



Royal Wharf London

Design + Access Statement Plots 11 + 12 + 15 + 16 + 22

Report prepared by:

GLENN HOWELLS ARCHITECTS

TOWNSHEND
Landscape Architects

FeildenCleggBradleyStudios

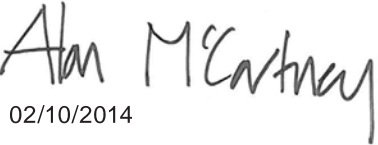
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Prepared by Glenn Howells Architects

Name Alan McCartney

Job Title Project Architect

Signed 

Date 02/10/2014

Prepared by Glenn Howells Architects

Name Sophie Hamer

Job Title Architect

Signed 

Date 02/10/2014

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Royal Wharf Phase 02 (formally Minoco Wharf) is a residential led mixed use scheme in the heart of the London Borough of Newham. The project represents a second phase of development of the planning-approved 2012 Minoco outline masterplan (reference 11/00856/OUT) and proposes a significant opportunity to provide new family housing alongside small scale commercial and retail uses providing for the housing and amenity needs of the local community.

Submitted in September 2014, this document forms the design and access statement of the reserved matters planning application for building plots coming forward as a second phase of development within the masterplan consent; known as Plots 11, 12, 15, 16 and 22.

The project is a stepping stone between the previously consented residential led development known as Royal Wharf Phase 01 and the scheme moving west from the Phase 01 consent. Proposals for Plots 11, 12, 15, 16 and 22 aim to build on the momentum already established in the area by the first phase detailed works.

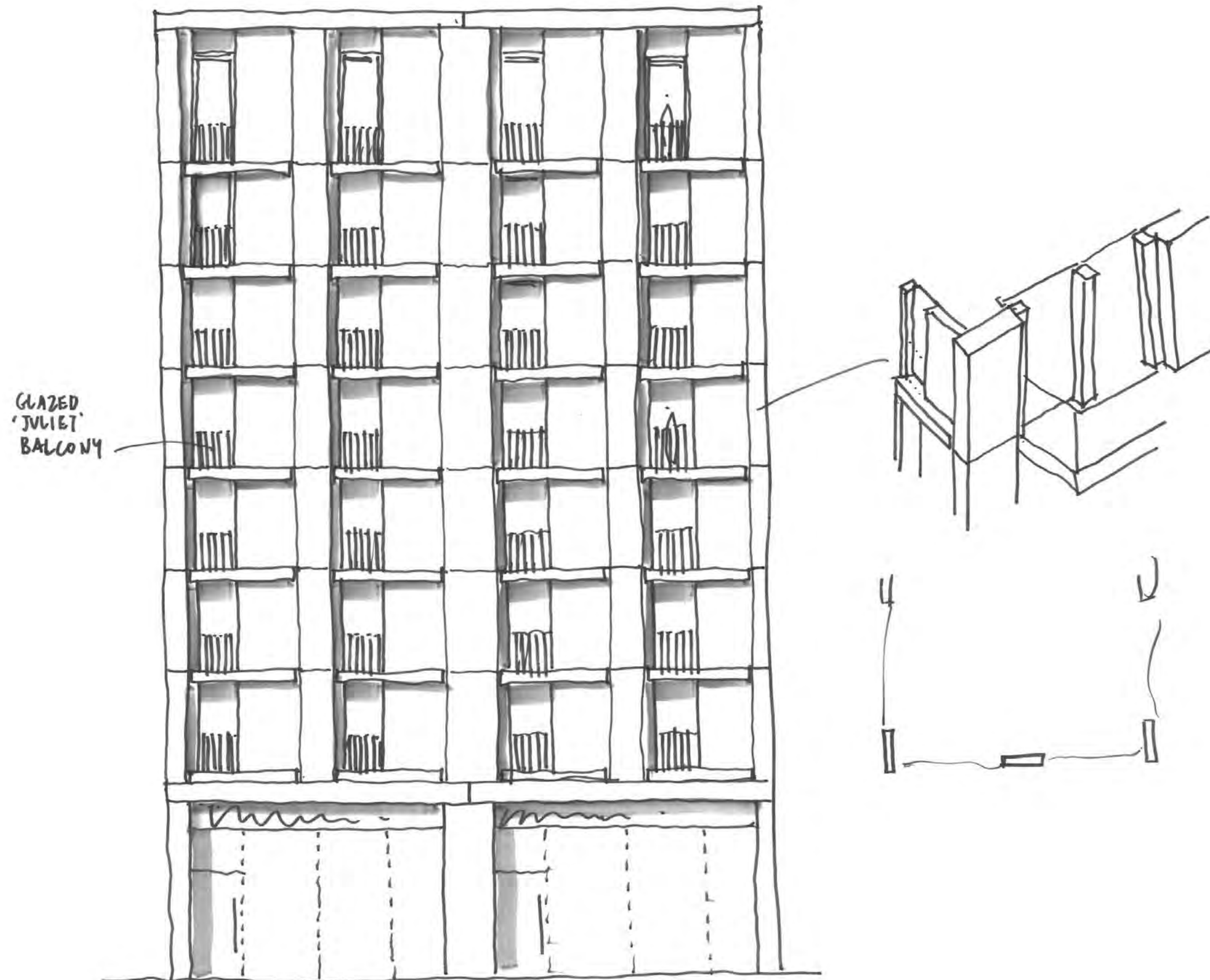
This report summarises the design and access audit process undertaken when developing proposals for this key site. It records development of the building proposals from their initial concepts at masterplanning stage, through their relationship to the Royal Wharf masterplan design code and leads onto detailed design proposals; submitted for each plot as part of this reserved matters application.

In addition, this report records the process of design review panel (DRP) consultation and subsequent resulting design development undertaken for Plots 11, 12, 15, 16 and 22, as recommended by the DRP. The outcome of the review process has had a positive effect on each plot design with the amended scheme providing greater consideration to a wider range of issues, sensitivities and opportunities particular to the locality.

The comprehensive development of Plots 11, 12, 15, 16 and 22 will include new homes in a mixture of 1, 2, 3 and 4 bedroom apartments and townhouses, (C3); alongside retail floorspace (A1), financial and professional floorspace (A2), hot food / take away floorspace (A3 and A5), pub and restaurant floorspace (A4) and employment uses (B1).

New elements of public realm including, a riverside park and walk, external hardscaping and paving with an interface to the consented Phase 01 development works will stand alongside large areas of private courtyards and semi private open space.

Royal Wharf seeks to be an exemplary residential development. The design strategy aspires to realise the full potential of this unique site, benefiting from its location in the heart of the London Borough of Newhams Royal Docks, and providing a new district of growth; thus achieving a vision of an attractive and sustainable development within which to live, work and play.



Façade Concept Design Sketch Plot 22

Royal Wharf will be an exemplary landmark development. In addition to the masterplan vision as a whole, the design strategy for Plots 11, 12, 15, 16 and 22, aspires to realise the full potential of this unique opportunity, which combines a large site in single ownership next to the River Thames, benefitting from views to the Thames Barrier, Canary Wharf and the Millennium Dome, to be an attractive place in Newham to live, work and play.

Achieving this goal requires the clear and carefully considered integration of well-designed, high quality residential buildings, both house typologies and apartments alongside business workspace, local retail and a wide range of diverse community uses.

A desire to create special places summarises the team's approach for the Royal Wharf masterplan. We aspire to create neighbourhoods where work, leisure and home life all come together.

The proposed concept focuses on family living and places shaped by building edges to make a high quality residential setting protected from the scale and hustle of neighbouring roads and public transport routes. The sensitive deployment of materials and landscape will enhance the sense of place and allow attractive private outdoor spaces creating a place where people feel they can belong within a wider contextual setting framed by famous London landmarks and city parks.

The scheme proposals also aim to build upon and engage with existing and future designs for neighbouring sites; while also generating a successful individual and site specific urban strategy. This will be achieved by learning from significant examples of urban development, both historical and contemporary from within London and from further afield.

The design proposals comprise a rich variety of architectural elevations, unified through a common material and detail language to emulate the range of textures and materials historically present in London. Each building's aesthetic, materials and design language draws on the consented parameter plans of the Royal Wharf outline permission and design code as well as the immediate context of the detail consented Phase 01 proposals.

Within each plot a number of distinct elevations are proposed, each connected at ground level either by landscaping or an architecturally detailed junction. This ensures that an articulate plot massing, which is respectful to the adjacent context and maintains the range of elevation scales required for the plot, is achieved in balance.

This design and access statement may be read alongside the Minoco Masterplan Design and Access Statement (May 2011) for further background information on the project in its wider planning and design context.

Design Team

Client	Oxley Wharf Property Ltd
Project Manager	Roundstone Development Mgt
Masterplanning Architect	Glenn Howells Architects
Plot Design Architect (Plots 11 + 22)	Glenn Howells Architects
Plot Design Architect (Plot 16)	Fielden Clegg Bradley Studios
Plot Concept Architect (Plot 12)	Mæ Architects
Plot Concept Architect (Plot 15)	Serie Architects
Planning Consultant	Rolfe Judd Planning
Environmental Consultant	URS Corporation Ltd
Transport Consultant	TPP
Energy Consultant	OCSC
Landscape Architect	Townshend Landscape Architects
Public Relations	Remarkable Group
Structural Engineers	OCSC
M+E Engineers	OCSC
Daylight Assessor	eB7

Scope of the Design and Access Statement

This design and access statement has been prepared in context of, and to comply with the The Town and Country Planning (Development Management Procedure) (England) Order 2010 and the circular Guidance on changes to the development control system 01/2006.

This document provides information on the amount, layout, scale, access and the landscaping of the proposed development and should be read alongside previously consented Minoco Wharf outline masterplan application documents pursuant to approved planning permission 11/00856/OUT and accompanying relevant planning guidance.

We believe that place making is the key ingredient to creating a successful scheme and buildings will only prosper if people want to be around them.

The combination of a unique location and a London setting provides a great opportunity for integrating Plots 11, 12, 15, 16 and 22 into the previously consented Phase 01 proposals, bounded by high quality public realm within the emerging masterplan.

The design and access statement sets out to explain in detail the resolution of the design proposed. It clearly illustrates the commitment to design and quality in the design development process to ensure that the proposed scheme realises the full potential for this site.

The report is subdivided into the following broad chapter groupings which follow the chronology of the design process undertaken:

- Introduction
- Site Context
- Royal Wharf Design Code
- Design Development
- Technical Design Strategies
- Landscape Proposals
- Access Audit
- Conclusion

Consultation Process DRP

The Newham Design Review Panel (DRP) helps to improve the quality of urban design and architecture through the borough’s planning process. The panel advises on major developments in the borough and does not make planning decisions itself; but helps the council to get the best built environment for residents.

The panel includes a chair and up to three others taken from a group of 15 built environment professionals, including architects, urban designers and landscape architects.

Royal Wharf Plots 11, 16 and 22 were formally presented to the DRP on 30 April 2014 and subsequently revised proposals in line with the panel’s comments were represented in summary on 23 June 2014. Plots 12 + 15 were formally presented to the DRP on 30 May 2014.

The panel’s comments received during the reviews (and formally by letter afterwards) are recorded within the design sections for each respective plot, with each comment having been responded to through the design process and included in the proposals presented in this report:

Invited Limited Design Competition

In the interest of providing greater architectural variety to the scheme LBN requested that an invited limited design competition be held for a number of plots with the Royal Wharf masterplan as a requirement of the Section 106. Plots 12 and 15 were selected due their prominence and key locations, making them ideal landmarks for the scheme. Plot 12 is situated at the end of the park and 15 adjacent to the park overlooking the river.

Six architects were invited to submit designs for the competition based on their expertise and experience. Those invited architects were:

- 1. Ben Adams
- 2. Coffey Architects
- 3. Mae
- 4. Serie
- 5. Stephen Taylor
- 6. Duggan Morris

Duggan Morris declined the invitation to submit an entry. The remaining 5 architects presented their schemes to the judging panel and were interviewed on 31st March 2014.

The competition required a collaborative approach with the competition entrants required to design envelope ideas for the plots and the chassis and layout to be determined by GHA. Following the competition the judges assigned a plot to each chosen practice and the designs were developed with GHA in a series of workshops up to stage C+.

Based on their innovative approach and exciting designs, Mae was selected for the design of plot 12 and Serie was selected for plot 15.

A series of collaborative workshops were held alongside reviews with the client and design team to develop the design. The process included presentations to the London Borough of Newham Design Review Panel and the Development Control Members Forum. Glenn Howells, as Design Champion for the development oversaw the competition.



Detailed CGI's Phase 01 Development

Phase 01

Phase 01 detailed planning consent at Royal Wharf was recieved at the same time as the outline masterplan planning permission. The images adjacent provide an illustration of how the Phase 01 buildings have been designed and the range of architecture and landscape proposed in this section of the development.

Brief

The client’s brief to the design and planning team was to explore the following issues:

- Provide attractive family housing at a mix of tenures, that comply with the S106 requirements;
- Accessible / walkable community heart to the development, reinforcing the parameters of the outline masterplan;
- Provision of good space for future occupancy by a range of mixed use facilities;
- Develop a design which sits well within its own site but also respects neighboring context, both within the Royals and adjacent communities;
- Design an appropriate mix and range of unit types for the residential accommodation;
- Develop a better understanding of real community value that can be provided within the plot design strategy;
- Scale testing: models / visual montages;
- Provide a viable sustainability strategy;
- Address existing constraints;

- Provide spaces to meet the required the range of facilities and services that support a new community, while providing that community independent identity within the development;
- Develop a clear and appropriate open space strategy, both for public realm as for private amenity spaces;
- Develop a clear connections strategy for each plot within its wider context;
- Prepare easily understandable information;
- Meet the cost plan and viability testing of the S106.

This document follows a logical progression through the issues above and in conclusion measures the proposals against the aspirations of the brief.

The plans presented in this report illustrate a body of work that aims to present a solid grounding and set of detailed parameters that not only establish the quality of design for each plot within its own site boundary but also seeks to establish strong design principles; upon which the further detailed development of neighbouring sites can be measured ultimately to realise the vision of the Royal Wharf masterplan.



The Royals- An Introduction

The Royals site has been developing for over two centuries. First managed as areas of pasture maintained in a low lying flood plane the context changed dramatically in the 18th and 19th centuries.

Throughout the 18th and 19th centuries the industrial revolution necessitated land east of the city be developed into industrial factories and warehousing culminating in the development of the Royal Docks which remained in use through to the 1980s.

As trade declined and Britain's economic focus shifted the Royal Wharf area steadily lost its focus as a centre for import and export. This steady decline from an industrial led centre, has left a legacy of dereliction and vacant land which is only recently being positively addressed in proposals such as the Royal Wharf masterplan.

Now the Royals area is undergoing significant change. The former historic industrial land uses are relocating to more appropriate sites and a new mixed use community is emerging including significant residential developments, led by public investment in the DLR and attraction of a riverside setting.

The airport, ExCeL, Siemens and the University of East London are amongst the new businesses. Britannia Village, Barrier Point East, Barrier Park East, Tradewinds and the land east of ExCeL illustrate significant new residential developments alongside the Royal Wharf homes. A new mixed use community is emerging.

The Royal Wharf site in this context provides the opportunity to connect existing communities with new areas of development on both sides of North Woolwich Road while creating a diverse local and intensely active new urban quarter of London.

Transport and Connections

The Royal Docks have benefited from significant public investment in the DLR and Crossrail, which will provide excellent accessibility to Canary Wharf, central London and the southeast of England.

The closest Crossrail station will be at Custom House and is expected to be complemented with feeder bus services to provide access for current and future Newham residents and businesses. Latent provision has also been made for a future DLR station on the Woolwich branch to the west of the site.

London City Airport provides both national and international connections, along with related business opportunities.

Development at the Royal Wharf site will maximise the benefits of these nodes, linking with Canning Town and supporting the bus, cycle and river networks, encouraging a greater use of the waterway and riverside through improved pedestrian links and a potential extension to the current river bus routes.



- Britannia Village
- River Thames
- Peruvian Wharf
- Royal Victoria Dock
- Future Development Site
- Vanesta Wharf
- Minoco Wharf Oil Pontoon
- Sunshine Wharf
- Manhattan Wharf
- Deanston Wharf
- Thames Barrier
- Thames Barrier Park
- Minoco and Crescent Wharf
- Lyle Park
- DLR Viaduct
- North Woolwich Road
- Barrier Point Residential Development

Existing Site

The application site (Plots 11, 12, 15, 16 and 22) covers approximately 3.657 hectares of brown field land and sits within the context of three former wharves; Vanesta and Crescent Wharves to the west and Minoco Wharf immediately around the plots. None of the wharfs have the status of safeguarded wharves. The western area of the wider site houses a number of warehouses and industrial buildings; all of which are either derelict and / or in a poor state of repair. The remainder of the wider site comprises cleared vacant land and unused temporary structures.

The site is situated in the London Borough of Newham (LBN) and all but the extreme eastern part of the site was previously in the administrative area of the London Thames Gateway Development Corporation (LTGDC). The River Thames is located to the south, Barrier Point Road to the east and North Woolwich Road to the north.

The wider site forms part of a series of underdeveloped low grade industrial sites that are situated along the River Thames from the mouth of the River Lea in the west to the Tate and Lyle plant in the east. West Silvertown DLR station is located to the north west of the site and the Thames Barrier is located to the south east.

The site is currently accessed from North Woolwich Road. This is the primary route connecting the Royals to Canning Town via Silvertown Way. Along North Woolwich Road to the East, Pontoon Dock, Docklands Light Railway station is located. The Thames Barrier is in close proximity to the south of the site where the river width reaches 550 metres.

The Barrier Point residential development comprising mainly 7 - 8 storeys with an 18 storey tower on the river front, is located to the east of the site on the former Prince Regents Wharf, overlooking Thames Barrier Park. The building is a white rendered linear block running the full length of its site with stepped terraces facing Barrier Park and is raised above a decked carpark by several metres.

Thames Barrier Park is a 9 hectare park which opened in 2000. It is owned and maintained by the London Development Agency and includes a riverside walk and a sunken landscaped garden overlooking the Thames Barrier. The park also incorporates formal and informal planting as well as a children's playground and a hard surfaced area for basketball.

The Kierbeck Business Complex, which consists of warehouses and industrial units used by small businesses and for storage is an indent into the norther perimeter of the site.

Deanston Wharf stands as a brick warehouse building running approximately 350m uninterrupted along the entire length of the western site boundary. The building is in a poor state of repair.

To the west of Venesta Wharf is Lyle Park, which was established in 1924, by Tate and Lyle for factory workers within the Royal Docks area. The park comprises open green space, play areas, a football pitch, tennis courts and formal and informal planting.

To the north of the site are located a number of warehouses and former industrial buildings, one of which is Grade II listed, Silo D. To the north west of the site, adjacent to the Silvertown Quays area, is located Britannia Village a residential development which also contains a primary school. This development began in 1994 and comprises private and social housing as well as community facilities such as a village hall and a health centre.



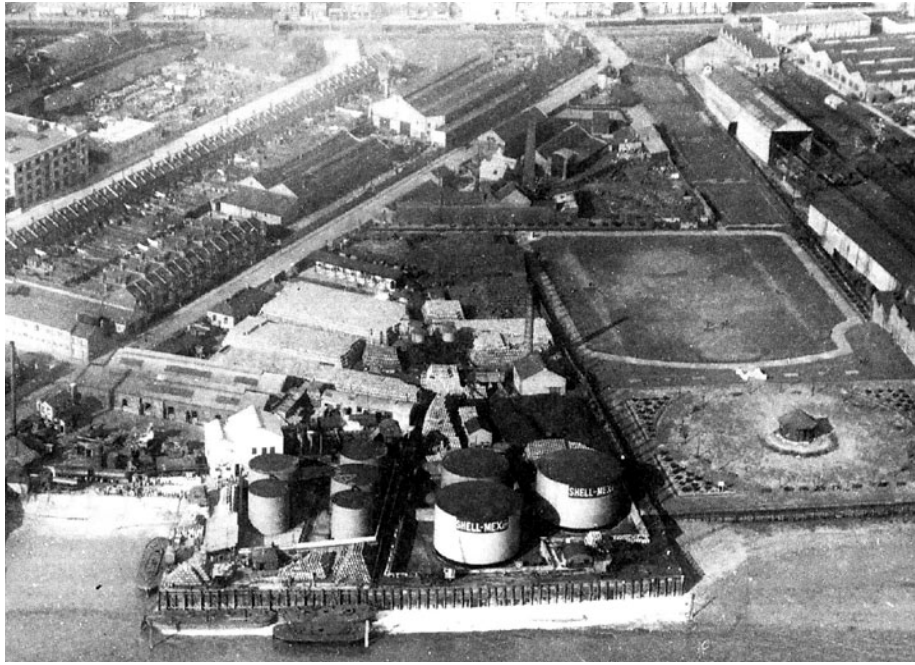
Knight's Road c1950



Aerial Photograph c1945



Aerial Photograph c1980



Lyle Park Aerial photograph c1940



Aerial Photograph c1940



Boxley Street c1959

Site History

The Royal Victoria Dock, opened in 1855, was the first dock built expressly for steam ships and the first to be connected to the national railway system through the North Woolwich branch of the Great North Eastern Railway.

The Graving and Pontoon Docks were the first to use hydraulic power to raise ships out of the water for maintenance. The King George V Dock was opened in 1921, completing the Royal group of docks which formed the largest area of impounded water in the world.

The demand for land for factories here was encouraged. One of the first to arrive, in 1852, was Samuel Silver's waterproof clothing works which gave its name to the Silvertown district. C.J.Mare built an iron works and ship-building facility at Orchard Yard, which became the world renowned Thames Ironworks. Important among the industrialists were Henry Tate and Abram Lyle who brought their refineries to the area. All this and the Royal Victoria Dock, created employment and very soon there was a huge demand for housing to accommodate the workers and their families. Thus originated new settlements such as those at Hallsville, Canning Town and North Woolwich and before long there was housing in much of what is now Custom House, Silvertown and West Silvertown.

By the 1880s the area had become a major centre of industry attracting people from all over Britain to work in the factories, docks and the Beckton Gasworks. Minoco Wharf was in the mid 1890s, an oil storage depot operated by Shell Lubricants. The adjacent Crescent Wharf was established as a chemical works in the 1890s by Brunner Mond Ltd.

Many of these industries were unhealthy or dangerous. This was highlighted on 19th January 1917 when 50 tons of TNT blew up in the Brunner Mond & Co works in Crescent Wharf, which had been given over to making munitions for the First World War. The noise of the greatest explosion in London's history could be heard as far as Southampton and Norwich. Upwards of 70,000 buildings were damaged and 73 people were killed.

Traffic through the Royal Docks reached its peak in the 1950s and early 1960s. Following the development of containerisation, technological changes and with EEC membership, Britain's trade rapidly declined. The Royal Docks were closed for general cargo handling at the end of 1981.

Such was the situation in mid 1981 when the London Docklands Development Corporation was established to secure the regeneration of the area. This was a response to a huge decline in the economy of the area brought about by the progressive closure of the docks from the 1960s onwards.

Among the projects on the new Corporation's early agenda was the proposal to build London City Airport. This was put to the Corporation in November 1981. It was pursued with great determination and following a public inquiry in 1983 work started on building the new facility in 1986. The proposal to build London City Airport was a radical break with the past and opened in 1987.

In addition, there have been a number of other significant developments in this area of the Royal Docks most notably the Thames Barrier completed in 1984.

ExCeL, the large-scale exhibition Centre on the north side of the Royal Victoria Dock opened in November 2000. It represents London's largest single site exhibition centre, with 65,000 square metres of column-free exhibition space. The listed warehouses at ExCeL west were converted at the turn of 2002 / 03. They provide a theme pub and restaurant, a nightclub, offices and apartments.

Thames Barrier Park opened in November 2000. Key features are a sunken landscaped garden, the 'Green Dock', a riverside promenade, cafe and a children's play area. The sites fringing the park are allocated for residential development; Barrier Point to the West and Tradewinds to the East.



Outline Planning Application

Generally in London the opportunity for a joined-up riverside environment along the River Thames has largely been missed because high value development enclaves, mostly concentrate on the relationship of the site to the river and not the east-west connections. There are many examples of the failure of this approach in west London.

In east London there is the opportunity to realise what has been lost in the west, a 10-mile long tapestry of walkable developments on both sides of the river stretching from Southwark to beyond the Thames Barrier, taking advantage of under used land.

But, to realise this fantastic opportunity, we need a really clear vision, bigger than individual developments creating isolated pockets of housing as the early enterprise zone Docklands residential developments did in the 1980s.

The Royal Wharf site is located both physically and strategically central to achieving the goals outlined above. To this regard a comprehensive outline planning masterplan framework was developed from October 2009 through to May 2011, for the Royal Wharf site to play its part in achieving this strategic vision.

The resulting planning approved masterplan was the clear output of a collaborative approach with the Greater London Authority (GLA), London Borough of Newham (LBN) as well as the London Thames Gateway Development Corporation (LTGDC), all of whom played a significant role in the development of the Royal Wharf site.

This collaborative approach to the design process allowed the structuring of a carefully prepared framework which embodied best practice in urban design, aimed to improve the quality of any resultant surrounding development, encourage more ownership and opportunity on the part of local communities and would lead to a better understanding of the site and development in its context.

The masterplan was subdivided into 26 plots broadly reflecting the disposition of the proposed development within the project. Seven of these development parcels were brought forward as part of a detailed planning application alongside the outline masterplan.

With specific regard to the detailed proposals presented within this design + access statement, the enclosed designs have been developed in full support of the masterplan principles and design code previously established. Design proposals for Plots 11, 12, 15, 16 and 22 seek to reinforce the aims and objectives of the wider Royal Wharf vision.

In order to audit and ensure compliance of the emerging designs within the consented design code, the original master planning team has been retained and involved with the detailed design process throughout its evolution and the project seeking detailed planning approval is considered as a welcome and well-considered development of the aspirations and objectives established by the wider Royal Wharf framework. An artist's impression of the completed masterplan in its immediate context is illustrated adjacent.



Royal Wharf Development Schedule

The comprehensive redevelopment of the 17 Ha Royal Wharf (formally Minoco) site to include:

- up to 330,000 m2 of residential (C3) floorspace in a mix of dwelling sizes, types and tenures
- up to 15,000 m2 of employment uses (B1)
- up to 3,250 m2 of retail floorspace (A1)
- up to 750 m2 of financial and professional floorspace (A2)
- up to 750 m2 of hot food / take away floorspace (A3 and A5)
- up to 750 m2 of pub and restaurant floorspace (A4)
- up to 9,600 m2 of “non residential institutional” floorspace to include a new primary school, creches / nursery schools and community facility (D1)
- up to 3,000 m2 of assembly and leisure floorspace to include gym and fitness centres (D2)
- new public realm including a hierarchy of open spaces including a riverside park
- creation of areas of private open space
- riverside walkway, including a link to the proposed Silvertown Pier
- two accesses on to North Woolwich Road
- internal access roads, footpaths and cycleways
- basement and undercroft car, motorcycle and cycle parking, plant, machinery and storage
- other supporting infrastructure.



Planning Parcel B

The consented outline masterplan permission divides the overall masterplan site into 3no. Planning parcels for the purposed of establishing the affordable housing provision, illustrated adjacent as Parcels A, B and C.

As illustrated adjacent Plots 11, 12, 15, 16 and 22 sit within Parcel B and form the last of the detailed design elements of the middle portion of the masterplan. The plot design team have designed to a clearly set target brief concerning tenure, mix and quantum of units across each plot, set by the outline planning S106. It is within this framework the plot design mix has been developed.

Details concerning specific plots are contained later in this document and a summary of the plot proposals within their planning parcel context has been provided within the planning statement supporting this application.

Strategic Planning Policies and Material Considerations

Relevant planning policies and material considerations for the Royal Wharf application are noted below:

Economic development	London Plan; the Mayor’s Economic Development Strategy; draft	Transport	London Plan; the Mayor’s Transport Strategy; PPG13	Tall Buildings / Views	London Plan; RPG3A, View Management Framework SPG, draft Revised View
Housing	London Plan; PPS3; Housing SPG; Providing for Children and Young People’s Play and Informal Recreation SPG; Housing Strategy; revised interim Housing SPG	Cross Rail Parking Employment	London Plan Alteration; revised draft Cross Rail SPG (March 2010) London Plan; the Mayor’s Transport Strategy; PPG13 London Plan; PPS4; Industrial Capacity SPG	Ambient Noise Context Environment	Management Framework SPG London Plan; the Mayor’s Ambient Noise Strategy; PPG24 Planning for the Historic Environment Development and Flood Risk
Affordable Housing	London Plan; PPS3; Housing SPG, Housing Strategy; revised interim Housing SPG	Access	London Plan; PPS1, PPS1 supplement; PPS3; PPG13; PPS22; draft PPS Planning for a Low Carbon Future in a Changing Climate; the Mayor’s Energy Strategy; Mayor’s draft Climate Change Mitigation and Adaptations Strategies; Mayor’s draft Water Strategy; Sustainable Design and Construction SPG	The draft replacement London Plan (October 2009) for consultation and London Borough of Newham Core Strategy draft are also a material considerations.	
Density	London Plan; PPS3; Housing SPG; revised interim Housing SPG			Additionally the Newham UDP comments on economic development, housing, affordable housing, density, mix of uses, regeneration, transport and employment.	
Urban Design	London Plan; PPS1				
Mix of Uses	London Plan				
Regeneration	London Plan; the Mayor’s Economic Development Strategy; draft replacement Economic Development Strategy				

Purpose of Design Guidelines

As part of the Royal Wharf framework a detailed design code was prepared to support and supplement the urban design strategies of the Royal Wharf masterplan allowing architects, landscape architects and designers to maintain and engage in a design approach consistent and appropriate for this unique site. The code was written with the aim of enriching the development as a whole, through the development of a common and identifiable design language for the masterplan site.

The masterplan framework defines a clear hierarchy of built and open spaces providing a series of settings and themes to be articulated and reinforced through architectural and landscape proposals.

The purpose of this design code was to provide the following:

- Live design guidance to form the brief for architects and landscape architects
- An assessment aid for client, local authority and stakeholder design review.
- Document the aspirations of the Royal Wharf masterplan

Parameter Plans

Parameter Plans linked to the Environmental Statement established the high level spatial masterplan at Royal Wharf and identified an individual vision for each of the main places within the scheme. These parameter plans have been referenced alongside the Royal Wharf design code in the preparation of the Plot designs and used in support of the architectural, townscape and landscape proposals enclosed.

Parameter plans submitted as part of the outline application are listed below:

Parameter Plan 01	Site Location Plan
Parameter Plan 02	Application Boundary
Parameter Plan 03	Existing Site Levels
Parameter Plan 04	Basement Level Plan
Parameter Plan 05	Flood Defence Level Plan
Parameter Plan 06	Proposed Upper Level Plan
Parameter Plan 07	Proposed Building Footprints
Parameter Plan 08	Proposed Minimum AOD Levels
Parameter Plan 09	Proposed Maximum AOD Levels
Parameter Plan 10	Movement Plan
Parameter Plan 11	Public Realm

Status of Guidelines

Design code guidelines published as part of the Royal Wharf masterplan Outline Planning Application (May 2011) have been used to form a suitable platform for the foundation of the enclosed design briefs and detailed architectural and landscape design proposals.

The design code was not written to be prescriptive to designers, but sought to inform a series of principles upon which designs may be viewed, critiqued and measured against as the masterplan aspirations are realised. It has therefore been used as a principal base for the plot design proposals which have also been prepared with reference to the following associated documents:

- Masterplan Development Specification (May 2011)
- Masterplan Design and Access Statement (May 2011)
- Masterplan Environmental Impact Assessment (May 2011)
- Masterplan Parameter Plans (May 2011)

Guidance Organisation + Hierarchy

The Royal Wharf design code was organised under the following headings:

Objectives

Objectives of the design guidance.

Framework

Site wide conditions to which buildings and landscape proposals should respond. It sets the context in terms of movement, open space structure and built form.

Settings

Identifies places within the masterplan that form specific conditions, and to which design guidance must operate at a local scale.

Design code instructions were set in bold and listed as bullet points, as below.

- **Design Code Instruction**

Interaction

The design guidance for settings across the masterplan indicated the implications for architectural expression of buildings in various locations. This included the concept of ‘marker’ and ‘background’ buildings, in which the former are intended to be visually more important in the identification of routes, defining views or containing spaces. Background buildings and adjacent landscape designs form the principle means of achieving the masterplan vision by allowing the masterplan to be a landmark development and not a competing set of landmark buildings.

To achieve this relationship, it is essential that the process of design development within individual blocks demonstrates recognition of the specific conditions established by the design guidance.

To this regard the plot designs have been developed alongside the code to respond positively to the formal spatial relationships and frameworks established within the masterplan, as set out or implied by the design guidance.

Context

Generating a new site context is a key component of the masterplan framework. Specific criteria have been set by the masterplan to ensure plot design proposals respond to the Royal Wharf design code.

These framework items are as below, and each has been considered fully as part of the enclosed plot design. Where illustrated the proposed plot layouts have been annotated in yellow.

- Connection
- Major Spaces
- Build Form
- Urban Grain
- Sunlight + Daylight
- Drop Off
- Servicing
- Vehicular Movement
- Pedestrian Movement
- Public + Private Space
- Visual Links + Viewing Corridors

Connection

A number of strategic connections exist within the scheme. While the masterplan promotes a rich and varied tapestry of minor lanes and mews type environments the diagram below illustrates the principal strategic connections as defined by the masterplan framework which are responded to by the plot proposals. Legibility and ease of movement along these desire lines has be reinforced and protected.



Major Spaces

The clear and logical definition of the masterplans urban spaces is essential to the success of the scheme.

The diagram below illustrates how edges of major spaces have be defined with clarity in order to realise the urban framework for Royal Wharf. The hierarchy of these environments within the masterplan has been protected.

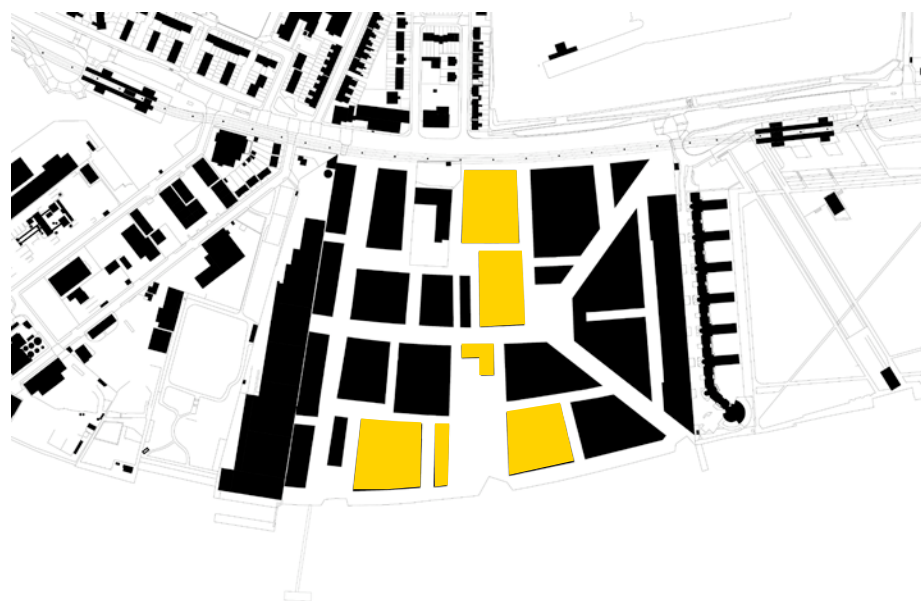


Built Form

The masterplan block plan and built form strategy is illustrated below.

The diagram illustrates the areas of the scheme that have been clearly established as urban built forms in order to define and fully articulate the streets and public spaces within the framework.

The proposed plot layouts respond to the principles of the built form strategy as illustrated below, seeking to maintain and enhance the streets and urban spaces generated by their buildings and landscapes.



Urban Grain

Within the context of the block diagram the masterplan recognises the need to break down the urban blocks and edges to promote permeability and allow visually accessible residential buildings to be delivered.

The diagram below illustrates how the masterplan and plot framework as proposed produces a fine urban grain in plan which avoids the plot being read as a large impenetrable urban block.



Sunlight + Daylight

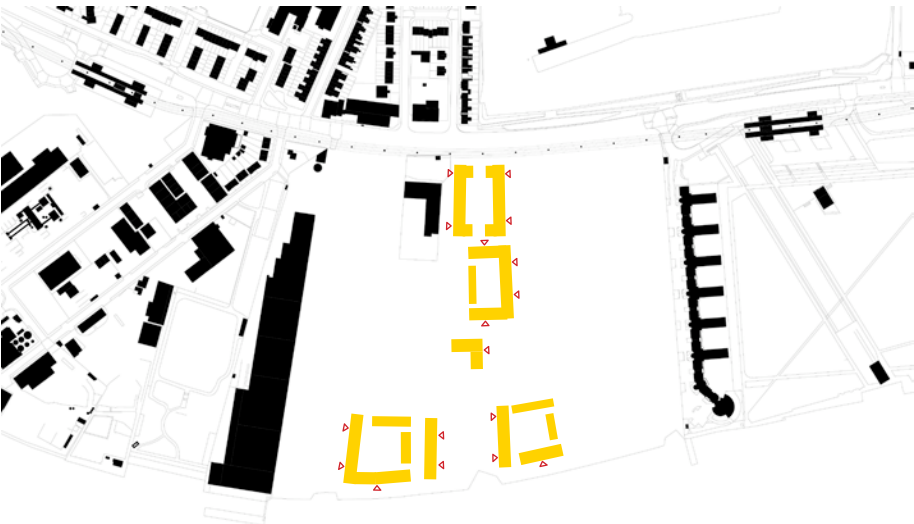
The Proposed Development is primarily made up of residential accommodation and for this reason has been considered for adequate levels of daylight and sunlight.

The supporting Royal Wharf EIA addendum for Plots 11, 12, 15, 16 and 22 includes an internal daylight assessment alongside the sunlight assessment as well as a sun-path shadow study, examining the transient as well as permanent shadow on any existing surrounding amenity space and internal proposed amenity space.

Drop-Off

Drop-off access to all buildings and front doors is a key principle of the masterplan. It is the aspiration of the Royal Wharf scheme that each front door is accessible from a drop off zone or area of visitor parking allowing deliveries and residents to easily access their homes without the need to enter a basement or undercroft parking area.

The diagram below illustrates how each plot entrance is easily accessible from local drop-off points within the scheme at ground level.



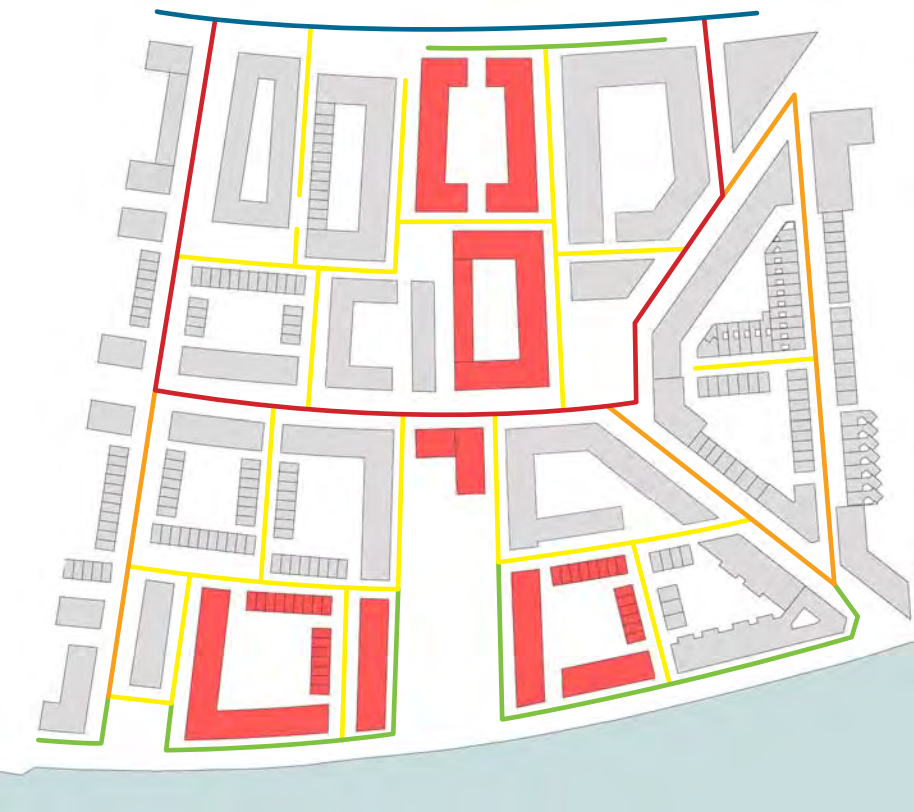
Servicing + Vehicular Access

Servicing for the residential apartments and townhouses is undertaken either from the on-street road network via front doors + residential cores. Frequencies of use are low per unit, the size of vehicles small and the length of stay for each vehicle short. The non-residential units will be managed to allow access from the principal streets at times which do not conflict with the main pedestrian movements.

The aspiration is to allow the main streets to operate in exactly the same way as a typical high street within London. Access for emergency vehicles and servicing of the residential, commercial and employment spaces is achieved across the site.



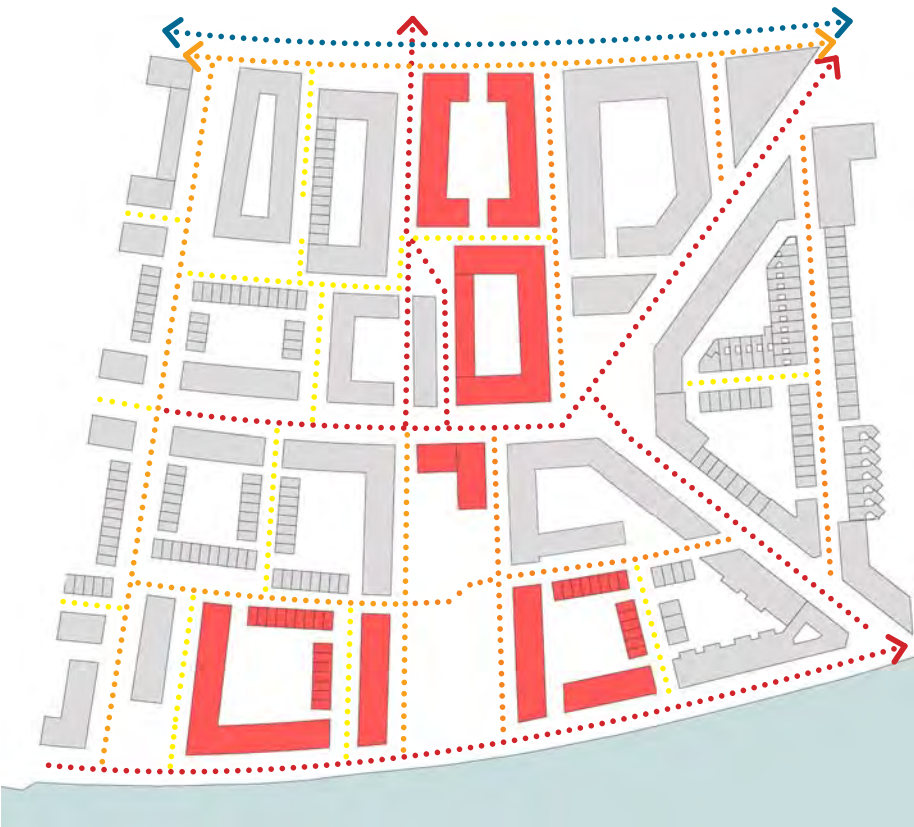
Vehicular Movement



- Primary
- Secondary
- Tertiary
- Restricted access/Pedestrian priority
- Main access road to site

Principles of vehicular movement established in the strategy above are reinforced by the plot design proposals.

Pedestrian Movement



- Primary
- Secondary
- Tertiary

Principles of pedestrian movement established in the strategy above are reinforced by the plot design proposals.

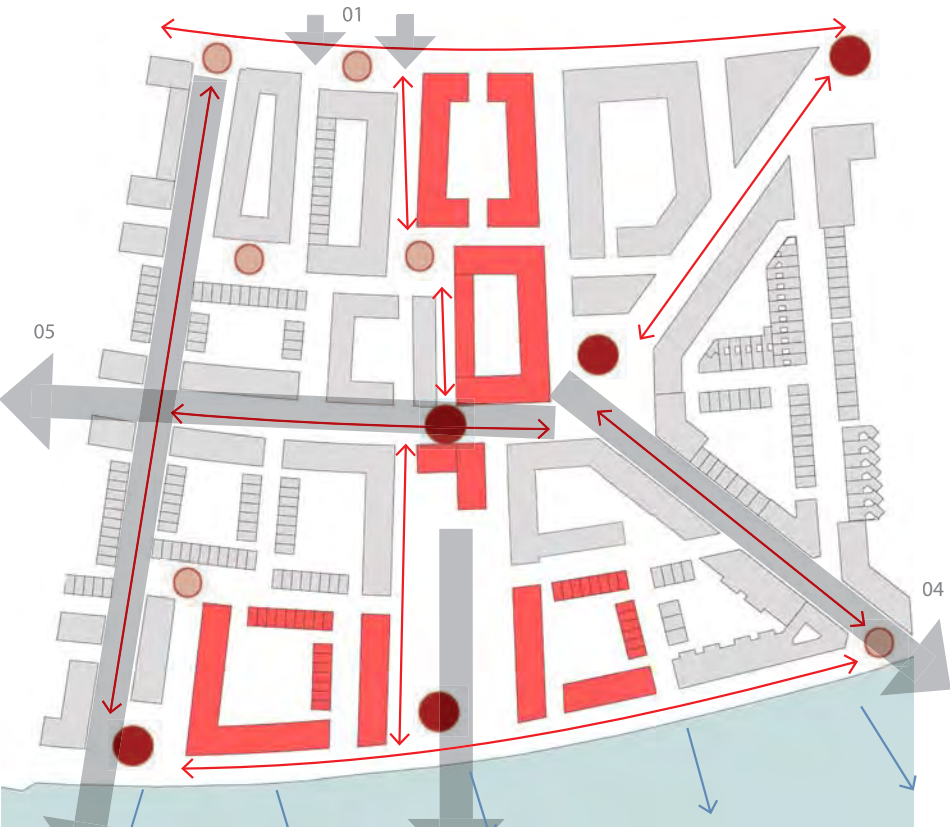
Public + Private Space



- Main Public Spaces
- Gateways
- Pocket Spaces
- Semi-private Spaces

Principles of public and private space established in the strategy above are reinforced by the plot design proposals.

Visual Links + Viewing Corridors



- Main focal points
- Visual nodes
- Visual links
- Views across the river
- Protected Viewing Corridor
- 01 Views in from Britannia Village
- 02 View to the Pier
- 03 View to the River
- 04 View to the Thames Barrier
- 05 View to Canary Wharf

Principles of the masterplan viewing corridors established in the strategy above are reinforced by the plot design proposals.

Synthesis of Urban Design, Architecture and Landscape

The Royal Wharf masterplan seeks to create a cohesive, diverse and varied townscape that synthesises the strategic masterplan principles with the urban, architectural and landscape design approaches.

To achieve this goal a dialogue has been established and maintained by the plot design team and the master planning team to ensure that plot designs were explored and tested at all scales applicable to achieving the townscape vision of the masterplan.

Additionally, the plot designs respond to the site's heritage and context as a unique riverside location in the London Borough of Newham, exploiting the finest grain of movement through the masterplan's urban spaces and high levels of tactility and articulation in its architecture and public realm.

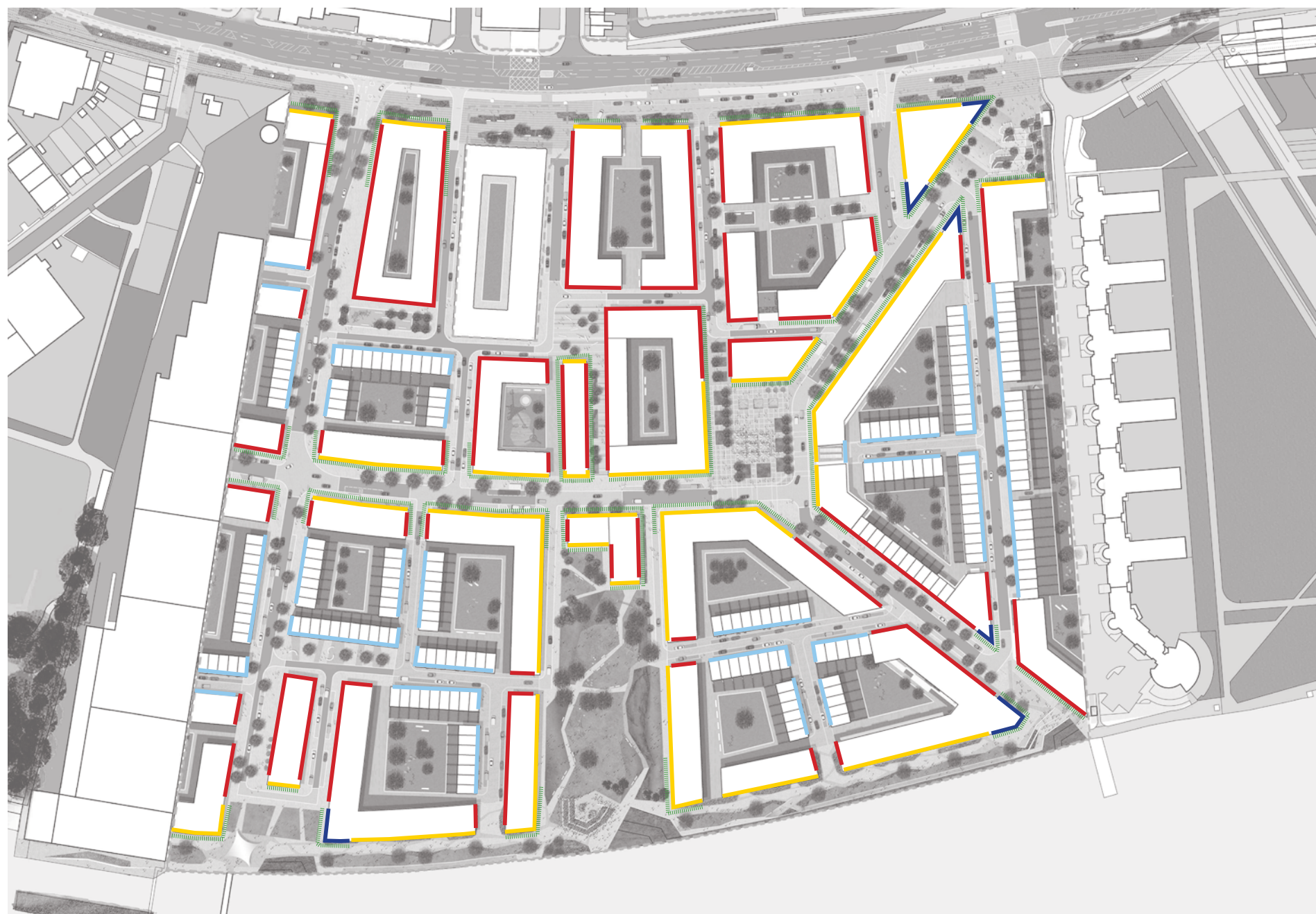
The narrative device which unites these concepts is the idea of creating a series of legible experiences + journeys, comprising clarity of routes through the masterplan for visitors and residents of the scheme. The plot proposals seek to reinforce this goal in order to complement and reinforce the overall character of the development.

Hierarchy of Setting

The masterplan has a clear hierarchy of setting to order and provide visual clarity and subtle design divergence to the spaces formed by the overall zonal design framework.

Measuring against this spatial hierarchy, the plot designers have tested ideas against the location of place within the masterplan, in order to establish the legibility of overall scheme.

These place settings provide a backdrop of urban conditions throughout the Royal Wharf site to which the plot designs respond with expression and articulation specific to their location within the immediate and wider context.



Frontage

Building frontages will be key to the success of the plots. Strategically the masterplan aspires to create spaces defined by a range of differing building frontages to provide variety and character to each street and the development as a whole.

Buildings within the masterplan were desired to meet the ground with long lengths of façade broken down into master and subordinate orders with a clear hierarchy to the elevation. This principle has been reinforced by the plot design proposals illustrated within this document.

While plot land use is defined by the masterplan strategic parameters it is expected that the use of each plot may be read from its frontage which will articulate the façade and define the building character onto the street.

The principles set by the masterplan are illustrated adjacent in context of the new plot design proposals:

- Corner —
- Strong Edge —
- Publicly Permeable - - - - -
- Semi Private —
- Principal —



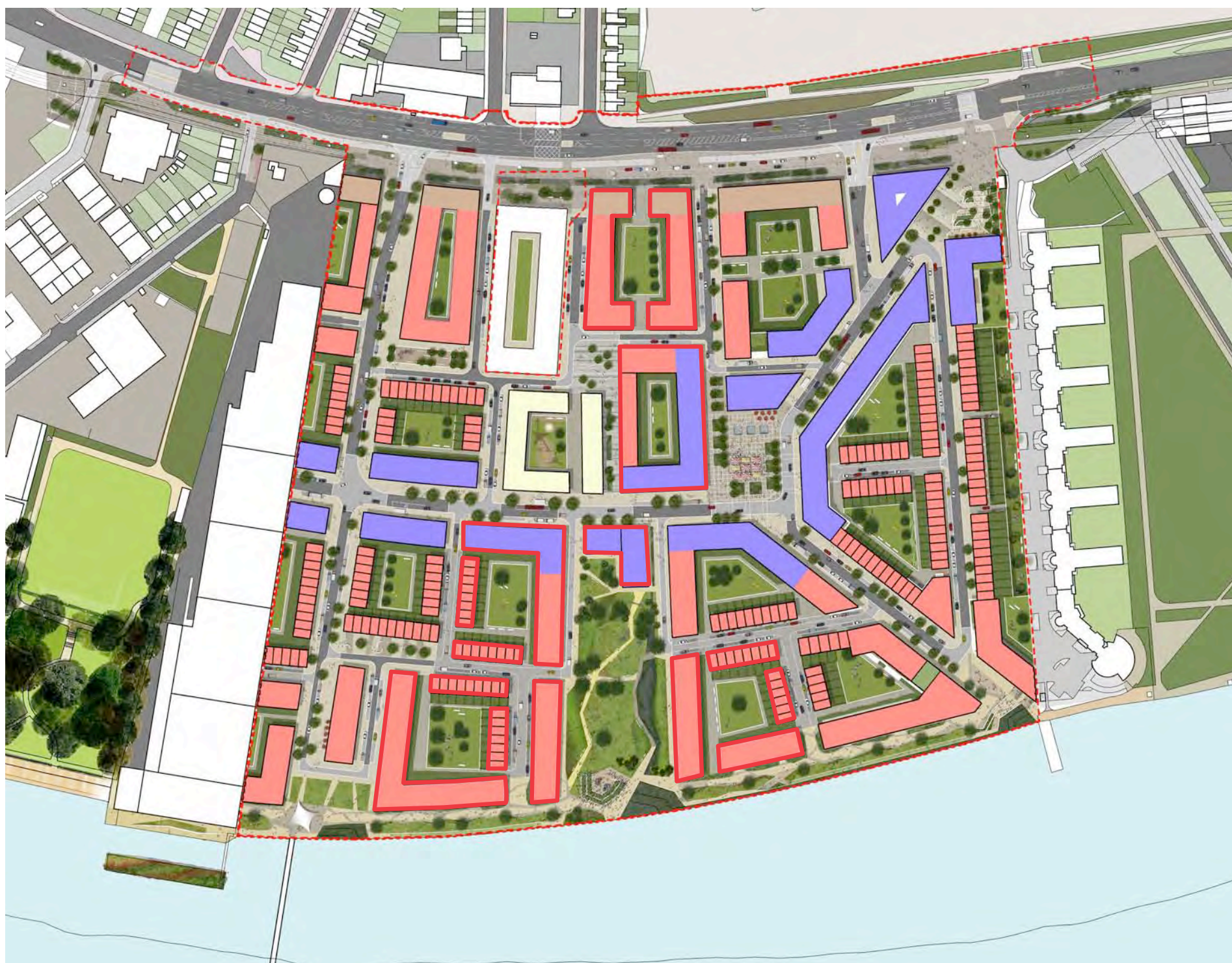
Flood Level and Formation Level Land Use Plan

Flood Level and Formation Level Class Use

A ground floor land use plan for the Royal Wharf masterplan is illustrated left. The diagram illustrates the strategic principle of wrapping the northern edge of the site in a predominant run of B1 employment uses, allowing these functions to deal with a number of the technical challenges of the changing topography and proximity of the buildings to the DLR viaduct.

The proposed design of Plots Plots 11, 12, 15, 16 and 22 complies with the use parameters for the flood and formation levels.

	Mixed Class Use A1 to A5, B1, C3, D1 and D2
	Predominantly B1 Class Use
	Predominantly B1 / C3 Class Use
	Predominantly C3 Class Use
	Predominantly D1 Class Use



Upper Level Land Use Plan

Upper Level Class Use

An upper floor level land use plan for the masterplan has been illustrated left.

In this context the upper level residential use is defined as the predominant use over all the upper floors.

The diagram builds on the principles set out by the ground level uses plan but recognises that a number of the buildings need to be adaptable to residential uses at the upper levels.

This flexibility has allowed the detailed design of Plots 11, 12, 15, 16 and 22 to respond to certain site constraints with richness and sensitivity.

The proposed design of Plots 11, 12, 15, 16 and 22 complies with the designated criteria for the Upper Level Use Class parameters.



Proposed Site Levels Plan

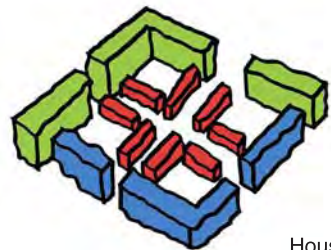
Proposed Site Levels

The EA flood levels of for the site has been set at +5.05m A.O.D. The proposed site levels strategy is principally defined by the aim to achieve a level of +5.05m A.O.D. grading up from the existing North Woolwich Road pavement levels; as soon as is feasible within a responsible and appropriate access strategy.

Rising above +5.05m A.O.D. allows the masterplan the flexibility to introduce terraced housing as well as a wider range of residential activities at the new masterplan ground level.

Illustrated by the adjacent diagram the thin red lines highlight the position on site where the contours achieve the flood defence level from the existing levels along North Woolwich Road. Continuing southwards the site levels continue to gently rise to a natural peak of +6.35m A.O.D. along the central east / west route, whereby the site levels gently fall to the rivers edge in a very natural and appropriate way for the site.

The proposed design of Plots Plots 11, 12, 15, 16 and 22 complies with the designated cirteria for the Proposed Site Levels parameters for the flood and formation levels.



Housing and Apartments In Context



The sketches adjacent illustrate the Royal Wharf strategy for organisation of the houses adjacent to the apartment buildings. Houses have been grouped as the inner core to a citadel type urban block with the taller mixed uses and apartments framing and protecting the inner core of resident's homes.



Housing + Apartment Location Plan



Mixed Use



Houses



Apartments

Housing / Apartment Mix

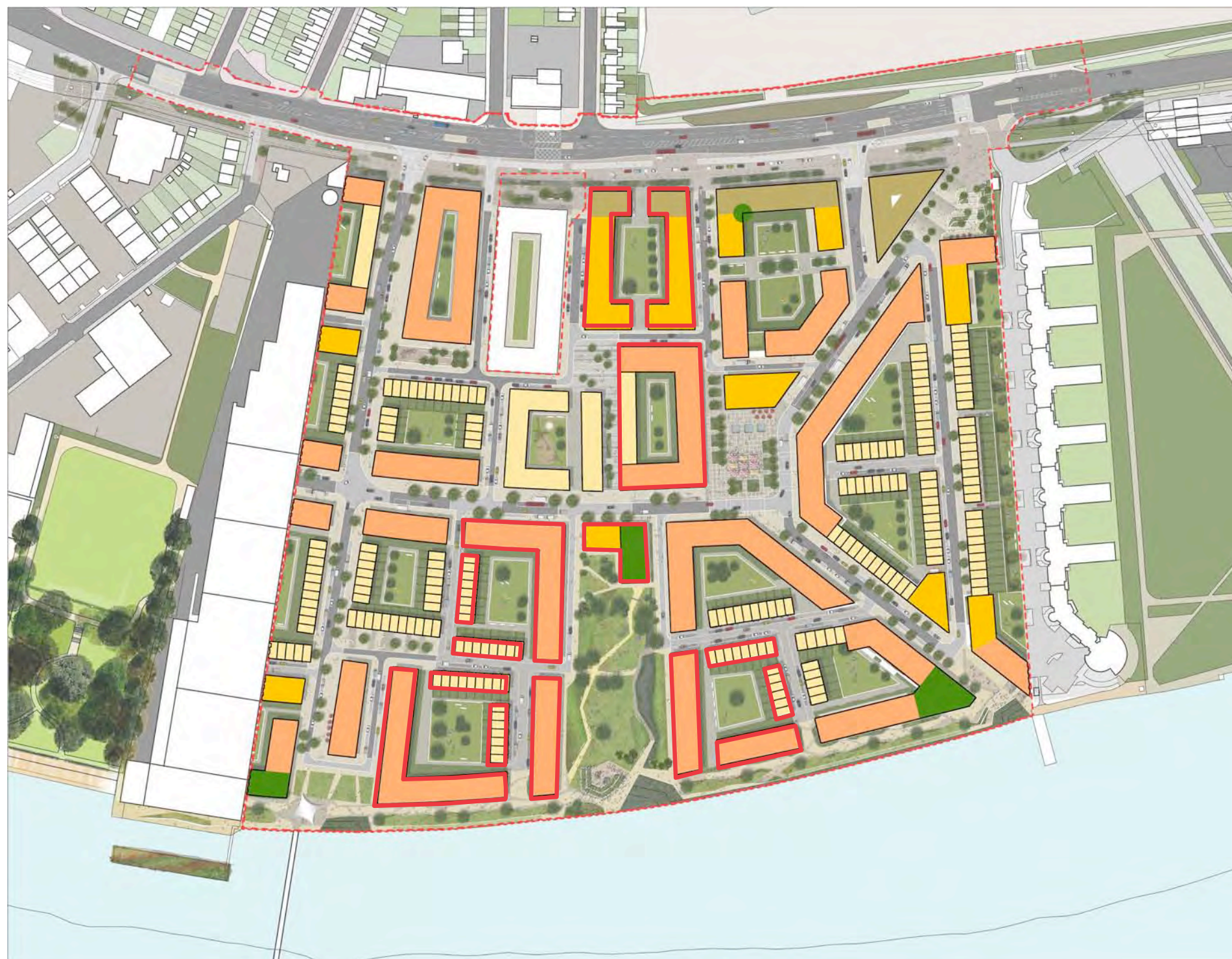
A housing / apartment plan for the masterplan has been illustrated in the diagram adjacent.

The diagram illustrates how housing within the masterplan framework may be developed to integrate with apartments as well as the mixed use buildings proposed for the site.

Where placed the housing has been grouped around mews / home zone streets protected within an massing of apartment buildings. Designing the masterplan in this way allows for a rich mix of housing typologies and tenures to be developed within each character area.

The masterplan application documentation establishes a clear residential unit mix for the comprehensive masterplan site incorporating a range of tenures, unit sizes and typologies - this has been detailed in the development specification and design code.

The proposed design of Plots Plots 11, 12, 15, 16 and 22 complies with the designated criteria for the Housing / Apartment Mix parameters.



Minimum Heights Plan

Minimum Heights AOD

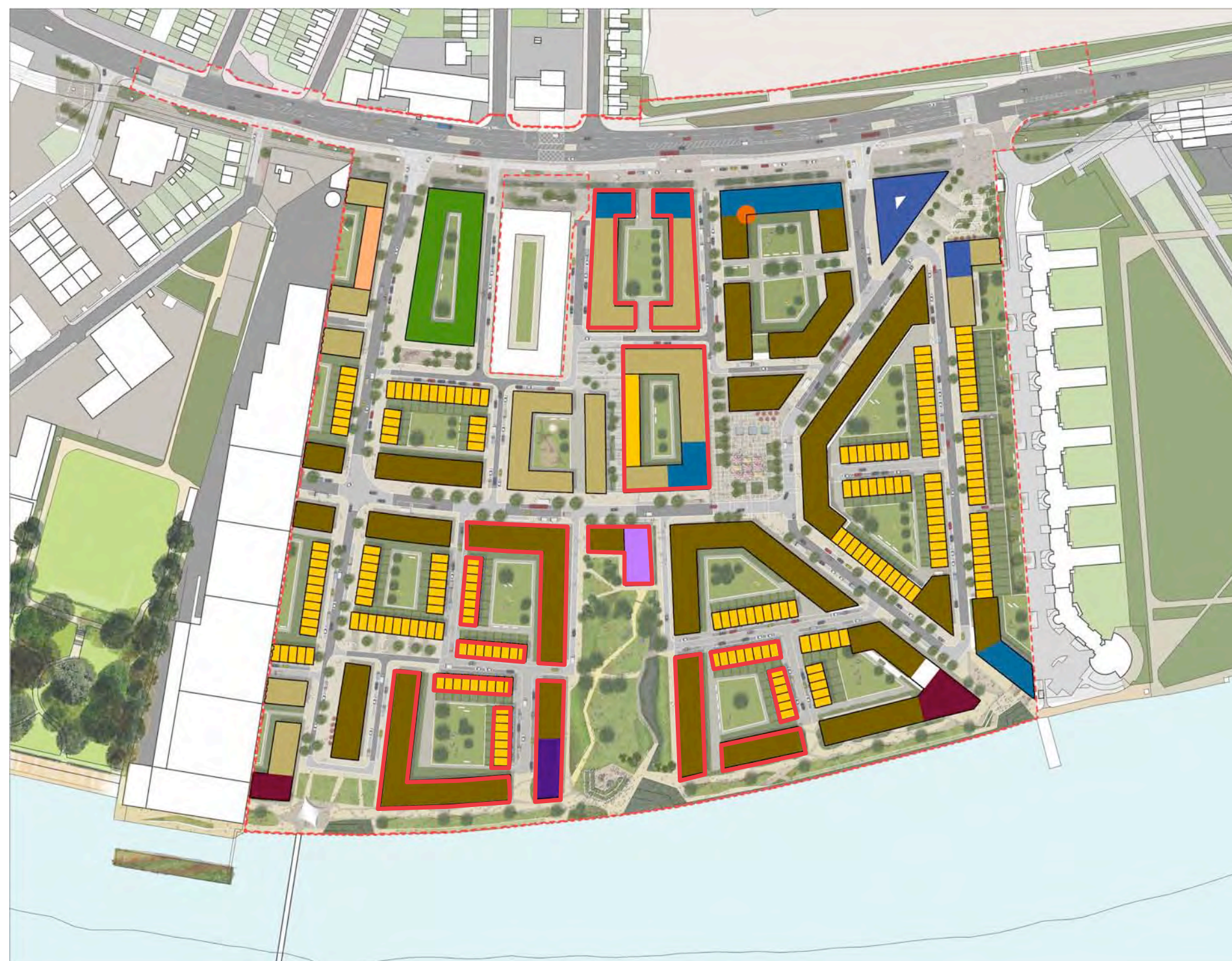
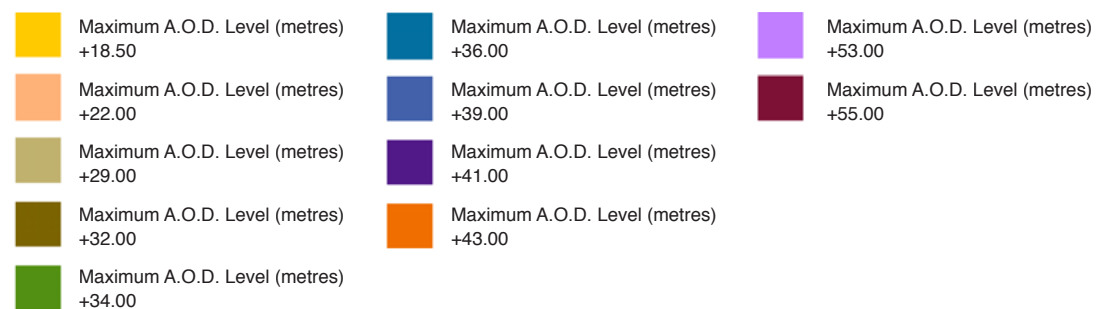
In order for the masterplan to be a success a minimum level of built form needs to be achieved, to ensure enough people live in the area to animate the scheme but also to ensure streets and spaces receive an appropriate level of enclosure to form their edges.

The minimum heights strategy seeks to balance the need for occupancy density with an appropriate level of urban realm and built form density. The heights strategy must allow for a wide range of building forms and architecture to be developed within its framework while also providing certainty in the deliverability of the masterplan aspirations.

It is within this context that the minimum heights for Royal Wharf have been set.

The proposed design of Plots Plots 11, 12, 15, 16 and 22 complies with the designated criteria for the Minimum Heights A.O.D parameters.

	Minimum A.O.D. Level (metres)
	+14.00
	Minimum A.O.D. Level (metres)
	+22.00
	Minimum A.O.D. Level (metres)
	+25.00
	Minimum A.O.D. Level (metres)
	+32.00
	Minimum A.O.D. Level (metres)
	+39.00



Maximum Heights Plan

Maximum Heights AOD

The maximum heights strategy needs to define where landmarks should be formed and those streets and areas of urban realm within the masterplan that need to be further defined and enclosed, to heighten the quality of the scheme. The diagram for maximum development sets taller buildings adjacent to existing infrastructure along North Woolwich Road, along the principle streets, riverside and main urban spaces but limits height adjacent to the townhouses.

In some cases the maximum building heights vary within a Plot to reflect the role of the building in the overall master plan framework. The tallest buildings will be located at:

- The eastern element of Plot 12 (maximum of 58.0m (AOD), this building sits at the northern end of the new park and marks the centre of the site
- The southern element of Plot 18 (maximum of 58.0m (AOD) is located adjacent to the pier and will act as a 'marker' for this facility
- The south eastern part of Plot 10 (maximum of 58.0m (AOD) which is the termination of the diagonal route from the central square and announces the development across the riverfront

The proposed design of Plots 11, 12, 15, 16 and 22 complies with the designated criteria for the Maximum Heights A.O.D parameters.

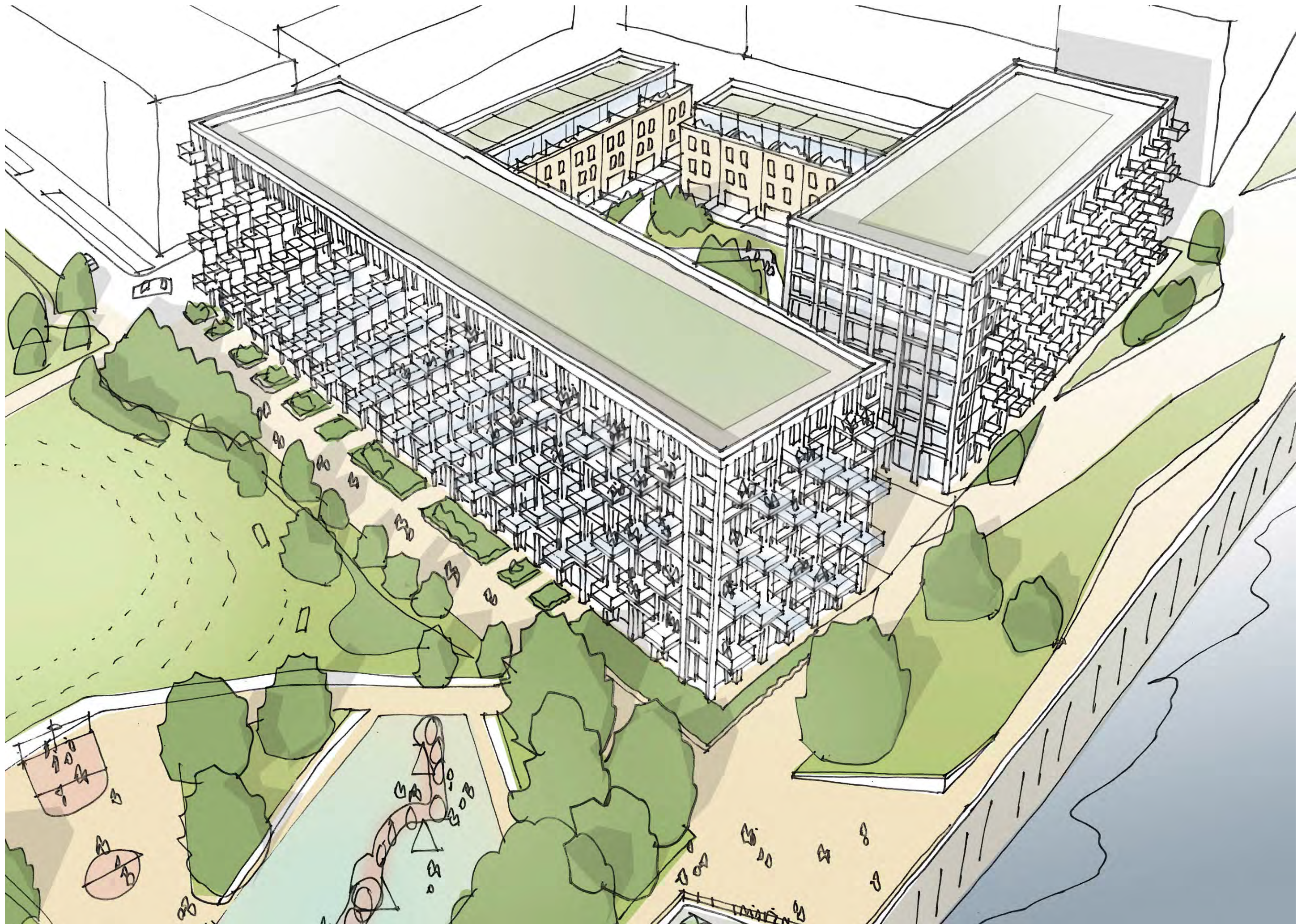
Summary Schedule

Plot 11

GEA Residential -17,820 sqm
GEA Commercial - 206 sqm

Private Housing Mix:

Studios	10
1 Bed Apartments	43
2 Bed Apartments	44
3 Bed Apartments	37
4 Bed Apartments	8
3 Bed House	4
4 Bed House	7
Total	153



Concept

“Living by the park and river”

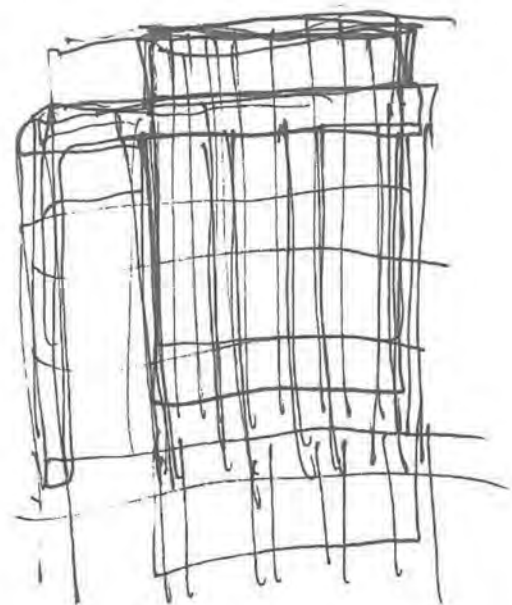
Plot 11 forms an important riverside corner within the Royal Wharf masterplan. The scale and massing of the building articulates a riverside setting with spectacular views of the Thames to the south, the new park to the west and home zone streets to the east and north.

The plot contains both apartments and houses designed to use the larger apartment massing as a backdrop to the riverside and park settings, with houses facing the quieter residential streets, still with views to the rivers edge.

Conceptually, the plot has been developed within its wider master planning context and seeks to use reconstituted stonework as the main material, complementing Plot 10 and reinforcing the design code principles of stone buildings facing the riverside at Royal Wharf.

The plot design has benefitted from a clear conceptual approach such that the scheme presented here has developed from the principles of the masterplan design code, generating an architectural language and a common family of detailing that ensures each sub building responds to its location while remaining of a plot family; set within the wider masterplan setting.

Principles of mass, form, land use and quantum have all been established by the Royal Wharf masterplan parameters and have been used to inform the basis of the plot design presented.



Above: Sketch Design Study Plot 11 Apartment Gable Façade

Left: Sketch Aerial View Plot 11



Compliance to Parameter Plans

Parameter plans submitted as part of the outline application are listed below and the following items are noted with regard to Plot 11:

Parameter Plan 01, 02 Location and Levels Plans

The proposed development sits within the outline site application boundary as identified and complies with the parameter.

Parameter Plan 03 Formation Level Plan

The proposed design does not require a basement parking area and as such this has been omitted.

Parameter Plan 04 Flood defense Level Plan

The proposed plot design complies with the designated criteria for mixed use located to the south west corner of the plot and C3 uses elsewhere.

Parameter Plan 05 Proposed Upper Level Plan

The proposed design complies with the designated criteria for use class orientation around the plot.

Parameter Plan 06 Proposed Building Footprints

The proposed development sits within the masterplan parameters excluding the south gable to the south west corner of the plot, which extends beyond the max parameter by 80cm.

Parameter Plan 07 Proposed Minimum AOD Levels

The proposed design complies with the designated criteria.

Parameter Plan 08 Proposed Maximum AOD Levels

The proposed design complies with the designated criteria.

Parameter Plan 09 Proposed Public and Private Realm

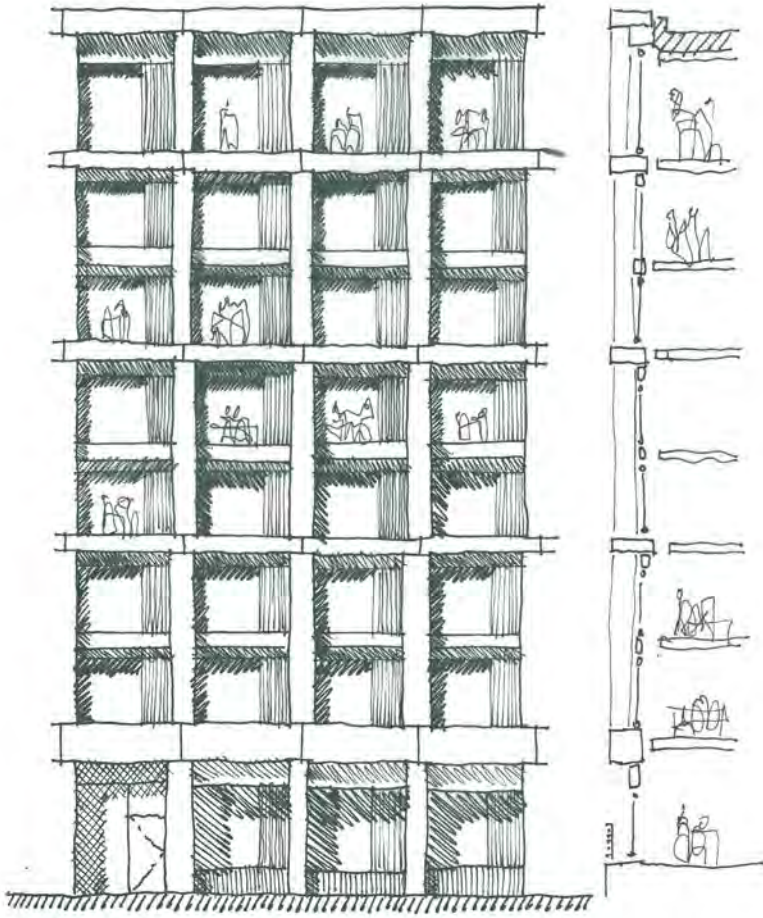
The proposed design complies with the designated criteria.

Parameter Plan 10 Movement Plan

The proposed design complies with the designated criteria.

Parameter Deviations

The marginal deviations from the parameter plans are currently being addressed separately in a Section 73 to be submitted to LBN.

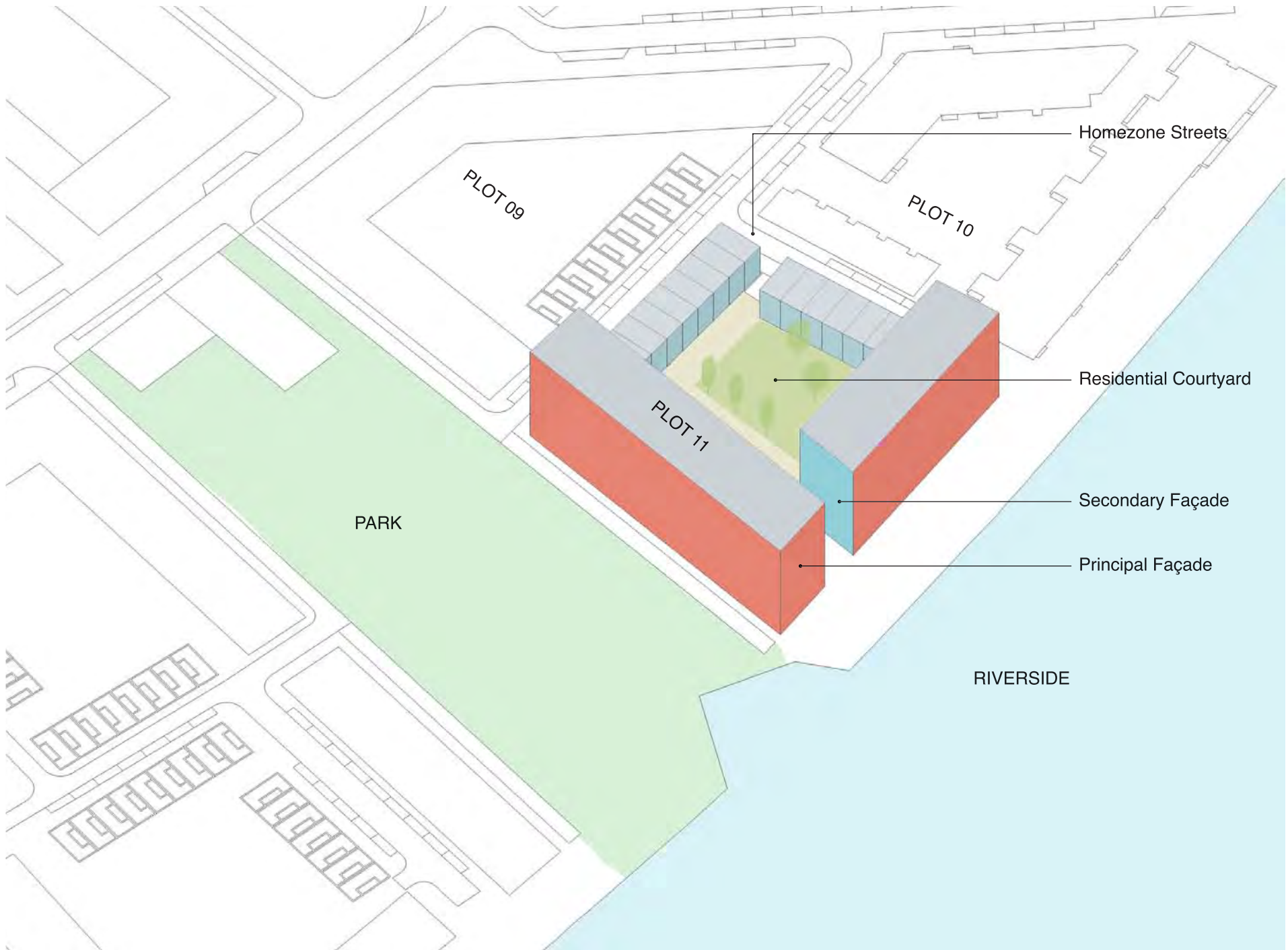


Façade Design Sketch Plot 11

Royal Wharf Massing

As part of the 2011 masterplan a number of urban block studies for Plot 11 were undertaken. The design principles explored for this masterplan zone are highlighted below and stand as a starting point for the updated design proposals:

- Perimeter development / urban block development;
- Distinct plot character, riverside;
- Maximise views into and out of the scheme;
- Simple massing to river and park;
- Scale relationship to Phase 01 buildings, notably 09 + 10;
- Entrances onto park and main streets;
- Range of façade types by typology;
- Provision for private amenities.



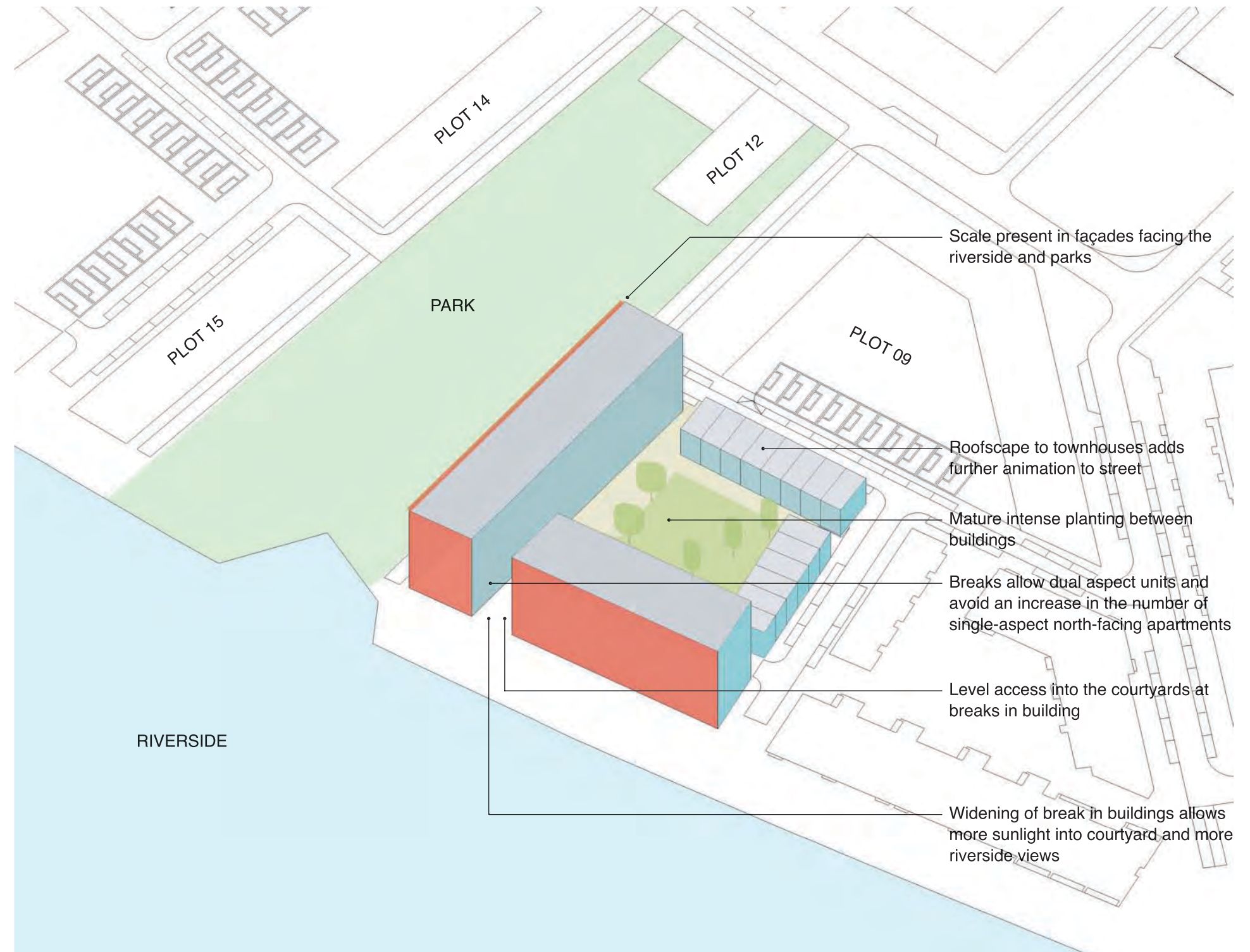
Royal Wharf Outline Masterplan Massing Plot 11

Massing Evolution

Development of initial massing study models for Plot 11 resulted in the adjacent diagram.

The following issues have been developed and addressed at a larger scale and as an evolution of the masterplan scheme, in line with design comments received by the LBN DRP:

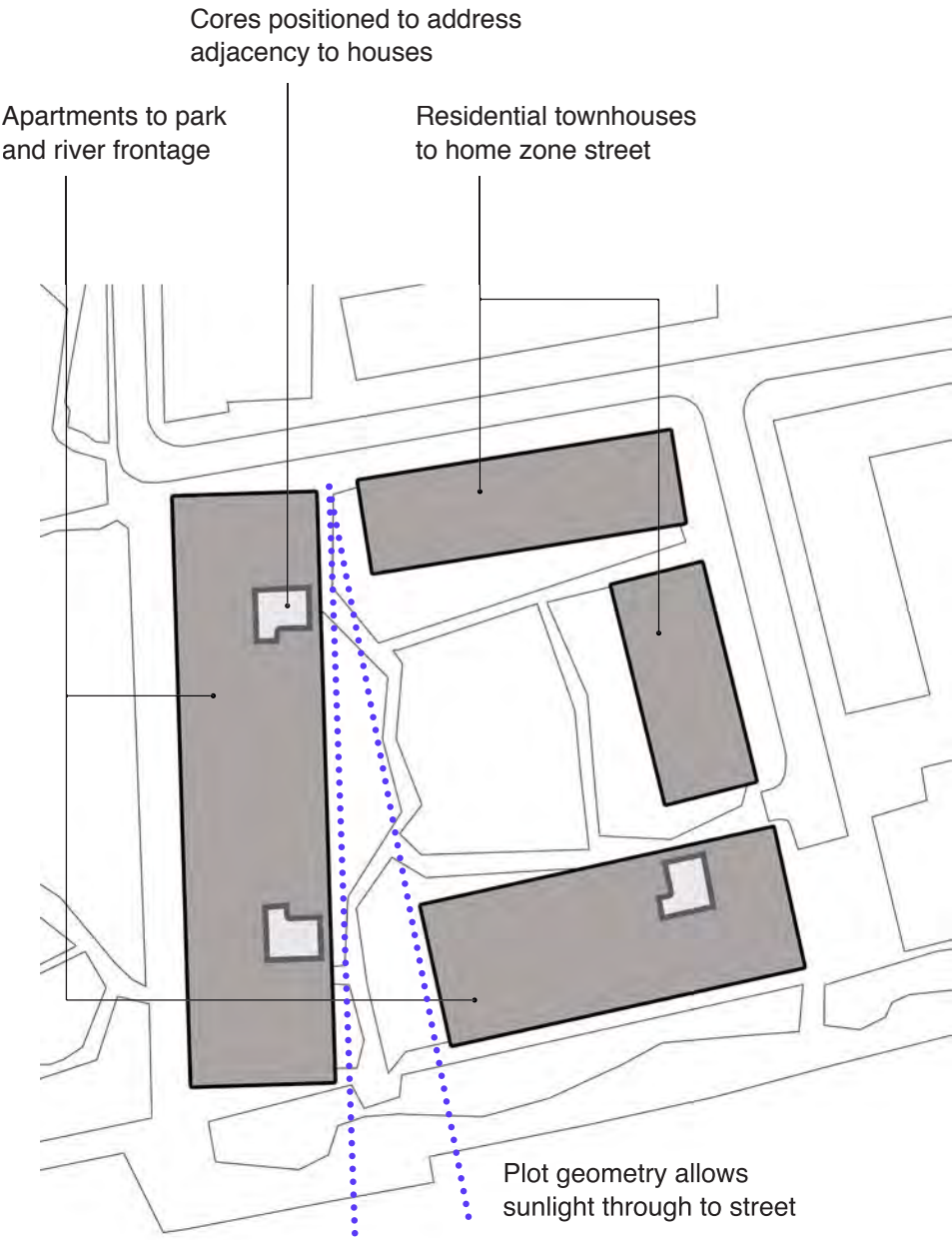
- Façade articulation;
- Scale of opening in façade responds to distant views of building across the river and park;
- Amenity space provided as balcony and private ground level terraces;
- Articulation at roof level to the houses, animating the home zones;
- Cycle store access at grade;
- Residential animation of park and riverside;
- Greater consideration of the sun path;
- Responding to the spectacular views from the plot.



Proposed Plot 11 Massing Diagram

Arrangement Strategy

The diagram below illustrates the schematic layout of Plot 11 in plan in its immediate landscape context.



Townscape

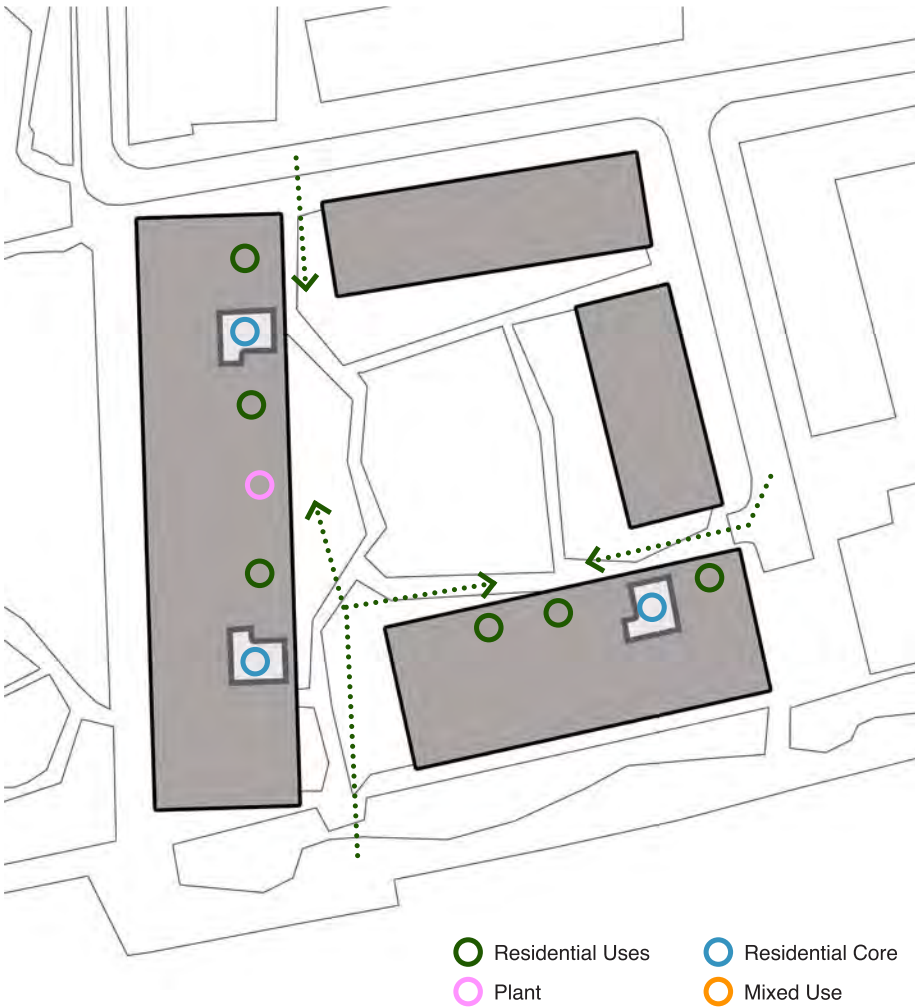
As illustrated earlier in this document the Royal Wharf masterplan design code proposes a range of different elevation types along the length of each plot to form the masterplan street frontages framework. The plot proposals seek to reinforce and enrich this tapestry of materials and elevation types. A summary of the elevation groupings is annotated below; illustrating how the building façades are consistent across the apartments and vary slightly within the same family of detailing for the houses.



Access + Servicing

Access and servicing for Plot 11 follows the principles of the masterplan design code. Ancillary C3 uses such as refuse presentation rooms and cycle storage areas are set to the courtyard side of the scheme allowing residential units to achieve the best possible orientation.

Access into these areas will be possible through the breaks in the buildings massing.



Entrances

Each building mass has been divided into a number of buildings labelled Plot 11, Buildings 01 (Core A and Core B), 02 and 03 and 04. Each has its own entrance core placed as features along the main street façades. Houses are accessed off the street they face. Additionally, level and secure core access into each residential courtyard is provided at the appropriate level.

Upper Level Arrangement Strategy

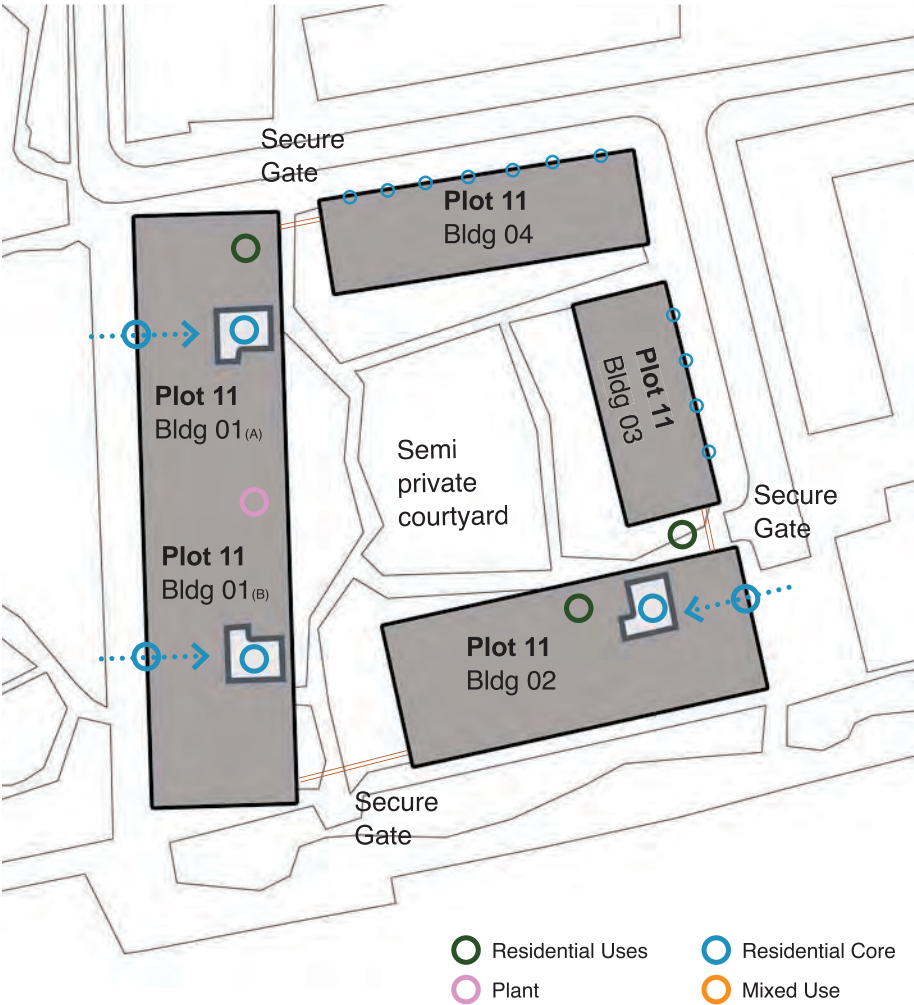
Above grade all of the upper level plans contain only apartments. Single-aspect north-facing units have been minimised with core positions strategically placed to address issues of overlooking and adjacency to the townhouses.

Located centrally to the plan is the semi-private landscaped courtyard and private gardens, protected from the hustle and bustle of the main streets.

Views

The diagram below illustrates the viewing planes that have influenced the design of Plot 11:

- Mid range views to parks and riverside; ➡
- Long range views to London and across the river; ➡
- Internal Views into landscaped courtyard; ➡
- Close views of residential streets; ➡





Ground Level Plan

Ground level for Plot 11 has been set at circa +5.65m AOD in accordance with the EA flood defense level and master plan levels. The plan principally consists of residential units wrapping around the plot perimeter with ancillary C3 uses located internally, facing into the courtyard.

Entrances to the residential cores animate the façade by providing a range of access points along the apartment building frontage. These entrances are complemented by additional residential front doors to each townhouse and duplex units.

A pocket of mixed use space has been set to the south west corner of the plot articulating the corner of the riverside park and new public park.

Illustrative Ground Level Plan





First Floor Level Plan

The upper level plan contains C3 uses only. Breaks in the building mass allow sunlight and additional daylight to penetrate the courtyard landscape spaces and allow a large number of apartments the enjoyment of a dual aspect arrangement.

Each of the apartments has been carefully considered in design and layout to maximise views, daylight levels and internal spatial arrangement, to achieve the highest quality residential experience for the proposed scheme.

Direct level access out of each of the apartment buildings, duplexes and townhouses have been provided onto the shared landscape courtyard to ensure full accessibility by each of the residents of the scheme.

Illustrative Typical Upper Level Plan



Elevations Concept and Townscape

For Plot 11 the Royal Wharf master plan envisaged that the building design should employ a range of materials, scale and language that references the architectural character already evident across Phase 01 and which creates an identity appropriate to each of the façade settings.

Plot 11 is to be predominantly dressed in stonework and is conceived as a modern reflection of a framed East London warehouse building. The townhouses are conceived as a modern version of a London Victorian Terrace property.

Following a strategy of applying a limited number of carefully selected materials across the plots, several local physical constraints have also been considered to inform a suitable design solution for each façade:

Municipal Hierarchy and Scale

A hierarchy of scale for each building has been established to determine the importance of the façade within its context, subsequently informing the level of detail applied to the façade.

Human Scale to Detailing

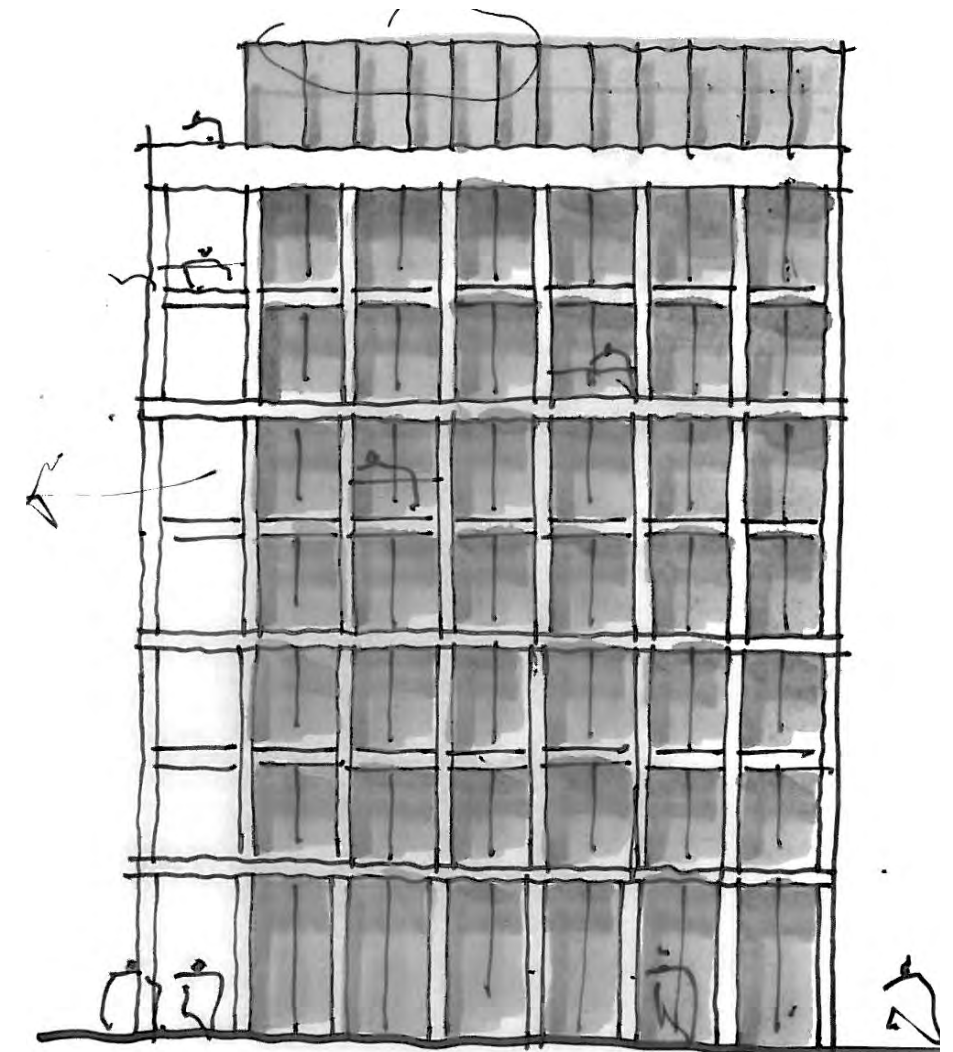
In contrast to the Municipal scale required to promote each building in its urban context a further and finer level of residential detailing has been applied to ensure the buildings read as a cohesive residential scheme.

Robust Materials

It is of importance to specify a palette of materials that reflects a modern development of its time as well as contributing to the future historic character of the Royal Wharf area. To this regard concrete with pressed metal detailing and brickwork, is proposed for the apartments and townhouses respectfully to ensure longevity and future weathering of the façade.

Responding to the Surrounding Context

Good design can ensure that local significant buildings of interest maintain their status through smart framing and scale of elevations. Respectful to this constraint a larger scale of opening is proposed for the apartment buildings which will be viewed primarily from a long distance. The townhouses will be more intimately approached and have been detailed respectful to this occurrence.



Plot 11 Window Design Study Sketche



Precedent Study For Plot 11

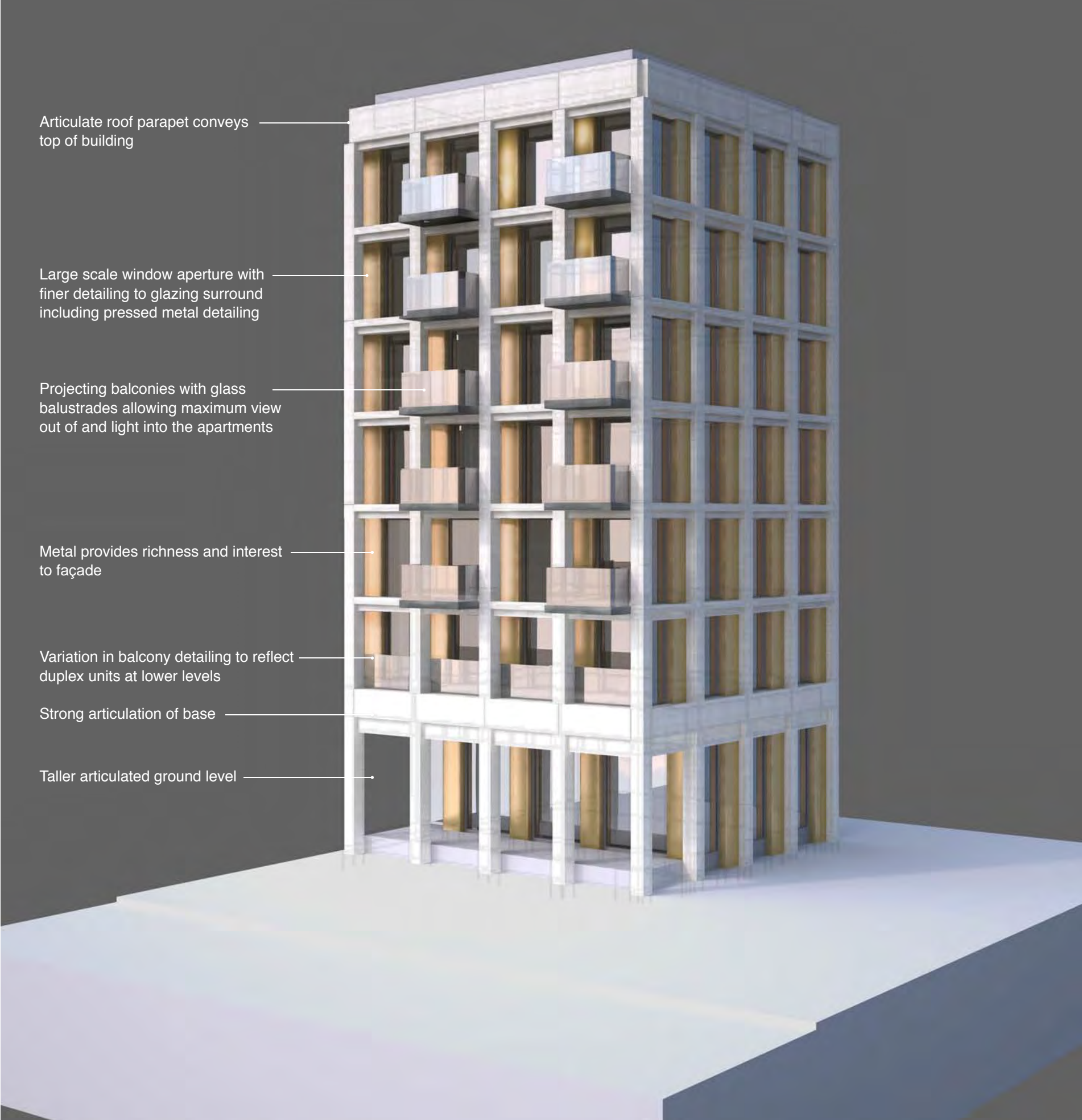


Elevation Development

The images below and adjacent illustrate the design evolution undertaken for Plot 11. Initial façade designs developed a strong framed language which was ultimately discounted to improve day lighting levels into each unit.



Plot 11 Initial Window Design Study Bay Model Illustrating Frame To Riverside



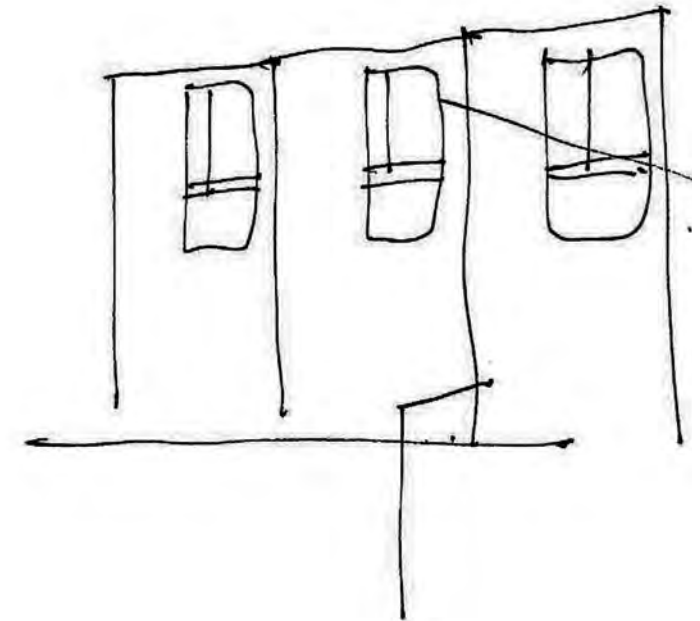
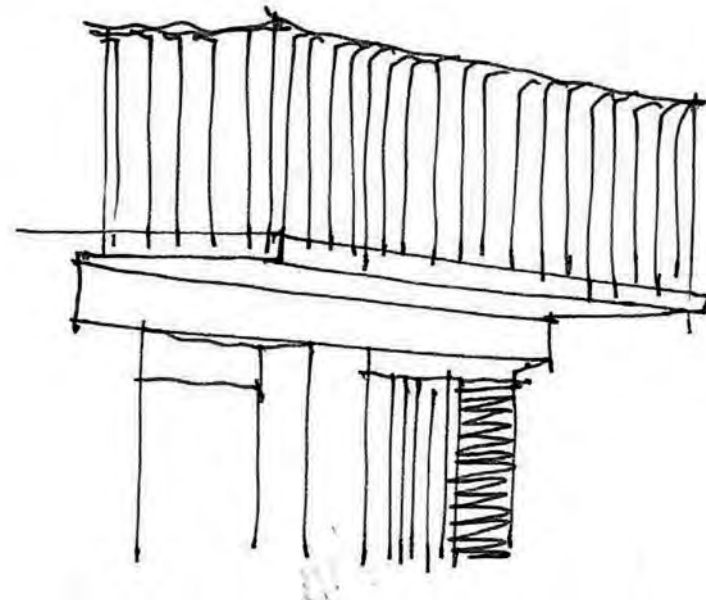
Plot 11 Initial Window Design Study Bay Model



Plot 11 Typical Bay Study Model

Townhouse Development

The images below and adjacent illustrate the design evolution undertaken for Plot 11 townhouses. These buildings have principally been developed as a contemporary reinvention of a Victorian Terrace. Window sizes and orientations have been carefully considered to respond to site context and view.



Townhouse Study Models + Concept Sketches

Summary Schedule

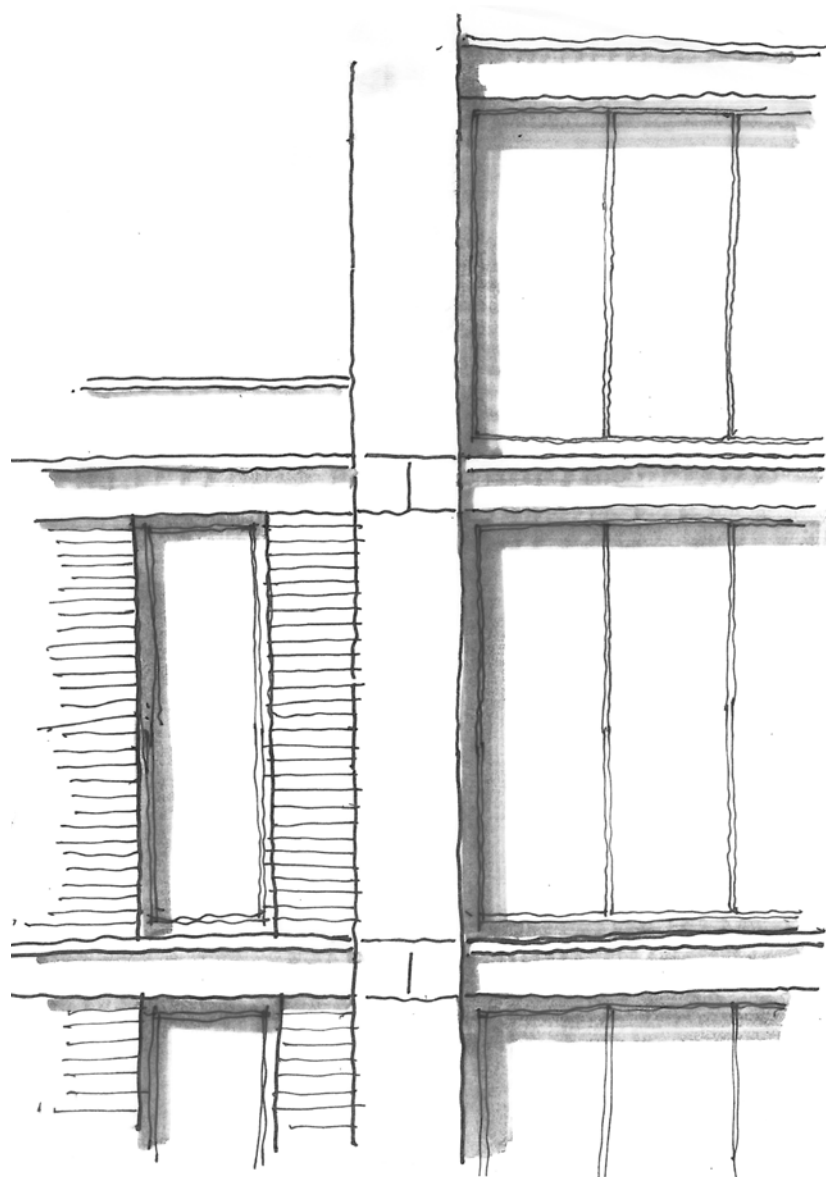
Plot 22

GEA Residential - 18,255 sqm
GEA Commercial - 1,461 sqm
GEA Community- 525 sqm
GEA Parking - 10,959 sqm

Private Housing Mix:

Studios	47
1 Bed Apartments	37
2 Bed Apartments	75
3 Bed Apartments	36
Total	195





Above: Sketch Design Study Plot 11 Apartment Gable Façade

Left: Sketch Aerial View Plot 22

Concept

“Civic Setting”

Plot 22 forms an important corner within the Royal Wharf masterplan. The scale and massing of the building concludes the main urban square within the development and instigates the extension of the high street west from the Phase 01 plots.

The plot contains both apartments and community uses and has been massed to use the larger apartment massing as a backdrop to the urban square and high street settings, with the community building facing onto quieter streets bearing a relationship to the future Plot 23 school.

Conceptually, the building has been developed to be civic in character, referencing the Georgian mansion houses and office buildings typically found in west London and seeks to use reconstituted stonework as the main material.

The plot design has benefitted from a clear conceptual approach such that the scheme presented here has developed from the principles of the masterplan design code, generating an architectural language and a common family of detailing that ensures each sub building responds to its location while remaining of a plot family; set within the wider masterplan setting.

Principles of mass, form, land use and quantum have all been established by the Royal Wharf masterplan parameters and have been used to inform the basis of the plot design presented.



Design Sketch Plot 22

Compliance to Parameter Plans

Parameter plans submitted as part of the outline application are listed below and the following items are noted with regard to Plot 22:

Parameter Plan 01, 02 Location and Levels Plans

The proposed development sits within the outline site application boundary as identified and complies with the parameter.

Parameter Plan 03 Formation Level Plan

The proposed design complies with the designated criteria for a basement under the plot. The layout however proposes an extension of the parking area west under Plot 23.

Parameter Plan 04 Flood defense Level Plan

The proposed plot design complies with the designated criteria for mixed use located to the south west and C3 uses elsewhere. In addition community uses (D1) are proposed along the western edge in lieu of the ground level C3 uses.

Parameter Plan 05 Proposed Upper Level Plan

The proposed design complies with the designated criteria for use class orientation around the plot with the exception of the removal of the western edge of C3 accommodation.

Parameter Plan 06 Proposed Building Footprints

The proposed development sits within the masterplan parameters with the addition and integration of the community centre to the western edge of the plot.

Parameter Plan 07 Proposed Minimum AOD Levels

The proposed design complies with the designated criteria.

Parameter Plan 08 Proposed Maximum AOD Levels

The proposed design complies with the designated criteria.

Parameter Plan 09 Proposed Public and Private Realm

The proposed design complies with the designated criteria.

Parameter Plan 10 Movement Plan

The proposed design complies with the designated criteria

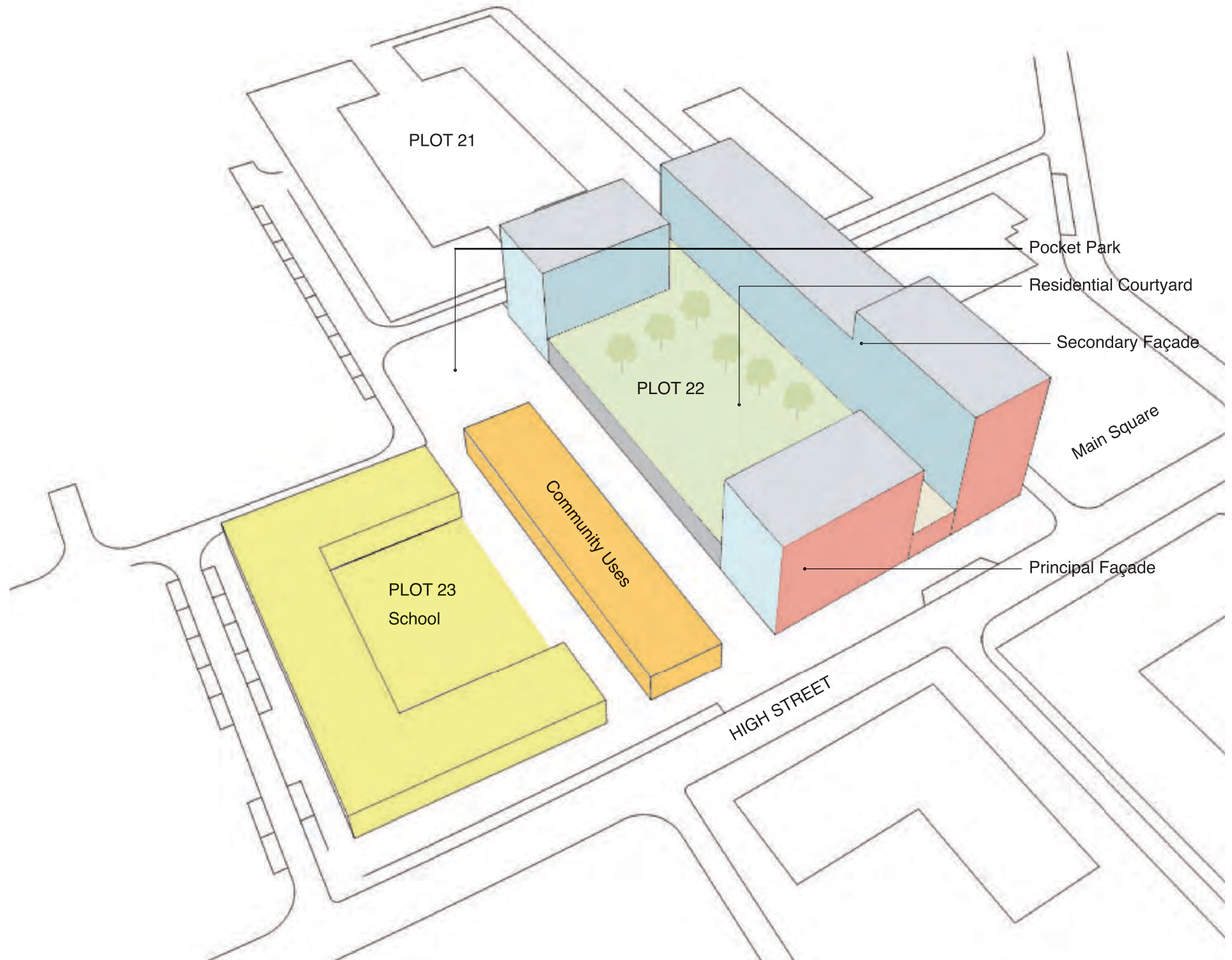
Parameter Deviations

The marginal deviations from the parameter plans are currently being addressed separately in a Section 73 to be submitted to LBN.

Royal Wharf Massing

As part of the design process a number of urban block studies for Plot 22 were undertaken. The design principles explored for this masterplan zone are highlighted below and stand as a starting point for the updated design proposals:

- Urban block development, containing separate massed blocks;
- Distinct plot character, urban civic;
- Form a backdrop to the square;
- Simple massing to river and park;
- Scale relationship to Phase 01 buildings, notably 09 + 10;
- Entrances onto park and main streets;
- Range of façade types by typology;
- Provision for private amenities by means of courtyard;
- Parking within podium and basement.

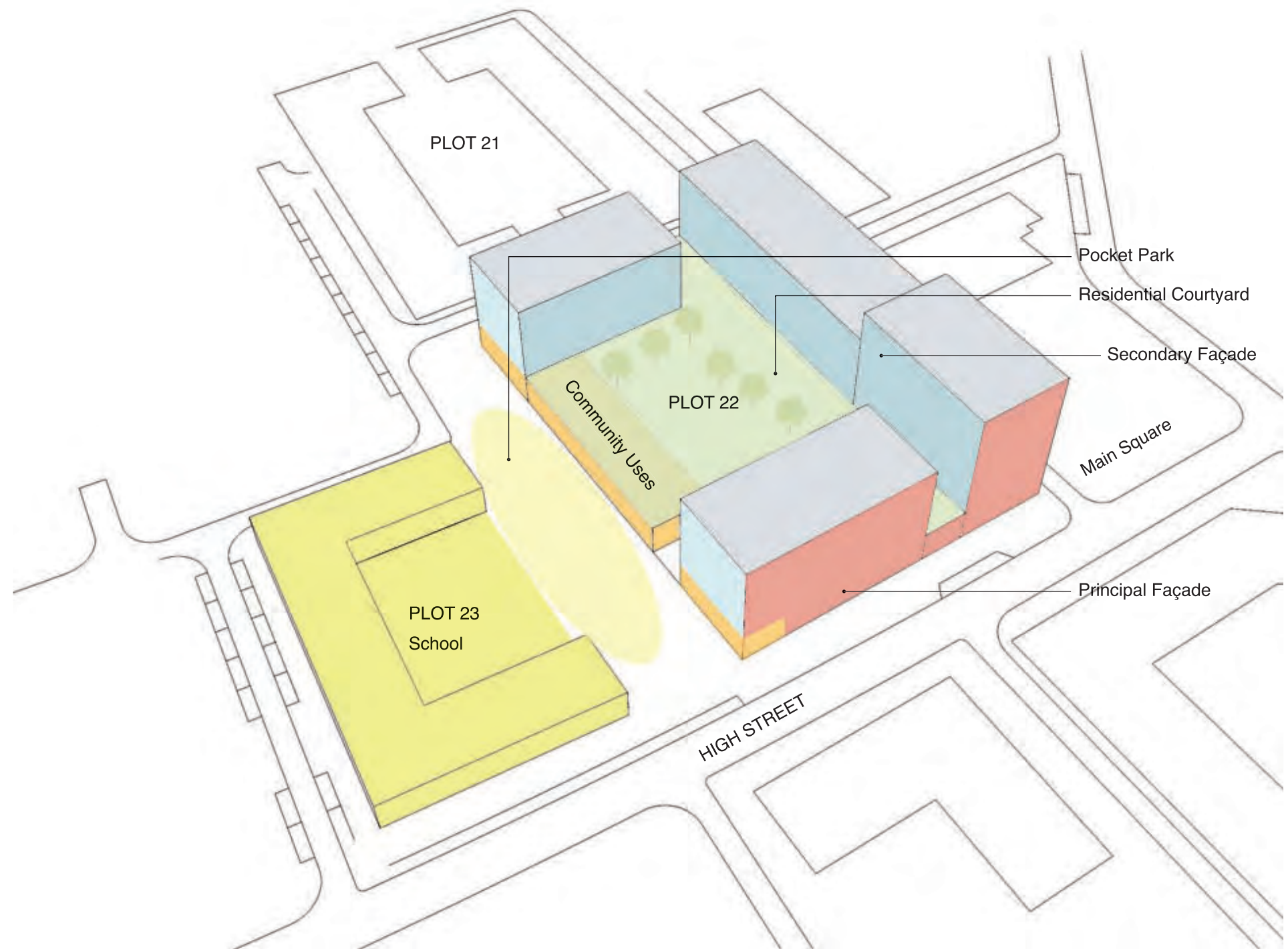
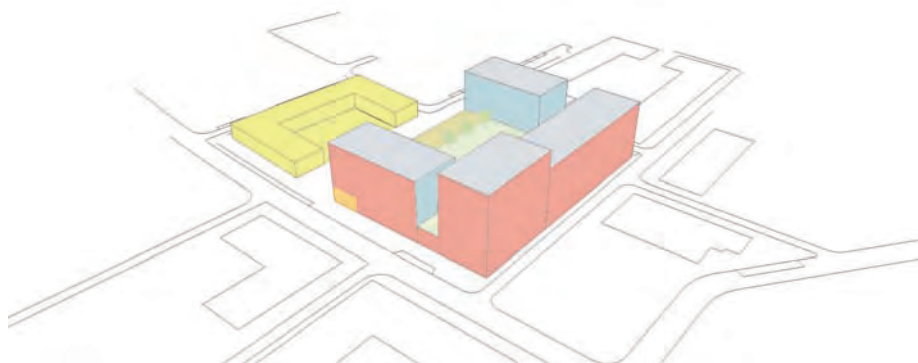


Royal Wharf Outline Masterplan Massing Plot 22

Massing Evolution

Throughout the DRP review process for Plot 22 it became evident that the adjacent community uses proposed for Plot 23 would result in a front and back of the community building being created, most likely with the back of this building facing the home zone environment between Plots 22 and 23.

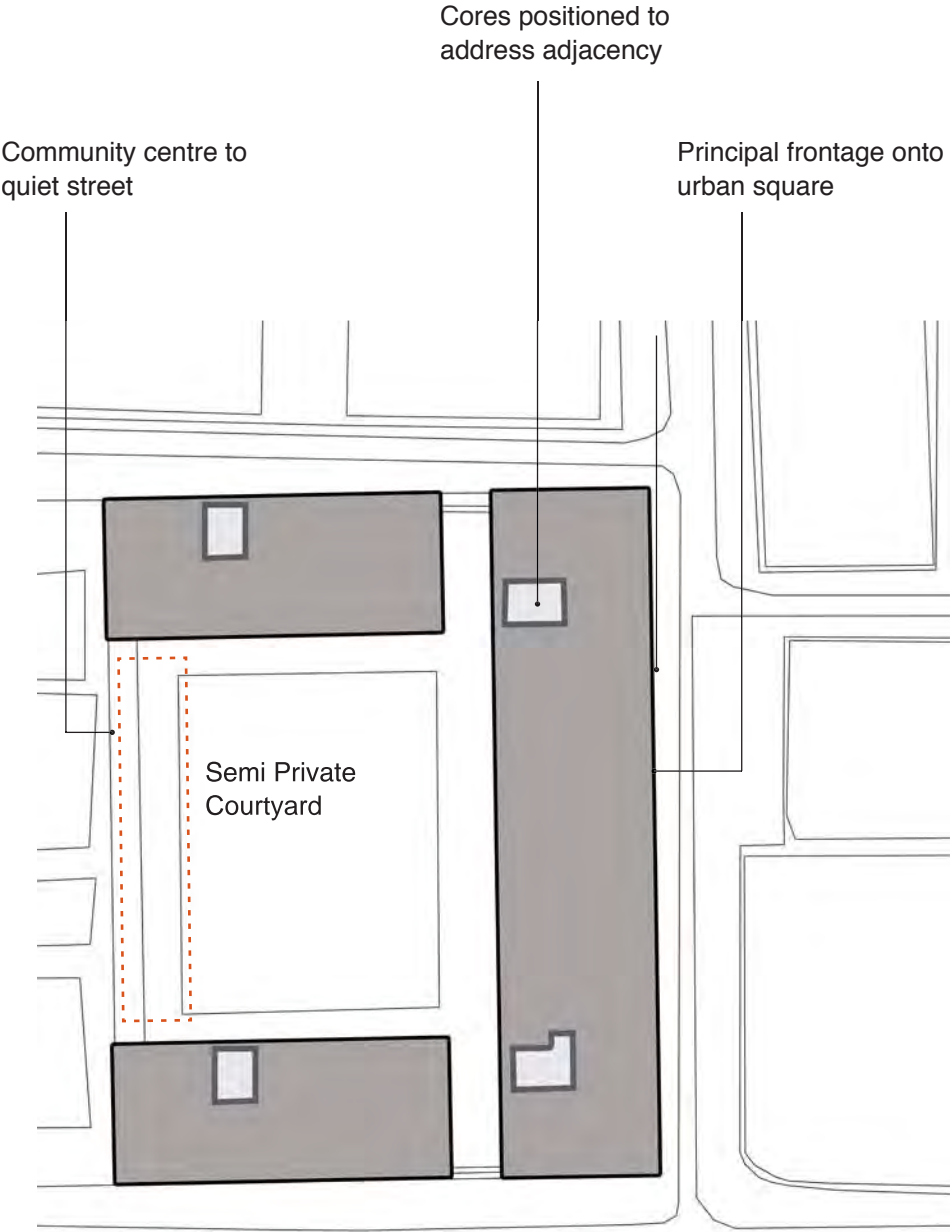
A number of varying configurations were explored with the proposed adjacent solution arrived at by both the DRP and the plot design team. In order to avoid the back of house functions of the community centre forming a length of inanimate frontage the community centre has been incorporated into the west façade of Plot 23; this strategic move also allows the pocket park previously north of Plot 23 to grow south into the home zone street.



Proposed Plot 22 Massing Diagram

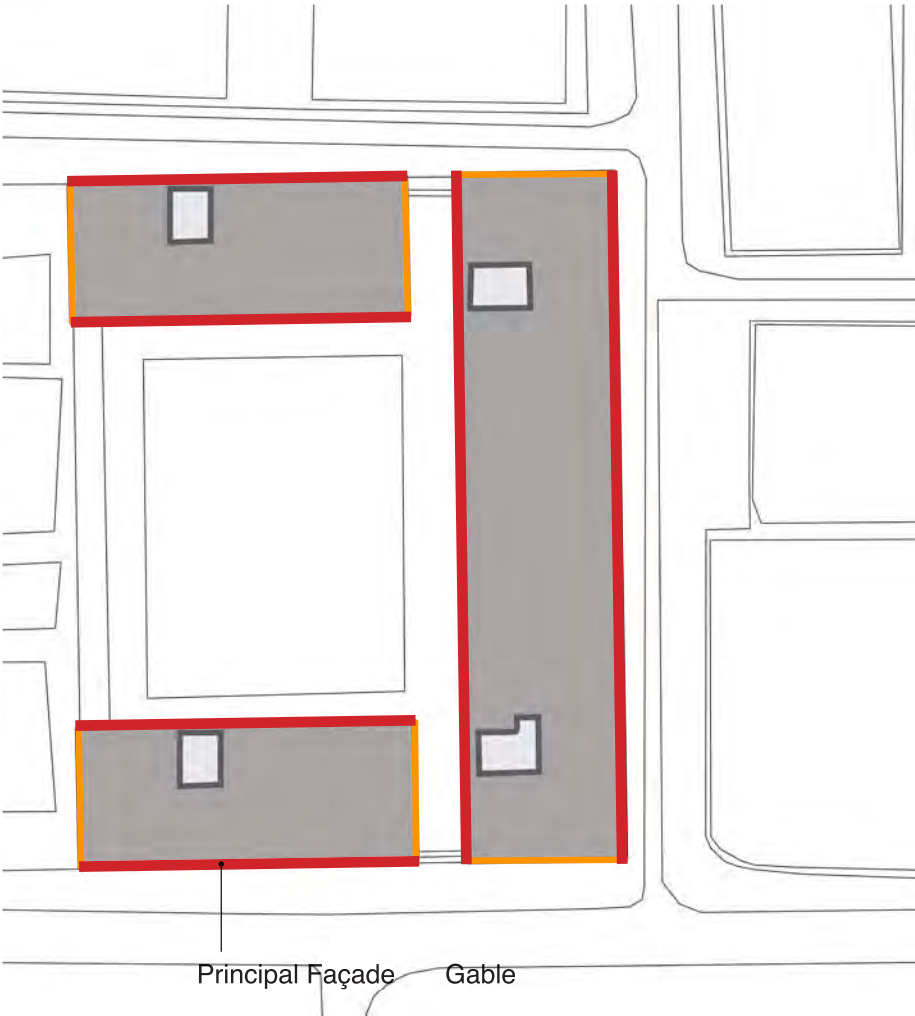
Arrangement Strategy

The diagram below illustrates the schematic layout of Plot 11 in plan in its immediate landscape context.



Townscape

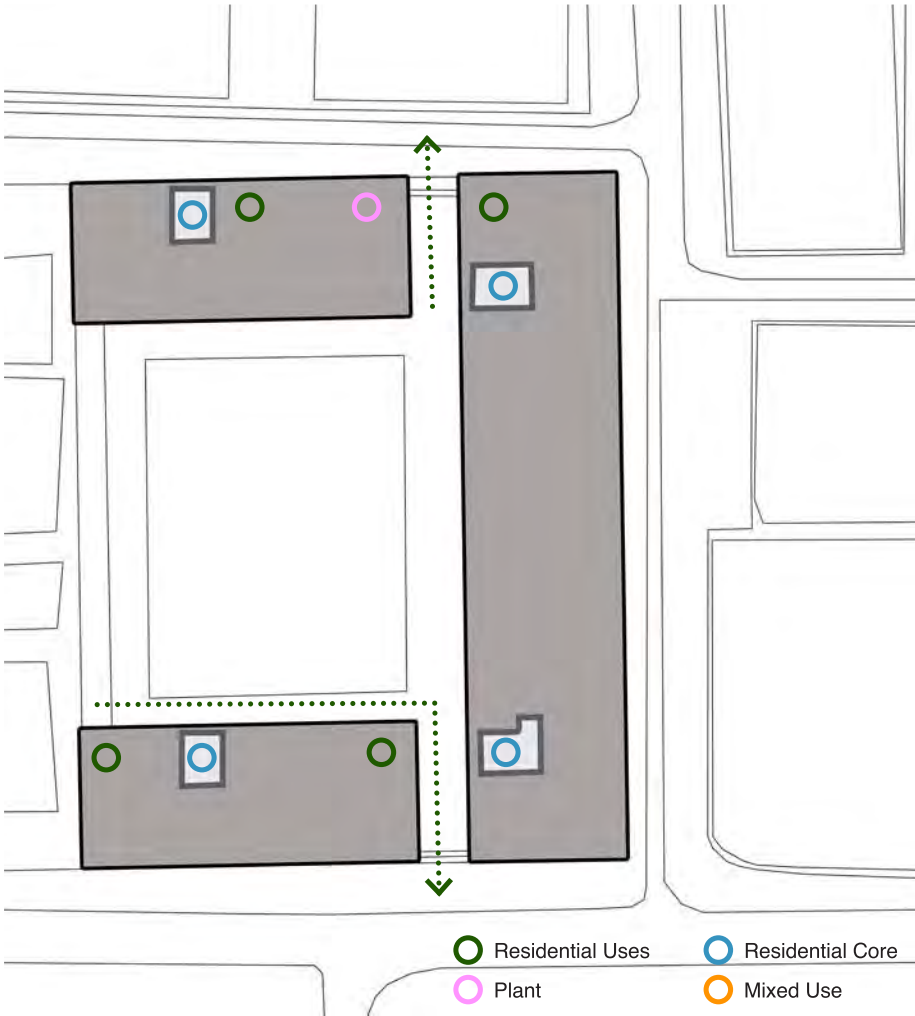
As illustrated earlier in this document the Royal Wharf masterplan design code proposes a range of different elevation types along the length of each plot to form the masterplan street frontages framework. The plot proposals seek to reinforce and enrich this tapestry of materials and elevation types. A summary of the elevation groupings is annotated below; illustrating how the building façades are consistent across the apartments.



Access + Servicing

Access and servicing for Plot 22 follows the principles of the master plan design code. Ancillary C3 uses such as refuse presentation rooms and cycle storage areas are set to the inside plan allowing mixed use units to achieve the best possible orientation and size along the high street.

Access to the parking podium is via Plot 04.



Entrances

Each building mass has been divided into a number of buildings labelled Plot 22, Buildings 01, 02 (Core A and Core B) and 03. Each has its own entrance core placed as features along the main street façades. Additionally, level and secure core access onto the residential courtyard is provided at the appropriate level.

Upper Level Arrangement Strategy

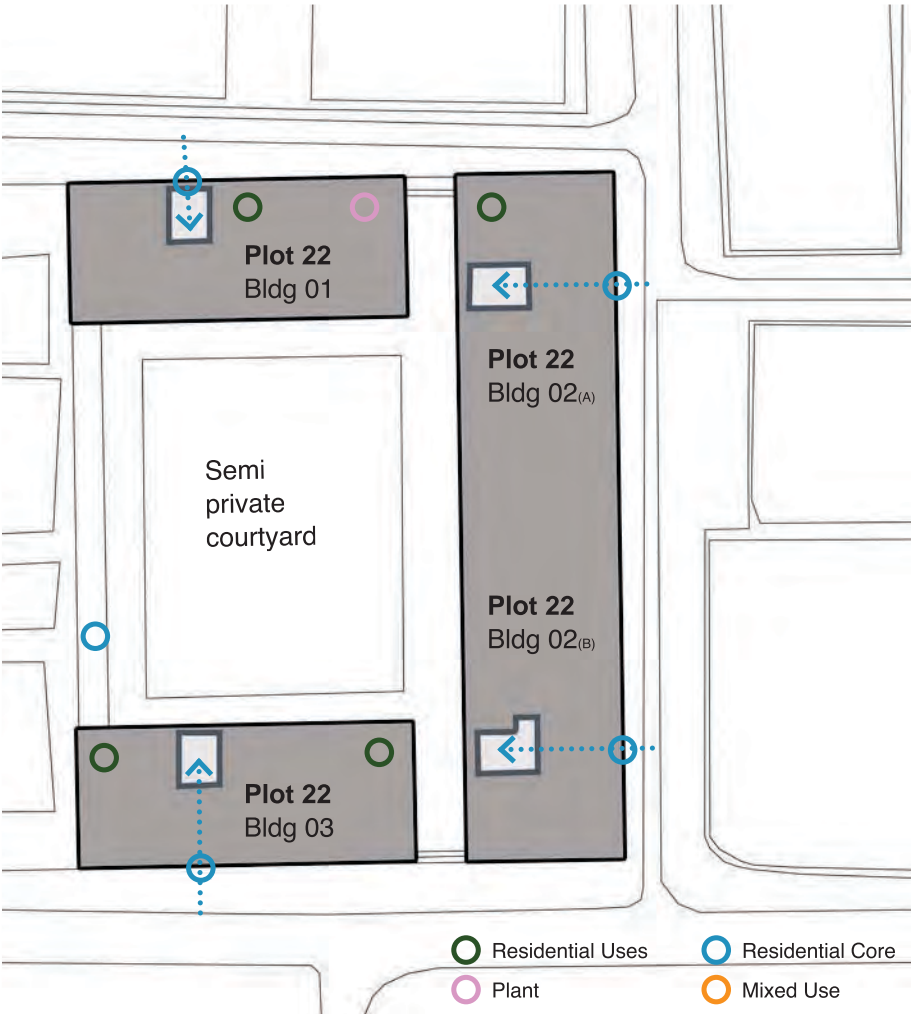
Above grade all of the upper level plans contain only apartments. Single-aspect north-facing units have been minimised with core positions strategically placed to address issues of overlooking.

Located centrally to the plan is the semi-private landscaped courtyard and terraces, protected from the hustle and bustle of the main streets.

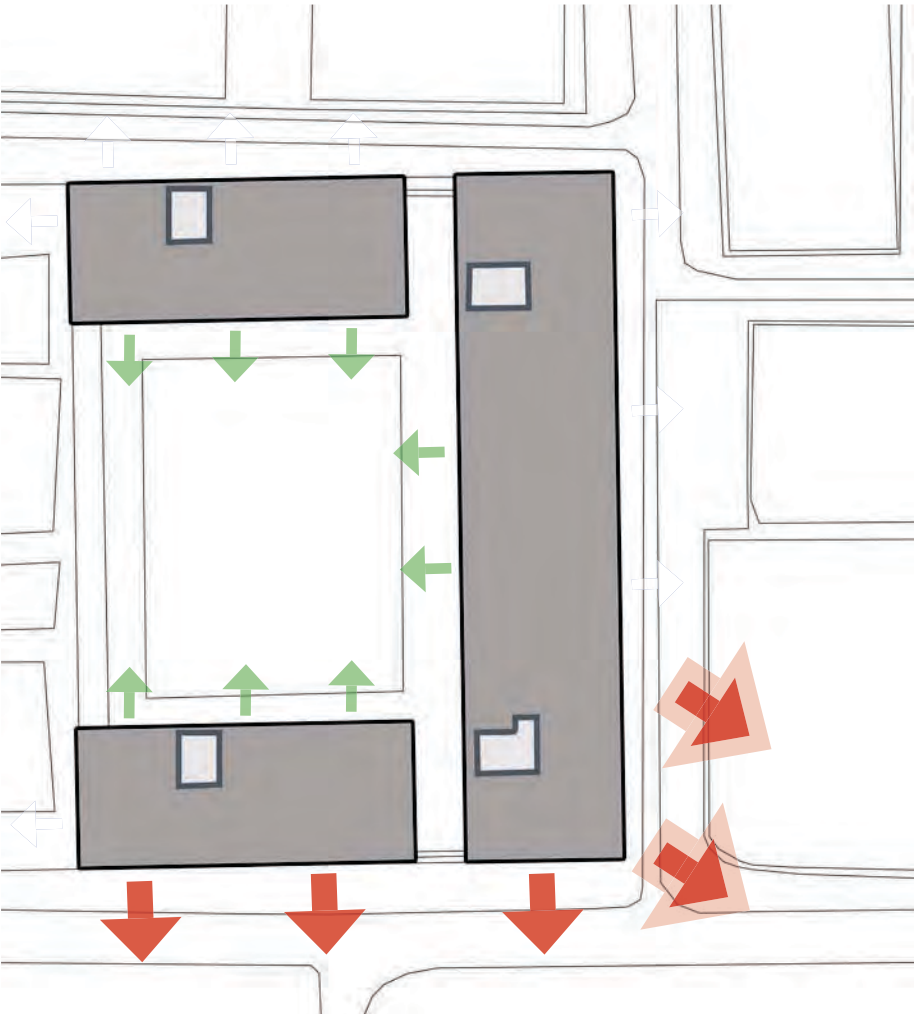
Views

The diagram below illustrates the viewing planes that have influenced the design of Plot 22:

- Mid range views to high street and square; →
- Long range views to Thames Barrier; →
- Internal Views into landscaped courtyard; →
- Close views of residential streets; →



Design + Access Statement

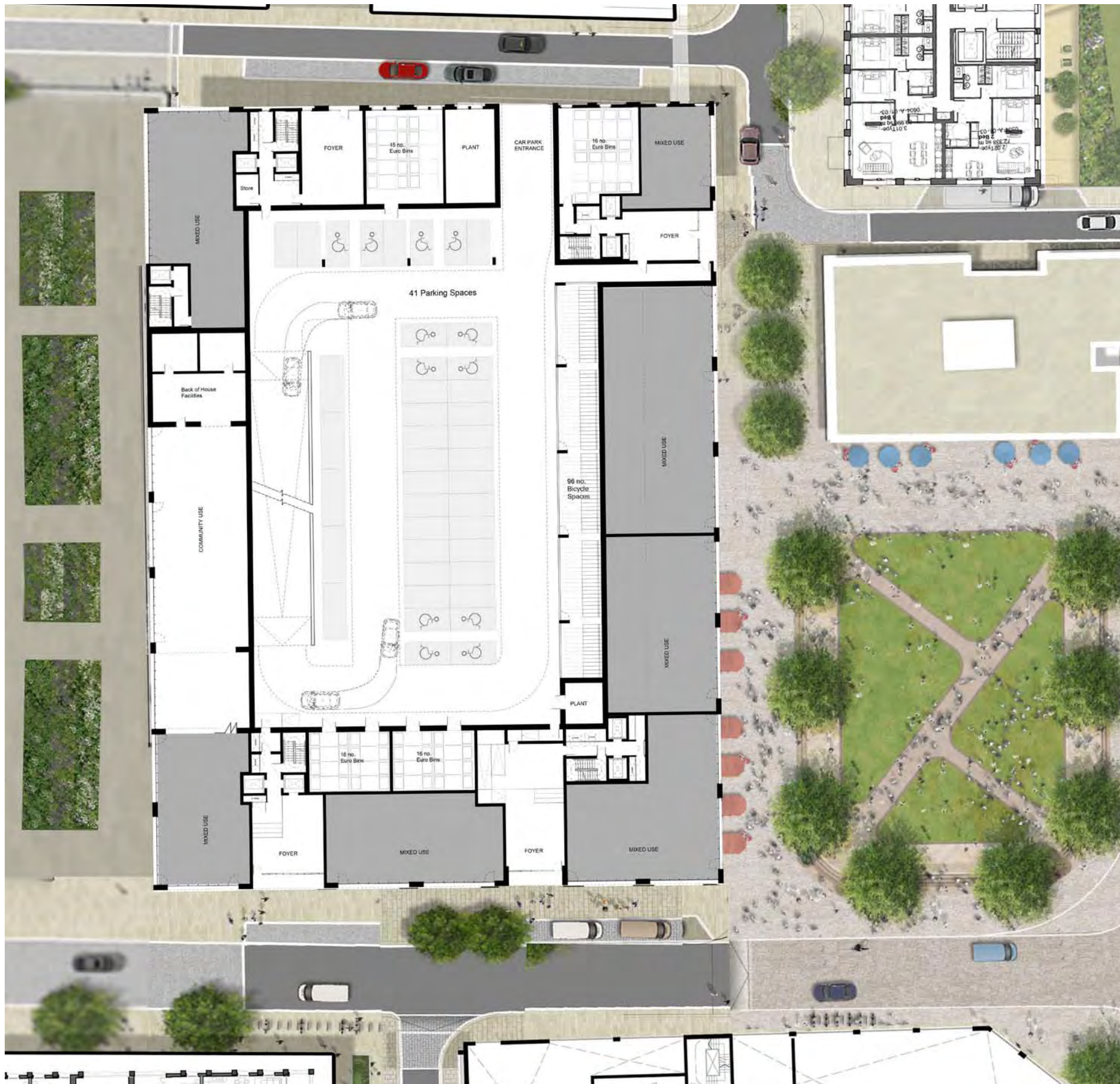




Basement Level Plan

At basement level Plot 22 consists of an extensive run of basement parking for use by residents across the masterplan site. In addition to the parking layout the plan only contains core positions for access into the units above and also to provide level assess to street level.

Illustrative Basement Level Plan



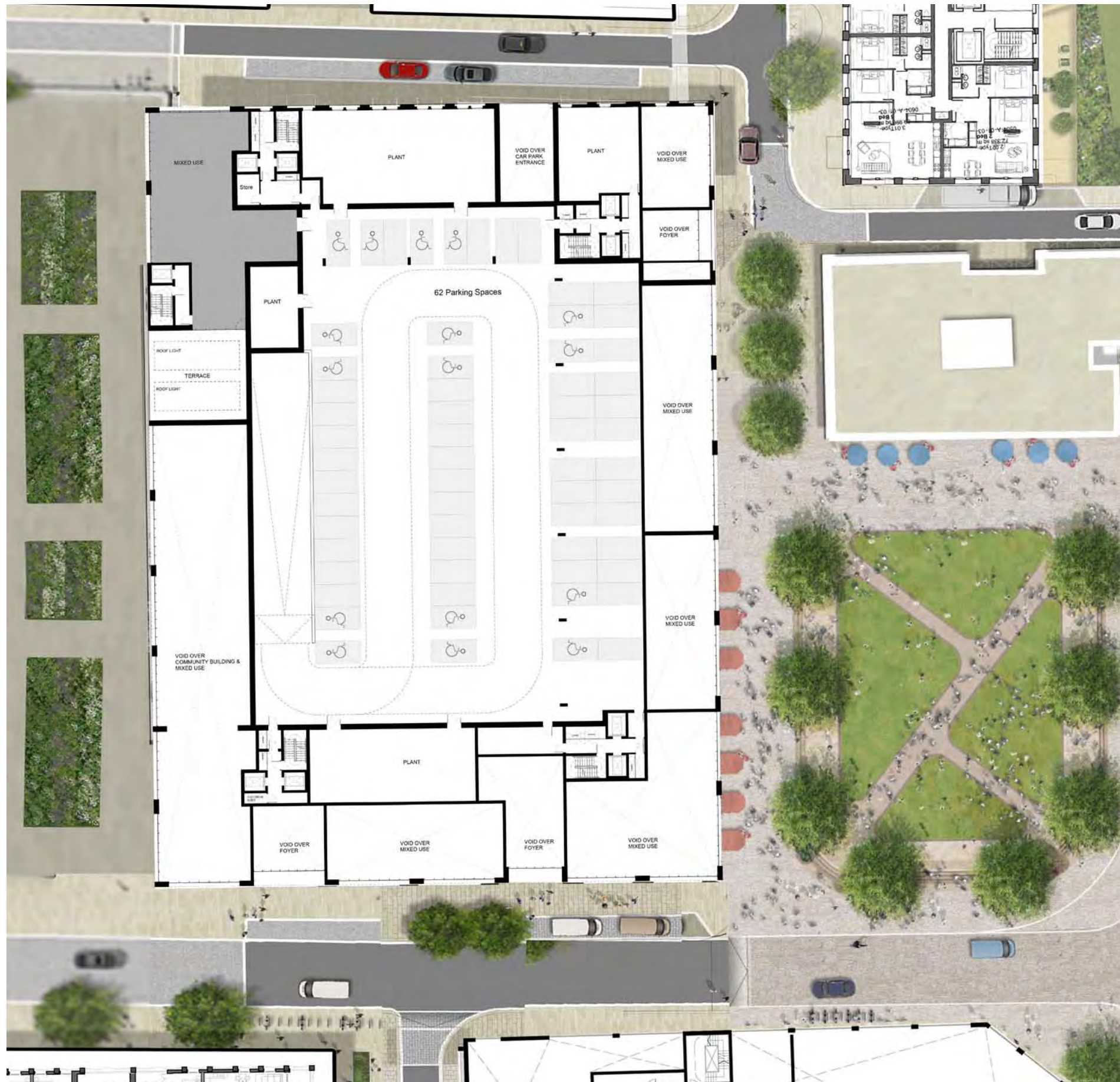
Illustrative Ground Level Plan

Ground Level Plan

Plot 22 ground level fills the full extent of the urban block set by the masterplan. The plan schematically consists of mixed use units along the eastern and southern perimeters addressing the main square and high street respectfully. The community centre is situated to the western edge and retains a relationship to the school in Plot 23.

Residential cores are placed to provide access at street level to each facade of the building and serve to provide further animation to the street scene.

Central to the plan ancillary residential uses and additional parking spaces are located under the landscaped podium with the car park access via the carriageway between Plots 04 and 03.



Illustrative First Level Plan

First Floor Plan

First floor level contains mainly parking provision based on the ground floor layout. A predominance of plant and ancillary spaces for the plot are also located at this level.

A small cluster of residential units are located to the north east corner of the plot.



Illustrative Typical Upper Level Plan

Typical Upper Level Plan

At typical upper level Plot 22 is massed into 3 distinct buildings formed in a C shape geometry with the opening set to the west opening up to evening sunlight across the landscaped courtyard.

Each building is arranged around a single core with 2 lifts and consists of 7 units per core on a mix of 1, 2 and 3 bed units.

Each core has direct access onto the shared residential courtyard with a perimeter run of terraces to each apartment opening directly onto the courtyard. Issues of overlooking have been addressed through the use of through and dual aspect units.

Elevations Concept and Townscape

Plot 22 is designed to respond strongly to its urban setting with the façade conceptually developed to reflect a Georgian west London stone mansion. A strong rhythm of finely crafted stonework and metalwork are proposed to give the building intimacy and prominence at varying scales.

Municipal Hierarchy and Scale

Fine balcony and glazing detailing are set within a rigorous larger scale stonework pattern which gives confidence to the building fronting the high street and square, while also ensuring a precision and richness is visible in the façade by visitors to the Royal Wharf site.

Robust Materials

It is important to specify a palette of materials that reflects a modern development of its time as well as contributing to the future historic character of the Royal Wharf area. To this regard reconstituted stonework with pressed metal and glass detailing, is proposed to ensure longevity and future weathering of the façade.

Responding to the Surrounding Context

In addition to the grandeur of the façade, Plot 22 also responds to the local setting by allowing itself to be read as a background building. This strategy ensure that Plot 04, consented as part of the initial Royal Wharf detailed application retains its ability to be the focal point of the square, supported by a varied architectural language of buildings on the square's remaining perimeter edges.



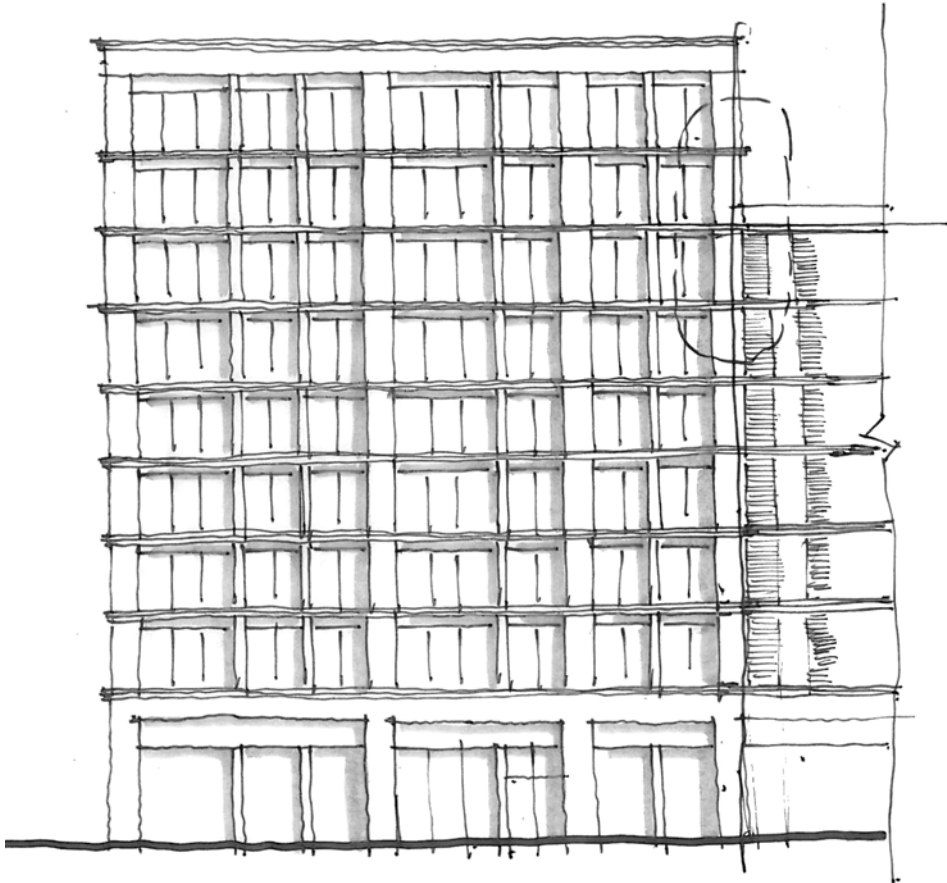
Plot 22 Window Design Study Sketche



Precedent Study For Plot 22

Elevation Design Development

The images below and adjacent illustrate the design evolution undertaken for Plot 22. Initial façade designs showed a strong framed language which was ultimately discounted to improve day lighting levels into each unit and to create a historic grand order to the scheme.



Plot 22 Facade Concept Sketch



Plot 22 Bay Study



Articulate roof parapet conveys detail at top of building

Large scale window aperture with finer detailing to glazing surround including pressed metal detailing

Projecting balconies add detail and rhythm to square elevations

Strong articulation of mixed use at base

Taller articulated ground level

Plot 22 Window Design Study Bay Model

Summary Schedule

Plot 12

GEA Residential - 10,398 sqm

GEA Commercial - 485 sqm

Private Housing Mix:

Studios	13
1 Bed Apartments	54
2 Bed Apartments	18
3 Bed Apartments	26
Total	111

Plot 12 - Masterplan Location

In June 2001, English Heritage and the Commission for Architecture and the Built Environment (CABE) published a consultation document Guidance on Tall Buildings. Tall buildings have to take into account many components of national and regional planning policy guidance as well as local policies. Government policy is to get the right developments in the right places. It states that tall buildings should be of the highest architectural quality and designed in full cognisance of their likely impact on their immediate surroundings and the wider environment.

Both CABE and English Heritage strongly endorse this approach, and recommend that local planning authorities should carry this out as part of their plan-making functions. Where there is a possibility of such proposals, the locations where tall buildings are, or are not appropriate should be identified in local authority development plans or, in future, when preparing development plan documents. These should be drawn up through effective engagement with local communities and with proper regard to Government planning policies and matters such as the local environment.

Such an approach will ensure that tall buildings are properly planned as part of an exercise in place-making informed by a clear long-term vision, rather than in an ad hoc, reactive, piecemeal manner.

It is within this context that the proposals for taller buildings within The Royal Wharf masterplan have been considered and developed.

Situated at the head of the park, plot 12 is identified as a landmark tall building that denotes the centre of the site, whilst enclosing and adding character to the new Linear Park.

To be acceptable, any new tall building should be in an appropriate location, should be of first-class design quality in its own right and should enhance the qualities of its immediate location and setting.

The judging panel for the design competition selected Mae's design. Some of the judge's comments are recorded below

- *Strong elegance*
- *Strong and intricate base*
- *Intriguing narrative*

Competition Submission Plot 12

Design Statement by Mae

Introduction

There is a clear aspiration set out in the master plan to create a new distinct neighbourhood within this part of Newham and London. Like all successful London neighbourhoods with distinct characters, building on sound Urban design principals and a simple and relevant approach to building materiality and expression are key. The buildings are part of a compact city extension and don't need to 'shout'. However we feel that the two buildings onto

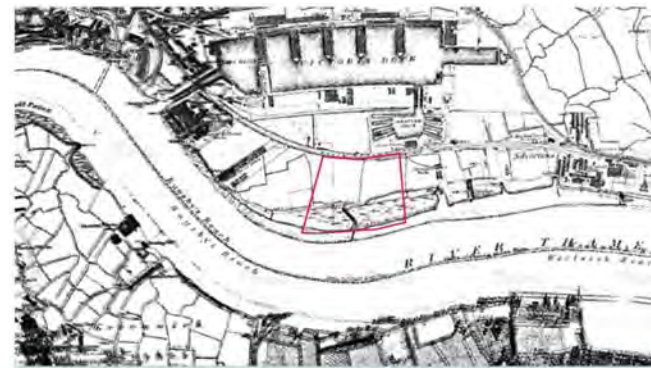
the park need to be special with extra attention paid to their architecture.

The proposal is for a fairly dense urban form with medium rise buildings connected to a fantastic public realm. The buildings should therefore form a backdrop to the public realm but still delight in their materiality and sense of place.

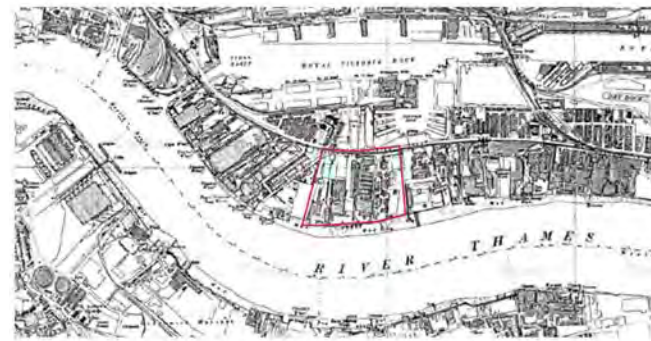
The following envelope study shows one approach that seeks to meet the aspirations and aims of the masterplan.

Historical Context

The historical context of the docks is important as a place of trade the import and export of goods. The maps and images illustrate the development of the site and activities that helped mold the built environment on this part of the Thames.



1890 - Riverside Pastoral/marsh land before industrial boom



1890 - Docksides Industrial growth alongside Royal Victoria Dock during Late Victorian Import/Export



2014 - Current Masterplan, Plots 15 & 12 indicated



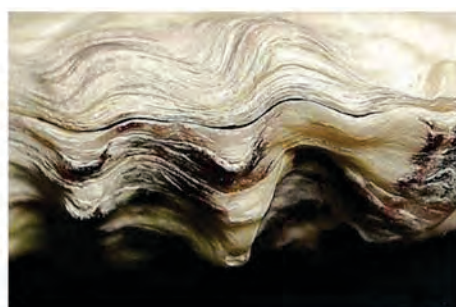
Canaletto's romanticised depiction of Greenwich Hospital - a grand civic space and formal garden with aspect to river



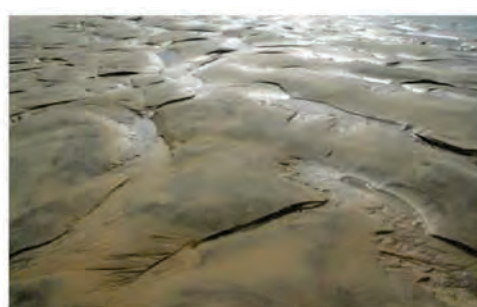
C.1900 - River Thames as Busy trading port during the Victorian and Industrial age



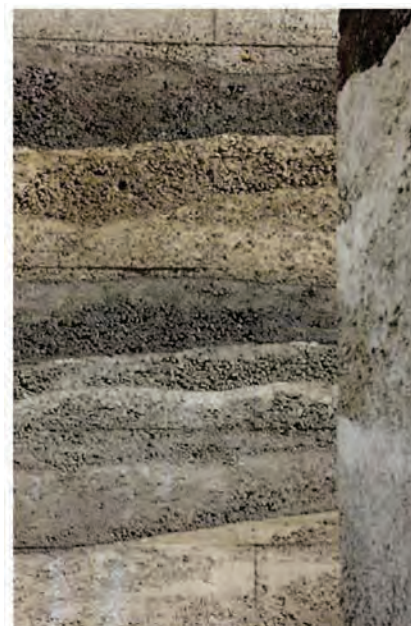
The worker's of the London docks dined on oysters, many have been discovered during excavation of the old dock walls.



Oyster shell detail - layering at a smaller scale



Sedimentary layers and patterns of Thames Estuary Mud at low tide



Rammed Concrete provides a beautiful finish similar

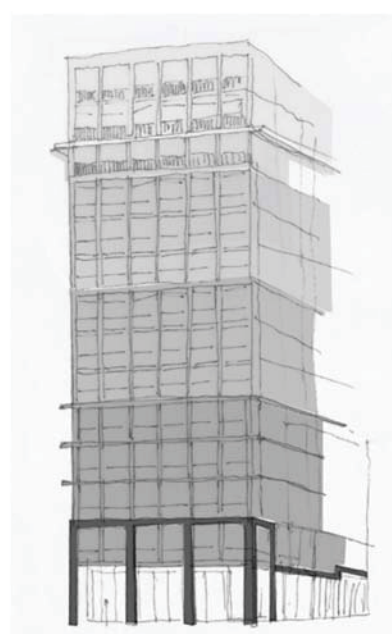
Scale & Proportion – Tidal Sediments & Material Expression

We have drawn inspiration from the history and geology of the site to create a distinctive architecture for the proposed buildings that focus on:

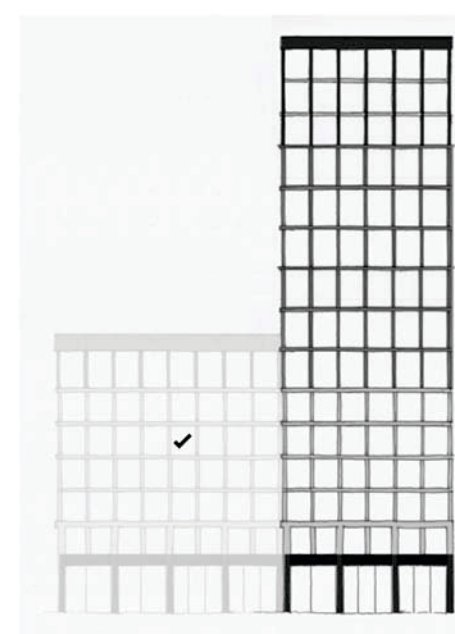
- strong base, middle and top
- dark to light - tide/sediment
- moving from ground to sky
- oyster shells discovered in the excavation of dock walls



Variations testing how the form of the building can be broken down into more manageable forms

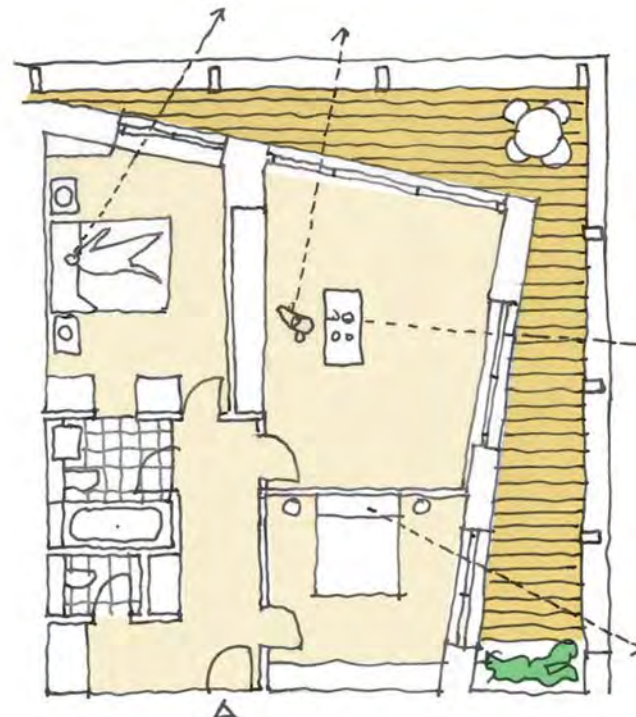
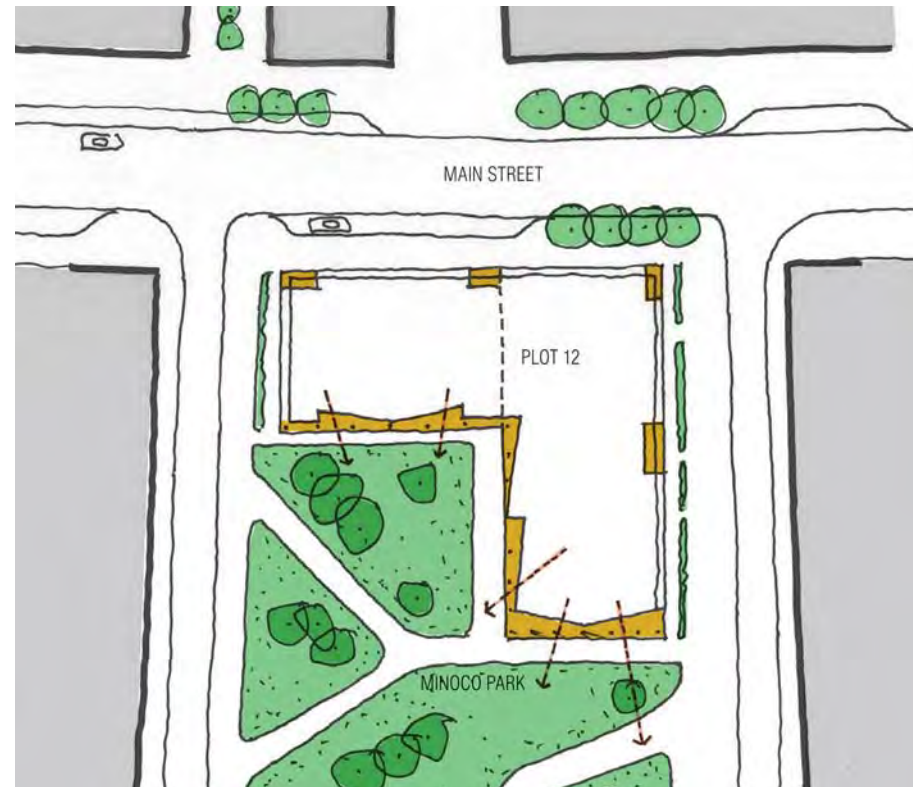


Subtle changes of scale & proportion, reducing scale architectural stratification



Response to Park & Street, River & City

- A façade that responds to the sites specific aspect, orientation, views, park, street, river and city
- A simple frame of precast elements that enclose and support balconies with a line of glazing set behind and orientated to respond to the flats layout/aspect, views and solar protection.
- Street side (north and west).... Proximity to neighbours, frame views, respond to street and noise at lower levels
- Park side (east)...respond with open, full width balconies
- River side (south) ... respond with open deeper balconies protected from south sun.
- Apartments arranged to capture and frame views of the city
- Sheltered outdoor seating and living
- Provide protection and solar shading
- Balcony fascia is set forward to provide differentiation
- Secondary facade layer glazing and anodised aluminum panels



A View of Delft through an Imaginary Loggia, Daniel Vosmaer (1663)



Structural screen contains the balconies within the envelope of the building whilst maximising views and daylight entering the apartments.

Park & River Façade - Base, Middle, Top

Base

- Covered colonnade in front of active frontage
- Lower levels rusticated with oyster shell aggregate with a smooth finish
- Articulation of lower floor slabs with corncicing provides a robust and tectonic construction taking the load of the structural screen above.

Middle

- Columns become more 'fin-like' and slender
- Proportions are articulated by use of corncicing and alternating triple and double order columns.
- Balcony fascia is set forward to provide differentiation
- Secondary facade layer glazing and anodised aluminum panels

Top / Crown

- Double order slender columns to upper level.
- Curved 'shell-like' reconstituted stone parapet celebrates the top as a crown to the building and reinforces the concept of shell integrated into the construction
- Pre-fabricated bays can be manufactured off site and craned in to increase speed of construction
- Secondary facade layer glazing and anodised aluminum cladding panels

Street Façade – Plinth & Crown

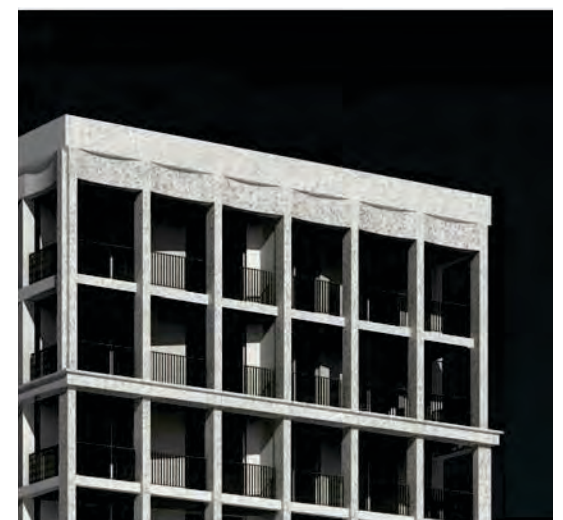
- Facade is more solid in appearance and balconies set back to provide a retreat, privacy from overlooking buildings within the development and a buffer to noise from the street.
- Faceted facade with large full height windows orientated at varying angles or dynamic views to river and city.
- Construction of the facade can be achieved in 5m, 1-storey sections and manufactured off site for controlled quality.



Base of base integrated to the Park Elevator

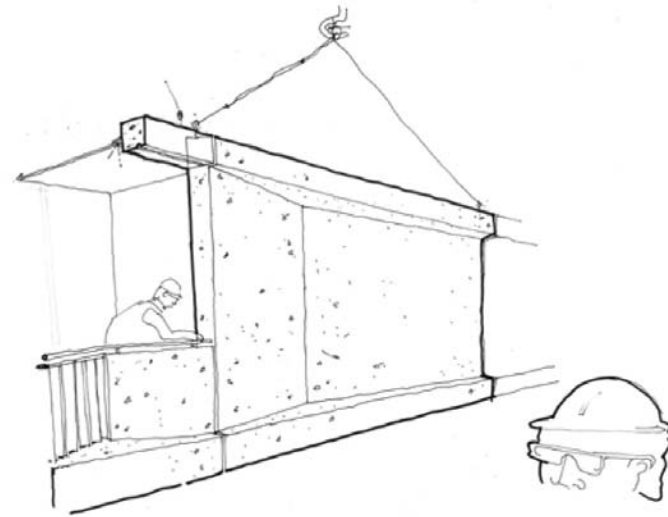


Architectural rendering of the middle section of the building, showing a faceted facade with large full height windows.

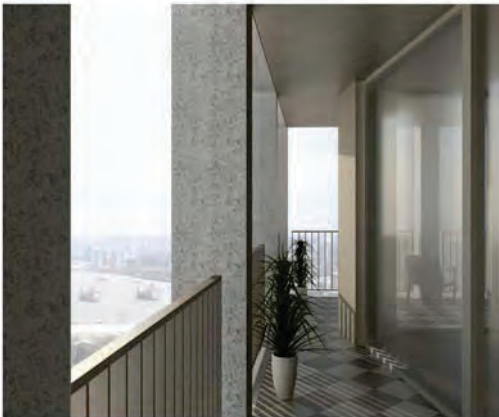


Street Façade – Plinth & Crown

- Facade is more solid in appearance and balconies set back to provide a retreat, privacy from overlooking buildings within the development and a buffer to noise from the street.
- Faceted facade with large full height windows orientated at varying angles or dynamic views to river and city.
- Construction of the facade can be achieved in 5m, 1-storey sections and manufactured off site for controlled quality.



Overall Composition / Materiality



Park side view framing views



Street side view with inset balcony



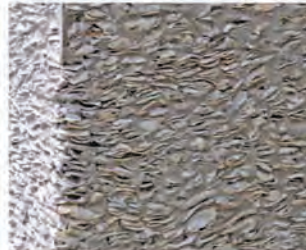
Polished reconstituted stone, marble/limestone and anodised metals for set back facade



Limestone tiles



Polished limestone with fossilised aggregate travertine



Tabby construction- Oyster shells in render



Double order Columns at ground level articulated with curved pediments.
ETH Student Project: Adam Caruso

Design Development & Workshop Outcomes

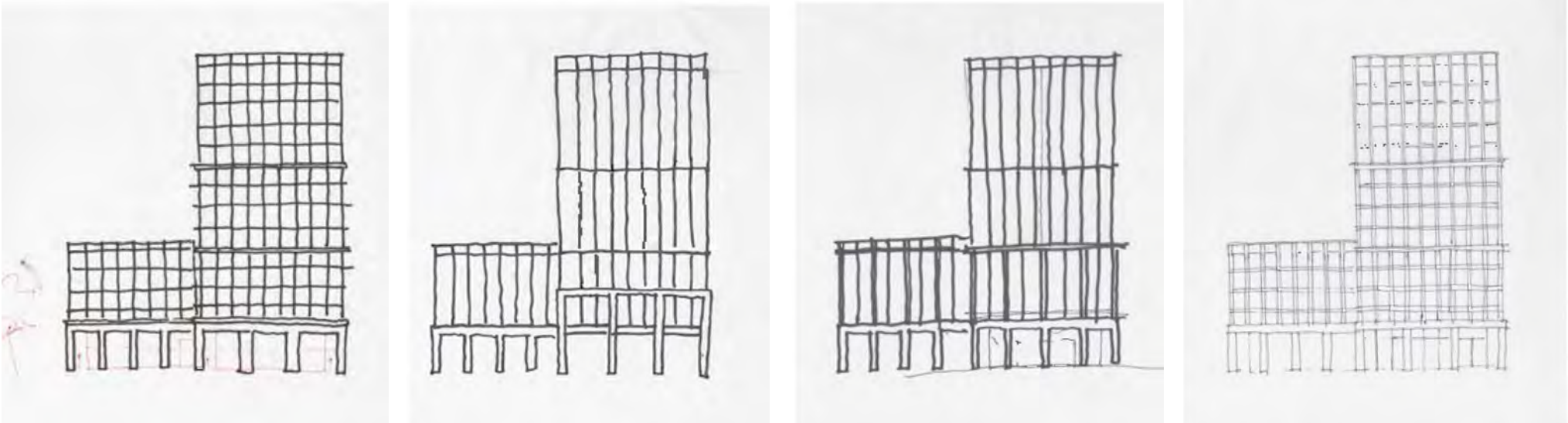
The following statement was prepared by Glenn Howells Architects.

Following the competition, key developments that resulted from the workshop process were as follows:

Massing, Proportion

Due to the principle of continuous balustrades to the perimeter, the tower element increased horizontally. In order to improve the overall proportions of the building the lower shoulder block was reduced by 2 storeys from the masterplan maximum parameter.

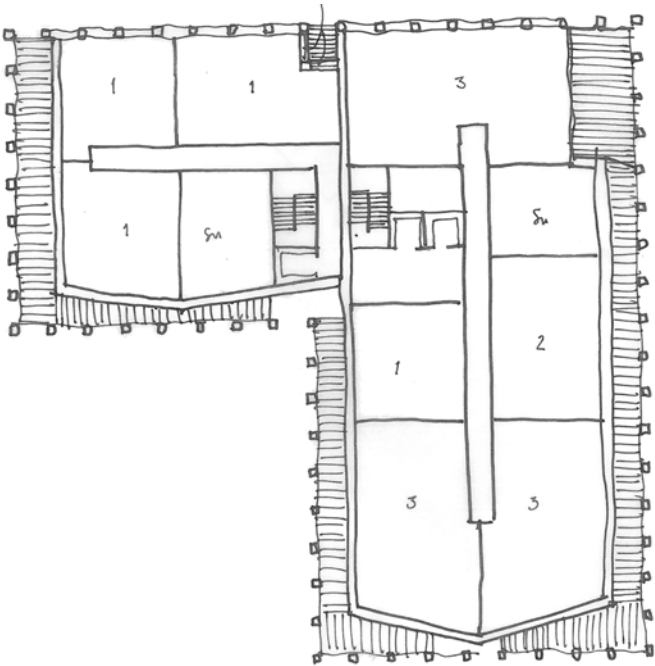
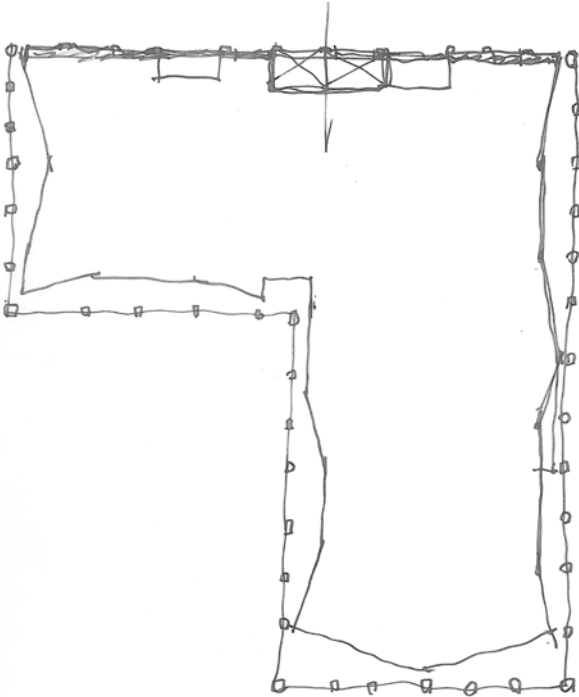
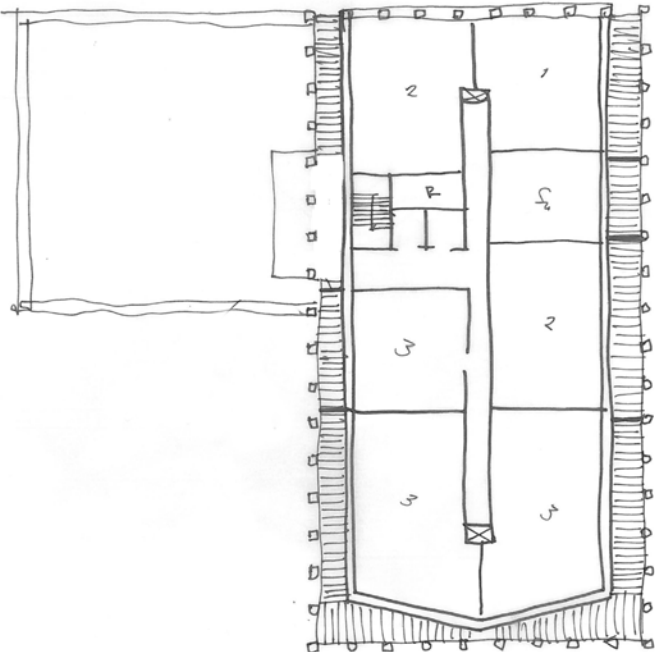
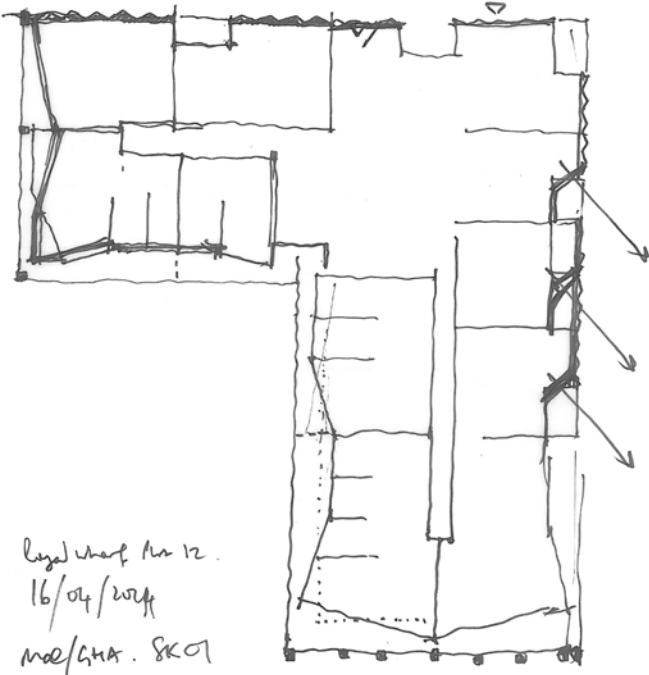
Subsequent studiies were carried out to establish the ordering of the elevation.



Elevation Design Development

Inner Skin - Outer Frame

The initial design showed splayed inner walls behind the outer masonry frame. This was rationalised to improve the internal spatial quality. Splaying the walls to the principal southern elevation facing the park only,



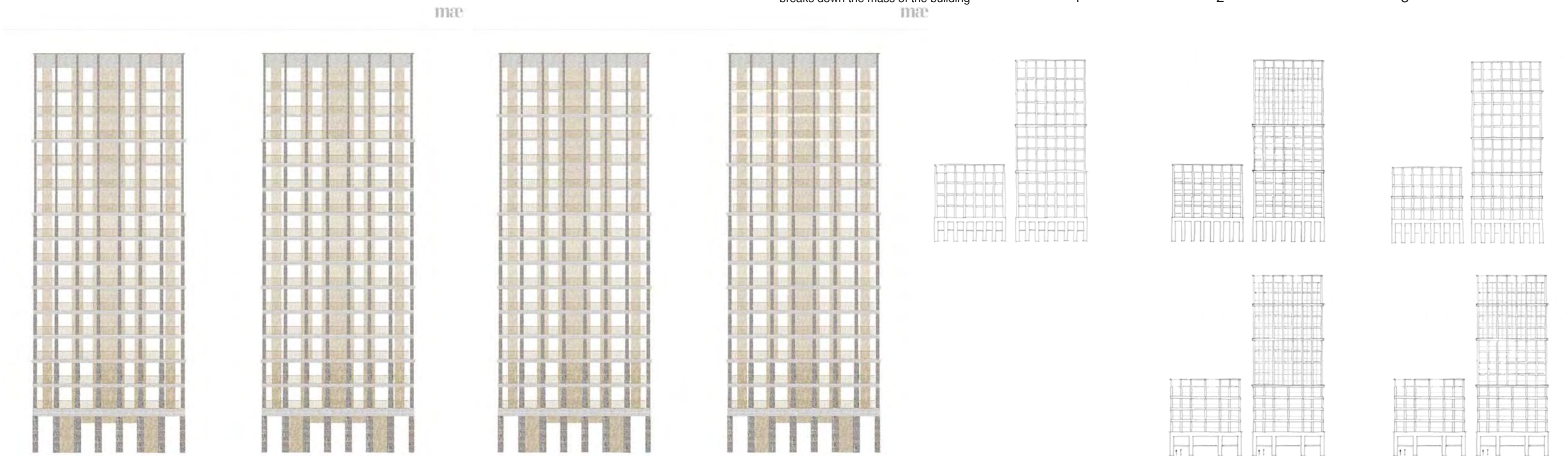
Tidal Concept

A number of iterations to establish elegant elevational proportions and to test associated materiality in order to convey the tidal concept.

images right:
1 + 2. Lynch Architects: Stone Screen precedent
3. Rue Marcueu, Paris. Architect unknown
Well-proportioned reconstituted stone screen
breaks down the mass of the building



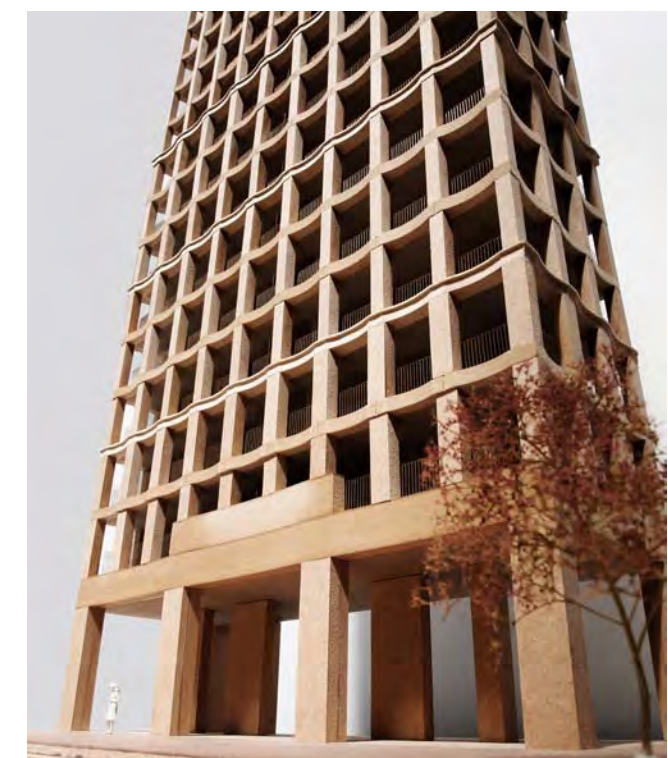
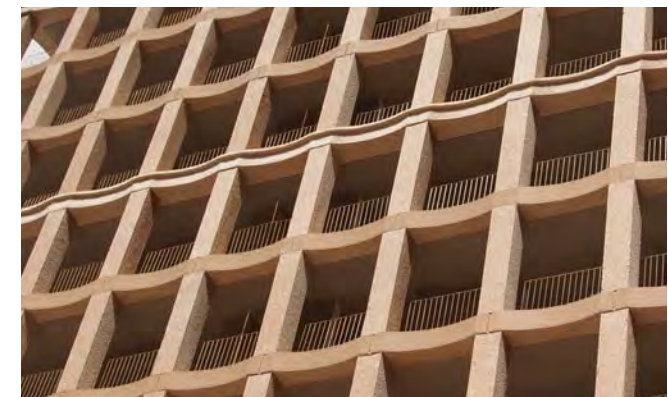
1 2 3



Sculptural Outer Frame

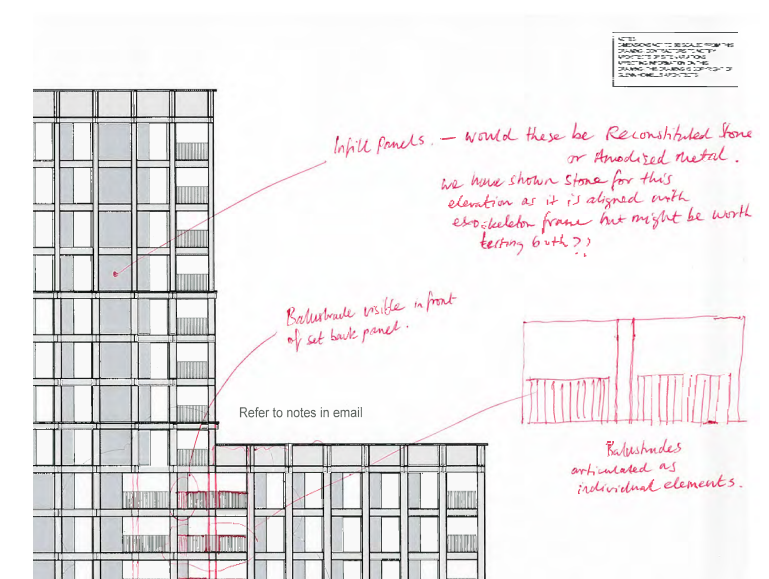
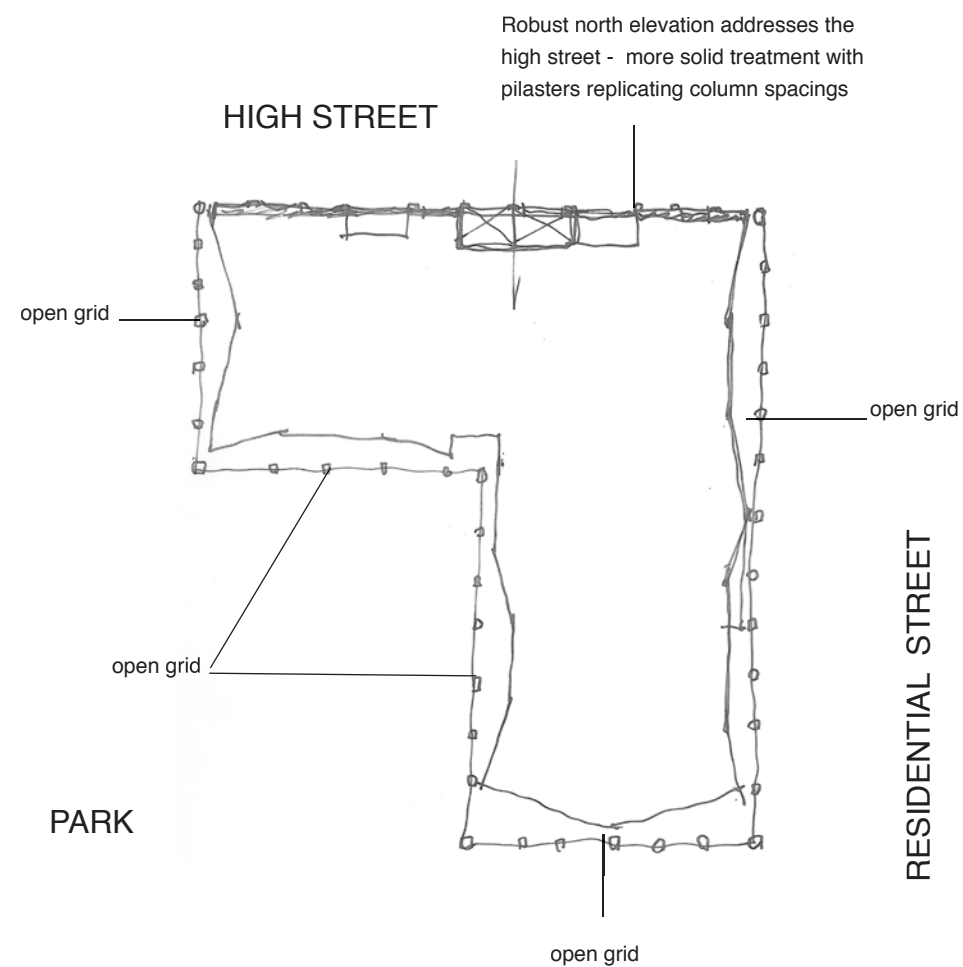
The original the competition submission proposed a scalloped crown at the top of the building. This scalloped language was later applied to the horizontal members of the colonnade facades and the cornices which divide the orders. This sculptural effect articulates and adds depth to the facade.

Vertical breaks in the masonry outer grid form recesses, revealing the inner facade to mark the main residential entrance to the east and the core location to the west. These recesses break up an otherwise large expanse of tower elevations.



North Elevation

The north elevation was conceived at competition stage as a more solid, predominantly masonry facade where the inner facade is brought forward to the back of the outer facade. The grid proportion of the colonnade to the south, east and west elevations is continued with a language of pilasters and solid panels allowing the colonnade facades to feel lighter and more open. Throughout the workshop process and following feedback from the DRP this language was refined. The openness of the grid is continued to the north elevation, the infill panels are expressed in the anodised material of the inner facade. This reinforces the material hierarchy of the facade composition.



Design Review Panel

The design review panel for plots 12 and 15 was conducted on June 2nd 2014. The following comments were given:

We support the very strong architectural direction being taken by the design teams for these plots. Each building has the potential to be very special and this is appropriate given the position of the plots within the masterplan. We made the following points for consideration and action by the design team:

Plot 12 – Mae Architects

The combination of the scalloped, grid-like form and the graded variation in the concrete tone, and oyster shells within, has the potential to be very interesting indeed. The north, high street elevation is rather more ordinary – the infilling of the grid with stone introduces a different language that is less successful. We suggested continuing the grid to this side of the building, even if the recessed face is needs to be shallower. We also suggested that the tonal variation of the concrete could be increased to make the ‘tidemark’ stages of the building more emphatic.

Following the DRP comments the following amendments were made to the scheme:

- Infill material to north elevation switched from stone to anodised panel and elevation developed in conjunction with internal layout
- Tonal variation increased to make the tidemark stages of the building more emphatic (to be explored further detailed design)



Tower View



Park View



North View



North Elevation



Layout constraints and LHDG compliance

The layout was determined by GHA, based on target numbers for the plot set out by the SECTION 106.

Single Core

Due to the L-shaped building plan outlined in the masterplan parameters, providing 2 cores in order to comply with the LHDG recommended maximum 8 units to a core for the lower levels, created a convoluted arrangement. Initially, the building was planned with a core for the tower and one for the lower shoulder block. The core within the shoulder block was considered to be inefficient as it was serving only 4 units over 5 floors. In order to reconcile the arrangement of the ground floor entrance the cores were placed opposite one another, with lifts facing across a shared lobby. This meant that south-facing elevation to the shoulder block was being used to ensure the core received natural light (another LDHG requirement).

The single core arrangement, introduced later is beneficial in a number of ways:

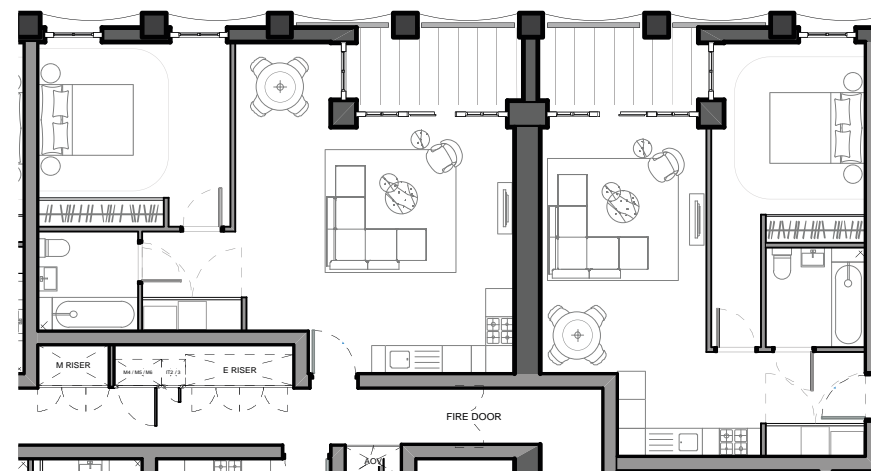
- 1. It makes the circulation more efficient and coherent
- 2. It frees up the south elevation for habitable space (apartment)
- 3. It increases the active ground level frontage
- 4. The maximum recommended 8 units is exceeded to 12, which is considered to be a comfortable number, particularly as the tower and shoulder block apartments are accessed from separate corridors
- 5. Building a single core will reduce the amount of building construction, therefore requiring less carbon emissions
- 6. A single core contributes to the notion that the tower and shoulder block are both part of the same building, unifying the 2 elements
- 7. It improves the overall building net:gross efficiency

A generous lift lobby is provided to compensate for the single lift arrangement, which is more befitting a building of this scale. This is the only instance in the entire Royal Wharf masterplan that the recommended maximum number of apartments per core is exceeded.

Single-Aspect North-Facing Apartments

Due to the L-shaped plan, it is necessary that a small percentage of apartments will be single-aspect, north-facing. A number of layout options were tested in attempts to eliminate single aspect north facing apartments. Doing this created problems such as overlooking and building inefficiency. The current layout proposes 10 single aspect north-facing units (less than 10% of the overall number).

Single-aspect north-facing apartments are a compromise outweighed by their location in a landmark building, whose architecture was described by LBN's DRP as 'very strong'. The apartments will overlook the high street, which will be a lively, animated environment thus an attractive setting. The apartments are more generous in area than the LHDG recommendations and are provided with a side window to the inset balcony that offers an additional aspect to the accommodation.



Illustrative Layouts





Ground Level Plan

Ground level for Plot 12 has been set at circa +5.65m AOD in accordance with the EA flood defense level and master plan levels. The plan principally consists of non-C3 uses at street level, to key locations on the high street and overlooking the park. Residential ancillary uses are placed between these spaces adjacent to the building core.

The main residential entrance to the is off the side street, on the east elevation.



Typical Upper Floor Level Plan

The upper level plan contains C3 uses only. The plan reduces to the tower footprint at seventh floor.

A large number of apartments the enjoyment of a dual aspect arrangement. Each of the apartments has been carefully considered in design and layout to maximise views, daylight levels and internal spatial arrangement, to achieve the highest quality residential experience for the proposed scheme.

Direct level access out of the apartment building, has been provided onto to ensure full accessibility by each of the residents of the scheme.

Compliance to Parameter Plans

Further to compliance with the principles established by the Royal Wharf design code and masterplanning framework Plot 15 also sits within a planning parameter schema.

Parameter plans submitted as part of the outline application are listed below and the following items are noted with regard to Plot 12:

Parameter Plan 01, 02 Location and Levels Plans

The proposed development sits within the outline site application boundary as identified and complies with the parameter.

Parameter Plan 03 Formation Level Plan

Not Applicable

Parameter Plan 04 Flood defense Level Plan

The proposed plot design complies with the designated cirteria for mixed use located to the South and C3 uses elsewhere.

Parameter Plan 05 Proposed Upper Level Plan

The proposed design complies with the designated cirteria for use class orientaion around the plot.

Parameter Plan 06 Proposed Building Footprints

The proposed development exceeds the parameter footprint slightly. This is due to the continuous balcony design. The inner building sits within the masterplan parameters. However, the external colonnade which then forms the balconies sits outside it.

Parameter Plan 07 Proposed Minimum AOD Levels

The proposed design complies with the designated cirteria

Parameter Plan 08 Proposed Maximum AOD Levels

The proposed design exceeds the maximum height parameter designated cirteria by 450mm. this does not include parapet and lift overruns.

Parameter Plan 09 Proposed Public and Private Realm

The proposed design complies with the designated cirteria

Parameter Plan 10 Movement Plan

The proposed design complies with the designated cirteria

Parameter Deviations

The marginal deviations from the parameter plans are currently being addressed separately in a Section 73 to be submitted to LBN.

Summary Schedule

Plot 15

GEA Residential - 12,785 sqm
GEA Commercial - 278 sqm

Private Housing Mix:

Studios	12
1 Bed Apartments	36
2 Bed Apartments	52
3 Bed Apartments	20
Total	120

Plot 15 - Masterplan Location

Plot 15 was identified at an early stage as a key plot with landmark prominence. Its location at the riverside corner of the new Linear park makes plot 15 a building that requires a strong and unique architecture.

The judging panel for the design competition selected a design by Serie.

Some of the judge's comments are recorded below:

- *Very strong conceptually*
- *Exciting and lively facade*
- *Interesting use of materials*

Competition Submission Plot 15

Design Statement by Serie

Introduction

Characteristics of the City

The goal of the Royal Wharf project is to 'make another piece of the city'.

With this in mind we have looked closely at London and its built environment in order to identify its most important characteristics.

The central part of London is essentially a nineteenth century creation and the built manifestation of this is the Victorian terrace house. Although the terrace house comes in many forms — from the grand stuccoed houses of Belgravia to the simple two storey workers' housing — there are three important elements common to all:

1. Scale — low rise: nearly all of London's terrace housing is no more than five storeys high. Therefore the city can be characterised, despite twentieth century high rise development, as a low rise city.
2. Building type — terrace house: the ubiquity of this type gives the city an overall coherence but allows interesting subtle variation

Coherence: repetition of a standard unit with the same heights, fenestration and materials

Subtle Variation: plot adjustments, brick type, window and door details

3. Outdoor space — generous green space:

Britain has long been a nation of gardeners — as a result terrace houses have typically included front and rear garden space



I. Scale — low rise: all of London's terrace housing is by definition low-rise. And therefore the city can be characterised, despite twentieth century high rise development, as a low rise city.

Mainstream Modernism

Grid base repetition



Contextualised Modernism

Street in the sky



Contemporary Random

Euro-disco facade



Challenges

Mass-housing in London since the era of the terrace house has failed to reflect this distinct set of characteristics. We believe the following three issues are central to 'making another piece of the city'.

1. How to build at scale? Most efforts to build at height have not been particularly successful:

Mainstream Modernism: reliance on the grid and repetition leading to monolithic massing

Contextualised Modernism: incorporation of the 'street in the sky'. Resulting in a loss of privacy and deadening of the facade

Contemporary Random: playful use of colour and random elevation treatment leading to loss of coherence and monolithic massing

How to address the terrace house type? reliance on the grid and repetition leading to monolithic massing

2. How to address the terrace house type?

By failing to consider the proportions and design language of the terrace house most mass housing is essentially rootless and foreign or a playful pastiche.

Unrefined Modernism has typically ignored all reference to the proportions of the terrace house has relied on a pastiche of earlier styles without emphasis on the values of the terrace house type

Post-Modernism has relied on a pastiche of earlier styles without emphasis on the values of the terrace house type

3. How to rethink outdoor space: high rise living has typically been seen as inferior to low rise because developers have failed to provide high quality outdoor space

fail to provide: many high rise buildings fail to provide any meaningful outdoor space

Under-provide: under-sized balconies, which inevitably become storage space

Concept - Slab Reimagined as a Grand Terrace with a Giant Order

1. Scale concept — giant order: the Plot 15 concept utilises the 'giant order' to break down the monolithic appearance of the standard slab block. This concept is reinforced by expressing cornice that separates the double storey separation.

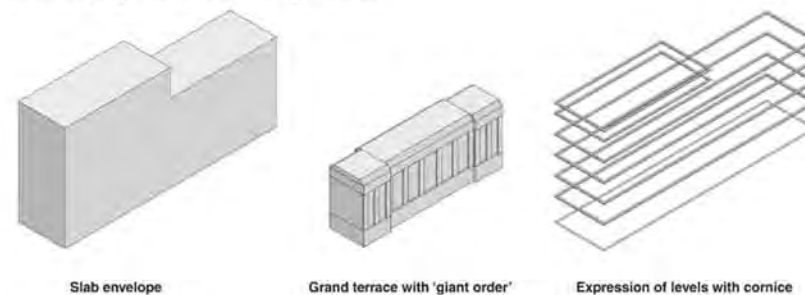
2. Type concept — subtle detail and proportion:

The richness of the grand terrace house is achieved by a series of elevation treatments. Alternate floor levels are highlighted with an expressed cornice. Wall space is defined with a wavy curtain 'pilaster' concept. This cladding system reinforces the giant order but also references grand terrace house detailing. The fenestration is given a chequer-board arrangement. This helps reduce the monolithic qualities of the block by creating visual interest.

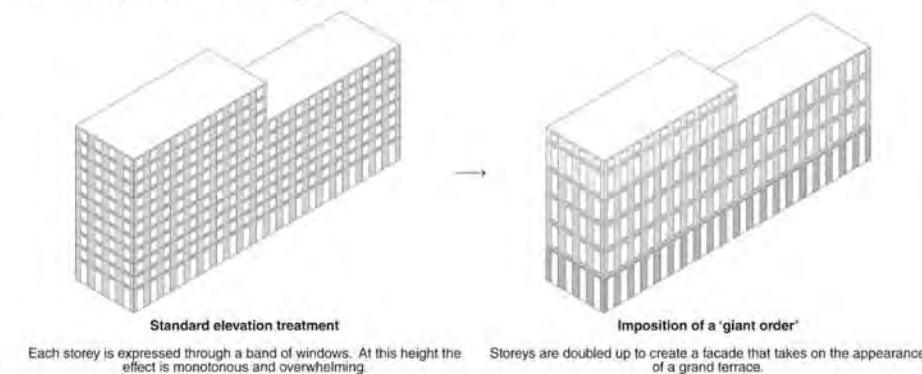
3. Outdoor space — orientated 'giant' balconies:

balconies are stretched over two storeys to reinforce the central architectural conceit. These balconies are covered to create some degree of shelter. Most importantly the balconies are orientated towards the views of the Thames to the south. This is achieved by pushing the south balcony wall toward the building and pulling out the north balcony wall.

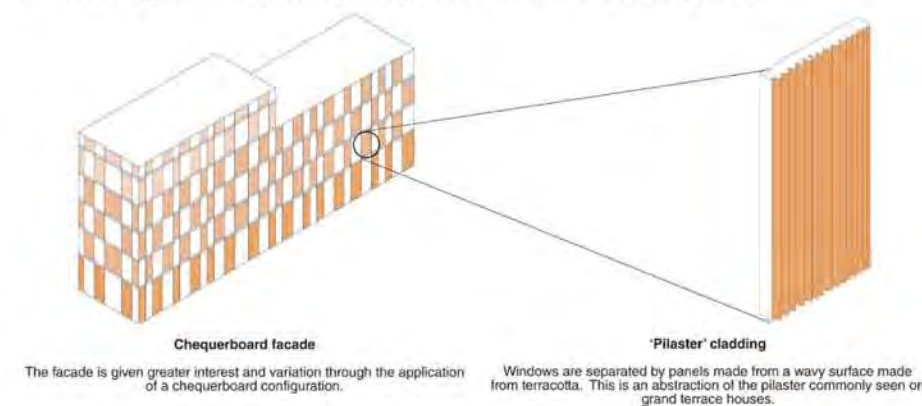
Plot 15 concept: grand terrace with 'giant order'



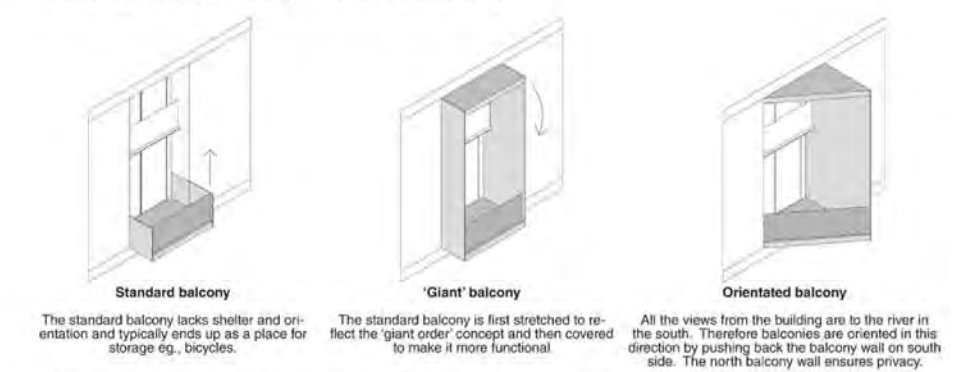
This concept is used to create grandeur and proportion



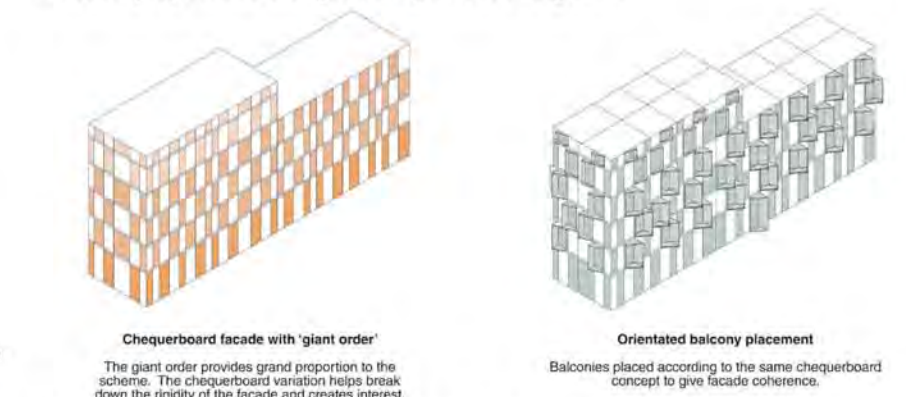
The facade is given richness through chequerboard variation and abstract pilasters



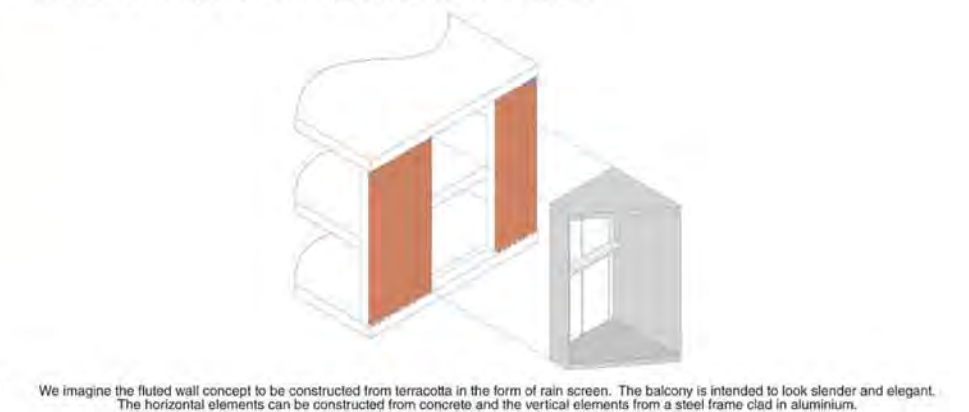
Outdoor space is provided by an orientated balcony



The balcony is placed according to a chequerboard arrangement



The facade concept is based on proven construction methods



Construction

Construction of the wavy wall panels can be from either terracotta in the form of a rainscreen or from glass reinforced concrete (grc). Terracotta would allow the use of more interesting surface textures and colours. The horizontal elements of the balcony can be constructed from pre-cast concrete supported via iso-korb steel elements. The vertical balcony wall is intended to be as slender as possible and therefore can be constructed around a steel frame, possibly with aluminium cladding.

Conclusion

The intention of these proposals is to 'make another piece of the city'. We therefore pay close attention to the qualities of London: its scale, building type and use of outdoor space.

The plot 15 concept uses the classical concept of the 'giant order' to create a more proportionate and grand elevation. With the addition of fluted terracotta cladding and angled balconies this riverside tower is intended to appear elegant and sophisticated.



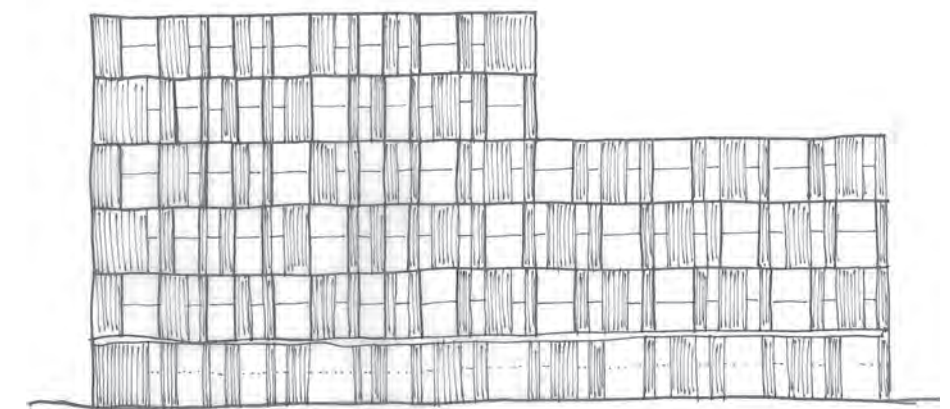
Design Development & Workshop Outcomes

The following statement was prepared by Glenn Howells Architects.

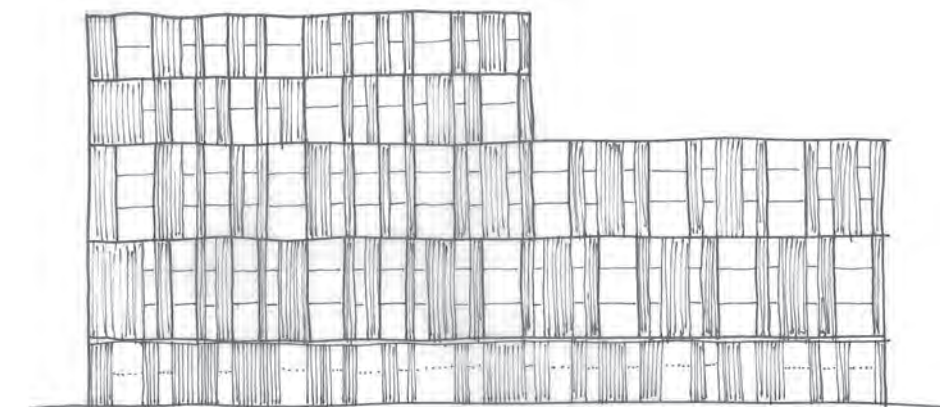
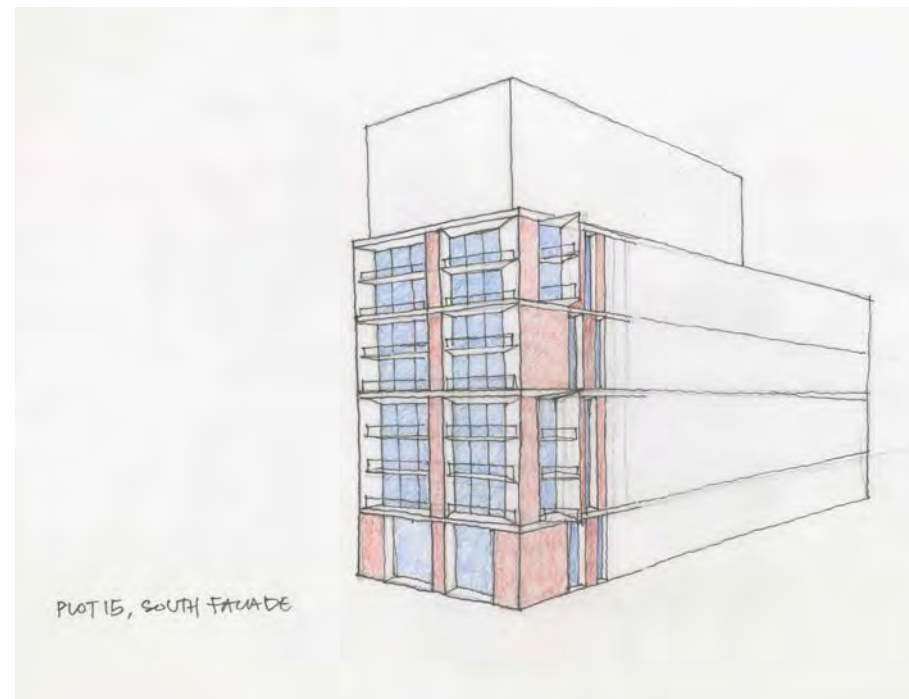
Massing & Proportion

Several studies were carried out to establish the order for the building, as it was felt by the competition-judging panel that the single storey on top of the building weakened the composition.

The lower element of the building was reduced a storey from the masterplan maximum parameter height to balance the elevation.



PLOT 15 DOUBLE ORDER THROUGHOUT.



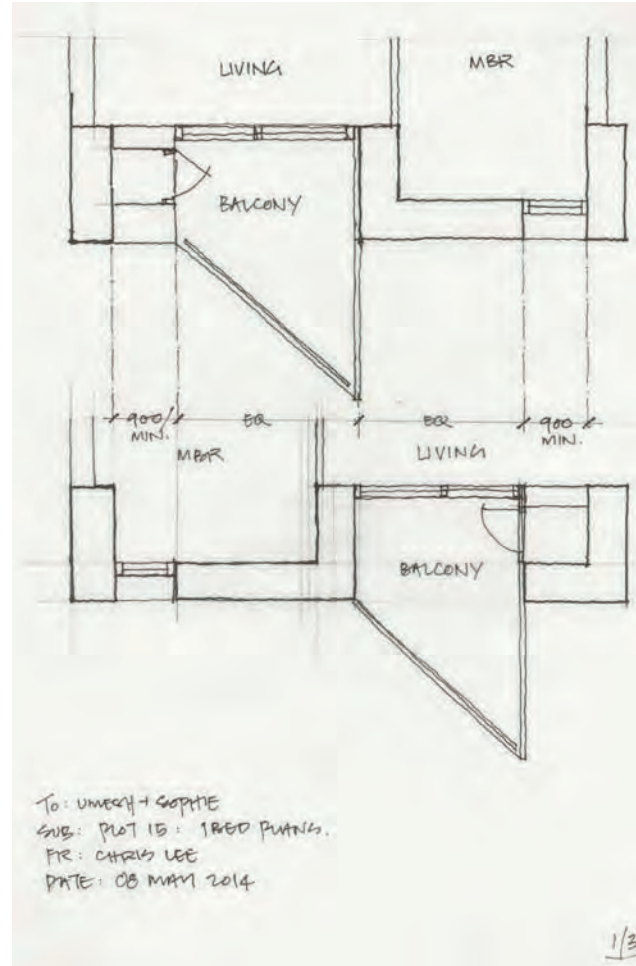
PLOT 15: DOUBLE + TRIPLE ORDER.

Elevation Development

A great deal of care and attention has been taken to achieve the chequerboard façade. This requires the layout of the apartments to switch on alternate orders to allow the balcony to sit in the correct position in elevation.

In order to comply with the London Housing Design Guide, balconies are provided to each apartment. This has changed the balcony module order from what was initially proposed at competition stage. The design development ensures compliance without compromising the original design intent.

The sidewall to the balconies has been reduced to maximise views across the park.



Apartment Layout



Competition Design



Current Design

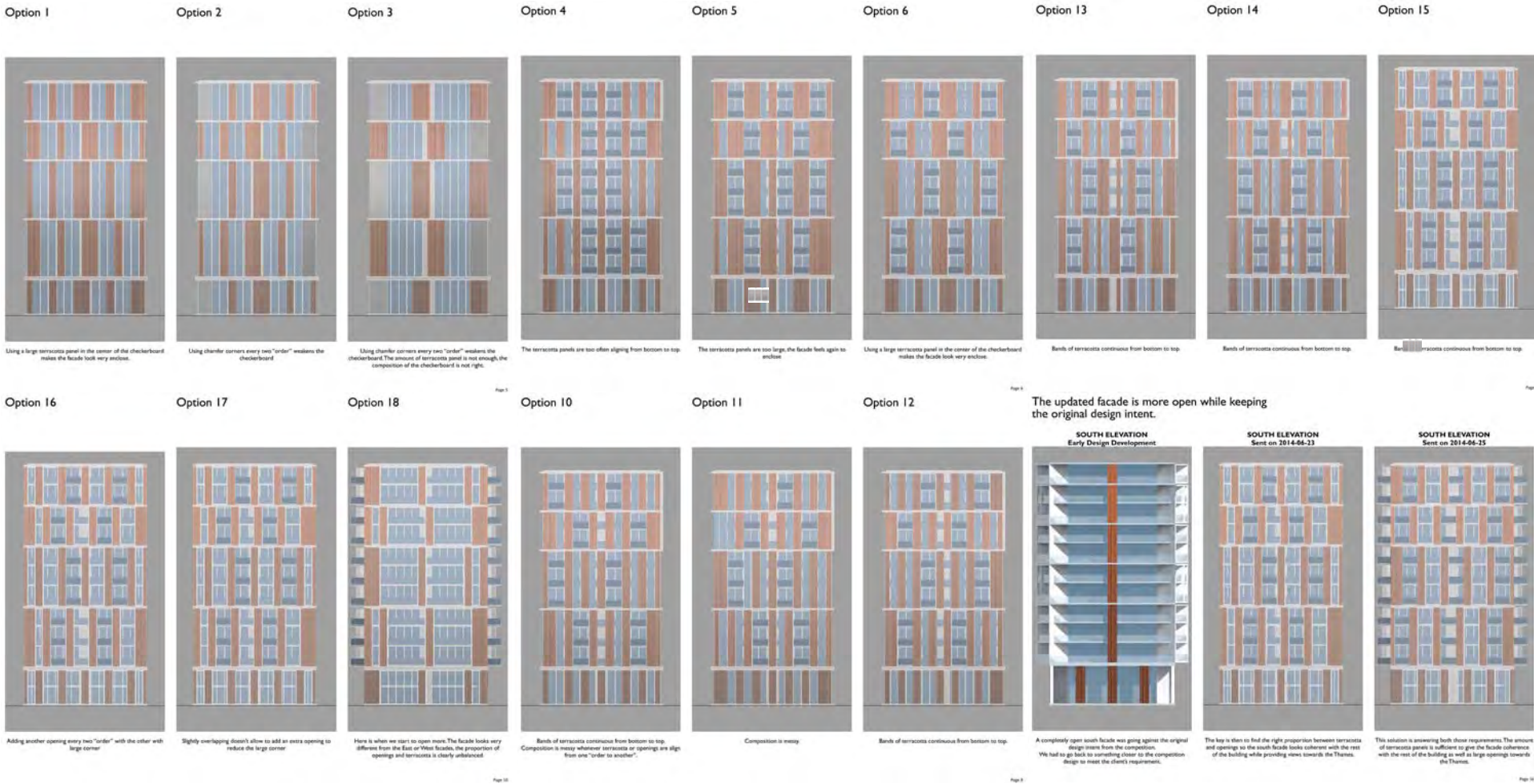
South Elevation

The south elevation has been developed from competition stage. It was felt by the panel to be too closed and solid facing the river, where views would be better maximised with openness to the facade.

A number of variations were tested by both Serie and GHA to establish an elevation which offers the openness for river views, while maintaining the architectural language of the side elevations.



South Elevation Development Sketch



South Elevation Development Process Drawings

Design Review Panel

The design review panel for plots 12 and 15 was conducted on June 2nd 2014. The following comments were given.

We support the very strong architectural direction being taken by the design teams for these plots. Each building has the potential to be very special and this is appropriate given the position of the plots within the masterplan. We made the following points for consideration and action by the design team:





Facade Development Model



Plot 15 – Serie Architects

The layered terracotta creates a fabric like texture that could be very interesting. The building has a street and park elevation and therefore the treatment of the building at its base - both in terms of plan and elevation - will be crucial to ensure a successful interface with these spaces. Balconies need to be provided to every unit. We look forward to seeing more detail in relation to these elements as the scheme progresses.

Following the DRP comments the following amendments were made:

- Apartments were added at ground and first floor level
- Balconies are provided to every apartment unit
- The south elevation has been opened up more to maximise views to the river

Ground and First Level Plan

Ground level for Plot 15 has been set at circa +5.65m AOD in accordance with the EA flood defense level and master plan levels. The plan principally consists of C3 uses (apartments) to the ground and first floor level. Main residential entrances to cores are also from the park side.

A large non-C3 use unit is located at the at the southern end of the building facing both the park and the river. Residential ancillary uses such as refuse and cycle storage are placed along the western side of the building, to be accessed directly from the side street.



Ground Floor Plan



First Floor Plan

Typical Upper Floor Level Plan

The upper level plan contains C3 uses only.

A large number of apartments enjoy a dual aspect arrangement.

Each of the apartments has been carefully considered in design and layout to maximise views, daylight levels and internal spatial arrangement, to achieve the highest quality residential experience for the proposed scheme.

Direct level access out of the apartment building, has been provided to ensure full accessibility by each of the residents of the scheme.



Typical Upper (Second) Floor Plan



Typical Upper (Eighth) Floor Plan

Compliance to Parameter Plans

Further to compliance with the principles established by the Royal Wharf design code and masterplanning framework Plot 15 also sit within a planning parameter schema.

Parameter plans submitted as part of the outline application are listed below and the following items are noted with regard to Plot 15:

Parameter Plan 01, 02 Location and Levels Plans

The proposed development sits within the outline site application boundary as identified and complies with the parameter.

Parameter Plan 03 Formation Level Plan

Not Applicable

Parameter Plan 04 Flood defense Level Plan

The proposed plot design complies with the designated criteria for mixed use located to the South and C3 uses elsewhere. However due to the duplex design to the ground floor which is in turn defined by the elevation language to the upper storeys, the mixed use is slightly less than is highlighted on the parameter plan.

Parameter Plan 05 Proposed Upper Level Plan

The proposed design complies with the designated criteria for use class orientation around the plot.

Parameter Plan 06 Proposed Building Footprints

The proposed development exceeds the building footprint parameters. This is due to the design intent. Because of the unique triangular balcony design, the balconies must be inset to make them structurally viable while achieving the required external area for unit. Therefore the building plan has been made wider to compensate for the inset balconies.

Parameter Plan 07 Proposed Minimum AOD Levels

The proposed design complies with the designated criteria

Parameter Plan 08 Proposed Maximum AOD Levels

The proposed design exceeds the maximum parameter by 650mm with the designated criteria

Parameter Plan 09 Proposed Public and Private Realm

The proposed design complies with the designated criteria

Parameter Plan 10 Movement Plan

The proposed design complies with the designated criteria

Parameter Deviations

The marginal deviations from the parameter plans are currently being addressed separately in a Section 73 to be submitted to LBN.

Summary Schedule**Plot 16****GEA Residential** -21,281 sqm**GEA Commercial** - 209 sqm**Private Housing Mix:**

Studios	15
1 Bed Apartments	66
2 Bed Apartments	84
3 Bed Apartments	22
4 Bed Apartments	5
Total	204



Introduction

Plot 16 sits on the riverside, to the west of the central park.

It is a rectangular plot with nine storey apartment blocks to the south and west and four storey town houses to the north and east.

The townscape character of the plot perimeter changes on all four sides. Its southern aspect directly faces the river and forms part of the Royal Wharf riverside composition. It's neighbours to the east and west are similar sized apartment buildings fronting relatively narrow residential streets. To the north is another residential street lined with terraced houses.

The street to the east of Plot 16 is a mews terminating at the riverside walk and the entrance to the riverside apartment building. The five terraced houses will ensure a good level of activity in the street, along with the road-side parking.

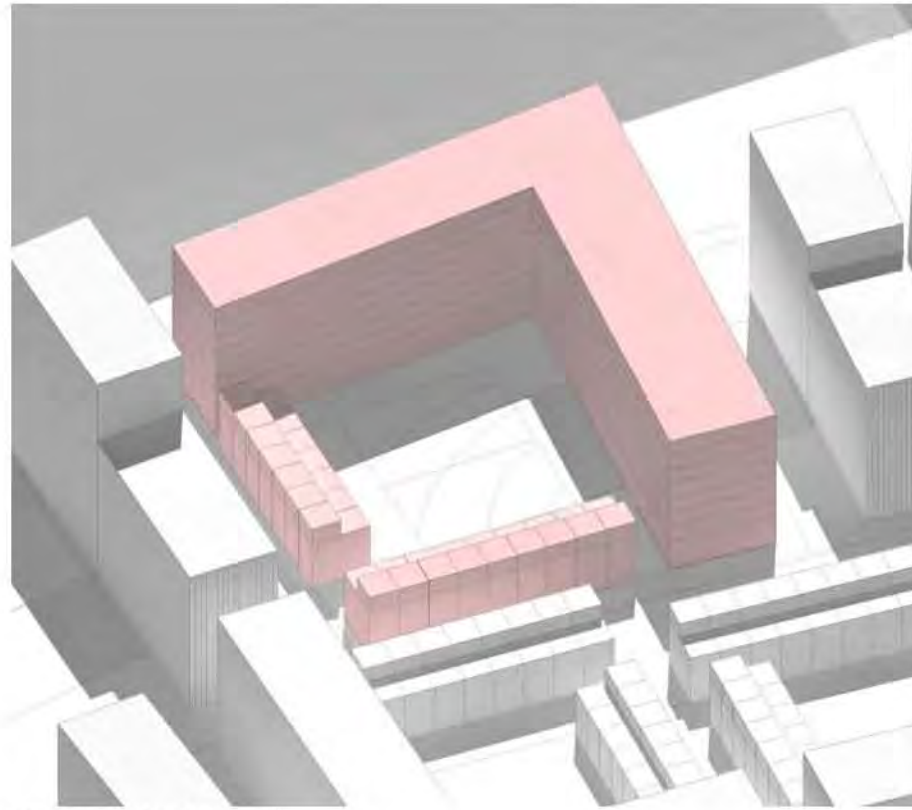
The street to the west of the plot is part of a one way loop which leads to the small public square on the river front, which has commercial activity on three sides facing the square.

Massing

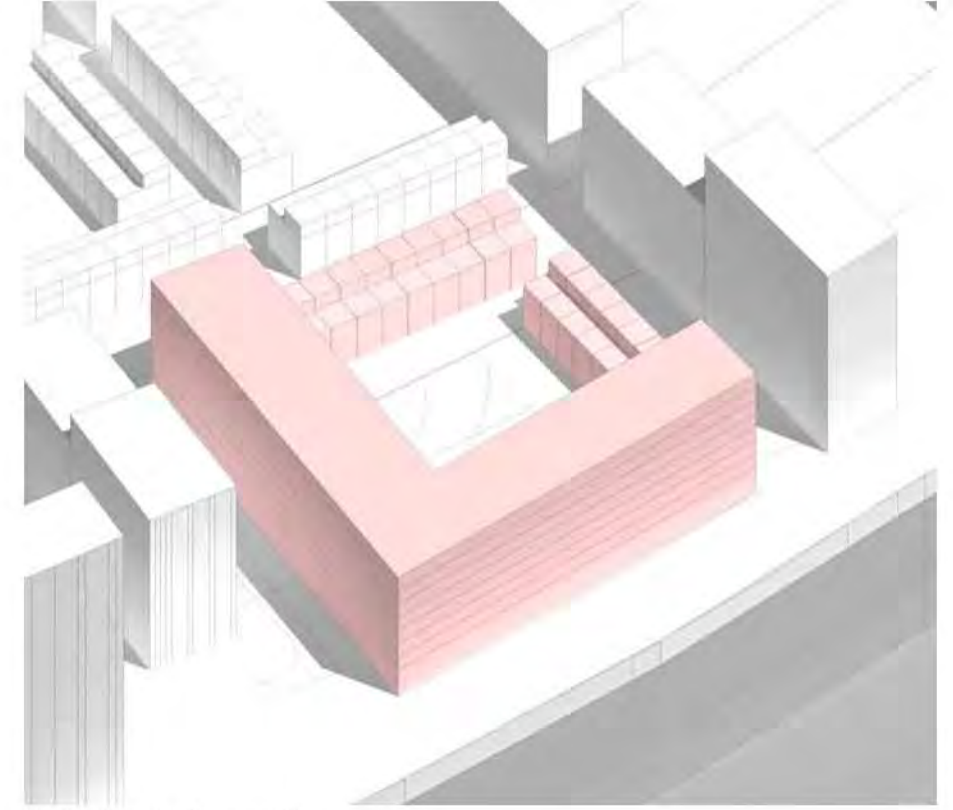
The scale and massing strategy for Plot 16 broadly follows the parameters set out in the Masterplan, which is then refined to respond to the detailed design of the blocks.

The diagrams opposite illustrate strategic developments from the consented masterplan.

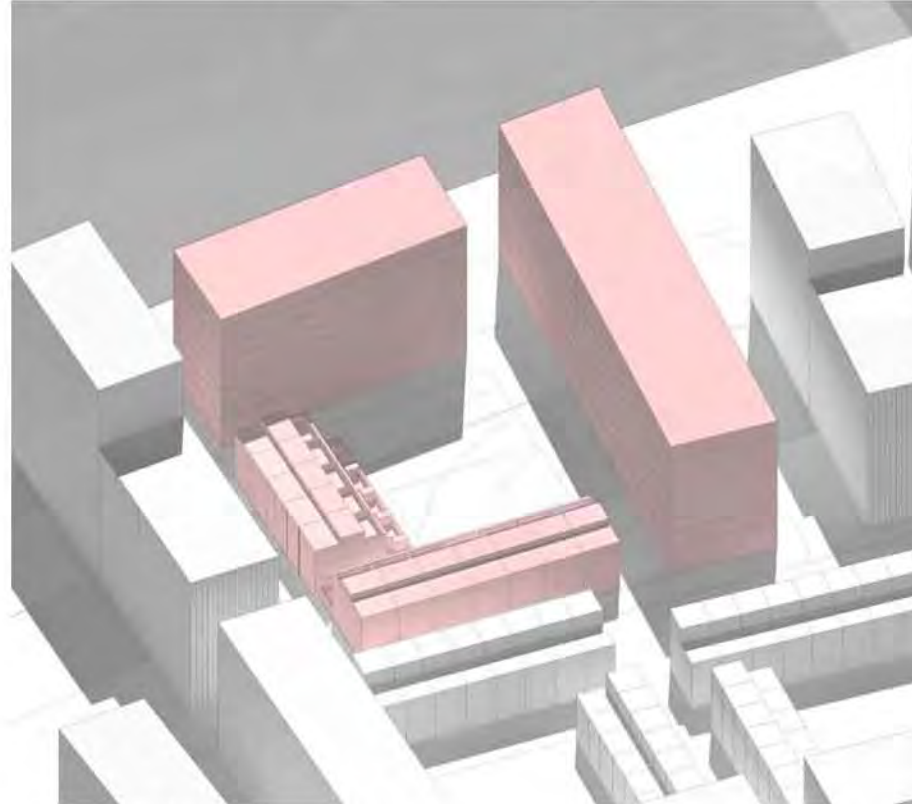
- The houses to the north and east have been set back from the edge of the plot to create front gardens.
- The southern limb of the apartment block is broken to allow daylight to penetrate well into the courtyard and provide river views to as many residents as possible. This also minimises the extent of north facing elevation.



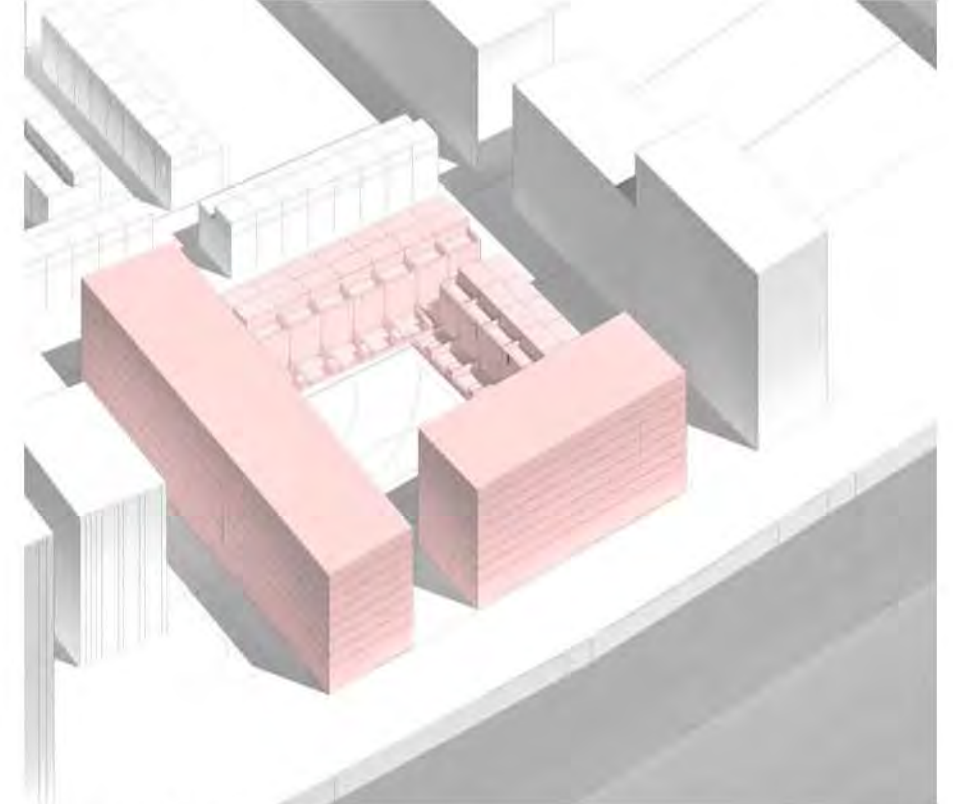
Masterplan view from north



Masterplan view from south



Proposed view from north



Proposed view from south

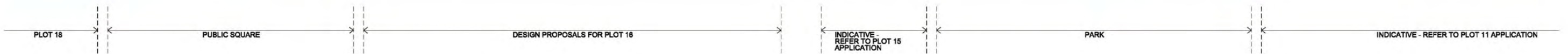


Elevation precedents

Appearance

The masterplan allows for a move away from warehouse or mansion block typologies for the riverside plots. Therefore, whilst the townhouses have a shared aesthetic with the other terraces across the site, the apartments have a distinct character of their own. The use of white precast concrete or stone tie the different typologies together, as does the use of brick paving and other features at ground level.

Two short terraces form the north and eastern boundaries to the plot. They have simple elegantly proportioned facades in grey/brown brick set behind railings with precast balconies marking each front door.





Apartment Elevations

The elevations are ordered with an expressed white precast concrete frame which projects from the façade to give definition to the apartments. The walls comprise a combination of glazing and textured cladding, in a consistent module.

Balconies are designed as cantilevered extensions to the expressed floor plates with glass balustrades. They span the full width of the apartments but vary in depth. For bedrooms they are around 600mm deep, providing the opportunity to step out and take advantage of the oblique views; however in front of living rooms they project 1800mm to give space for external furniture. For apartments with full river views they project up to 3m to give dramatic external spaces which fully utilise their location.



The floor plans allow apartment layouts to be reversed for alternate floors, allowing both the glazing and balconies to reverse locations and thus animate the elevations, giving a level of animation which is particularly effective in the oblique views of the building, either along the streets or the river bank.



River Elevations

The river facing block has a more formal composition, reflecting its location and aspect. The lower two storeys comprise large duplex units defined by double height columns. On upper levels the south facing apartments all have large balconies which follow the same alternating pattern as elsewhere.

River facing balconies have 1500mm high glass balustrades to provide acoustic screening from dredging site on opposite bank.

The cladding panels are textured with a relief pattern to reflect the rippled effect of the river at low tide or the wind blown water surface. The full length balconies make this element an integral part of the outdoor apartment areas, and help give them a distinctive character related to their location within the development.



Courtyard Elevations

The courtyard elevations are composed from the same elements as the riverside elevation although the balcony projections are reduced to reflect the more intimate nature of the space.

Townhouse Elevation

The town houses are a variation on the four storey houses used across the site. The elevations are in a grey/brown brick here to tone with the other materials on the plot.

The building line is set back to provide front gardens to the houses. The front gardens are separated from the street by railings on low walls and the boundary is continued across the park entrances to form a unified character to the scheme. This familiar approach to the relationship between houses and streets will help to define the character of this street and its relationship within the hierarchy of public realm within Royal Wharf.



Ground floor plan

Ground Floor Plan

Ground floors frontages to the north, east and south, are punctuated with front doors to either houses or duplexes to ensure an active street presence. The western street is more varied, containing apartment entrances, and commercial frontage as well as service activities.

All courtyard facing apartments and the majority of townhouses have direct access to the shared gardens, as well as their own private outdoor space.

Duplexes are proposed in locations which have a higher public presence such as the riverside walk or the small public square to the west.



First floor plan

First Floor Plan

Double height commercial units occupy the first floor level space facing the square. The duplex bedrooms are all at this level and the remainder of the space is given over to apartments.

The principle living space for the town houses is also at this level, giving a degree of privacy from the street.



Typical floor plan

Typical Upper Floor

The typical upper level plans repeat over seven storeys and comprise apartments of various sizes arranged around cores. Layouts of each apartment reverse on alternate floors to avoid overshadowing from balconies.





Refuse and servicing strategy

Servicing Waste and Refuse Strategy

Servicing of Commercial Units

There is one small retail unit on the southwestern corner of Plot 16. Service vehicles will use a designated drop-off zone along the western street.

Waste and Refuse

All refuse stores are compliant with Part H of the Building Regulations and have been designed in accordance with Newham's Waste Management Guidelines.

The residential waste and refuse is stored at ground floor in three designated bin stores; each of these stores is in proximity of a respective residential entrance and has direct external level access. The commercial refuse is stored in the back of the commercial unit in a separate refuse store. Refuse storage for the townhouses is included within the space in the back garden and carefully designed to be included within the landscape and garden wall design.

All waste and refuse storage has been sized to accommodate a weekly collection. The waste collection vehicles will park adjacent to the refuse store or at the closest point along the street. Operatives will then wheel the containers from the store to the vehicle and back.



Parking and street access strategy

Cycle and Vehicle Parking, Pedestrian Entrances

Plot 16 is extremely well connected by public transport, with DLR stations and bus stops close by. A designated cycle route into central London also runs along North Woolwich Road.

Car parking provision for Plot 16 is described in the Transport Statement.

Resident's cycle parking is provided at ground level in secured cycle stores. The total number of provided spaces (221) allows for 1 space for each 1 or 2 bed unit and 2 spaces for each 3 or 4 bed unit, complying with London Design Housing Guide recommendations and Code for Sustainable Homes Level 4. The townhouses have their own dedicated secure cycle storage within their private amenity space.

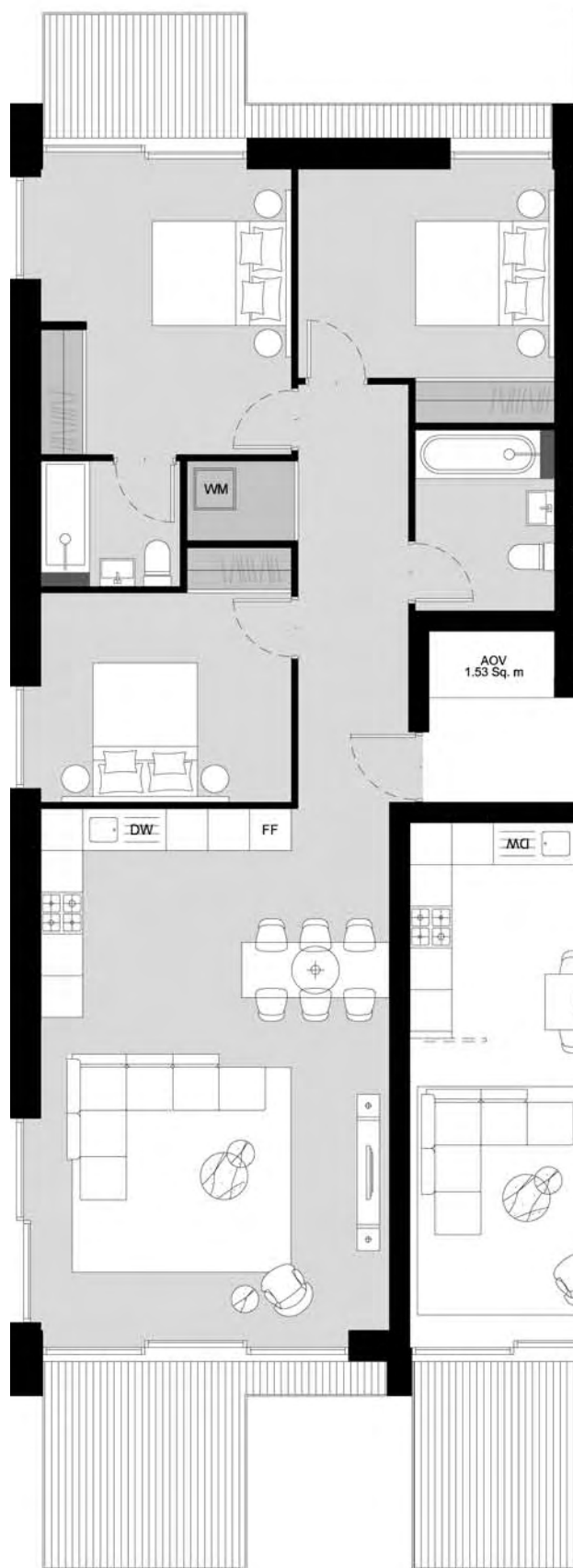
Sheffield cycle racks for public cycle parking are also provided along the pavements.



Typical 1 bed unit



Typical 2 bed unit



Typical 3 bed unit

Apartments

The apartments have been designed using the following criteria:

- to exceed the LDHA guidelines where possible
- maximise the amount of natural light
- respond to orientation and aspect

Cores are designed to provide efficient access to apartments. As well as two lifts, each core has a generous daylit stair well to provide opportunities for interaction between neighbours on route to and from their homes. Each core serves seven or eight apartments.

In line with the Masterplan, there is a broad mix of apartment types and sizes, ranging from suites to four bedroom units. Although all apartments on this plot are for private sale, there is a mix of at least four different sized apartments within each core. This is to encourage a broad mix of residents within each core and therefore increase the range of use patterns. Generous ground floor lobbies contain shared facilities such as post boxes and provide access to cycle stores and the shared courtyard gardens.

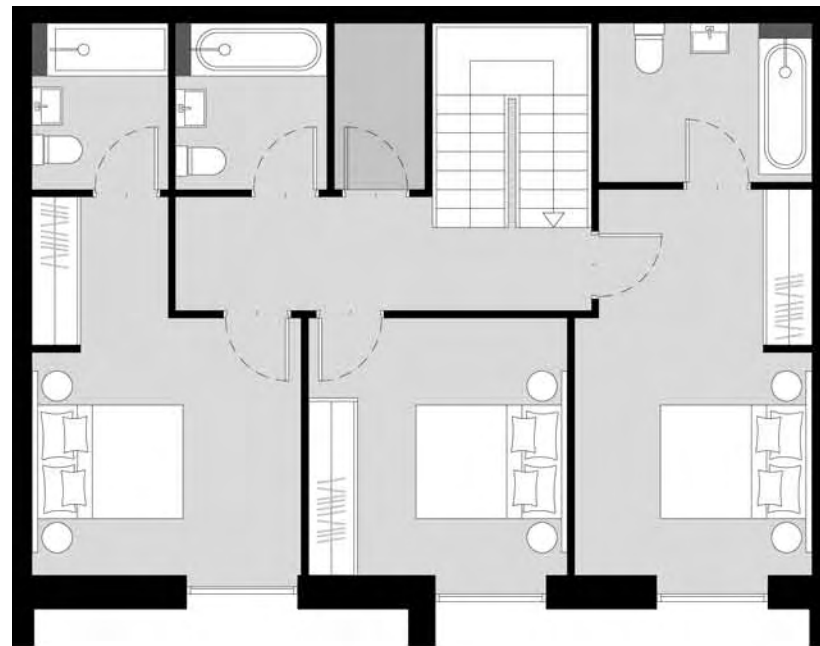
Layout of apartments has sought to maximize daylight and views, and minimize overlooking. The internal layout of the apartments has been carefully

considered to create generous and practical spaces within the space standards. Conventionally apartment layouts are heavily influenced by the fire escape requirements of the Building Regulations. This requires bedrooms to have a direct exit from the apartment without passing kitchen and living space. This inevitably leads to lobbied entrances and often creates cramped entrances to units. To overcome this, all apartments are fitted with a sprinkler fire suppression system. This allows much more flexibility in terms of layout, and all apartments are typically entered directly into open plan living space, giving a much more generous feeling of space and avoiding floor area being taken up by circulation space.

All apartments have access to their own private balcony, from all rooms and all windows are full height. By alternating balcony locations on different floors it is possible to give very generous balconies without creating overshadowing issues for the units below.



Typical Ground Floor Duplex

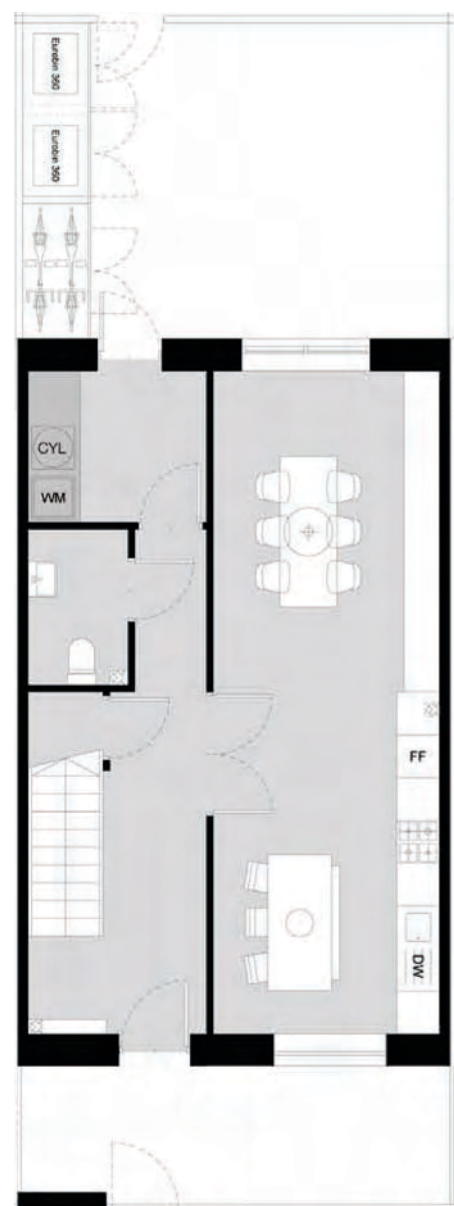


First Floor

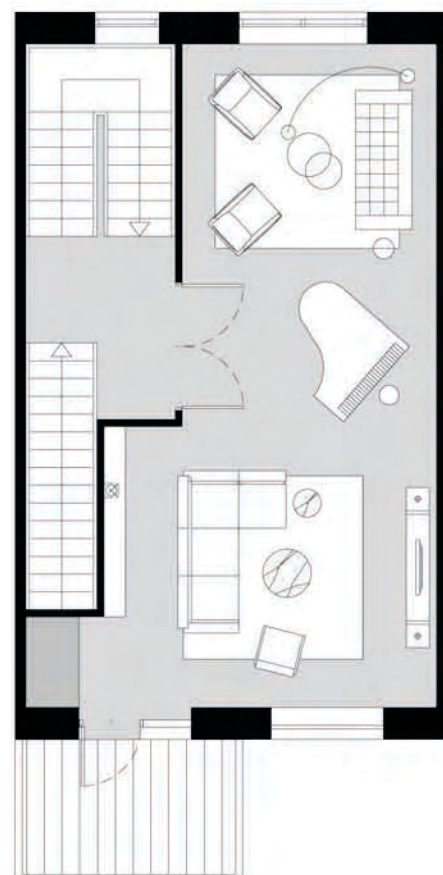
Duplexes

Duplexes are proposed in locations which have a higher public presence such as the riverside walk or the small public square to the west.

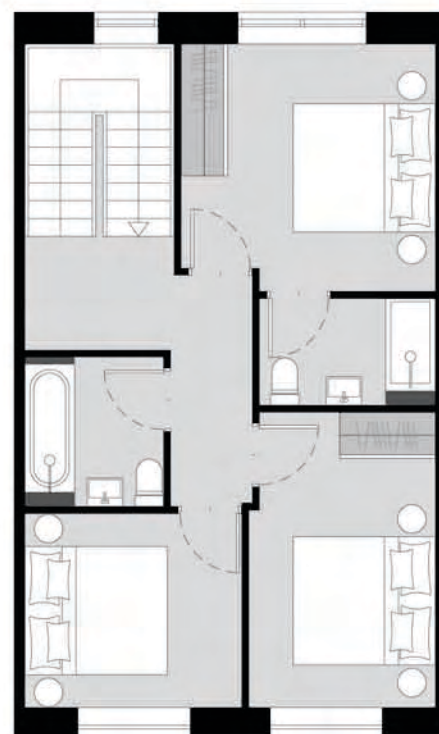
These large units provide a slightly different offer to single storey apartments and they create a degree of activity at street level which is often missing from large scale developments. Where these units face the river they have a front garden behind railings, leading to individual front doors. Living and guest accommodation is provided on the ground floor, with the remaining bedrooms occupying the upper floor.



Ground Floor



First Floor



Second Floor



Third Floor

Townhouses

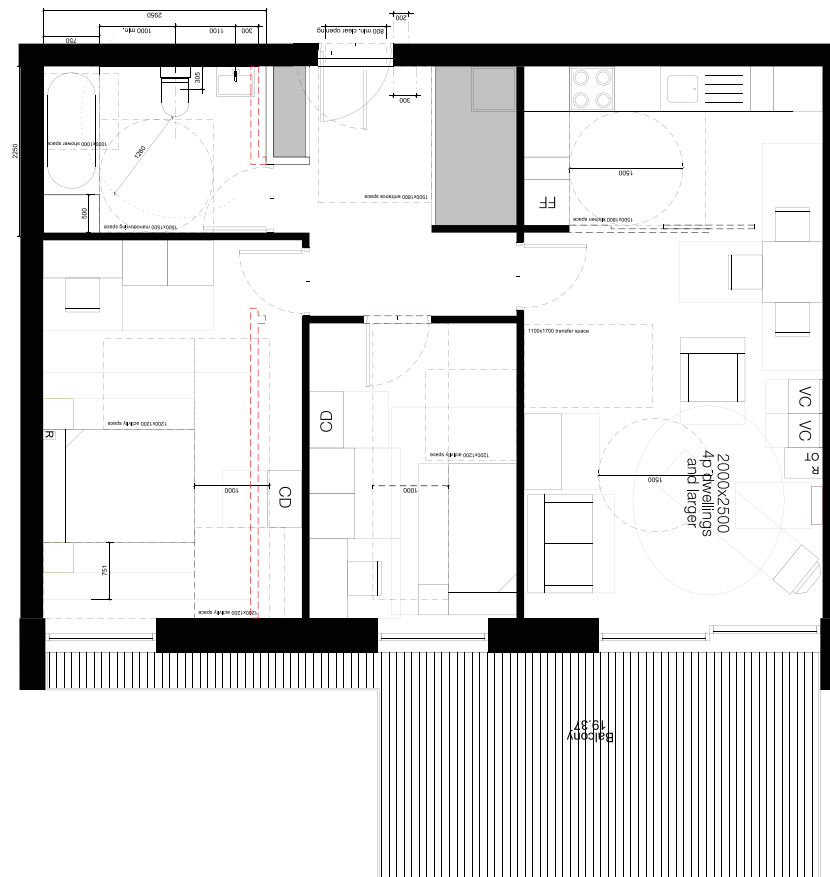
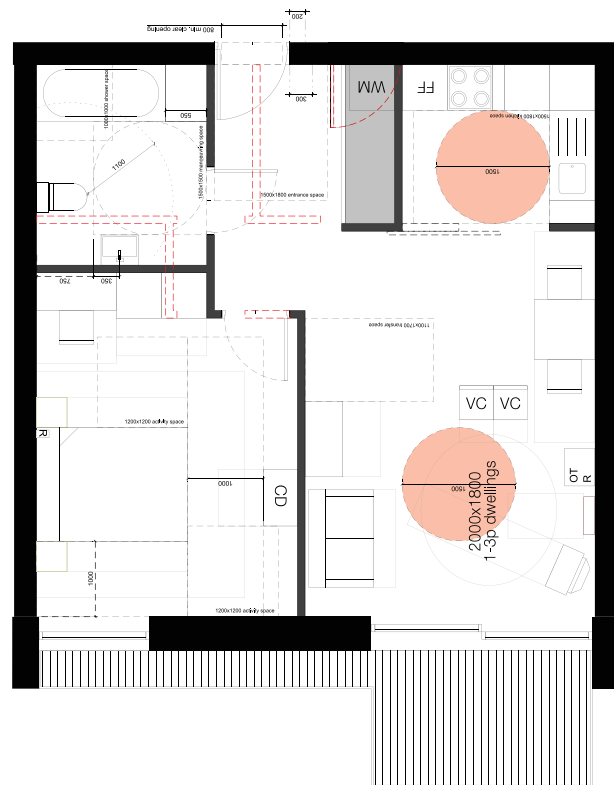
The design of the terraced houses aims to create high quality modern homes which have a tangible connection to traditional London terraces, without resorting to pastiche. The scale, materials and relationship to the street follow traditional and successful models. The predominant material is stock brickwork with cast stone dressings and metal railings.

The entrance is protected by a cast stone balcony above, supported on a pier to provide privacy and hide bin stores. Ground floor accommodation contains generous entry with kitchen, dining rooms and a utility room also at this level. The first floor contains a large, dual aspect living space, with generous ceiling height. Bedrooms are located on the two upper floors. The master bedroom also has access to south facing balcony set behind the façade for privacy.

All houses have their own gardens orientated towards the courtyard allowing a westerly/southerly aspect.



Wheelchair units



Landscape Vision

This chapter has been prepared to describe the designs for the landscape, starting with the Riverside Walk and Park. This is followed by an explanation of the streetscape design and finally, the designs for the individual plot courtyards.

The landscape design for Royal Wharf Phase 2 will bring forward two key pieces of public realm- the new park, a length of the riverwalk, as well as the associated streetscapes.

The new park will be the recreational focal point for the development with expansive areas of lawn, planting and play provision. The Riverwalk will become a linear park along the bank of the Thames and is a continuation of the first section that is being delivered to the east as part of the first phase of development.

The streetscapes have been designed in line with the master plan objective to deliver streets WHICH establish a hierarchy through the use of a familiar language of materials and elements for carriageways, kerbs, and footpaths, that will enable the development to feel like a recognisable part of the wider city.

The courtyard gardens within the individual Plots have been designed to be places which will afford the Plot Residents an amenity space which is attractive to look out over and is appealing for residents of all ages to use.

The Role of Landscape For Royal Wharf

Landscape and public realm forms a key component of the Royal Wharf development. The aim of the master plan is to create an attractive, vibrant new neighbourhood in London which will support a new population with a focus on family housing. This will be reinforced by the design of the public realm.

The structure of the public realm has been arranged around establishing a clear hierarchy of streetscapes and individual spaces located across the master plan, including the Market Square and Royal Wharf Park.

The courtyards contribute to the amenity of the site, providing local spaces for the residents in the buildings around each garden court.

Phase 1 of Royal Wharf received a detailed planning consent alongside the outline master plan consent. This brought forward a number of streets, the entrance space, the Market Square, the first section of North Woolwich Road and the Riverside Park. As well as these areas of public realm, residential courtyard gardens are being delivered in Plots 02, 05, 08, and 10 as well as a residents kitchen garden along the eastern boundary of the site.

A reserved matters planning application has also been submitted for Plots 01, 03, and 09 which included designs for each of the associated courtyards.



Royal Wharf Master Plan

[Design Review Panel Presentations and Feedback](#)

The landscape design has been presented to the Design Review Panel (DRP) alongside the Architecture. The following comments were received and have been addressed as follows:

[We were broadly supportive of the landscape design of the park, though we suggested that greater provision should be made for people to sit out in positions overlooking the river.](#)

Seating provision has been incorporated at the southern end of the park, overlooking the river. This will be complemented by further seating opportunities overlooking the River along the River Walk, to the east and west.

[While supportive of the extent of play facilities for young children and teenagers we queried whether there was enough to attract people of all ages to enjoy the space.](#)

The design of the park will have areas of interest for users. There is an emphasis on family use and play, but there are opportunities for other users, including extensive lawn spaces and areas of planting and seating.

[The landscaping needs to interface successfully with the base of the buildings adjoining the park, and any residential amenity spaces allocated to ground floor units.](#)

The design of the park was developed to create front gardens alongside plots 09 and 14 a softer, planted buffer against the southern plots (11 and 16) to create an attractive interface with the park. The interface between the external spaces and ground floor layouts have been developed in more detail following the presentation. Private terraces and the location of entrances, living spaces and bedrooms have been carefully co-ordinated.

There were also a number of comments which were common to each of the courtyards which have been addressed as follows:

[We questioned whether the soil depth in the courtyard will be sufficient for tree planting – particularly in the locations shown.](#)

The landscape within Plots 14, 21 and 22 will be located above slab construction. The designs of each courtyard have been developed to create increased depth of up to 1.2m to facilitate tree planting. This increased depth has been created through the use of landform and raised planters. The depths and volumes of planting medium reflect those which we have specified on existing schemes to successfully establish landscapes on slabs.

[Further detail requested for the opportunities for landscape to contribute to quality of life biodiversity, outdoor play and individual character](#)

Quality of life: Each garden has been designed as a visual delight for the surrounding homes. The individuality of the layouts and planting will create a

particular sense of surprise and individuality within each garden. Courtyard level apartments and houses around the perimeter will have private amenity spaces providing direct access into the garden. Within the gardens a variety of features and elements will be included including doorstep play, picnic benches, lawn space which will be complemented by the use of a variety of seasonal palettes of plants.

Biodiversity: The planting palette will be balanced to create a visually delightful landscape. As the gardens are in close proximity to London City Airport, birds should not be encouraged.

Outdoor Play: Play within the courtyard gardens is focussed on doorstep play to complement the play provision within the public realm. This is described in more detail further in this chapter.

Individual Character: The designs have been developed to create a family of gardens which have individual identities and characters. The design of each courtyard is strongly influenced by the containment and form of the surrounding buildings. The variation in architecture and access arrangements has led to varied perimeter arrangements within each garden, which are generally formed around a central lawn. Planting characters and palettes within each garden have been developed to reinforce the individuality of each garden.

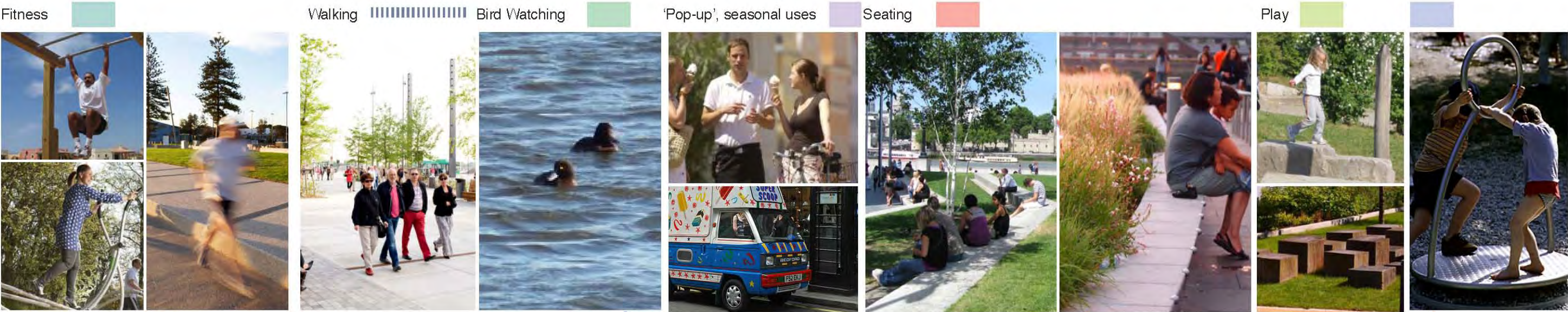
The Riverside Walk

The Riverside Walk will extend alongside the wall of the River Thames, on the southern edge of Royal Wharf. The Riverwalk is envisaged to provide a linear park for pedestrian and cycle recreation. The Riverwalk will become

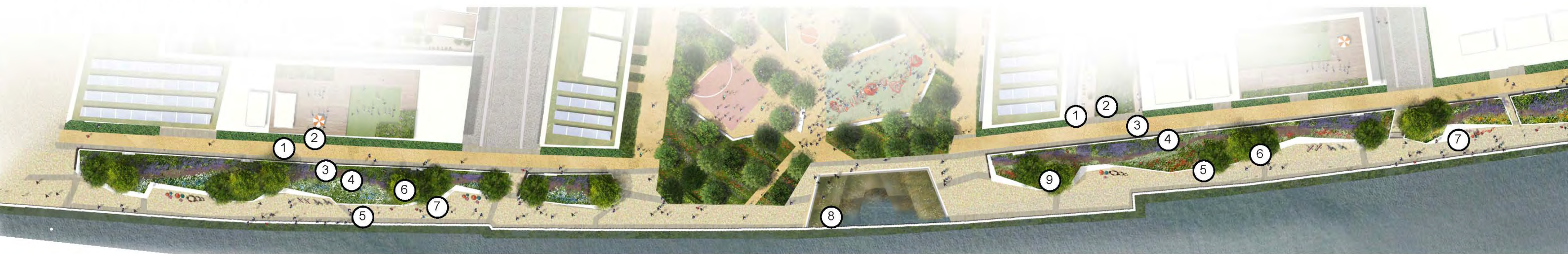
an attractive promenade for residents and visitors.

The design will be softened with swathes of planting, creating a flowing

landscape along the length. The riverwalk will facilitate a number of activities along its length including seating, small scale play, and external fitness equipment to appeal to various users.



The Riverside Walk Master Plan



Key

1. Route for access to buildings including infrequent servicing and fire access.
2. Planting buffer in front of residential buildings.
3. Swathes of planting.
4. Groups of trees.
5. Pedestrian and cycle route.
6. Seating.
7. External exercise equipment.
8. New tidal terraces.
9. Play equipment.



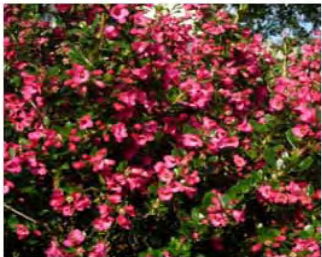
Swathes of planting beside the footpath



The planting design along the Riverside Walk will create variation along the length through the use of different palettes of plant colours and forms.



Alnus glutinosa



Escallonia macrantha



Ilex aquifolium



Crocosmia 'Lucifer'



Penstemon 'Andenken an Friedrich Hahn'



Pennisetum



Escallonia



Prunus ceracifera



Escallonia



Ceanothus



Lavandula angustifolia 'Imperial'



Salvia leucantha



Viburnum burkwoodii



Acanthus spinosus



Design + Access Statement





Crataegus prunifolia



Hippophae rhamnoides



Crataegus lavaleii



Stipa barbata



Osmanthus



Potentilla fruticosa 'Tangerine'



Hemerocallis stachys



Betula jaquemontii



Viburnum burkwoodii



Ilex



Geranium x cantabrigense 'Biokovo'



Rosa



Aстранtia 'Roma'



Agapanthus africanus



Townscape



The Park

The Park in Phase 2 will be a focal point within the site for external recreation. Generous areas of lawn and planting will create an attractive landscape which will provide opportunities for recreation, sitting and play.

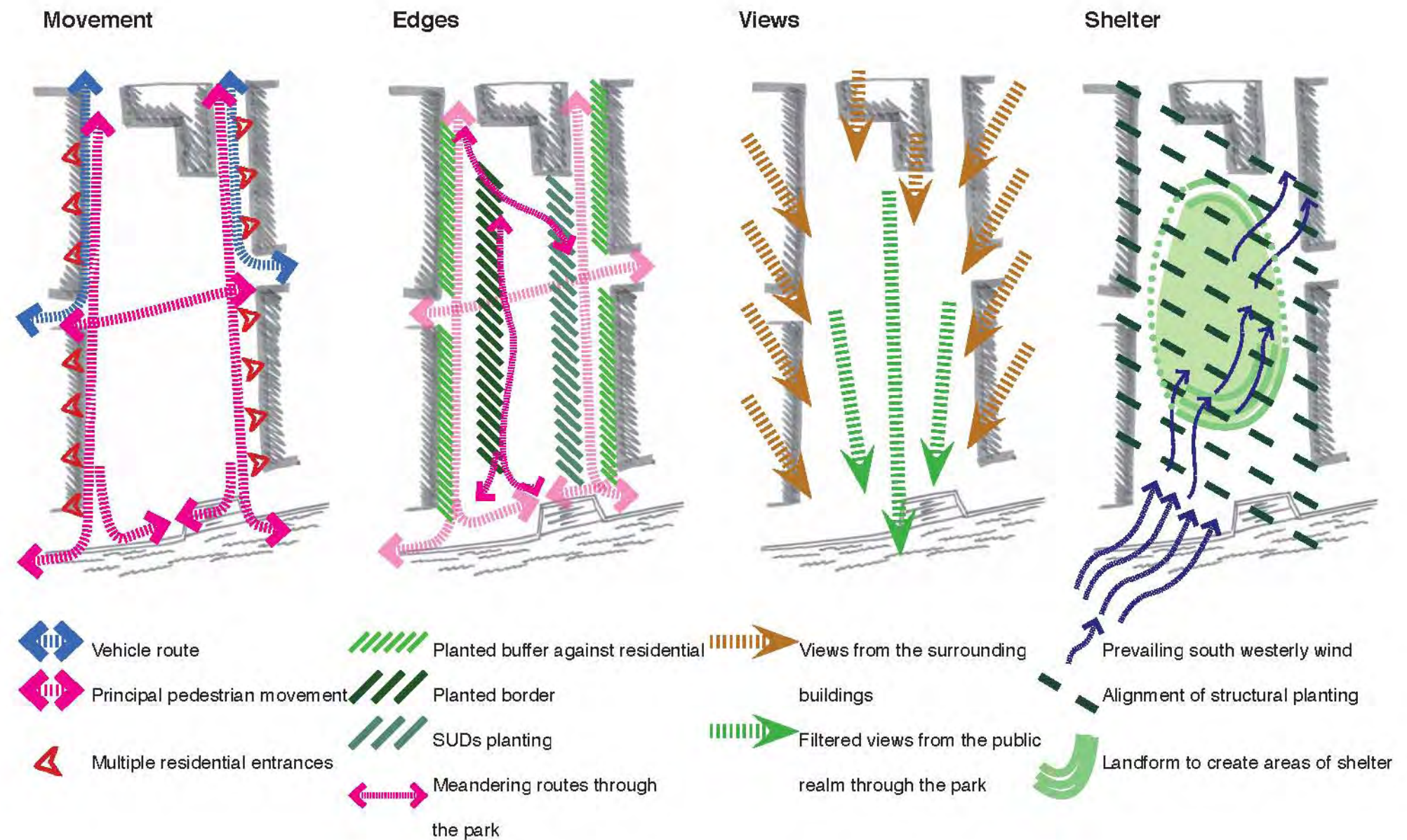
Movement: Multiple entrances will activate the edges of the park.

Pedestrian and cycle movement will be facilitated around and through the park while vehicle access will be limited to the northern edges.

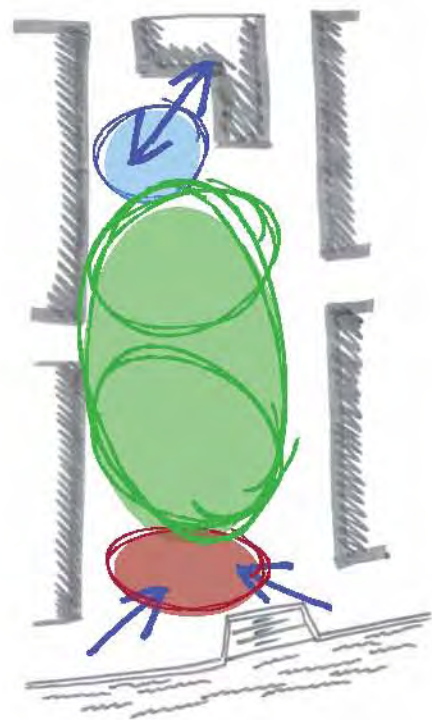
Edges: The edges of the park will be softened with planting. The planting will also create a sense of enclosure within the park, providing shelter for users.

Views: Residents of the surrounding residential accommodation will enjoy views across the park to the river. There will also be glimpsed views through the park.

Shelter: Blowing across the river into the park, the wind could cause discomfort to users. In response the design has been developed to provide shelter through the use of planting and landform.

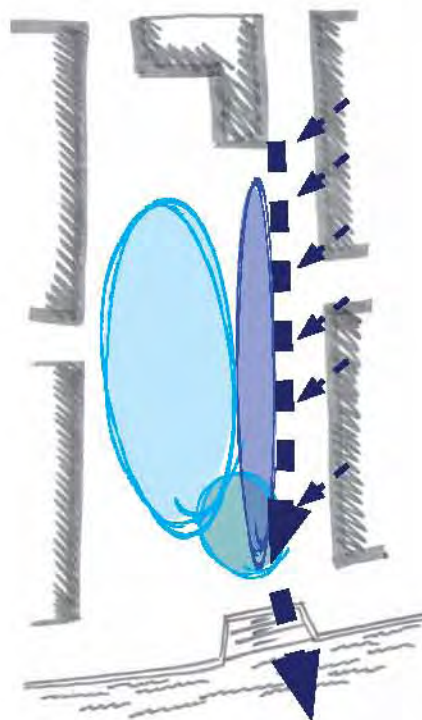


Activity Zones



- Young children's play with possible link with internal soft play facility
- Open lawn for informal recreation
- Active play space next to the active riverside promenade

Attenuation



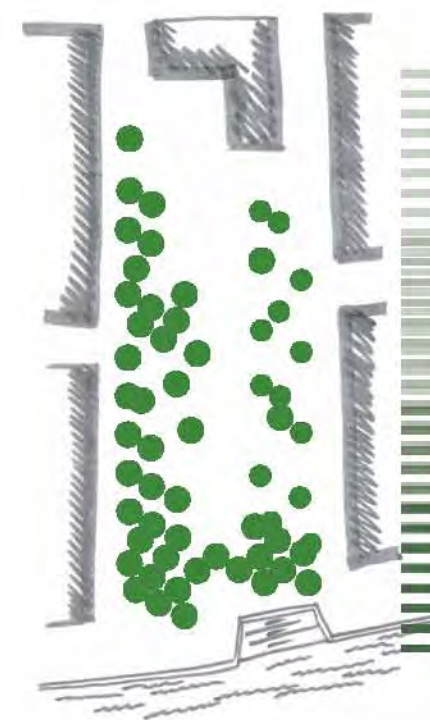
- Swale
- Attenuation pond
- ▶ Water flow

Shrub and Herbaceous Planting



- Planting with additional seasonal colour
- 'Prairie' swathes of planting
- Shrub and herbaceous planting
- Planted swale with emphasis on native plants

Tree Planting



- Trees of varying species planted along the same alignment as the hedges

Activity Zones: The park will have 3 principal activity zones. A play area at the north and south of the park and an expansive area of informal activity and play in the centre.

Attenuation: The park has been designed to provide surface water attenuation. Water will be collected in a swale along the eastern edge of the park before it flows into the river via the tidal terraces. The lawn space will be used for storm water storage and attenuation.

Shrub and Herbaceous Planting: The planting in the park will be varied to create different character areas.

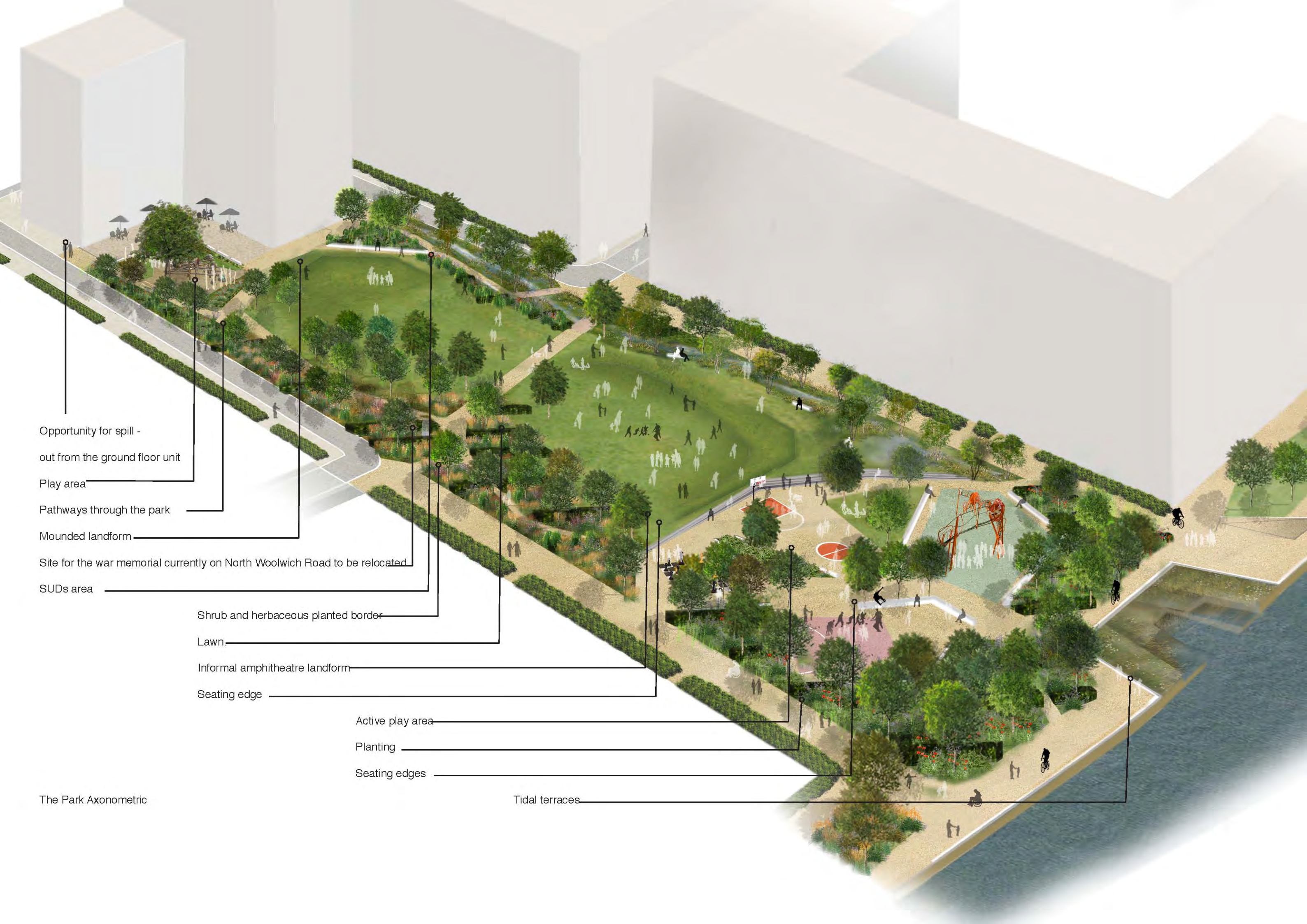
Tree Planting: Trees will be located through-out the park. Their locations will be set up on the same alignment as the hedges. There is a greater density of planting to the south of the park, to create shelter from the wind.

The Park: Master Plan

Key

1. Opportunity for spill out from the ground floor unit.
2. Play area.
3. Pathways through the park
4. Mounded landform
5. SUDs area
6. Shrub and herbaceous planted border
7. Site for the war memorial currently on North Woolwich Road to be relocated.
8. Lawn
9. Informal amphitheatre landform
10. Seating edge
11. Active play area
12. Planting
13. Seating edges
14. Tidal terraces





Opportunity for spill -
out from the ground floor unit

Play area

Pathways through the park

Mounded landform

Site for the war memorial currently on North Woolwich Road to be relocated

SUDs area

Shrub and herbaceous planted border

Lawn

Informal amphitheatre landform

Seating edge

Active play area

Planting

Seating edges

Tidal terraces

The Park Axonometric

The park will have a number of character areas to promote a diverse range of uses to encourage residents of all ages.

1: Play area

A play area has been located at the northern end of the park with a focus on play for younger children. The ground floor provides an opportunity for a linked use, through cafe spaces or a soft play provision.

2: Lawns

The generous lawn areas will provide flexible space for informal activities including general run around, kicking a ball around, or sitting out with friends or family. The northern section will be sculpted to form a gentle mound, providing some shelter to the users of the spaces to the north. The terraced formation of the lawn at the southern end will create an informal amphitheatre space and will create an area of lawn at the south that is sheltered from the wind.



Play Area



Lawn



Planted Border



Swale



Memorial

3

4

5



3: Planted Borders

Planting along the western and southern edges of the park will create varying landscapes emphasising colour, form and texture. This planting will create areas of shelter and visual delight for park users. Seating will be located along the paths which pass through and alongside the planting.

4: Swale

The swale along the eastern side of the park will be designed to create an attractive landscape. Volumes of water will vary along the length, with a pond at the southern end providing a focal point in the landscape. The soil conditions within the swale will provide an opportunity for further planting variations, creating a visual distinction to the planting along the western side.

5: The War Memorial

The scheme proposes to relocate the war memorial to a location within the park enclosed by planting where the setting can provide the opportunity for quiet contemplation. The location identified will mean that the memorial will only move once from its current position on North Woolwich Road.

6: Active Play Area

The design of the active play area will facilitate a wide range of activities including ball games and active play such as climbing. The space has been developed with older children in mind, complementing the provision of play in the north of the park and within the courtyard spaces.

7: Tidal Terraces

The tidal terraces in Phase 2 are designed to complement those in Phase 1. Terraces have been designed to step back into the Royal Wharf site at the southern end of the park. These will be largely planted, but an area will be kept free of planting where the runoff is fed into the river. The water runoff will cascade down steps within the terrace to reduce the velocity of the water before it reaches the river and will mediate against any potential scouring of the river edge.



Active Play Area



Tidal Terraces



The Park: Visualisations



View looking northwards through the park



View looking southwards through the park



The Park: Sections



Opportunity for
cafe spill out

Play area

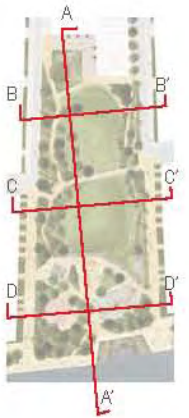
Pathway

Mounded lawn

Lawn

Pathway

Section A-A'



The Park: Sections





Phase 2 Streetscapes

The master plan for Royal Wharf proposed a street hierarchy that has been applied to the design development of Phase 2. This hierarchy is essential to achieving a sense of normality within the scheme, where pedestrian and vehicular movement operates as in any other part of London.

This hierarchy informs the layout, dimensions and streetscape materials across the site and ensures consistency in the design approach of the streets in each of the development phases.



Streets diagram from the master plan documentation

'High Street'



Lanes



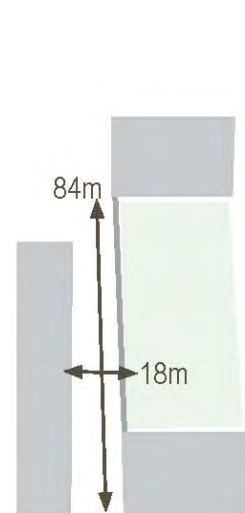
Mews



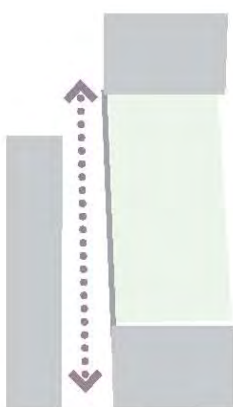
Illustrative street layouts



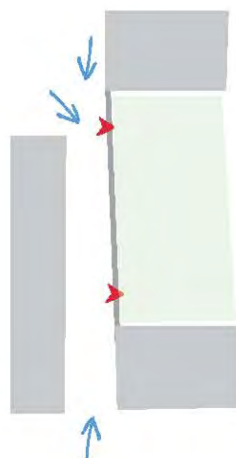
Illustrative Royal Wharf Master Plan



Movement



Entrances



Banded paving creates a dynamic street surface

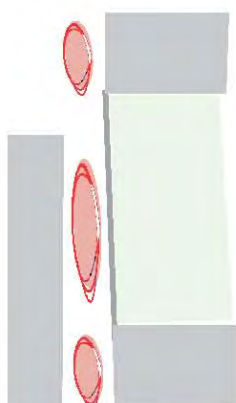


Sloped planter edges encourage play

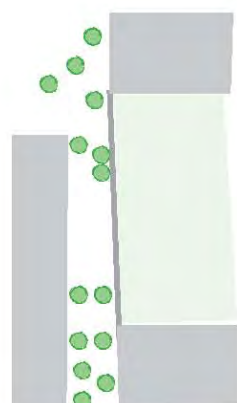


Creation of pocket spaces for people to stop

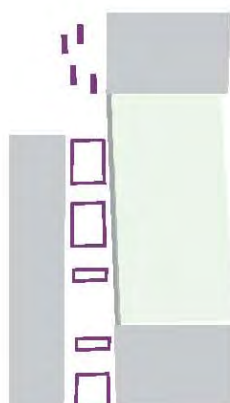
Pause Points



Trees



Active



Plot 22 and 23 Pedestrian Route

The route between Plot 22 is and the School is part of that which runs between Britannia Village, to the north of North Woolwich Road, and the River Walk at its south.

The original master plan had a pedestrian route to the east and western sides, the proposal to attach the community centre to Plot 22 has meant that there is now a single, wider pedestrian route. This increased width has created the opportunity to create an attractive pocket space.

Located to the east of the school and the west of the community centre, this space is envisaged to provide a complementary space allowing parents and carers to wait for their children, possibly with other children. Seating has been incorporated and the edges of the planting designed to encourage informal play.

Key

1. Seating amongst tree planting
2. Raised planters with sculpted upstands
3. Tree planting
4. Lawn space
5. Pocket space beside the community centre entrance
6. Good quality paving in a linear pattern

Blank



- Family of gardens
- Community kitchen gardens
- Linear gardens along the site boundary
- Gardens with a more varied character to respond to the particulars of the plot shape/ size
- Public spaces each with different characters, identities and functions



Gordon Square



Argyle Square



Brunswick Square



Mecklenburgh Square

The Courtyard Gardens at Royal Wharf

The gardens at Royal Wharf have been conceived as a family of private spaces only accessible to the residents of the surrounding buildings. The site wide concept for the development is as a modern interpretation of the traditional residential areas in London, creating a neighbourhood which responds to housing types, streets and spaces that have a familiar palette, hierarchy and function.

The designs have referenced the garden squares of London where there is a tradition of creating open spaces both public, and private 'key holder' gardens, for example, as Mecklenburgh Square Garden. These squares, although slightly different in layout and content have a familiar, simple style which people recognise and feel comfortable with. They often utilise similar elements; tree planting, shrub and herbaceous planting, lawns, seating, and focal points, generally fountains or statues or sometimes floral displays. The aspiration is that a 'family' of gardens is created, each one individually designed but with an overarching identity that will help to reinforce Royal Wharf as a distinctive neighbourhood.

There are some opportunities for an alternative approach where the function is significantly different, such as the communal kitchen gardens, or where the size or shape is different, such as the linear gardens along the eastern boundary, which are also being developed as part of phase 1 (consented).

Plot 11 Courtyard Garden

Character:

Plot 11's courtyard garden is characterised by central open lawn space and strong bands of bold planting. The angular forms which define these elements are also echoed in the routes through the courtyard. Plot 11 will provide 2,064 sq/m of communal garden space, of which 123sqm will be play space.

Terraces and Gardens:

Between the buildings and courtyard to the north, east and south, private amenity spaces have been created which are accessible from the corresponding garden level apartments. Along the southern most interface terraces will provide a usable space with enough room for a table and chairs. The houses on the north and east sides of Plot 11 include private gardens, these will be accessed from the courtyard via a garden path.

Access:

The courtyard can be accessed from a number of points including buildings cores, garden level apartments, gated access from the streets to the north and east of the plot and from the riverside walk to the south.

Circulation

The main paths around the courtyard provide access in and out of the courtyard, access to communal entrances and also border the space's central lawn. Feeding off from this central path structure are a series of secondary paths which are slightly narrower providing access to private terraces.

Planting:

Bold bands of structural planting are used throughout the courtyard to reinforce the angular nature of the design. Planting will contrast with the open central lawn space, for example where it is used to create a sheltered pocket space, or used to create route enclosed with planting. This contrast is heightened by

the use of trees in planted areas which will create shelter and filter views into the garden.

Spaces:

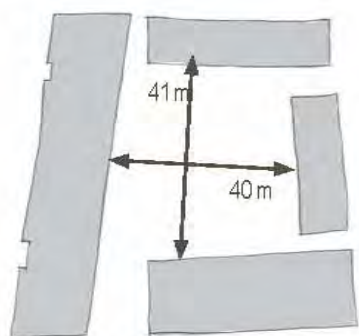
The courtyard has been designed to subtly create subspaces, allowing the space to be used simultaneously by different groups without a sense of encroachment.

This definition will be created through the use of trees and planting. Care has been taken to ensure that sunny areas of the courtyard are utilised.

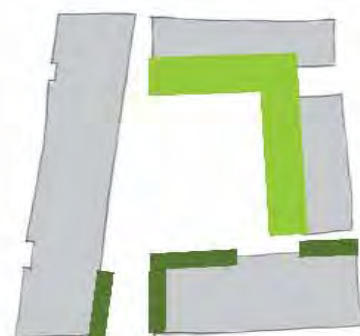
Green Buffer Zone:

Green buffers have been employed along the north and east outer facades of Plot 11 to create privacy for residents and an appropriate transition between public and private space.

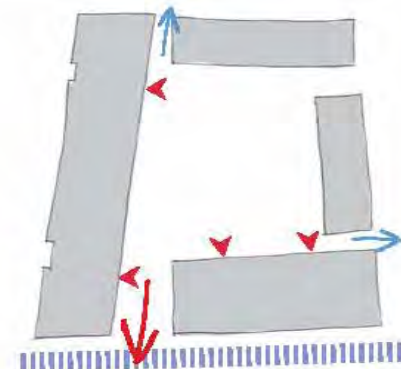
Dimension



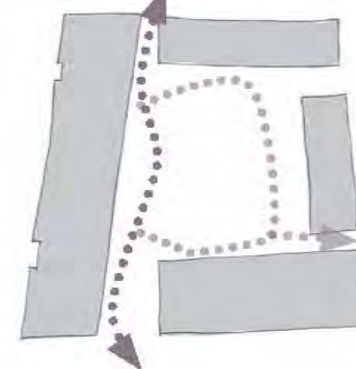
Terraces & Gardens



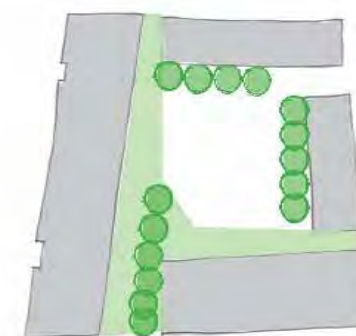
Access



Circulation



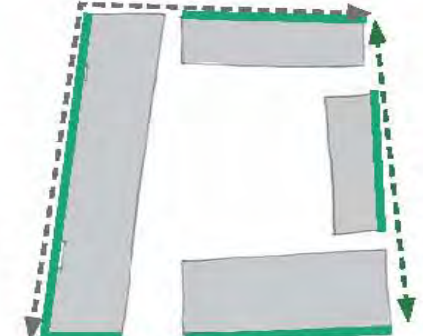
Trees and planting enclosure



Spaces



Green Buffer Zone





Plot 11 Courtyard Garden Master Plan

Key

1. Terrace gardens around the courtyard perimeter
2. Back garden spaces for the houses
3. Communal access
4. Access to street to/from the garden
5. Access to riverside to/from the garden
6. Bound gravel path
7. Seating
8. Play
9. Defensive planting in front of buildings



Reference image for the planting

Left: Plot 09 Courtyard Garden Master Plan

Axonometric of Plot 11 Courtyard Garden

Private gardens alongside the houses

Garden path around a central lawn

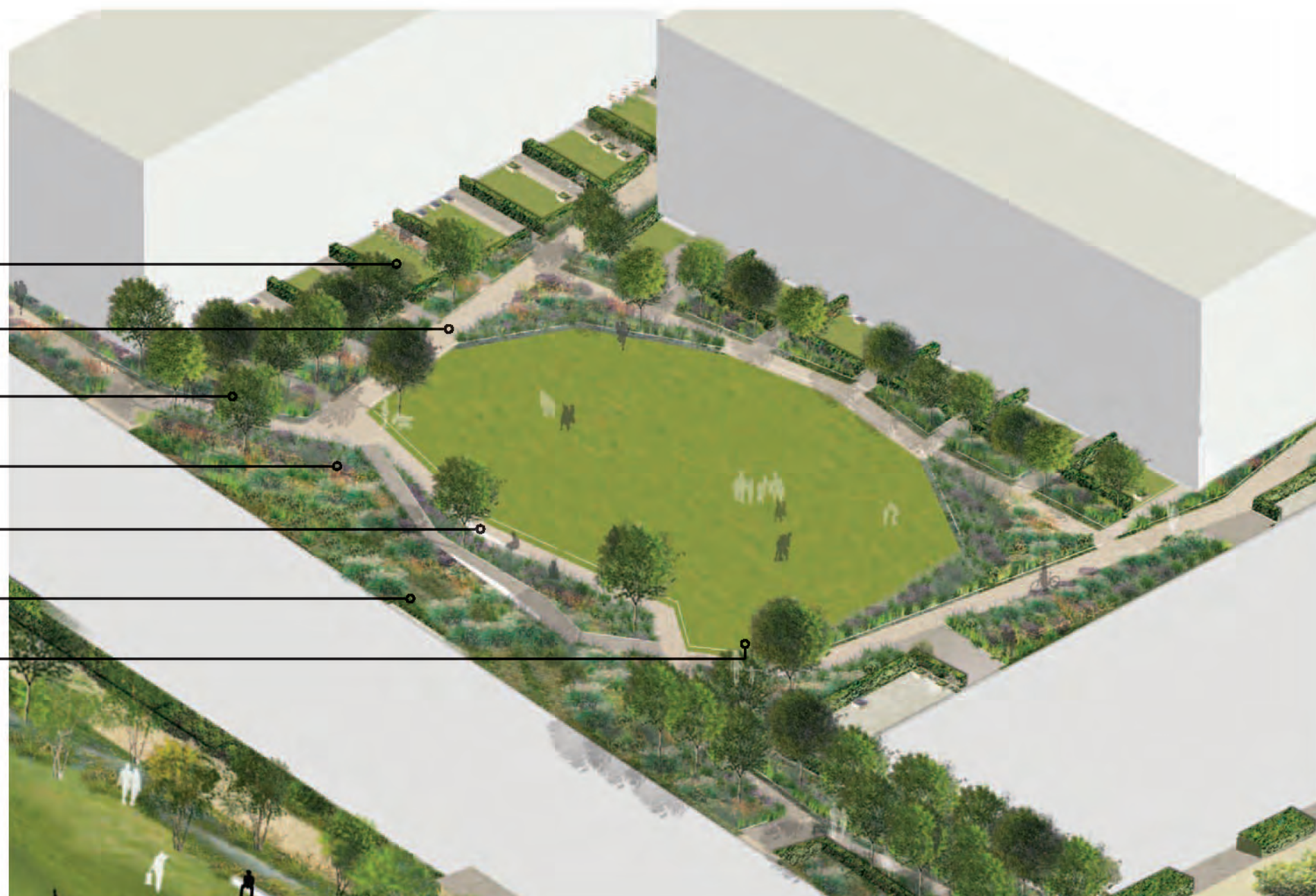
Tree planting

Colourful shrub and herbaceous planting

Seating

Apartment terraces

Play trail



Tree Palette



Cercidiphyllum japonicum Crataegus prunifolia

Malus 'Red Sentinal'

Cornus kousa

Cornus 'Eddies White Wonder'

Planting Palette



Lavender Mix

Crocosmia and Helenium

Pennisetum alopecuroides 'Hameln'

Echinops ritro

Verbena bonariensis

Plot 11 Courtyard Garden Planting Palette

The planting will be designed to provide an individual character in each garden through the use of varying species to create structure and height in the spaces and to provide seasonal interest and variation. In each plot, a base layer of shrub planting will be enhanced with herbaceous planting.

The Plot 11 planting palette will be used to create bold swathes of planting through the garden with an emphasis on the use of colour. The trees will complement this, with a strong colourful display in spring and/or autumn.

Plot 16 Courtyard Garden

Character:

Plot 16's courtyard garden is characterised by scattered multistem trees and swathes of delicate planting which combine to create a woodland feel. This is structured by a network of paths, framed by planting, which weave around the central lawn space. Plot 16 will provide 1700 sq/m of communal garden space, of which 375sq/m will be play space.

Terraces and Gardens:

Around the courtyard perimeter, private amenity spaces have been created which are accessible from garden level apartments. Along the south and west boundary, terraces will provide a comfortable amount of room for inhabitants to place a table and chairs. The houses on the north and east sides of Plot 16 have private gardens, these will access the courtyard via a garden path.

Access:

Plot 16 courtyard will be accessed from a number of points including building cores, the garden level apartments, gated access from the streets to the north and east of the plot and from the riverside walk to the south.

Circulation

The main paths around the courtyard provide access to the street, and the communal entrances and encircle the space's central lawn. Feeding off from this central path are a series of secondary paths, providing access to private terraces.

Planting:

Planting is used throughout the courtyard to define and differentiate spaces. By concentrating tree planting around the perimeter of the central lawn space a sense of enclosure is created. The planting is used as a buffer between

spaces, including between the private terraces and gardens, and the communal courtyard space. Along the paths this planting is used to create a sense of enclosure, contrasting with more open areas of lawn.

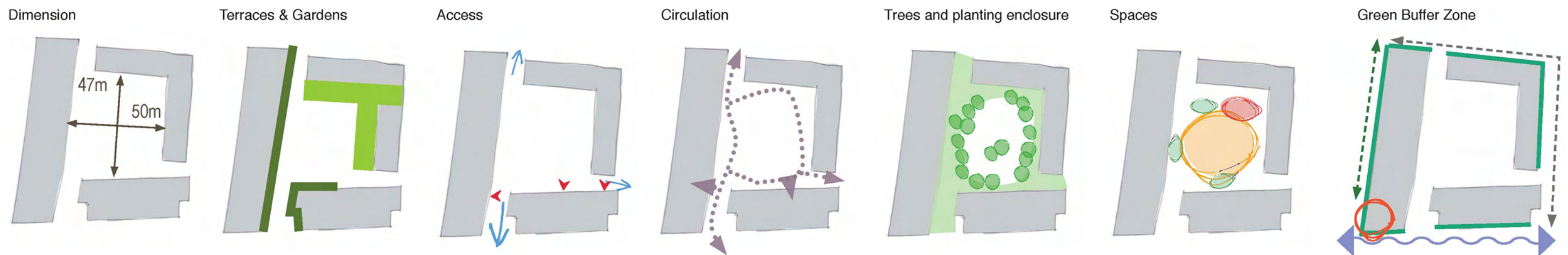
Spaces:

The courtyard has been designed to subtly create subspaces, allowing the space to be used simultaneously by different groups without a sense of encroachment.

This definition will be created through the use of trees, planting and by the addition of seating or plant equipment. Care has been taken to ensure that sunny areas of the courtyard are utilised.

Green Buffer Zone:

Green buffers have been employed along all four outer facades of Plot 16 to create privacy for residents and an appropriate transition between public and private space.





Plot 16 Courtyard Garden

Key

1. Terrace gardens around the courtyard perimeter
2. Back garden spaces for the houses
3. Communal access
4. Access to street to/from the garden
5. Access to riverside to/from the garden
6. Bound gravel path
7. Seating
8. Play
9. Defensible planting in front of buildings
10. Front gardens



Planting enclosing lawn space

Left: Plot 16 Courtyard Garden Master Plan

Axonometric of Plot 16 Courtyard Garden

Private gardens

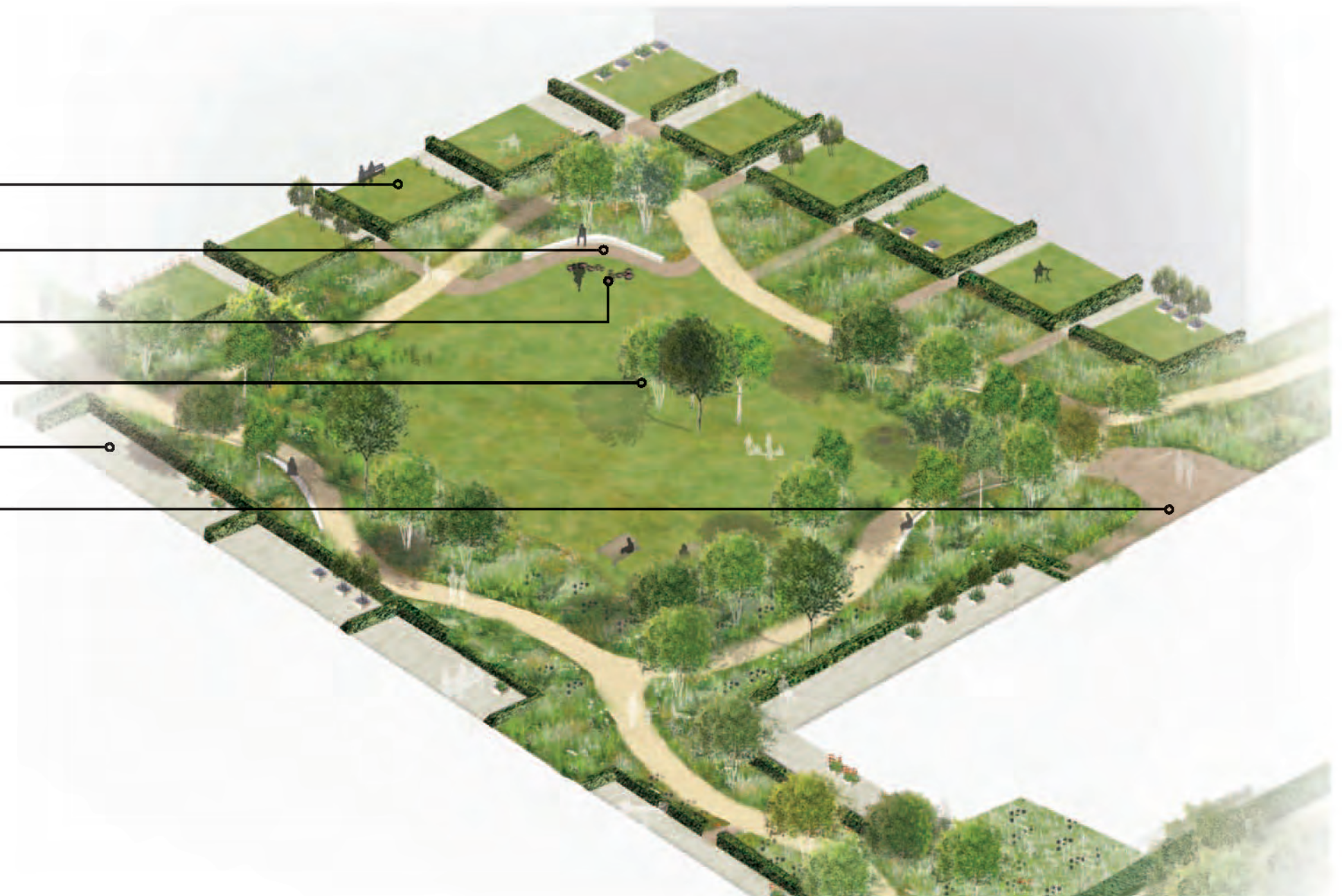
Seating area

Play space

Sheltered glade

Private terrace

Access to building core, bin and cycle stores



Tree Palette



Betula albosinensis



Magnolia stellata



Amelanchier lamarckii



Cornus kousa



Cornus 'Eddies White Wonder'

Planting Palette



Sarcococca confusa



Viburnum plicatum 'Mariesii'



Osmanthus delavayi



Agapanthus



Campanula persicifolia 'Alba'



Dryopteris affinis



Tiarella cordifolia



Anemone hybrida 'Geante des Blanches'

Plot 16 Courtyard Garden Planting Palette

Within Plot 16, the planting will have a woodland feel and will create a sense of enclosure around the central lawn space. The palette of species will be used to create an emphasis on white flowers through the year. The light canopy of trees such as Betula albosinensis planted in clusters, enables trees to be closely grouped to create shelter while still allowing light to filter through the courtyard.

Plot 22 Courtyard Garden

Character:
Plot 22’s courtyard garden is informed by the geometry of the surrounding buildings. This underlaying grid is reflected in the layout of the paths and raised planters which enable tree planting despite the courtyard being on a podium.
Plot 22 will provide 1884 sq/m of communal garden space, of which 173sqm will be play space.

Grid: The design of the garden will be set up on a simple grid.

Terraces:
Between the buildings and courtyard to the north, east and south, private terraces have been created which are accessible from the corresponding courtyard level apartments. These 2.5 - 3m deep spaces will provide a usable private space for residents with enough room for a table and chairs.

Access:
The courtyard can be accessed from a number of points including buildings cores, garden level apartment and two gated access points from the streets to the west.

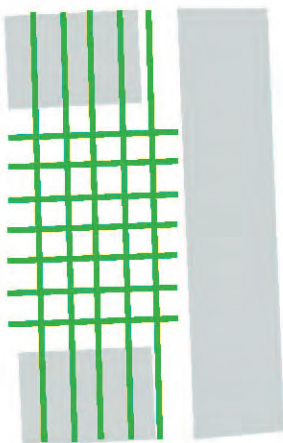
Circulation
A path running around 3 sides of the garden will give residents access to the lawn.

Planting:
The planting emphasises the linearity of the garden design; linear bands of formal planting, structured by hedges, stretch vertically across the space. Planting is used to create buffers between spaces, including between the private terraces and the communal courtyard space. Raised planting with

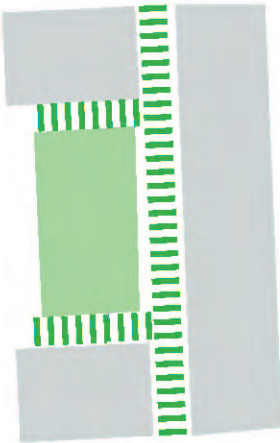
trees create pocket spaces, enclosing decked areas. To the west, raised planters screen create a sense of enclosure.

Spaces:
The courtyard has been designed around a central lawn space. Two smaller pocket spaces are defined by the change in materials. The planting is used to enclose the spaces.

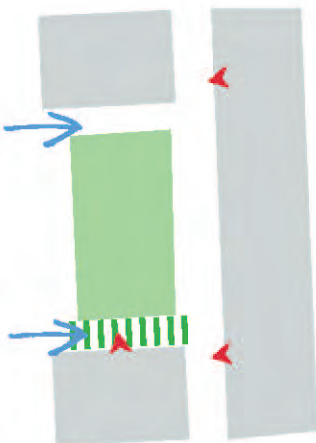
Grid



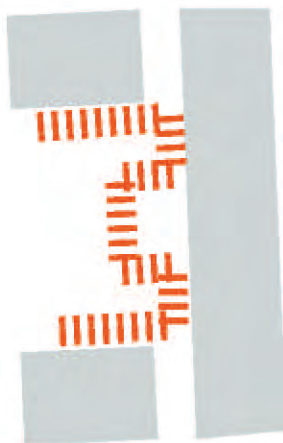
Terraces



Access



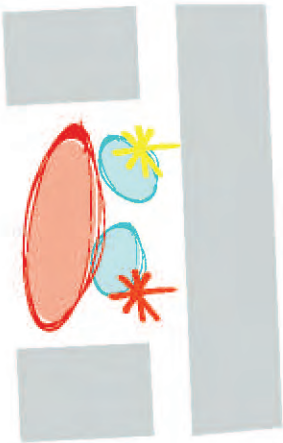
Circulation



Planting



Spaces





Plot 22 Courtyard Garden Master Plan

Key

1. Private terraces around the perimeter of the garden
2. Linear shrub and herbaceous planting
3. Decked pocket space with bench seating
4. Raised planters with multi stem tree planting
5. Play for 0-5 year olds
6. Lawn
7. Planted edge to the garden to create a sense of enclosure



Axonometric of Plot 22 Courtyard Garden

Private terraces around the perimeter of the garden

Linear shrub and herbaceous planting

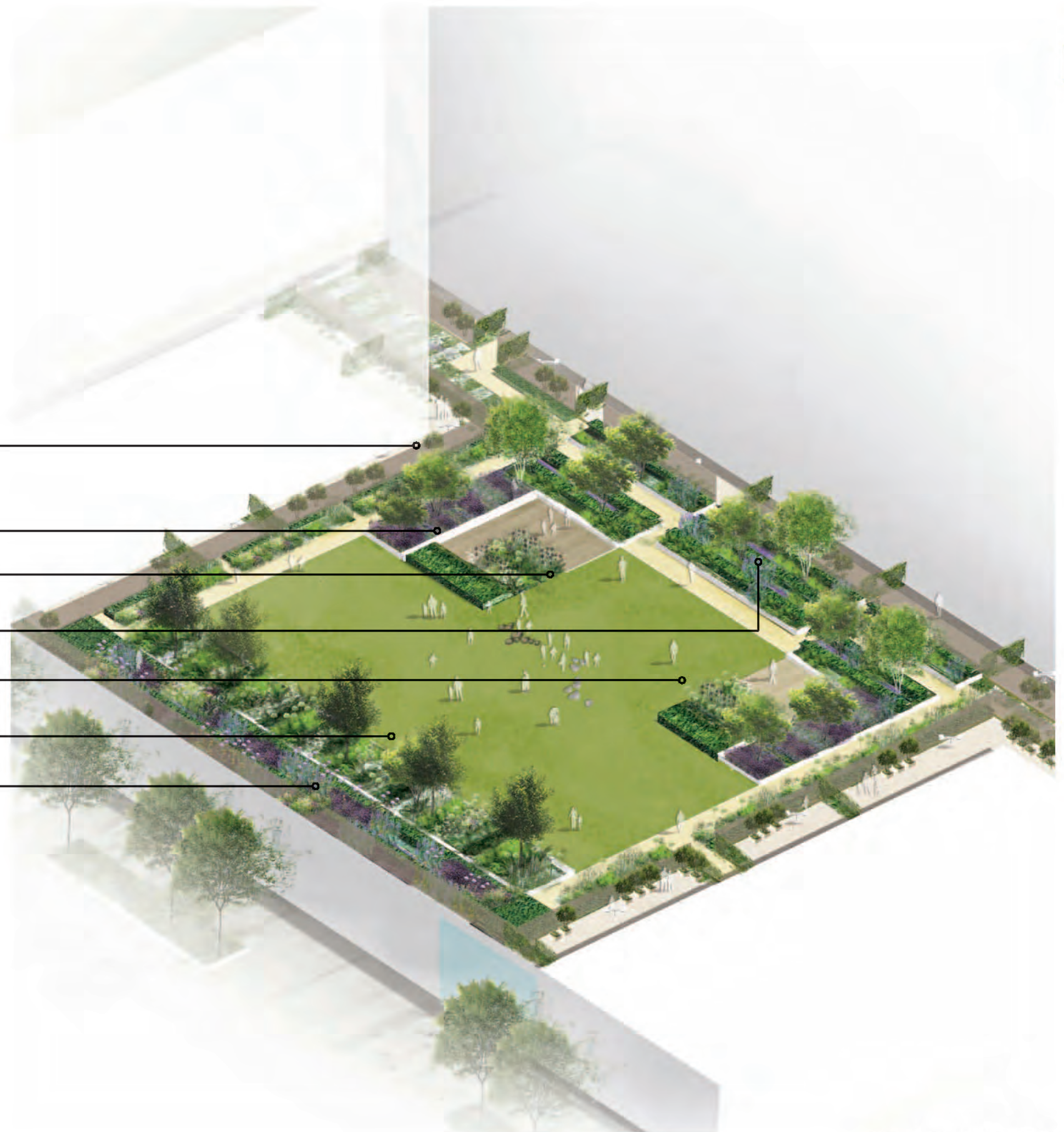
Decked pocket space with bench seating

Raised planters with multi stem tree planting

Play for 0-5 year olds

Lawn

Planted edge to the garden to create a sense of enclosure



Tree Palette



Betula albosinensis



Magnolia stellata



Amelanchier lamarckii



Magnolia grandiflora

Plot 22 Courtyard Garden Planting Palette

The Plot 22 planting will be designed to emphasise the linearity of the design. Rows of evergreen planting will create a year-round structure. Mixes of herbaceous planting will be planted between the hedges to create seasonal interest.

Planting Palette



Luzula nivea



Astrantia major
'Hadspen Blood'



Lavandula angustifolia



Iris 'Broadleigh Carolyn'



Allium hollandicum



Geranium phaeum
'Sambor'

Green and Brown Roofs

The green and brown roof strategy is an important part of the environmental mitigation for the development. As such, there are opportunities to incorporate a range of living roofs such as extensive and intensive green roofs, balconies and private roof terraces across the site. These locations were summarised on Parameter Plan 09 for the site wide master plan. The existing site has a strong, post industrial, brownfield character which has informed the recommendation in the Environmental Impact Assessment carried out as part of the outline application, for there to be a split between green and brown roofs of 20% and 80% respectively.

Plots within Phase 2 will have brown roofs which will offer a number of environmental benefits:

- Reduced rainwater runoff
- Enhanced roof insulation properties
- Reduction in urban heat island effect
- Enhances roof lifespan by protecting underlying waterproofing system

These brown roofs will seek to utilise recycled material and spoil. If practicable this material will come from site, however the contaminated nature of the site means that this will be unlikely. Local wildlife will be allowed to colonise the roof over a period of time with minimal human intervention.

Biodiversity and Sustainability

Measures to address issues of sustainability are embedded within the principle concept for the design of the landscape master plan and have been carried through to the design of Phase 2.

These principles include:

- Considering from the outset of the design process how the landscape will be managed and maintained in the long term.
- Creating places that are inherently flexible taking account of the future impacts of climate change, and adaptation measures that may need to be retrofitted.
- Considering the implementation of water management and recycling schemes.

At a detail level this will include:

Materials specification

- Seek to select materials from sustainable sources where fit for their purpose.
- Aim to use locally sourced materials where practicable.
- Examine the potential for retaining and reusing site materials, particularly on the brown roofs across the site.
- Seek to maximise the design life of projects by optimizing the use of durable materials that last longer, reducing the volume of water produced

over the developments' life time.

- Consider the use of prefabrication and standardization techniques to minimise waste.
- Examine the use of recycled materials.
- Specify Forest Stewardship Council (FSC) certified timber or timber certified under the Pan European Forest Certification Scheme.
- Seek to install energy efficient components including lighting.

Water Conservation

- Seek to install efficient irrigation.
- Seek to install water efficient products/ features.

Biodiversity

The proximity of the site to London City Airport has given rise to a planning condition associated to the scheme which requests that nesting birds are discouraged and that planting doesn't encourage food sources for birds.

- Contribute to a site wide network of green spaces which connect to existing green spaces in the surrounding areas, forming a connection of potential wildlife habitats and green corridors.
- Promote an environment where quality of life and quality of environment are integral to the development.
- Use planting which is attractive, and responsive to the changing seasons.

Play

Locations for play were indicated on the Parameter Plan 09 as part of the outline submission. This parameter plan identified areas that would be provided based on the benchmark scheme and the provision of private, affordable and social rented properties. These numbers were used to calculate the areas that would be required based on 10m² per child in accordance with the GLA's supplementary planning guidance on play.

As part of the master plan, the principal was established that doorstep play (for 0-5 year olds) would be provided within the courtyard gardens, play for 5-11 year olds would be provided in courtyards and in the public realm, and 11+ play provision would be within the public realm and in the parks in particular.

The schedule of accommodation for the plots within Phase 2 have been used to recalculate the areas of play required to ensure that there is sufficient provision across the site, and that it is located in the appropriate locations.

Provision of play within the courtyards is based on the idea of play trails, providing children with the opportunity to link together landscape and play elements. These play areas will include a combination of some of

the following: stepping stones, balancing beams, undulating landform, and playable edges and walls as well as more formal pieces such as mini roundabouts and play houses.

Play provision for 11+ will be in the park. The gardens will not prohibit use by older children- there will be places which they can sit and meet friends, the spaces in the public realm will provide an opportunity for more lively, active uses.

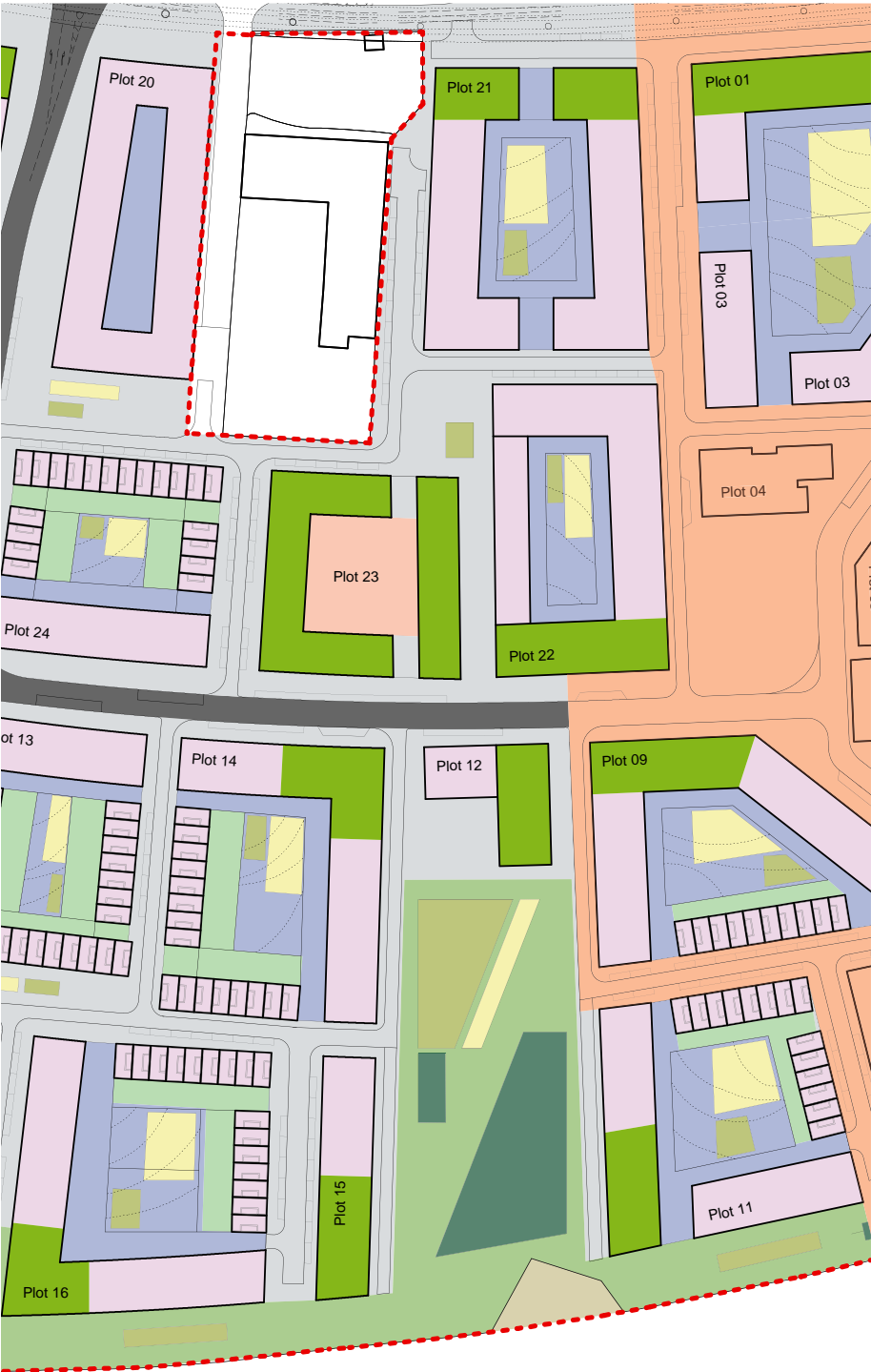


Play areas identified in Parameter Plan 09



Play elements using the landform creating a trail which could be followed

Location of Play



Play areas identified in Parameter Plan 09

Plot 11

	No of Children	Area (m2)
Under 5	8	83m2
5-11 year olds	4	40m2
12+ year olds	2	20m2
Total	14	143m2



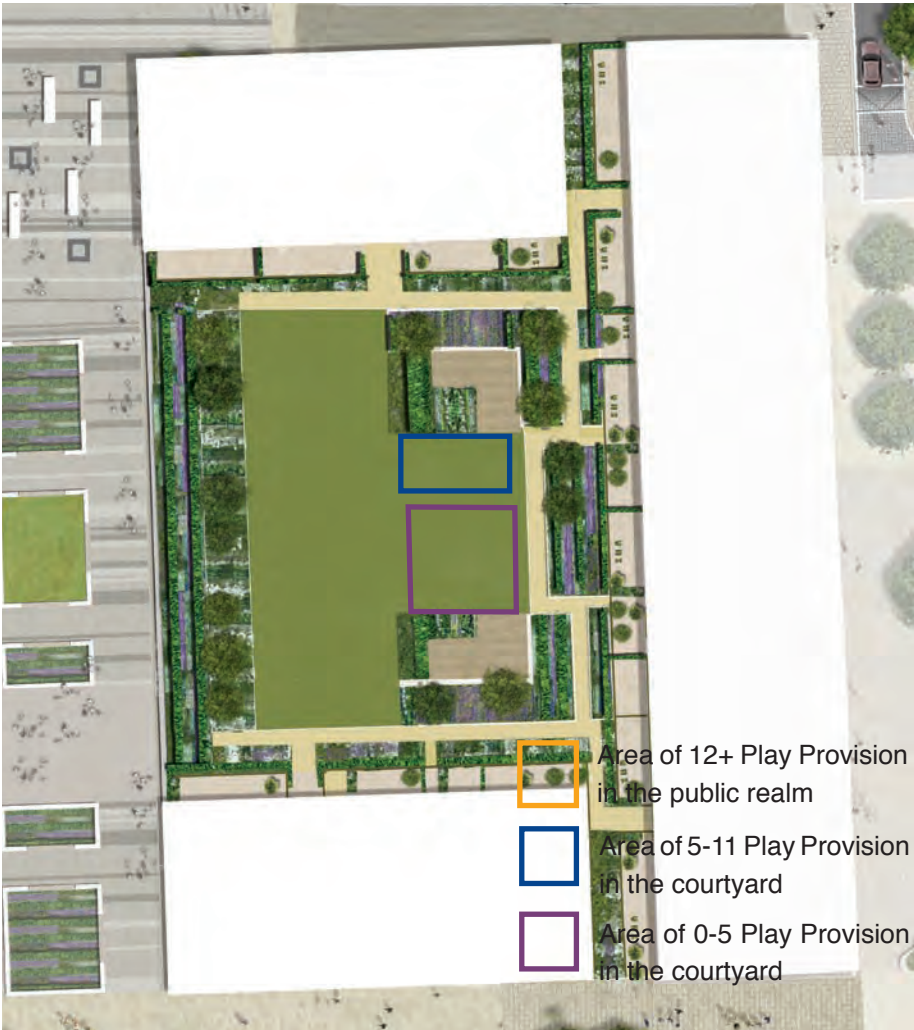
Plot 16

	No of Children	Area (m2)
Under 5	14	218m2
5-11 year olds	05	157m2
12+ year olds	04	88m2
Total	46	462m2

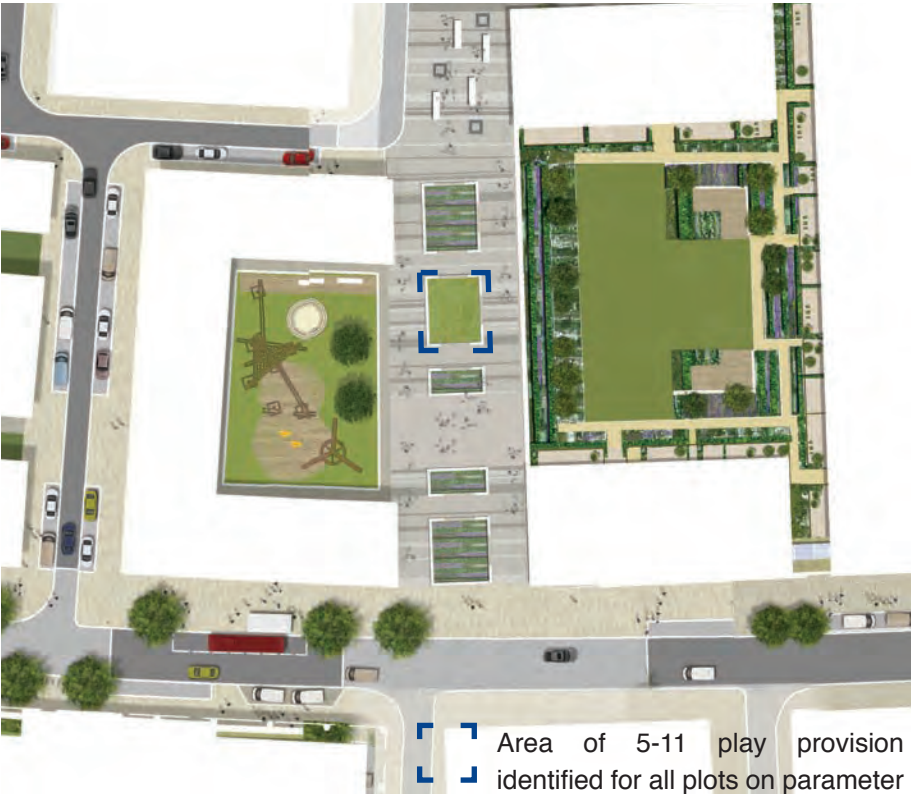


Plot 22

	No of Children	Area (m2)
Under 5	12	116m2
5-11 year olds	6	57m2
12+ year olds	3	29m2
Total	21	204m2



Pedestrian Street adjacent to Community Centre



Area of 5-11 play provision identified for all plots on parameter plan

The Park



- 12+ Play Provision for phase 2 plots
- 5-11 Play Provision for phase 2 plots
- 0-5 Play Provision for phase 2 plots
- Area of 0-5yrs play provision identified for all plots on parameter plan*
- Area of 5-11yrs play provision identified for all plots on parameter plan*
- Area of 12+yrs play provision identified for all plots on parameter plan*

* Shapes have been reconfigured to reflect design development

Plot 12 - play provision provided in Park

	No of Children	Area (m2)
Under 5	6	61m2
5-11 year olds	4	35m2
12+ year olds	2	15m2
Total	11	111m2

Plot 15 - play provision provided in Park

	No of Children	Area (m2)
Under 5	8	75m2
5-11 year olds	4	38m2
12+ year olds	2	18m2
Total	13	132m2

Accessibility

The government circular 01/2006 states that local councils should require applicants to submit an Access Statement showing how the principles of inclusive design have been incorporated into the development and how inclusion will be maintained and managed.

The purpose of this statement is to outline the overall approach to inclusive design within the scheme in accordance with the relevant local and national planning guidance, along with how the different access principles will be implemented into the scheme and managed.

The Royal Wharf plot proposals aim to achieve the following with regard to accessible design:

- Maximise access to all parts of the development, its facilities and services for people who are residents, visitors and members of staff regardless of disability;
- To ensure that wherever possible appropriate standards for accessibility can be met at the outset as part of mainstream inclusive design;
- To meet requirements of The Building Regulations Approved Document M – Access to and Use of Buildings, 2004;

- LBN Unitary Development Plan, SPG Access for All;
- Greater London Authority’s The London Plan;
- Wheelchair Accessible Housing Design Guide;
- Lifetime Homes Standards, July 2010;
- British Standard BS 8300:2009;
- Requirements and implications of the Equality Act 2010;

While frequently used documents such as Approved Document Part M and BS8300 - Design of Buildings and their Approaches to Meet the Needs of Disabled People provide general advice, other guidance may be more specific. Access standards are in a continuing state of development with no single authoritative document as a source of reference. Instead several separately authored documents have to be referred to.

Additionally planning and legislative policy and access regulations and standards govern the emerging plot design as follows:

Equality Act 2010 [Formerly Disability Discrimination Act 1995]

The developers or others may have ongoing obligations under the Act as landlords and may also have obligations as service providers where they are also providing services to the public. In the main, the Act will apply more to issues of services and information rather than to building design.

Building Regulations Part M and Part B

The Building Regulations Approved Document B - Fire Safety, and Approved Document M – Access to and Use of Buildings, 2004 are the only standards directly relevant to access. It is essential to understand that these standards require Building Control approval. The Regulations make clear that designs other than those shown in the document can be approved if they are justified as being equally or more effective. Approval confers acceptance that the building meets all reasonable standards in respect of physical access for disabled people with regard to the Equality Act.

British Standard 8300:2009 - Design of Buildings and their Approaches to Meet the Needs of Disabled People.

Where practical and reasonable it is recommended that BS 8300:2009 standards are applied to new buildings. The revised BS 8300: 2009 has been in effect since February 2009.

British Standard 9999:2008

This standard, published 2008, provides guidance for the safe evacuation of disabled people from buildings in an emergency.

Lifetime Homes Standards

The CfSH seeks to ensure that all new housing is built to ‘Lifetime Homes’ standards”

Wheelchair Housing Standards Adapted dwellings

Wheelchair Housing standards set out in the Wheelchair Housing Design Guide (2006) will be met as appropriate.

Adaptable dwellings

Best practice guidance on wheelchair accessible housing represents the standards of the Wheelchair Housing Design Guide (2006) that should be incorporated into dwelling designs from the outset to ensure that they are easily adaptable to meet the full wheelchair housing standards if required.

Where appropriate the inclusive nature and improved accessibly standards of these dwelling is discussed later in this access statement.

Parking

The required provision of accessible car parking spaces to be provided is set by local planning policies as well as the Royal Wharf outline masterplan planning conditions at 10% and will be adhered to.

Inclusive design

Inclusive design is a fundamental aspiration of the plot designs means designing beyond the minimum standards set by regulations.

The design team’s aim is to achieve a high standard of inclusive design and respond to the GLA’s and LBN’s requirements to achieve a socially, as well as a commercially successful development. An access review as part of the submission of the planning application have assisted this aspiration.

There are six overriding approaches to the design of the accommodation for all occupants and any visitors relating to the retail, community and residential buildings:

1 - To ensure that inclusive access is available at each level for occupants and visitors, as well as general public access, and that they can circulate and exit each type of accommodation with ease so that the built design does not present barriers to people with disabilities.

2 - To ensure that there are step free routes to all parts of each building and that passenger lift access is provided between all storeys.

3 - The shell and core will allow for future tenant fit out proposals to include accessible facilities for employees to access and use the back of house ancillary facilities within the retail and community spaces.

4 - To adopt as far as possible a repetitive plan form to facilitate navigation and way finding to essential facilities, for the public and occupants at all levels.

5 - To provide within the development shell and core the opportunity for the individual retail tenants to provide an inclusive environment for their staff and customers as part of their own fit out proposals.

6 - To anticipate emerging standards and public expectation.

If the design deviates from published access guidance and regulations as it progresses then approval will be sought for appropriate alternative arrangements. Such arrangements will be recorded as part of the development process.

Access Audit Approach, Landscaping and External Areas

A plot access audit has been undertaken for the design proposals under the following headings:

- Pedestrian Arrival
- Public Transport Links
- Accessible Parking
- Vehicle Pick-up / Set-down Areas
- Pedestrian Routes Through The Reserved Matters Area
- Landscape Zones

Pedestrian Arrival

The Royal Wharf site is bounded by the River Thames to the south and North Woolwich Road to the north. The principal pedestrian approach is off the North Woolwich Road to the north. The outline and reserved matters areas indicate new streets through the site serving all buildings and providing links through the site between the two nearby DLR stations (Pontoon Dock and West Silverton).

The approach route to the detailed area of the development is principally from North Woolwich Road with a bus route and DLR stations nearby. The proposed site concept is to define a clear route through the detailed area of the scheme to link Pontoon Dock DLR Station with the new riverside park as well as allowing a potential connection to Thames Barrier Park creating a high street within the scheme off the North Woolwich Road.

Routes from the bus stops and DLR stations to and through the site will be accessible for people unable to use steps including the use of dropped kerbs, tactile paving surfaces where appropriate, adequate lighting and evenly laid surfaces.

New crossings and a landscape scheme are proposed across North Woolwich Road and the design of this area will follow accessible design guidance to ensure easy access for all.

As part of the landscape proposals throughout the detailed area , suitable seating with and without arm and backrests is proposed at suitable intervals to allow resting and accessible play areas are proposed along the routes. The new paved surfaces will be even, firm, slip resistant and provide some visual contrast to assist in wayfinding.

It is proposed that a distinctive building massing, architectural and landscaping features will create distinctive focal points and landmarks that can be used in wayfinding through the scheme. Suitable signage designed to meet good practice guidance including the “Sign Design Guide” will also be provided to supplement landmark features, though this has not been detailed at this early stage.

Public Transport Links

For the detailed area the principal public transport link is the Pontoon Dock DLR station which has lift access from street to platform level. North Woolwich Road is also served by the 24 hour accessible bus route 474 which links Canning Town through to City Airport or through to Manor House.

While not confirmed at this early stage, consideration is being given to extending the bus route to travel through the scheme with designated stops en route. This potential new route through the site is in addition to the new bus stops being generated along North Woolwich Road.

Accessible Parking

Vehicles may enter the site from North Woolwich road to the north at a number of locations. The general concept for parking at Royal Wharf is to provide all accessible residential parking adjacent to the house or residential core, which assists disabled people requiring parking close to their residence or block entrance.

Parking is provided at a maximum of 40% for apartments and at 1:1 for houses. Some parking bays will be designed so that they can be easily allocated or converted to accessible parking bays for disabled people as need arises and capable of enlargement to meet the Lifetime Homes Standard.

Most of the car parking is located in basement and undercroft areas in order to free up landscape areas at ground level. However some parking bays are provided at ground level also.

On-street parking is seen as an essential feature of the site above ground in order to create a lively animation to the newly created streets. This also serves to provide useful accessible parking and drop off facility for residential,

commercial and retail facilities on the scheme without the need to overcome level changes from basement level parking in some areas. On-street, designated parking is located off the main thoroughfares and where provided basement and undercroft level parking is provided for the apartments with direct access into the communal residential areas above provided by lift and stairs.

Vehicle Pick-up / Set-down Areas

Marked pick-up and drop-off areas are provided at a variety of locations around the scheme to serve each building, though the streetscape will be such that short-term drop-off and pick-up will be possible in many more areas without obstructing traffic flow or pedestrian routes. The marked areas will be recessed off the main vehicle routes and where there is a kerb level difference on approach to buildings, suitable dropped kerbs will be provided to gain access to and from the drop-off area.

This facility will be carefully managed and controlled. The client team will be managing the site and the parking strategy, including pick-up and set down, will be an integral and important part of the site wide strategy as will be the management of all external spaces.

Pedestrian Routes Through The Reserved Matters Area

The scheme is largely level or has a shallow gradient throughout with the intention that there is step free accessible access between all buildings and landscaped recreational areas. Generally gradients across the site are shallower than 1:60, though where gradients are steeper they are the shallowest possible gradient and typically have a level resting area for every 500mm vertical level change following good practice guidance.

Due to the existing topography of the site, the need to achieve the EA flood level as soon as possible within the scheme and the desire to maintain level routes along the façades of the buildings for accessible entry, the pedestrian priority area in the northern approach to the scheme from North Woolwich Road has unavoidable gradients of 1:25. This is set into the landscape and as stated above there are substantial level areas for resting.

A hierarchy of streets is proposed ranging from larger scale high street environments through streets and lanes to residential only mews streets. The high street and street will have a 100mm kerb level change between vehicle area and the pedestrian areas. This will have suitable dropped kerbs where appropriate at crossing points and access points to on-street parking

areas. Where pavements are created adjacent to the buildings, these are as wide as possible, aiming for a clear width of no less than 1800mm to allow two wheelchair users to pass. This may be reduced in some isolated areas but for short distances only, and in no circumstances will the width fall below 1200mm.

The quieter Lanes and mews will be kerb-free areas with the intention that they are shared between pedestrians, cycles and vehicles, though will be designed to be principally pedestrian. Traffic will be minimal in these areas though various features are proposed to maintain a safe environment for pedestrians.

The need for a “safe zone” forms part of the current thinking for shared surfaces and aims to provide a zone within which pedestrians can feel safer while having the benefit of step free access to any area of the mews or lane.

The safe zone at the outer edges of the lanes and mews will be defined using street furniture, tree planting and lighting posts aligned to create differentiation and a sense to the pedestrian they are in a “safe area”.

The outer zones will also be a contrasting tone, have a differing grade of paving and possible contrasting feature band of paving to help create some definition between the vehicle and pedestrian areas while assisting drivers in remaining within the central zone. Consideration may also be given to a low chamfered kerb which will give some indication to people with visual impairments while not impeding wheelchair users or causing a trip hazard.

In some locations, contrasting textures and colours of paving may be specified to help indicate a suggested crossing point. This will assist in wayfinding but also alert drivers to the likely presence of pedestrians crossing at certain points.

Paving surfaces will be smooth, even and well laid to avoid tripping. Uneven cobbles are not proposed. Street furniture will be grouped or aligned wherever possible to avoid obstructing routes.

Seating will be provided along routes and within landscaped areas at suitable intervals to allow people to rest regularly if required. Wherever there is a grouping of external seats, some will be specified with arm and back rests.

The use of tree grilles will be avoided and slots for drainage will have heel guards incorporated which will prevent the trapping of heels, wheels or walking aids.

Bollards will be avoided wherever possible, though where used, these will be a minimum 1000 – 1200mm high and clearly visible by contrasting the background or having a visible contrasting band so that it is visible in a variety of weather and lighting conditions. No bollards will be linked by chains or ropes.

Landscape Zones

Throughout the whole site, there will be several identified landscaped areas to include grass and hard surface recreational space including play, nature, seating, culture, formal landscape and outdoor eating opportunities.

Among other advantages, this approach provides clear features to assist in wayfinding and orientation to and around the site. Distinctive areas around the plots include the high street, riverside walk and urban squares.

These comprise hard landscaped piazza, small grassed areas and tree planting to be used flexibly for a range of retail, arts and community events,

plus a variety of informal grass recreational areas between the buildings for residents use. The urban squares will be level or have suitably shallow gradients with resting spaces and have firm, evenly laid surfacing suitable for wheelchair users. Junctions with other paving and grass surfaces will be flush to allow access throughout.

Children’s “doorstep” play areas are proposed throughout the scheme. It is proposed that the surfacing will be firm safety surfacing with flush junctions where this joins the paving surfaces to ensure it is accessible for everyone and does not present a trip hazard. At detailed development stages it will be ensured that play equipment is inclusive.

Informal grass recreational areas will have level or shallow gradient paths though them which will be at least 1800mm side to allow two wheelchair users to pass.

Access Audit Buildings

Plot buildings are principally residential, though at ground floor level there are some mixed use units which may be retail, restaurant, arts, community or other uses as required.

Residential Buildings

The residential accommodation includes a variety of types from houses, to apartments of a range of sizes. The two principal types are apartments and terraced houses. The apartments are generally on one level and houses are a range of bedrooms located on ground up to 4th floor.

Residential Standards

Apartments are generally located at upper floors above multi-use accommodation, though some are located at a raised ground level. All units are accessed by stairs and lift. Terraced houses are accessed at ground level with flush thresholds. Basement and undercroft car parking for the residences is accessed via a dedicated core. Surface parking is provided throughout the site should level access be required.

Dwellings are designed to meet the requirements of the Building Regulations Part M (section for dwellings) as a minimum standard. In addition, in keeping with London Borough of Newham Planning requirements and the London Plan, all dwellings will also be designed to the Lifetime Homes Standards.

Within the detailed area, the scheme has been designed so that at least 10% of the units in each plot are fully wheelchair accessible, or have the space standards to allow easy adaptation to be fully wheelchair accessible, following guidance in the GLA Wheelchair Housing Design Guide. The provision of wheelchair accessible units includes a range of unit sizes, and as far as possible, a range of aspects.

It should be noted that all residential units are generously sized beyond minimum Lifetime Homes Standard in many cases so that the possibility of adapting more units to be more accessible is possible.

Residential Entrances and Common Parts

All upper floor apartments are accessed via the shared residential entrance lobbies which are accessible at grade directly from ground level. Raised ground floor units will also use the shared entrance areas and a lift and stair will overcome the internal level change within the lobby.

All common areas and dwelling units have been designed to meet AD M guidance for dwellings and the Lifetime Homes Standards. Level access, adequate clear opening door widths and suitable circulation space is provided for wheelchair users and other disabled people to refuse areas though it is recognised that management policies and procedures may still be required for some disabled residents.

Vertical Circulation

There are staircase and accessible lift access provisions to all residential levels. The stairs have risers of no greater than 170mm and goings no less than 250mm with continuous handrails to both sides which extend at least 300mm top and bottom of flights. The rail profile will be approximately 45mm with fixings that allow a continuous flow of the hand. Each step will be clearly visible by having suitable contrasting integral nosings and stairs will be well lit.

All lifts, serving residential floors will be specified to exceed Lifetime Homes Standard guidance as most lift cars are 1100mm wide and 2100mm deep and all meet or exceed the minimum 1100mm by 1400mm requirement. All features of the lift will be specified to meet Lifetime Homes and other good practice access guidance, including tactile and contrasting controls at 900 – 1200mm, visual and voice announcement, support rail to available walls, contrast between floor and wall surfaces, non-reflective materials and an alarm intercom system suitable for people with hearing impairments.

At each floor level, there will be a suitable sign on the landing visible when using the stair or the lift to indicate the floor reached.

Lifetime Homes Standard & Building Regulations Part M

All dwellings will be designed to meet minimum AD M requirements and Lifetime Homes Standard (LTH). Features will include:

- Suitable circulation widths which generally exceed LTH guidance;
- Suitable internal door opening clear widths of 750 - 800mm relating to corridor width;
- Suitable dwelling entrance opening width of 800mm clear;

- Level entry and flush thresholds to gardens and roof terraces;
- All units will have a suitable living area at entry level (in terrace houses this may be a dining area which can be converted to a living area if required);
- Suitable WC facilities at entry level with floor shower drain facility;
- Adequate manoeuvre space in habitable rooms including 1500mm turning circles, 1200mm clear space in front of kitchen units and generous clearance round all beds in all bedrooms which exceeds LTH guidance.

There will be the ability for adaptation including reinforced walls for grab rails, accessible detailed elements such as lever ironmongery and adequate positioning of switches and controls.

Wheelchair Accessible Units

Wheelchair accessibility has been achieved in 10% of the detailed area units in each plot across the unit mix by providing units that have adequate spatial and structural provision so that easy adaptation by through fixtures and fittings can be achieved to suit the resident’s preference.

These units have been designed following the Greater London Authority “Wheelchair Accessible Housing - Best Practice Guidance” document (2008).

Features incorporated include:

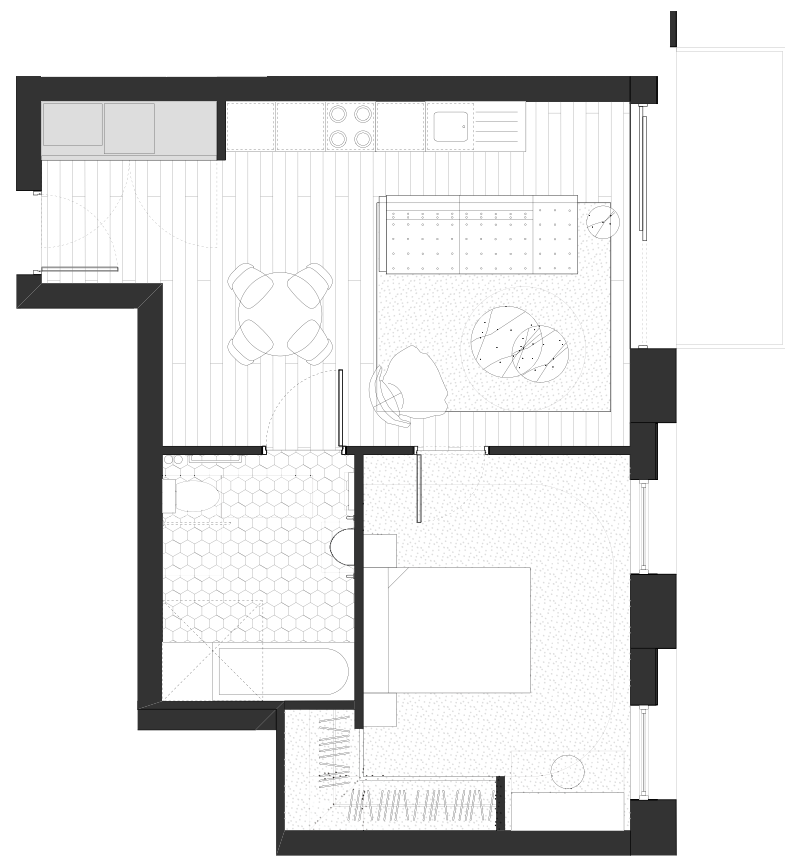
- Level circulation;
- Adequate clear opening widths of 800mm to all doors and circulation areas;
- Consideration given to wheelchair charging and storage;
- Adequate manoeuvre space in all rooms including bedrooms;
- Suitable sanitary facilities with a full 1500mm wheelchair turning space.

Multi-Use Units

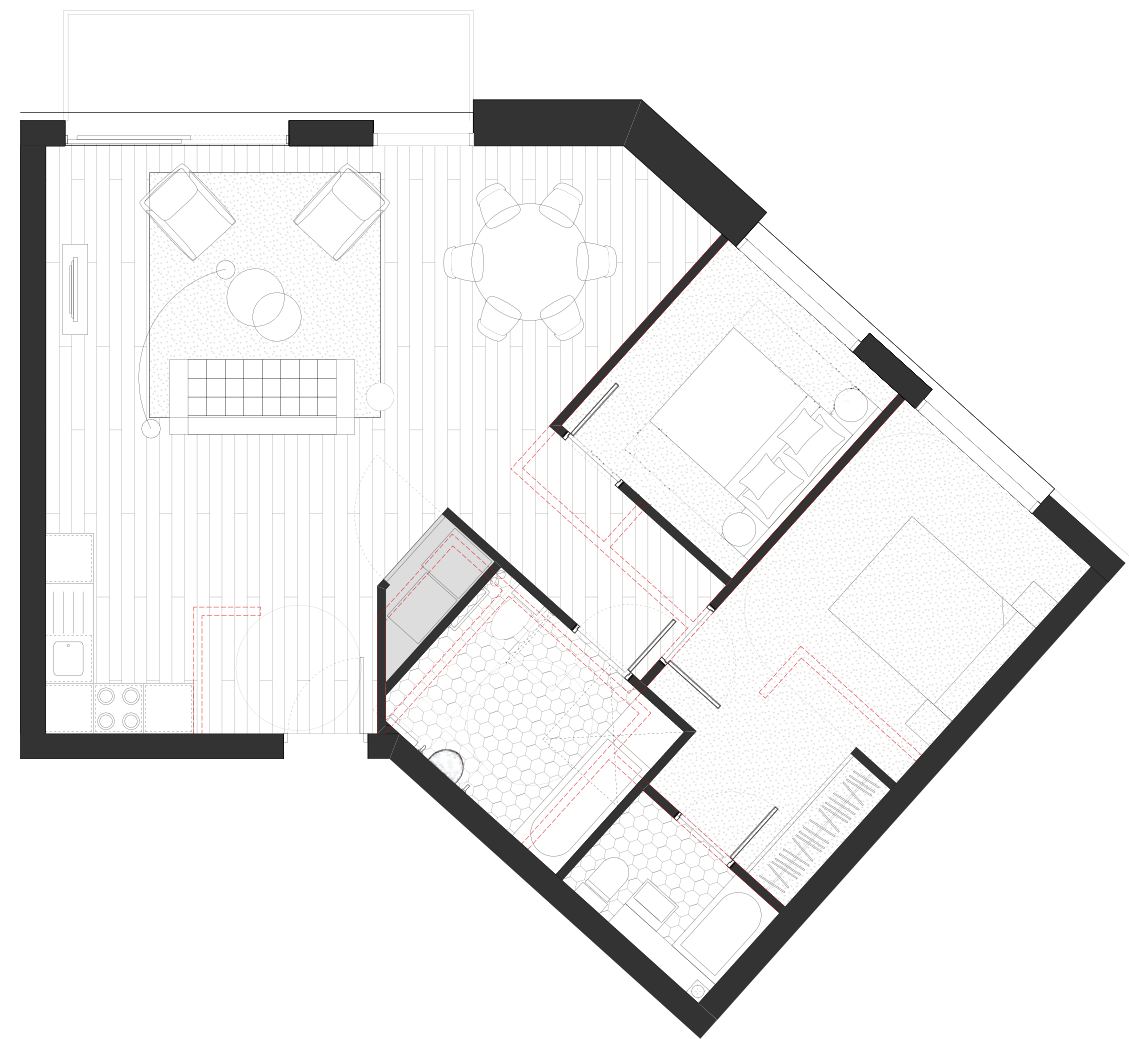
There are several units proposed for the detailed area which are multi-use and may include café, retail unit, community, culture and the arts uses. These are located at ground floor level at grade.

The internal fit-out of these units does not fall under the scope of this report as the units will be occupied by service providers who are likely to have duties under the Equality Act 2010 relating to provision of goods and services and relating to employment.

Wheelchair Accessible Units



Typical 1 Bed Wheelchair Unit



Typical 2 Bed Wheelchair Unit

Wheelchair Accessible Units



Typical 1 Bed Wheelchair Unit



Typical 2 Bed Wheelchair Unit

The unit shells will be designed to enable the tenants to meet their duties under the Equality Act for their customers and employees by maximising access as far as is practicably possible.

The detailed design has not been carried out at this early stage though features to be incorporated include:

- Level entrances with suitable flush entry mat provision;
- Suitable entrance door opening widths;
- Clear markings to glazed screens and doors;
- Provision of services to facilitate the addition of accessible toilet facilities;
- Accessible internal circulation;
- Cabling to accommodate entry controls set at appropriate heights.

Adaptability / Livability

A key aspiration of each plot design is to provide high quality family accommodation through designing for the needs of families when they move into this exciting new area of London and to allow families to grow in the area and their new homes without having to move out. Therefore buildings and spaces must be fit for current purpose and adaptable to change to accommodate future occupancy needs and technologies.

Adaptability and livability are two key characteristics fundamental to the design philosophy of the scheme. The design of the each of the new buildings, with particular emphasis on the family dwellings will accommodate where possible the following criteria to ensure the buildings remain suitable for use for years to come:

- Secure private gardens
- Access to secure toddlers play area
- Natural daylight lighting each room
- Compliance to Lifetime homes standards
- Wheelchair accessibility standards built in from day one
- National Housing Federation space standards
- Secure bike storage
- Home office space
- Internet delivery spaces
- Passive surveillance

Community

The creation of a strong and coherent community identity is central to the success of the new development and will rely on careful consideration of the following criteria:

- Hierarchy of clearly identifiable community spaces – private/semi-private through to public areas
- Secure by design principles organically integrated into the design
- Local retail facilities
- Coherent design and material use
- Range of house types and apartment sizes
- Community consultation processes informing key design decisions

Community involvement needs to be encouraged to ensure that initiatives are maintained and built-upon, and to assist in spreading positive influences into the wider community beyond. To achieve a safe and secure development, key factors need to be considered as an integral part of the overall design concept.

Examples of these principles are as follows:

- Natural Surveillance- Street Ownership
- Community facilities
- Quality of Design and Materials
- Coherent Well Lit Public Realm
- Safe Secure Well Lit Car Parking

The development responds to the need of a varied community by providing a range of housing types and tenures as well as being located near existing and proposed schools and other community facilities.

Security

To achieve a safe and secure development, key factors need to be considered as an integral part of the overall design concept. Examples of these principles are as follows:

- Natural Surveillance- Street Ownership
- Community
- Quality of Design and Materials
- Coherent Well Lit Public Realm
- Safe Secure Well Lit Car Parking

Movement and surveillance across the site is vital in promoting activity and life within the development. Careful street design and lighting to the approach of the building and the avoidance of concealed areas will promote a thriving community that feels free to enjoy the public and private domain safely.

Secure by design principles have been observed and development of the scheme with the police liaison officer is proposed at the next stage of detailed design to ensure a safe and secure environment is created.

Residential Design Standards

Plot designs have been developed in line with the following design guidance documents. The list below represents a proportion of residential design standards and does not preclude compliance to specific standards in relation to tenure or land use class. Specific compliance to individual standards has been listed in bold below.

Design standards referenced:

- Homes and Communities Agency Design and Quality Standards
- Homes and Communities Agency Housing Quality Indicators
- Code for Sustainable Homes (CfSH)
- Lifetime Homes (July 2010)
- BRE Wheelchair Housing Design Guide (2006)
- Secure By Design
- Manual for Streets Department for Transport
- Standards and Quality in Development – National Housing Federation
- Building for Life
- Interim London Housing Design Guide

Sustainability

Environmental sustainability should be at the heart of good design and should be maximised by taking a holistic view of sustainability in terms of energy consumption, carbon emissions and running costs throughout the life of the development. Planning development to reduce demand on energy use in terms of heating and power, transportation and food and waste is the primary route to environmental sustainability.

Our approach to creating sustainable communities develops from gaining an understanding of local context and the character of neighbouring existing communities. At the Royal Docks it is important that we not only create a balanced and long term new community but also that it reinforces and strengthens the communities that it is located within. To achieve this it is important that we take a wider view of the site, reaching beyond partners ownerships to make sure we provide the facilities that provide local retail, housing and work requirements for this new part of the city.

A development must be capable of meeting the social, environmental and economic needs of the community it serves both in the present and for future generations.

We recognise the future needs for developments to be sustainable, responsible and integrated together with an increasing need for the implementation of Low or Zero Carbon Technologies that require active rather than transient communities. The opportunities available with Royal Wharf are unique as the project allows the potential to develop crucial issues and provide housing in close proximity to the city and due to its location is able to integrate with existing facilities and transport networks. As city living identifies measures such as prioritising the pedestrian and cycle usage over the car it allows the promotion of active streets, neighbouring squares and city parks.

Careful site analysis has been undertaken and all the opportunities and options available to produce an environmentally sustainable development have been considered. An understanding is required of the inter-relatedness of all these factors to develop a set of solutions which work on all levels.

There are a number of significant key environmental benefits which will be included in the design. The site has a variety of excellent public transport connections to offer alternatives to private car use for business and recreational purposes. Specification of recycled / recyclable materials where possible will reduce embodied energy. Specification of locally sourced construction materials where possible will reduce transport related carbon emissions. South facing living accommodation allows maximum beneficial ingress of natural light.

Energy efficiency in the buildings is controlled through a combination of the architecture, technical systems, construction and the behavior of the occupier. We believe that simple solutions which do not rely on complex technology control systems are likely to be most effective in residential design. Our team recognise that the energy use in the buildings is only a small part of the total sustainability equation and that a significant factor will be how the development responds to and influences the lifestyle choices of the community who live and work in it.

Residential units within the Royal Wharf masterplan will achieve Code for Sustainable Homes Level 4.

Site Management Strategy

To ensure Royal Wharf achieves and retains the quality aspirations set as the vision for this unique site, the site wide strategic management strategy is an essential part of the detailed design.

The site will be managed by a dedicated on site management company, allowing a very high level of facilities to be maintained both for Royal Wharf residents as well as visitors. The site Estates and Management team start work early in the life of the project to ensure all management issues are adequately addressed in the development of the design.

The site Estates and Management team (EMT) will be responsible for the set-up and operation of all matters relating to the development and will pro-actively co-ordinate the servicing of the estate, the buildings and individual households as required. They will maintain the public realm, provide a level of security for the residents of the development, assist residents with deliveries and generally guarantee the upkeep of Royal Wharf.

The extent of the services will be considerable and a brief summary of services have been listed below. Although not exhaustive, this list is indicative of the array of facilities that the team at Royal Wharf be able to offer. Further considerations would include long term maintenance, such as redecoration and resurfacing of accessways.

Proposed Services:

- Handyman & Yardman
- Residential Parking Management Service
- Maintenance of Landscaping (Shared and Public)
- Maintenance of Vehicle Gates
- Maintenance of playground facilities
- Health & Safety
- Internal Common Area Cleaning
- Refuse Store Cleaning
- Communal Window Cleaning
- Maintenance of Fire Protection Equipment
- Maintenance of Door Entry Systems
- Maintenance of Communal TV System
- Maintenance of Water Booster Pumps

Estate Management

To manage a scheme of this size effectively and to ensure the need and expectations of residents are met, it will require a permanent site based management team.

This will mean the appointment of an Estates and Management (EMT) team specific for Royal Wharf. The role of the EMT would be the first point of contact for all issues arising on site from lessees, tenants, RSL, Commercial premises, staff, visitors and developer. The EMT would be overall responsible for the provision of all services, the supervision of all contractors on site, ensuring minor repairs are dealt with, ensuring the plant and facilities on site are maintained appropriately; and needs to be flexible enough to deal with any issues relating to the site, no matter where the source is.

In addition, the scheme will have a 24 hour front of house concierge from which all day-to-day operations will be managed from this base and for example the concierge can take delivery of parcels and dry cleaning on behalf of the residents.

Building Maintenance

The EMT will be responsible for organising the maintenance to the block(s) as follows:

- Arrange for each block to have cleaners appointed to ensure that the overall appearance of the internal communal areas is kept to a high standard.
- To assist with all repairs of a minor nature, the development would have a dedicated handyman to carry out these small works. Larger repairs would require the use of specially appointed contractors who would be sourced by the EMT. There will be an element of routine maintenance such as fire alarm testing etc., which would be the responsibility of the handyman under the supervision of the EMT.
- The window cleaning regime for the communal / apartment windows will be arranged via the on site EMT. They would utilise in built systems to ensure access is achieved and that windows are cleaned safely.

Landscape Maintenance

The EMT will also be responsible for maintaining the landscaping around each of the buildings and would apply equally to the green / brown roof areas that are open to resident access.

Play Area Maintenance

The EMT will also ensure the play areas available for residents and the wider community will be safe and secure areas for children to interact and play. This will include it being fully inspected by ROSPA on an annual basis and supported by a written report. Any remedial works noted as being required to the playground facilities will be organised by the EMT.

Façade Management Strategy - Medium Rise Mansion Blocks

Cleaning of communal windows is to be carried out routinely by the site wide management company by means of an approved cleaning system. Cleaning of the glazing and façade sections will normally be achieved using a proprietary water fed pole system and maintained using mobile access equipment. Access to upper floors can be achieved by use of a cherry picker or similar lifting device. This strategy will be further detailed during the construction phase of the plot design process.

Service Deliveries

The requirements for servicing both the residential and commercial uses within each Royal Wharf detailed plot have been carefully considered to ensure that the building functions efficiently with minimum impact on the public realm.

Service vehicles will be able to use designated drop-off areas accessed of all principal vehicular routes as well as having access to the site concierge and EMT offices.

Waste Management Strategy

The site wide refuse collection strategy is applicable to every residential unit and subject to detailed agreement with the local authority, is as follows:

- Residents take domestic waste from the apartment to allocated refuse stores located in the basement
- Each building has its own allocated refuse store, in close proximity to the residential core
- Each refuse store has a calculated refuse capacity based on the predicted occupancy level of each apartment this will include provision for household garbage and recyclables
- Each courtyard block has an allocated waste presentation area at ground level accessed from one of the internal streets

- Periodically refuse bins are decanted from the basement stores (where present in the plot design) and placed in the waste presentation areas at ground level. The site management company in coordination with the local authority scheduled waste collections manages this process
- Local authority waste collection services remove refuse from waste presentation areas upon scheduled collection days
- The EMT removes all empty bins and transports them back to the basement refuse stores

Commercial waste will be dealt with by the tenant of each commercial unit and in accordance with BREEAM and the local authorities requirements.

Commercial waste stores are anticipated and have indicatively been designed with direct access from the retail / commercial unit, as well (where appropriate) with rear access onto side streets.

Landscape Management

Appropriate public realm management and maintenance is vital to the success of the public realm. Even the best-designed spaces need to be cared for and inappropriate behaviour needs an effective response. The designs should foster perceptions of safety and a degree of self-regulation of behaviour through encouraging active, positive uses by a diverse mix of users, while offering specific places for young people to meet.

The management of the public realm will be undertaken by a private management company for all areas within the site boundary excluding private amenity space such as terraces and balconies. The planting strip forming the boundary between the private and public realm will be maintained by the management company.

The following key factors will need to be addressed in order to sustain a high quality public realm:

- Cleanliness
- Safety and Security
- Repair and Replacement
- Horticultural Health

Cleanliness

Cleanliness is the principle indication of the quality of management of the public realm. As such, the perceived success of the development will be significantly affected by the effectiveness of the procedures established for regular pavement cleaning, litter picking, and the removal of graffiti, bill posters and chewing gum. The strategy will be applied to all elements of the scheme from roads, pedestrian paving, street furniture, drains and planting beds.

Safety and Security

A safe environment is one that is accessible to all. As well as adopting ‘Secured by Design’ principles in the design of the streets and spaces, long term management and maintenance of the development will be required. Well looked after places are less likely to suffer from crime as they are more likely to be visited or used, with the premise that more ‘eyes on the street’ will deter anti-social behaviour. Landscaping will enable clear visibility along routes with trees being clear stemmed to approximately 2.5-3 metres.

Repair and Replacement

The need for repair and replacement of finishes will be mitigated by the use of appropriate and durable materials. Nevertheless, in the long term a degree of maintenance and replacement is unavoidable. In order to ensure that the public realm remains safe and in good condition, all worn-out, damaged and broken elements will be promptly repaired or replaced. In the short term this will be carried out within the clearly defined defects liability periods of the various contractors who installed the work. The longer term solution will form part of the management plan. Vigilant and regular monitoring of every aspect of the scheme will ensure that all remedial work is carried out in a timely and thorough fashion.

Horticultural Health

The health and general condition of planted areas including trees, shrubs, perennial plants and lawns is clearly indicative of the level of care and attention a place receives. Planting, including any replacements to dead or dying material, will be maintained in accordance with a Landscape Maintenance Specification, the submission and approval of which could be controlled by the imposition of a suitably worded planning condition.

Royal Wharf aspires to be the best solution for Newham. The masterplan and plot proposals presented in this document are a product of a long, in depth and considered design process undertaken with consultation and corporation with the London Borough of Newham, the Greater London Authority and the London Thames Gateway Development Corporation. This process has informed and matured the framework for development proposed within the scheme and has resulted in a design authored by many hands.

The success of the scheme will be measured by the quality of the built environment it produces. It is hoped that the enclosed designs and their supporting technical drawings contribute to the transformation of this key site into a unique and exceptional place where many people enjoy living, working and playing for generations to come.

Glenn Howells Architects Birmingham
321 Bradford Street Birmingham B5 6ET
T: +44 (0)121 666 7640 F: +44(0)121 666 7641

E: mail@glennhowells.co.uk
W: www.glennhowells.co.uk

TOWNSHEND LANDSCAPE ARCHITECTS

3A Zetland House
5-25 Scrutton Street
London EC2A 4HJ

T 020 77299 9333
W www.townshendla.com

FCBS
Bath Brewery , Toll Bridge Road
Bath , BA1 7DE

bath@fcbstudios.com

+44 1225 852 545