

Appendix 2



Design Commision for Wales

Design Response Document – **October 2020**

Contents

0. Introduction

1. Masterplan Framework & Vision

2. Opportunities & Constraints

3. Masterplan Structuring Elements

4. Design Development

5. Masterplan Design Parameters

- Uses Plan
- Movement Diagram

6. Phase 1

7. Green Infrastructure & Open Space (WYG)

8. Architectural Design & Character

- Housing Squares Typology Study
- Shared Surface Streets Typology Study
- Architectural Design - Buildings
- Architectural Design - Streets
- Architectural Design - Biophillic Elements (over 55's)
- Main Square - CGI Views

9. Energy Strategy

Appendix A - The Bridge

Appendix B - Public Consultation

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

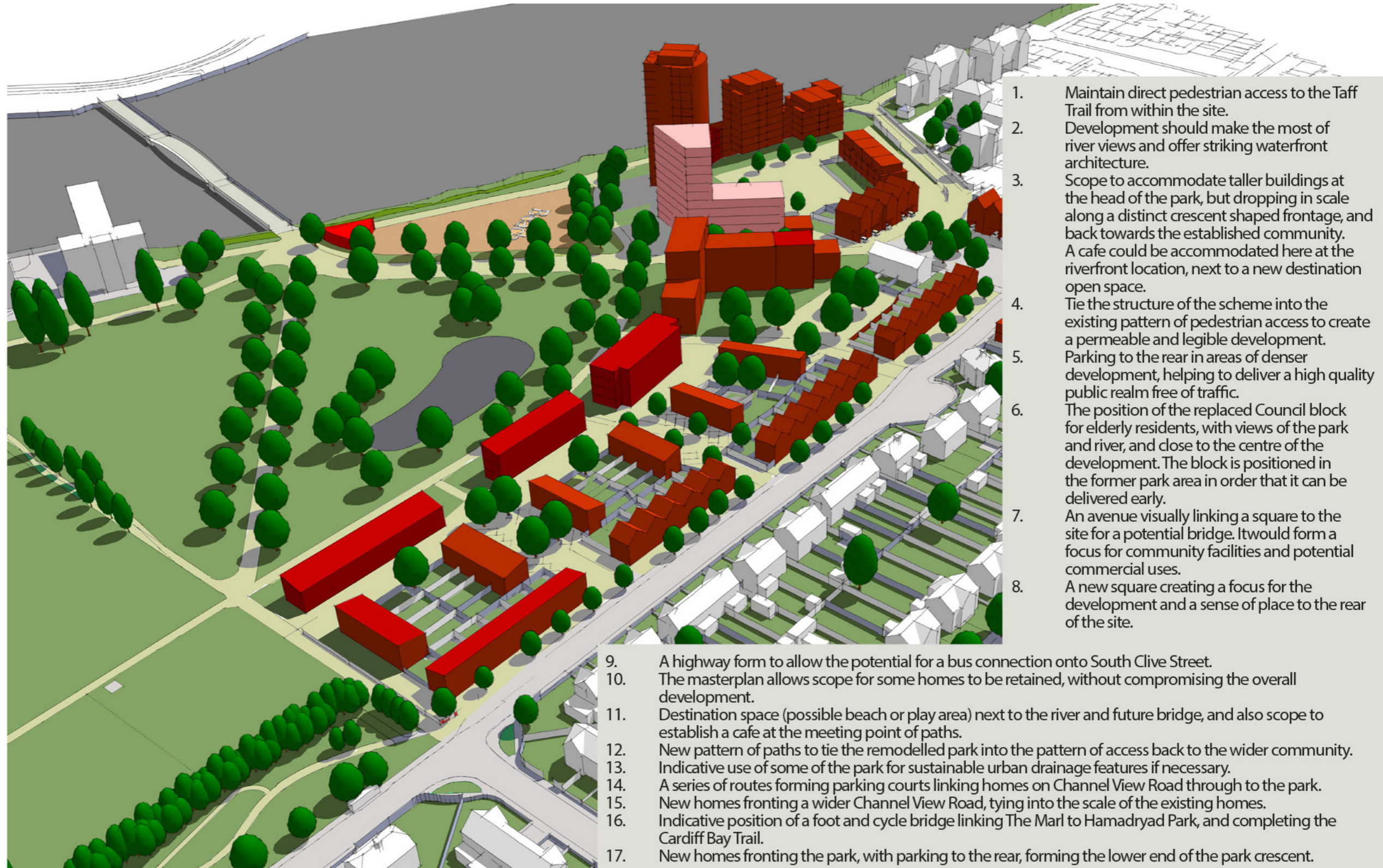
Project Manager & Cost Consultant: Blake Morgan

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

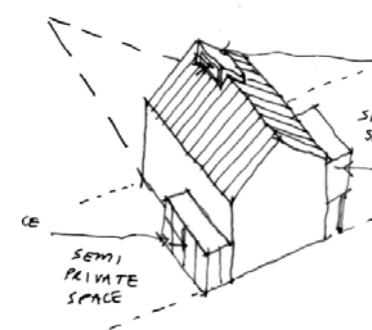
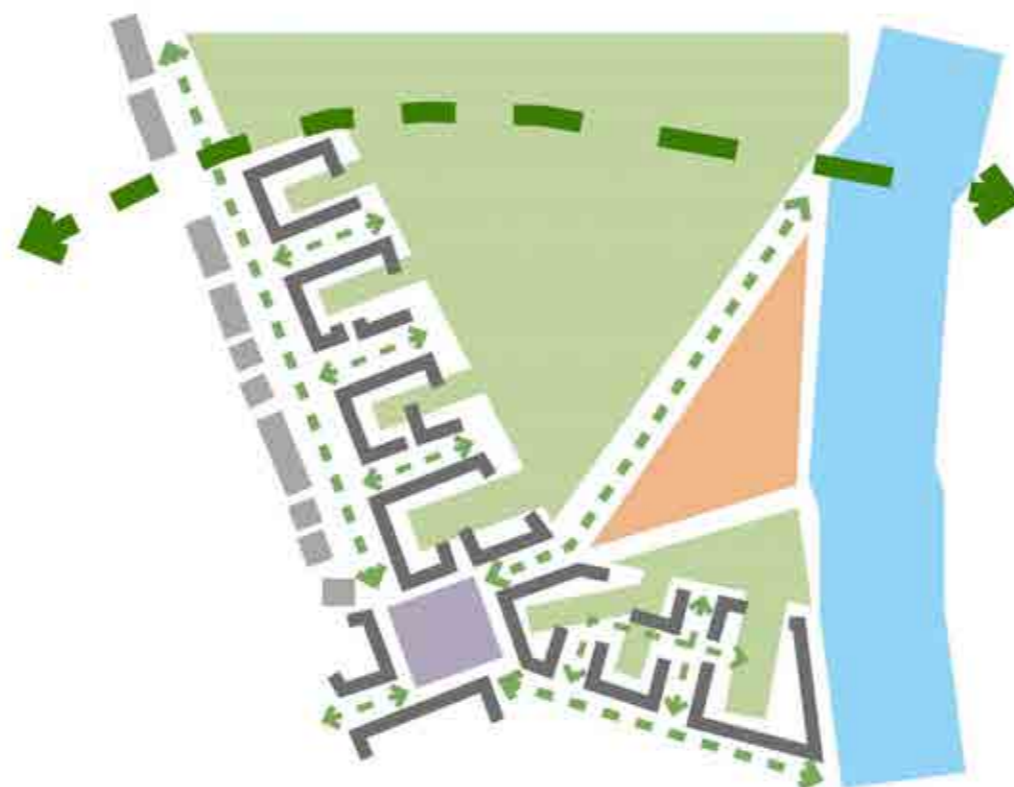
To Strengthen these Foundation Principles with 4 Themes of Our Vision:

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

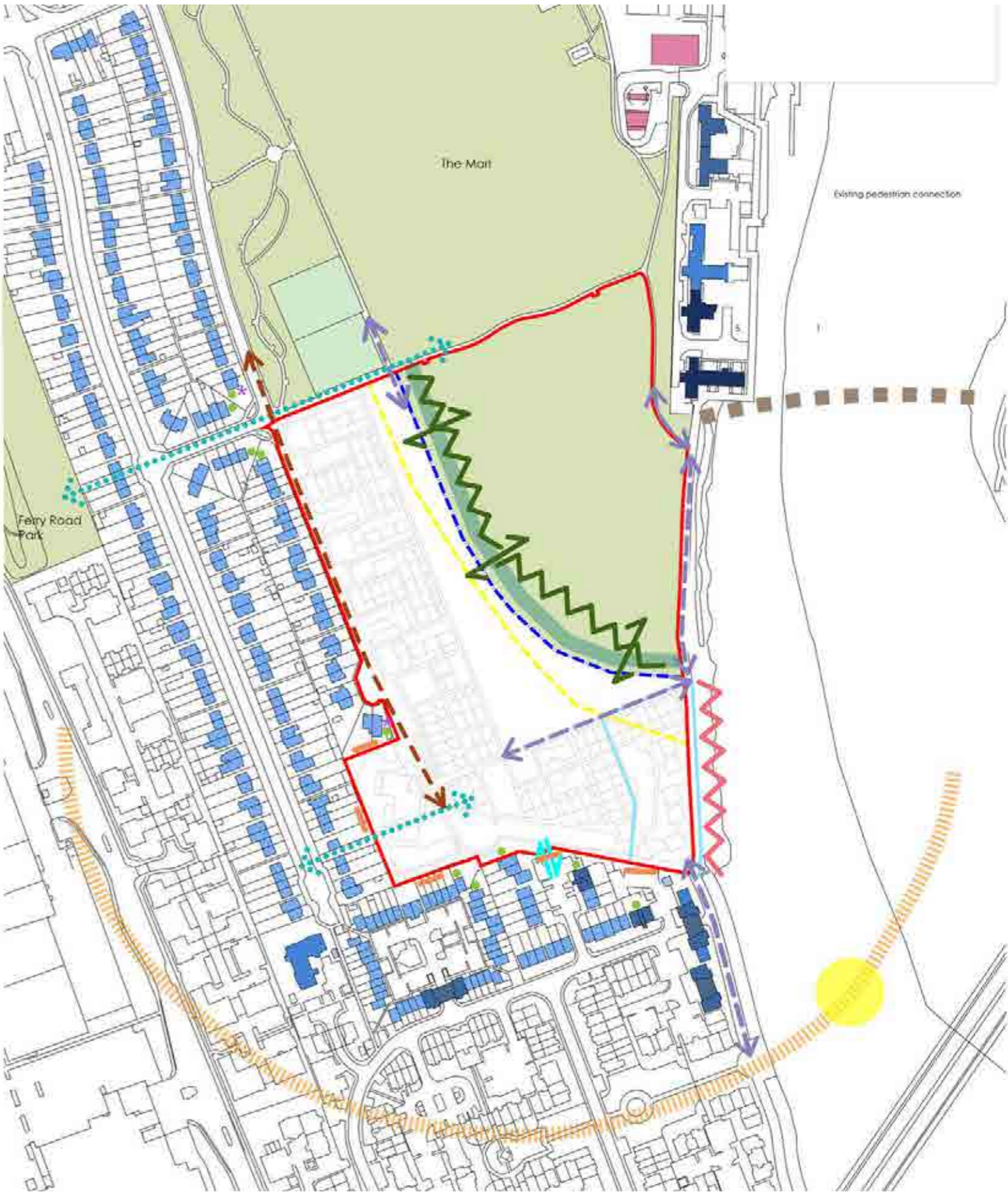
“Living Streets” – life between buildings to create a greener more sustainable neighbourhood

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 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 359 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.



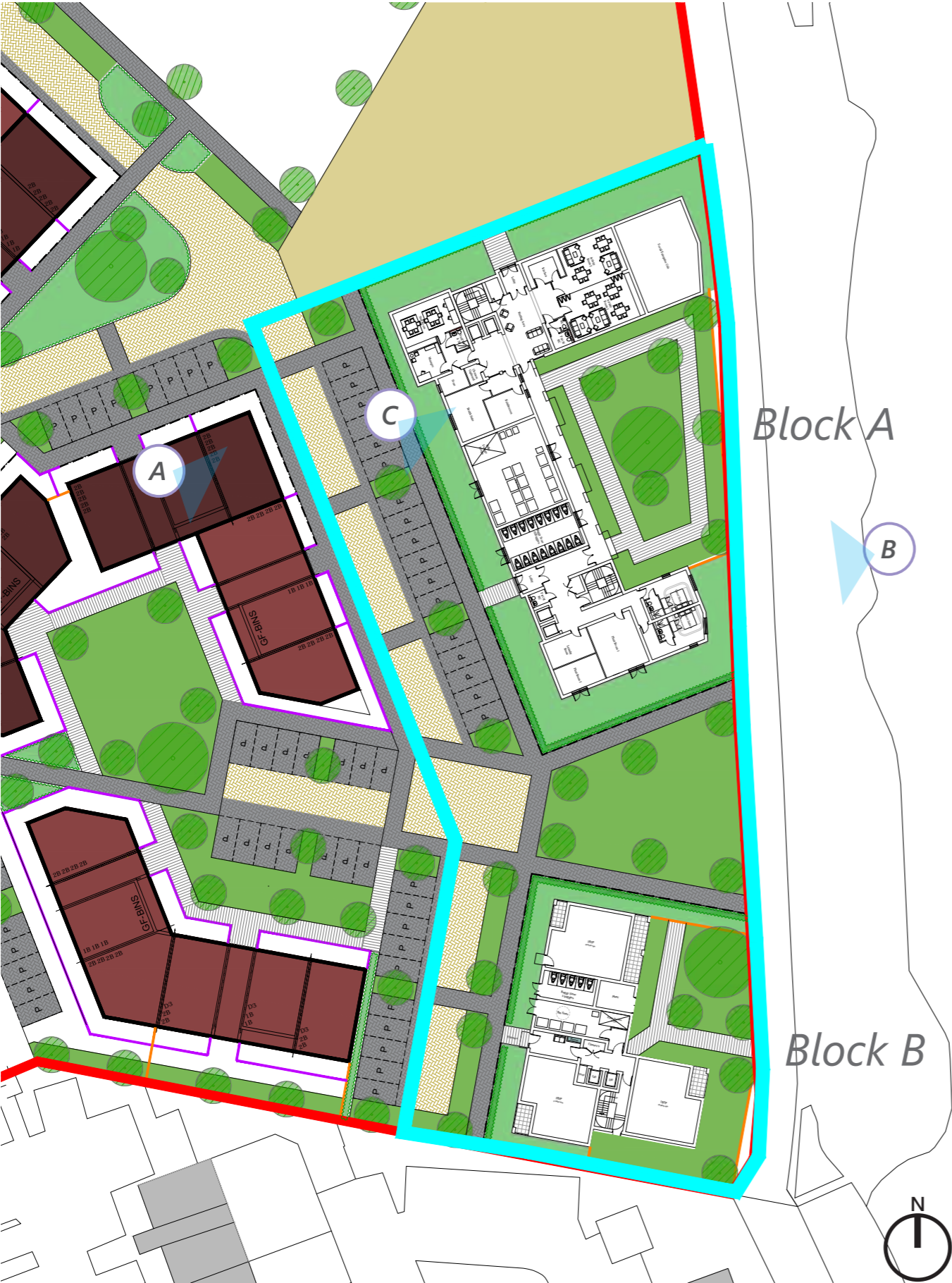
Movement Diagram

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. Phase 1



Block A



Block A / Level 00 - Ground Floor Plan



Block A / Levels 01-04 Plans

- Key**
- Resident's lounge
 - Communal facilities
 - Social enterprise cafe
 - Staff facilities
 - Servicing
 - Circulation
 - Stairs/Lifts
 - Risers
 - 1 bed apartment
 - 2 bed apartment
 - Roof terrace
 - Views to the Marl
 - Views to the river and rear courtyard
 - Views to the Marl and the Main Square
 - Connectivity with the Rear Garden

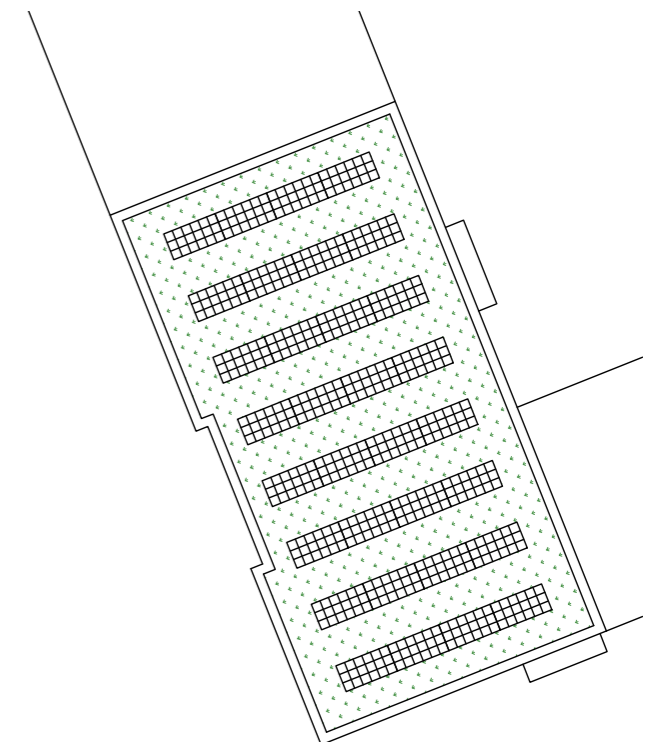
- Key**
- Resident's lounge
 - Communal facilities
 - Social enterprise cafe
 - Staff facilities
 - Servicing
 - Circulation
 - Stairs/Lifts
 - Risers
 - 1 bed apartment
 - 2 bed apartment
 - Roof terrace



Block A / Level 05 Plan



Block A / Levels 06-07 Plans

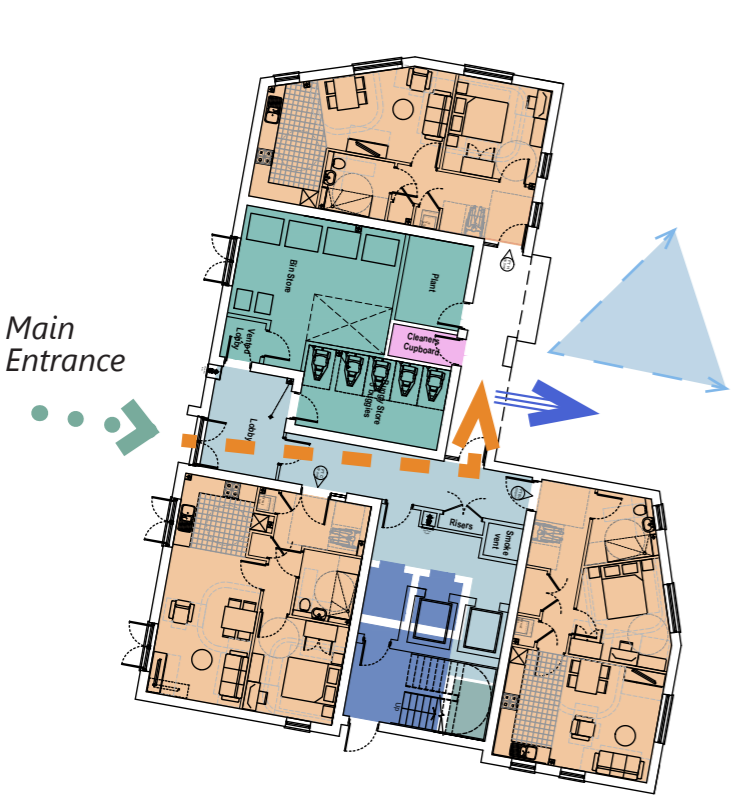


Block A / Levels 11 Roof Plans



Block A / Levels 08-10 Plans

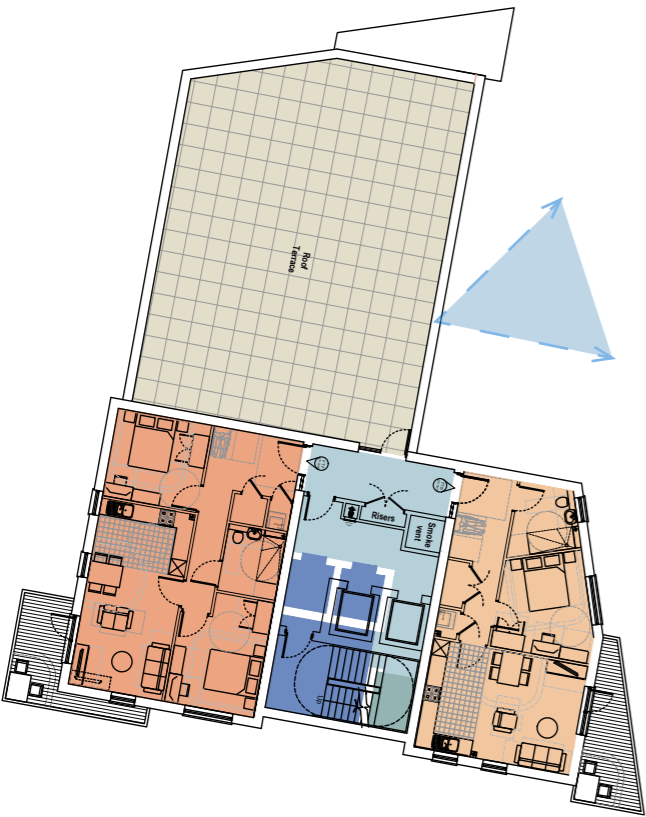
Block B



Block B / Level 00 - Ground Floor Plan



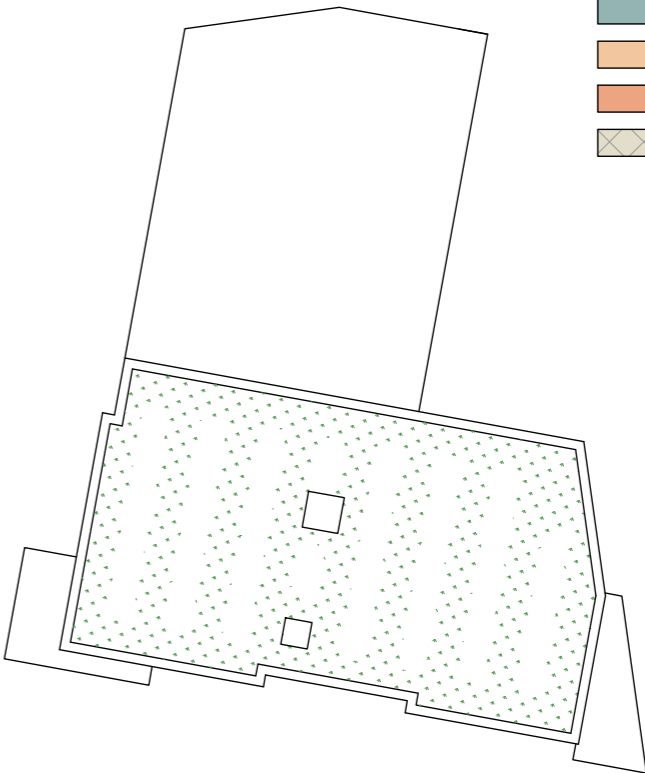
Block B / Levels 01-04 Plans



Block B / Level 05 Plan



Block B / Levels 06-07 Plans



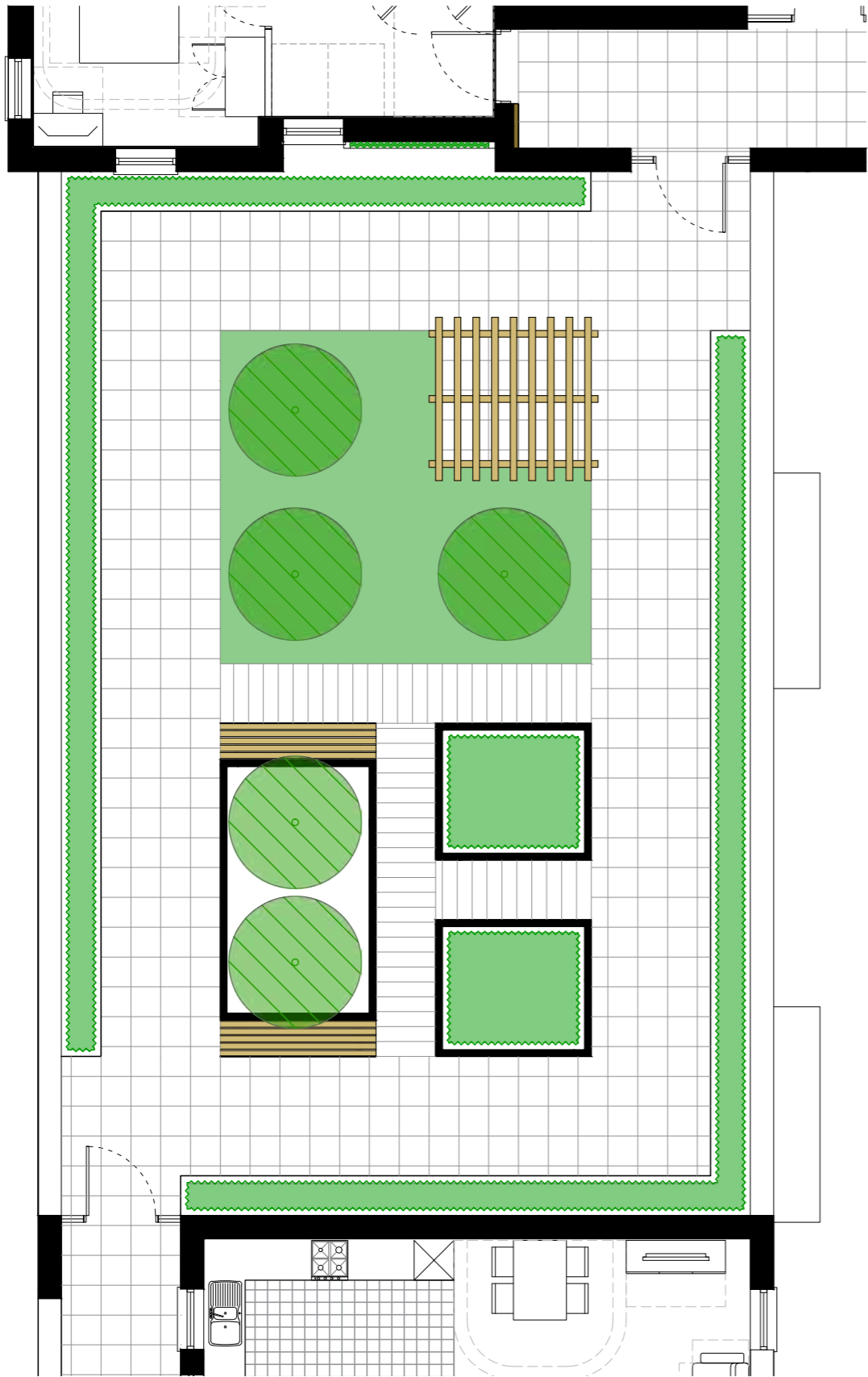
Block B / Roof Plan

- Views to the Marl
- Views to the river and rear courtyard
- Views to the Marl and the Main Square
- Connectivity with the Rear Garden

Accommodation Schedule Over 55s						29/10/2020					
Block A			11 storeys			Block B			8 storeys		
Level	1B	2B				Level	1B	2B			
00	0	0				00	3	0			
01	9	0				01	4	0			
02	9	0				02	4	0			
03	9	0				03	4	0			
04	9	0				04	4	0			
05	2	1				05	1	1			
06	2	2				06	1	1			
07	2	2				07	1	1			
08	1	1									
09	1	1									
10	1	1									
	45	8					22	3			
Subtotal	53 units					Subtotal	25 units				
Total 1B Units: 67											
Total 2B Units: 11											
Total Units: 78											

- Key
- Resident's lounge
 - Communal facilities
 - Social enterprise cafe
 - Staff facilities
 - Servicing
 - Circulation
 - Stairs/Lifts
 - Risers
 - 1 bed apartment
 - 2 bed apartment
 - Roof terrace

Area Study A - Roof Terrace

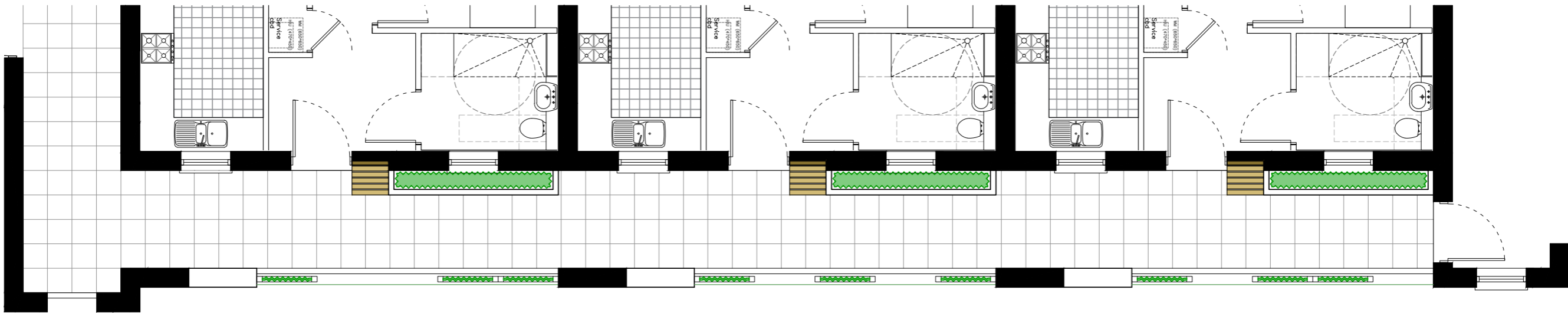


Roof Terrace Plan



Roof Terrace View

Area Study B - Access Deck Study Area



Access Deck Area

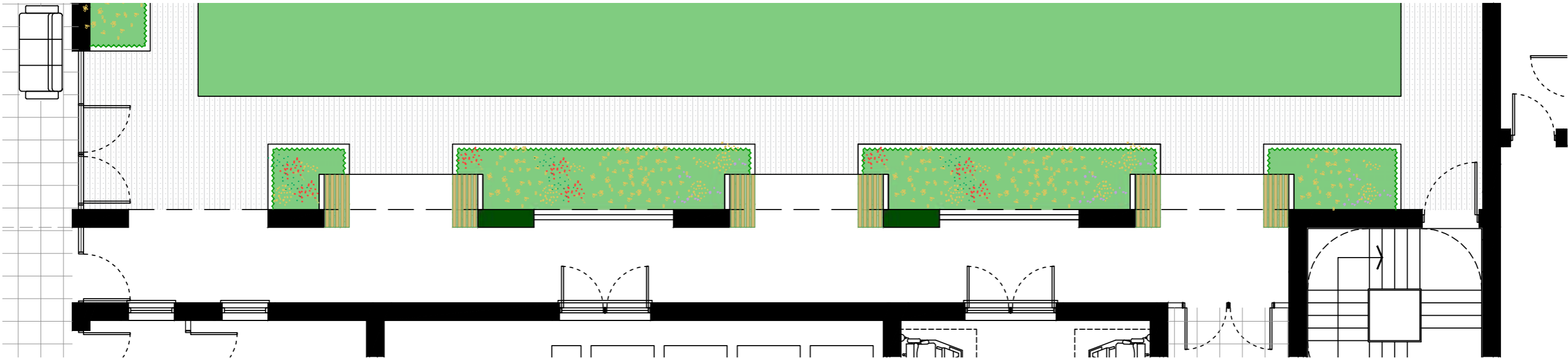


First floor Deck Area



Front Elevation

Area Study C - Communal Garden



Conectivity to the Rear Garden. Plan



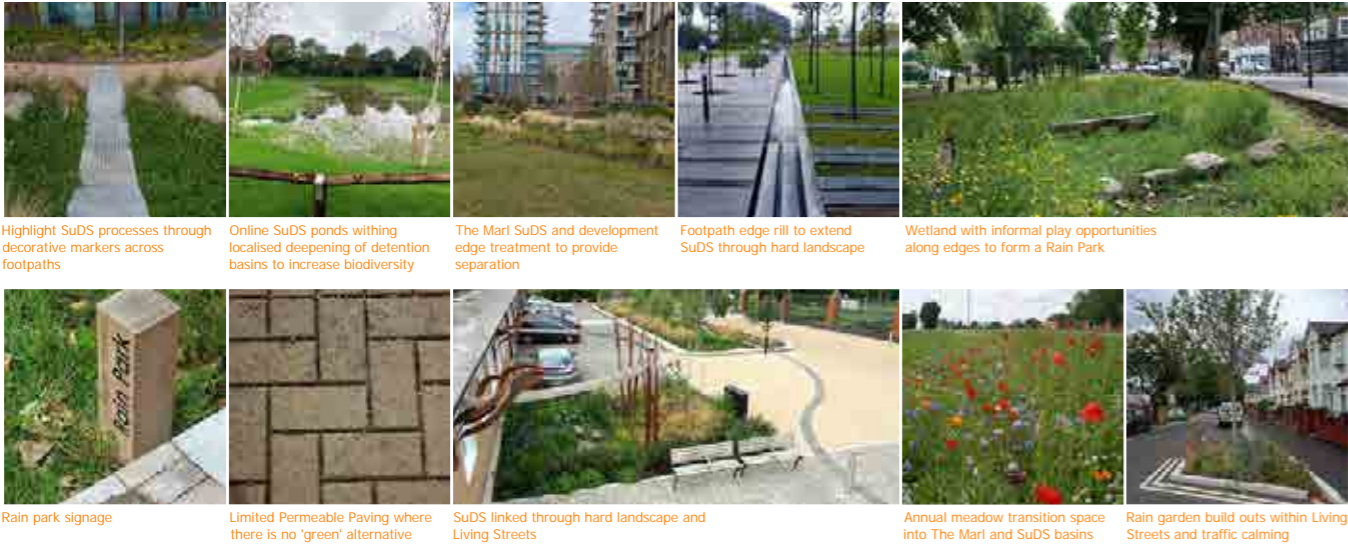
View from the Rear Garden



View to the Rear Courtyard

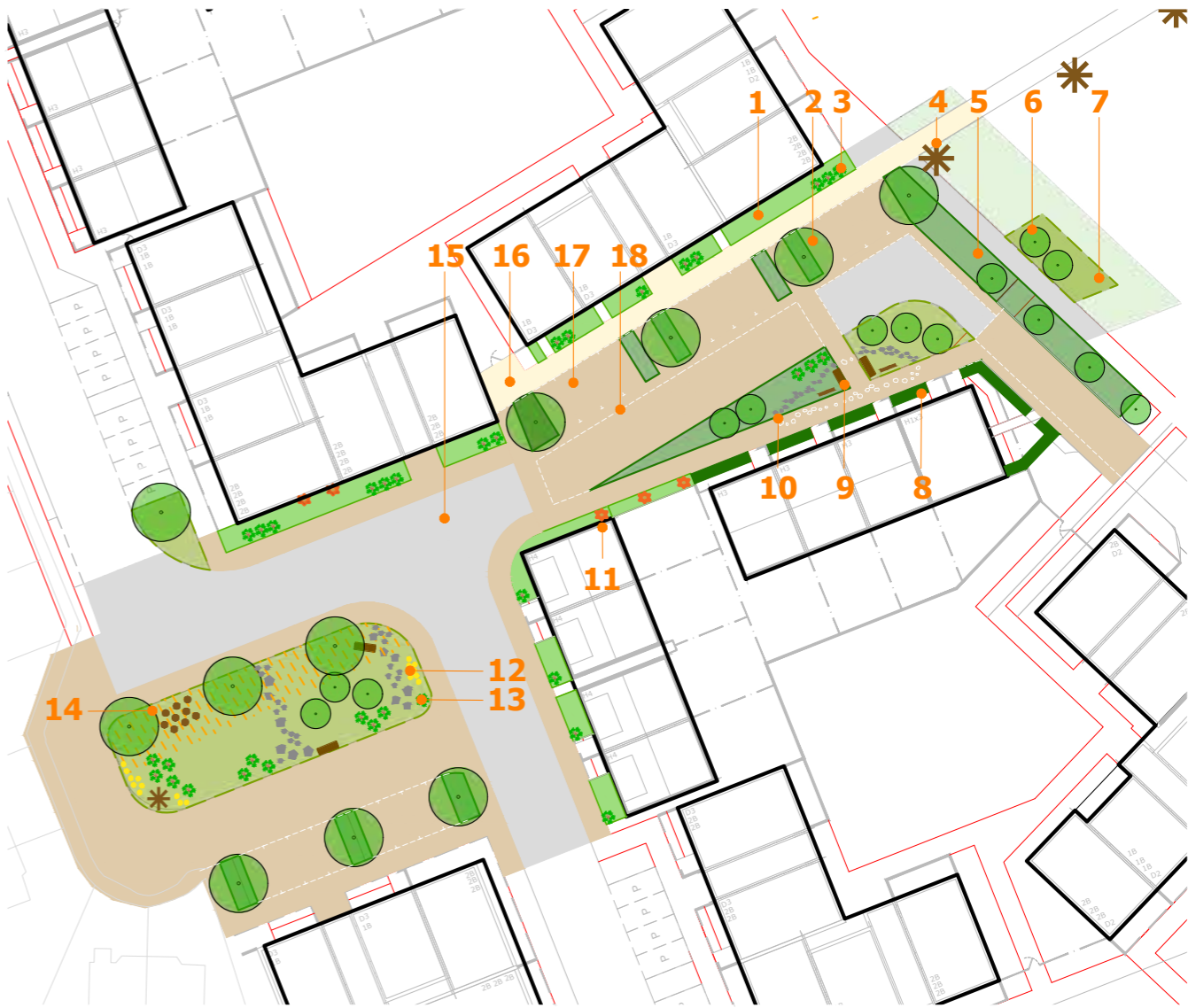
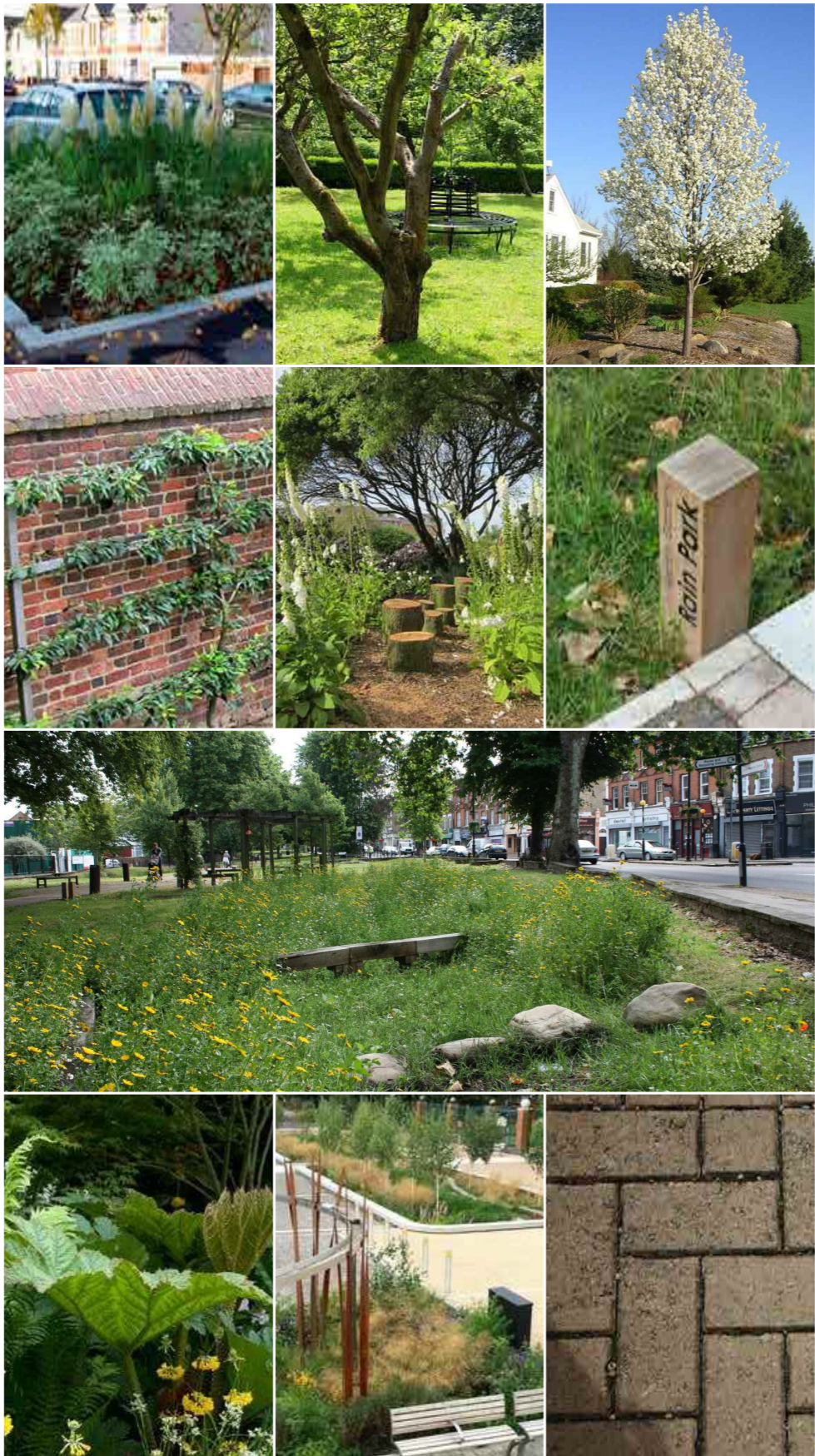
7. Green Infrastruscture & Open Space

Concept Landscape Strategy

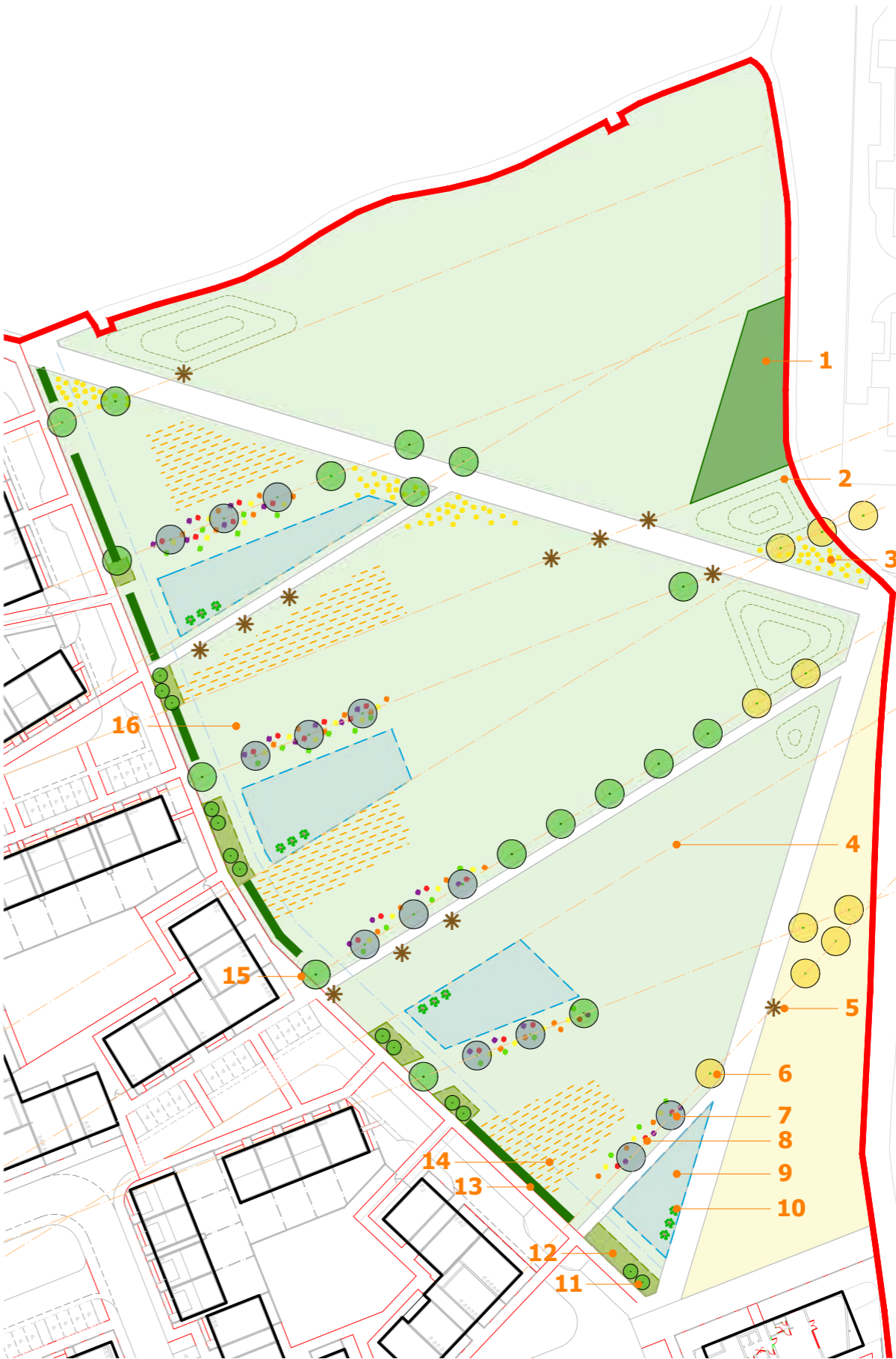


Highlight SuDS processes through decorative markers across footpaths
Online SuDS ponds withing localised deepening of detention basins to increase biodiversity
The Marl SuDS and development edge treatment to provide separation
Footpath edge rill to extend SuDS through hard landscape
Wetland with informal 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

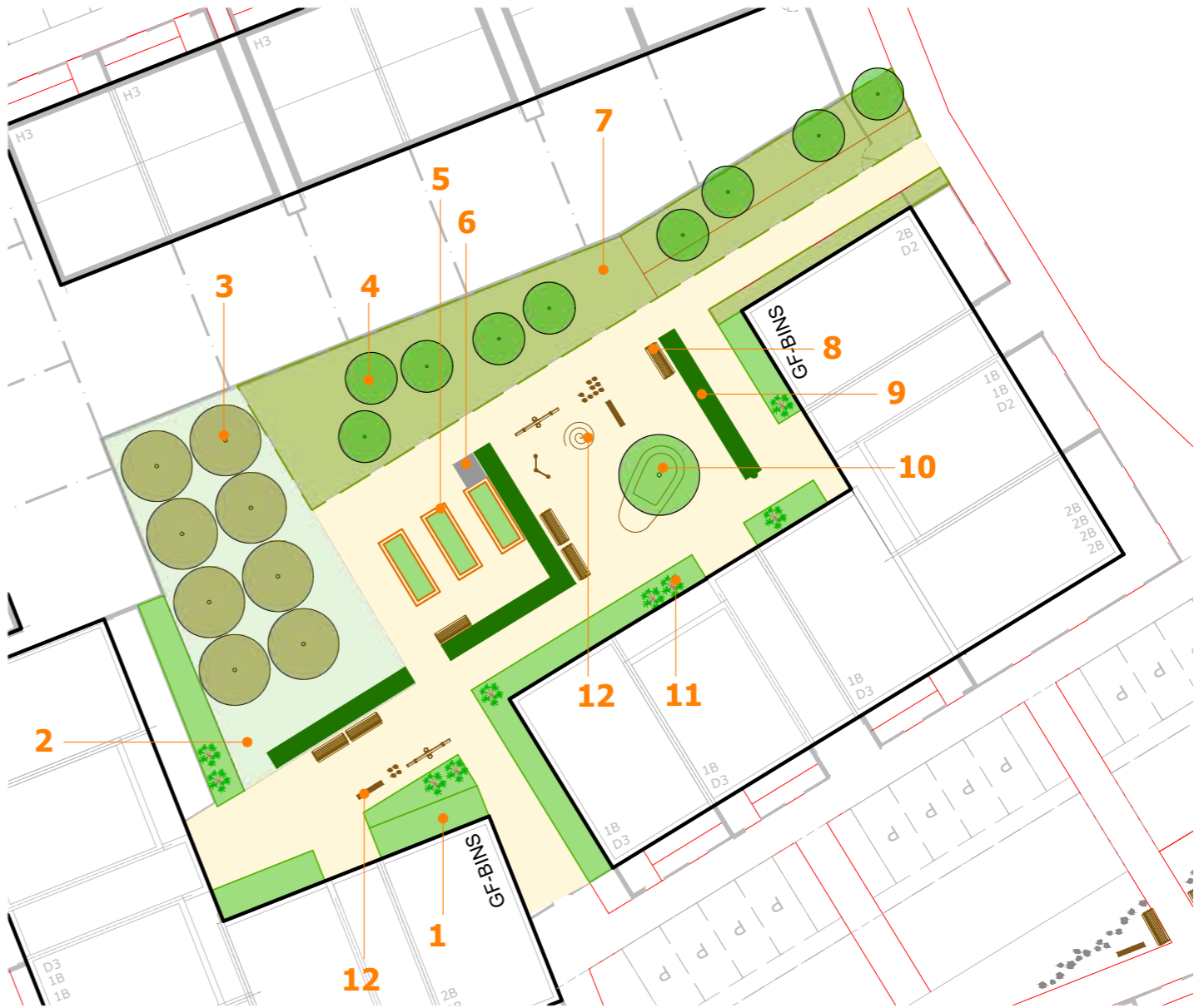
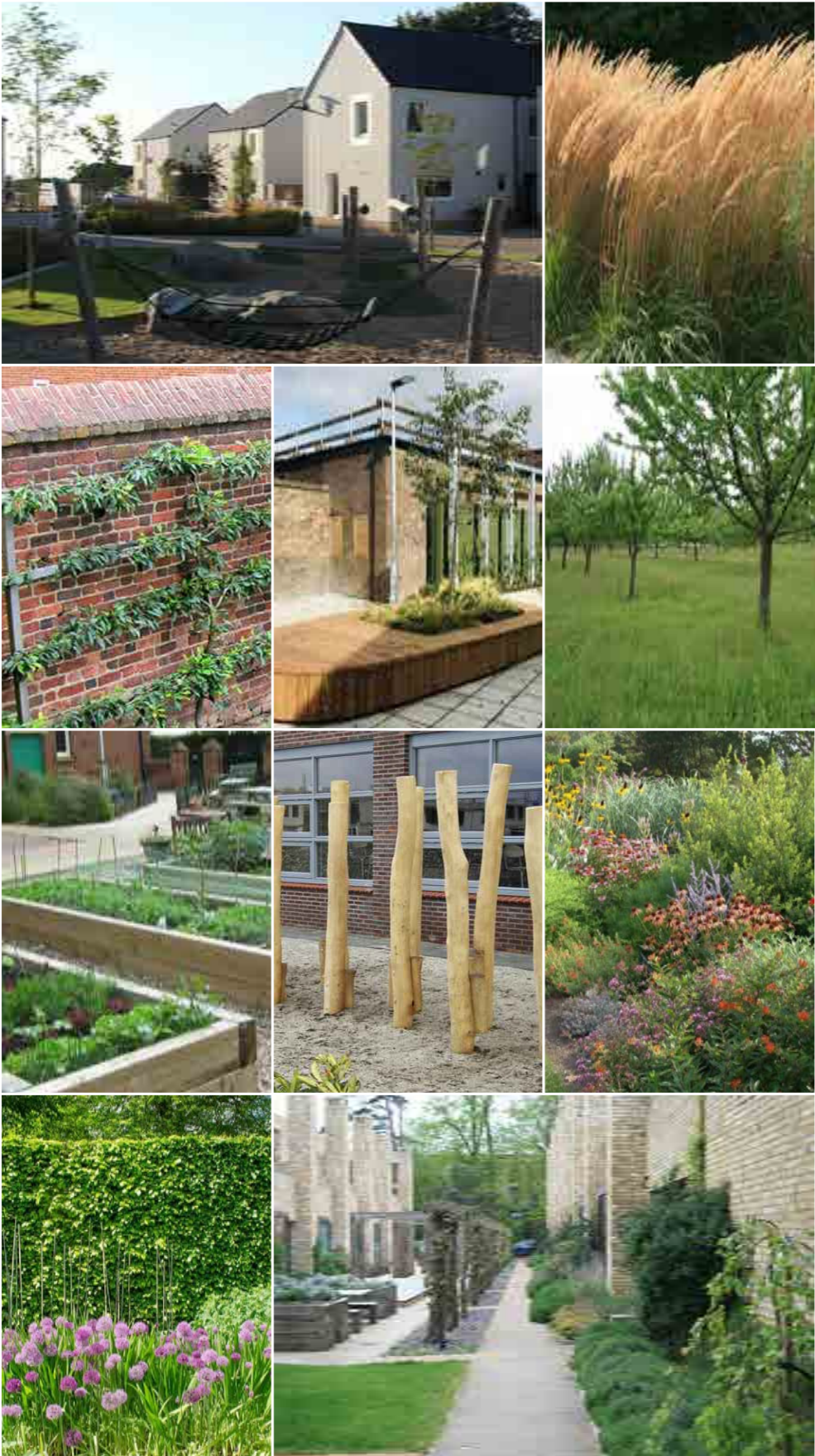
Living Streets Strategy



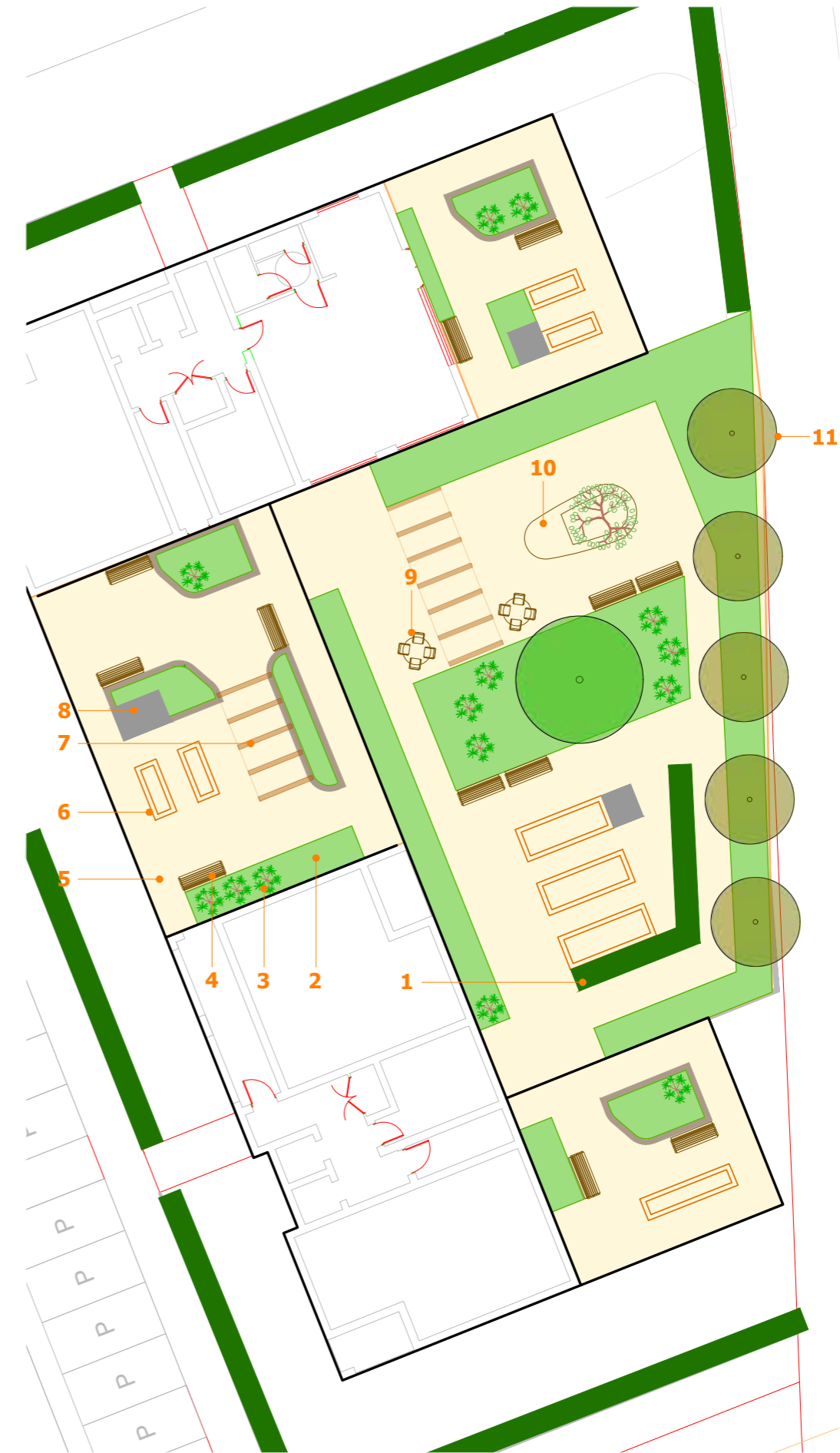
The Marl Strategy



Garden Strategy



Over 55s Gardens Strategy



8. 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

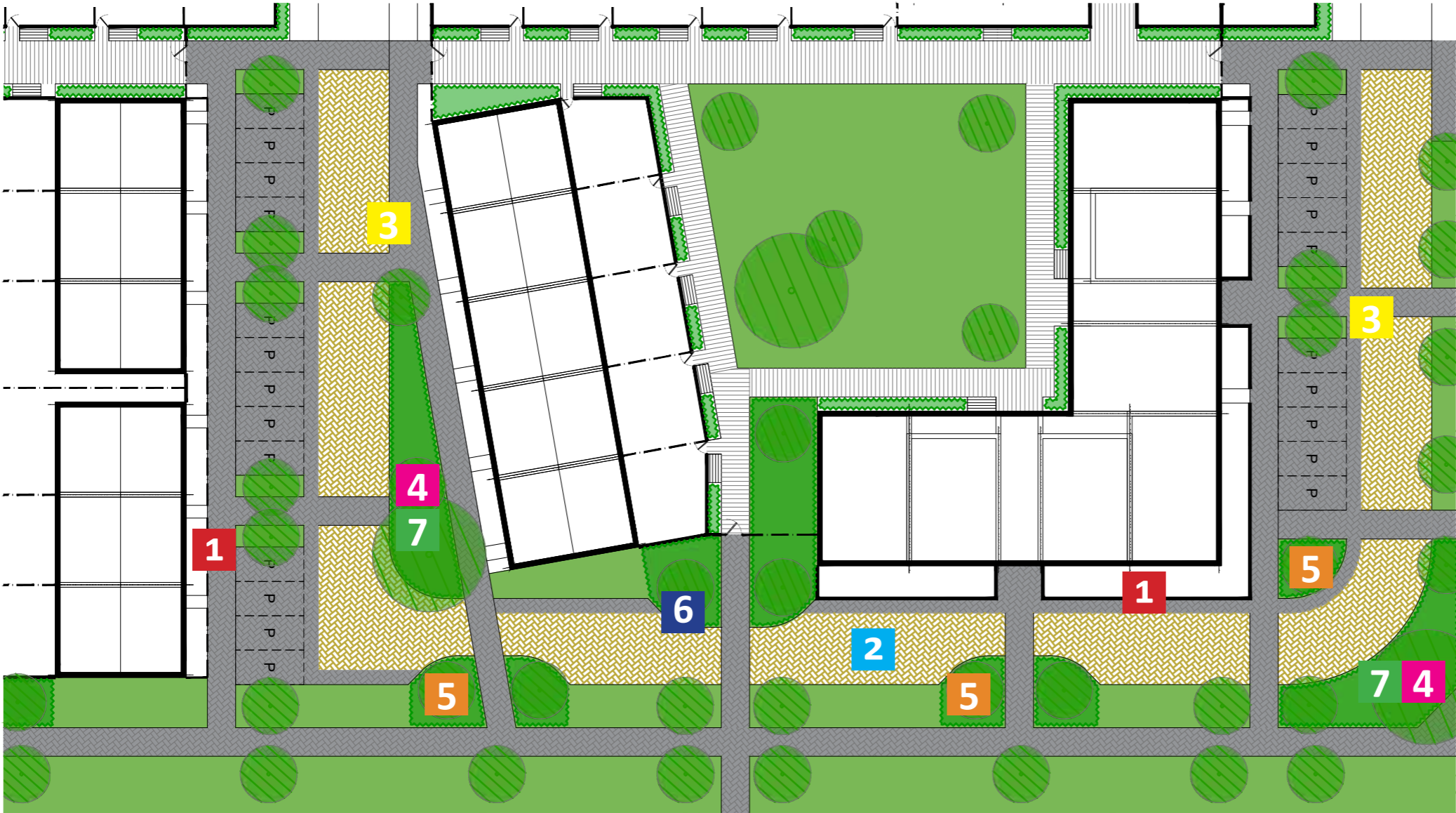


3D Image showing rear garden spaces and green streets



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



Main Spine Spaces



Shared Surface Infomality



Shared Surface Materials



Main Spine Verge



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



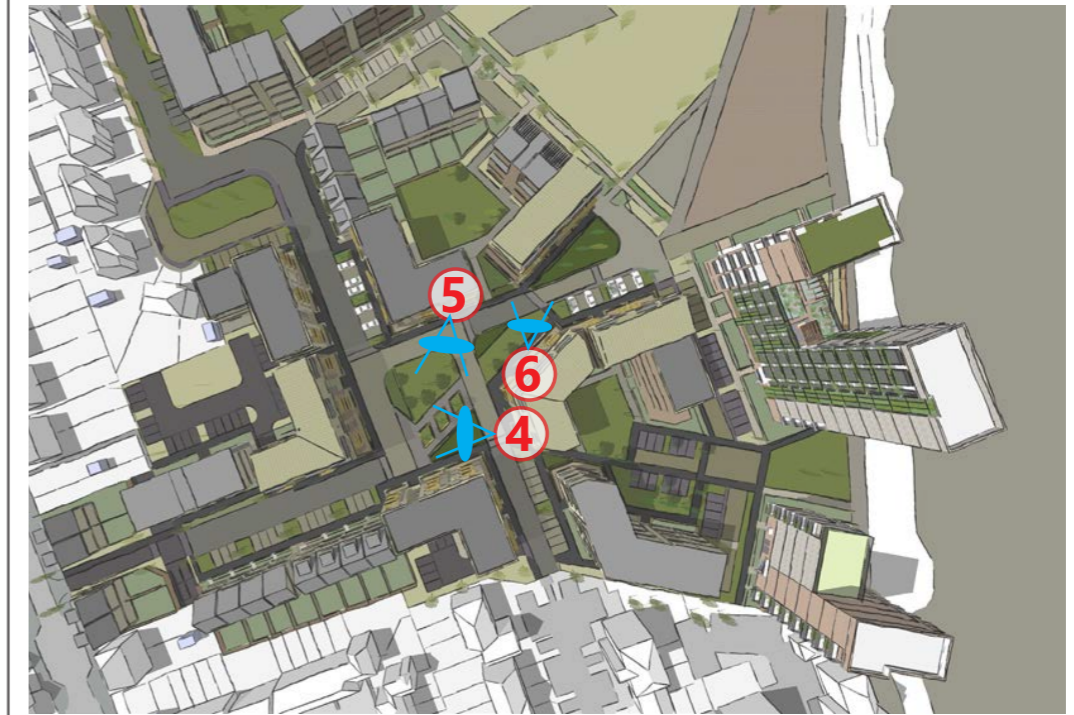
View 3



View 4



Main Square. Views - Key Plan.



View 5



View 6



View 7



Main Square. Views - Key Plan.



View 8



View 9



9. Energy Strategy

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.

WASTE MANAGEMENT



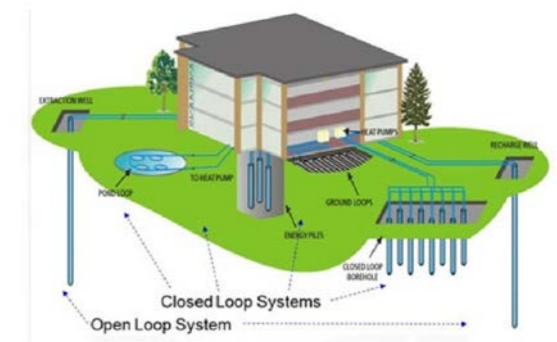
We understand that the storing and collection of waste and recycling is an important consideration in people's lives but can also affect the quality of the environment in which we live. As such the scheme is looking at a variety of options and innovative solutions to address this as follows:

- Underground automated vacuum collection systems with communal access points and a single collection chamber.
- Different methods for waste collection and recycling.
- Individual bin stores for each property
- Easily accessible communal bin storage for flats.

RENEWABLE ENERGY STRATEGY

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



Appendix A

THE BRIDGE Proposal and Timeframe

Whilst forming a strategic part of the outline proposals for the regeneration of Channel View Estate, the detail design has been excluded from the current detail design work being carried out on the residential development. This is to allow for the specific detail design of the bridge to be brought forward separately by a specialist team which will review and incorporate the technical and engineering aspects of the design. Cardiff is currently in the tendering process for this work to provide clarity on the 2 detailed parts of the scheme coming forward together. A summary of the brief and timescales is set out below.

Background

Cardiff Council has a strategic plan to regenerate the Channel View Estate in Grangetown, supporting one of the Council's key Housing priorities; to develop well-designed high quality homes aimed at tackling housing demand and needs. The regeneration project, will deliver affordable, sustainable and energy efficient new homes as well as enhance the existing Marl public open space.

As part of the strategic aims, the Council intend to provide a new Bridge link from the Marl linking with Hamadryad Park. The proposed Bridge will offer better connectivity for the residents of Channel View and Grangetown to the surrounding area (including schools) and wider potential benefits in terms of walking and cycling links across this part of the city.

The Vision for the Project

Our vision for Channel View is to celebrate its strong and vibrant community and to regenerate the estate for current and future residents through quality urban design and placemaking. There is a real opportunity through the work being undertaken on the Masterplan to significantly improve the wider linkages into and from this part of the city. The proposed new Bridge will complement the masterplan, improve options for sustainable connectivity and help integrate the local community further by connecting the east and west banks of the River Taff.

The Project Objectives

The regeneration of the Channel View estate supports one of the Council's key Housing priorities; to develop well-designed high quality schemes aimed at tackling housing demand and needs. However, the regeneration of Channel View is about more than just housing – it is about improving residents' quality of life and providing better access to economic and social opportunities as well as creating a new attractive neighbourhood with its own unique sense of identity. The proposed Bridge is imperative to the success of the scheme by opening the site to wider permeability, connectivity and access. The concept of the Bridge should, therefore aim to;

- Refresh this area of the city's relationships between housing and parks/open space
- Improve the natural and physical environment, making the area safe and attractive to residents and visitors
- Provide better east / west connectivity to community facilities, employment opportunities and other key destinations
- Provide Improved access to the river for recreation and well-being

Proposed Timetable

Set out below is the proposed indicative timetable of key dates.

STAGE	DATE(S)/TIME
Stage 1 Tender issued	Thursday 10th September 2020
Submission deadline for stage 1 tender	12:00 (Noon) Thursday 17th September 2020
Issue of Invitation to Tender to shortlisted bidders	2nd October 2020
Closing date for submission of Tenders	12:00:00 noon on 13th November 2020
Evaluation of Tenders	W/C 16th November 2020
Notification & Intention to award letters (followed by a mandatory 10 day standstill period)	W/C 23rd November 2020
Contract Award	3rd December 2020
Contract Start	4th January 2021

Appendix B

PUBLIC CONSULTATION

Community Engagement

Cardiff Council and the Design Team has carried out various community engagement throughout the design process. A summary of the key dates and future strategy is set out in the following text.

Historic Consultation – Cardiff Council

Resident's consultation events were held in July 2018 and September 2019 in the Channel View tower block. All the residents from the estate were invited to the events. Plans showing high-level design concepts for the housing development and footbridge were exhibited. Residents were given the opportunity to discuss the proposals with the council's housing officers. Further to this a detailed questionnaire was completed by all the attendees. The response received from the residents were a mixture of mostly positive comments. The consultation events highlighted the importance of engaging with the residents in a strategic approach where a well-structured thorough community consultation process is delivered.

Current Consultation – Channel View Design Team

Following the appointment of the design team and initial design development of the proposals a further consultation event took place in March 2020 at Channel View Leisure Centre. This presented the initial detail design work focusing on the masterplan and the options / improvements the Marl, as well as some of the design ambitions looking at the greening of Channel View Estate with the introduction of rear communal gardens and street landscaping. Another detailed questionnaire was completed by all the attendees and again the responses were generally positive from a design perspective, with most concerns around phasing and the length of time the process has taken to date.

Future Consultation

The intention was to carry out more face to face public consultation, as well as specific consultation with key groups and stakeholders. This has been difficult to achieve given the current Covid-19 pandemic and the changing guidance. Key stakeholders and groups have been kept notified of progress and individual consolation with the separate local authority departments has taken place. An online consultation event is planned for Oct 2020 in which wider residents of Grangetown will be informed of the plans. Comments will be collated and incorporated into the final designs before formal PAC submission in November. It is intended the the planning application will be submitted in December 202.

