4.4 The public realm

4.4.1 Approach

The concepts for the public realm have been derived from the need to strengthen the connections through the site and context, animate the riverside and create a unique urban destination.

4.4.2 Joining the Riverbanks

The marriage of the two banks of the River, helping to reconnect east and west Belfast is a fundamental design concept.

The new routes through the site act as conduits between the residential areas to the east and the City Centre, with high degrees of permeability through the Sirocco site. A new pedestrian footbridge will cement this marriage.



4.4.3 Bringing People to the Waterfront

By creating new connections into and through the site, lining the waterfront with a series of new beautifully designed spaces, and promoting a wide range of activities within the buildings fronting the water's edge, life will return to the waterfront.

This befits the urban context while drawing in the people from East Belfast who have historically been denied direct access to the river because of the size and siting of the Sirocco Works.

Additionally, through the design of quality spaces and a rich mix of uses on the site, the development will draw people from the west of the city across to the East Bank. The orientation of the development on the sunny south facing side of the riverbank provides a valuable opportunity to deliver the concept of an enlivened waterfront.

4.4.4 An Urban Destination

The public realm will be pedestrian dominated, by creating an area which encourages meandering, street theatre, social interaction and promenading. A series of event spaces, with different characteristics, will be provided to help create environments for different activities, day and night, over the changing seasons.

Urban quarters come to life when their public places are inhabited by people and to achieve this they must also have a purpose - a reason for people to be there. Recent experience in Belfast suggests that three issues in particular will require attention in order to secure a credible "reason to be there". These are:

- · A substantial resident population.
- A high quality, purposeful, pedestrian friendly external environment.
- A diversity of purpose including cultural, social, community, retail, leisure and commercial uses to help ensure a genuine daytime and evening occupation of the public realm.



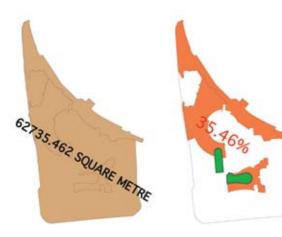
This design requires an enthusiastic response to all three of these issues with a distinctive and spacious public realm. The proposed mix of uses at ground floor level and the anticipated residential density ensures that the area will be full of people and therefore active and animated for long periods throughout the day and into the night, as befits a city centre context.



4.4.5 Public Realm Quantum

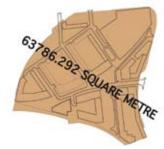
The ratio of useable open space to built area will establish both the character of the area and the comfort levels to be enjoyed by users. As a useful comparison, the neighbouring development at Lanyon Place has been measured to determine a benchmark for the future quantum of open space at Sirocco. If vehicle only areas are excluded, Lanyon Place provides a little over 35% of the site area as useable open space. By establishing a shared surface approach to street design where pedestrians have priority, as well as providing semi public communal gardens, Sirocco should achieve a quantum of open space which matches or surpasses this provision.

The scale and proportions of the individual spaces is also important and should be designed in response to the surrounding proportions of the adjoining built form with particular regard to the dominant land use and ground floor functions.



Laganbank, Riverside Site Area 62. 7 Hectares

Laganbank, Riverside
Open Space: 35% of site area
(22.2 Hectares)



Sirocco Site Site Area: 63.7 Hectares



Sirocco Site
Open Space: 58% of site area
(37 Hectares)

4.4.6 Local Identity

The public realm is often referred to as the "glue" which binds together potentially differing architectural styles that make up an urban quarter. The design for Sirocco adopts this approach and will define a palette of materials whose purpose shall be to invest the area with a legible "signature". Surface materials, street furniture, lighting and planting will all be selected as components of a coherent, definitive identity.



Recent Public Realm construction in Belfast, notably at Lanyon Place and Custom House Square has raised the standards of specification and workmanship hitherto seen in the city. These local precedents shall be adopted as a quality benchmark to establish minimum standards for Sirocco.

Having ensured exemplary standards of specification, the opportunity will also be taken to invest the project with dramatic individual elements which are unique to the site. The riverside location in particular offers the potential for exuberant architectural expression, enhancing the site's role as a key visitor attraction for the city.



4.4.7 Flooding and Levels

The criteria which have been established by DARD Rivers Agency for flood defence in Belfast demand that ground floor levels for new buildings at Sirocco are raised to a minimum level of 4.2m AOD. This is substantially higher than existing levels for this part of the city which are typically between 2.4m and 3.0m.

Conventional methods of flood defence such as perimeter walls often result in severance of a neighbourhood from its surroundings with a consequently detrimental effect upon the quality and usefulness of the public realm.

In order to address this issue a proposed "flood contour" has been established for the Sirocco site. This contour does not follow the entire site boundary but allows the land to rise gently into the site along a number of key routes. The result is to combine the need for universal pedestrian access with a flood defence system which avoids the use of walls or other barriers.

Developing this approach further provides several responses to essential changes in level including gentle inclines, steps, ramps and raised terraces. The public realm therefore embraces flooding issues as a design opportunity rather than a constraint by providing a diverse range of useable public spaces at differing levels.

4.4.8 Roads & Streets

One of the most important determining factors for successful street design is the assumed vehicular speed. For Sirocco, a universal maximum design speed of 20mph shall be imposed. This has a major effect upon how the streets are designed and ultimately how they are used by all modes of transport. To begin with, the entire quarter may be designated as a pedestrian priority area. In addition, 20mph allows for cyclists to use all of the streets without recourse to dedicated cycle lanes. The configuration of the streets (ie short with narrow carriageways) further contributes to a calming effect so that vehicles will in fact rarely reach even the 20mph limit. The absence of through vehicle traffic will also enhance the low speed character.

All of the public realm will be designed as a flush "shared surface" without upstand kerbs, thereby promoting universal pedestrian access. One exception to this will be bus stops where raised kerbs will be required to allow disabled access to vehicles. Vehicle carriageways shall be defined by street furniture, paving materials, lighting and tree planting.

Surface gradients will be designed to a maximum of 1:20 (5%) to allow for unassisted wheelchair access to all areas.

4.4.9 Provision

The layout of the public realm has been designed to accommodate an intensive yet sociable use of the public realm. To this effect a comprehensive spatial typology has been assembled and applied to all of the land within the masterplan area.

By using such a classification it is intended that future proposals, which come forward for approval, will contain named, buildable, landscape elements. The Sirocco development will contain a number of recognisable, legible landscape types including but not limited to:

- Main Street
- Side Streets
- Crescent Gardens
- Waterfront Square
- "Chimney Square"
- Central Square
- Central Park
- Sirocco Promenade
- Communal gardens
- Short Strand Boulevard
- Bridge End

Indicative guidance is provided for each of these identifiable spaces. These classifications have been adopted in preference to the technical terminology of "district distributor", "local distributor", "access road" and the like. By doing so streets are defined as places whose spatial quality, frontage uses and therefore their architectural character predominate rather than their function as a conduit for vehicles. The resulting street hierarchy, ranging from the intensely urban to a domestic character establishes a clear design intention to provide the public with a legible structure and identity. A design speed of maximum 20mph has been established for all streets which (with the exception of service access to a proposed supermarket) allows for the establishment of pedestrian priority for the entire site. This in turn permits the construction of "flush" surfacing without upstand kerbs, and consequently universal access for all users, able bodied or otherwise.

Principles

- A comprehensive design approach to the public realm;
- High quality, highly durable palette of materials to be used consistently throughout;
- Innovative use of lighting, functional and as an art form;
- Tree planting with seasonal consideration and of a scale commensurate to the scale and form of the space and its framing form;
- Bespoke street furnishings to be used throughout;
- A pedestrian, rather than vehicle, hierarchy of streets and spaces.

4.4.10 Main Street



Main Street is the most diverse spatial type in terms of adjacent building uses and will contain most if not all of the uses referred to above with residential accommodation only on upper floors. In addition it will act as the principal pedestrian thoroughfare through the site with pedestrian links at its extremities to adjacent neighbourhoods.

The majority of other spatial types will have a direct connection to Main Street so that movement patterns may follow a permeable network throughout the area. The design of the street will also encourage people to linger, with ample provision for seating and shelter. For the most part, ground floor uses are active, encouraging direct visual and spatial relationships between internal and external spaces.









4.4.11 Side Streets



Side streets will contain some own-door offices, apartments and access to multiple occupancy, mixed use buildings. Community uses such as crèche or health care facilities may also be located here at street level. However the predominant use will be residential. Accordingly the streets will be quieter, narrower and more intimate than Main Street.

In order to provide privacy for ground floor apartments, a policy of grade separation will be adopted in similar manner to the Georgian town house or "walk up" terrace. This is in preference to placing ground floor non-habitable rooms at street and/or a "set back" which requires the provision of small gardens of dubious usefulness. On-street visitor parking provision will also be sited in side streets in preference to Main Street.



4.4.12 Crescent Gardens



Crescent Gardens will be the most domestic and family friendly of Sirocco's public spaces. Low traffic speeds, some visitor parking, generous planting, seating and children's play facilities, which are overlooked and close to residences, will provide a suitably residential environment.

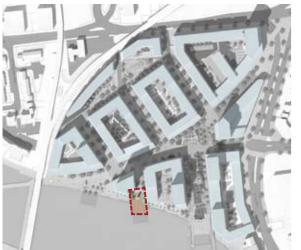








4.4.13 Chimney Square

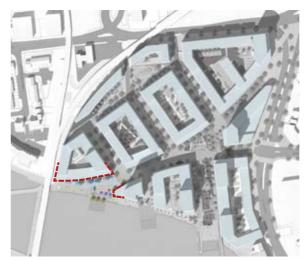


A brick built chimney close to the river's edge is the last remnant of the original Sirocco engineering works and will be retained. In addition to providing a dignified setting for the chimney itself, this new square will offer access from the waterfront to the heart of the new quarter, simultaneously enhancing pedestrian permeability, providing a new waterside public space, and providing a historical reference and richness of benefit to the whole development.





4.4.14 Waterfront Square



The western end of Main Street terminates in a new square which opens on to the River Lagan. South or west facing and backed by a proposed hotel, restaurants and cafes, this space aims to act as a primary waterfront destination. Access to water level activities will be provided giving a multi modal (pedestrian, cycle & river bus) threshold to the new quarter.

The design of this important new city space will be one which accommodates and promotes high levels of intensity within an outstanding location. This space is a front door to the East Bank and is therefore of strategic importance. Its design quality sets the tone and flavour of all that lies behind.



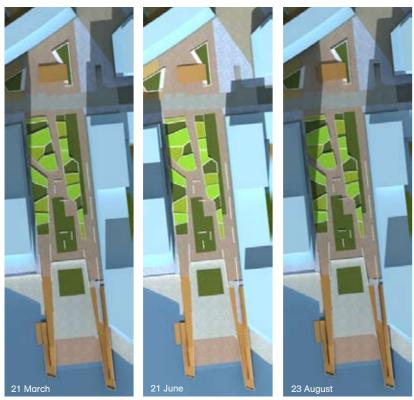
4.4.15 Central Park



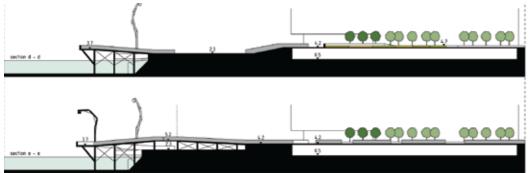
Linking the Central Square with the waterfront is a new park in excess of 0.3 hectare. The provision of open space of this type is an essential faciolity for the range of uses and the residential density proposed. Generous planting, lawns and all weather surfaces will allow for a combination of passive and active recreational uses. Orientation of the park provides extensive views upstream on the River Lagan and an exceptional microclimate.

The elevated position of the northern section of the park also offers overlooking of the river and the attendant activities which will congregate at this location. Restaurant and café accommodation is to be accommodated at ground floor spaces around the park, further enhancing the location as a destination for visitors as well as residents.





Lunch time in the Central Park: Daylight studies at 12h00

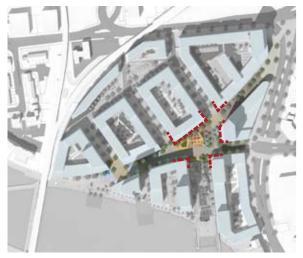


Longitudinal sections





4.4.16 Central Square



At the heart of the project the public realm will converge upon a central square, fronted by retail, office, leisure and community uses. The main bus stop and a taxi rank will also be located here. The square itself will be designed to accommodate a range of outdoor uses including market stalls and street performances. Consequently the design intention will be to create a gregarious spatial focus for both the resident community and visitors.

4.4.17 Sirocco Promenade



The existing Lagan Walkway forms the south western boundary to the site. The existing wall, which has prevented any relationship between this part of the city centre and the river, will be demolished to permit the integration of new waterfront spaces with the internal spaces of the proposed development while creating a lively linear route along the river.

















4.4.18 Communal Gardens



All of the residential accommodation proposed shall have direct access to communal gardens. The purpose of these is to provide safe, well overlooked garden areas for all residents that will also include more specialist amenity provision including, for example, toddler's play spaces.

areas of the development permitting experimentation with the

Opportunities for residents to "adopt" sections of garden shall be investigated as part of a management policy for the common type of planting installed and potential for local employment.

4.4.19 Short Strand Boulevard and Bridge End



The existing footway along Bridge End will be widened to 4 metres and will include substantial tree planting to improve the pedestrian experience along this busy traffic route.

The Short Strand will be radically remodelled into a tree-lined boulevard that will include new planting along the street's edges.

Short Strand intersections at Mountpottinger Link and Bridge End will be redesigned to create clear, safe and easy crossing points for pedestrians moving between the city centre and the eastern neighbourhoods.















4.5 Movement framework

4.5.1 Approach

The Sirocco site, because of its location and setting, provides a major opportunity to create a new city centre quarter that is efficient and sustainable in terms of movement and access. Compared to providing for an equivalent level of growth at a peripheral location, Sirocco will enable a low level of car use whilst providing a high degree of accessibility. People living or working in, or visiting, the Sirocco area will have alternative means of travel available to them, and will be in proximity to a wide range of facilities and activities without the need for motorised travel. This means that the development will have a low impact in terms of traffic added to the existing road network, a relatively small footprint in terms of land devoted to transport and access, and a small impact on CO2 and other emissions.

The development concept reinforces and provides for this aspiration by limiting the supply of parking on the one hand, while on the other hand providing for high quality movement on foot, cycle and public transport. The high quality public spaces will in themselves provide an incentive to walk or cycle.

Car use by residents will be provided for through a combination of residential parking spaces for occupants of the larger dwelling units, and the provision of a car sharing club whereby people can choose to use a car on a pay as you drive basis without the need to own a car. This is an innovative feature in Belfast and will be introduced recognising how it has become an established and fast-growing model in the rest of the UK and elsewhere.

In line with established transport policy in Belfast, the development at Sirocco will not provide for any commuter (long-stay, daytime) parking. Non-residential parking will be provided for short visits to the retail, office and other facilities on the site, on a pay and display basis, both on-street and in an underground car park for public use.

The aim is to provide not only high quality movement within the site, but also to enhance the connections for pedestrians, cyclists and bus users with the city centre and surrounding areas.

This section describes the proposed provisions for movement within and to and from Sirocco by all modes, and also the provision for parking and servicing, together with the reasoning behind the proposals. The scope includes:

- · Means of access into and out of the site for all modes;
- Access and movement within the site for all modes;
- Street profiles and design including provisions for parking and loading;
- · Provisions for specific modes of travel;
- On-street and off-street parking;
- · Servicing of premises



Sirocco public realm will be designed as shared space with pedestrian priority $% \left(1\right) =\left(1\right) \left(1\right) \left($

Functionality, Viability and Sustainability

Two important strands lie behind the provision. First, the aim is to ensure that transport infrastructure enables the development to function efficiently and in accordance with the wider aspirations expressed in existing and emerging planning policy documents. Second, the aim is to provide a package of measures that specifically address sustainable transport objectives, including measures that potentially can be provided off-site through planning conditions.

Principles of Provision

A number of principles underlie the various provisions:

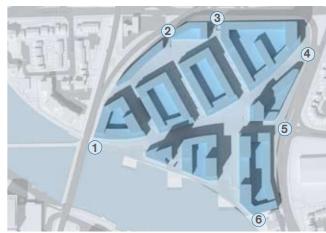
- Provide routes for pedestrians, cyclists and bus users to the City Centre that encourage use of those modes rather than private cars;
- Provide ease of access to and from homes, businesses and facilities within the site;
- Provide good permeability through the site for pedestrians, cyclists and buses;
- Encourage social cohesion and inclusiveness within the site, and between the site and surrounding communities;
- Provide high quality streets and public realm that are legible, convivial and safe, and with very high quality hard and soft landscaping and furnishings;
- Prevent streets within the site from being used as short cuts by through private motor vehicle traffic;
- Minimise the impact on surrounding streets and roads of motor vehicle traffic generated by or attracted to the site

4.5.2 Means of access into and out of the site

There will be 6 access points for the Sirocco site, as numbered on the External Access Points diagram.

All access points will serve both pedestrians and cyclists. The main vehicular access to the Sirocco site will be located at No.3 on Bridge End and at No. 5 on the Short Strand.

A detailed physical description of each access point and how it is intended to function is included in Appendix A. The purpose of each of the access points is shown on the following table:



External Access Points diagram

Access point	Pedestrian	Cycle	Bus	Supermarket service vehicles (in and out)	Public underground car park ingress	Public underground car park Egress	General access, all modes
1	✓	\checkmark	×	×	×	×	×
2	\checkmark	\checkmark	\checkmark	×	×	×	×
3	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	×
4	\checkmark	\checkmark	×	×	×	×	×
(5)	\checkmark	\checkmark	\checkmark	×	×	\checkmark	\checkmark
6	\checkmark	\checkmark	×	×	×	×	×

4.5.3 Access and movement within the site

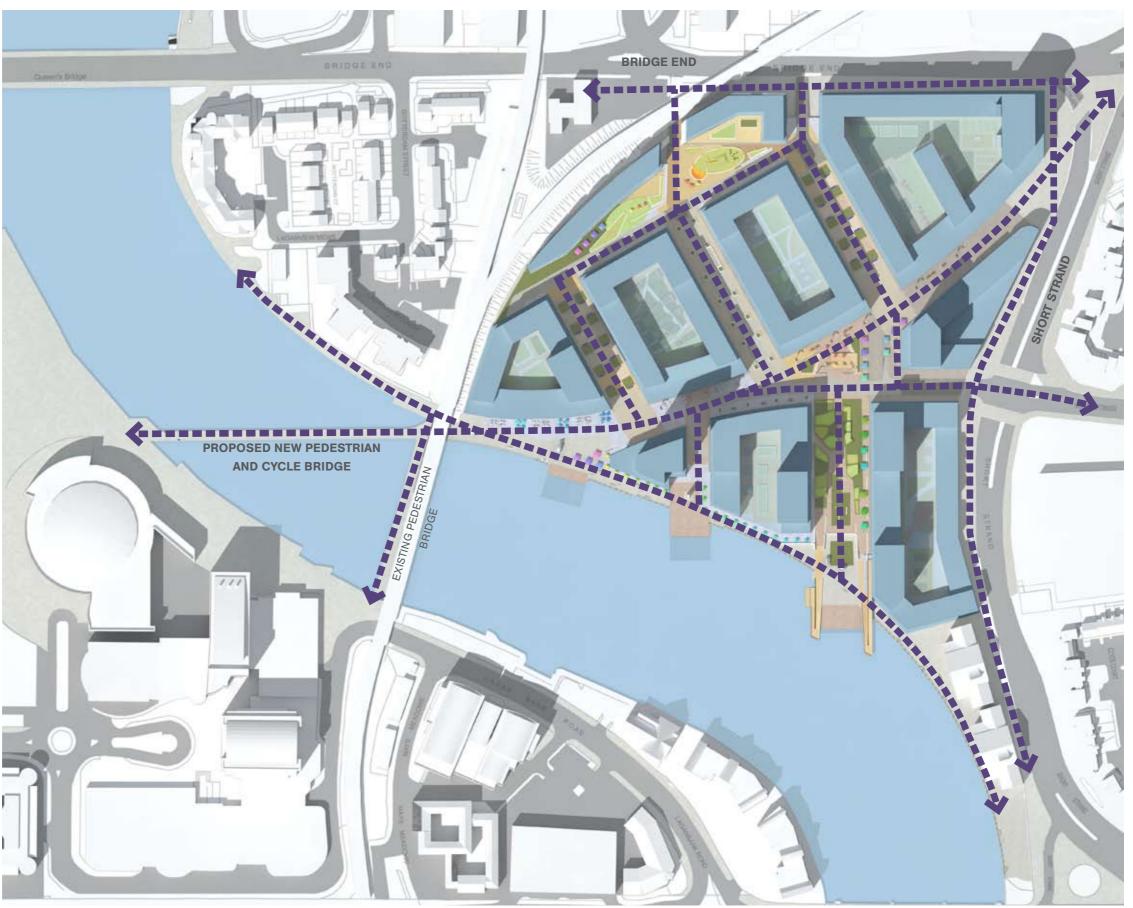
The site has been designed with the requirements of all categories of user in mind. It is intended that the streets and spaces are designed and managed to a high quality and specification in order to ensure that they are places where people will like to live and will want to visit. The different categories of user are considered in turn.



Pedestrians and bicycles have priority within the Sirocco site and can go everywhere, as indicated by the plan opposite.

Pedestrians

- High quality, safe routes and spaces for people on foot are seen as the prime requirement for the site
- Public spaces for leisure and enjoyment are provided by the Central Square with an open green space leading to the riverside, the Waterfront Square at the south west corner, the Chimney Square and the Crescent Gardens on the north west side of the site.
- These public spaces will be linked by streets designed specifically to facilitate pedestrian priority.
- External links to Newtownards Road and Mountpottinger Link across Short Strand will be greatly improved with signalprotected crossings.
- External links to the City Centre will be immediately available via the existing footbridge by the railway bridge as well as the Queen's Bridge.



Pedestrian and cycle routes across the Sirocco site

- Links via Bridge End and along the Short Strand will be improved by creating a wider, tree planted and upgraded footway along the site.
- Most importantly, the development will also benefit from and contribute to the viability of a new bridge connecting directly to Lanyan Place beside the Waterfront Hall.
- In addition there is an aspiration for extending the riverside walk south from the Sirocco site to link with the existing walkway south of Albert Bridge.

Cyclists



- · Cycling will be allowed through all pedestrian areas.
- Where an identified carriageway is provided, cyclists will be expected to use the carriageway.
- On pedestrian paths it is not intended to separate cycle and pedestrian flows. Shared use of paths is expected including the new footbridge and the riverside walkway. However, it is crucial that pedestrians are given priority over cyclists.
- Cycle parking will be provided on and off street. On street cycle stands will be provided as part of the overall public realm design. Indicatively stands will be provided in busier areas near the supermarket, other retail and office and restaurant uses.
- Off-street cycle parking will be provided within residential car parks at ground or basement level.
 Access to these will be provided separately from the vehicle ramps. They will be enclosed for security reasons.

Pedestrian movement study

Analysis of pedestrian movement was undertaken to identify why the amount of use and activity along the Lagan Waterfront is not commensurate with the level of regeneration that has been undertaken to date.

The analysis was then re-run to determine the likely positive effect of the new movement pedestrian routes across the Sirocco Site.



Analysis: Existing Conditions

The analysis adopts a series of randomly selected starting and ending points for journeys between the City Centre and East Belfast. A movement route for each journey is charted following the easiest and shortest route between the starting and ending points.

When mapped, Queens Bridge and Albert Bridge provide the quickest and most logical movement routes. The routes identified on the adjacent drawing as 'A' and 'B' are unlikely to be used as they are longer and often unsafe after dark.

The analysis demonstrates that the Lagan Waterfront does not form part of any 'natural movement route' through the city which accounts for the low use and activity of the Lagan Waterfront.



Analysis: Proposed Development Concept

The Development Concept is transposed on to the map of Belfast with the new pedestrian bridge and movement routes across the Sirocco Site.

The identical series of starting and ending points for journeys between the City Centre and East Belfast are again used in the analysis with movement charted to follow the easiest and shortest route.

The results predict that the Waterfront would become part of the natural movement, providing safe and attractive routes reconnecting the City Centre with East Belfast. Enlivened by people moving through it, the Lagan Waterfront could play host to a variety of activities and support restaurants and retail facilities that promote the enjoyment of the riverside.

Bus users and bus operation

The site is currently served by Metro route 5 on Short Strand and Mountpottinger Link. It is envisaged that a bus service will be provided through the site itself, and the layout provides for a bus route with priority access at Bridge End.



Following consultation with Translink it is expected that a service can be provided using either or both of the routes described below:

Option A

The existing Metro route 5 could be diverted to run through the site between access points 3 and 5. This would be facilitated by:

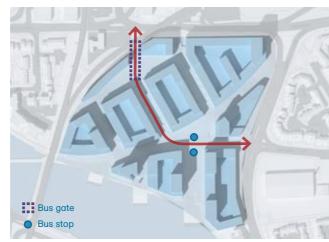


Bus route option A

- Bus priority opening of access point 3 whereby buses only can enter and exit the Sirocco site controlled by a bus gate
- Routing through the central "square" where a pair of high quality bus stops and shelters will be provided.

Option B

The internal streets will be configured to allow for a bus route through the existing railway arch opposite Dalton Street .

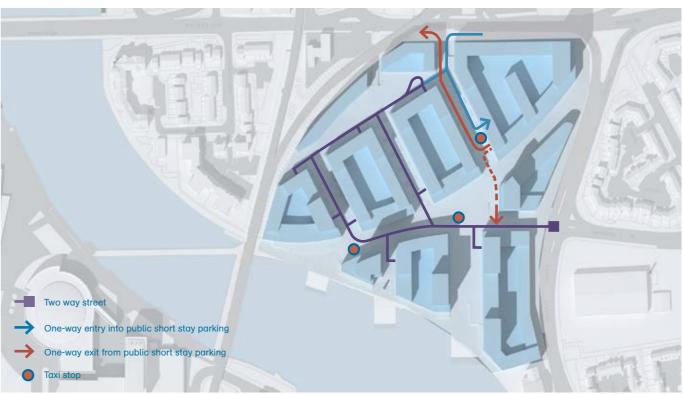


Bus route option B

- The route could accommodate single deck vehicles (on account of height limitations of the railway arch) on a new or diverted route.
- Modification of Dalton Street will allow southbound buses to use it and to then cross Bridge End to reach the railway arch. This modification will take the form of a short length of bus-only road with appropriate signing. The existing lights and crossing on Bridge End would be relocated to the east of Dalton Street to facilitate this bus crossing, with a pedestrian crossing alongside.
- The bus route approaches align with the railway arch to allow inter-visibility for drivers approaching in each direction.
- A bus gate will be provided at the railway arch to prevent the use of this access by other motor vehicles.
- It will be possible to make this route available to emergency service vehicles.

Other bus aspects

- · Both routes would use the Short Strand/Mountpottinger
- · One bus stop in each direction will be provided in the main square at the heart of the site. These will be of high quality with raised kerbs for level boarding, and with attractive shelters. The two stops will be placed opposite one another to maximise conspicuousness and also to maximise surveillance by passengers during quiet hours.



Private vehicle routes

Private vehicles

- · Access for residents' cars will be via Access No 5 off Short Strand. It is not intended to provide access to residents' parking from Bridge End.
- Access for cars will be provided to the public underground car parking using access 3 on Bridge End. Drivers leaving the car park will have the choice of exiting to Bridge End, via a one-way ramp to the central square and thence to Short Strand (Access 5).
- The public underground car park will be controlled by pay and display. It is expected that visitors to all local shops (not only the supermarket) will be able to get the initial period of their stay refunded at the till. The car park will not generally be available for stays of more than 4 hours during the day
- Hotel and restaurant customers will have the choice of parking on-street (probably free of charge after 6 pm and before 8 am, or in the public underground car park with reduced rates and long-term stay concession in the evening and overnight. For example a hotel user will be able to park overnight from 6 pm to 8 am, but require a ticket to remain in the car park after 8 am for up to 4 hours.

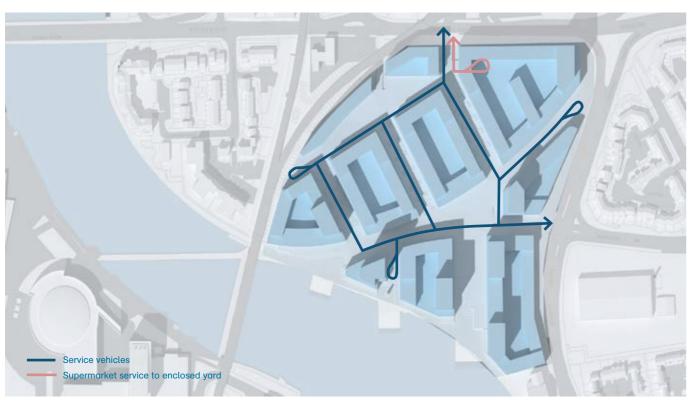
- Users of the crèche, local shops and other facilities will be able to use short-stay on-street parking.
- All of the aforementioned controls are typical of and necessary for high density, mixed use city centre areas.

Car Club cars

- Car Club cars will use the same access points as private cars.
- Parking spaces for Car Club cars will be on-street, and these will be specially marked as being for Car Club cars only at all times (not just the usual parking control hours).
- · The design of the Car Club bays will reflect their special purpose
- Enforcement of Car Club bays will be crucial and it is proposed to use tow-away powers.

Taxis

• It is expected that there will be demand for taxis at the supermarket, the Central Square and at the new hotel on the riverside. Taxi ranks are proposed at these locations.



Service vehicle routes

Motorcycles

Provision for motorcycle parking will be made on-street according to demand.

Service vehicles

- Bays on-street will be the main means of access for loading and unloading, except for the supermarket, which has its own dedicated service yard.
- Bays suitable for loading will be provided close to shops and other commercial premises, but can function as part of the pedestrian space when not in use. Car parking bays can also be used on payment of the appropriate charge.
- Loading will be time-restricted to avoid parking of lorries not actually engaged in loading or unloading, and to ensure that loading activity does not conflict with times of busy pedestrian activity.
- Servicing of the supermarket will be at an off-street service yard, accessed directly from Bridge End at Access No 3 shown on the plan. There will be no HGV access to this service yard from within the main part of the Sirocco site.

Disabled badge holders

Provision for blue badge holders will be made on-street close to shops and facilities according to demand. These will be signed on-street bays.

Riverboat users

A jetty will be provided adjacent to the riverside walkway for use by boat owners. It is possible that public ferry of leisure craft will use the Lagan, in which case provision can be made for such craft to stop at the site. In the latter case the jetty will need to meet the standards required for the operation of a public service.

4.5.4 Street design and profiles

The principle to be applied within the development is that of "soft separation" between spaces for vehicles and spaces for people on foot. This means that street surfaces will mostly be level between buildings, with vehicle areas demarcated with street furniture and different surface materials rather than with kerbs. This is to give freedom of movement to pedestrians, to assist people with a mobility disability, and to create an attractive street scene. Car parking will be allowed only in marked bays and according to the charge and time regulations.

Separation will be stronger on those streets that will carry buses, and higher volumes of vehicle traffic. In these streets there can be a limited use of kerbs to separate the footway, but only where pedestrian crossing desire lines are minimal, such as between junctions.

All junctions will have level surfaces to facilitate freedom of pedestrian movement. There will be no formal pedestrian crossings within the site. However, pedestrian phases will be provided at all the signal-controlled external junctions.

The street design will relate to the function of the street, and the balance between three characteristics: "place", "social function", and "traffic function". Further details are included in Section 4.4 - Public Realm Components.



Shared surface streets

4.5.5 Parking Approach and Policy



The parking and access aspects of the development proposal are based on a vision for the urban renaissance of Belfast, and the creation of new and radically different opportunities for city centre living with much lighter impact on the environment than the equivalent numbers of people living at sites on the City periphery. The existing and emerging policy framework allows for departures from parking standards, and the proposals here reflect this by having their own logic rather than rigid adherence to general standards.

Consistent with the proposal to create an eastern extension of the City Centre which invigorates the centre with high quality residential and other activities, the approach to parking is low provision and control of available parking spaces. Existing city centre activities do not generally have off-street parking associated with them, nor is there any expectation of such provision. Sirocco will extend this character across the river. Non-residential activity will be served by communally provided public parking, both on and off-street. Residential parking will be provided for larger dwelling units, and smaller units will be "car-free". This is to ensure high quality combined with high density in order to foster the urban renaissance of Belfast.

Aims of the parking strategy at Sirocco

- To ensure, consistent with planning policy, that parking at Sirocco does not encourage or provide for all-day car commuting to Belfast City Centre;
- To ensure that parking provision is low, in response to an access and movement strategy that is designed to minimise car dependence and use, consistent with policies to discourage car use;
- To minimise the impact of car parking and associated traffic on the quality of the environment;
- To avoid measures that would encourage car ownership amongst residents;
- To ensure that parking provision is efficiently used, so that excess space and costs are avoided;
- To ensure that, after taking into account the restraint element described above, the parking provision within the Sirocco site is sufficient to cater for all the parking demand generated within the Sirocco site:
- To avoid parking being displaced to Short Strand or other areas to the detriment of those areas:
- To ensure that parking (or related accesses or infrastructure) does not visually dominate or unduly intrude into the street scene;
- To ensure that special parking requirements are fully met, in particular dedicated parking for Car Club vehicles and for the vehicles of people with a mobility disability and for taxis

Residential parking

Existing and emerging policy supports the approach of low and car-free provision. Creating Places sets out standards for residential parking and states that lesser provision may be acceptable in inner urban locations and other high density areas. Sirocco is both inner urban and high density. It also states that in special circumstances, in some inner urban locations, 'car-free' developments may be considered appropriate – where it can be demonstrated that households will not own a car, or will keep it elsewhere. The applicant considers Sirocco to be the archetypal location and development where this policy can be implemented.

The circumstances which justify a low level of residential and non residential parking provision on the Sirocco site are presented as follows:

- Proximity to City Centre, being within 10-15 minutes walk of the major retail and employment locations within NI;
- Proximity to both the Central train station and a major national bus terminus which are located within 5 - 10 min walk of the Sirocco site;
- The provision of a local bus route through the site financially supported in the initial phases by the applicant, and supported in principle by Translink;
- Provision of a Car Club within Sirocco, enabling non-car owners to have access to a car on a pay-as-you-go basis. This will be supported financially by the appliacnt to the extent necessary for 3 years;
- Provision of ample and secure cycle parking to encourage cycle ownership and use;
- Personalised travel planning for all new residents at Sirocco to encourage sustainable travel decisions, ongoing as part of the management company responsibilities;
- Covenants preventing residents or landlords from selling, renting or leasing car parking spaces to non-residents and enforced using registration plate matching.

Non-residential parking

The approach for non-residential parking reflects emerging policy as expressed in existing standards (Planning Service SPG "Parking Standards") and emerging BMAP policy. Parking Standards SPG gives its principle objective as being to give consideration to parking provision within the context of wider government policy aimed at promoting modal shift to more sustainable forms of transport. The amount of parking is to be determined having regard to these standards or any reduction provided for in an area of parking restraint designated in a development plan.

The Sirocco site is within the City Centre fringe area of parking restraint, and is therefore subject to the lower non-residential and non-operational standards set out in dBMAP Policy TRAN 4. This policy also permits variations from normal standards in exceptional circumstances when evidence of alternative transport arrangements can be clearly demonstrated. This Sirocco Masterplan provides that evidence. In areas of parking restraint (in which Sirocco falls) the policy focus is to restrain the availability of long-stay commuter parking. The current application provides for this control by making zero parking provision for stays of more than 4 hours during working hours.

Non-residential off-street parking is proposed in a public underground car park for users of commercial and other facilities in Sirocco, including a supermarket. This is appropriate to the objective of creating destination activities at Sirocco, and bearing in mind that Sirocco lies at the edge of the City Centre area. The supermarket and other uses are also important to the social cohesion of Sirocco and the neighbouring communities. However, the scale of activity will not, and is not intended to, compete with City Centre retail.

Parking Strategy

The parking strategy elements for the Sirocco site are as follows:



A low-car development

The proposal is for a low level of parking for residents and short-stay restrictions for visitors.

Low car ownership

- Studio and one-bedroom dwellings and small two bedroom units will have zero parking spaces and will effectively be "car-free" housing.
- Parking spaces will be provided for occupants of larger 2 and 3 bedroom dwellings at a 1:1 ratio.
- Covenants will prevent sale, re-sale or rent to car commuters (non residents) from outside the area.

Residential parking

- Residential parking will be provided off-street entirely and located in four primary locations
- Dedicated parking bays will be assigned within close proximity of their respective residential entrances.
- Residential parking will be allocated from within either three two-storey semi-basements or from within an underground basement.



Dedicated residential parking

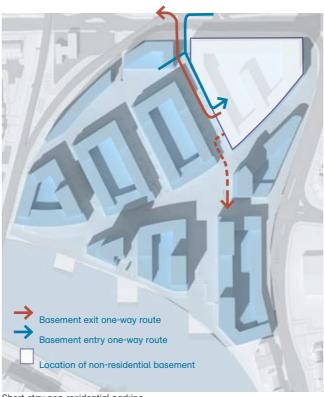
In order to meet the policy requirement not to provide all-day commuter parking at Sirocco, it will be necessary to control who has access to the off-street residential car parks. The control of parking will be responsibility of the management company, while the mechanism of control and enforcement of it is likely to be subcontracted to a specialist company. Two key aspects are envisaged.

First, a covenant will be made which limits use of the car parks to people resident at Sirocco. Terms of residence will be established, for example at least nine months of the year. The covenant will also prevent residents from selling, leasing or renting their car space to non-residents. The rights and restrictions on residents' parking will be made clear to people purchasing, leasing or renting dwellings as a condition of residence.

Second, those residents entitled to a parking space (see schedule below) will register their vehicle with the management company, and will be issued with a windshield pass (probably electronic, for automatic identification at the gate). The pass will be specific to the vehicle registration number, and transfers will need authorisation. Infringements will be enforced by the management company or its agents, for example, by disqualification of the right to park and withdrawal of the pass.

Non-residential short-stay basement parking

 An underground public car park will be provided under the supermarket, catering for both supermarket customers and customers of other activities in Sirocco, with a maximum 4 hour parking limitation.



Short-stay non-residential parking

Car Club parking



Dedicated spaces will be provided on street for Car club use.

- Car club spaces will be strictly enforced to ensure efficient operation;
- 10 spaces will be provided initially, but additional spaces can be provided, either on or off-street, as the Car Club grows. Management of the Car Club spaces will be a key responsibility of the management company.

Secure and controlled parking

All parking within the development blocks and on-street will be available only to those who are authorised to use it, specifically:

- Car Club users (in special bays only)
- Resident car owners who have purchased or leased a space for their own use
- Disabled badge holders
- Non-resident drivers using controlled public and/ or private parking in accordance with the control regulations (including supermarket customers, and other visitors to residents, shops and restaurants etc.).

Controlled street parking zone (CPZ)

Streets within the Sirocco site will be controlled in similar manner to existing city centre controlled parking, using a private parking control agency.

- Pay and display bays will be provided in marked bays within the street, for stays of up to 2 hours and 4 hours, controlled during the day (e.g. 8 am to 6 pm). Parking will be prohibited outside these bays, with tow-away and other sanctions imposed.
- · The controls and charges will be imposed to prevent the use of on-street bays by all-day commuters to work, consistent with planning policy, and to prevent use by residents that would deter shop customers and other short-term visitors:
- No bays will be provided on the surrounding streets (Short Strand and Bridge End);
- On-street parking bays will be kept away from places where people will cross the street, or spend time in public realm activities (strolling, sitting out, picnicking, meeting etc), and away from children's play areas and school entrances.

Servicing and loading

- Servicing of both residential and commercial properties will be carried out on-street except for the supermarket, where a dedicated service area will be provided;
- The supermarket service area will be accessible only from the Bridge End left-in-left-out vehicle access, to avoid HGVs entering the residential parts of the development;

Cycle parking



- Cycle parking will be provided in secure areas within the building blocks and/or the car parks within those buildings.
- 1 space will be provided per dwelling;
- Cycle parking for residents will be provided at ground or basement level;
- Cycle parking for visitors to Sirocco will be provided on-street ahead of demand
- Motorcycle parking will be provided on-street close to the shops and other facilities according to demand.
- Motorcycle spaces will also be available in residential off-street car parks according to demand.

Marketing

The development will be positively marketed as offering a "low carbon" lifestyle, with mobility options that are cheap and environmentally beneficial. This will include individual travel planning providing pre and post sale or rent agreement as part of the management company's role on an ongoing basis.

Schedule of parking within Sirocco

Residential parking

960 min. based

on the following:

1 bed apartment

car free

2 bed apartment (small)

car free

2 bed apartment (large)

1 bay per unit

3 bed apartment

1 bay per unit

Non-residential

570 min. based on

the following:

Public off-street

420

Public on-street

50 - 80 (inclusive of Car

Club/Disabled badge)

Cycle parking

Residents

2400 minimum

Visitors

according to demand

Motorcycle parking

according to demand

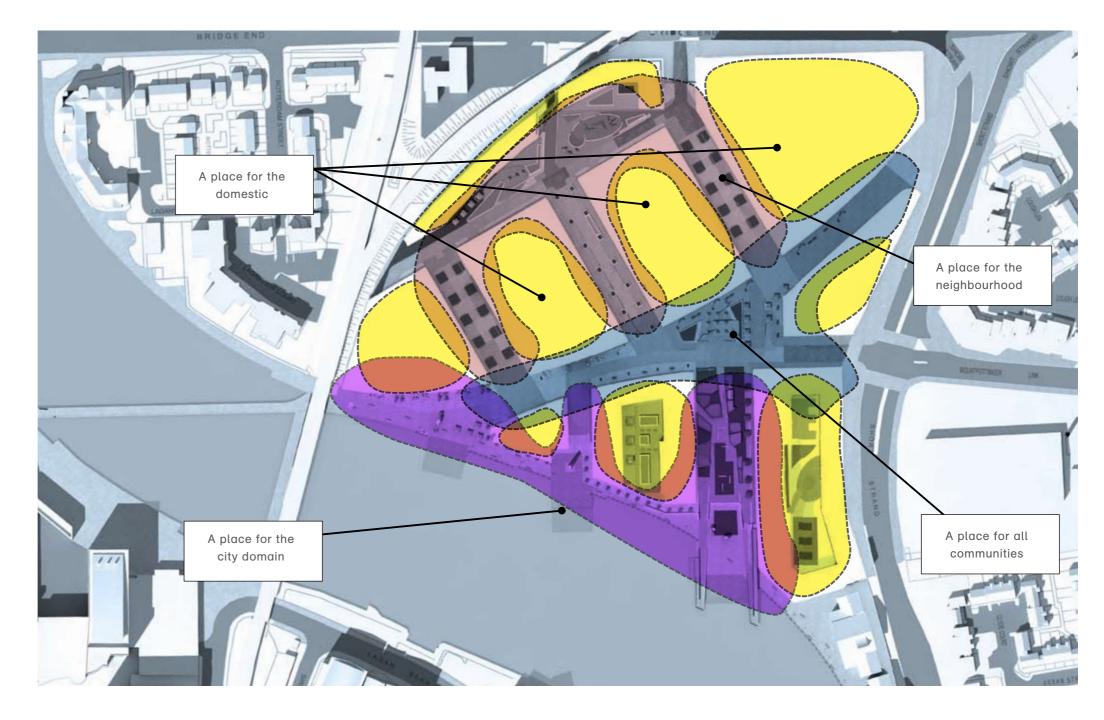
4.6 Land use

4.6.1 Approach

The Sirocco Quays masterplan been has conceived as a vibrant and sustainable new urban quarter of the city. As befits a part of the City Centre, the aim is to combine high density residential living with a range of non-residential uses so that each supports and benefits from the other and in turn positively enriches the whole of the site and the city in general.

The land-use structure is crucial to this realisation, responding to the following four broad functional spheres that inhabit the spatial plan and underpin this vision:

- A place for the domestic
- A place for the neighbourhood
- A place for all communities
- A place for the city domain























Creating a vibrant mixed-use City Centre neighbourhood

4.6.2 A place for the domestic

The masterplan creates a variety of domestic environments that respond to a range of household structures, lifestyles and aspirations. It recognizes the changing nature of households over the generations, that they often grow and shrink over the years, requiring a variety of dwellings types that respond to a complex matrix of needs and requirements.

In response, the masterplan will deliver a variety of dwelling typologies including apartments, penthouses and maisonettes. They will include a mix of studios, one and two bedroom flats and larger family sized two and three bedroom dwellings.

To promote social inclusion, a mix tensures, that includes provision of affordable and social homes, will be included in the development. Social homes will be 'pepper potted' throughout the Sirocco site and will of a similar high standard of design to ensure they are indistinguishable from the private housing.

Each new home will be designed to a high level of environmental performance that achieves the masterplan's sustainability criteria, realising the current BREEAM standard as a minimum. All homes will also be required conform to above average space and internal storage standards.

The masterplan has responded to the important role amenity space plays in domestic life. Aside for the array of public spaces provided by the development, most new homes will also have access to large scale, semi-private courtyards. These spaces will be designed to foster a sense of community within each urban block and provide for relaxation and enjoyment, including a safe environment for toddler play, communal areas for BBQ's and small scale urban allotments. In addition, private terraces and balconies to the majority of homes will create enjoyable spaces for the domestic realm.

4.6.3 A place for the neighbourhood

The land-use structure helps to support the development of a viable neighbourhood within this new urban quarter. Centred on side streets and the Crescent Park, this part of the site offers places were children can play, preteens can mingle, and older people can sit and socialise. The streets will be safe, animated social spaces, designed for pedestrian priority. A sense of collective ownership is fostered through the urban configuration which ensures that apartments overlook and spatially contain the public realm, and through the positioning of the residential entrances at ground floor onto the fronts of the streets.

The land-use disposition has been structured to promote occupation of these areas. Community facilities, such as the care home and nursery school, are positioned adjacent to the Crescent Park creating a locus for neighbourhood interaction and helping to animate the environment.

Although primarily residential in character, a number of ground floor units will comprise small offices on the shady side of the streets, generating additional activity by day when many residents will be at work or school.



4.6.4 A place for all communities

The Sirocco Quays will be a place in which the communities, both from the site and the surrounding areas, come to share common facilities and resources, with the Central Square and the waterfront becoming important social nodes. In particular, the heart of the new neighbourhood, along Main Street and around the Central Square, contains a variety of land-uses that includes spaces for local service provision, community uses, shops and a new supermarket. These have been arranged in the vicinity of the square to further foster a sense of shared community.

Central to supporting the proposed community facilities is the provision of an adequate critical mass of people to support them, many of which will live within the new development, others will arrive by foot or bicycle while those living further afield can access the site by the adjoining public transport facilities.

The proposed urban density supports the creation of a sustainable community through:

- encouraging social interaction and diversity by a careful spatial and landuse disposition
- improving the viability of and access to local retail, services and facilities
- enhancing the economic viability of the development which in turn subsidises the provision of community services and the provision and maintenance of a high quality public realm
- reducing the need for car travel and promoting walking and public transport use, providing a healthy, cost efficient lifestyle option
- making it economically viable to locate car parking either undercroft or in basements, freeing up the public realm and creating an attractive pedestrian orientated environment
- increasing energy efficiency and decreasing resource consumption and minimising the development impact on the environment

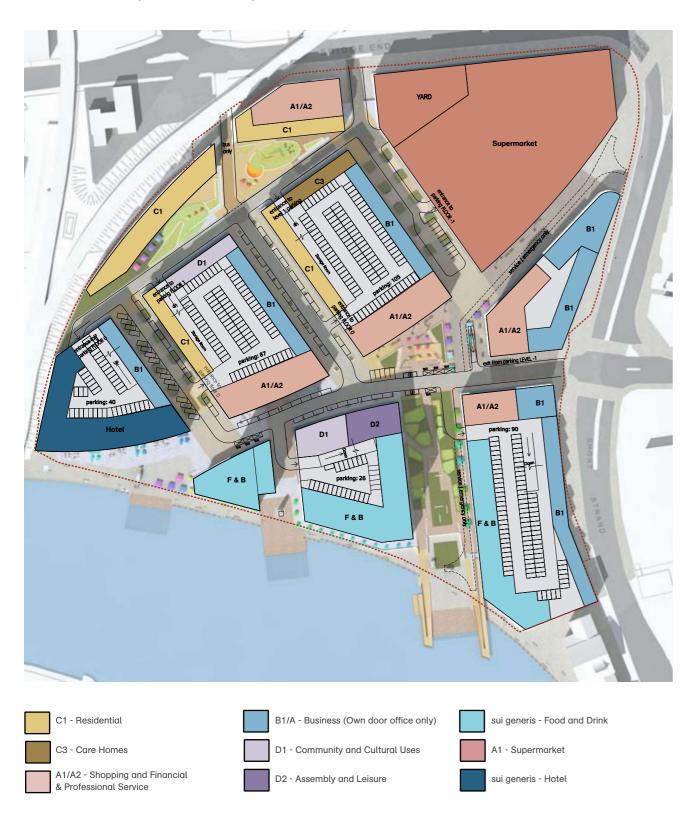
4.6.5 Place for the city domain

The city domain includes the social, cultural and leisure spaces and facilities within the Sirocco development which will attract people from all continents, nearby districts and counties to citizens of Belfast. It will become a cosmopolitan urban destination with the range and quality of activities to support it. These will include places for outdoor exhibitions, art galleries, urban squares and piazzas and the waterfront and its promenade as well as landmark buildings, a hotel, restaurants, coffee shops and cafes.

Combined, the result will be an energised quarter of a metropolitan disposition that caters for a diverse audience and allows for high levels of social interaction.



4.6.7 Floor 0 (Ground Floor)



4.6.8 Floor 2 - 5





4.6.9 Land Use Schedule

Below is an indicative land use schedule. It should be noted that a degree of flexibility is required to accommodate potential future uses they may present over the coming years, according to changing market and local demand.

	Use Class	Landuse	Area
FLOOR -1		420 bays DEDICATED Supmarket	11744 sqm
		507 parking bays for Residential	11829 sqm
FLOOR 0	C1	Residential	2194 sqm
	A1/A2	Local Retail & Services	3454 sqm
	A1	Supermarket	8600 sqm
	B1	Own door office / call centre / R&D	3982 sqm
	sui generis	Food and Drink	3536 sqm
	sui generis	Hotel	1679 sqm
	C3	Care Home	328 sqm
	D1	Community & cultural uses	764 sqm
	D2	Assembly & Leisure	436 sqm
		363 bays undercroft	10783 sqm
		79 bays on street	
FLOOR 1	C1	Residential	14706 sqm
	C3	Care Home	328 sqm
	A1	Supermarket	-
	B1	Own door office / call centre / R&D	910 sqm
	sui generis	Hotel	645 sqm
		224 bays undercroft	6890 sqm
FLOOR 2-5 (Areas are per floor)	C1	Residential	19412 sqm
	C3	Care Home	118 sqm
	B1	Own door office / call centre / R&D	1441 sqm
	sui generis	Hotel	645 sqm
FLOOR 6-7 (Areas are per floor)	C1	Residential	14870 sqm
	sui generis	Hotel	477 sqm
FLOOR 8-9 (Areas are per floor)	C1	Residential	10209 sqm
FLOOR 10-15 (Areas are per floor)	C1	Residential	3503 sqm
FLOOR 16-19 (Areas are per floor)	C1	Residential	1958 sqm
FLOOR 20-29 (Areas are per floor)	C1	Residential	416 sqm

Use Class	Use	Total
C1	Residential	175,636 sqm
A1/A2	Local Retail & Services	3,454 sqm
A1	Supermarket	8,600 sqm
B1	Own Door Office / call centre / R&D	10,656 sqm
sui generis	Food and Drink	3,536 sqm
sui generis	Hotel	5,858 sqm
C3	Care Home	764 sqm
D1	Community & Cultural	1,200 sqm
D2	Assembly & Leisure	436 sqm
TOTAL		211,334 sqm
	Provide 1094 undercraft parking, 79 on stree	et parking

RESIDENTIAL UNIT-TYPE SCHEDULE

Unit Type	% of total number of units	No of units	Carparking
Single Bed/ Studio	40%	960	None
Two Bed	17.50%	420	None
Two Bed	20.00%	480	1 Bay / Unit
Three Bed	20%	480	1 Bay/ Unit
Retirement	2.50%	60	None
TOTAL		2400	960 min