



OVERALL DESIGN
INCLUDING MAXIMUM HEIGHTS AND
EXTERNAL FINISHES OF STRUCTURES

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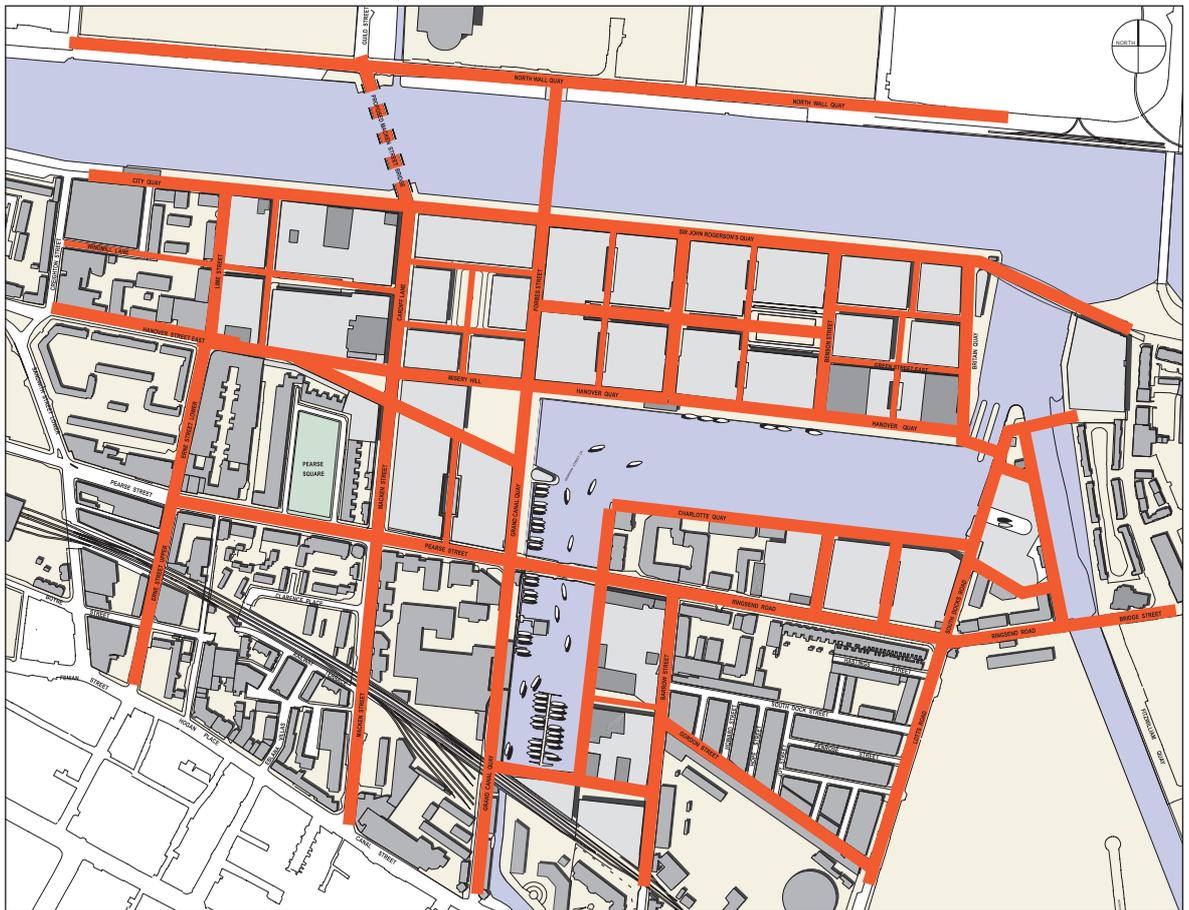


Diagram 7

5.1 KEY STRUCTURING PRINCIPLES

As a result of the layout of the docks and the area's historical uses a simple grid structure exists across the Area. The structuring elements are established by the existing street layout, key buildings and the necessity to sub-divide the site to create a permeable urban area. Creating and enhancing views on important routes, memorable structures and landscape features is to be encouraged, since this assists orientation and reinforces a sense of place.

New streets and pedestrian routes are proposed to link into the existing network which integrates the development into its wider context. These include: a pedestrian bridge across the River Liffey; a pedestrian link between Barrow Street and Grand Canal Quay; a public transport bridge across the mouth of the River Dodder; and a pedestrian bridge from the locks across the River Dodder to Thorncastle Street. The bridges and their landing areas will need to be designed in a manner that minimises impact on existing canal and river users. The precise design and location of the bridges will require further detailed study.

The resultant fine network of routes reduces travel distances, which in turn encourages walking and cycling to local facilities. The presence of more people and the choice of routes means that the streets are safer. All new streets and accessways should be designed in a manner which will ensure that public utility and emergency vehicles can service the development.

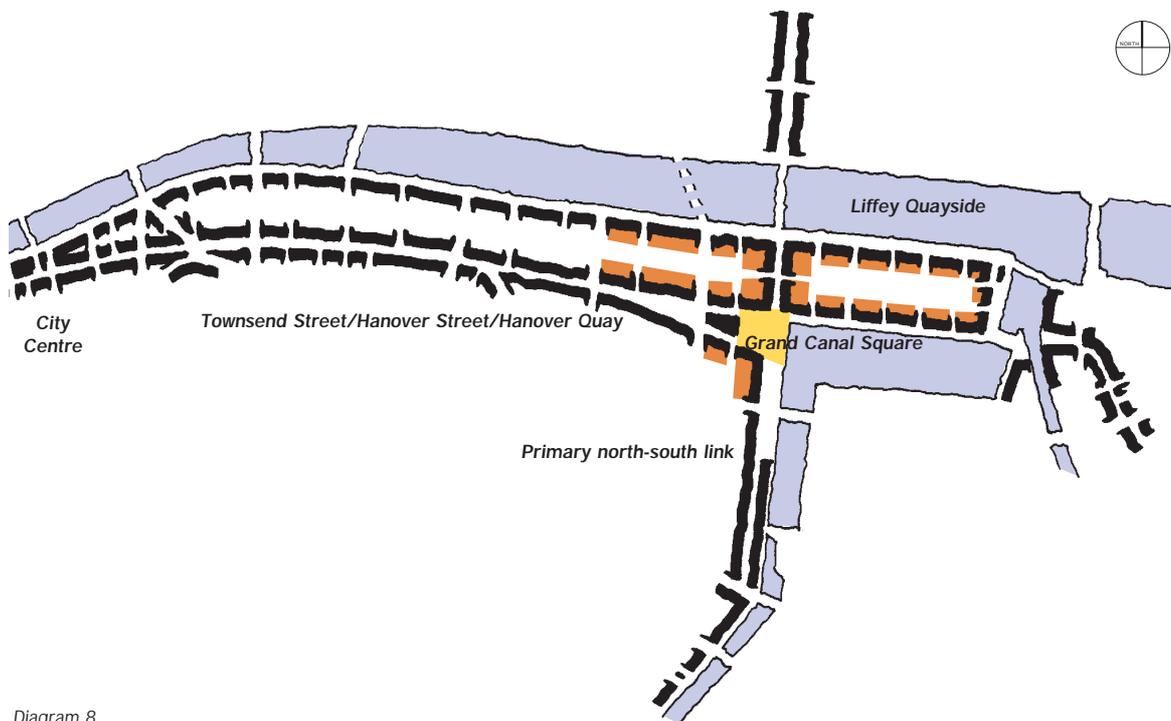


Diagram 8



Illustrative high quality public space

The two primary east-west pedestrian links comprise of:

- the Liffey quayside; and
- Townsend Street/Hanover Street/Hanover Quay

These form direct links between the city centre and the Area. The provision of pedestrian bridges across the mouth of the docks and the River Dodder extends these important links into Ringsend.

The primary north-south pedestrian link comprises Warrington Place, Clanwilliam Place, Grand Canal Quay and Forbes Street. A pedestrian bridge across the River Liffey should be aligned on this link, to connect the proposals for the north and south banks of the river.

The primary north-south and primary east-west pedestrian links intersect at the edge of the outer dock. A new public space, Grand Canal Square, should be located at this intersection, which would extend the character of the waterbody into the heart of the proposed development.

It is also envisaged that Hanover Street East will be widened in a triangular form at its eastern extremity to enhance the approach to Grand Canal Square. This will be an objective in any redevelopment of affected property.

In addition the landing point of the proposed Macken Street Bridge should be marked by an appropriate civic design response in the three dimensional configuration of the buildings facing onto the bridge. This might be achieved by an appropriately shaped set-back space or an architectural design feature.



Diagram 10



Model from "Making a Modern Street" Group 91

5.2.1 Blocks fronting the River Liffey and Macken Street

Accessibility on Macken Street and around the junction of Cardiff Lane and Sir Rogerson's Quay is good. The blocks fronting the River Liffey and Cardiff Lane/ Macken Street have a good profile and are therefore desirable locations for larger scale development. There is a strong demand for such larger scale developments which are important to provide balance and sustainability to the economy of the area. This is one of the few locations within the city which can accommodate large office buildings. The combination of good access and profile indicates that blocks fronting the Cardiff Lane/Macken Street and the River Liffey should be suitable for larger scale units. The large floor plates create coarse grain suitable for this location. The coarse grain is particularly appropriate along the River Liffey frontage. This creates an urban continuity from the Area to the city centre.

5.2.2 Blocks fronting the outer basin

The blocks that front the outer basin should be of a fine grain. This creates smaller floor plates that should be in this location. These blocks should be developed using principles of "Making a Modern Street", Group 91. The fine urban grain establishes the sub-divisions of each block.

5.2.3 Blocks fronting the residential east-west street

The blocks fronting the new east-west street, on the former Dublin Gas production site, should be of a fine grain. It is considered that these blocks could be partially developed as 'own front door' accommodation.

5.2.4 Blocks fronting the inner basin

The urban grain of the Barrow Street area is defined by the existing notable structures. It is recommended that the protected structures should be conserved since they create a unique character area. It is recommended that the areas in between the protected structures should be sensitively infilled to enhance this area.

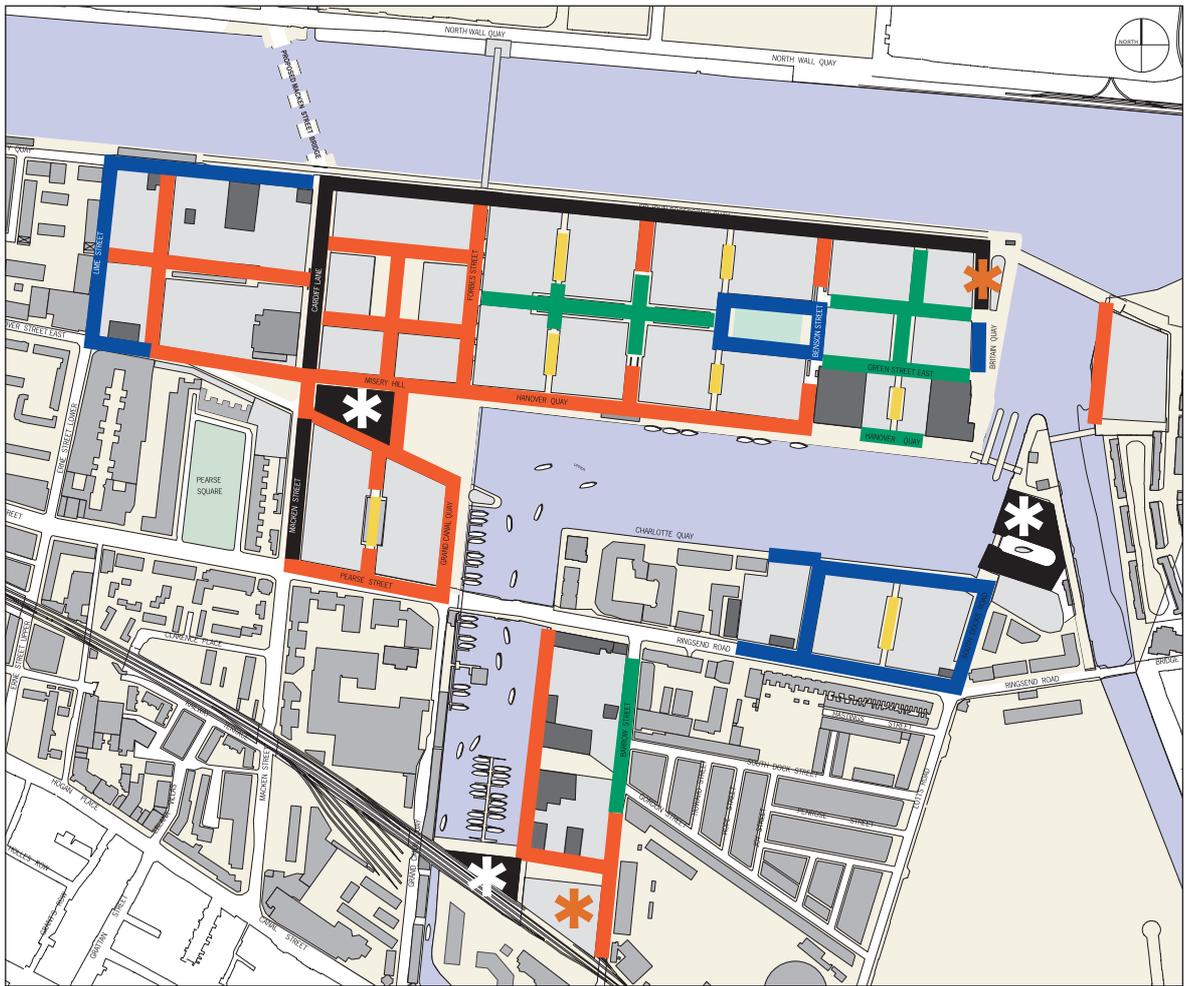


Diagram 11

5.3 BULK SCALE AND MASSING

The bulk, scale and massing of the development blocks are established by the optimum scale of enclosure and the density requirement for the Area. The development should have sufficient mass to accommodate a rich mix of uses, but should retain a human scale and avoid overshadowing.

Building heights should range between three and seven storeys (plus a possible set-back storey), depending on their location and use. Building heights and the width between building frontages are inter-related and have been established by the route hierarchy. Specific locations for landmark buildings are identified.

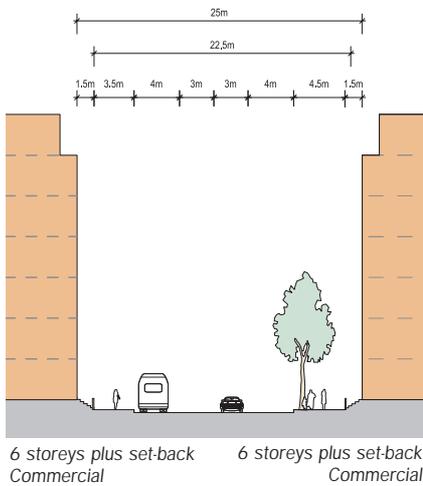
A clear definition between public and private space should be established to create a pleasant, safe environment. Continuous street frontages should be developed without blank walls, to maximise surveillance.

The following guidelines establish the principles for the bulk, scale and massing for the Grand Canal Dock development:

Note: The asterisk symbol on Diagram 11 does not indicate a precise location for a high landmark building but shows the general location considered suitable for such a building.

Key

- 6 storeys commercial or 7 storeys residential (all plus 1 possible set-back storey)
- 5 storeys commercial or 6 storeys residential (all plus 1 possible set-back storey)
- 5 storeys (plus 1 possible set-back storey)
- 4 storeys (plus 1 possible set-back storey)
- 3 storeys (plus 1 possible set-back storey)
- Protected structures and buildings to conserve
- ★ High landmark buildings
- ☆ Low landmark buildings



5.3.1 Main Street & Quayside Development

The main streets and waterfronts should be lined by the higher buildings, as shown on Diagram 11. The height is determined typically by a 22metre shoulder, which equates with six storeys of commercial, or seven storeys of residential with provision for a further set-back storey which should be set back a minimum of 1.5 metres. Additional height may be permitted at corners where it contributes to the architectural definition of the corner, provided it does not cause amenity problems in terms of overshadowing and/or overlooking and does not detract from the general massing structure, as indicated in the Planning Scheme.

The set-back reduces the overall impact and overshadowing whilst enabling sufficient density to be achieved. In determining these storey heights a rigid parapet height is not being adopted but would expect variety to arise from the variations normally experienced in floor to floor heights in different residential and office formats.

The protected structures, on the main streets and quays, are of a different scale. Buildings adjacent to protected structures should respect them, for example by reducing their heights and increasing their set-backs.

An interface should be provided between the building line and the pavement. This should be a maximum of 1.5 metres. The interface creates a clear definition between private and public space and facilitates disabled access. A level difference of approximately 0.9 metres should be dealt with in the interface. This level difference is due to the ground floor levels being raised to meet recommended levels in case of global warming, whilst the quays and Cardiff Lane/Macken Street remain at their existing level. Special consideration should be given to disabled access. The ground floor being raised enables surveillance of the public realm without reducing people's privacy.

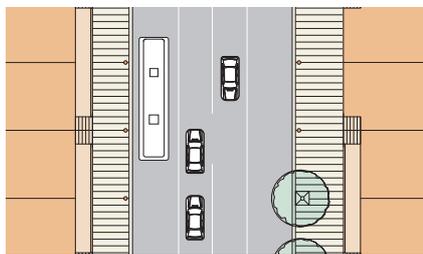


Diagram 12 - Illustrative section and plan of Cardiff Lane

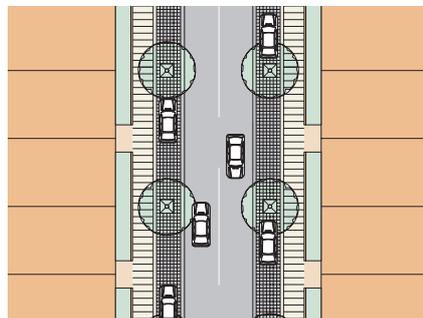
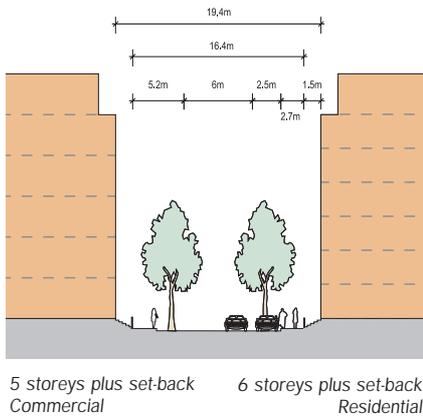
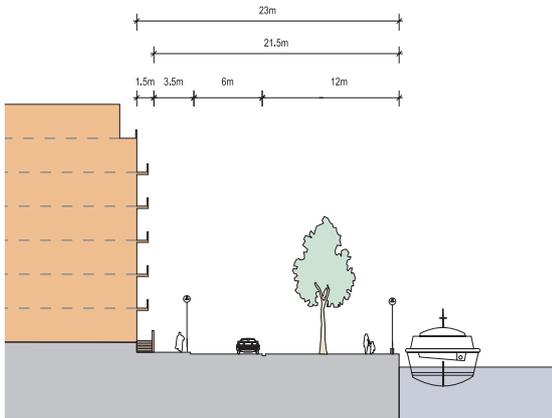
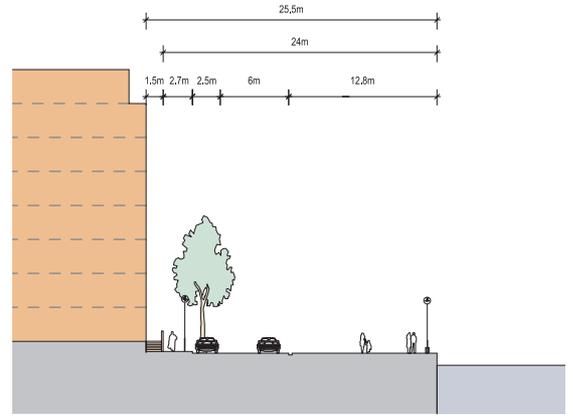


Diagram 13 - Illustrative section and plan of a typical main street



5 storeys plus set-back commercial or
6 storeys plus set-back residential



6 storeys plus set-back commercial or
7 storeys plus set-back residential

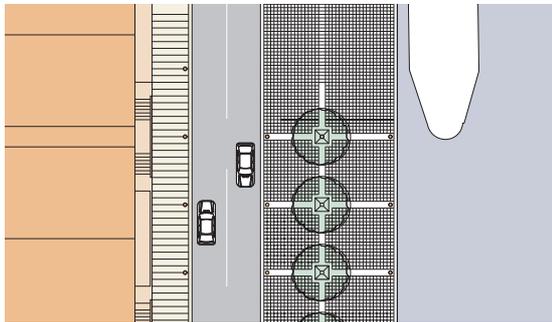


Diagram 14 - Illustrative section and plan of buildings fronting
Grand Canal Dock

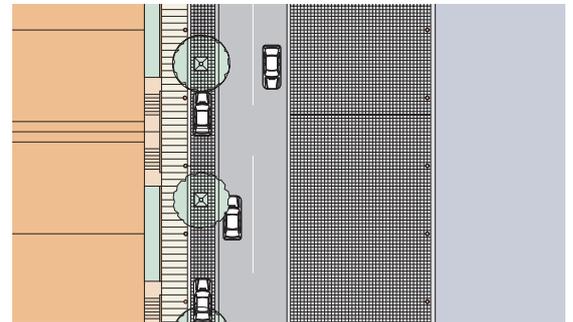


Diagram 15 - Illustrative section and plan of buildings fronting the
River Liffey

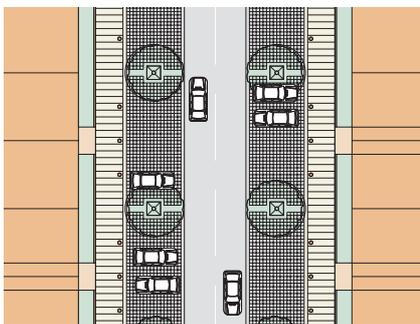
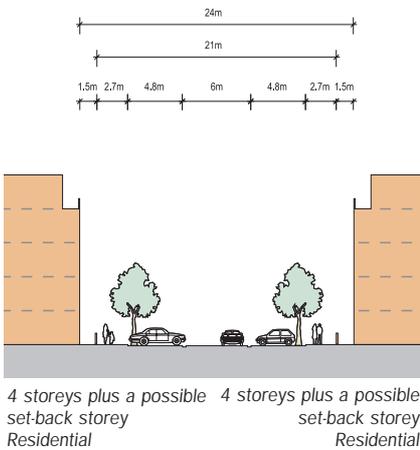
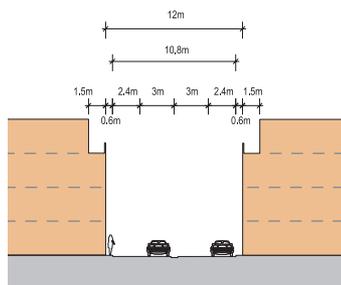


Diagram 17 - Illustrative section and plan of new east-west street



3 storeys plus a possible set-back

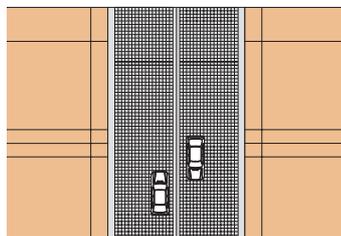


Diagram 18 - Illustrative section and plan of mews

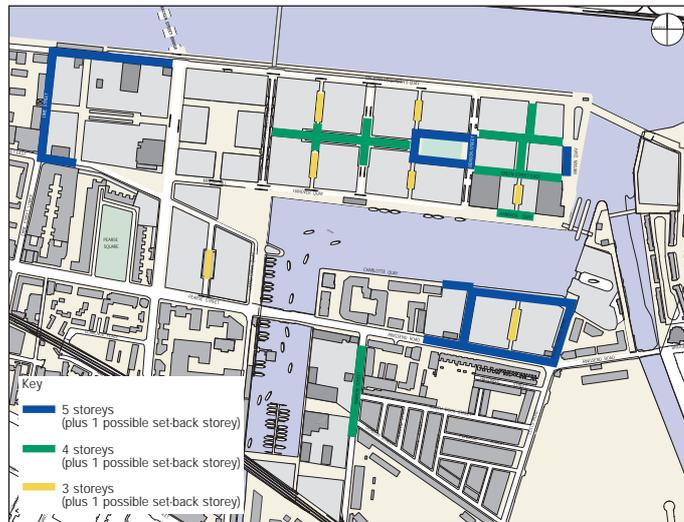


Diagram 16

5.3.2 East-West Street Development

The development along the new east-west street could be four storeys, as shown on Diagrams 11, 16 and 17. This could provide 'own front door' family housing, with direct access from the street. The ground and first floor should be connected as one unit with a garden. The second and third floor should form another unit. The lower building height reduces overshadowing of the private gardens and the street, which creates a pleasant living environment.

An interface should be provided between the building line and the pavement. This should be a maximum of 1.5 metres. The interface creates a clear definition between private and public space. There is no level difference between ground floor and street level since the entire area is raised.

5.3.3 Five Storey Development

A number of locations are identified and shown on Diagrams 11 and 16. Generally, due to their proximity to existing lower buildings, these locations are not considered appropriate for higher buildings.

5.3.4 Mews Development

The mews developments run north-south, as shown on Diagrams 11 and 16. They enable greater permeability through the blocks. The buildings could be three storeys plus a possible set-back storey to minimise overshadowing of gardens and courtyards. They could provide a different scale of unit, for example live-work units.

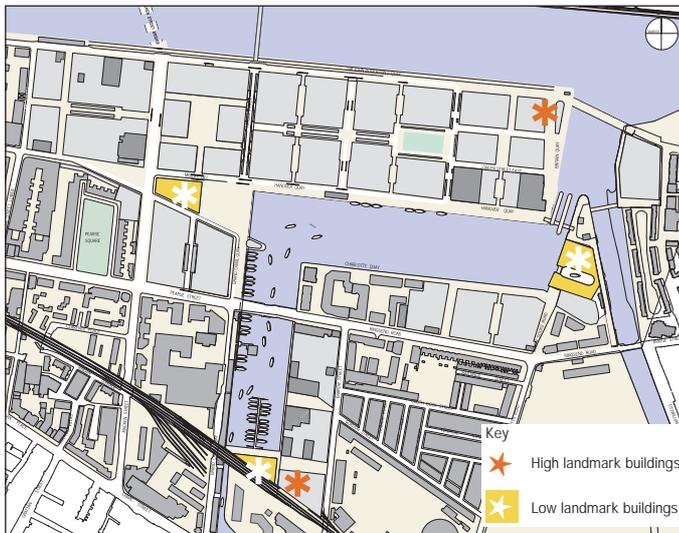


Diagram 19



High landmark building - Millennium Tower at Charlotte Quay Dock development

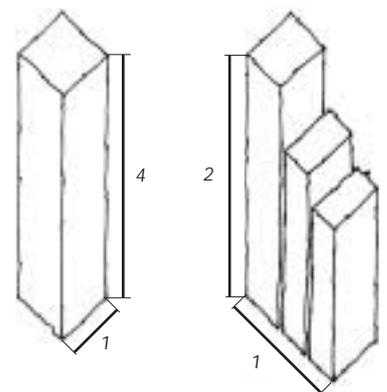
5.3.5 Landmarks

Sensitively designed landmarks enhance the urban quality of an area, adding interest and points of reference that aid orientation. A number of landmark sites are identified and shown on Diagrams 11 and 19. Certain locations are recommended for high landmark buildings and others for low landmark buildings.

High landmarks should be sensitively designed to avoid causing excessive overshadowing. The high landmark building shown situated at the junction of Sir John Rogerson's Quay and Britain Quay shall not exceed 60 metres in height above pavement level. That shown located close to Grand Canal Dock Station shall not exceed 50 metres in height above pavement level. A suitable slenderness ratio shall be adopted in both cases to create an image of a tall slender building. The slenderness ratio shall not be less than 4:1 in the case of a building having an integrated three dimensional form or 2:1 in the case of a building with a dis-aggregated three dimensional form. As indicated in paragraph 4.9.3 the design of a tall building adjacent to the Grand Canal Dock Station will present a difficult design challenge in view of the proximity of both low rise and the protected structures.

Due to the generic nature of the Planning Scheme and its accompanying EIS which cannot measure the detailed impact of a specific high landmark building, the Authority will require a detailed EIS to be submitted as part of any application for a Section 25 Certificate for any such building proposal. The purposes of this detail EIS is to ensure that the urban design and other environmental objectives required for the Planning Scheme are achieved.

Special low buildings can function as landmark buildings. They may be considered as landmarks due to their special architectural quality or the use of the building may make them landmarks in their own right.



4:1 slenderness ratio integrated form

2:1 slenderness ratio dis-aggregated form

Diagram 20



Low landmark building



Diagram 21 - Diagrammatic view of the Grand Canal Dock Development, from the north



Diagram 22 - Diagrammatic view of the Grand Canal Dock Development, from the south

5.4 ARCHITECTURAL DESIGN

This Planning Scheme establishes the principles for the built form of the Area. The architectural design should be of the highest quality. The following guidelines establish principles for entrances, corner elements and materials:

5.4.1 Entrances

The primary access to buildings should be from the street with entrances at no more than 15 metre intervals. However, entrances to commercial development fronting the River Liffey and Cardiff Lane/Macken Street may exceed this distance. This increases activity and improves surveillance on the street. Accommodation on the ground floor should have private front doors which will maximise the number of entrances on the street. The number of units accessed from a common stair should be minimised, giving people more privacy and control.

The entrances of all buildings should be reflected both in scale and form to establish a clear identity to the building. This should be achieved by use of vertical elements which project beyond the setback line, have different façade treatments, or have larger openings in the façade.

5.4.2 Corner Elements

Corners are prominent elements which help to give a place an identity and positively contribute to the public realm. Corners should be positively addressed with special treatment such as creating a feature or raising the height.

5.4.3 Combined Heat and Power

Designers should be conscious of minimising energy consumption and buildings should be designed to achieve high insulation standards. Combined Heat and Power has been used in previous Docklands projects and its development in the Area will be encouraged.

5.4.4 Materials and External Finishes

The new development should reflect the materials characteristic of the GCD area. Combining high quality modern materials and natural old materials can add to visual diversity. Natural colours should be used. All materials should be durable to avoid long-term maintenance problems.

Designers should specify sustainable materials insofar as possible by considering the environmental effects arising from construction materials over their entire cycle, from raw material sourcing and extraction, through processing, infrastructure, transportation, use on site, future repair and maintenance, and on to eventual demolition and disposal.

5.4.5 Waste Management

Designers and construction companies will be expected to adopt best practice to minimise construction waste arising before, during and after the use of construction materials. Waste management plans should be adopted and policed by regular audits. Building designs should incorporate best practice in occupational waste management.

5.4.6 Water Conservation

It is expected that best practice in conserving water will also be adopted in the development of the Area.



Historic quayside landscaping to be retained



Illustrative prominent corner



Materials characteristic of the area

5.5 POLICIES

The Authority will:

- 1 Require a high standard of architectural design in all buildings, together with high standards in the design of ground finishes, street furniture, landscaping and signs.
- 2 Encourage designers to recognise the importance of the treatment of spaces between buildings whether they be streets, squares, waterways or open spaces.
- 3 Ensure that streets and spaces link together in an interesting manner to exploit frontage and landmarks, and ensure that functions, particularly at ground level, actively contribute to the animation of the public realm.
- 4 Encourage the design of buildings that are proportionate to the scale of their surroundings and ensure that the architectural design articulates frontage, entrances, corners, etc.
- 5 Require coherent architectural expression to this section of the river front so that the Liffey Corridor can be read as an entity.
- 6 Retain but also develop the original orthogonal road layout characteristic of the area to create a block structure and urban grain as shown in Diagrams 9 and 10.
- 7 Require designers to create coherent enclosures to streets and public spaces by avoiding broken three-dimensional building forms.
- 8 Require designers to design streets and spaces to be self-policing to create a sense of security for users.
- 9 Require designers to articulate clearly public, semi-public and private space.
- 10 Require building heights not to exceed the maximum heights shown on Diagrams 11 to 19 inclusive. It should be noted that the heights are expressed as main parapet heights. The Authority will consider architectural features standing above the main height limitation provided they contribute to the architectural design qualities of the building. It will also consider additional height within the body of a site provided it does not impact on the civic design qualities of the streets and spaces as articulated by the dimensional criteria set out in this chapter.
- 11 Require buildings to conform to the building lines established for the streets and spaces as shown on diagrams 9 to 19 inclusive.
- 12 Require external finishes to be of good quality with a significant use of natural materials such as stone combined with lightweight structural and glazed elements.
- 13 Seek in particular to animate the section of Hanover Quay fronting the Grand Canal Dock by the use of fine grain development based on smaller site sizes and smaller building floor plates.
- 14 Seek the development of landmark buildings in the location shown in diagrams 11 and 19.
- 15 Require designers to be conscious of specifying materials which are sustainable.
- 16 Encourage the provision of Combined Heat and Power in new developments.
- 17 Require developers to minimise waste through the application of waste management plans.
- 18 Require the adoption of best practice in conserving water in the development of the Area.