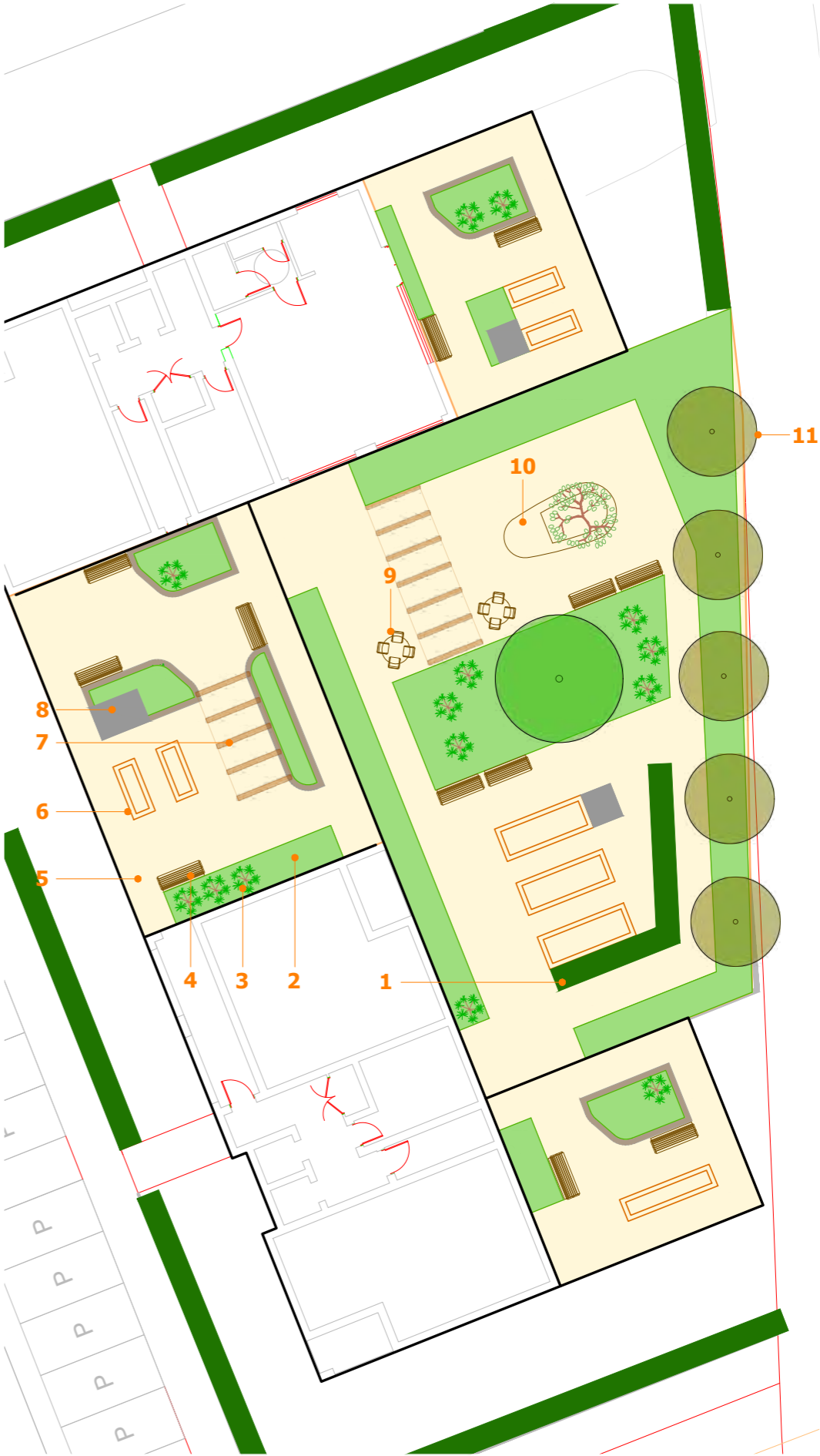
The Marl Strategy



Garden Strategy



Over 55s Gardens Strategy



7. Architectural Design & Character

Character Areas Plan

There are a number of character areas proposed for the site. These respond to the there location within the masterplan and the physical connections they have with the surrounding environment. They can be summerised as follows:

Main Spine Road: This character area is defined as the main movement network through the site. Materials respond to the existing context of channel view estate, channel view road and south clive street.

Main Square and Boulevard: This character area is defined by the main square and boulevard connection to the key destination space. The area forms the key movement interchange on the site.

Park Edge: As the name suggest, the park edge character area is defined by its relationship to the Marl. Key emphasis on green streets and landscape connections.

River Edge: The river edge character area represents the extent of phase one. It's importants is defined by its position next to the river and Marl which offer long views over the river and park which will give the scheme a landmark setting.

KEY

Main Spine Road Character Area

Main Square and Boulevard Character Area

Park Edge Character Area

River Edge Character Area



Housing Squares Typology Study

House Squares Typology

- Private shared communal gardens for the flats with pedestrian, visual and landscape link to the Marl.
- Houses with separate private rear garden spaces
- Access to shared rear gardens for residents and maintenance
- Bin storage incorporated into front gardens for houses, communal for flats
- Flexible block typologies, allowing the masterplan to alter as the site and construction progress. 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.
- Splays and setbacks to building line to allow for street greening of access streets, reinforcing connection to the Marl

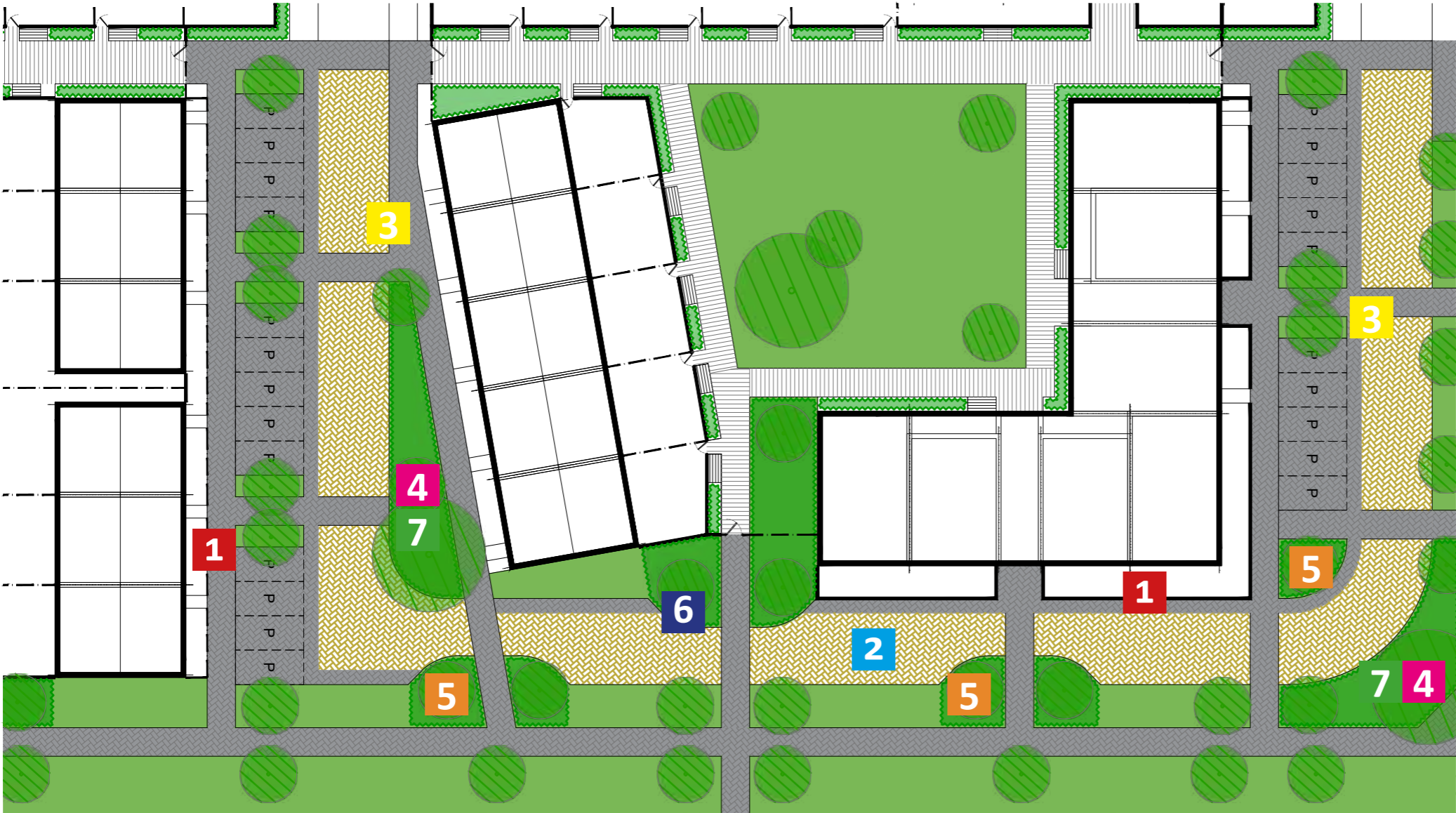


3D Image showing rear garden spaces and green streets



Extract of masterplan showing rear shared and private gardens combination

Shared Surface Streets Typology Study



Architectural Design - Buildings



Changes in scale



Regular Rythm



Upper Floor Recess & Definition



Important Rears



Openess & Screening



Openess & Screening



Contrasting Tones



Material Continuity



Brick Detailing

Architectural Design - Streets.



Main Spine Green Boundaries



Main Spine Verge



Main Spine Spaces



Green Streets Rain Garden



Green Streets Planters



Green Streets Play



Shared Surface Infomality



Shared Surface Materials



Shared Surface Movement

Architectural Design - Biophillic Elements (Over 55's).



Cladding Green Screen



Cladding Green Wall



Cladding Green Wall



Green Roof Garden



Green Roof Solar



Green Roof Terrace



Streed Greening



Streed Greening



Streed Greening

Main Square CGI Views

View 1



Main Square. Views - Key Plan.



View 2



View 3



View 4



Main Square. Views - Key Plan.



View 5



View 6



View 7



Main Square. Views - Key Plan.



View 8



View 9

