

Text

North Lotts & Grand Canal Dock Planning Scheme

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Chapter 1

1.1 The Challenge and the Opportunity

The urban regeneration of Dublin's docklands and redundant Port areas, over the last two decades, compares positively with the best international examples globally. While the Master Plan prepared by the Dublin Docklands Development Authority (DDDA) covered an area of approximately 520 hectares, the centre of gravity of redevelopment focused on the areas in the North Lotts, extending eastwards from the Custom House Docks [phase 1 &2], and on the Grand Canal Dock area south of the river. During this period a fledgling financial services sector has consolidated and expanded and has been supplemented by legal and digital services sectors. A critical mass of knowledge economy jobs has created a new business quarter which is redefining the role of the inner city at the heart of the Dublin City Region and is a key player in the national economy.

The economic development has been paralleled by integrated urban planning which has sought to achieve high quality in urban design and architecture. A series of new character areas incorporating a grid pattern of streets and new public space has included a substantial ratio of quality residential uses to complement the business sector accommodation. The emphasis on neighbourhood has included a diverse programme of social initiatives aimed at delivering community infrastructure and gain and tackling social disadvantage.

While the positive achievements of the DDDA over the past 20 years must be acknowledged, there are also major difficulties associated with the current context. The collapse of the banking sector, combined with a major downturn in the Irish economy, has had a profound impact on the development sector and on the regeneration programme within docklands. Most major property developers are now linked with NAMA - there is paralysis in the construction sector, and investor confidence has dried up. While this current position of development inactivity is temporary, there is a need to reflect on a complex new context and build consensus about how the situation can be moved forward. The SDZ Planning Scheme is geared to unlock the current set of difficulties and provide a blueprint for the years ahead. In renewing the vision, the SDZ process has drawn on a wide set of new perspectives, aimed at consolidating the platform achieved but also providing a sustainable underpinning for the future.

The SDZ Planning Scheme puts forward a set of high-level themes geared to highlight those areas that are seen to be part of the strategic answer. The economic platform is central but it must be counterpointed by success in the area of social regeneration. A vision of sustainability must drive a framework that can ensure gaps in infrastructure are addressed and that implementation delivers a building fabric that is of high quality, conserves energy, and responds well to operational management over a long life-cycle.

Social sustainability also needs a radical new vision to persuade Government of the need for positive discrimination, to address chronic embedded social disadvantage, and step outside current criteria for investment and assistance. The SDZ Planning Scheme points to the need for a new public discourse on the social challenge in the inner city and docklands and for an alliance of new energy drawn from well disposed partners such as Trinity College and Dublin Port. The notion of 'smart city' and collaborative citizenship, assisted by technology and social media suggests there is a major potential to forge an energetic community of thinkers and actors capable of developing new understanding and powerful arguments for the right interventions.

While buildings accommodating economic and residential uses constitute the vast majority of land-use, the making of successful 'Place' and the building of a unique identity must draw on many elements. The extensive consultation during the pre-draft period has emphasized the importance of heritage and the contribution of protected structures and industrial archaeology to the making of

streets and spaces. Likewise there emerged a consensus that the maritime character should be optimized and again this is strongly reflected in the design approach of the SDZ Planning Scheme.

The urban structure and urban design of the SDZ is where the thrust of high level themes and core objectives find expression. The spatial layout is also informed by key structuring principles which articulate the role of major elements such as the river, the line of Luas, the hubs, the north-south streets and the strategic urban squares. Protected structures and view corridors have also a critical influence.

The SDZ of course is not a greenfield site; it is a work in progress that is now set to move forward in a somewhat different direction and under new stewardship. There is a complex legacy of regulation, in terms of planning consent, that has to be acknowledged as part of the current context. It is important however that historical non-implemented permissions do not stymie the creation of a coherent and high quality urban layout. NAMA has a key role to play in facilitating a consensus in relation to a large number of sites in which the Agency has an interest. The methodology used to drive the urban design on the major urban blocks is three-fold [a] Identify the important existing constraints [b] Articulate the core objectives for the block [c] Draw up the preferred solution.

It is important to keep in mind that the SDZ is not an island. It is a critical component of the original 520 hectares constituting the designated spatial area of the Docklands Master Plan [2008], an area containing long established communities and extensive under-used brownfield sites.

The SDZ also sits close to the city centre but suffers from a degree of disconnection and isolation in terms of public mind-set. The regeneration of Docklands is in the process of building a powerful eastern flank to Dublin's inner city and is strategically and spatially placed to repair and re-establish the Capital's relationship to the sea. The SDZ Planning Scheme outlines how these strategic connections can be strengthened.

1.2 Statutory Context

1.2.1 Introduction & Context

Part IX of the Planning and Development Act 2000-2011 provides for the designation of a Strategic Development Zone (SDZ) to facilitate development which in the opinion of the Government is of economic or social importance to the State.

The Government designated lands at North Lotts and Grand Canal Docks in the Dublin Docklands as a site for an SDZ on 18 December 2012 and specified Dublin City Council as the Development Agency (SI No 530 of 2012). Where land is designated as an SDZ by Government Order, a Planning Scheme must be prepared by the Development Agency before any development can be permitted in the SDZ Area, under SDZ legislation.

1.2.2 Why an SDZ for Docklands

The SDZ designation, as proposed by Dublin City Council, follows the Government's decision in May 2012, to wind up the Dublin Docklands Development Authority (DDDA), but with a simultaneous commitment to ensure the continued regeneration of the Docklands Area. The SDZ designation provides for a continued fast-track planning mechanism so as to maintain the focus on the social and economic regeneration of the area.

The SDZ, as a holistic plan-led approach with fast-track planning procedures, is an appropriate mechanism to sustain the good work and significant achievements of the DDDA in terms of regenerating a city quarter, successful urban-place-making, employment creation, community engagement and marketing the Docklands internationally.

The SDZ offers a coherent spatial and urban planning approach and is considered the most appropriate and effective mechanism to deliver the remaining parts of this area of economic and social importance to the city and state. The area represents a strategic landbank with economic, cultural, community and recreational assets in the city context and in the national context, a major employment hub and driver of the economy.

One of the major advantages of the SDZ process is the wide-ranging consultation measures built in to the preparation of the SDZ Planning Scheme enabling an inclusive involvement and input from the full range of stakeholders in the area. The SDZ Planning Scheme process can facilitate residents, businesses, potential investors and other interested parties to help shape the future planning and build-out of this strategic city-centre location. In this context, significant pre-consultation with the key stakeholders was undertaken including community representatives, business representatives, landowners, urban designers and statutory agencies, as part of the pre-draft preparation stage.

Dublin City Council is also undertaking a separate assessment of the existing Docklands Masterplan vis á vis the provisions of the Dublin City Development Plan to ensure that most appropriate instruments are put in place to deliver on the broader objectives and to facilitate the socio-economic regeneration of the entire Docklands Area. This assessment will involve close engagement with communities, business and other key stakeholders in the area.

1.2.3 Designation of North Lotts and Grand Canal Docks SDZ

The Minister designated the North Lotts and Grand Canal Dock SDZ as an SDZ for the following reasons:

- The potential and need for comprehensive planning and development of the site due to its economic and social importance to the State;
- The efficient use of public investment in infrastructural facilities; and
- The giving of effect to the policies contained in the development plan made by Dublin City Council in accordance with section 9 of the Act of 2000.

1.2.4 SDZ Description & Context

The vast majority of the Docklands Area has either been successfully redeveloped over the past two decades or relates to long-established residential communities in the vicinity of the development sites, save for the Poolbeg Peninsula. However, there are a number of strategic sites and vacant lands at the core of the regeneration area at North Lotts and Grand Canal Dock which need to be developed to consolidate the achievements to date and to help sustain a critical mass necessary to support a vibrant mixed-use urban quarter and to attract inward investment. The SDZ incorporates these sites and this is where the greatest focus and pressure for redevelopment is likely to occur in the short to medium term.

The SDZ Area comprises some 66ha of the overall 520ha Dublin Docklands Area as set out in the Dublin Docklands Masterplan 2008 and relates to the extent of the DDDA's North Lotts and Grand Canal Dock Section 25 Planning Schemes. The SDZ Area is illustrated on Fig. 1. The developed and undeveloped lands in the SDZ are shown in Fig. 2.

The SDZ lands extend north and south of the river at a strategic location: North Lotts immediately adjoins the IFSC and Grand Canal Dock is in close proximity to the city's central business district and south city retail core area. The SDZ will support an eastward extension of the city and is well-served by high quality public transport including Luas, DART and mainline rail commuter service, whilst the more long term proposals for a DART Underground Station at Spencer Dock will potentially result in the lands becoming the most accessible and connected part of the city and state.

Fig. 1 - SDZ Area

Fig. 2 - Developed and Undeveloped Lands (*See separate booklet for Figures*)

The area also encompasses a number of strategic assets such as the Convention Centre at Spencer Dock, the O2 at the Point Village and the Bord Gáis Energy Theatre at Grand Canal Dock and has the potential to become a major magnet for cultural and leisure uses of national importance consolidating the economic role of this new urban quarter. The presence of nationally significant theatres along with small independent galleries and high-profile public art means that this area is also emerging as a new cultural destination in the city.

The Samuel Beckett Bridge provides a vital link between the two locations north and south of the Liffey and it is important from a city and international perspective that they be considered as a single entity in the one SDZ, so that the eastward extension of the city can be considered in one coherent development framework.

The extent of the proposed SDZ Planning Scheme reflects a sequential approach to development and the need to ensure the effective consolidation of the IFSC and the mixed-use hub at Grand Canal by building out the remaining brownfield sites and optimising public investment on infrastructure which to date includes strategic transport infrastructure and public realm projects of city-wide importance.

It is acknowledged that, to facilitate the continued socio-economic regeneration of the wider Docklands Area, there is a need to address areas beyond the SDZ boundary and/or to prepare additional Planning Schemes / Local Area Plans at some future stage, in particular to deal with the remainder of the North Wall Area, the CIÉ lands to the north of Sheriff Street and/or the Poolbeg Peninsula.

1.2.5 SDZ Development Capacity

Within the 66ha of the North Lotts and Grand Canal Dock SDZ, the remaining sites for development equate to circa 22ha, which represents significant development potential for major economic and community expansion, a substantial scale in the context of city-centre regeneration.

The remaining sites are roughly equivalent in scale to the entire Custom House Docks/IFSC Area (24ha). In this context, it is relevant to note that the IFSC area alone generated an employment capacity of circa 24,000 persons at the end of 2010, whilst the figure for the overall Docklands Area is in excess of 40,000.

On the basis of the development capacities set out in this scheme, the 22ha of available lands could accommodate an estimated 2,600 residential units and 305,000m² of commercial floorspace, which equates to a residential population of circa 5,800 and circa 23,000 workers.

1.2.6 Planning Scheme Boundary

For the avoidance of doubt, the Planning Scheme boundary equates to the SDZ Area as designated by the Minister. This area replaces the two DDDA Section 25 Planning Schemes, namely the North Lotts Planning Scheme and the Grand Canal Dock Planning Scheme. The area as designated is also identified as a Key Developing Area (KDA) and Strategic Development and Regeneration Area (SDRA) under the core strategy of the Dublin City Development Plan 2011 - 2017.

1.2.7 SDZ Process

Where land is designated as an SDZ by Government Order, the planning authority must prepare a draft planning scheme in respect of all or any part of the site within 2 years of the Government Order. This means that the planning scheme for the North Lotts and Grand Canal Dock SDZ must be prepared by 18 December 2014. However, given the substantial preparatory work and extensive

stakeholder consultation carried out by the City Council with support from the with the DDDA, prior to the designation, it is anticipated that the associated SDZ Planning Scheme for Docklands be in place by the end of November 2013, to coincide with the expiry of the DDDA's Masterplan for the Dublin Docklands Area. This approach allows for the necessary statutory consultation procedures and accords with the Government's commitment to ensure a seamless transition.

Dublin City Council, as the specified development agency, was responsible for the preparation of the Planning Scheme for the North Lotts and Grand Canal Docks SDZ. The City Council has undertaken wide-ranging consultations to inform and shape the preparation of the SDZ Planning Scheme, with input from the Docklands Board, Council and Community Liaison Committee.

The Planning Scheme was subject to a six-week public display period for written submissions or observations, and the City Manager prepared a report on such submissions and observations, including any recommendations, for consideration by the Elected Members of the Council.

The Elected Members of the City Council approved the Planning Scheme on 5th November 2013. Following the Members decision on the making of the Planning Scheme, any person who made submissions or observations in respect of the draft Planning Scheme may, within a four-week period, appeal the decision of the planning authority to An Bord Pleanála.

Once the Planning Scheme comes into effect, development within it will require planning permission. Planning permission shall be granted where the development, if carried out in accordance with the application or subject to any conditions which the planning authority may attach to a permission, would be consistent with the Planning Scheme. Planning permission shall not be granted for any development which would not be consistent with such a planning scheme. Third parties will be afforded the opportunity to make an observation on development proposals during the statutory five-week period. However, no party may appeal to An Bord Pleanála any application for permission in respect of a development within the area of the Planning Scheme, given the nature of an SDZ as a fast-track planning mechanism.

1.2.8 Pre-Draft Consultation

As described in paragraph 1.2.7 above, the SDZ Planning Scheme was the subject of a statutory consultation process. However, in order to inform the preparation of the Scheme an extensive pre-draft consultation exercise has been carried out over 6 months since September 2012, in anticipation of the designation by the Minister. This consultation has included meetings with the business community, the local residential community and a range of statutory bodies and service providers. The Docklands Board, Docklands Council and Elected Representatives for the area have also been engaged in the preparation of the Planning Scheme by way of regular updates and feedback. A notable feature of the consultation to date has been the holding of a week-long on-street conversation which yielded over 500 responses which have been taken on-board also.

1.2.9 SEA & AA

The Planning Scheme has been prepared in accordance with the requirements of the Planning and Development Act, 2000 (as amended), the Planning and Development (Strategic Environmental Assessment) Regulations 2004 and Article 6 of the Habitats Directive 92/43/EEC. The Strategic Environmental Assessment (SEA) and Appropriate Assessment (AA) processes, undertaken in tandem with the preparation of the Draft Planning Scheme, have ensured full integration and consideration of environmental issues throughout each stage of the preparation process.

The SEA Statement and AA Conclusion Statement / Natura Impact Statement demonstrate how the findings of Environmental Report (ER) and Natura Impact Report (NIR) were factored into the Planning Scheme and also indicate the rationale for the strategy as chosen in the Planning Scheme.

The SEA and AA were updated throughout the process and are available for viewing at www.dublincity.ie

1.2.10 Transitional Arrangements - Section 25 Planning Process to SDZ

On designation of the North Lotts and Grand Canal Dock SDZ, the Government emphasised the importance of facilitating continued development activity in the area, especially where there is scope to attract new businesses, including major multinational firms, who may wish to establish offices in the Docklands or SDZ Area. To this end, the Government is committed to providing a seamless transition from the Section 25 planning process to the new SDZ arrangements to maintain momentum and foster market interest. In this regard, the Minister has advised that appropriate arrangements will be made to enable a smooth transition, including legislative clarity where necessary, regarding the completion of developments granted certification and under construction. Dublin City Council will proactively liaise with the Government and DDDA to expedite the transition phase.

1.3 Historical Context

The reclamation of large areas of mudflats on the north side and south side of the Liffey to create the docklands, largely took place between 1717 and 1760.

On the north side, the North Lotts and East Wall area was fully reclaimed and the distinctive new grid street pattern, which remains today, was laid out by the 1750's following the construction of the North Wall. During the 1790's, the Custom House, designed by James Gandon, was completed and the adjoining Custom House Docks opened for trade. The Royal Canal, linking the new docks to the Shannon was completed by 1806. However, the new railway era in the mid nineteenth century resulted in both the demise of the canal and the expansion of the docks for both freight and passenger trade. From the 1850's onwards the North Lotts became a busy international port including saw mills, cattle yards, vinegar works and associated industries.

The south Docklands developed in broadly the same manner as the north Docks. Between 1717 and 1760 Sir John Rogerson's Quay was built and an extensive area extending approximately 1km from the City Centre to the River Dodder and southwards to South Lotts Road was largely reclaimed. In 1796, the Grand Canal Dock opened, attracting warehousing, grain stores and flour milling to the immediate locality.

The dry dock on the triangular peninsula between the Grand Canal Dock and the River Dodder was infilled in 1918. The industrial character of the South Docklands expanded during the 19th century to eventually include gas production, bottle making, sugar refining and fertiliser manufacturing.

Shipping activity had ceased in the North Wall and Grand Canal Docks by the 1990's.

In more recent times, the Custom House Docks Development Authority was set up in 1986 in order to secure the regeneration of the Custom House Docks. In 1987, the IFSC was established with Government tax incentives, eventually employing some 22,000 people.

Since 1987, when the first specific regeneration agency was set up to co-ordinate and develop the social, physical and economic regeneration of the Docklands, some 765,000m² of commercial space has been permitted and the population of the Docklands has grown from 17,000 approximately to 27,000, and is recognised as a major success. In recent years, major digital, media, legal and financial services employers have relocated to the area. Significant cultural and event buildings have been constructed, e.g. the National Convention Centre and the Bord Gáis Energy Theatre, thereby extending the mental map of the city. On the north docklands a new Luas extension to the Point Village has been built. The challenge now is to create a new maritime city quarter with a strong economic and social base, with both the new communities and the more established communities actively contributing to a shared future.

Fig. 3 - 1797 Plan Of Dublin Engraved By Samuel John Neele (*See separate booklet for Figures*)

1.3.1 Background to Docklands Regeneration

The Docklands regeneration process effectively commenced with the Urban Renewal Act, 1986 which established the Custom House Docks Development Authority (CHDDA) whose remit was to secure the physical regeneration of the Custom House Docks. In 1987, the Government established the International Financial Services Centre (IFSC) at this location and the Custom House Docks Planning Scheme, 1994 was prepared by the Authority.

The Dublin Docklands Development Authority (DDDA) was subsequently established under the Dublin Docklands Development Authority Act, 1997, to lead a major programme of physical, social and economic regeneration. The DDDA was responsible for a much more extensive area in excess of circa 520ha which is defined as the 'Docklands Area' under the Act. The Area encompassed the former docklands sites which, at the time, were substantially derelict or low-value industrial land extending to circa 100ha at the very core of the area and also included a number of long-established communities for example at Sheriff Street, East Wall, Pearse Street and Ringsend. Notwithstanding a very strong and active sense of community, there was evidence of severe economic and social challenges in the area with high levels of unemployment and poor educational levels.

Accordingly, the 1997 Act broadened the concept of urban regeneration to include social, economic and environmental considerations in addition to physical renewal. The Docklands Authority also subsumed the functions of the CHDDA which included promoting and facilitating the IFSC.

Sections 24 & 25 of the 1997 Act set out the requirement for the DDDA to prepare a Master Plan and Planning Schemes for the Dublin Docklands Area. The Authority prepared three successive Master Plans 1997, 2003 and 2008 and two Planning Schemes for Docklands North Lotts and Grand Canal Docks. Under these plans, the authority has achieved the successful regeneration of the majority of former industrial and harbour lands in close collaboration with the community, transforming derelict and contaminated disused harbour-front lands into an attractive urban living and working city quarter with waterfront access, along with an effective social regeneration framework with an emphasis on community infrastructure and gain for the surrounding communities of the Docklands Area.

Notwithstanding the significant achievements over the past fifteen years, there remains a number of strategic sites and vacant lands at the core of the regeneration area at Grand Canal Dock and North Lotts which need to be developed to consolidate the achievements to date and to help sustain a critical mass necessary to support a vibrant mixed-use urban quarter and to attract inward investment. The Docklands SDZ and Planning Scheme focuses on these key strategic sites at the core of the Docklands Area.

Fig. 6A - Wider Docklands Area as defined by the Dublin Docklands Development Authority Act, 1997 (*See separate booklet for Figures*)

1.4 Policy Context for SDZ and SDZ Planning Scheme

The SDZ lies at the heart of Dublin's docklands in an area which has already experienced massive demographic and economic change. The area has been designated as an SDZ for specific reasons; to actively promote development which is of economic or social importance to the state.

The planning scheme for the SDZ has been prepared to accord with the hierarchy for land-uses and spatial plans and other relevant policies at national, regional and city level. In particular the SDZ Planning Scheme accords with the following hierarchy of strategies and plans;

- The National Spatial Strategy 2002 - 2020 (NSS) recognises that Dublin, as the capital city and national gateway, plays a vital national role and that the performance of its economy is essential

to the success and competitiveness of the national economy. In order to sustain this role as the engine of the economy, it advocates the physical consolidation of Dublin. The Docklands SDZ lies at the heart of the metropolitan core, with its capacity to facilitate a significant supply of modern commercial and office space in tandem with its high levels of accessibility, make it a crucial national resource for innovation, enterprise and employment, and as such it fully accords with the NSS. The premier gateway status is envisaged to remain in any successor to the NSS.

- The National Development Plan 2007 - 2013 (NDP) also supports the regeneration of the wider Docklands Area and acknowledges that it has been a factor that has contributed to the success of the Dublin Gateway.
- The Regional Planning Guidelines for the Greater Dublin Area 2010 - 2022 (RPGs), translates the national strategy to the regional level with a similar emphasis on Dublin as the driver of national development and on the need to physically consolidate the growth of the Metropolitan Area. The RPGs settlement hierarchy seeks to prioritise and focus investment and growth to achieve integration of infrastructure, employment and new housing. Further consolidation of the Docklands SDZ lands will maximise the use of recently installed physical infrastructure such as the Luas Red Line Extension, the Samuel Beckett Bridge and in the longer term the DART Underground.
- Transport 21 and Smarter Travel – A Sustainable Transport Future 2009 - 2010, are the capital investment frameworks under the National Development Plan to deliver the transport system in Ireland. The Docklands Rail Station at Sherriff Street which caters for mainline commuter services and the extension of the Luas Red Line from Connolly Station to the Point Village have been delivered under Transport 21. The longer term proposals for DART Underground with a station at Spencer Dock will facilitate interchange with the Luas, DART and mainline commuter services, making the proposed SDZ lands highly accessible on a city and national level. The Government's transport policy recognises the vital importance of continued investment in transport to ensure a competitive economy, but also sets out the necessary steps to ensure the use of more sustainable transport modes such as walking, cycling and public transport.
- Dublin City Development Plan 2011 - 2017, reinforces and distils these higher level plans with the promotion of the intensification and consolidation of the city. It seeks to achieve this by way of regeneration and renewal of the inner city and redevelopment of brownfield areas. It also emphasises the city's role as the national gateway and key economic driver of growth for the region and state as a whole, with the need for the city to develop sufficient critical mass to compete at an international level.

The Development Plan's Core Strategy designates the Docklands, including the Docklands SDZ, as a Key Developing Area (KDA) and a Strategic Development Regeneration Area (SDRA). KDAs are those areas of the city with substantial development capacity and the potential to support economic or cultural specialisms essential for the growth and diversification of the city. SDRAs relate to important brownfield sites with the potential to deliver a significant quantum of mixed uses. The Docklands SDZ exhibits all these characteristics with an opportunity for continued physical and social regeneration of the Docklands, supporting the emergence of the area as a new and vibrant economic, cultural and amenity quarter of the city.

The Development Plan sets out a series of Guiding Principles in Chapter 16 for the North Lotts and Grand Canal Dock SDRAs. These principles promote the creation of a new urban neighbourhood with a socially cohesive community and high quality physical environment. A number of principles stress the need to forge spatial connections with the wider docklands area, the city centre and surrounding neighbourhoods as well as linkages with the IFSC. Optimising the potential of key brownfield sites to contribute to the city in employment and economic terms and fostering the area's role as an emerging cultural destination are also key governing principles relevant for the Docklands SDZ Area. The Plan

also identifies the Docklands Area as one of the very limited locations in the city that has the potential to accommodate landmark buildings for economic and identity reasons appropriate for a capital city.

Fig. 4 – Extract from National Spatial Strategy (NSS)

Fig. 5 - Dublin City Development Plan Core Strategy Map

Fig. 6 - Dublin City Development Plan Zoning Map (*See separate booklet for Figures*)

- Dublin Docklands Area 2008-2013 Master Plan set out a 5 year framework for the regeneration of the Docklands Area as defined by the Dublin Docklands Development Authority Act, 1997. The area extends to circa 520ha and consists of both established communities and new areas that have been subsequently developed with newly emerging employment and residential neighbourhoods.

The Master Plan reflects the statutory objectives as set out under the 1997 Act, namely, the social and economic regeneration of the Dublin Docklands Area on a sustainable basis; improvements in the physical environment of the Dublin Docklands Area; and the continued development in the Docklands of services of, for and in support of, or ancillary to, the financial sector of the economy.

The Master Plan in turn is driven by five strategic objectives: accelerating physical roll out of development; achieving genuine architectural legacy; fulfilling the potential of the docklands; realising quality of life; and creating a sense of place.

It provided a framework to guide the development of the Docklands Area over the five-year period and beyond, embracing social regeneration, economic development, land use, transportation, infrastructure, urban design, arts, tourism, culture, leisure and implementation. The five-year life of the current Docklands Master Plan expires in November 2013.

- The Grand Canal Dock and North Lotts Section 25 Planning Schemes essentially cover the same 90Ha area as the new SDZ area (including waterbodies). They provide a local planning framework under the Docklands Masterplan, setting out area-specific guidance in relation to land use mix, urban design, amenities and transportation. The schemes are primarily physical in nature but reflect the social and economic policies of the Docklands Area Master Plan. In this regard, the Grand Canal Dock and North Lotts Schemes were important elements in the implementation of the broader strategy for Docklands during the first ten-year framework of the Master Plan under the 1998 and 2007 Master Plans.

The Grand Canal Dock Planning Scheme 2000 (Amended 2006) has produced a successful new urban quarter around the Grand Canal Dock, including An Bord Gais Theatre Hub, a vibrant residential/commercial mixed use zone, and the attraction of digital media industry to the area (e.g. Google).

The Docklands North Lotts Planning Scheme 2002 (Amended 2006) follows a set of principles to extend the successful IFSC, Mayor Street areas eastwards to the Point Village. Major achievements include the Conference Centre Dublin (CCD) and the new LUAS line.

In addition to the above, there are a number of non-statutory local level plan which the SDZ Planning Scheme has had regard to including:

- Dublin Port Master Plan 2012 - 2040 is a non-statutory plan which sets out a vision for the operations of the port. It acknowledges the importance of the emerging cruise liner tourism and potential of the natural amenities of Dublin Bay. The Master Plan seeks to ensure that there is harmony and synergy between the plan for the Port, Dublin Docklands Area and Dublin City, whilst the integration of the Port with the City and its people is a core aim of the Master Plan.

- The River Regeneration Strategy, 2001 aims to maximise the amenity potential of the River Liffey with a series of initiatives for river based projects, a number of which have been successfully implemented including the upgrading of the Dublin City Moorings and the Docklands Maritime Festival.
- The Campshire Vision, 2007 looks at how the Liffey with its water, waterfront and docks has the potential to become a new centre for employment, leisure, culture and the arts and assesses how connections from the city centre and surrounding areas can make the campshires more accessible and inviting. The strategy is based on three pillars: 'Making Connections, Creating Destinations and Animating the Water'.
- The City Canals Plan, 2010 was prepared on a partnership basis between Dublin City Council, Docklands Authority and Waterways Ireland. The plan relates to the canals and associated docks within the city boundary area. It identifies the recreational and tourism potential for specific sections of the canals, including the Royal Canal and Grand Canal at Docklands.
- The Cruise Traffic & Urban Regeneration of City-Port Heritage - Local Action Plan for Dublin, 2011 sets out a strategy for the development of cruise tourism and urban regeneration of the port area to create an urban quarter that facilitates sustainable and consolidated growth in the city and to articulate a new relationship between the city and port through the development of the cruise tourism sector. This represents a joint strategy prepared by Dublin City Council, Dublin Port and the Docklands Authority.

Chapter 2

Chapter 2 The Docklands SDZ Area Today and The Future

This chapter contains two parts. The first part (2.1) describes the socio-economic situation in the SDZ area to date and is largely sourced from the 2011 Census. The second part (2.2) is an overview of the existing and future role of the Docklands. Both parts provide a basis to inform the approach and strategy set out in this SDZ Planning Scheme.

2.1 Population and Socio-Economic Context

2.1.1 Profile of the SDZ Resident Population

The overall Docklands area (comprising the DED's of North Dock A, B, C, Mansion House A, South Dock, Pembroke East A and Pembroke West A) has increased in population by over 54% between 1996 and 2011. The 2011 Census population for this area recorded almost 27,000 people. Between 2006-2011 alone, the population increased by over 36% at a time the city growth rate was 4.2% and 8% growth nationally.

Within the SDZ boundary, the 2011 Census recorded 6,366 people compared to 4,001 persons in 2006, representing a significant increase of over 50%.

The SDZ population represents approximately a quarter of the wider docklands population. Of the SDZ population, there are interesting trends recorded within the 2011 Census which are important to consider in order to ensure that the SDZ Planning Scheme is relevant in addressing the current and future needs of the community.

A diverse and multi cultural population exists in the SDZ area with 55% of the population born in Ireland, 29% born in other European countries and 16% from the rest of the world.

The age profile of the SDZ population is young with the majority of residents (65%) in the 25-44 years of age category. The second highest category is 15-24 years (14%) and the third highest is 0-14 years (11%). Combined, these figures show that 97% of the population in the SDZ area is under 44 years of age. Persons aged 65+ represent 3% of the total.

These trends are similar to the wider docklands and city age profiles although the proportion of the population aged 15-24 (65%) is significantly higher than the wider docklands (50%) and city (43%). It is interesting that while most of the housing stock in the SDZ is new, the extent of the population in younger age categories (0-14 and 15-24) is approximately the same as for the wider docklands. There are important young age groups within the SDZ and wider dockland area.

Analysing stages of the family life cycle, pre family units represent 63% of the total households reflecting the young age groups recorded.

The second highest category is preschool households (13%). Early school and pre adolescent households are 5% each and adolescent 4%. Family units at adult stage are 6%. Empty nest family units and retired stage family units are 3% and 1% respectively.

Household sizes are small (reflecting the young age groups and majority pre-family life cycle stage) and are predominantly two person size (46%). One person households are also significant and recorded as the second highest category (29%). Three person households are 18% of the total and four person plus are 7%.

Family units with no children are the dominant category of household (67% of total) which again reflects the pre family life cycle stages with one child family units the second highest category at 20%, two child family units 10% and three child plus family units just 3%.

It is notable that family units with no children in the SDZ area, at 67% of total households, is higher than the wider docklands (47%) and city (36%). This may reflect the recent population increase and young age groups of new residents with a likelihood that family units with children will increase if the new population remains living in the area as they start their families.

Family units with children tend to have very young children at present. 53% of the households with children have the youngest child aged between 0-4 years. The second highest category is the youngest child of 5-9 years (14%) and third highest category is the youngest child of 10-14 years and plus 20 years (each 12%).

2.1.2 Socio-Economic Profile of the SDZ Population

Looking at economic status (2011 Census figures), the percentage of those at work in the SDZ population, at 80% of the total, is significantly higher than the overall city level at 51% and the wider docklands at 62%. This demonstrates the strong employment role of the SDZ. The unemployment rate in the SDZ is recorded at 5% which is half the city rate.

Professional workers make up the largest occupation and social class of the SDZ population at 31% of the total, with associate professional and technical the second highest at 21%. Administrative workers are the third highest category at 11%, with managers and directors a close fourth at 9%.

This compares with managerial and technical workers being recorded as the highest category in both the wider docklands and city (26% and 25% respectively). Professional workers are recorded at 11% for the wider docklands and 9% for the city and are the third or fourth highest category at those levels. This indicates that the majority of the population in the SDZ, over 1,500 persons from a population of 6,366, is classified as professionals indicating the strong economic functions of the area and the attraction of young professionals to live in the area.

The main industry types in the SDZ are commerce and trade (37% of the population), transport and communications (21%) and professional services (15%). Commerce and trade is also the main industry type for the population of the wider docklands (34%) and city (29%) with the SDZ location somewhat more dominant in that sector. Whereas professional services is the second highest category for the wider docklands and city (20% and 25% respectively), transport and communications is the second highest in the SDZ highlighting the communications sector in particular (social media related in particular) as important.

2.1.3 Educational Attainment of the SDZ Population

Advancing from second level education to third level assists the ability of the population to gain access to employment and enter the labour market for higher earnings. Of importance for this location are opportunities for the workforce to access employment in the new and emerging industries locating in the docklands.

78% of the population aged 15 years and over in the SDZ have a third level or higher qualification which is significantly larger than for the wider docklands (49%) and city overall (35%).

2.1.4 Modes of Travel of the Local Population

The majority of the population in the SDZ travels to work, school or college by foot (50%) which is positive and comparable with the wider docklands (46%). More people walk to work in the docklands than in the city overall (28%).

Other sustainable modes of travel are however surprisingly lower in the SDZ with car driver (at 17%) the second highest category. Train travel is 10% and bus 9%. Cycling is 6%.

This is still comparable however with the wider area and city trends where car drivers are also the second highest category (also 17% for wider docklands). Bus travel is higher in the wider docklands (11%) and city (17%) and train travel lower (8% in the wider docklands and 6% in the city).

The journey time to work, school or college is mostly between $\frac{1}{4}$ and $\frac{1}{2}$ an hour for the SDZ population (42% of all journeys) with journeys under 15 minutes the second highest at 25%. Looking at car ownership, 47% of the population has no car while 41% have just one car showing low levels of car ownership.

2.1.5 Housing Characteristics

The 2011 Census recorded 2759 housing units within the SDZ boundary. Of the total households recorded, 93% of households in the SDZ live in apartments compared with 61% in the wider docklands and 33% in the city.

In terms of tenure, the majority of households in the SDZ are private rented (62%) with 24% owner occupied and 11% rented either from the local authority or voluntary body.

Private rented is also the largest tenure type in the wider docklands (46%) but at a much lower rate than in the SDZ area, with owner occupied at 33%. Rented from local authorities or voluntary bodies is higher than for the SDZ area at 17%.

In the city overall, owner occupied is the largest tenure type (52%) with private rented 32% and rented from the local authority or voluntary body 13%.

Within the SDZ area, the majority of residential units were built from 2006 or later (47%) and 29% built between 2001 and 2005. In total therefore, 76% of the units have been built since 2001 indicating the contribution of new residential units to accommodating the population and recent growth. 14% of units were built between 1991 and 2000. Older housing stock (pre 1990) accounts for just 3% of the total units.

82% of the recorded permanent private households were recorded as occupied, compared to 18% unoccupied.

The number of rooms in private households provides an indication of the size and character of units occupied by the majority of the population. The number of rooms includes kitchens, bedrooms and living rooms but excludes bathroom/toilets, storage space and utility rooms. Smaller units are the majority with three room households the highest (39%) and two room households joint second highest at 23%. 62% of units are therefore two to three room units indicating one and two bed character apartments. Four room units are 23% and five room + 9%.

2.2 Existing and Future Role of the SDZ

Over the last two decades the implementation of the Dublin Docklands Project has constituted a remarkable achievement in terms of urban regeneration, and embedding a diverse modern service economy of global significance. While sitting within the broader Docklands hinterland, with its established communities and neighbourhoods, the spatial focus of new development has concentrated on the Section 25 Planning Scheme areas north and south of the river. These areas are now the subject of the current SDZ.

In order to devise a solid platform for new proposals, it is important that the existing context is well understood. While there are many positive factors in the build-out to date, there is also a range of issues and challenges to be met in building an effective delivery model that can implement the aspirations and vision of a new SDZ. The following key areas emerged from an analysis of the existing context.

Fig. 7 - Liffey Corridor Clusters (*See separate booklet for Figures*)

2.2.1 Function/Role of Docklands in the City

The strategic focus on economic development has been a key driver to date and has led to a critical mass of niche service sectors locating in the area. The concentration and clustering of this activity is of increasing importance to the Dublin region, to the national economy, and impacts significantly in a competitive global context. The set of support systems and infrastructures, necessary to expand and nurture the economic ecosystem in Docklands, needs to be supported by governance and embedded in the SDZ. Allied to the economic role are a number of strategic spatial dimensions; the building of a strong eastern flank to the expanded inner-city and the re-connection of the capital with the sea and the bay. In tandem with livelihood and jobs, there is the need to focus on quality of life which can best find expression in an exemplar new urban quarter and attractive neighbourhoods.

2.2.2 Land-use

Good urban places tend to incorporate a lot of diversity and a wide mix in land use. This helps to create animation and character and ensure activity over the lifecycle of the day and through weekends. Single use areas on the other hand often suffer from sterility and a lack of character. While some areas in Docklands, notably Mayor Square and Grand Canal Plaza, have an impressive mixed

use character and attractive urban design qualities, other areas are fragmented, windswept and lack vitality.

The tendency towards coarser, larger-scaled buildings, featuring single use, militates against good place-making. While a primary economic use, such as office activity, is a valid strategic objective for a hub area, it must be leavened by other uses which reflect the urban philosophy, including economic, social, and cultural activities.

2.2.3 Movement

On a city map the SDZ area in Docklands appears to be close to the City centre, yet the experience when one is there is of not being connected. This results partly from the historic physical separation of the working port from the city and from a deficit in road and public transport infrastructure. New bridges and a Luas extension are a major step forward in the building of a movement network aimed at linking the area internally and externally. A limited number of new street links and bridges will be necessary to underpin the emerging strategic network. In building inter-connection between different travel modes it will be important to prioritise continuity of a high quality walking experience by ensuring consistent standards in a generous public realm network.

2.2.4 Heritage/Sense of Place/Maritime

The maritime legacy of Dublin is now assuming increasing importance and is more and more being understood as an important extension of the Georgian heritage of the city. This involves an adjustment of mind-set to expand beyond the traditional focus on the Georgian Squares and embrace the river corridor and its 18th and 19th century industrial archaeology. The legacy of maritime infrastructure including surviving built fabric has great potential to underpin the character and sense of place in contemporary regeneration. While the retention of the Inner Docks, Harbourmaster House, Scherzo Bridge and CHQ underpinned a rich public domain in IFSC 1, and mediated an excessive ratio of office provision, there is a risk that heritage elements are being eroded as one moves further east. The re-imagining of historic fabric must inform the vision and inspire development proposals rather than be seen as a negative constraint.

2.2.5 Conflict between Living and Working

While the networks and range of economic activity extend to a national and global scale, the liveability dimension impacts more at the local and neighbourhood scale. There would appear to be a tension between office use and its tendency to configure and cluster in single use character areas, and the aspiration to deliver quality of life through mixed use and a rich cultural identity.

There may be some basis to the perception that office precincts lack animation, especially in the evenings. The vision for the SDZ must strive to create the best balance between creating sustainable work environments and creating good places to live. A creative response to residential needs including family living, and the provision of appropriate social infrastructure must be combined with the core focus to nurture economy.

2.2.6 Public Realm and Infrastructure.

The design and maintenance of an attractive and generous public realm is fundamental to city identity and fostering pride in citizenship. 'Your City, Your Space', Dublin City Council's Public Realm Strategy recognizes the critical role of public space in facilitating a rich public life. A strategic network and hierarchy of good public space will also help order and structure the quality of urban design and people's mental maps of an area.

While the public realm can be seen as an integral part of infrastructure, there are other utility and service components that must be considered; Drainage, Water, Energy, Communications, Sea Protection, and Contamination. The need to ensure we have a sustainable Docklands in the decades ahead means that all these services must be assessed and planned for in an integrated manner. This will include the need for audits of the existing context, the identification of gaps and a consideration of phasing and funding options.

Chapter 3

Chapter 3 Vision and High Level Themes for Scheme

3.1 Vision for the Docklands SDZ

The vision is that the Docklands SDZ will become a world class maritime quarter with a distinctive Dublin character. It will be a model of sustainable inner city regeneration incorporating socially inclusive urban neighbourhoods, a diverse, green innovation based economy contributing to the prosperity of the locality, the city and the country, all supported by exemplary social and physical infrastructure and a quality public realm integrated with the wider city.

The vision for the Docklands SDZ is centred on the best of what has happened in the Docklands to date, augmented by the core strategies of the City Development Plan for economic livelihood, a compact green city and a city of quality neighbourhood living. The vision must enjoy broad civic support, even through short term challenges. Without a vision for the Docklands SDZ which commands enduring support, short term, often competing interests could prevail, ultimately to the detriment of all.

The vision for the Docklands SDZ is evolved from the Mission Statement in the Docklands Masterplan 2008, which has successfully guided the social, physical and economic development of the Docklands to date, and on the vision in the City Development Plan 2011-2017, which is centred on the need for a shared vision for our city over the next 25-30 years.

The long term vision for Dublin and the Docklands SDZ is based on the principles of Sustainable Development, contained in the Framework for Sustainable Development (FSD) in the City Development Plan.

The current economic downturn must be grasped as an opportunity to create a long term vision for the Docklands SDZ which will not only facilitate recovery but will ensure that the recovery takes place in a coherent sustainable manner for the benefit of the Docklands community, the city and indeed the country.

3.2 From Vision to High Level Themes

The translation of the vision for the Docklands SDZ into a coherent, sustainable plan to achieve a successful, thriving Docklands quarter for Dublin City necessitates the application of some themes. The themes are distilled from an analysis of the development of the Docklands to date, allied to the future needs of the city and its residents. These key themes are not self-contained, rather they are cross-cutting and will form the basis by which the Planning Scheme and all future proposals under the scheme will be tested. There are six key themes as follows:

3.3 High Level Themes

3.3.1 High Level Theme No. (i) - Sustainability

The sustainability theme imbues both the City Development Plan 2011 - 2017 and the Docklands Masterplan 2008 – 2013 and is a key overriding principle for the SDZ Planning Scheme. The City Council has developed the Framework for Sustainable Dublin (FSD) as a way of thinking and as a tool to help tackle the challenge of climate change, the post carbon economy and social cohesion at city and local level.

The sustainability theme is built around a shared vision for sustainability based on meaningful civic governance centred on community engagement. There are compelling reasons for pursuing sustainability in the Docklands, not only in the obvious areas of flood management, energy conservation and sustainable movement, but also as a contribution to reducing urban sprawl,

enhancing the green economy, creating a more healthy, socially inclusive, and ultimately a more resilient city.

As indicated in the City Development Plan and the Docklands Masterplan 2008 – 2013, the sustainability concept for the SDZ area can be encapsulated in the concepts of livelihood (jobs) and liveability (quality of life for all ages and future generations).

The SDZ Planning Scheme will use the sustainability indicators set out in Appendix 28 of the City Development Plan as a means of monitoring the progress of the Scheme.

3.3.2 High Level Theme No. (ii) - Economic Renewal and Employment

The Docklands SDZ is of national economic and social importance to the state and ideally placed to build on the economic synergies which have happened to date in order to contribute a real competitive edge to the Dublin region. For example, the IFSC has grown to become a centre for green technology industry whilst Google and Facebook not only employ thousands of people but have put the Docklands on the international map.

The Docklands SDZ area is ideally placed to promote for the full range of international, national, and local enterprise, by virtue of the variety of sites available, the proximity to the city centre, a unique waterfront setting, and the potential for collaboration with employers in the area. It is an integral part of this high level theme that the Planning Scheme provides for a range of employment uses, from large scale FDI types, to small local support services, including start-up units. It is also important that there should be a variety of tenures available – long term, short term and temporary, to contribute to the economic vitality of the SDZ area and surroundings.

3.3.3 High level Theme No. (iii) - Quality of Living

It is a strong theme of the SDZ Planning Scheme that it must be a model of contemporary living, providing a quality lifestyle for both existing and future residents with good access to employment.

In order to build sustainable communities and neighbourhoods, the Docklands SDZ Planning Scheme will provide for a variety of housing typologies to cater for residents at all stages of their life cycle. A good quality of living also requires a safe, supportive, external environment, incorporating recreational facilities, public spaces, life affirming social infrastructure, including any necessary educational facilities.

A quality living environment also includes integration with green infrastructure and, as such, it is a key principle to promote a green / blue network providing public access recreational and biodiversity opportunities, particularly along all the water bodies.

3.3.4 High Level Theme No. (iv) - Identity

The fourth major theme is to create a distinctive Dublin maritime quarter. It is this unique character which will distinguish Dublin Docklands on the global stage. This can be achieved on a number of fronts, including re-imagining the existing heritage to providing for new active uses and providing a context for a rich urban landscape.

The cultural heritage of the area should inform the character of the area across all aspects – built form, quality of civic spaces, entertainment uses, public sculpture, bridges over water bodies, views and vistas into and out of the area etc. Paramount to the new maritime identity is design excellence married to a diversity of uses, to achieve successful urban place-making. Of course, the maritime quarter must be integrated with the rest of the city, including Dublin Port, while retaining its character.

3.3.5 High Level Theme No. (v) - Infrastructure

The provision of good infrastructure, both physical and social, is a theme which includes and supports the delivery of the first four themes.

The physical infrastructure includes drainage, water supply, electricity, gas, telecommunications and flood management, all of which are necessary to promote quality neighbourhoods, employment and a good ecological environment.

Social infrastructure such as education, healthcare and community facilities are a necessary part of sustainable neighbourhoods in the Docklands.

3.3.6 High Level Theme No. (vi) - Movement & Connectivity

This key theme is also necessary to enable the first four key themes to be delivered successfully and involves extending connectivity not only eastwards into the city centre, but north and south.

It is also part of this high level theme to improve connectivity within the SDZ area, by making a safe and efficient public realm which caters for walking, cycling, public transport and the car. Increased connectivity across and along the water bodies is also a component of this key theme.

3.4 Sustainability – Process and Implementation

Sustainability is critical to all of the High Level Themes. It is necessary therefore to expand on the approach to Sustainability in the SDZ Planning Scheme and to explain the importance of process and strategy in developing an implementation framework for the scheme. Firstly though, it is proposed to position sustainability in a more global/macro context.

The City Development Plan places sustainability at the heart of things through the Framework for Sustainable Dublin (FSD). This recognizes the fact that our city operates within a global/ international context of political, legal, social and environmental systems. The thrust of the FSD is that we must build success on the basis of a future where we live in harmony with nature while meeting our human needs. A key component of sustainability is collaboration which is about drawing in the energy of stakeholders across the spectrum of city life in the pursuit of a sustainable future.

In the context of sustainability and the SDZ Planning Scheme, it is important that sustainability is not limited to the environmental strand alone, central as this is. The vision for sustainability must be holistic and reflect the breadth and scope of all the High Level Themes. It is proposed that 3 core strands will help structure sustainability in the SDZ;

- The Economic Strand
- The Social Strand
- The Environmental Strand

The question now arises as to how an effective collaborative process can be generated to ensure that an optimal response to sustainability is embedded in the SDZ. A limited view might suggest that the SDZ is essentially an efficient machine for delivering clarity in terms of planning permissions. It is important that the Designated Agency moves beyond a passive stance, takes ownership, drives co-ordination and implementation, and exploits the potential for collaboration from stakeholders. The following outlines some possible approaches under the core strands listed above;

- Economic Strand: Section 4.1 outlines the tremendous economic platform that now exists in Dublin's docklands with its unique emerging mix of sectoral diversity and spatial focus. Research for the SDZ Planning Scheme has helped map the major economic sectors and their pattern of clustering. Much of the activity however is not very visible, and potential investor/visitors can experience difficulty in getting a tangible experience of what Docklands has to offer. This contrasts

with 'Tech City' in London where a big effort is made to communicate the story but where the substance is much less than that existing in Dublin. The economic community in Docklands supports the need for further research on understanding the service pattern used by various sectors, and the synergies that are emerging from the spatial clusters.

- An opportunity exists to develop a temporary building[s] over the proposed Dart Underground station in Spencer Dock. These structures would be 3/4 storeys, would be well designed but budget conscious, and would be demountable consisting of a series of cartridges. They would incorporate green design and have green roofs. The design objective of this building would be to encapsulate the creative and innovative forces driving contemporary docklands, and to tell the story of its varied and rich economic ecology. It is anticipated that agencies like the IDA, Enterprise Ireland, and Dublin Chamber of Commerce and the Digital Hub, would welcome and support such a building, an exemplar of collaborative energies, but also as an effective focus for marketing.
- Environmental Strand: While initiatives like the Dublin City Council Sustainability Report and the Regional Indicators Report represent logical and welcome initiatives under the Framework for Sustainable Dublin, the application of a cohesive environmental strand has not been pursued within recognizable area based structures. The SDZ provides an opportunity to develop the potential of the environmental strand, with its focus on areas like infrastructures, energy and building construction, while also being aware of the close links existing with economic and social sustainability. In order to exploit the collaborative aspects of the SDZ, it is proposed to build links with a number of initiatives that have a strong synergy with the environmental strand including the 'Green IFSC' and the 'Sustainable Energy Community', the latter sponsored by SEAI. The focus of collaboration could be anchored physically in the riverside pavilion offices of DDDA where exhibition material could foster awareness and generate a drive for deeper action and traction.
- Social Strand: Social sustainability is concerned with the challenge of providing the citizen with the effective personal infrastructure that enables full participation in the life and culture of society. Social sustainability spans hard and soft infrastructure, and complements a focus on housing, schools and community facilities, with a parallel focus on programmes to improve access to learning and create more effective pathways to employment. Docklands has particular problems due to the embedded nature of long-term disadvantage. The level of educational disadvantage registers as even more acute when it co-exists with modern knowledge sectors which attract the most highly educated people. A society that is willing to brand itself as a 'Smart City' however, must develop the institutional agility to build bridges between dimensions of environmental, economic and social sustainability, and find inventive and collaborative ways to cross fertilize and encourage a culture of working together.
- It is an objective of the SDZ Planning Scheme to facilitate collaboration in the pursuit of social sustainability and to support the view of a wide range of community activists that, in Docklands, 'We are one community'. Plot 20 [formerly known as Plot 8] at the eastern end of Grand Canal Dock is a pivotal site, enjoying high levels of visual amenity, incorporating unique marine heritage elements, and carrying longstanding community aspirations. It is proposed that a new community building on this site could house recreational water facilities for Grand Canal Dock while also anchoring social sustainability in a physical building aimed at generating collaborative energies to drive a radical vision of a socially sustainable future.

4.1 Economic Regeneration & Employment

4.1.1 Introduction

Ireland has a dynamic knowledge based economy and is ranked as the top destination globally for quality and value of investment. It has developed strategic clusters of both inward investment and indigenous expertise in niche sectors through its offering of a unique combination of advantages including access to key markets, a pro-business environment, a strong talent pool and quality of living.

Dublin is one of the most attractive global locations for Foreign Direct Investment (FDI) and is ranked as the best location globally for availability of skilled workforce, investment incentives and openness. It is an open and connected hub in the global economy, particularly through its advanced services economy as a world leader in IT and Financial Services. Dublin, as the capital city, generates almost half the national Gross Domestic Product (GDP) and so its performance is essential to the success and competitiveness of the national economy.

Dublin, in its role as the engine of the economy, needs to develop a sufficient critical mass to compete at an international level. Docklands given its location at the core of the city region, its capacity to deliver a significant supply of modern commercial space and its high levels of accessibility, has the potential to fulfill this strategic role and consolidate itself as a global economic hub.

4.1.2 Achievements

The International Financial Services Centre (IFSC), located in Docklands, is one of the major economic success stories of Dublin and Ireland. It has become a world leading investment location with global recognition as an important location for financial services. The IFSC incorporates more than half of the world's leading financial service companies generating in excess of 32,700 jobs, two-thirds of which are based in IFSC Dublin (22,000).

The IFSC has also become one of the major centres in the world for the aviation sector, leasing over half of the world's fleet of aircraft, as well as playing a very significant role in the development of aircraft financing and leasing business on a global level. Other emerging specialisms include Islamic finance as facilitated by recent government legislation and green finance under the Green IFSC Initiative.

Docklands is now considered a prime office location comparable with the traditional office core or central business district of the city, attracting quality development and high value economic activity. This is apparent from the strong presence of multi-national enterprises, as well as a significant headquarter presence of indigenous corporate entities. The high-profile move of the Central Bank to North Lotts further endorses the area as an attractive employment hub.

There is also evidence of emerging spatial clusters of economic activity in Docklands, such as financial, legal and digital-media which, according to research, is a benchmark indicator of specialisation and innovative performance. The success of the internet and the social media cluster at Grand Canal Basin, with high-profile entities such as Google, Facebook, Dogpatch Labs, Windmill Lane Studio and Pulse College, is such that the area has become known as 'Silicon Docks'. The cluster effect has extended to neighbouring areas with the presence of LinkedIn, Twitter, Zynga Games and Gilt Groupe which, in turn, has attracted smaller firms and start-ups, to the extent that Dublin could now be termed the 'Silicon Valley of Europe'.

The extension of the Luas Red Line to Point Village and the provision of the Docklands Station at Spencer Dock means that the area is well-served by a range of high quality public transport options including Luas, DART and mainline commuter service, giving easy access for workers. Meanwhile, the proposals for a DART Underground Station at Spencer Dock will result in the area becoming one

of the most accessible and connected part of the city and state, giving corporate occupiers access to the largest labour market in the country.

In terms of area regeneration, the significant levels of public investment in enabling physical infrastructure, flagship public realm projects such as the campshires and Grand Canal Plaza, as well as strategic assets such as the Convention Centre Dublin (CCD) and the Bord Gáis Energy Theatre, have all underpinned the creation of a quality urban environment as an attractive employment hub.

4.1.3 Challenges

The Docklands has global recognition as a centre of excellence for financial services. However, given the increasing competing nature of financial services centres globally, there is a need to ensure the continued competitiveness of the IFSC.

It is equally essential that Docklands and the city continue to attract high value economic activity in key growth sectors across a range of corporate entities from start-up to large mature organisations, indigenous and multinational enterprises. The key growth sectors relevant to a sustainable city quarter relate primarily to Information and Communication Technology (ICT), Financial Services, Consumer & Business Services and Content Industry. These sectors have a significant presence in Docklands, save for the latter where there is a small but growing presence of the industry sub-sectors such as media, music, film, digital and games industry.

The challenge is to nurture a spatial concentration of these growth sectors, building on the emerging clusters of specialisms in Docklands. Proximity and integration are important factors of economic clustering, with mutual synergy and co-operation between different stakeholders being crucial elements for supporting area-based innovation and creativity. The substantial development capacity of Docklands presents an opportunity for cluster consolidation.

A further challenge is to leverage on the success of the emerging clusters to foster an ecosystem of innovation and creativity. The social and internet media cluster, as well as players in the multi-media sector, operate with many innovative and creative firms and could potentially be pivotal for the development of other sectors, stimulating the emergence of businesses, directly or indirectly connected with the tech or multi-media sector. In this context, Docklands has the potential to develop as a creative district of innovation, building on its role as a new cultural quarter of the city.

In positioning Docklands as a high-skill innovation hub, there is a need to tap into the huge potential of the university and third level sector, harnessing the knowledge, research and resource capabilities of colleges with the commercial outlook of industry players. Trinity College, National College of Ireland and Dublin Institute of Technology's Hothouse are immediate neighbours to the area and could play a central role in the creation of linkages between the academic and high-technology sectors, both crucial to the key growth sectors which essentially make up the knowledge economy.

For Docklands to perform on the economic platform, it will be necessary to ensure a range of office typologies that cater for the large and mid-scale corporate entities, as well as facilitating the co-existence of small and niche start-up companies. The challenge will be to provide flexible floorplate options and to accommodate the larger floorplate requirements in an attractive fine grain urban environment. Commercially viable options for start-ups, so vital to the dynamics of innovation and creativity, will also be a challenge.

Dublin Port as an extensive industrial area presents both a challenge and a tremendous opportunity. The Port interfaces with the SDZ at Point Village and by virtue of its role as a strategic working port, there is limited connectivity with its immediate environs with a resultant lack of permeability, a poor pedestrian environment and a reduced retail catchment area for Point Village.

4.1.4 Way Forward

4.1.4.1 Clusters

Clusters tend to act as drivers in the economy and there is an important relationship between clusters and innovative performance. This is true of the emerging financial, legal and digital-media clusters at Docklands which in essence represent the spatial concentration of specialisms. These clusters are linked to sustainable growth areas and play a crucial role as key drivers of the city, regional and national economies, see Fig 8.

A key benefit of clusters is that they can support a synergy and knowledge exchange between different players which may share similar trajectories in terms of development and goals. This synergy can stimulate and increase the complementarity and competitiveness in a local economy, which in the case of Docklands is of national importance. A further advantage of clusters is the empowering of small or medium enterprises to take the opportunity of participating in the global economy, by virtue of real or potential relationships with larger corporate entities.

Successful cluster development hinges on a number of factors including the presence of established or mature organisations, office accommodation for small to medium size businesses, and specific services and incubator space for entrepreneurs. The presence of universities and continuous education or a professional learning centre is also important, as well as a centre of excellence for technology.

The Docklands exhibits a number of these factors and also offers great potential to nurture smaller businesses and start-ups through the provision of appropriate office accommodation and incubator or collaborative space, as well as a better reach out to the colleges. Delivery of these elements would support the consolidation of the existing clusters and also strengthen the area's potential as a multi-cluster of innovation and creativity. The potential role of seed projects to create success spin-offs also merits consideration.

There is the great opportunity of linking cluster development with each of the five hubs, as in the case of the existing tech and social media cluster at Grand Canal Docks. Boland's Mills, with its range of historic and characterful mill buildings is likely to be attractive to high-value tech and media start-up and could potentially reinforce the existing cluster at Grand Canal Dock. Equally, start-up enterprises could potentially reinforce the emerging creative and artistic activities in the warehouse buildings at Hanover/Britain Quay. Meanwhile, Spencer Dock, as an intense commercial zone with the DART Underground, could function as extension of IFSC I & II.

Fig. 8 - Emerging Spatial Clusters (*See separate booklet for Figures*)

4.1.4.2 Innovation & Enterprise

Innovation Nation! is an integral part of Government strategy for the creation of an exemplary research, innovation and commercialisation environment, underpinned by a range of funding and soft support mechanisms. Dublin, as the main centre of innovation, has become a leading venture capital location with a vibrant start-up scene. It is fast gaining a reputation as Europe's leading start-up hub and is listed as one of the best cities in the world to start a business.

This emergence of Dublin as a global start-up city is reflected not only in the number of indigenous firms who start in the city, choose to stay local and attract overseas talent to work for them, but also in the number of overseas entrepreneurs who are coming to set up businesses in Dublin. The latter is a new trend for which a support programme has been developed by Enterprise Ireland.

There are numerous city initiatives that seek to foster innovation. The universities have made significant efforts to commercialise research and relate to business needs for example, the Nova UCD Centre, TCD's CRANN Centre, DIT's Hothouse and DCU's Cloud Computing Competence Centre. Similarly, 'Dublinked', the Dublin local authorities initiative on open data, seeks to help the

development of innovation networks across the city and to facilitate test-bedding of smart city research and prototyping.

Meanwhile, Dublin Business Innovation Centre, which immediately adjoins the SDZ and Trinity College, houses and supports 80 early stage companies, with significant representation in the gaming and creative sectors. Dublin's scale enhances the potential for interaction between multiple players including industry, government and academia, as well as between large multi-nationals and small to medium firms.

There is a vibrant venture capital community in the city. According to Enterprise Ireland there is €800 million available through seed, venture and angel capital firms in Ireland. Accelerator programmes aimed at early stage companies are plentiful and especially so for web start-ups, for example Startupbootcamp, Dogpatch Labs and Wayra. Wayra, Telefonica's new global programme for technology start-ups and Dogpatch Labs, founded by a US venture capital firm, are both located in the Docklands SDZ. A key approach of the accelerator programmes is that they typically provide seed funding, mentorship, free co-working space and a community for web entrepreneurs. A similar environment of collaboration and industry networks could be created with the conversion of the warehouse structures in Docklands for incubator space. See Fig. 9.

Fig. 9 - Innovation & Enterprise Zones SDZ Wider Docklands Area (*See separate booklet for Figures*)

4.1.4.3 Digital-Tech Sector

Dublin is increasingly becoming a hub for the tech sector with an impressive list of global players in areas such as cloud computing, social networking, gaming and apps and a significantly higher proportion of entrepreneurs working in medium or high technology sectors when compared with the OECD or European Average.

Creative digital technology is an important sub-sector of the wider digital economy and one which has a growing presence in Docklands with a network of game, film and audio production companies and educational colleges most notably at George's Dock, Barrow Street, Ringsend Road, Shelbourne Road and Pearse Street.

For decades, Silicon Valley has been the leader of innovation and jobs growth in creative digital technology. However, with the number of developers increasing by 292% and jobs increasing by 91% since 2009, Ireland, indeed Dublin, is quickly becoming the choice destination for these sectors. It now contributes over €4.7 billion to the economy.

This emerging industry (in which 61% of the workforce is under 35 years) is very much a world of collaboration and exchange of know-how. The infancy of the industry, and its desire to expand and grow, means that those involved are eager to build communities. Perhaps out of necessity, there is a heightened sense of openness and camaraderie amongst 'gamers' and those involved in digital technologies.

To nurture this and to truly become the 'Silicon Docklands', the area needs to cater for the youthful faces of this fledging industry. Formal, constrained and structured work environments will not attract these brilliant creative and technical minds. The SDZ strategy includes an emphasis on creative spaces and 'open houses' for demonstrating and discussing technology. Industry players indicate that 'Cool' needs to meet 'Geek' to ensure organic networking opportunities which will entice new talent and lead to the creation of supplementary companies. Access to reliable, high speed broadband is core to competitiveness, flexible patterns of labour use and remote working which are all hallmarks of this sector. The SDZ Planning Scheme will pursue implementation of the National Broadband Plan.

The Government's strategy is that by 2015 Ireland will be recognised as a 'Global Games Hub'. Docklands is well-placed to fulfill this role and become the European Hub for technology as 'Silicon

Docklands'. The area has key assets such as Pulse College, which specialises in creative media education and has direct infrastructural ties with Windmill Lane Recording Studios, Ringsend Road. The College has undergone an expansion with an additional educational facility at The Dublin Exchange Building, George's Dock.

The Exchange Building also houses on-site incubation units for games companies, as a joint academic and industry partnership with Games Ireland, an advocacy group which provides structural support and seeks to ensure rapid industry growth. These synergies are an example of industry clusters in a very real sense.

Pulse College acts as a talent feeder for companies in the city and this is of immense significance given the intense global competition for skills across the sector. 'The Factory', which incorporates the Irish Film and Television Network and the National Performance Arts School, Dogpatch Labs, as well as tech giant Google are all in close proximity on Barrow Street, reinforcing the potential for a creative digital-media cluster at Grand Canal.

This sector puts a premium on creative ideas, concepts and technology, values which mean that it could act as a catalyst for creative industries and inter-linkages with the existing clusters in Docklands. The relative youth and enthusiasm of the cohort means that it could also act as a stimulus for a greater number of start-ups in the area. The SDZ Planning Scheme spatial strategy will seek to foster this creativity and entrepreneurship.

4.1.4.4 Office Typologies

Docklands must facilitate a range of office typologies to reflect the key growth sectors and to meet business lifecycle needs from start-up to growth phase to maturity and consolidation. To this end, the SDZ Planning Scheme will promote flexible floorspace provision and to allow for a range of office accommodation types within each grid block. This approach is also desirable from an urban design perspective to ensure an appropriate diversity of scale and a richness of finer grain development, both of which underpin a quality urban environment so critical for the attraction of investment and talent.

Large corporate occupiers have typical floorspace requirements of 15,000-25,000m² with demand for flexible and sub divisible floorplates which are typically 2,000-2,500m², beyond which there may be multiple cores. Factors such as a good external profile, prominent reception, floorspace flexibility, energy efficiency and a safe vibrant location are important for international and headquarter occupiers.

Office occupiers at the mid-range have typical requirements for 2,000-4,000m², which are often accommodated within larger buildings, hence the importance of flexible floorspace solutions. The availability of mid-range space caters for growing companies, which is particularly relevant to the rapid pace of growth in the tech sector. Facebook is a case in point, where colonisation of its offices at Hanover Quay, occurred on a floor-by floor basis in tandem with the company's growth.

Start-ups typically seek office space that is affordable and flexible in terms of lease arrangements, often in the form of incubator units or larger multi-tenanted spaces with shared services. There is a strong enterprise culture in the immediate area with long-established organisations providing low-cost incubator space and essential soft support skills such as the Liffey Trust, Pearse Street Local Employment & Enterprise Centre, St. Andrew's Resource Centre, Dublin Business Innovation Centre and IDA Enterprise Centre. Business parks in the wider Docklands area can also fulfill an important role in accommodating start-ups such as East Point Business Park, Docklands Innovation Park and Castleforbes Business Park. This is especially relevant for supporting economic activities which may have no need to be in a premium office location. The proximity of a number of enterprise zones to the core economic clusters also enables growing businesses to stay within the general area but to move to higher value office space in the SDZ Area.

The tech sector with its young profile tends to have a different value-system in terms of key criteria for working places. Competition for staff is intense and so staff well-being is crucial. The building type and external profile is less important, but the general environment is a critical factor. The players in this sector want vibrant urban locations with eighteen-hour uses reflecting the nonstandard working hours and a different philosophy to the working day.

They also seek out neighbours with a similar image or profile, sharing a resonance with the design, innovation and digital communities. Large tech companies also seek an ecosystem of smaller tech companies to feed them. Tech start-ups tend to seek collaborative or co-working spaces, municipal Wi-Fi and a range of outdoor cafés, pedestrian spaces and cultural activities in close proximity.

There is strong evidence to suggest a demand across the economic spectrum for a mix of large and small office floorspace in close proximity, on the basis that there is growing awareness of synergies, spin-offs and the potential for an exchange of talent between companies of different sizes across different sectors. Multi-National Enterprises (MNEs) or large corporate entities can benefit from such an alliance with fresh ideas and technological innovations or a partner for non-core business activities, whilst Small Medium Enterprises (SMEs) can benefit from business development opportunities and a foothold in a global network of markets. The exchange of talent may take the form of a single placement or an incubator desk within an international company that would facilitate mutual learning or technical support to a start-up development studio. Enterprise Ireland and IDA Ireland in conjunction with Accenture, which has a significant presence in the SDZ, have set up an initiative to identify suitable SME partners to facilitate exchanges that involve mentoring and peer-to-peer learning. In this context, the provision of incubator space and start-up facilities as part of conventional office development will be encouraged, as for example in the case of the Wayra Academy which occupies a floor of Telefonica's HQ Building on Sir John Rogerson's Quay.

4.1.4.5 Green Finance

The Green IFSC Initiative is likely to be the next stage in the development of the IFSC. The initiative is a Government sponsored public-private-partnership which seeks to position Ireland as a global hub for green financial services. Underpinning this goal is the IFSC as a world class international financial services centre, with expertise and global linkages in the emerging green and climate change finance sector. These key attributes enable a unique combination of financial services expertise and enterprise knowledge offering an unparalleled talent pool for a green financial services centre where finance, trade, product and skills are developed, exported and exchanged. This sector has huge potential for growth as the world transitions to a low-carbon economy. On this basis, the Green IFSC is working closely with Government and IDA Ireland to attract FDI to the Green IFSC.

Furthermore, the Green IFSC and Dublin City University's launch of a post-graduate course on sustainable energy finance is indicative of the new collaborative approach between industry leaders and academics, which has the potential to play a pivotal role in the emerging economy of Docklands.

Reinforcing the Green IFSC Initiative and strengthening its green credentials are a number of parallel projects relating to resource efficiency and sustainability, including 'Greening the IFSC; the Sustainable Energy Community (SEC) Programme, the Dublin District Heating System and notably, the Docklands SDZ Planning Scheme with its over-arching sustainable framework to the regeneration of substantial city-centre brownfield lands.

4.1.4.6 The Marine Economy

Ireland has established itself as among the top fifteen international centres for the growing sector of ship finance and maritime commerce. There is significant further potential for this niche sector given that Dublin is currently recognised as the leading centre for aviation lease finance in the world. The similarity of the sector's profile with the need for ancillary ship commerce including finance, leasing,

legal and accounting firms means that there is a real opportunity to emulate the level of activity and expertise in the aviation sector. Docklands is well-positioned to become a marine services centre harnessing the locational proximity of IFSC and Dublin Port. The Irish Maritime Development Office and IDA Ireland have proposals to develop an International Shipping Services Centre. North Lotts would be an ideal location for this type of economic activity given the natural synergy with the existing financial cluster and the port as a focal point of internationally traded merchandise, maritime logistics and cruise tourism.

On cruise tourism, there is real potential to increase this as an economic activity, especially in the context of the high level of accessibility between Dublin Port and Dublin Airport. The Port's Masterplan sets out proposals to develop new cruise tourism facilities to enable it to act as a commencement port for cruises, which include inter alia, bringing the cruise liners closer to the city centre at Alexandra Basin and an enhanced environment for disembarking passengers. The City Council supports these proposals on the basis of its positive role in integrating the port with the city, creating a permeable interface and supporting the viability of the retail district at Point Village, as well as being of wider strategic economic importance to the city. See Fig. 10.

Fig. 10 - Economic Drivers (See separate booklet for Figures)

It is an objective of Dublin City Council:

- ER1 To facilitate the growth and consolidation of the emerging spatial clusters of the legal, financial and digital media specialisms **and the Global Services Sector.**
- ER2 To actively engage with universities and industry players to help create a multi-cluster innovation hub.
- ER3 To investigate the potential to create physical linkages between the emerging spatial clusters in the docklands and clusters in the rest of city, as well as fostering collaborative network synergies between the clusters on a city-wide basis.
- ER4 To seek an iconic physical space to accommodate a focal point for innovation in the city.
- ER5 To promote and facilitate the creative digital technology sector as a pivotal part of the digital economy and as a catalyst for creative industries and inter-linkages with existing clusters in Docklands.
- ER6 To encourage and facilitate a range of office typologies to cater for the key growth areas and to meet business lifecycle needs from start-up to growth phase and maturity.
- ER7 To seek the provision of flexible floorspace and a range of office accommodation in each city block.
- ER8 To promote the provision of incubator space and start-up facilities as part of conventional office development to foster synergies between companies of different sizes and across different sectors.
- ER9 To promote the provision of start-up, incubator and collaborative space for high value digital, design or creative industries as a possible use for a number of the historic warehouse buildings in the SDZ.
- ER10 To facilitate and harness the employment generating opportunities of the support services sector as well as enterprise activity with a range of key skilled, semi-skilled, unskilled and volunteer workers of all ages, as part of the overall economic regeneration for the wider Docklands Area.

- ER11 To liaise with agencies and organisations working in the docklands to maximise educational opportunities and support access to employment for local residents of the Docklands Area.
- ER12 To facilitate agencies and organisations, in particular those engaged in employment and training initiatives in Docklands to work together in a coordinated manner in order to maximise employment, volunteer and training opportunities for residents of all ages in the Docklands Area.
- ER13 To encourage the provision of affordable workspace for start-up, enterprise and creative activity where feasible as an interim measure and /or on secondary streets in the SDZ and to support the continued provision of such space in the existing enterprise zones in the wider Docklands Area.
- ER14 To seek to deliver a range of outdoor cafés, pedestrian spaces, cultural activities and municipal Wi-Fi zones to create a vibrant urban working environment, as a response to the locational criteria or value system of the tech sector.
- ER15 To support the Green IFSC through projects and programmes such as a Greening the IFSC Initiative and Sustainable Energy Communities (SEC) and to ensure that Docklands represents the optimum in energy efficiency and sustainable design to reflect its emerging role as a hub for green finance.
- ER16 To liaise and support the government and interested parties to develop an International Shipping Services Centre in the SDZ.
- ER17 To engage with Dublin Port Company, Fáilte Ireland and the Department of Transport, Tourism and Sport to facilitate the development of a new cruise tourism terminal at Alexandra Basin

4.2 Making Quality Residential Neighbourhoods

4.2.1 Introduction

The ambition for the Dublin Docklands is for it to become one of the great living urban environments of Europe, providing a unique and enriching life choice and experience for residents. Attracting people to live in the area is core to the overall aims of successful regeneration.

The regeneration policies followed over the past two decades have delivered high quality housing for contemporary urban living in the Docklands. This positions Docklands as a place that attracts a variety of residents and family types, providing opportunities to live in a safe, people friendly environment.

In continuing to develop the Docklands as a contemporary living environment, the SDZ Planning Scheme sets out a holistic approach to housing policy, one that seeks successful integration between residents, their neighbourhoods and the wider community. The approach is also one where good design principles and the key principles of economy, identity, infrastructure, connection and sustainability are recognised as inter-related components, necessary for the continued development of a successful urban residential neighbourhood.

Fig. 11 – Docklands Neighbourhoods (*See separate booklet for Figures*)

4.2.2 Achievements

The significant increase in population in the Docklands between recent census periods is evidence of the success of the regeneration process to date, particularly in building the population base and expanding the residential community within the heart of the regeneration area. It is one of the fastest growing areas in the city, region and State. The new population which has come to live in the SDZ area in recent years is young, growing, multicultural and brings a new vibrancy and diversity to the area.

The majority of the population, including the pre-family and young family households, resides in a new generation of higher density apartments provided in recent years through the regeneration process. The new schemes have high occupancy rates and have successfully attracted a significant new residential population to live in the area. With 93% of the new housing stock in the form of apartments, the Docklands has become a showcase for the city in how to achieve successful apartment living.

Many of these schemes are award winning for their design, quality and innovation. Hanover Quay for example was the RIAI 2009 silver medal winner for excellence in housing design. The scheme successfully combined 292 mixed tenure residential units with retail and commercial uses. Adjoining the SDZ area, Clarion Quay won the same award in 2007.

The 2011 Census recorded that 11% of households in the SDZ area are renting from either the local authority or approved housing bodies. Approximately 660 units have been (or are in the process of being) provided and distributed throughout schemes in both the north and south docks. Social housing provision is managed by a combination of the local authority and approved housing bodies such as Cluid, Liffey Trust and Tuath Housing.

4.2.3 Challenges

For the SDZ it is particularly important to continue the positive return to population growth and regeneration of communities following sustained periods of decline in the city's recent past. The city centre competes with other locations across the region in attracting residents. It is important that the advantages of living in the city centre, including sustainable proximity to places of work, services, amenities and public transport, are maximised in the integration of new housing areas into the fabric of the city. The quality of the living environment, from the level of the overall housing scheme, to

integration with the urban street and the internal quality of the individual unit, needs to be of a high standard to attract and retain residents.

Creating good neighbourhoods and successful communities is a core theme of Dublin City Council policy. The Development Plan recognises the inherent strength of a good neighbourhood that is small enough to engender a sense of belonging and community, with opportunities provided for chance encounters between people going about their daily activities, yet large enough to provide a good range of services. The real value of any neighbourhood is its community, with people, individually and collectively, being the city's strongest asset.

The overall challenge is therefore recognising that people are a primary asset for the SDZ. The analysis of the existing SDZ population profile has highlighted the young population groups living in the area. This young population profile is mostly living in rented apartment accommodation. There is a challenge in retaining this population and ensuring that choice and availability of accommodation exists for this young population as they move to family formation stages.

Although the majority of households are at a pre-family stage of the life cycle and household sizes are small, this may change in the short to medium term. At present, households with children, mostly one child and two child families, have young children mostly under 4 years and at the pre-school stages. There are also significant categories of children at the early school and adolescent stages. As these children grow, they will move between pre-school, primary and secondary level school stages. While a small proportion of the total, there are empty nest households and retired households within the population. Meeting the current and changing needs of such residents over their lifecycle represents a challenge for sustainable planning of the area into the future.

At present, the majority of units in the SDZ area are 2-3 roomed, privately rented apartments, suitable for the current population profile. Over time, a wider variety of larger, adaptable apartments will be required to meet changing family circumstances for residents and encourage people and families to put down permanent roots in the neighbourhood.

To enable this, it will be important for new development to deliver:

- High quality spacious residential units with good levels of amenity in terms of green open space, daylight and sunlight
- Adaptable and flexible units that readily provide for changing needs over time including the needs of families with children
- High quality well designed communal areas
- Good property management
- Effective phasing for larger developments to front load benefits including social infrastructure.
- Sustainable building designs which are energy efficient and utilize renewable energy sources.

Future social housing policy and its implementation in the SDZ will be led by Dublin City Council and guided by the Housing Strategy of the Dublin City Development Plan, including the mechanisms to deliver social housing. The policies for social housing must accord with national policy guidance which is informed by the past performance of social and affordable housing initiatives and the realities of economic, market and financial restrictions. It is imperative that housing policy for the SDZ Planning Scheme is realistically guided by new national policy, is pragmatic and has an ability to be implemented. Housing policy for the SDZ Planning Scheme, while led and implemented by the local authority, will be implemented in collaboration with approved housing bodies who will play an important role in the future provision and management of social housing throughout Dublin city.

Housing policy and the physical design of housing schemes must be responsive to people and their quality of life issues. It will be a challenge to provide high levels of amenity within a compact high density model, and to integrate new urban neighbourhoods, within an area that also has a city, regional, national and international role in economic, cultural and leisure uses.

4.2.4 The Way Forward

The way forward is for housing in the SDZ to create real opportunities for exemplary and innovative designs and successful models of multiple unit management quality. Housing that attracts a new population, and provides choice and options for the existing residents (within the SDZ and adjoining communities) to stay living in their locality, is a core objective.

Past schemes have provided a successful basis on which the SDZ can build on in the future provision of quality housing. New housing in the SDZ should continue to aspire to create a lasting legacy and positive contribution to housing character in Dublin.

Policy for the future must also be implementable, realistic in addressing the financial and implementation measures available (social leasing schemes for example), and informed by new national policy.

4.2.4.1 Provision for Family living

While recognising the positive trends in population increase within the locality to date and the positive benefit of the young population base within the area it will be important to avoid a transient character to the local community and to provide choice to people as their life circumstances change. The SDZ Planning Scheme will make provision for schemes and unit types that are conducive to family living, longer term occupancy and long term leasing. The standards and facilities provided for residential schemes need to encourage long term rental and home ownership. There is a design challenge in developing exemplary high quality layouts, and providing facilities for families in compact higher density forms and the Planning Scheme will encourage innovative and distinctive design in order to achieve quality family living.

4.2.4.2 Provision of social infrastructure

It is important that services are accessible for existing and future family units, are within walking distance or close to public transport connections in order to foster genuine sustainable neighbourhoods. The location of facilities also provides focal points where residents within the community can meet and socialize, developing a true sense of neighbourhood and local identity. Housing provision cannot be seen in isolation in this regard and to be sustainable in the long term, must be provided in tandem with social and community services.

4.2.4.3 Valuing Higher Density Living

In order to meet national, regional and city policy for consolidating the city and ensuring an efficient and sustainable use of the land resource, residential development in this area will continue to be characterised by the high density apartment model. A mixed typology will provide some opportunity for other residential types (terraced houses and duplex units) where the context is appropriate. However, the apartment unit and scheme needs to be valued as an attractive long term home choice. There is a challenge in promoting this model to attract long term residents in the Irish context. Quality standards, management of schemes and integration of schemes within their communities need to be successful.

4.2.4.4 Inclusive and socially balanced residential communities

Residential provision should also create opportunities for smaller households, elderly accommodation, people with disabilities and starter homes. The largest demand for social housing is for one bed units and such units have an important role in the overall provision of new housing stock. Adaptable homes and a successful mix of unit design and typology needs to be provided to create inclusive and socially balanced residential schemes. The SDZ is also located close to significant third level colleges. Suitable locations for student housing, with quality standards of design and management, may provide a valuable housing type within this location.

As national policy and models for the provision of social housing changes, there will be opportunities for intermixing tenure throughout residential schemes. It is important that this provision is equitable, provides options for affordable living, balanced in terms of its geographic provision and well managed within mixed tenure schemes.

4.2.4.5 Multiple unit management

The management of apartment schemes has been strengthened since the introduction of the Multiple Unit Dwelling Act 2011. There are still challenges for both management companies and residents in maintaining schemes and enjoying communal living. These factors can be addressed through careful design decisions which recognise the end user, the amenity of the residents and ongoing management and maintenance. In particular, the successful sharing of communal space, respect for privacy and good noise reduction measures are important design criteria. The successful management of a well integrated development incorporating a variety in unit types and unit tenures is promoted in the SDZ Planning Scheme.

4.2.4.6 Integration of Housing with the Neighbourhood

An emphasis on the role of the street is important in ensuring that residential units, particularly where they are integrated with commercial uses, are not isolated or segregated from the community adjoining. Abrupt changes in the perception of character and identity need to be avoided. The street and public realm can provide the common denominator to blend residential areas, connect new housing to the wider street network and encourage the opportunity for social interaction. The design of schemes and new units can also play a role in how the occupier interacts with the streets, public spaces and their neighbours from the wider community.

4.2.4.7 Integration of different scales and housing character

Diversity in the built form can deliver visual richness, character and animation to new residential streets. High density layouts do not necessarily require the same mono approach to heights and frontages. It will be a challenge to ensure that new housing provides for a mixed character and still deliver on the principles of sustainable layout and design. A typology of streets will allow for a gradation in scale (from wide main street routes to narrower residential mews streets). Achieving good quality, natural daylight and sunlight into interiors and open spaces will require variations in heights. Where built heritage and residential terraces exist adjacent to new development sites, a transition in scale and character will be required for good integration. These design considerations provide opportunities for variations to the housing character, ranging from apartments to townhouses.

4.2.4.8 Optimise the Special Character of the Docklands

The opportunity to live in the Docklands area offers exciting prospects to enjoy outstanding cityscape and water views. The integration with established communities which have strong character and identity (such as East Wall and Ringsend) will connect new residents to a local sense of identity, culture and history. Restoring and adapting the historic buildings within the area for new uses, including residential uses (live work, studio apartments, and larger family spaces), offers the opportunity to connect new residents with the heritage of the location. The SDZ Planning Scheme will promote the integration of these heritage assets within each development. To create a genuine special identity for new housing that has the qualities of the Dublin Docklands, special regard to site positioning, design and integration of the area's features will be central to the successful development of Docklands neighbourhoods.

4.2.4.9 Delivering high levels of residential amenity in a transition period

The completion of residential development across the SDZ will be a gradual process. In the context of the current economic climate, it will be important to seek high levels of amenity across sites where some are in progress and others are halted owing to the economic downturn. Temporary uses, attractive site boundary treatments, improved visual presentation of sites (awaiting future development) will be important in this regard. Protection of residential amenity from adjoining construction activity will also be an issue to be managed in the transition context.

4.2.4.10 Core Principles for Successful Residential Development

It is recognized that the DDDA has made a major contribution to the provision of quality housing in the Docklands. The City Council will build on this legacy through the implementation of the following principles, taking account of national housing policy;

- To promote the establishment of sustainable residential communities through the provision of a wide mix of types and tenures of dwellings, which meets the changing needs of people throughout their lives facilitating long-term or whole-life living within the area

- Promote the development of living space that reflects the range of different users including single people, couples, couples with children, one parent families, persons with disabilities and seniors
- Require designers to ensure that residential developments interact with the street by means of frequent entrances, overlooking windows and balconies, whilst in residential streets ensuring a secure separation between any ground floor living accommodation and the public street
- Develop, promote and implement an integrated management system for housing, play areas and public realm within new residential complexes
- Provide for social housing in the SDZ and wider Docklands Area in accordance with the City Council's Housing Strategy and the Government's Housing Policy Statement, 2011
- Develop and implement a programme of supported housing in cooperation with the relevant housing agencies and providers
- Promote the design of residential complexes that do not articulate social differences
- Promote the implementation of supporting community, social, economic, cultural, health and educational facilities in tandem with the completion of new residential development. In the event that there is a need identified for additional school capacity, the preferred option is the rebuilding/upgrading of St. Laurence O'Toole School.

4.2.4.11 Delivering Social Housing

The provision of social housing in the SDZ Planning Scheme will be based on the following national policy approach:

- Taking further steps to regulate the private rented sector by making the rented sector a stable and attractive housing option for all, delivering true choice across tenures
- Nationally, affordable housing programmes will not be funded by the state into the future (as home ownership models)
- The main focus in terms of national supports will be on meeting acute needs
- There will be no return to large capital funded construction programmes by local authorities
- A restructuring of the social housing investment programme to allow social housing provision through more flexible funding models. Social leasing initiatives and in particular, the Rental Accommodation Schemes (RAS) will play a large role
- Long term rent supplements will be phased out
- An accelerated rate of transfer of households from rent supplement to RAS and the sourcing of increased rental stock will be a key feature in future provision
- Other funding mechanisms will be promoted including purchase on lease agreements, build to lease and sourcing of loan finance by approved housing bodies
- Options to acquire and lease existing housing stock for social purposes, in consultation with NAMA, will be pursued
- Approved housing bodies will be at the heart of future social provision. The use of loan finance from commercial lending institutions and the Housing Finance Agency, has the potential to develop stronger, more substantially funded voluntary and cooperative housing sector, playing a much greater role in the supply of social housing without reliance on capital funding
- The voluntary and cooperative model has the potential to promote the evolution of mixed tenure communities through the provision of housing for market sale and rent as well as social renting and will offer a new path to ownership via sales to tenants

Social housing provision based on this approach will allow genuine integration across residential development and will support a socially balanced community within the SDZ.

It is particularly important to note the future important role of the private rented sector (the Council will evolve the contribution of this sector through the PRTB), approved housing bodies and social leasing in the provision of social and affordable housing opportunities.

Social housing provision for the residential component of each city block must be addressed under the City Block Rollout Agreement (CBRA) and in accordance with Dublin City Council's Housing Strategy. See section 6.1.2 for further details on the CBRA.

4.2.4.12 Delivering the Dublin City Council Housing Strategy (See Dublin City Council Development Plan)

Part V of the Planning and Development Act 2000 (as amended) requires each planning authority to include in any development plan a strategy for the provision of housing for the existing and future population of the area.

The zoned and serviced lands in the SDZ area have an important contribution to make in meeting future housing supply and accommodating further population growth over the Development Plan period. There are 22ha of lands to be developed within the SDZ boundary which will contribute to additional housing units required by the city overall.

The social housing requirement will include a range of social housing tenures and will be implemented through the SDZ Planning Scheme in accordance with the mechanisms of the City Development Plan Housing Strategy.

4.2.4.13 Working with Approved Housing Bodies

The role of approved housing bodies, such as the Docklands Housing Trust, Cluid, Liffey Trust and Tuath Housing, is recognised for its importance in developing and implementing housing policy in the area. Dublin City Council will work with approved voluntary and cooperative housing bodies to implement the City Council's Housing Strategy in the SDZ and wider Docklands Area.

It is an objective of Dublin City Council:

- RN1 To promote the expansion of the residential population in the SDZ and retain the existing population base as their lifecycle requirements change by providing high quality adaptable homes and quality residential choices for a range of household types inclusive of single occupants, students, young couples, families, the elderly and those with special needs
- RN2 To promote sustainable higher densities and quality innovative designs achieving generous standards of residential amenity for residents including spacious and adaptable interiors, high quality natural lighting, good storage facilities, private open space amenity and car parking storage
- RN3 To seek a successful interaction between the residential scheme, streets and public realm to foster a true sense of neighbourhood and encourage interaction between residents. Opportunities for animated ground floors, homes with own door access, private landscaped terraces and a successful integration with communal and public open space shall be encouraged

- RN4 The design of residential schemes, communal open space, public open space and public realm shall be integrated to maximise use by community and facilitate children's play and recreation for children across a range of age groups
- RN5 All residential proposals shall comply with the policies of the Dublin City Development Plan 2011-2017 for Providing Quality Homes in a Compact City (Ch 11), Creating Good Neighbourhoods and Successful Communities (Ch 12), Residential Quality Standards (Ch 17) and provisions of the Dublin City Council Housing Strategy (Appendix 3)
- RN6 To promote socially balanced communities through the implementation of Part V under the Dublin City Development Plan Housing Strategy which will be successfully integrated within schemes throughout the SDZ and implemented through a variety of measures, including long term social leasing and expansion of the Residential Accommodation Schemes (RAS), in accordance with national housing policy
- RN7 To promote creative design solutions in tandem with a successful mix of unit types and tenures to create socially inclusive residential schemes to promote genuine integration within a scheme and support a sustainable residential community within the SDZ.
- RN8 To recognise the important role of approved housing bodies in the provision of social housing within the SDZ and to continue to liaise and co-ordinate with these bodies in the implementation of Dublin City Council's social housing policy
- RN9 To promote successful models for multiple unit management and ensure that the design of schemes is cognisant of longer term and on-going successful management and maintenance
- RN10 To seek excellence in the completion of high quality development to facilitate taking in charge and protect the long term amenity value of new homes and schemes
- RN11 New housing shall be provided in tandem with physical, social and amenity infrastructure including enhanced access to the facilities and amenities of the wider neighbourhood
- RN12 To encourage the provision of a variety of housing throughout the area
- RN13 All residential proposals shall have regard to the document 'Quality Housing for Sustainable Communities' (Department of the Environment, Heritage and Local Government 2007) and accompanying manual 'Best Practice Guide' (Department of the Environment, Heritage and Local Government 2009)

4.3 Community Development

4.3.1 Introduction

The regeneration of the Docklands is a project about people, not just physical and economic regeneration.

Within the wider docklands area and nearby city centre areas, there are existing community facilities (schools, churches, libraries, parks, sports facilities, community centres etc) which provide the local population and wider community with amenities essential for recreation and leisure, a range of key social services, opportunities to meet and opportunities to become involved in the local neighbourhood.

The City Council's Department of Culture, Recreation, Amenity and Community has assumed responsibility within the Council for Community Development, Social Inclusion, Children's Services, Integration, Local labour market activation and an Age Friendly City. The City Council will actively pursue a community and social development agenda that will support and underpin the SDZ Community objectives.

Indeed, supporting and sustaining the viability of existing uses into the future is a key policy approach of Dublin City Council. The SDZ Planning Scheme will fully support this approach and promotes enhanced access to existing facilities in the wider community. Improvements to the public realm, public transport expansion, walking and cycling routes and integration of open space into green networks will provide opportunities to connect the community with locations of social, community and recreational activity in the wider locality. Building the employment and population base in the area will enhance critical mass of people to help sustain existing uses and make new uses viable.

Creating good neighbourhoods and successful communities is a core vision for the city overall, with a significant opportunity provided in the growth area of the Docklands to create an exemplary model for successful "Place".

4.3.2. Achievements

Progress in regenerating the docklands, often measured in housing units completed and commercial floor space developed, also includes a significant enhancement in facilities for community use and benefit. An audit of civic infrastructure, undertaken by the DDDA in 2006, found a notable increase in social infrastructure facilities within the locality since 2002 and identified 207 facilities covering sports and recreation, education and training, community/social services, health and religious facilities. In addition, shops and entertainment provide benefits to the community and the inclusion of such facilities brought the total to 429. See Fig 12.

Connecting the area with public transport, developing high levels of amenity along the campshires, requiring active commercial uses such as shops and cafes at street level, running a year round programme of festivals and events and are just some examples of how social infrastructure has grown and been delivered in partnership between private, state, voluntary and community interests over recent years.

A strong partnership with stakeholders in education, job creation and social housing in particular secured the physical and economic renewal of the area and also assisted social renewal, especially for communities that adjoin the regeneration area.

Significant public funding was committed to develop multi use community facilities in the architectural award winning Sean O Casey Community Centre on St Mary's Road North, East Wall. This facility, opened in 2009 provides a sports hall, gym, soccer pitch, 156 seat theatre, playschool/crèche, meeting rooms, senior citizens day care, skilled classes and office space.

Significant private funding has also been committed to develop cultural and entertainment facilities including the landmark Bord Gais Energy Theatre at Grand Canal Dock and the Odeon Cinema at the Point Village.

The Lir National Academy of Dramatic Art on Pearse Street, and the National College of Ireland on Mayor Square provide valuable education, training and cultural facilities and have opportunities to play a continued and greater role in interacting with the community.

St Andrews's Resource Centre is contained within a historic school building (dating from 1895), a land mark protected structure on Pearse Street. The refurbished centre opened its doors in 1989 and has successfully run a diverse range of community services and activities including adult education, childcare, digital training, senior care, jobs and training, youth services, employment services and a sports centre. The centre employs 230 people and organises the annual South Docklands Festival.

A range of social programmes were successfully delivered by the Dublin Docklands Development Authority in the period since they were established, particularly in the area of education and training. For instance, achievements in 2011 under these programmes included;

- Docklands Schools Psychological Assessment Programme: 21 additional assessments were funded in 7 Docklands Schools.
- Docklands Third Level Scholarship: 43 full time and 2 part time students continued to receive scholarships during 2011 from previous years.
- Docklands Schools Job Placement Programme: 5 local people completed placements in local companies (run in conjunction with Fás).

Fig. 12 – Community Facilities Map (*see separate booklet for Figures*)

4.3.3 Challenges

The choices people will make, whether to live or work in this area, will be influenced by the range and quality of social infrastructure available and accessible to them. As households enter family formation stages, whether children will play safely, go to school, go to college, gain employment in the future are all life style choices that will determine if families stay long term in this area. As households progress to retirement, facilities for senior citizen support, including active facilities for socialising and recreation and health, will determine if communities can stay together and remain inclusive. Delivering on a range of social infrastructure to meet the needs of all members of the community remains a challenge.

While progress in social regeneration has been on-going over the past two decades, public finance restrictions have also impacted on the ability for different state bodies to commit funds for additional health, education and community services within the area. The largest challenge facing the development of social infrastructure is the availability of finance. Too often, social infrastructure is delayed or pushed out in the setting of priorities but it must be recognised that there are real dividends to the longer term sustainable renewal of areas if the social and economic status of the community is enhanced and quality of life criteria improved as the area progresses. Engaging with landowners and their financiers to recognise these dividends and longer term gains will be an important task in ensuring community infrastructure and gain can be realistically delivered through future designs and land use proposals within the SDZ Planning Scheme area.

Attracting people to work, live and socialise, companies to invest and businesses to open is dependent on creating a vibrant neighbourhood. This is particularly important in a context where communities within and adjoining the SDZ have been marginalised in the past and are at a disadvantage in socio-economic terms compared with the profile of newer residents. The need to prioritise the social and economic regeneration of the wider community so that polarisation is not created between different socio-economic communities is a central part of the SDZ Planning Scheme approach to social regeneration.

The population of the area is expanding and younger people, from mixed international backgrounds, are now living side by side with residents from historic neighbourhoods. Facilities need to be inclusive to all so that the community can integrate and socialise across different age, socio economic and cultural backgrounds. This is itself a challenge where there are limited financial resources and points to the need for sharing space amongst a diverse range of uses.

A challenge also exists to evolve the perception that social infrastructure is solely an outlay of expenditure as opposed to also being a potential revenue stream and provider of a future financial return to the area and city (increased vitality in a neighbourhood offering a good quality of life will attract people to live, work invest and commit to the area in the longer term). Ways to prove the real value of benefit to the economy of the city should be promoted (cost benefit analysis and pilot studies). Finding good examples of where community space is created, shared and made financially viable as a use integrated with other revenue generating activities, especially cultural, artistic, media and enterprise activity will assist in changing this perception.

Given the huge economic significance of the SDZ and the range of potential employment opportunities and spin-offs, it is essential to community development that opportunities for the wider population to work in the economy, particularly in the main and supporting economic activities in the docklands, are created. There is a need to support an increase in the level of attainment to third level plus education and further training and skills development. In addition, fostering entrepreneurship and creativity that create opportunities for community development, in particular engagement of local schools and local youth with economic activity and the creative industries clustering in the SDZ area, will be a challenge for the area.

Integrating the corporate commercial sector and the local community so that residents, workers and company managers alike share the same sense of community and pride in the local neighbourhood presents an interesting challenge. Opportunities for Corporate Social Responsibility Programmes, linkages between community organisations and companies through community programmes are all innovative, new options that could bring about such integration.

The successful co-ordination and co-operation between state agencies with a remit to provide the public with quality social services and to ensure that this growing area is being supported with quality social infrastructure and relevant social programmes will be a challenge in the current financial climate.

4.3.4 The Way Forward

By seeking to improve the physical infrastructure, connections, public realm and population base of the area and requiring the supply of serviced floor space in accessible locations, the SDZ Planning Scheme is creating the environment and opportunities to attract private, state, voluntary and other public bodies to occupy space in the docklands and be accessible to a population base that makes the services provided viable.

As the area continues to be regenerated, a people focus will remain at the core of all proposals for design and land use provision, with an improvement in the quality of life for residents, a central tenet in all development proposals.

4.3.4.1 Social Infrastructure Needs

The City Council seeks to develop a cohesive, integrated and socially inclusive community through Asset Based Community Development (ABCD). The approach seeks to discover local assets and create opportunities for these assets to combine to be more productive. This approach focuses on mobilising the resources that are already present in a community and building on these.

The SDZ Planning Scheme seeks to encourage the maximum use of established assets through shared use and shared cost, to ensure high quality facilities are available to all. The Planning Scheme recognises that additional civic infrastructure is required in the area, particularly childcare, education, and a large multi-functional leisure and community facility. The delivery of this infrastructure will be achieved through a combination of community infrastructure and gain, public and private funding and other collaborative means, given the current economic and financial constraints that have impacted on the rate of delivery of community infrastructure across a broad spectrum of uses. Any new programme will have to be drawn up in the context of current budget constraints.

Local services such as doctor's surgeries, local shops, play areas, leisure and health facilities are encouraged in the SDZ Planning Scheme through the mixed use approach and the emphasis on creating vibrant neighbourhoods, and an attractive public realm.

4.3.4.2 Community Infrastructure and Gain

As infrastructure is developed and regeneration advances to tackle the remaining brownfield sites, it will be a core requirement that opportunities for community infrastructure and gain are maximised through the design of buildings, the public realm provided, and land uses proposed.

The requirement for social audits and the provision of social infrastructure as set out in Section 12.4.6 of the Dublin City Development Plan 2011-2017 will apply to all proposals for large scale residential and / or mixed use schemes in the SDZ Area. Under these requirements, typically schemes of 200 units or 20,000 sq.m. depending on local circumstances, must be accompanied by a Community Infrastructure Statement comprising an audit of existing facilities in the area. This audit must show how the proposal will contribute to the range of supporting infrastructure and how it will deliver a key social infrastructure element.

Key social infrastructure elements may include the following category types, as defined by the Government's Developing Areas Initiative: Education and Childcare Facilities; Community and Social Facilities; Recreational Facilities; Passive Amenity & Open Space and Local Retail.

Community infrastructure and gain will continue to be promoted as part of development proposals and within each city block and these opportunities will include:

- New high quality housing options to expand the population base and vitality of the area
- New employment opportunities within commercial and mixed use developments including requirement for business start up and smaller enterprise space
- New permeable routes and street connections that facilitate ease of local movement and neighbourhood integration
- A high quality public realm and provision of public open space for recreation and socialising
- A vibrant mix of commercial uses that include local shopping, cafes, restaurants and leisure uses to benefit the population
- Provision of suitable accommodation for private childcare operators to uptake and where public sector operators have funding, floor space available for public and community based childcare services
- Encourage the shared use of facilities and spaces for the benefit of community meetings and events
- Develop the tourism, culture and arts resources within the local area which are engage with the local community
- Reinforce the strong connections with established urban villages and neighbourhoods in the wider area and encourage shared use of facilities in all locations for all
- Provision of new social facilities as part of development proposals

Creative ways to achieve community infrastructure and gain, (creative use of vacant units and land) and longer term (provision of quality housing, uses that create employment, shopping, community and leisure facilities etc) will be supported and sought within development proposals. The development of facilities within each of the proposed hubs, at locations accessible to public transport and along active street frontages will also provide these opportunities.

4.3.4.3 City Block 19 [former Plot 8] Site at Grand Canal Dock Basin

The peninsula site located where the Grand Canal Basin and River Dodder meet is significant for its unique setting, heritage value and potential for development that includes community uses, as prioritised in previous plans for the Docklands area. An advisory group was established including key site and community interests to steer the implementation of a community based development on site. The economic downturn has subsequently delayed the delivery of a community based project on this site.

Any future development of this site will be a joint venture with Waterways Ireland and NAMA. The potential for a multiple use community facility to maximise the special geography of the site and to provide a catalyst for area wider regeneration is recognised as significantly positive for community development and regeneration of a unique project within the Docklands. The SDZ Planning Scheme will continue to promote and facilitate the delivery of this project.

4.3.4.4 Education Facilities

The Department of Education and Skills was consulted as part of the SDZ Planning Scheme preparation process to establish the need for additional primary or secondary level school facilities in the SDZ or wider locality. The Department's own research has highlighted the strong population growth within the Docklands. However at this present time, the continued operation and sustainability of existing schools in the wider locality is the priority for the Department, in particular encouraging increased enrolment as children enter the primary and secondary school age categories. Improvements to public transport, enhanced walking and cycling routes will also improve mobility whereby a choice of school locations within the wider area (city centre, north and south city inner suburbs) will exist for the growing population.

Currently there is no land reservation requirement from the Department for a school facility within the SDZ boundary. However, in co-ordination with Dublin City Council, the Department have agreed to continue to monitor trends in population growth, the capacity and enrolment at existing schools and to carry out studies to establish the need for additional facilities in the wider locality. Dublin City Council will fully support proposals which are made for new educational facilities by the Department or other providers.

It is important that the wider community have access to third level education, training and skills development, to gain access to jobs in the industries locating the docklands and both new and supporting enterprise activities. With respect to further opportunities for education beyond second level, leveraging the opportunities provided by the National College of Ireland located in the docklands and the close proximity of Trinity College and other third level facilities, will be important to ensure that the local population achieves access to third level plus skills and education development.

4.3.4.5 Childcare Facilities

Access to childcare facilities is vitally important to assist the community development of the growing population, and assist the social and economic development of households (assisting the development of children and parents to have employment options).

There is an increasing population and young children within the SDZ area and more children can be expected as pre-family households move to family formation households in the life cycle stage. With a growing population, there will be a continuing and increasing demand for childcare places, in particular affordable facilities. The vision for the area is to promote the location as a family friendly neighbourhood and to ensure access to childcare facilities.

Dublin City Council will continue to support the role of childcare services and co-ordinate with stakeholders and providers of these services to assist existing service providers and support the future provision of private and community based services as the population expands.

4.3.4.6 Other Local Social and Community Services

There are a range of community services in the wider area which play an important role in community development. Such services should be supported into the future as they will continue to provide vital services to the community within the SDZ boundary.

4.3.4.7 Collaborating with the Private Sector

A policy of Corporate Social Responsibility will be encouraged by the Council, through the implementation and review mechanisms of the SDZ, to ensure successful integration between large companies and local residents sharing this neighbourhood. Opportunities such as the sharing of facilities, sponsorship of events, skills and jobs placement initiatives, and the development of cultural and social activities will be encouraged and maximised.

4.3.4.8 Supporting and Co-ordinating Social Programmes

Continued co-ordination with the providers of social services throughout the implementation and review mechanisms of the SDZ Planning Scheme will ensure that the location is continually promoted to attract such facilities. Support for social programmes will be encouraged by Dublin City Council, in co-ordination with relevant stakeholders, to maximise the opportunities for community development, education, training and employment for the wider community.

It is an objective of Dublin City Council:

- CD1 To promote a community, cultural and recreational development on the peninsula site of the gravings docks in the Grand Canal Basin, including the provision of generous landscaped amenity areas and public realm, optimising the unique setting and heritage value of the site and providing a neighbourhood-wide community and recreational resource as a unique attraction in the SDZ area
- CD2 To support and promote the continued role of the Sean O Casey Community Centre East Wall Road and St Andrews Resource Centre Pearse Street as significant multi use community facilities, social spaces and landmark buildings accessible to the wider community
- CD3 To promote access to high quality social infrastructure that sustains existing and planned population growth and supports the long term quality of life the community
- CD4 To recognise the multi cultural character of the growing population and promote community facilities and social infrastructure that is inclusive and accessible to all within the community
- CD5 To co-ordinate with the Department of Education and Skills in supporting the important services provided by existing schools in the wider neighbourhood and in particular support their continued role in community development, co-ordinate the provision of enhanced connections (walking and cycling routes) and open space provision to benefit of local schools and promote the provision of enhanced educational services in the wider Docklands area to service the significant growth in population of the SDZ
- CD6 To conduct a special review between Dublin City Council and the Department of Education and Skills to ascertain the need to enhance and develop educational facilities in the wider neighbourhood to service the growing population of the SDZ area
- CD7 To encourage the use of facilities in third level colleges and larger companies (opportunities for meeting rooms as an example) for community benefit and promote the development of a

Corporate Social Responsibility policy within larger companies to integrate the community with the commercial sector

- CD8 To co-ordinate, with other agencies, on the continued support for and enhancement of youth and senior citizen services in the local area for inclusive and integrated communities
- CD9 To promote a local School Job Placement Programme
- CD10 To promote a Docklands Local Employment Steering Group with relevant stakeholders to facilitate an employment strategy to promote enhanced local employment access with a specific regard for younger people and older people.
- CD11 To promote the development of community, health, childcare and other community and social facilities as part of the mixed land-use policy for the SDZ
- CD12 To provide commercial facilities such as local supermarkets, restaurants, cafes and leisure facilities that provide opportunities for local employment and locations for the community to interact, meet and socialise to assist community development
- CD13 To promote the use of vacant commercial units and appropriate vacant spaces for artistic, cultural and community uses on a temporary basis to encourage the community to meet (the concept of third spaces) for community development
- CD14 To promote the development of street infrastructure, walking and cycling routes and public transport routes to enhance connections between residential areas and the community facilities that exist in the wider neighbourhood
- CD15 To provide locations that encourage interaction between residents, workers and visitors, and importantly between neighbours within the SDZ area and wider neighbourhood adjoining, as integral elements in the design and layout of schemes, in particular in the positioning and design of public open space and the design of the public realm
- CD16 To facilitate the provision of sports and leisure facilities, in particular water based sports in recognition of the special waterside location context of the SDZ, to the benefit of local community and in particular the local youth
- CD17 The Council will seek to develop initiatives with relevant stakeholders through Corporate Social Responsibility programmes.
- CD18 The Council will concurrently develop a Community and Social Development Plan for the SDZ area.
- CD19 To develop, facilitate and support educational initiatives undertaken by community and voluntary sector to enhance life opportunities and social cohesion.
- CD20 The Council in conjunction with the HSE will facilitate the development of a Health care Service in the North Lotts area of the SDZ.

4.4 Movement

4.4.1 Introduction

The development of the Docklands area has resulted in the extension of the city centre eastwards drawing in the existing community and bringing new residents and uses to the area. From a movement point of view, new infrastructure has been provided in recent years that has improved connections from Docklands to the city centre and the surrounding areas. There remain a number of challenges to be met to ensure continued regeneration of the area. There is limited road capacity on the network to accommodate car based development. The existing environment is not yet conducive to the promotion of walking and cycling as the predominant means of travel. Also, public transport capacity serving the area needs to be increased to accommodate the projected growth in people working and living in the area. See Fig 13.

Notwithstanding the above, the preparation of an SDZ Planning Scheme for the area presents an important opportunity to develop and promote the area as a sustainable community and city quarter. The strategic movement vision for the area is one of an environment that is pleasant, accessible and easy to move around on foot and by bicycle and where movement to, from and within the area is predominantly by sustainable means.

Fig 13 - Main Traffic Routes (see separate booklet for Figures)

4.4.2 Achievements

The opening of the Port Tunnel and the implementation of the HGV Strategy has removed thousands of heavy goods vehicles from the City Centre and in particular the quays. The Port Tunnel provides the area with direct and speedy access to Dublin airport, greatly facilitating international business connections for the corporate sector located in the SDZ area.

The construction of the Samuel Beckett Bridge, which provides bus priority and includes provision for the potential future expansion of the Luas, and Sean O'Casey pedestrian and cycle bridge has improved connectivity for all modes of transport. Over 14,000 vehicles use the Samuel Beckett Bridge each day, while approximately 2,300 people cross the Sean O'Casey Bridge every day in the evening peak.

The Marlborough Street Bridge, which will carry the Luas Cross-City line, is currently under construction and will facilitate the connection of the area to St. Stephen's Green and beyond via light rail and also play a pivotal role in bus priority in the city centre.

Recent years have also seen the extension of Luas from Connolly to the Point linking the Docklands area to Tallaght and Saggart through stops across the Docklands and the city centre.

Docklands Station, which is located at Sheriff Street was opened in 2007 and facilitated the expansion of suburban and outer suburban rail services to Docklands. There are four other stations in or adjacent to the SDZ area, Pearse Street, Connolly, Tara and Grand Canal Dock, all served by DART and linking to inter-city services. Plans have been completed for both Connolly and Tara Street rail stations which should, once implemented, improve connectivity to the stations and enhance their environs.

Dublin Bus currently operates 13 bus services within the Planning Scheme area, 7 of which operate on North Wall Quay, East Wall Road, Sheriff Street and New Wapping Street, while a further 6 routes operate on Pearse Street, Ringsend Road, Sir John Rogerson's Quay and Benson Street.

The Pearse Street Bus Priority Scheme provided additional bus and cycle lanes and reduction in general traffic capacity and a Quality Bus Corridor has recently been completed along North Wall Quay.

The Docklands area is also within walking distance to Busáras, the termination point for large numbers of daily commuters to the city from the outlying areas of the Greater Dublin Area.

In terms of cycling the wider Docklands area currently has high levels of cycling, where the average mode share for cycling is 7.8% (2011 Census). The geography of this part of the city, together with the existing network of cycling often make cycle trips the fastest and most convenient mode of transport around the area.

A major improvement in cycling infrastructure within the study area has been the introduction of the Canal Premium Cycle Route which runs from Portobello to Sheriff Street. This route has been a huge success, serving both commuter and amenity functions.

The provision of the dublinbike Scheme has raised the profile of cycling in the city. It is one of the most successful city bike rental schemes internationally. The closest stations to the study area presently are the Custom House Quay and Pearse Street stations. The next phase of the long-term strategy for the expansion of the Scheme will see the scheme extended to the SDZ area and become operational in the later months of 2013.

4.4.3 Challenges

The particular location, within walking distance of O'Connell Bridge, and the physical nature of the study area, straddling the river and the Grand Canal, presents both opportunities and challenges from a movement point of view. While acknowledging the challenges, the Docklands area presents a real opportunity for the creation of a sustainable community underpinned by the integration of land use and transportation and adequate infrastructure.

As a major centre for employment, leisure and cultural activity with a large residential population, the area needs connectivity for the population of the Greater Dublin Area, as tens of thousands of people need to access and move around this area daily. From a practical and sustainable point of view, it is neither feasible nor desirable to meet these movement requirements by private car. The challenge therefore is to provide public transport infrastructure with sufficient capacity to accommodate the majority of movement by sustainable means. An equally important challenge is the provision of good quality pedestrian and cycling infrastructure, good interchange with public transport and an environment that encourages travel by these modes. This approach makes the best use of existing infrastructure in the area.

Barriers to movement occur at both the local/internal level and the more strategic/external level. Although the Liffey severs the area and constitutes a real barrier to integration and connection for the SDZ and the Docklands as a whole, it is central to the area's character and has some potential for movement from a recreational point of view, both quayside and water-based. The river and the canals also present a barrier to movement and access to the city centre, particularly for walking and cycling while the peninsular character of the area affords limited opportunities for connection to the surrounding areas for public and private transport. Pedestrian and cyclist access to the port needs to be addressed particularly in the context of increased cruise liners docking in the port. Connection westward to the city centre is poor from the pedestrian and cyclist point of view.

At a more strategic level, movement in to the area from the Greater Dublin Area is restricted by the existing road network. The strategic road network within the Docklands is limited to a small number of major roads. Although none of the roads within the Docklands are designated as national primary roads, the major roads carry significant volumes of traffic and provide important links in the local, regional and national road network. The existing road network is running at capacity during the peak

hours. A major challenge for the SDZ Planning Scheme is managing the capacity of the street network to provide maximum accessibility between the SDZ and the Greater Dublin Area, and at the same time integrating internal movement across the Liffey and within the city centre.

In terms of rail infrastructure, the Dart Underground with associated public transport interchange adjacent to the Convention Centre Dublin would be a major addition to the area in terms of accessibility. However, the timescale for the delivery of this project is presently unclear.

The Luas line serving the north Docklands is an important and attractive public transport facility. However, it does not alone have the capacity to accommodate the scale of development proposed for the SDZ area and the Docklands as a whole. The same must be said for the existing DART which skirts the Planning Scheme area. Creating direct and easy connection between the two forms of public transport presents a challenge for the area.

Another important challenge is to achieve a balance in car parking provision for the SDZ area where commuter car parking is restricted but sufficient short term commercial car parking and residents' parking is provided. Car storage for residents off street is crucial as there is insufficient space on street to meet this need. This is apparent from the existing situation which could be exacerbated by intensification of development. Another issue is the management of on street car parking particularly on private streets not yet taken in charge by Dublin City Council. Allied to this, and to the ambition to promote cycling and walking as the predominant transport modes, is the need to provide sufficient good quality cycle parking, both on and off street.

4.4.4 The Way Forward

The realisation of the full potential of the SDZ area requires a robust movement strategy which will contribute to the area fully evolving in a sustainable manner.

The vision is one of an environment that is pleasant, accessible and easy to move around on foot and by bicycle and where movement to, from and within the area is predominantly by sustainable means. The achievement of this vision will require stitching the gaps in existing infrastructure, providing improved connections, pro-actively managing private car access and parking and the pro-active promotion of sustainable smarter travel.

4.4.4.1 Provision of Infrastructure

The following infrastructure is necessary to fill in the existing gaps in infrastructure and to improve the facilities for public transport, walking and cycling. It is also crucial in providing connections that are currently lacking.

The two proposed pedestrian/cyclist bridges across the Liffey are crucial to improving connectivity within the SDZ area and the docklands area as a whole. They will also play an important role in making the best use of existing infrastructure providing improved linkage to DART on the south side and Luas on north side. The provision of these bridges will impact on quayside berthage.

The Dodder Bridge is also a crucial piece of infrastructure providing linkage eastwards to Poolbeg. This bridge would enable the provision of increased bus transport to serve the entire area as well as providing an important pedestrian and cyclist link eastwards to link residents with Dublin Bay.

The City Council re-states previously agreed policy in terms of supporting the provision of a link between north Dublin Port and the Southern Cross/South Eastern Motorway via an eastern bypass of the city, in conjunction and co-operation with other transport bodies, the National Roads Authority and local authorities. The preferred method is by means of a bored tunnel and the preferred route is under Sandymount and Merrion Strand and Booterstown Marsh. However, the route and detailed design of the link road will be subject to an Environmental Impact Assessment and all statutory requirements,

including a public consultation process, by the relevant authorities. An Appropriate Assessment of the proposed project for the entire route is also required in accordance with the Habitats Directive.

4.4.4.2 Alteration to Road Network

On the south side of the area facilities for buses would be greatly improved by the provision of a more direct route/ connection from Hanover Street East to Misery Hill. This would involve extending Hanover Street East in a straight line south of the An Post Sorting Office to connect with Misery Hill. The area is directly east of the Samuel Beckett Bridge linking the North and South Circular Roads. The SDZ area needs to link with the city centre across this route. The current layout of Hanover Street and Misery Hill on Cardiff lane is extremely inefficient and results in traffic from the Grand Canal Docks experiencing long delays.

4.4.4.3 Travel Demand Management & Mobility Management

Facilitating the use of public transport, walking and cycling as the primary modes of transport requires the provision of facilities and an environment to encourage sustainable travel but also the implementation of travel demand management measures.

Prior to the delivery of DART Underground a number of measures will be expedited to improve accessibility within the SDZ area and the wider area. Existing public transport and interchange facilities will be supplemented. In this regard, a frequent Luas service could run between Connolly and the Point, quickly connecting employees in the area to a concentration of cross city public transport facilities. There is potential to connect the Grand Canal Dock area back to the city centre through additional bus services/ routes including a dedicated Quality Bus Corridor. Furthermore, such enhancements would allow for supplementary transport measures on an interim basis in the form of shuttle buses provided by employers to meet staff travel needs. See Fig 14.

Car parking can be used as an effective demand management tool. The challenge is to limit commuter parking while ensuring adequate car parking for residential and commercial purposes.

It is important that standards for office and employment uses be in line with current development plan standards. The future development of the area needs to be weighted heavily in favour of the efficient use and patronage of public transport with a consequent reduction in the car parking requirements for significant commercial development proposals. The maximum car parking standards set out in the City Development Plan should not, as a general rule be required for future commercial development in the Docklands area.

Residential car parking needs to address the requirement for car storage while not promoting car usage. Although 47% of the population in the SDZ area has no car and 41% have just one car, there is insufficient capacity on the road network for residential car storage. Therefore, new development within the area should have sufficient off street car parking for residents.

Pro-active Mobility Management particularly in centres of employment can be very effective in reducing car travel to work and influencing travel behaviour. There is an important role for Mobility Management and travel planning in the development of the area as a sustainable place to work and live. It is noted that some of the major existing employers in the area are currently active in the NTA's Smarter Travel Workplaces Programme.

Fig 14 - Public Transport Map (*see separate booklet for Figures*)

4.4.4.4 Cycling

The expansion of the existing cycle network within and adjacent to the Docklands area will support an increased mode share for cycling. The City Council in tandem with the NTA are actively pursuing a

number of specific cycling projects which will provide important cycling infrastructure for the Docklands area. These infrastructure projects will form part of the wider network of links throughout the Dublin City area, promoting enhanced opportunities for movement and connectivity through Docklands. The specific projects include;

- the continuation of the S2S route – The future phases of the Sutton to Sandycove cycle route will pass through the Docklands area and will connect to the existing cycle infrastructure south of the River Liffey.
- the Dodder Greenway - A feasibility study has been carried out to develop a high quality pedestrian/cycle route along the River Dodder linking the Liffey at John Rogerson's Quay to the Bohernabreena Reservoirs at Glenasmole. In the longer term, it is hoped to create a direct connection from the River Liffey Cycleway Scheme to the River Dodder Greenway on the eastern side of the river.
- the Liffey Cycle Route - Dublin City Council in association with the NTA is currently undertaking a feasibility study to provide a continuous cycleway connecting the Phoenix Park and Heuston Station to the O2 arena along an east-west corridor in the vicinity of the River Liffey. The project is intended to improve the network of cycling infrastructure in the city, bridging a long recognised gap in accessibility through the city centre.

These projects will provide important new cycling infrastructure for the Docklands area. The provision of good quality cycle parking facilities, both on and off-street, is also an important part of cycling infrastructure.

All projects are consistent with current planning policy, including the emerging Cycle Network Plan for the Greater Dublin Area. They will be of huge benefit to the area as they will serve both commuting and amenity functions. They will also provide a totally new perspective of Dublin from a leisure and tourist point of view. As well as fulfilling a commuter function, these routes add to the attractiveness of Dublin as a destination.

4.4.4.5 Supporting & Promoting Innovation

The marketing and promotion of the area as a sustainable place to live and work is also important in influencing travel behaviour. Encouraging innovative approaches to movement, such as car clubs etc., is an important part of this.

It is an objective of Dublin City Council:

- MV1 To continue to promote the modal shift from private car use towards increased use of more sustainable forms of transport such as cycling, walking and public transport and to implement the initiatives contained in the Government's, 'Smarter Travel, A Sustainable Transport Future 2009-2020'
- MV2 To support and facilitate the development of an integrated public transport network with efficient interchange between transport modes, to serve the existing and future needs of all ages in association with relevant transport providers, agencies and stakeholders and to facilitate the integration of walking and cycling with public transport
- MV3 To provide additional cycle and pedestrian bridges across the canals and rivers in the SDZ to form part of strategic cycling and walking routes
- MV4 To create and support a well-designed network of pedestrian infrastructure to promote and facilitate walking and cycling; provide priority for pedestrians and cyclists along key desire

lines, developing routes within the Docklands and linking with the surrounding walking and cycling networks in Dublin City

- MV5 To require provision of good quality end of trip facilities to encourage walking and cycling such as secure and weather proof bike stands, lockers, showers, changing and drying rooms
- MV6 To support the extension of dublinbikes scheme throughout the area
- MV7 To discourage commuter parking and to ensure adequate but not excessive parking provision for short-term shopping, business and leisure use
- MV8 To provide appropriate levels of car parking to serve a range of uses accordance with the City Development Plan car parking standards (Section 17.40)
- MV9 To provide for sustainable levels of car parking and car storage in residential schemes in accordance with the City Development Plan car parking standards (Section 17.40) so as to promote apartment living for all age groups and family types
- MV10 To promote best practice mobility management and travel planning to balance car use to capacity and provide for necessary mobility via sustainable transport modes
- MV11 To support the function of the strategic road network through the Docklands and support the operation of primary routes for appropriate levels and types of traffic
- MV12 To maximise the potential benefit of the water bodies within the Docklands for recreational and transport purposes; support and enhance the water-based transport amenities within the Docklands
- MV13 To encourage the use of innovative measures, such as car clubs, to reduce the requirement for car parking
- MV14 To require Travel Plans and Transport Assessments for all relevant developments and/or extensions or alterations to existing developments as outlined in Appendices 5 & 6 of the Dublin City Development Plan
- MV15 Proposals for new developments shall comply with the standards for cycle parking and associated cycling facilities as set out in section 17.41 of the Dublin City Development Plan
- MV16 To support and facilitate the reservation strip as shown in City Blocks 2 & 7 for the provision of the DART Underground Station. All proposals within the zone of influences will demonstrate to Iarnród Éireann how the proposal relates to the DART Underground design. In the interim period until the DART Underground is in place, temporary uses and/or pavilion structures will be considered, on a short term basis, subject to the agreement with the DART Underground Office

4.5 Sustainable Infrastructure

4.5.1 Introduction

The provision and delivery of infrastructural services are essential to the continued development of Dublin Docklands and in particular the SDZ area. The physical infrastructure for the SDZ area includes drainage, water supply, electricity, gas, telecommunications and flood management, all of which are necessary to promote quality neighbourhoods, employment and a good ecological environment. The SDZ area forms part of a larger catchment area for infrastructure and this needs to be considered when proposing future plans for the development of the area.

4.5.2 Achievements

Dublin City Council and Dublin Docklands Development Authority, in partnership with other organizations, have been working to improve all aspects of infrastructure in the area. Over the last number of years a series of projects have been completed or undertaken.

The Royal Canal Linear Park was completed at the end of 2011 and runs between North Wall Quay and Sheriff Street.

The Spencer Dock Pumping Station is designed to pump sewerage from the Spencer Dock Development and the surrounding North Docklands area, through the Dublin Docklands Rising Mains, to the Main Lift Pumping Station in Ringsend and includes extensive odour control and noise abatement features.

The construction of the Liffey Services Tunnel was completed in 2010. The tunnel carries two new foul rising mains to the Main Lift Pumping Station in Ringsend. The services tunnel also has provision for electricity, telecommunications and possible future district heating utility requirements.

In 2009 the Spencer Dock Restoration project was completed which included new flood protection gates. The flood protection feature of the gates is that, being partially circular in plan, they are able to resist high tide levels coming from the sea and provide a barrier to flooding.

The South Campshires Flood Protection Project is currently ongoing and consists of approximately a 1km new wall which will be circa 800-900mm high. The scheme will provide flood protection from extreme high tides to a level of 3.7m above Malin Head datum.

The “Greening the IFSC” project has been launched by the Green IFSC Initiative which aims to make the IFSC one of the most resource-efficient financial centres in the world. While the Sustainable Energy Communities Programme have been enacted to develop a sustainable-energy system for the area. Both of these projects are positive steps as Dublin City Council aims to reduce the city’s reliance on unsustainable energy and fuel sources.

4.5.3 Challenges

A number of infrastructural challenges are facing not only the SDZ area but also the Dublin region particularly the supply and demand for high quality drinking water and for wastewater treatment. The main challenge to be addressed regarding drinking water supply and wastewater treatment are centered on meeting future increasing demand due to population growth, improving the efficiency of the existing network and encouraging water conservation. The SDZ area is prone to flooding. The main flood risks identified are from coastal/fluval (river) and pluvial (rain) sources. Given the onset of climate change and increased flood risk from extreme events, flood risk assessment and management is required in relation to all aspects of the draft planning scheme, including the areas of urban design, flood resilient construction materials and individual developments.

Much of the land within the SDZ area has been created through reclamation over a period of time. Remediation measures will be required for each development site within the area.

4.5.4 The Way Forward

In order to achieve the vision of the SDZ Planning Scheme and the key principles, delivery of infrastructural services is essential and this will be achieved through the strategy of:

- Investment in physical infrastructure which is required to ensure that there is adequate capacity to accommodate the quantum of development envisaged in the SDZ Planning Scheme
- The delivery of the required infrastructure will require a variety of different funding mechanisms and sources
- The securing of corridors for utility infrastructure to match the spatial pattern of development
- Using flood risk assessment techniques and the identification and management of these risks lying in place through flood resilient urban and building design and construction
- Promote the area as an exemplar of environmental sustainable design and building solutions with regard to energy efficiency, CCHP Systems and Sustainable Urban Drainage schemes

4.5.4.1 Wastewater Network and Treatment

The Dublin Docklands drainage network discharges to the Regional Waste Water Treatment Plant at Ringsend. At the time of preparing this planning scheme, Ringsend Waste Water Treatment Plant is operating at design capacity. Dublin City Council is currently finalising proposals to increase the capacity of the plant from 1.7 million PE (population equivalent) to 2.1 million PE.

In 2010, the Environmental Protection Agency granted the Greater Dublin Area Agglomeration Waste Water Discharge Licence, which conditions Local Authorities to address spills to the rivers and the sea. The ultimate objective of this licence is to restrict discharges from the wastewater network into rivers and waters.

4.5.4.1.1 North Lotts

The drainage infrastructure of North Lotts is mostly based on the single pipe combined system. As outlined above, various improvements and significant investment have been made over recent years but significant work remains to be completed to enable development proceed throughout the entire area. The City Council is current advancing plans for the construction of construct two major trunk sewers along Sherriff St and Castleforbes which, when delivered, will form the basis of the required new foul network for the area.

4.5.4.1.2 Grand Canal Dock

The drainage infrastructure of Grand Canal Dock has been partly upgraded in recent years. A new separate system for surface water drainage and foul drainage has been put in place in Phase 1 of the Grand Canal. These works were carried out as part of the former gas works site redevelopment. There are proposals to relocate the Grand Canal Surface Water Outfall from the Grand Canal Dock to the River Liffey. Notwithstanding these upgrades the remainder of the area will require the existing infrastructure to be upgraded to cater for any new development. See chapter 5 for proposed drainage infrastructure requirements at city block level.

All development in the Grand Canal Dock will be required to be drained on a completely separate system, i.e. both foul and rainwater flows should be directed to separate pipes. This reduces the possibility of flooding of the foul pipelines during times of extreme rainfall events. All rainwater run-off

must be attenuated where possible and sustainable drainage systems utilised. The use of sustainable drainage systems produces multiple benefits in terms of enhanced bio-diversity, reduced peak flows, water quality improvements and improved ecology.

Fig 16 - North Lotts / Grand Canal Dock SDZ Existing & Proposed Drainage Infrastructure (see separate booklet for Figures)

4.5.4.2 Water Supply

The Dublin City Council Water Services Strategic Plan 2009 sets out the vision for water supply services in the Dublin Region. Supply and demand for high quality drinking water is finely balanced and this will remain the case in the short to medium term pending increased production, storage and delivery capacity. The Dublin Region Water Supply Project is in progress to identify a new water supply source to avoid shortages of drinking water in the future.

Any proposal to develop site(s) not immediately adjacent to existing water supply infrastructure will have to address the issue of providing a suitable water supply for proposed developments. Alongside ensuring adequate supply, the SDZ Planning Scheme includes a number of measures to sustainably manage water demand. New developments and upgrading of existing development will need to install suitable water conservation measures including the use of rainwater harvesting and grey water recycling for example.

4.5.4.3 Flood Management

Over the last few decades the risk of flooding has continued to increase in Ireland, which is often due to climate change, resulting in increased rainfall, increased sea water levels, and also due to increasing levels of urbanisation. Coastal erosion can also increase the risk of flooding in some areas. Flooding, as well as causing economic and social impacts, could in certain circumstances pose a risk to human health.

The main types of flooding are from (i) coastal flooding which arises from the sea or estuaries; (ii) fluvial flooding which arises from rivers or streams, (iii) pluvial or surface flooding which arises directly from rainfall, (iv) groundwater flooding and (v) sewer/infrastructure failure.

The Regional Planning Guidelines for the Greater Dublin Area 2010-2022 recognise that Dublin City is vulnerable to two key sources of flooding, fluvial and coastal. The guidelines identify the impact of flood risk in terms of planning and identify that flood risk should be proactively managed throughout the planning process, that development in flood risk areas should be avoided where possible and that flood risk be reduced to and from existing and future development.

The Flood Risk Assessment which accompanies the SDZ Planning Scheme was prepared and informed by the Guidelines for Planning Authorities on 'The Planning System and Flood Risk Management' (and Technical Appendices) (DoEHLG & OPW, 2009). The Guidelines state that planning authorities are required to introduce flood risk assessment as an integral and leading element of their development plan functions. It sets out that development plans and local area plans must establish the flood risk assessment requirements for their functional area.

4.5.4.3.1 Flood Risk Assessment

In common with many major cities across the world, Dublin's coastal location offers both opportunity and challenge when it comes to addressing flood issues. As well as being on the coast, Dublin is also built around the confluence of three major rivers, namely, the Liffey, Tolka and Dodder. This unique location has informed the literature of the city, the life of its people and the physical development of the city over the centuries.

In addressing flooding at such a location, it must be borne in mind that the risk inherent in the physical location can never be entirely overcome, but rather it can be successfully managed in order to allow for both economic development and the lives of its inhabitants to flourish.

Over the years, flood defences have been constructed in Dublin city that are now seen as part of the very fabric of the city and are no longer even considered in terms of their original function to keep the waters out. Examples of this are Strand Road, running along the east coast which is essentially a flood barrier to protect low lying parts of the city from the Irish Sea. Relative to other parts of the city, the docklands area is quite low lying and also subject to tidal conditions.

Dublin City Council has worked closely with the Office of Public Works (the lead agency for flood risk management in Ireland) in developing solutions to minimise the risk of flooding in the city with a particular focus on the general docklands area.

4.5.4.3.2 Surface Water Management

In order to reduce flooding and improve water quality, all developments in the City Council's administrative area are required to implement the policies of the Greater Dublin Strategic Drainage Study (GSDSDS) in relation to surface-water and flood risk management. This is done by ensuring new development does not obstruct existing flood plains or routes and by limiting the runoff from new development to green-field rates.

New development in the SDZ will be required to limit surface-water runoff to a maximum of 2l/s/ha for up to the 100-year storm and to provide retention storage on-site to limit discharge to this rate. Due to the proximity of development sites in the area to the tidal section of the River Liffey and the possibility that tide-locking will occur during a combined high tide/ extreme storm event, a minimum of 570m³ per hectare of surface-water storage should be provided in each development. This equates to storage provision for the 30-year 6-hour storm during a high tide event with a climate change factor of 20% applied.

4.5.4.3.3 Sustainable Drainage within Private Development

In recent years in Ireland, there has been a move away from the traditionally designed hard-engineering drainage solutions such as concrete underground attenuation tanks and piped drainage systems in favour of multi-function, sustainable solutions for the management of surface-water in urban environments. The use of SUDS (Sustainable Urban Drainage Systems) provides the additional benefits of improving the aesthetic character of the urban environment, enhancing biodiversity, and improving air quality. Sustainable drainage solutions that are visible to the public also allow for a stronger connection between the public and the natural environment, and therefore a greater awareness of water management issues.

A variety of sustainable drainage components, such as swales, retention ponds, constructed wetlands, permeable surfacing, green roofs, soakaways and rainwater harvesting systems, have successfully been incorporated into private development in the Dublin City Council area since the publications of the GSDSDS. Given the

¹ While the current policy of DCC in relation to the climate change factor to be applied to statistical rainfall data in drainage design is 10%, it is noted that OPW draft guidance on the assessment of potential future scenarios for flood risk management recommends that a factor of 20% be applied to design rainfall depths in order to allow for the likely future scenario.

Docklands area, and the possible high percentage of site coverage of the developments that may be proposed, it is acknowledged that some of the above solutions will not be appropriate for incorporation into developments in the SDZ Planning Scheme area. It is also acknowledged that it may not be appropriate to provide all the storage required for tidal attenuation using sustainable

drainage techniques. The installation of some “hard-engineering” components may therefore be inevitable in development sites with a high proportion of site coverage. However, in order to achieve the Dublin City Council development plan objectives of enhanced biodiversity and improved water quality, sustainable drainage solutions are required in all development.

The following SUDS components should be considered for installation within the private area of all development (See Appendix 2 for more details):

- Green Roofs
- Rainwater Harvesting
- Permeable Surfacing
- Soakaways and Rain Gardens
- Rilles

Sustainable surface-water management designs should comply with current best-practice guidance and include a full maintenance package. In order to ensure their viability as sustainable solutions, the communication of maintenance requirements at handover or property transfer stage is of utmost importance.

4.5.4.3.4 Sustainable Drainage of Public Areas

In addition to the incorporation of sustainable surface-water management techniques within private development sites, particular emphasis will be placed on the incorporation of SUDS into public realm infrastructure. The use of sustainable surface-water management in streetscapes ties in with Dublin City Council’s biodiversity and green infrastructure strategies and has proven to be very cost effective in cities in the US and Europe.

The following surface-water management solutions should be considered for surface-water management of public spaces:

- Permeable Surfaces in Pedestrian Areas
- Bioretention Areas
- Rilles
- Sunken Squares

Where sustainable stormwater management solutions are incorporated into public spaces, it is important that their operation is communicated to the public through the use of appropriate signage. This was successfully done in the Portland Green Streets Program which provides a great model for sustainable stormwater management and green infrastructure implementation.

It may be possible to design some new streets such that the traditional piped surface-water sewer and gully system will not be required, thus providing cost savings at construction stage and also in terms of long-term maintenance.

It should be noted however that provision for surface-water storage during tide-locking will be required in order to manage surface-water in public spaces. If sustainable surface-water management techniques are not incorporated to their fullest potential in order to achieve this, the requirement for the laying of large surface-water sewers cannot be avoided.

4.5.4.4 Utilities & Telecommunications

The SDZ area is well served by an extensive electricity cable network, virtually all of which is underground. Two 110KV sub-stations have been provided in the area in recent years, one at Misery Hill and the other at Sheriff Street Upper. Further investment in the electricity network may be required in the future including the provision of further sub-stations.

The natural gas network in the SDZ area is extensive and gas usage is considerable. The current network is adequate for the anticipated level of development. Gas is supplied by means of two high pressure transmission pipelines, operating at a nominal pressure of 40bar in the North Lotts area and a separate line to the south of the River Liffey operating at 19bar.

Depending on the form of development in the area, provision may be required for pipelines as part of any new bridge infrastructure traversing the river and or canals. This will ensure security of supply and incorporation with the existing network.

Telecommunications infrastructure is a key requirement within the SDZ. The availability of high speed broadband is critical the economic competitiveness of the area and in attracting investment into the area. It is important to ensure that new residential and commercial developments are connected in terms of ducts to existing or proposed optical fibres. The sharing of ducts by operators is encouraged. The City Council has rolled out a free WiFi service in a number of locations across the city which contributes to the digital infrastructure of the city. It is envisaged that the service will be expanded to include additional locations in the future.

4.5.4.5 Air & Noise

Dublin City Council through the planning system can help minimise the adverse effects of air and noise pollution associated with the construction and operation of development. Dublin City Council is actively engaged in the strategic management of noise in compliance with requirements under the Environmental Noise Directive. In 2008, noise maps and a Noise Action Plan were produced by Dublin City Council in conjunction with the other Dublin Authorities.

Controls on the cumulative effect of development on air quality and on the adverse impacts of noise pollution can most appropriately be dealt with by placing planning conditions on permissions for new development.

4.5.4.6 Sustainable Energy

Dublin City Council is cognisant of the importance of a secure and reliable energy network not only for supporting economic development but also to provide for the needs of every sectoral interest, not only in the SDZ area but also in the city. The development of the SDZ area provides the opportunity to place a particular emphasis on renewable energy solutions in terms of both supply and efficiency. Initiatives such as Green IFSC and the Sustainable Energy Community Programme allows businesses in the area to adopt a strategic approach to sustainable energy, and showcase the potential of the docklands to be one of the more resource-efficient.

4.5.4.7 Energy Efficiency

Proposals for development should seek to meet the highest standards of sustainable design and construction with regard to the optimum use of sustainable building design criteria such as passive solar principles and also green building. For larger schemes, consideration should be given to district heating schemes and Combined Heat and Power (See section below).

In order to reduce energy consumption, the following key design considerations should be considered at an early stage in the design process and incorporated, where feasible:

- Passive solar design including the orientation, location and sizing of windows

- The use of green building materials: low embodied energy & recycled materials
- The use of natural ventilation or mechanical ventilation with heat recovery
- Energy efficient window glazing units and frames
- Building envelope air tightness
- Appropriate use of thermal mass and insulation
- Appropriate renewable technologies
- Measures to conserve water

4.5.4.8 Dublin District Heating System

Development of a Dublin District Heating System, research and planned by Dublin City Council and Codema, the City Council's energy management company, since 2008, is planned to begin in the Docklands Area initially and then expand to other parts of the city. Communications with potential customers for the system found the overall response to the system among the Docklands community to be very positive.

It is envisaged that district heating will become available in the Docklands Area before 2020. Work has already commenced on developing the network in the area along with the construction of the Liffey Service Tunnel which will facilitate the roll out of the district heating piping network north and south of the River Liffey.

The Dublin District Heating System will help Dublin and the Docklands achieve its aim of being;

- Energy efficient and flexible in its energy choices
- Less dependent on imported energy
- More competitive and environmentally clean, thus attracting foreign direct investment into the area
- A leader in managing climate change

4.5.4.9 Sustainable Energy Community (SEC)

Dublin City Council has been chosen to create a Sustainable Energy Community (SEC) in a 4km zone in the city centre, the SDZ lies within this zone. The SEC will facilitate the use of sustainable energy, decentralised energy systems and renewable energy technology. Networks of expertise and existing sustainable energy projects will be formalised into a platform to inform current and new developments in the mechanisms of smart energy and green technology solutions.

4.5.4.10 Remediation

Much of the land within the draft planning scheme area has been created through reclamation over a period of time and had a history of heavy industrial use such as vitriol plants (sulphuric acid), glass manufacture, iron, gas and coke works, tar pits, foundries and chemical fertiliser plants, until the decline of such industries left the lands redundant.

From 1997 to 2013, many of sites in Dublin Docklands were developed, the majority of which required extensive remediation.

A qualitative risk assessment of potentially contaminated undeveloped sites within the SDZ area, undertaken as part of the preparation of the SDZ Planning Scheme, provides a risk ranking of the remaining undeveloped sites and has divided them into 12 plots for this purpose. The Risk Assessment found that remediation measures will be required for each of the twelve plots.

The degree of remediation measures are determined by the severity of the risk indicated for the sites or neighbouring receptors (residents and environment). The desktop study and qualitative risk assessment of potentially contaminated undeveloped sites within North Lotts and Grand Canal Docks is available at www.dublincity.ie

The general guidance set out by the EPA in relation to contaminated lands is as follows:

- The removal off site of contaminated soil/material (for treatment/disposal) will require a waste collection permit or Transfrontier Shipment of Waste (TFS), if exported.
- The excavation of contaminated soil/material and its treatment on-site (i.e. the site of generation) will in all likelihood require waste authorisation, and a waste licence if the scale is large (>50000 tonnes per annum for treatment is the likely threshold) or if the material is classified as hazardous waste upon its excavation.
- The subsequent use of the material (if still classified as waste) at the site, e.g. by putting it back into the excavation, will require waste authorisation.

4.5.4.11 Waste Management

The Greater Dublin Waste Management Plan provides a framework for minimising waste, encouraging recycling and ensuring the avoidance of environmental pollution. The plan includes the policy of diversion from landfill in accordance with targets set out in the European Union Landfill Directive.

Although there are no recycling facilities within the planning scheme area a number of facilities are in close proximity. The Ringsend Recycling Centre is located just outside the area and allows domestic users to recycle a wide range of materials. There are also a number of bottle banks in close proximity to the SDZ area, namely at East Wall Road and in Ballsbridge.

It is an objective of Dublin City Council:

- SI1 To actively seek funding for the delivery of key drainage infrastructure to enable development in the SDZ
- SI2 To manage development and promote the continued provision and upgrading of waste water treatment plans in the region so that new schemes are permitted only where adequate capacity exists in the waste water network
- SI3 To complete, as a priority, the relocation of the Grand Canal Surface Water Outfall from the Grand Canal Dock Basin to the River Liffey.
- SI4 To ensure that development is permitted in tandem with available water supply and to manage development, so that new schemes are permitted only where adequate water supply resources exists or will become available within the life of a planning permission
- SI5 To require all large development proposals to include water conservation and demand management measures
- SI6 To require all proposed developments to carry out a site specific Flood Risk Assessment in accordance with the Departmental Guidelines on Flood Risk Management and the Strategic

Flood Risk Assessment of this plan, Appendix 1. The flood risk assessment shall accompany the planning application and should be sufficiently detailed to quantify the risks and the effects of any residual mitigation/adaptation together with the measures needed to manage residual risks

- SI7 To require all developments in the SDZ area to comply with Flood Risk Management Guidelines as well as in accordance with the prevailing City Development Plan and the national standards at the time of application.
- SI8 To require that all new buildings be designed using Flood Resilient Construction methods. A statement shall be submitted with each FRA to show how it is intended to comply with the above
- SI9 To promote the achievement of good ecological status, good ecological potential and good chemical status for the length of the Liffey WMU by 2027 and to implement the programme of measures set out in the River Basin Management Plan 2009 – 2015, in accordance with the Water Framework Directive (WFD) 2000/60/EC
- SI10 That all new developments shall be required to comply with the standards set out in the Greater Dublin Strategic Drainage Study (GDSDS)
- SI11 To achieve best practise and innovations in SUDs design as part of the planning scheme including the successful co-ordination of surface water management with ecology and amenity functions of open space and landscaped areas. All planning applications shall be accompanied by a surface water drainage plan which will include proposals for the management of surface water within sites, protecting the water quality of the existing water bodies and groundwater sources, and retrofitting best practice SUDS techniques on existing sites, where possible.
- SI12 To require the use of ducting for information communication technology within individual new residential and commercial developments
- SI13 To facilitate the development of accessible WiFi zones within the 5 hubs of the planning scheme area
- SI14 To maintain good air quality in accordance with National and EU policy directives on air quality and where appropriate promote compliance with established targets
- SI15 To minimise the adverse impacts of noise and promote a good quality of life for the existing and future residents of the plan area, through the effective management of noise in line with the Dublin Agglomerations Noise Action Plan
- SI16 That all proposed developments be district heating enabled in order to provide an environmentally sustainable source of heating and cooling
- SI17 To accurately meter the imported gas and electricity within the SDZ in order to facilitate the move to a Smart City
- SI18 That all undeveloped sites be remediated to internationally accepted standards prior to redevelopment. All applications shall be accompanied by a report from a qualified, expert consultant detailing compliance with the remediation measures as outlined in the Remediation Measures Report. The remediation shall incorporate international best practice and expertise on innovative ecological restoration techniques including specialist planting and green initiatives that create aesthetically improved sites, healthy environments and contribute to the provision of new green open spaces as integral parts of newly created areas. . Soil

Remediation measures shall require a licence from the EPA under the Waste Management Act 1996.

- SI19 That all developments will comply with the waste policy as set out in the Dublin City Development Plan 2011-2017.
- SI20 To ensure that surface water quality is protected in the construction of enhanced drainage works to meet requirements of the Water Framework Directive.
- SI21 To ensure the protection of surface and ground water quality in the plan area and surrounding areas, and the protection of protected habitats and species including designated national and international conservation sites in implementing the plan.
- SI22 To require the preparation of a soil remediation plan for each city block or adjacent blocks, including associated streets, prior to the commencement of any development within the city block(s), to ensure an integrated approach to soil decontamination is taken (see also paragraph 6.1.2 , providing co-ordinated delivery, requirements for each city block).

4.6 Built Heritage

4.6.1 Introduction

The Docklands encapsulates the very essence of the city's unique maritime heritage. The maritime legacy of the docklands is immense exhibiting engineering excellence, industrial and dockside warehouse buildings and transport infrastructure.

The docks pre-dates and enabled the construction of the Georgian city, which could not have been built without a reliable supply of imported building materials. The Great South Wall represents an unparalleled feat of engineering construction at its time, whilst during the nineteenth century the port became a magnet for the country's transport systems and industrial revolution. Port traffic declined in the late nineteenth century with cattle, flour, coal-based industries and gas production developing around the hinterland of the Liffey and Grand Canal Docks. In more recent times, bridge building across the Liffey and the expansion into container traffic, has moved the port's centre of gravity further east, providing a singular opportunity to regenerate and create a new urban quarter for the city.

A distinguishing feature of the docklands regeneration area is its extensive water frontage, along with its matrix of historic transport networks and evocative maritime artefacts. Rivers, bridges, dock complexes, warehouse structures and industrial engineering underpin a strong sense of place and have created a distinctive cultural area with Dublin's Docklands.

The regeneration of the dockland area creates a unique opportunity to conserve much of its architectural heritage and to invigorate what had become a decaying industrial quarter with new activity. It also provides an opportunity for enhancing the character and appearance of areas of special architectural interest particularly within the public realm.

4.6.2 Achievements

Considerable sensitive conservation works have already been undertaken by the Docklands Authority and Waterways Ireland. In particular the high quality public realm landscaping along the campshires, around the Grand Canal Dock, the linear park along the Royal Canal, Spencer Dock and the conservation of the historic bridges and locks.

Generally, the architectural quality of new buildings delivered to date respects and enhances the nuanced historic setting. The former Section 25 Planning Schemes reflected the historic urban block and street plan on the Dublin gas works lands and secured public access to the edges of the water bodies with the removal of buildings and structures.

Internationally renowned architect Calatrava was commissioned to design one of his feature bridges across the river, Liebskind's diamond-shaped theatre has become a focal point alongside the eighteenth century dock at Grand Canal, and with the Convention Centre Dublin located at the historic Spencer Dock and Sherriff Street Lifting Bridge, the city finally got a building by Kevin Roche, the Pritzker award-winning Irish architect. These landmark structures of unmistakable modernity have resulted in an intricate juxtaposition of contemporary architecture with the area's historic fabric.

In addition, communities and attractive hubs have been created within the SDZ, renovating robust industrial buildings for new uses, for example the Inner Grand Canal dock has been enlivened with mooring facilities and a visitor information centre.

4.6.3 Challenges

A key challenge will be to balance the significant archaeological and architectural heritage of the area with its regeneration and growth. This is particularly relevant in the case of industrial buildings which are not listed for protection or in active use, thus potentially leading to dereliction and loss of historic fabric.

An important mechanism to achieve this balance will be to formulate appropriate objectives for the protection, enhancement and management of the area's built heritage, while encouraging regeneration and change.

In this way, the regeneration process can be woven into the existing urban fabric to enrich the architectural heritage for future generations and enhance the quality of life for its community and visitors alike.

The adaptive re-use of heritage assets is essential to the appearance of the area as a whole and requires that an appropriate balance can be struck between the requirements of repairing, converting and extending the heritage buildings alongside high quality contemporary development.

It will be equally important to increase public awareness of the legacy and inherent value of the area's rich industrial and marine heritage. Dublin's tourism industry relies largely on the city's built heritage, with its unique character and identity as a city of neighbouring but distinct quarters. Dockland's heritage can contribute significantly to the city as a tourism destination, reinforcing also its emergence as a cultural quarter.

The conservation and protection of the historical docklands fabric presents an opportunity to enhance the area's architectural assets and to build on its maritime character and distinct identity as unique to Dublin.

4.6.4 Way Forward

4.6.4.1 General Approach

The conservation of docklands' architectural heritage is a key component of the SDZ Planning Scheme. Conservation has played a major constructive role in the regeneration of the area so far, and its inherent value of lending a rich diversity of architectural fabric is central to the urban design approach for the SDZ.

On this basis, the over-arching conservation approach will be to ensure that the architectural and historical significance of the docklands area is protected, conserved and enhanced.

The SDZ area includes a number of structures listed for protection and these are shown on Fig 17. These buildings are to be retained as part of the design proposals for each city block.

The area also includes industrial heritage artefacts which may not be listed on the Record of Protected Structures (RPS), but identified as worthy of protection in the Dublin City Industrial Heritage Record (DCIHR). The SDZ Planning Scheme promotes the retention of these artefacts where possible.

In terms of archaeology, best practice will be promoted for archaeological excavation and the dissemination of the findings of archaeological investigations through the publication of excavation reports, thereby creating public awareness and appreciation of the value of archaeological and industrial heritage resources. Underwater or intertidal archaeology is of particular relevance to the SDZ and the potential implications, including disturbance to the riverbed will have to be assessed as part of any archaeological assessment. It will also be a goal to develop a long term management plan for the conservation, enhancement, management and interpretation of archaeological sites and monuments and to identify areas for strategic research during the regeneration of the SDZ Area.

The SDZ Planning Scheme will have regard to the suite of statutory provisions and guidelines in relation to the built heritage, including the City Council's Record of Protected Structures (RPS) and Zones of Archaeological Interest. It will also ensure that any works to protected structures is in accordance with internationally established principles, national standards and best-practice. For the avoidance of doubt, it will also have regard to the policies and objectives of Chapter 7.2 Built Heritage of the Dublin City Development Plan 2011-2017.

Fig. 17 - Record of Protected Structures Map (RPS) (*See separate booklet for Figures*)

4.6.4.2 SDZ Planning Scheme Conservation Strategy

The Planning Scheme's urban design strategy sets out clear guidance on the conservation of the individual heritage buildings within the area to reduce unanticipated delays, minimise potential conflict between conservation and regeneration objectives and achieve the optimum design response.

The strategic and site-specific objectives for each city block include conservation guidelines, which combined with the SDZ Planning Scheme high level themes and key structuring principles will ensure safeguarding of the built heritage. This approach helps define the special character of the area and requires that any proposals for new buildings or the demolition of non-listed buildings must comply with over-arching environmental objectives.

Within each of five hubs, there are a significant number of protected structures, generally clustered adjacent to the river or docks. For example, at Britain Quay and Boland's Mills, the buildings and associated industrial engineering are considered to be of sufficient interest to warrant a conservation-led approach to regeneration. Equally, the former hotel and woolstore at Station Square, Spencer Dock, justifies a similar approach.

The SDZ includes conservation areas as designated under the City Development Plan. These relate primarily to the water bodies and include the inner and outer docks of the Grand Canal, Spencer Dock, the Liffey and the Dodder. They also include the quay walls and the immediate areas fronting the rivers and docks.

New buildings, as well as alterations and extensions to existing buildings bordering these conservation areas must be of a high design standard and make a positive contribution to the architectural character of the area. Design proposals need not necessarily be pastiche, on the contrary the interest and vitality which modern architecture can contribute is often a welcome addition. There are many examples where new buildings successfully fill gaps in street frontages, complete the enclosure of urban spaces and help eradicate dereliction. The SDZ Planning Scheme will actively promote the use of contemporary architecture in this way and will seek to maintain the high quality of infill building that has been achieved to date in the area, so as to enhance the historic features and quality of life of residents and workers.

Having regard to the above, it will be necessary to ensure that the settings of historic buildings are considered in all proposals and that sympathetic materials, styles and techniques are used in all conservation projects in the SDZ area. In addition, all significant alterations to the fabric of historic buildings must be supported with an appropriate level of recording. Furthermore, the City Council will monitor the area's built heritage resource to ensure that buildings at risk are identified and conserved.

4.6.5 Area-Based Conservation Guidelines

4.6.5.1 Campshires and Quays

All surviving components of architectural and historic interest bordering the water bodies should be conserved and integrated into future programmes of investment so as to contribute to the sustainable regeneration of the area and to provide a continuing link between the past and the future. This would include historic paving materials and street furniture.

4.6.5.2 Spencer Dock

The Spencer Dock hub exhibits distinctive qualities of a railway building complex, which along with an historic building stock along parts of the North Wall Quay, references the area's original docking function.

The complex of buildings including the former Railway Hotel, Station Building and Woolstore lend a distinctive character to the area which sets it apart from other international dockland redevelopment and create a focal point of interest on approach to the city from Dublin Bay. Features such as the drawbridge and quay walls to the river and canal, also contribute to this unique character.

In the surrounding areas, there is still some remaining evidence of the former residential pattern of small-scale workers cottage which would have been an integral part of the working docklands.

Proposals should respect the setting and visual qualities of the railway complex protected structures and provide for publicly accessible uses, active frontages and public spaces. The location of these buildings at the proposed DART Underground Station and Station Square, present an opportunity to create an attractive civic space with special qualities.

4.6.5.3 Point Village

The north boundary of the Point Village hub is defined by a now defunct rail depot and its railway lines, some of which still punctuate the hub area, for example at the Gibson Hotel. Traces of the former railway lines have also been successfully retained and crisscross the campshires. The associated historic warehouse and commercial buildings which are mostly protected structures, lend further distinctive identity to the area.

Castleforbes Road with its stone setts retains the largest quantity of original street-surfacing in the entire Docklands Area. Meanwhile, the reconstructed campshires surfaces demonstrate the value of

utilising historic fabric to create a contemporary public space. Similarly, the modern gas installation on the campshires not far from the historic red brick pump house on Castleforbes Road continues the practice of locating utilitarian buildings in this area.

There are also groupings of small-scale one and two storey cottages and sections of rubble stone boundary walls which echo the livestock yards that once lined the North Wall Quay. Equally, saw-tooth roofs with northern lights resonates the former typical roof line of the building stock in the area.

The Luas line acts as an infrastructural spine through the Spencer Dock and Point Village hubs, mirroring the historic transport lines which ran along the quays and to the north with a feeder line criss-crossing the area. Proposals for new development should equally seek to reflect the area's industrial heritage, retaining historic street paving and street furniture and having regard to the robust mid-18th century street grid pattern of North Lotts. Proposals should also seek to reflect the area's historic function where possible, through innovative design elements and / or public art.

4.6.5.4 Grand Canal Dock

The development of the railways fundamentally changed the dynamics of the city's industrial landscape, destroying the economic future of the canals. The industrial legacy from the nineteenth and twentieth century included belching chimneys and the pneumatic gas storage tanks, features that later came to define the area.

Nestling between the railway line and the Liffey, the Grand Canal Dock as an urban landscape includes unique architecture, ordered planning, dock complexes and transport systems providing coherent evidence of the ports historic character and significance. It has already undergone a critical mass of regeneration and incisive repositioning is in place. Hanover Quay with qualities such as a south-facing aspect, attractive low warehouses and sheds, represent key historical sites in the context of the defining character for the hub at Grand Canal Dock.

Proposals should seek to conserve the character and physical integrity of the Grand Canal Dock. Proposals should also seek to minimise interference in original maritime, river and transport heritage, protecting quays, canal walls, docks, graving docks industrial fabric and allowing space around these features for amenity purposes.

4.6.5.5 Britain Quay

This hub is defined by the historic maritime and commercial functions of the area. Grand Canal Dock opened in 1796 attracting warehouses and manufacturing sites in the vicinity. The existing warehouses on Green Street and the uniform gabled warehouses fronting onto Hanover Quay are remnants of the formative 18th century period of the docklands and its contribution to establishing Dublin as a major commercial hub.

The quays walls, lock-keepers cottage, lockgates and graving docks are the key features that attract our attention from the expanse of the River Liffey through a narrow canal into the impressive space of Grand Canal Dock, which is an important engineering feat. The scale of the historic buildings, the quality materials and design and even the historic street pattern with its traces of original surfaces will need to be conserved and feature as part of any future development.

4.6.5.6 Boland's Mills

The Boland's Mills site contains an array of landmark buildings which represent a key historical place in the context of defining both the existing and future character of this hub. The stone warehouses with their pitched roofs, their sheer facades to the water and their imposing scale create an excellent opportunity to conserve and adapt the protected structures for new uses, complemented by contemporary buildings and civic spaces fronting the dock.

4.6.5.7 Visual Context & Landscape Setting

The SDZ Planning Scheme promotes the docklands distinctive historic environment as a key driver in the sustainable regeneration of the area. In this regard, it seeks to protect the visual amenity of known heritage sites and features, as well as historic views and vistas from within and without the SDZ in order to conserve its integrity. New developments should consider and recognise the landscape qualities of the Docklands, Poolbeg Peninsula, the Liffey and Dublin Bay.

For its part, the City Council will continue to provide the high quality public realm works that have subtly embodied the essence of maritime and industrial heritage which identify this area. It will also seek to safeguard historic open spaces.

Efforts will also be made to establish a linear connection shadowing the Great South Wall in celebration of its significant engineering achievement to reinforce the identity of the area and improve connectivity.

4.6.5.8 Heritage and Cultural Tourism

The SDZ Planning Scheme strategy protects and embraces the area's built heritage as a finite resource which can lend a richness, diversity and special character to the area, supporting it as an attractive destination for tourism.

The rich mix of historic buildings, contemporary architecture and civic spaces designed as set pieces of public art, along with the river and coastal setting on the day, make for a rewarding visitor experience. The City Council will seek to interpret and promote the built, industrial and archaeological heritage of area and its environs to the local community and visitors. To this end, it will explore the potential of exhibition or cultural heritage facilities in the SDZ Area, in conjunction with national cultural institutions and key stakeholders.

4.6.7 Views & Prospects

4.6.7.1 Summary of Views and Prospects Analysis

A Views and Prospects Analysis of the SDZ and surrounding area was undertaken as part of the preparation of the SDZ. The aim of the study was to ascertain which views would be desirable to keep and opportunities for the creation of new views when determining the layout of the area.

The study identifies 13 existing and potential landmark features in and around the SDZ that are considered significant to the history and / or character of the area, or that are so physically conspicuous, by reason of their siting, design and / or height, as to contribute to the legibility of the area / city as a whole. Fig 18 indicates the position of 10 of the 13 features; the other 3 are the Dublin Mountains, Holles Street Hospital and the Poolbeg Chimneys.

The analysis identified 16 key views of the landmark features that could be affected by potential development within the SDZ. The Views and Prospects Analysis, which includes a written statement, summary matrix and datasheet for each view, is available at www.dublincity.ie.

4.6.7.2 Views And Prospects Map

Of the 16 views identified in the Views and Prospects Analysis, 12 have been integrated into the proposed urban structure of the SDZ, 1 partially integrated and 3 excluded or altered. In place of the 3 excluded / altered views, 3 additional views have been opened-up.

Five of the views incorporated into the urban structure relate to the Alto Vetro Tower and the Boland's Mills site, situated on opposite sides of the Grand Canal Dock towards its southern end (Views 7, 8, 12, 14 & 16). Other views integrated into the proposed layout are of the Conference Centre Dublin & Old North Wall Railway Station complex (View 3), St. Joseph's Church (View 6), St. Patrick's Church & the Aviva Stadium (View 2), the Poolbeg Chimneys (Views 9 & 10), the proposed Point Square building (View 13), and Holles Street Hospital (View 11).

View 4, taken from Grand Canal Square looking eastwards towards the Poolbeg Chimneys and the spire of St. Patrick's Church in Ringsend will be curtailed by the proposed residential development at the southern end of the dry dock site. It is noted that dependent on what is proposed to the north of that new block, the church may still be viewed across the dry dock site from parts of Hanover Quay, thus retaining a visual link between the two city neighbourhoods.

Currently taken from Upper Sheriff Street Bridge southwards towards the Alto Vetro Tower, View 1 will be shortened by the proposed layout, with the view now being taken from North Wall Quay looking southwards.

View 5 of The Gasworks, currently taken from North Wall Quay and along Benson Street in the south docks will be restricted by the proposed new blocks on the bus depot site north of Ringsend Road. The new north-south link road proposed between Charlotte Quay and Ringsend Road, slightly to the

east of the current view, however, will provide an alternative view of The Gasworks taken from Hanover Quay.

On the other hand, the proposed urban structure opens up 3 new long-distance north-south views in the north docks, created by 3 new link roads between Upper Sherriff Street and North Wall Quay. These will provide visual links between the emerging neighbourhood in the north docks and the river corridor and more established neighbourhood of the south docks.

It is an objective of Dublin City Council:

- BH1 To ensure that the architectural and historic significance of the docklands area is protected, conserved and enhanced, to include areas of significant streetscape and urban landscape.
- BH2 To ensure that redundant dock water-spaces are managed and re-used in a way that respects their significance and utilises their potential
- BH3 To ensure that new development respects the significance of the site and is appropriate to its historic, spatial context
- BH4 To conserve the character and physical integrity of the Grand Canal Dock and its sea locks, the graving docks, historic marine artefacts, street furniture, views and vistas to preserve its identity
- BH5 To ensure the provision of high quality public realm works that embody the maritime and industrial heritage character of the area
- BH6 To actively promote the conservation and adaptive re-use of protected structures and heritage buildings to produce high levels of sustainability
- BH7 To interpret and promote the archaeological resource of the area to the local community and visitors
- BH8 To minimise interference in original maritime and river, and transport heritage, thereby protecting quays, canal walls, docks, graving docks industrial fabric and allowing space around these features for amenity purposes
- BH9 To retain historic paving and street furniture, in addition to maritime features such as mooring rings and the mid 18th century street grid pattern of North Lotts
- BH10 To retain and promote the Industrial Heritage of the area by keeping rail, canal, military and maritime fabric, plant and structures in situ and to adapt for reuse
- BH11 To ensure that in circumstances not provided for in the above objectives, all proposals shall comply with the policies and objectives set out in the Built Heritage section of the Dublin City Development Plan.
- BH12 To explore the potential of exhibition or cultural heritage facilities in conjunction with national cultural institutes and key stakeholders to celebrate the unique maritime and industrial heritage of the Docklands Area.

4.7 Culture

4.7.1 Introduction

The enhancement and promotion of culture is central to making Docklands a vibrant city-quarter that is an attractive place to live, work, study and visit. A richer cultural environment with a vibrant artistic community can enhance international image, foster creativity and entrepreneurship, and also act as a vehicle for social inclusion and community integration, while underpinning quality of life at the neighbourhood and city level. In these ways, culture is a very important aspect of sustainable urban regeneration, having the potential to create a distinct sense of place and instill civic pride in a community.

4.7.2 Achievements

Docklands is now recognised as a cultural quarter in the city. This reflects the clustering of cultural activities and the success in delivering cultural infrastructure of national and city-wide importance such as the Liebeskind designed Bord Gais Energy Theatre and the expansion of the O2 Venue.

Another significant achievement includes the provision of notable works of public art, creating an awareness and making art easily accessible, for example, the Martha Schwartz landscape design for Grand Canal Square and Rachel Joynt's 'Freeflow' glass cobble illumination work along North Wall Quay. The public art programme has been successful at creating focal points of interest at strategic locations in the Docklands.

The Docklands also now plays host to a number of the significant festivals and cultural events held at public locations such as George's Dock and Grand Canal Square, including the Docklands Maritime Festival which has proven popular with children, young people and families alike. The Docklands has also created links with a number of internationally renowned festivals such as the Dublin Fringe Festival and the Dublin Theatre Festival.

In addition, there has been a strong focus on culture at the local and neighbourhood level with summer projects for young artists and the provision of a theatre and performance space in the Sean O'Casey Community Centre at East Wall. These initiatives can support a thriving locally-based arts community and play an important role in social regeneration.

Culture has been integral to the development and blooming of docklands and the surrounding areas. Participation in and access to world class events and facilities, along with engaged provision, has helped to create thriving neighbourhoods and has welcomed thousands of people annually to the area. See Fig. 19.

Fig. 19 - Docklands Cultural Quarter (*See separate booklet for Figures*)

4.7.3 Challenges

A key challenge will be to re-align and achieve an appropriate balance between the economic, cultural and social strands of regeneration in Docklands. Despite past successes, there is a need to ensure that culture remains an important aspect of docklands regeneration, through building on resources, developing initiatives and ensuring the optimum use of facilities.

Investment in cultural participation is an investment in neighbourhoods, which in turn is an investment in the future of these areas and communities. The creativity needed to navigate through a changing society, to connect and integrate, can all be developed through participation in quality cultural, sports and leisure pursuits, both as professional practitioner and community member. The challenge will be to develop a collective vision for the purpose and relevance of culture to the area and to identify new opportunities for cultural development.

There is an opportunity to build on the existing critical mass of cultural activity and to foster the emergence of the area as a creative quarter. However, attracting artists to locate in the area which is key to nurturing a creative quarter, will be a particular challenge in the context of commercial viability and competing uses, given that the area is also a prime office location.

Arts and culture play an important role in restoring, maintaining or improving civic pride, as well as providing a welcome and colourful distraction and a focus on celebration, as identified end in recent consultations undertaken by the City Council. For these reasons, arts and culture have also been identified as being more crucial now than ever before. The challenge will be to ensure that culture in the docklands fulfils this important role for residents, workers and visitors. There is also an opportunity to reflect and celebrate the unique coastal-riverside-canal location and the rich maritime heritage of docklands through arts and culture both at a community and citywide level. The local community along with organisations such as the Port Company and the Dublin Dock Workers' Preservation Society, have a key role to play in unveiling the maritime heritage of the area, as well as other appropriate stakeholders.

4.7.4 Way Forward

The SDZ Planning Scheme strategy for culture builds on and reflects the local, city and national cultural policy as set out in the Docklands Area Masterplan 2008, Dublin City Development Plan 2011-2017, Dublin City Council Culture Strategy 2010-2017, Dublin City Council Public Consultation on Arts and Culture 2012, and Developing the Arts in Ireland: The Arts Council Strategic Overview.

4.7.4.1 Inclusive Approach

The SDZ Planning Scheme approach is built on an inclusive model between the immediate area and the surrounding neighbourhoods and communities of the wider Docklands Area, in which the development of activities and infrastructure in tandem with a process of public engagement will further develop the area as a place of cultural importance in the city.

Arising from this approach, the strategy will explore a collective vision for culture and through collaboration and innovation, will seek to develop mechanisms that harness existing structures, resources and capacities. It will also explore the potential for synergies between the professional, community, statutory and corporate sectors to further develop the area not just as a gateway to the city, but also a gateway to world class arts, entertainment, festivals and events, as well as a vibrant cultural scene at the neighbourhood level. These twin pillars of excellence and inclusion will form the basis of the cultural strategy for Docklands.

4.7.4.2 Social Regeneration

Social regeneration will be central to this approach, where access to and involvement in activities and resources of a high standard is core to the development of engaged and engaging neighbourhoods and communities, where cultural practice and community development sit side-by-side. Equally, the engagement of the community in this work is central to its success, building a solid foundation for infrastructure that will sustain and grow.

Arts and culture can make a valuable contribution to community vitality and life. It can enliven a community visually and engage individuals with local community structures through planning and participation in events such as festivals or parades, community showcases, youth art initiatives and local arts development projects. In this way, the arts can act as catalyst for integration, by-passing social divides and facilitating interaction between communities.

Through community initiatives, the arts can also develop the creativity and confidence of young people. On this basis, the SDZ Planning Scheme strategy will recognise, maintain and develop grassroots arts provision in the Docklands Area. It will also explore the potential of developing youth arts to create a vibrant youth arts and urban culture scene.

4.7.4.3 Creating Synergies

Creating synergies between the cultural, community and corporate stakeholders has the potential to result in new opportunities, identify gaps in provision and facilitate further participation at a community or neighbourhood level, as well as greater engagement with the corporate sector.

Given the economic profile of the area, the potential for greater involvement of the corporate or business community is enormous. Arts and cultural events can lend vibrancy to an area, creating an environment that is stimulating, attractive, diverse and rich in cultural and social options – factors which are becoming increasingly important in trying to attract and retain a workforce, especially in a

global context where competition for talent can be intense. Meanwhile, culture can also provide the vital meeting point between business and community. Opportunities for corporate social responsibility could potentially include the hosting of cultural events, such as recitals or performances on office foyers or courtyard spaces showcasing business art collections, employee cultural volunteerism, investment in an arts and cultural fund for the area and developing a creative enterprise initiative for local young people.

Opportunities for corporate could potentially include the hosting of cultural events, such as recitals or performances on office foyers or courtyard spaces, showcasing business art collections

There is also the opportunity to connect with the existing cultural and professional landscape in the area, having particular regard to the presence of commercial cultural venues, as well as the design and creative expertise of the digital media or tech sector. Furthermore, the U2 legacy with strong historic connections to their Hanover Quay Studio and the Windmill Lane Recording Studios as well as the Liffey Trust with its state-of-the-art dance studios, are all successful platforms to leverage further cultural activity.

The City Council will explore the potential to develop relationships between these existing players and also the potential for artistic and cultural volunteerism. It will also examine how communities can complement the work of cultural institutions.

4.7.4.4 Docklands as a Creative Quarter

Docklands is developing a critical mass of strategic cultural assets as well as a range of community and educational cultural facilities, to the extent that a vibrant cultural scene is emerging as acknowledged by key cultural institutions and in turn reflected in the City Development Plan. The Development Plan states that reinforcing and nurturing new cultural initiatives to support existing and emerging cultural clusters, as well as enabling access to cultural development at a local level, are essential to developing a city's cultural wealth.

Making space for artists and the production of artistic work will be central to reinforcing the area's existing cultural assets and fostering a creative quarter. Artistic production in itself is important as a means of shaping a distinct cultural identity for the area and city, whilst the presence of artists will animate the area to a greater extent. It will be a priority to encourage artists to live and work in the area. In the interest of commercial viability, particular consideration will be given to the promotion of artist's work spaces, studios along secondary streets and vacant spaces as an interim use, adding vitality and focal points of interest.

There will also be potential for cheap artist's space in the immediately surrounding enterprise zones in the wider Docklands Area. This approach aligns with the economic strategy for the creative industries.

4.7.4.5 Docklands as an Arts Space

The SDZ Area with its unique geography and mix of river, dockside, industrial and contemporary buildings may in itself be considered as an art space. It presents an ideal canvas for festivals, events and public art. There is enormous potential for temporary and permanent public art to enliven the area, creating unusual and unexpected sites for public art, especially given the SDZ Planning Scheme commitment to the public realm and the creation of new civic spaces. The strategic civic spaces in each of the five hubs and the waterfront connection along the campshires, present opportunities for public art and cultural kiosks, enriching the experience of residents, workers and visitors as they move through the area. There is also the potential for outdoor street-art exhibitions as a means of engaging with youth culture and reflecting the area's rich musical heritage, as in the case of the existing graffiti art in the vicinity of the U2 Studios at Hanover Quay.

4.7.4.6 Cultural Audit

The City Council's Culture Strategy holds as a core value that 'culture is integral to Dublin City's identity and quality of life'. On this basis and reflecting the inclusive approach which imbues the SDZ Planning Scheme strategy, the City Council will work with communities and corporate entities in the Docklands to recognise and shape how arts and cultural practice is embedded within their lives and how these practices give communities a voice.

As part of the preparation of the draft planning scheme, the City Council has undertaken a cultural audit to gain an understanding of the area's cultural landscape and to inform an inclusive strategy for culture in the SDZ and wider Docklands Area. The Audit approach was based on a methodology which understands the importance of arts and cultural activity as a change element in communities, as developed and refined in other regeneration areas over the last ten years. The key findings and themes emerging from the cultural audit are documented in the report 'The Docking Station.'

In addition, the Docklands with its developing critical mass of cultural facilities, high quality public transport nodes and close proximity to the city centre, is an ideal location for a dance theatre, subject to long-term feasibility being demonstrated. The City Council will explore, with the Department of Arts, Heritage and the Gaeltacht, and the Arts Council, a feasibility study to assess the potential viability of a new Dance Theatre in Docklands

It is an objective of Dublin City Council:

- CR1 To develop an inclusive strategy for culture in the wider Docklands Area based on the findings of the cultural audit undertaken through engagement with cultural, community and corporate stakeholders in the area as set out in the audit report 'The Docking Station'.
- CR2 To explore the synergies between the professional, community, statutory and corporate sectors to further develop Docklands as a cultural quarter with world class arts, entertainment, festivals and events
- CR3 To ensure that the cultural strategy reflects social regeneration objectives by engaging with neighbourhoods and communities and ensuring community access to resources or facilities as key to cultural development in Docklands
- CR4 To support the development of a vibrant youth arts scene in the SDZ and wider Docklands Area
- CR5 To explore the potential for further cultural collaborations and twinning opportunities with other areas of the city and other dockland communities outside Dublin.
- CR6 To further develop and support sustainable relationships with established docklands-based organisations.
- CR7 To develop the docklands cultural tourism itinerary by expanding the range of high profile events such as commemoration of historical events, musical or circus showcases, water-based activities and family friendly daytime events and to promote low cost or free public events.
- CR8 To support the production of artistic work by encouraging the optimum use of existing event infrastructure, civic spaces as event spaces, the use of vacant space for artists and / or a shared creative space for community groups and the provision of new infrastructure for the performing arts, where feasible.
- CR9 To explore a variety of mechanisms to support a structured form of engagement with professional artists living and working in the wider docklands area nurturing a community of artists as part of the creativity of Docklands.
- CR10 To promote and showcase the development of new and existing community art forms including urban art, community theatre, writing and music workshops with consideration to the potential for an Annual Docklands Arts & Culture Day.

4.8 Retail

4.8.1 Introduction

Underpinning Docklands as a successful economic hub will be the creation of a vibrant attractive mixed-use quarter with a richness and diversity of uses that lends it to read as an extension of the city. Shops, cafés, bars, restaurants and other retail uses animate the street and enliven civic spaces and can help create a leisure destination area. In this way, retail vitality can play an important role in the regeneration of Docklands.

4.8.2 Achievements

On the basis of a strong policy approach of mixed-use activity, a considerable amount of small-scale retail has been delivered so far in Docklands, most notably in the Grand Canal Dock Area. There is a successful mix of the necessary small-scale convenience stores and retail services such as cafés, bars and restaurants along Gallery Quay and Hanover Quay. These enliven the key public space and waterfront areas of Grand Canal Plaza and Grand Canal Basin, helping to create the eighteen hour day and a synergy with the cultural activities supporting the emergence of the area as a cultural and leisure destination within the city.

The delivery of these small-scale retail units and cafés or restaurants at ground floor level has also been a key factor in creating a finer grain, richness and diversity at street level, as well as serving the needs of the daytime working population and residents.

Street markets such as the weekly farmer's markets at Grand Canal Basin and the Convention Centre, are a welcome development, animating these spaces and lending vibrancy to street activity. Specialist markets in tandem with festivals and events have also become destination points in the city, for example, the Christmas Market at George's Quay as part of the Twelve Days of Christmas Annual Festival.

4.8.3 Challenges

Despite these successes, there are a number of challenges, most notably the issue of retail vitality given the proximity of Docklands to the city centre which is the premier retail centre in the state. The primacy of the city centre and the physical proximity of the north and south retail cores are important factors in determining the retail function of Docklands.

The complexity of retail catchment areas will also be a key challenge. Notwithstanding the designation of Point Village as a district centre under the City Development Plan Retail Strategy, a number of factors combine to potentially reduce and fragment its catchment area, namely, the peninsular nature of Docklands, the juxtaposition of port activities and severance from neighbouring residential areas due to defunct rail infrastructure, as well as a insufficient number of strategic river crossings.

Clustering of active uses will be an important tool to animate the street, civic spaces and hubs as well as enlivening the Luas line, the campshires and waterbodies.

The challenge will be to achieve the optimum balance between the concentration of active uses in key focal points and an element of dispersion in order to give extensive frontages some ground floor activity at street level.

Vacancy levels, both at the scale of the individual buildings and ground floor units, is a potential reality in the short-term at least, especially in the context of regeneration, which needs a community of users and an intensity of footfall to ensure that retail and retail service business can be viable.

Good quality convenience, speciality and retail services to cater for the daily and weekly shopping needs is crucial to attract and retain residents, especially families with children, as well as facilitating

ease of access for workers and enabling the multi-purpose trip combining the journey to work with convenience shopping.

At Point Village, the designated district retail centre for Docklands, a large scale convenience store has already been delivered and is waiting a community of users for occupation of the units. There is an opportunity to create a successful mix of retail, leisure and civic uses to emulate the neighbourhood feel of the traditional urban village where chance encounters and casual meet and greets occur.

4.8.4 Way Forward

4.8.4.1 Role of Retail in Docklands

With the proximity of the city centre retail cores, the retail focus of the SDZ Planning Scheme must be on harnessing the inherent strength of retail as a complementary use, supporting the area's core economic function along with its cultural and leisure activities, whilst also acknowledging and supporting the larger scale convenience, comparison shopping and entertainment function of Point Village District Centre. The inter-play of retail, cultural and leisure activities has the potential to create a rich tapestry of uses which lend towards the making of a lively urban environment. See Fig 20. This approach serves to protect the primacy of the city centre retail core as the main shopping destination in the state and facilitates an appropriate level of retail provision commensurate with the growing population in docklands as a newly emerging Key Development Area (KDA) with Point Village as the designated District Centre. It also accords with the Retail Strategy for Dublin City and the Retail Strategy for the Greater Dublin Area 2008 - 2016.

For North Lotts and Grand Canal Dock, the emphasis will be on small-scale retail units generally on the ground floor of mixed-use residential and commercial developments. These units will be primarily convenience and retail service outlets, functioning as neighbourhood shops to serve the daily needs of employees and residents of docklands. There may be potential for discount / similar scale foodstores on secondary building lines with innovative design solutions which contribute to streetscape qualities and respect the principles of good urban place-making.

Point Village as the designated District Centre will cater for the lower-order comparison shopping needs of the SDZ and wider Docklands Area, as well providing for large scale convenience retail shopping. Outside the Point Village District Centre, any additional large scale convenience retail will be subject to the sequential test approach and other key retail tests as set out in the City Development Plan, and must demonstrate proximity to high quality public transport, preferably the DART Underground Station at the Spencer Dock Hub.

The Docklands' high quality pedestrian environment and public realm, with an emphasis on achieving greater permeability through the delivery of new north-south linkages, east-west routes and sunny spill-out spaces is ideally suited to fostering this rich mix of uses.

This approach acknowledges the major contribution of retail or retail services to the vitality and success of the area with the potential for synergies with other cultural, leisure and recreational activities, such as the night-time theatre and music venues, festival events, cruise tourism and boating or sailing activities, as well as the inherent link between retail and strategic public transport nodes, such as the DART Underground Station.

Notwithstanding the fact that Docklands will not develop as a retail destination in its own right, there is potential for the emergence of a niche retail sector in art and design, leveraging on the existing presence of a number of private art galleries and bespoke contemporary furniture shop along with cultural and amenity uses at Grand Canal and Hanover Quay. In this context, a niche sector may evolve organically.

4.8.4.2 Point Village District Centre

In addition to the role of retail as a complementary use throughout Docklands, it will play a central role in the success of Point Village as a district centre. The Retail Strategy for the Greater Dublin Area designates Point Village as a district centre and this is reflected also in the Retail Strategy for Dublin City, as well as the settlement hierarchy as set out in the Development Plan Core Strategy. Under these strategies, the purpose of a district centre is to cater for surrounding communities with a catchment population of approximately 12,000 – 15,000 people, typically comprising of a range of commercial and community services, often with at least one supermarket or superstore, as well as local public facilities.

This district centre function is important in the context of the Docklands as a Key Developing Area (KDA), not least to facilitate access to good quality convenience shopping and a range a facilities, and to engender a sense of community.

The delivery to date of 'big ticket' items such as the Luas Terminus, Point Square as the central civic space and the Gibson Hotel, as well as the cinema complex, will underpin its role as a district centre with the existing floorspace provision of 20,000m².

However, strategic interventions such as additional river crossings connecting Point Village to Britain Quay and Britain Quay with Ringsend, as well as the opening up port lands for cruise tourism at Alexandra Basin, have the potential to extend the retail catchment area and ensure a vibrant mixed-use quarter at Point Village. This approach would also fulfil the objective for an entertainment-leisure hub at Point Village.

Fig 20 - Retail Context Map (*See separate booklet for Figures*)

4.8.4.3 Retail Vitality & The Hubs

The retail strategy of the SDZ Planning Scheme aligns with the objective to create five spatial hubs. The retail component of the hubs will comprise primarily of small-scale retail units or retail services to achieve a fine-grain attractive streetscape, with potential also for small-scale specialist retail units or activities which underpin the particular function or character of a hub. In this way, retail in each of the hubs is a complementary use and will not detract from the viability of the district centre at Point Village. The combination of retail and retail services, including cafés and restaurants, has the potential to create a distinct character and identity for each of the hubs. In particular, there is an opportunity to leverage the typical hub elements such as a key civic space, strong pedestrian linkages and a concentration of particular uses. For example, the retail component at Grand Canal may focus on supporting cultural and creative uses, whilst the necessary large scale convenience shopping will be located at Point Village. Spencer Dock as a business centre with the DART Underground Station presents a strong case for small scale convenience and ancillary retail services. Boland's Mills could possibly provide a lively focal point for the media-creative tech cluster along Barrow Street and Ringsend, facilitating the eighteen-hour day so relevant for the relatively youthful age profile of this sector. Meanwhile, Britain Quay with its unique peninsular location and in close proximity to the recreational and community focal points at Ringsend, the Grand Canal Dock & the River Dodder, could cater for specialist water and leisure related enterprises and retail outlets. In this way, retail and active ground floor uses have the potential to develop and reflect the differences as well as the needs of each of the hubs, facilitating the emergence of economic, cultural and spatial components of the hubs.

4.8.4.4 Active Frontage & Street Animation

Active frontages such as ground floor retail units including cafés, bars, restaurants, cultural and amenity uses and even small businesses or support services with a significant public use, animate the street and enliven the public realm. The SDZ approach is to cluster and optimise the use of retail and

other quality active frontages in the hubs along key pedestrian routes, in civic spaces and protected structures, having regard to securing a favourable orientation and achieving a fine grain of uses at street level.

There is also an opportunity and need to enliven the campshires and waterbodies given their amenity value as special assets unique to Docklands. The extensive water frontage will require a selective approach for active uses at strategic points. On this basis, it will be an objective to secure a concentration of quality active uses including retail, cultural and amenity uses at the location of the proposed bridge crossings, protected structures and strategic public transport connections. These criteria apply to two locations along North Wall Quay and also at Britain Quay. Furthermore, the campshires along North Lotts, with the benefit of a southerly aspect that captures sunlight for much of the day and along a key route connecting the cruise tourism terminal with the city centre, are particularly suitable for such active uses, as well as Britain Quay.

Mayor Street as a live-work corridor setback from the waterfront amenity and along the Luas Line, has the potential to be enlivened by a different range of active uses such as community infrastructure or services, (for example a primary health care facility), professional services and possibly larger convenience retail formats such as discount foodstores, provided innovative design solutions are used which present a finer grain element to the street.

There is also a need to ensure that large scale commercial developments, where appropriate, incorporate an element of active ground floor use, relating to retail, cultural or leisure, in order to actively contribute to the animation of the streets and public realm. This is an important aspect of the strategy, given that it will help deliver the vitality and diversity as the very qualities that international and indigenous corporate investors seek out in an area.

For the secondary streets in the vicinity of the hub areas, small ground floor businesses with a significant element of public access will be encouraged. Elsewhere, enterprise units, studios or creative workshops with a design element which overlooks the street, will be promoted to engender a sense of safety and a human scale.

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Fig. 21 - Active Uses & Vacancy Levels At Ground Floor Level

Fig. 22 - Active Frontage Strategy (*See separate booklet for Figures*)

The SDZ Planning Scheme strategy for active frontage is:

1. Hubs

A concentration of retail / cafés / restaurants and vibrant uses shall be promoted in the five hubs, including retail, café and restaurants.

2. Campshires & Waterbodies

Intermittent quality active frontages including retail, culture and amenity uses will be promoted at strategic locations along the quays, campshires and waterbodies, namely, at the proposed bridge crossings, protected structures and strategic public transport connections.

3. Mayor Street/Luas Line Live-Work Corridor

Intermittent active frontages including retail, community infrastructure, support services and bespoke office uses will be encouraged.

4. In Other Areas

Own door access businesses / enterprise units / studios and own door residential units where appropriate will be encouraged

5. Unit Design

All ground floor units shall be of a design to accommodate commercial uses (4-5m ceiling heights)

4.8.4.5 Vacant Space

Vacant buildings and units have the potential to undermine the vitality of a street or city block. Despite, the current challenging economic environment, there is a relatively low vacancy rate in Grand Canal Dock. In North Lotts, the higher vacancy levels undoubtedly reflect the extent of undeveloped lands and lack of critical mass (See Figure 1).

A vibrant mixed-use culture in a developing area will take time to evolve being contingent on a critical mass of end-users. Nonetheless, it will be necessary to secure the spatial provision of active ground floor units from the outset in order to realise the long-term objective. In this context, the strategy will be to actively seek appropriate temporary uses as an interim solution.

One advantage that this vacant space scenario may offer is an opportunity to accommodate uses, albeit on a temporary basis, which the market economy may not otherwise facilitate, for example; cultural and creative uses, enterprise and incubator activities, or collaborative space to foster start-up innovation. Success on a trial basis may lead to a long term presence in the area or elsewhere in the city, this approach being similar to the genesis of the Fumbally Exchange, Liberties.

The City Council will proactively engage with landowners, tenants, business interests and city-wide stakeholders to secure suitable uses. The Council will seek to front-load particular uses that would benefit the first-movers or an emerging community in North Lotts.

It will also explore the potential of particular seed uses to curate adjacencies and potential specialisms that may underpin the character and role of each hub.

In addition, the Council will facilitate where possible the use of vacant units on a short-basis for community purposes such as a community café or meeting room, as a point of integration for the newly emerging residential community in Docklands.

It is an objective of Dublin City Council:

- RT1 To foster a rich mix of retail, cultural and leisure activities to support a vibrant urban quarter
- RT2 To provide for sufficient retail facilities to cater for the demands of the population working, living and visiting the SDZ and wider Docklands Area
- RT3 To support the emergence of niche retail sectors that creates a synergy with the creative and cultural activities in Docklands
- RT4 To proactively encourage the implementation of the district centre at Point Village, to include a concentration of retail, entertainment, leisure and community facilities, as well as quality and affordable supermarket shopping
- RT5 To cluster retail frontages in each of the five hubs along key pedestrian routes, civic spaces and in the vicinity of protected structures and to explore the potential for retail as a mechanism

to support a distinct identity and character to each of the hubs (See Fig. 22) *(See separate booklet for Figures)*

- RT6 To enliven the campshires and waterbodies with an appropriate level of publicly accessible active frontages, including retail, cultural and amenity uses (See Fig. 22) *(See separate booklet for Figures)*
- RT7 To ensure an appropriate level of active ground floor uses on all other main streets, to make a positive contribution to the street level activity (See Fig. 22) *(See separate booklet for Figures)*
- RT8 To implement the strategy for active frontages as shown on Fig. 22 *(See separate booklet for Figures)*
- RT9 To seek appropriate temporary uses as an interim solution for vacant buildings with particular support for economic and enterprise activities, cultural and creative uses, collaborative space and publicly accessible uses such as community cafés, local markets and art installations
- RT10 To support a rich mix of complementary uses, particularly in vacant spaces, to actively support new development in the area

4.9 Tourism & Leisure

4.9.1 Introduction

There is a steady recovery in the tourism industry in Ireland and to encourage this growth, the SDZ Planning Scheme will look to improve opportunities for increased number of tourism products and services in Docklands. As the national gateway, Dublin is ideally located to benefit from the influx of tourists to the country and has seized on these opportunities by taking significant amount of overseas visitors and revenue generated in tourism products and services. In 2011, 6.3 million people visited Ireland, with Dublin attracting over 50% of the overseas tourists. During this period, Dublin was responsible for generating €1.125 billion of the State's total €5.7 billion tourism revenue. Dublin continues to be an attractive destination and the SDZ Planning Scheme will further reinforce this, leveraging the unique maritime qualities and the city centre location of Docklands.

4.9.2 Achievements

The Docklands is an important part of the tourism offering provided to visitors coming to Dublin. The industrial and port heritage, festivals and events provides interest to visitors. The Tall Ships Races held in Docklands in 2012 attracted over 1 million visitors. The success as a tourism destination is further underpinned by the significant growth of cruise business at Dublin Port. Over 85 cruise ships arrived in the port in 2011, with 130,000 passengers alighting to see Dublin City and its environs.

The Docklands has seen rapid development over the last few years as an evolving maritime urban quarter with the completion of significant residential, retail, office, theatre and hotel buildings. The area has also made significant progress as a venue for events that appeal to tourists. High profile events, such as the Dublin Fringe Festival and the Docklands Maritime Festival are providing both overseas and domestic tourists more compelling reasons to come and visit the area.

The annual Dublin Dance Festival which also takes place in Docklands further enhances the range of cultural attractors for tourists and, importantly makes use of the indoor and outdoor spaces available in the area. Innovative events such as these are increasingly becoming focal points of the City's cultural tourism itinerary and, with its selection of public spaces and the natural resources of the River Liffey and canal basins, the Docklands provides a unique mix of outdoor and indoor activities to both residents and visitors.

The Docklands area offers visitors plenty to see and do. The Convention Centre Dublin (CCD) provides an interest in Spencer Dock. Recently opened specialist retail stores, convenience shops, restaurants and cafes, together with innovative landscaping and lighting features, and the Bord Gais Energy Theatre have all helped to launch Grand Canal Square as a vibrant new quarter. The O2 theatre with surrounding hospitality, cinema and pubic house uses provide Point Village with a quality setting.

4.9.3 Challenges

An important key to creating new tourism opportunities in the Docklands area is by expanding tourist activity over a wider area. Up to now, tourism in docklands has been concentrated in a relatively small area of George's Dock, the business tourism area of Spencer Dock, Grand Canal Square, Point Village and Dublin Port. The entire SDZ area should aspire to be a destination for people to visit and experience. The water bodies within the SDZ are still under-utilised and are representative of the cultural maritime heritage that exists in the area. The historic character of the Docklands is embodied in its vital relationship with the water bodies. Maximising the recreational, tourism and cultural use of the water bodies in the area remains a challenge due to its heritage and environmental sensitivity.

4.9.4 Way Forward

Dublin offers its visitors a unique experience and Docklands area should continue to develop as a perfect short-break destination and as an indispensable part of an Irish holiday. The SDZ area must enrich its current tourist product offering by creating new opportunities for tourism. The city should embrace the docklands, making use of the tourism opportunities afforded by new developments and ensuring that the docklands becomes an integral part of Dublin's value proposition as tourist destination.

With emphasis on continued growth and improvement, the strategy for growth should focus on the marketing and promotion of leisure, cultural and business tourism, the delivery of a distinctive visitor experience and enhancing the range of attractions and activities for both visitors and residents alike in a bid to increase revenue and employment in the SDZ area. Consistent with Fáilte Ireland, the SDZ Planning Scheme's strategic tourism goals may be defined as follows:

4.9.4.1 Variety in tourism attractions

The ability to attract tourists to previously unvisited sites requires strong drivers by way of high profile events and attractions. To date, events such as Dublin Fringe, Docklands Maritime Festivals and Tall Ships have proven to be very successful in drawing large numbers of visitors. However, the Docklands needs to complement its growing visitor numbers with other types of attractions.

The U2 studios at Hanover Quay and Windmill Lane Studio for instance are part of the cultural heritage of the area and should be celebrated with new innovative tourism offering.

4.9.4.2 Encourage waterfront and water based activities

The amenity value of the water bodies in the SDZ is still under utilised in so far as tourism offerings. The waterfront and water bodies are a distinct advantage to the Docklands in terms of responding to water based tourism. The Liffey Voyage, Sea Safari and Viking Splash Tours go some way to address these shortages; however there is ample opportunity for further innovations. The Planning Scheme will encourage the use of the waterfront and water bodies for family attractions, outdoor activities, sports events and the development of waterside facilities.

4.9.4.3 Promote Business Tourism

Business tourism offers plenty of opportunities for the Docklands. The significant increase in capacity, improvements in the access infrastructure, such as the Airport, Port Tunnel, Luas and proposed DART Underground, along with the opening of the CCD means the Docklands is well positioned to benefit from business tourism. The favourable tax regime for conference delegates further supports this potential. The City Council will work with Fáilte Ireland, Dublin Convention Bureau and trade to ensure that these opportunities are converted to achieve increased market share in business tourism.

4.9.4.4 Create a lively environment for discovery

The SDZ area has the potential to be the heart of tourism in the Docklands, with a mix of restaurants, bars, cafes, local events, markets, as well as cultural and creative attractions, in a unique maritime setting with extensive water frontage. The area has the potential to create a pulse and exhibit a sense of place for people to interact both day and night. It is possible that the area can become a focal point of tourism, leisure and entertainment where visitors to the city and gravitate towards docklands for its tourism offering and vitality. With the goal of creating a tourism nucleus, the City Council will support the establishment of a variety of facilities in the five hubs and in the public domain. The Council will work with trade, key stakeholders and the community to determine appropriate facilities.

4.9.4.5 Promotion of Docklands as a Tourism Destination

The SDZ area will be marketed as a must-see destination for visitors to Dublin. The area encompasses several distinct hubs, each of which is developing its own character yet as part of the overall Docklands identity. The purpose of marketing will be to stimulate tourist demand and encourage people to visit in greater numbers and for longer durations. In order to successfully position the wider docklands and the SDZ area in the marketplace, it will have a unique and clear brand that is consistent with the overall Dublin region tourism branding.

4.9.4.6 Taking advantage of the cruise traffic from Dublin Port

Cruise tourism is one of the fastest growing sectors of world travel and Dublin as a destination has increased significantly in the last decade with record cruise vessels numbers in 2010. Despite the current challenges to the economy, the number of cruise vessels visiting Dublin City continues to grow. An estimated 1.7million ferry and cruise passengers pass through Dublin Port every year. The SDZ area is at the door step of this traffic and should position itself so as to provide variety of tourism offering for visitors.

4.9.4.7 Leisure

The SDZ area continues to evolve as contemporary urban quarter, shaped in part by the urban setting of the Docklands. The Docklands possesses a broad selection of sporting, recreational and leisure amenities. At its heart is the River Liffey, which is a very valuable amenity for the Docklands and which is used by many clubs. Adjacent to the river is the Irishtown Stadium, boasting a modern athletic track, all-weather playing pitches and training room facilities. Nearby is Ringsend Park with its football pitches, basketball and tennis court.

Leisure in its widest sense is about quality of life and choice; people all have different hobbies and activities in which they choose to participate when they have free time. The amenity value of the public realm in the SDZ provides an opportunity for leisure and recreational activities. The linear form of the campshires provides an ideal space for outdoor leisure activities. Art programmes can take advantage of the campshires to create temporary installations and stage live performance. In favourable weather conditions the campshires can be converted into an urban beach engaging in variety of sporting, cultural and social activities. These forms of activities would further enliven and animate the SDZ area.

The Planning Scheme will seek to enhance existing facilities and, where possible, to encourage the local community to use new leisure, recreation and sports facilities which may be developed as part of the tourism and cultural infrastructure so as to enable all of the community to participate in activities during their leisure time. These include active recreation (dance and exercise), organised sport (football, hockey, netball, cricket etc), active transport (cycling) and active living (walking, gardening).

It is an objective of Dublin City Council:

- TL1 To promote the water bodies as part of Docklands' identity and ensure water based leisure, business, tourist and sporting activities are encouraged and supported in a sustainable manner.
- TL2 To promote the SDZ area as a destination for cultural tourism and encourage the use of Grand and Royal canals for leisure and recreational purposes
- TL3 Promote and support the Convention Centre Dublin and encourage the location of business tourism support services in the vicinity at Spencer Dock
- TL4 To investigate the opportunities to extend the existing tourism offering and explore the development of new tourist attractions which will encourage larger numbers of tourists visiting the area such as a maritime quarter
- TL5 To facilitate the cruise traffic coming into Dublin and encourage the timing of planned events and festivals to coincide with cruise ship calls at Dublin Port
- TL6 To support retention of existing leisure and sports activities in the area and encourage new facilities for the docklands community and visitors to the area, and that they meet the needs of all members of the existing and future communities.
- TL7 To encourage community involvement and local integration in recreation and entertainment opportunities, including events and festivals, using indoor and outdoor venues
- TL8 To maintain programmes of cultural events in the SDZ Area and include new events such as a Viking Festival
- TL9 To promote the recreational use of the water including the rowing, paddling and boating club activities in the area and to seek to ensure that any new infrastructure is provided in a manner which safeguards and protects these recreational resources.

4.10 Urban Structure & Design, Density, Height

4.10.1. Achievements to date

4.10.1.1 IFSC 1 & 2

The planning and implementation of the IFSC and Section 25 Planning Schemes to date has largely employed an orthogonal layout, consolidating and refining the legacy of the original city grid laid out in Georgian times. Within this grid, the street becomes the main element in building urban structure. A legible hierarchy is possible as the role of some streets is more important than others. While the primary grid is dominant, it is flexible enough to respond to and integrate major water bodies, urban squares and historical complexes.

The build-out of construction to date has generally moved from west to east. IFSC 1 represents a recognizable and new urban model of integrated planning for its time. It includes a concentrated cluster of large office floor-plates focused on a well designed and constructed public domain, organized around the retained water bodies of Georges Dock. Urban street character is generated by linked buildings containing the space of the street to a height of 4/5 stories, though there is occasional height above this. IFSC 1 also lays down a strong relationship to the river by defining a generous Campshire, though it is less successful in producing a successful relationship to the City. Mayor Street however becomes a major east–west spine gaining status as the masterplan moves eastwards.

IFSC 2 is generally regarded as being more successful and urban than IFSC 1. It has a much better mix of uses, incorporating a diverse range of hotels, shops restaurants and residential development both private and social. The big office floor-plate is still there but it feels more integrated, though offices are still very dominant to the river. Mayor Square is a major presence at the heart of IFSC 2 and is enlivened by multiple uses including the National College of Ireland [NCI]. Excise Walk is a bold intervention, a new street, connecting Mayor Square to the Campshires and the river. The maintenance of the building line to the Campshires, from IFSC 1 continues to build the civic dimension to the river.

4.10.1.2 North Lotts area

The opening of the Convention Centre Dublin, the re-engineering of the Point Depot as an internal venue meeting world standards [O2], and the construction of the new Beckett Bridge, represent significant infrastructure that will underpin success in Docklands in the decades ahead. However significant these projects, they have not been complemented by the expected roll-out of office and residential development planned for under the North Lotts Planning scheme. While there have been some significant development pockets, overall there is a visual fragmentation which is strangely emphasised by the continuous line of the Luas.

In Spencer Dock, the development blocks, clustered around the Convention Centre, are introverted and fail to animate or contain the public domain, which is windswept and sterile. The provision of Dart Underground envisaged a major business district at Spencer Dock, constituting a well connected hub at the heart of Docklands. This is still a valid objective but it must be complemented by a commitment to create an attractive street experience and animation in the public domain.

At Point Village a range of infrastructure awaits a community of users. Major facilities including a shopping centre [20,000m²], hotel, cinema complex, and the O2, represent district centre status but are not currently viable as such, due to a lack of local population and access from a hinterland. The scale of buildings has the potential to successfully contain the large central public space [Point Square] but an eastern boundary is required and the public square itself requires a high quality design solution. The cruise tourism facilities being considered by the Port need to interface with Point Village and support its viability.

Fig. 23 - Urban Structure of Dublin City Centre (*See separate booklet for Figures*)

4.10.1.3 Grand Canal Dock

The implementation of Section 25 Planning Schemes, south of the river, has taken on a somewhat different character, where a more cohesive urban fabric has emerged, spreading out from the centre

of gravity represented by Grand Canal Square. A legible orthogonal pattern of streets and public space shape the building blocks which are up to 8 storeys, those onto public space frequently contain mixed use. The most successful area of the South Lotts is the lands developed on the old Gasworks site, which was directly controlled and developed by the DDDA. The development of the Campshire link from Pearse Street to Grand Canal Square is particularly successful and the quality of the public realm on the Campshires in general is very high.

As one moves eastwards towards Britain Quay, there is an increasing experience of fragmentation, and of isolation and dereliction, towards the tip of what is currently an urban peninsula. Beacons of contemporary development and employment do exist and demonstrate what can be achieved. The U2 tower proposed for Britain Quay may not now be viable and needs to be reconsidered.

4.10.2 Challenges

The primary challenge is to translate high level themes and core functional objectives into a spatial layout and three dimensional plan that is legible, cohesive, inspiring, and can respond to multiple contextual constraints. The plan must also have clarity on fixed non-negotiable elements and guidance on those elements that are flexible. There must also be clarity on implementation. The main test of the urban plan will be the extent to which it is effective in integrating the quantum of accommodation and typology range for both residential and office. While the grid-pattern provides a legible order and structure, there is an opportunity to consider, how the urban layout can best respond to this need for a varied scale of office floorplate and diversity in residential accommodation, especially in situations where the two uses will exist close together.

Excise Walk in IFSC 1 is full of light and integrates multiple uses. This suggests there is an opportunity to refine the existing coarse grid on the North Lotts by introducing more north-south streets. Selecting the appropriate scale of development block is also challenging. Delivering a desired use-ratio over a larger development block may provide more flexibility on development plots within it, as was the case in the Gasworks site. The larger blocks may also help deal with legacy and ownership aspects and give more scope to deliver open space and other amenities including parking.

The east-west linear routes of Mayor Street, Sheriff Street, and the Campshires need a specific response in terms of urban design and land-use. Mayor Street is the internal street of the North Lotts and its busy commercial atmosphere through IFSC1&2, combined with the status bestowed by Luas, suggests it should reflect a live-work character. Sheriff Street is the interface of North Lotts with East Wall and has not received much attention in previous plans. It has a critical role to play in relating North Lotts to future development on brownfield lands to the north.

Grand Canal Square and the mixed-use blocks in the immediate surrounds, constitutes a successful hub which is much enhanced by the quality of public space and the Grand Canal Theatre itself. Grand Canal Square is an example of how a hub can operate as a centre of gravity and incorporate a specific focus. Spencer Dock and Point Village are also potential hubs but need further consideration and intervention. In order to counter isolation, generate a legible unity and create a dynamic focus in areas that have the capacity to grow economic clusters, it is considered that Britain Quay and Boland's Mills should also be defined as hubs in the urban structure.

4.10.3 The Way Forward

The Urban Form and Structure will be driven by [a] a number of High Level Themes and [b] Key Structuring Principles. Both the high level themes and the key structuring principles will assist distillation into [c] Key Building Blocks. Finally individual Development Blocks [City-Blocks] will include the development plots, and will lay down the fixed elements of building line, public open space, height, quantum and ratio of uses.

4.10.3.1 [A] High Level Themes

The high level themes summarize those areas that feed into the vision and are considered critical to the strategic solution. They are there as key influences on the direction and content of the plan.

They include;

- Sustainability

- Economic Renewal and Innovation
- Quality of Living/Social Regeneration
- Maritime Identity, Culture and Heritage
- Physical and Social Infrastructure
- Movement & Connectivity

4.10.3.2 [B] Key Structuring Principles

The key structuring principles prioritise existing physical elements or concepts which will underpin a legible order and inform the content of the urban structure. They include;

- Campshires
- Water bodies
- Orthogonal layout
- East-west links e.g. Sherriff Street
- North-south streets
- Luas line
- Hubs
- A major public space at the heart of each hub
- View Corridors
- Protected Structures

4.10.3.3 [C] Key Building Blocks

A & B above can be distilled down into a small number of key building blocks which form the framework and the spatial skeleton of the SDZ; they include

- The 5 hubs
- The linear Campshires of both river and canal
- Mayor Street [Luas] and Sheriff Street
- Orthogonal Frame, containing 5 layers;
- Historic grid
- City Blocks
- Secondary streets and spaces
- Urban Blocks and spaces
- Urban Plots

4.10.4 The 5 Hubs

5 Hubs have been identified within the SDZ area reflecting the existing hubs/clusters which are a feature of other parts of the City.

The 5 Hubs are (See Fig 24);

- Spencer Dock
- Point Village
- Grand Canal Dock
- Britain Quay
- Boland's Mills

The objective for the SDZ Planning Scheme is that all of the hubs achieve their own character through a combination of mixed-use, landmark buildings, significant open space and unique public realm.

4.10.4.1 Spencer Dock Hub (see also 5.6.2, 5.6.7 and 5.6.8)

4.10.4.1.1 Role of Spencer Dock Hub

Even more so than Point Village Hub, Spencer Dock Hub has a City and Regional role outside of the footprint of the SDZ. The key aspects of this role include;

- Primary economic driver; this is where the big floorplates could cluster, in a 'Business District'
- Transport role connected to regional network
- The combination of economic role and transport role is likely to be reflected in some element of increased intensification and scale
- Home to Convention Centre Dublin and the synergies that this brings in the future

Fig. 24 - The 5 Hubs (See separate booklet for Figures)

4.10.4.1.2 Proposed Dart Underground

While the Government has deferred the construction of Dart Underground, it is a critical piece of public transport infrastructure which the City Region needs. It is essential therefore that the SDZ is drawn up on the basis that Dart underground will be implemented. This means the full scope of Spencer Dock must be addressed, reflecting the potential offered by this infrastructure. However, while the long term plan must be presented there is a great risk that interim blight could result. It is proposed therefore to explore temporary building solutions on the site of the train station which could feature a creative focus around economic innovation clusters and promotion of the economic potential of Docklands in general.

4.10.4.1.3 Build-out and constraints

The main built elements include residential blocks and associated offices to Mayor St and Park Lane, the Convention Centre, and the adjacent office complex. These uses, because of their monolithic character and their tendency to be introverted, have not managed to generate sufficiently positive urban qualities in the public domain.

There is also a cluster of protected structures at Spencer Dock facing the river. These structures will eventually form part of the experience of entering the new Dart Underground station.

The scale of the small existing residential terrace along north side of Mayor St is a challenge in terms of policy response and design integration

4.10.4.1.4 The Public Square

This space has had a number of configurations since the first drafts in 1999. It is now proposed to fix the public square on the northeast quadrant south of Luas. It is important to aim for a square for that is of unique design, is urban, is green and has a magnet attraction. Surrounding uses must also help animate the public space. The square could interface with a smaller more contained/intimate space formed by the protected structures to the south.

There is a challenge in relating existing small scale buildings to the probable scale of new proposals. A bridge link is also proposed aligning with the view corridor from Grand Canal Square and connecting with Spencer Dock Square.

The interface of Spencer Dock with Sheriff St is difficult due to a level change and design proposals will be required to address this.

4.10.4.1.5 Urban Form and Height

There have been some extreme proposals put forward on height in the Spencer Dock area in the past. The discourse on height during the review of the City Development Plan combined with the economic downturn has reduced expectations for high buildings in the City in general. Nonetheless Docklands is designated as an area for tall buildings in the City Development Plan. In addition Spencer Dock will be at the heart of a public transport network with the delivery of Dart Underground.

The combination of public transport infrastructure and a CBD Hub of National significance points to the need to optimize density. Considering the fact that height to date in the Section 25 Planning Scheme areas has frequently been in the 5-8 storey category it is suggested that a range of 10-12 storeys at the upper end for Spencer Dock is appropriate. Other strategic objectives for the Spencer Dock Hub are the implementation of Dart Underground, the creation of a new pedestrian bridge connection linking Spencer Dock with Grand Canal Square and temporary well designed structures over the Dart Station site, geared to narrate and promote the economic platform and profile of Docklands.

4.10.4.2 Point Village Hub

4.10.4.2.1 Role of the Hub

There are major issues with Point Village in terms of economic and functional viability. There is a bleak windswept character to the main square which is not helped by low footfall despite the fact that there is a performance venue of national importance, a new cinema complex, a high quality hotel and a shopping centre [not operational]. The presence of some of these functions suggests a potential city role, or even regional role beyond the local. However, currently the role of the hub is compromised by a number of factors, including a weak retail hinterland, public realm with poor containment, which currently runs up against the heavy traffic on East Wall Road.

4.10.4.2.2 Improving the role of the Village Hub

A successful future role for the Point Village Hub will have to exploit the platform and profile of entertainment generated by the O2 venue and combine this with leisure, recreation, and tourism dimensions. The development of the entertainment role will support the viability of a District Retail Centre, which already has critical floorplate infrastructure in place. It is also critical that a hinterland emerges to support viability of business in Point Village and new bridge proposals in the SDZ are geared to promote this.

The increasing importance of Cruise Tourism economically, the strategic fit of this sector with the Marine Services sector, and the interest of the Port in promoting synergy suggests there is an alignment of interest with Point Village.

There is also an opportunity to develop this area as an epicentre of city cycling routes, and to consider food as a major theme supported by markets and a cluster of restaurants. A permanent fairground and/or exhibition areas on the lines of the RDS could also be considered for the Port lands as an extension of Cruise facilities.

4.10.4.2.3 Urban Design of the Village Hub

The current Section 25 Planning Scheme proposed a landmark building at the east end of Point Square terminating the long run of Mayor St, called the Watchtower [100 metres]. It is considered that at this stage the Watchtower is unlikely to be built and that an opportunity exists to consider alternative solutions, which will contain the eastern end of Point Square and reduce exposure to the harsh traffic environment of East Wall Road.

In proposing the previous landmark, there seemed to be a certain assumption of termination that urban regeneration would not extend further into the port area. The advent of Cruise Tourism initiatives now suggests that future spatial relationships with Alexandra Dock should be kept in mind. It is proposed therefore that a linear building form the eastern edge of Point Square, extending southwards parallel to the O2 arena.

4.10.4.3 Grand Canal Hub

The Grand Canal Hub has become established as a major cultural and mixed use zone based on the 60/40 residential/commercial mixed-use model. There are a number of factors which have contributed to the success of this hub. It lies at the confluence of a number of important routes, which link back to the city centre, south to Pearse St and north along Forbes St to Sir John Rogerson's Quay. The hub has a unique location at the elbow of the Grand Canal Dock and the innovative civic space exploits this aspect.

The civic space, combined with the south-facing frontages along Hanover Quay in conjunction with the presence of dramatic landmark buildings (An Bord Gáis Energy Theatre and the new hotel) and a variety of shops, restaurants and cafes in the vicinity have all contributed to a vibrant hub. Overall the Grand Canal Hub incorporates the essential features which contribute to the making of a successful city quarter – a critical mass of commercial and residential uses, a character largely conferred by landmark buildings and a unique public realm.

4.10.4.4 Britain Quay Hub

Britain Quay is a peninsula and suffers from a degree of physical and psychological isolation which could also be a strength. The location enjoys a powerful relationship with the three waterbodies of the Liffey, Dodder, and Grand Canal Harbour. This relationship is formally emphasized by wide Campshires which extend around three sides of the Hub. The inspiration and rationale for a Hub at Britain Quay arises in part from the unique qualities of the context but also from the need to anchor a centre of gravity in this part of the SDZ. The viability of the Hub would be critically enhanced by new bridge connections.

4.10.4.4.1 Role of Britain Quay Hub

The economic platform of the Britain Quay Hub Area includes an emerging spectrum of financial and legal uses supported by niche sectors in the digital, technology and creative media areas, attracted by the Hub's combination of low rent warehouses and state of the art accommodation. The design rationale is inspired by the idea of a 'Village' and the notion of intimacy and integration that this image generates. The design intent is to create a major public square, or series of linked squares, exploiting the powerful waterfront views while also achieving protection from the winds and harsh weather. The public space will achieve cohesion between the historic and protected fabric and the scale of new development. It is an objective to link Britain Quay to Poolbeg by a new Dodder bridge and to North Lotts with a new Liffey pedestrian bridge. It is also an objective to provide a publically accessible cultural facility in the hub, linking to the community, recreational and cultural uses proposed across the canal locks at City Block 19, which in combination will create a cultural destination point at the end of the peninsula.

4.10.4.5 Boland's Mills Hub

The Boland's Mills site occupies a pivotal waterfront position on the Grand Canal Harbour [inner dock]. Currently, the imposing mass of the concrete silos on the site contrast with the adjacent historic fabric of large warehouse buildings which fall sheer to the dock waters. Despite extensive redevelopment along Barrow St, major sites have remained introverted and there has been little evidence of a public domain network emerging. The Boland's Mills site can act as a centre of gravity to an economic Hub extending around the footprint of the inner dock. A key feature of redevelopment of the Boland's Mills site itself will be the delivery of legible public space opening up access to the water-body and threading in mixed use to expand on the chemistry of economic activity.

A number of key considerations will guide the urban design rationale. The retention and adaption of existing protected structures offers a range of accommodation for start-up arms and niche economic sectors. The removal of the concrete grain silos, if feasible, creates the potential to generate a critical quantum of development. However it is considered that new building blocks should have an

orientation to optimize light penetration and connect public space to the water. A residential component could be satisfied however by a new building containing the space of Barrow St.

4.10.5 Development Block and Plot

A number of 'city blocks' emerge logically from the orthogonal grid which constitute an appropriate scale for addressing the challenge of land-use ratio and quantum. Each 'city block' is numbered and subdivisions are labelled a, b, c, d, etc. as required. The subdivision of the 'city block' into secondary structure and urban development plots is informed by the High Level Themes and the Key Structuring Principles.

Each of the 'city blocks' has a critical number of fixed elements which include the following;

- The external building line to the city Blocks
- The extent of the public space/civic space within the block
- The maximum (and minimum) heights of buildings
- The ratio of main uses over the hub area to achieve 50 residential / 50 commercial land area insofar as is practicable, with the ratio of main uses in each City Block to be as specified in Section 5.5 (individual City Blocks) and paragraph 6.1.2 (Infrastructure Rollout).

4.10.6 Height in SDZ

In the existing Section 25 Planning Schemes and in the build-out to date, there is significant height difference across locations, but generally the variation is between 5 and 8 storeys. Landmark buildings perform a different role and can be categorized as those constructed e.g. Millennium Tower [54m] Monte Vetro [61m] Alto Vetro [60m] and those not yet built e.g. U2 Tower [130m] Watch Tower [100m].

The general run of buildings in IFSC 1 is 5 storeys though some office buildings are higher. In IFSC 2 the density steps up; hotel and residential buildings at the river end of Excise Walk are 7 and 8 storeys respectively. There is a terminal building of 10 storeys to the northern end of Excise Walk/Mayor Square. In IFSC2, height is well considered in order to impact optimally on the street scene or create an interesting vista.

In the North Lotts, the build-out in Spencer Dock includes the Convention Centre Dublin [44m] and the residential block to the north [STUV-10 storeys]. The small number of office buildings in this area are 8 storeys. The area between Spencer Dock and Point Village remains largely unbuilt though the proposed Central Bank is 8 storeys.

The Section 25 Planning Scheme ranged from 7 storeys on the river to 4 storeys on internal blocks with heights informed by a shadow analysis.

The Gasworks site with its eleven blocks configured around Grand Canal Square achieves heights around 7/8 storeys, with mixed use integrated vertically in a number of the blocks. As one moves eastwards along Sir John Rogerson's Quay, the office buildings are generally 8 storeys. This is the case in relation to the State Street Bank which is the most important site developed to date as one approaches Britain Quay.

On the Grand Canal [inner-dock] and Barrow Street there is an historic high context formed by vertical warehouses and the Boland's Mills concrete silos. The residential Millennium Tower and Monte Vetro [office] constitute contemporary bookends framing this authentic docklands elevational composition.

Applications for high buildings shall be in accordance with Development Plan guidelines set out in section 17.6 of the Dublin City Development Plan 2011 - 2017. In this regard, applications for high buildings where proposed in the SDZ will be subjected to assessment under the development management process, including matters such as a shadowing, amenity, microclimate and Environmental Impact Assessment. (See also Appendix 5 – Assessment Criteria for High Buildings)

4.10.7 Challenges/Way Forward

During the review of the City Development Plan, it became evident that the vast majority of accommodation needs can be met by buildings of fairly modest height. It is demonstrated above, that the implementation to date within the Section 25 Planning Scheme, employs a general height of 4/5 to 8 storeys, which works well in integrating different uses, and achieving a legible dense urban structure, comparable to the traditions of the European city. It is proposed to continue to operate generally within this height range in the SDZ.

There are a number of locations however, where a height range above 8 storeys is considered appropriate. The rationale for height elsewhere in the city includes arguments for identification, and visibility of a particular activity/ building or character area, and the need for density of a sector tied in with a transport node. Spencer Dock is already an important transport node, and with Dart Underground, will be one of the most connected places in the City Region. It is also an important office hub, and is the location for the Convention Centre Dublin. In order to respond to transport infrastructure, and develop its potential for business intensification, including the provision of larger office floorplate, it is considered that Spencer Dock should incorporate additional buildings in the range 10 to 12 storeys.

In the Point Village hub, buildings up to 8 storeys will be effective in containing Point Square, on the north, west and south boundaries. The existing Section 25 Planning Scheme includes a proposal for a landmark building of 100 metres [the Watchtower] to terminate the vista along Mayor St. There is very little prospect that the Watchtower, or the U2 tower at Britain Quay, will ever be viable or be constructed. In this context alternative proposals need to be put forward. A landmark perimeter building could contain the eastern edge of the square and extend northwards parallel to the O2, and could incorporate a height component. This perimeter building should allow penetration through it to connect with planned cruise tourism facilities.

At Britain Quay the SDZ also includes alternative proposals to the U2 tower. The proposed hub at Britain Quay is designed both to exploit its unique peninsula character, while creating an economic centre of gravity. An element of height is required to support and celebrate this objective. It is considered that the height component could best be achieved if it was integrated into the block structure, rather than stand as an isolated landmark on the Campshire. In order to meet the height objective, a range of 40-60 metres is considered appropriate.

In the Boland's Mills hub, it is important that new development fits comfortably into the complex historic composition along the waterfront. In order to achieve this, new development should not extend above a line linking the top of the Millennium Tower to the Monte Vetro. Also the orientation of any new high element should be east/west, in order to resonate with the orientation of narrow grained historic fabric.

4.10.8 Density and Plot Ratio of Development

The Docklands project is predominantly a regeneration of brownfield Port lands which is a major sustainable starting point. The recycling of such lands is costly in terms of infrastructure and it is important that a sustainable density of development is achieved. As outlined above sustainable densities and a high quality urban structure can be achieved within a height range of 5-8 storeys.

In accordance with best international city planning practice, the City Development Plan promotes sustainable higher densities, particularly in the City Centre and Key Development Areas such as the Docklands and within the catchment areas of high capacity public transport (see Ch. 4.4.3 and 17.3 of Development Plan).

Of course, the attainment of higher densities is not a standalone objective; higher densities must be delivered in tandem with high quality living and working environments to ensure the creation of good urban places and in this case, an attractive maritime district.

As stated in the UK Urban Design Compendium 2000, density is only a measure, not a determinant of good urban design. Density is a measure of the relationship between buildings and their surrounding spaces and is typically expressed in units per hectare. As such, it is usually applied to residential

schemes, whereas another planning measurement tool, plot ratio, is often used in relation to commercial developments.

Plot ratio is a tool to control the bulk and mass of buildings, and is expressed as the amount of floor space divided by the site area. It is a useful indicator, but only when used with other standards to achieve sustainable, quality urban places.

The City Development Plan (2011 - 2017) sets out an indicative plot ratio for Z14 regeneration areas in the range of 1:0 to 3:0 (the Docklands Master Plan used a plot ratio of 3:0). In the SDZ, the 3.0 plot ratio relates primarily to the city block, including the proposed internal streets/lanes, but excluding the existing surrounding streets.

In certain circumstances, a higher plot ratio may be considered, i.e. adjacent major public transport termini, to facilitate urban renewal, and to maintain an existing streetscape profile. These situations are only likely to occur in the 5 hubs in the SDZ. It is generally accepted that development with a plot ratio exceeding 3:0 must be very carefully considered with regard to its impact of an urban structure and amenity.

Having said that, the Docklands has been relatively successful in achieving sustainable urban densities to date. A target of 247 units per hectare for residential densities has been set in the Docklands Master Plan. Charlotte Quay (388 units per hectare), the Millennium Tower (440 units per hectare) and Gallery Quay (223 units per hectare) are examples of high density apartment living in the Docklands.

The main challenges for the SDZ are how to retain quality high density given the residential market downturn; how to ensure the management of residential schemes is reasonable and effective, and how to ensure both families and key workers will remain in the new Docklands quarter. While the Residential Density Guidelines (2008) promote a minimum of 50 units per hectare in urban areas, the Docklands must aspire to a higher minimum to achieve the strategic aims of the SDZ.

The way forward will be to promote an urban design quality led approach to achieving sustainable urban densities where the focus will be an orderly attractive neighbourhood, with a varied typology of residential units. It is considered that while there should be a land use mix at the City Block level, it is not necessary to mix commercial and residential to the extent the amenity is detrimentally affected. The test is whether the overall vitality and liveability of the local area is retained and enhanced.

It is an objective of Dublin City Council:

- US1 To ensure that the urban structure employs an orthogonal layout, consolidating and refining the legacy of the historic city grid whilst allowing for variety as per 5.4.3.
- US2 To define a number of Hub areas (5) in order to create focus and centres of gravity in the spatial structure, incorporate a unique public square and landmarks to facilitate the clustering of economic sectors and social and cultural activities
- US3 To ensure that the open, civic, and formal character of the Campshires, incorporating generous proportions and scale, shall continue to define the relationship of new development to the waterbodies of the river and canals
- US4 To ensure the “City Block” represents the appropriate scale at which to resolve mixed use ratios, configure development plots, achieve permeability and fix crucial aspects of building line, density and height and new public space (or adjacent City Blocks by Agreement as per para 6.1.2).
- US5 To ensure that Mayor St is developed as an internal street spine of the North Lotts, incorporating the theme of ‘live-work’
- US6 To ensure that Sheriff St develops a dynamic role to connect and relate the SDZ to the communities and brownfield lands to the north, and that a public realm strategy is designed to assist this

- US7 To ensure that new north-south and east-west streets are developed to give the urban grid a finer grain, exploit light gain and connect with the river and waterbodies
- US8 To ensure that the public realm as a whole, is legible, cohesive, of high quality, and operates as a connected network. It must be seen as a crucial infrastructure, underpinning economic, social and environmental sustainability
- US9 To ensure that the extensive footprint of waterbodies function as a valuable part of the public realm, and that a water animation strategy is prepared to drive this
- US10 To ensure that principles of Green Infrastructure inform the design of the public realm
- US11 To ensure that the public realm network of the SDZ interfaces effectively with the strategic public realm network of the inner city
- US12 To promote and achieve sustainable higher densities throughout the SDZ area, with an emphasis on higher commercial densities within the identified hubs
- US13 To achieve higher densities, not as a stand-alone objective, but in conjunction with other safeguarding criteria, such as indicative plot ratio, together with other criteria in the City Development Plan, e.g. daylight, open space, amenity space, privacy areas and play space in order to achieve a high quality living and working environment
- US14 To promote a variety of residential, duplex and apartment types which will create distinctive neighbourhoods, coherent streets and open spaces, and promote whole life-cycle living
- US15 To seek that the design of building footprints, heights and layouts allow for maximum daylight penetration to buildings, minimise overshadowing, as well as allowing for existing wind conditions to be ameliorated
- US16 Applications for medium and high rise buildings shall be accompanied by a design statement as part of the Assessment criteria for high buildings as set out in section 17.6.3 of the Dublin City Development Plan 2011 - 2017. (See also Appendix 5 – Assessment Criteria for High Buildings)

4.11 Environment, Open Space & Green Infrastructure

4.11.1 Introduction

The planning scheme aims to protect and enhance open space for both biodiversity and recreational use in a way which will allow residents, workers and visitors alike to enjoy a high quality urban environment, and allow nature to flourish.

The most significant areas of public space and amenity within the area are the River Liffey, its associated Campshires, Royal Canal Linear Park, Grand Canal Dock, Grand Canal Square and Point Square. There is a notable lack of green spaces and street trees in the SDZ area. While the River Liffey and associated Campshires provide a high quality west-east amenity link, it can be exposed and sometimes inhospitable due to the lack of landscaping.

Successful open spaces can contribute towards the attractiveness of the SDZ area, provide venues for cultural events and create safe and interesting pedestrian routes. Furthermore, the ecological function of green spaces includes providing flood protection and sustainable drainage systems along with enhancing biodiversity.

Fig. 25 - SDZ Open Space In City Context. *(See separate booklet for Figures)*

4.11.2 Achievements

In recent years the Dublin Docklands Development Authority has provided a number of high-quality open spaces as part of the overall Docklands redevelopment.

The Campshire project is one of the most significant public realm enhancements in the city for many years. The campshires are over 3km in length and along with the provision of cycle paths and public art installations, allow for a comfortable walking experience for residents, workers and visitors alike.

Grand Canal Square, a new urban space, was opened in June 2007. The 10,000 sq metre square is one of the largest paved public spaces in Dublin city and accommodates a diverse range of activities throughout the year.

The Royal Canal Linear Park was completed at the end of 2011 and consists of a 9,000m² park running between North Wall Quay and Sheriff Street.

Docklands Chimney Park, an innovative children's playground and new community amenity was opened in 2009. The park incorporates creative features such as a mirror wall, play platforms, water features and palm trees.

4.11.3 Challenges

Despite the dramatic transformation of the area over the last fifteen years or so, a number of challenges remain with regard to landscape, open space and recreational amenities. Despite the development of the campshires, it can be exposed and sometimes inhospitable due to the lack of greenery.

Given the urban nature of the plan area there isn't an abundance of terrestrial biodiversity. Although a number of large scale residential and commercial developments have been constructed in recent years, there are no notable Sustainable urban Drainage Systems within the plan area.

The abundance of brownfield sites and sites which have had initial development works has created visual and environmental blight within the area.

4.11.4 The Way Forward

In order to create an integrated network of green infrastructure and high quality public and communal open spaces which enables residents, workers and visitors alike to enjoy, the following approach will be pursued:

- To create a network of complementing and connecting open spaces which cater for both active and passive recreation and a wide range of age groups
- To promote the greening of the the public realm including the campshires and the street network to provide for a more sheltered environment and one where a higher priority is given to pedestrians and cyclists
- To enhance the biodiversity value of the SDZ area
- To create visual and environmental improvements to brownfield sites including the removal of unsightly hoardings and restoring greenery and landscaping on an interim basis prior to redevelopment
- To ensure that best practice and innovations in SUDs design form part of both developments in the public and private domain

Fig. 26 - Existing & Proposed Open Spaces. *(See separate booklet for Figures)*

4.11.4.1 Green Infrastructure

Green Infrastructure provides a mechanism for bringing together the key elements which define the quality of an area in relation to biodiversity, amenity, movement and water resources. "Green Infrastructure is a strategically planned and managed network featuring areas with high quality biodiversity and other green spaces that conserve ecosystem values which provide essential services to society. Green Infrastructure includes multi-functional green spaces in urban areas as well as ecological connectivity in the wider landscape." Comhar (2010)

It is planned to optimise opportunities for 'greening' and biodiversity by creating a viable network of open spaces, trees and waterways.

This green infrastructure will enhance the natural heritage of the docklands, conserve and protect the distinctive character and culture of the docklands and will be a significant determinant in achieving the desired quality of environment and experience the City Council envisages for the residents, workers and visitors to the area.

4.11.4.2 Open Space & Recreational Amenities

The open space areas developed to date within the SDZ area include Royal Canal Linear Park, Grand Canal Square and Chimney Park. Both Station Square and Point Square have partially been developed.

In addition to these new parks, there are important existing public parks in the wider local neighbourhood which have the potential to be more successfully integrated (through walking and cycling routes in particular) with the SDZ area. These parks include Ringsend Park, Fairview Park and Merrion Square. The natural amenities of Dublin Bay including Sandymount Strand and North Bull Island are accessible to the wider community.

A number of open spaces were proposed within the SDZ area but have not been delivered to date, owing to the market downturn and cessation of development works adjacent to the proposed locations of these open spaces. The open space strategy for the SDZ area seeks the completion of these spaces as part of an integrated network of amenities.

4.11.4.3 Open Space

It is an objective to require the provision of Public and Communal open space within the designated area to provide for a resident and employment populations. The provision of open space will be in accordance with the following hierarchy:

- Public Open Space
- Quays
- Pocket parks
- Streetscape
- Private/Communal Open Space
- Balconies
- Courtyards
- Roof Gardens

The hierarchy of open space for the purposes of this SDZ will seek to utilise the unique attributes of the plan area which is the confluence for the Liffey river, the Dodder river and the Grand Canal. The primary public open spaces therefore are the quays and dockside which avail of the natural attraction of the water. This is already exhibited by the square at Grand Canal Dock which is the primary focus for events and cultural activities.

The plan will seek to ensure that waterside development facilitates recreational activities in a planned and safe manner for the new community.

Pocket parks will be provided as an extension of the streetscape to facilitate rest and relaxation. These areas will be highly landscaped with appropriate street furniture. Two Pocket Parks should be designed to accommodate synthetic Multi Use Games Areas (MUGAs), one each side of the Liffey, as areas for children particularly teenagers to recreate.

Streets will be designed on a hierarchical basis ensuring that the main avenues have sufficient space allocated to facilitate large canopy trees. The tree planting plan for the SDZ will reflect the hierarchy of streets and spaces.

The design of all public realm and green infrastructure must be of high quality, creating flexible, multifunctional places which protect and enhance local character and incorporate retained features and important vistas. All open spaces must be inviting places for people to use for informal recreation. They must be well overlooked with clear delineation of the boundaries and transitions between private space, communal space and public space.

It will be an objective to promote the sharing of community and recreational facilities including open space between local schools and the local community.

Completing and connecting open space areas has many benefits. In addition to assisting the implementation of city policy, additional benefits for the local area will include:

- Enhanced opportunities for movement by walking and cycling.
- Creating distinct character areas for identity and orientation.
- Creating focal points for community interaction.
- Providing visual improvement.
- Improving quality of life that encourages long term residents

4.11.4.4 Public Space (see Chapter 5 for more details)

Proposed open Space (see Chapter 5.3 and 5.4 for more details)					
Open Space	City Block	Classification	Description	Approx Size (m)	Access
Station Square	7	Civic Space	A new urban space above the DART underground station, framed by historic buildings to the south and Mayor St to the north. The square should be adaptable in its layout & design, providing for a wide range of uses including public seating and landscaped areas. Cafes & restaurants will be encouraged on the frontages of the square with spill out to create animation. The square should also be designed to accommodate events.	60 x 55	Public
Middle Park	3	Local Park	The Middle Park will create a green lung between Sheriff St & the River Liffey. The park is to be designed as one legible space with a coherent design approach but will accommodate different types of uses including passive recreational facilities & SUDs features.	50 x 40	Public
North Wall	9	Pocket Park	This space will define an important junction within the city block. Such a space can provide good opportunities to rest and for the community to interact.	35 x 20	Public
Point Square	-	Civic Space	The square should provide for a range of activities supporting the retail & entertainment function of the hub including public seating and landscaped areas. Cafes & restaurants will be encouraged on the frontages of the square with spill	90 x 50	Public

			out to create animation. The square should also be designed as a destination space and also to accommodate events.		
Chocolate Factory Park	14	Neighbourhood Park	The park should be a focal point for the residential developments in the immediate vicinity. The park should combine opportunity for both active & passive recreation and should be predominately of soft landscaping.	67 x 26	Public
Britain Quay	15	Civic Space	This civic space at the end of the peninsula will have a multifunctional role serving the Britain Quay Hub and providing a maritime experience with openings to the North and East. The space should be contained by the pavilion building proposed at the mouth of the Dodder River. A key principle will be to link this civic space to city block 19 via the lock gates.	40 x 40 west of Britain Quay, plus quayside.	Public
Boland's Mill	17	Civic Space	This civic space shall provide an opportunity to exploit Grand Canal Dock as a water amenity. The space shall be accessible from Ringsend Road and Barrow Street.	40 x 20	Public
Charlotte Quay (east)	18	Civic Space	This civic space will open onto Grand Canal Dock.	25 x 20	Public

4.11.4.5 Communal Open Space and Semi- Private Space

A common approach for the provision of semi-private and communal open spaces under previous planning schemes in the area was through the central courtyard spaces of perimeter block development. Where the perimeter block typology is used, this will be one of the preferred methods of delivering on semi-private and communal open space requirements and on the provision of safe and secure areas for children to play.

Communal Open Space requirements will be based on the projected size and density of individual development plots and their proximity to planned open space. Qualitative provision will comprise of balconies, roof gardens and courtyards incorporating play areas (the Sustainable Urban Housing: Design Standards for New Apartments recommend play space sizes of 85m² - 400m²), outdoor exercise provision, seating and high-quality landscaping.

4.11.4.6 Private Open Space

Private open space will be required to meet the standards for apartments and houses as set out in the Dublin City Development Plan.

Private Open Space relates to balconies, patios, winter gardens accessible to individual residents only.

Semi Private/Communal Open Space will be available to residents within the city block and the public generally during daylight hours. It is intended that these spaces will be maintained by a management company.

Public Open Space is freely accessible to the public with the objective to be taken-in-charge by the local authority.

4.11.4.7 Recreation

Access to good leisure, play and recreation amenities is essential for any community. In so far as the land use constraints permit, opportunities for recreation will be provided within the SDZ. An important part of the plan however, will be to demonstrate how strategic greenways extending beyond the Planning Scheme boundary, will also link the community to amenities in the flagship and community parks on the periphery of the plan area as well as the beaches, and the Dublin mountains.

4.11.4.8 Greenways and Green Routes

Greenways are “shared-use routes for non-motorised users, (e.g. walkers, cyclists etc.) for pleasure, recreation, tourism and daily journeys” (The Heritage Council) and for the purpose of this report will be considered as the strategic routes outlined in the City Development Plan. Green Routes are local cycle and pedestrian routes which link neighbourhoods to the strategic Greenways. Greenways have a dual green infrastructure role by facilitating an ecology and wildlife corridors in addition to their transport role.

4.11.4.9 Trees

A tree survey of existing trees in accordance with tree management best practice is required to establish the baseline tree cover that exists at present and to set targets for tree cover in the plan. This will optimise the recognised benefits of trees as a key element of green infrastructure.

All roads will be required to facilitate tree planting. For this purpose, pavement width should not be less than 2.5m, with trees planted in linear trenches to make use of proprietary planting systems or structural soils which can also form part of the Suds/drainage network. Tree Root Structural Cell Systems (e.g. Silva Cell) are subsurface stormwater systems that hold large soil volumes while also supporting pavements and traffic loads. It is proposed that these will be used throughout the Planning Scheme area to assist with attenuation and groundwater recharge.

The species of tree chosen shall relate to the hierarchical importance of the road and the width of pavement. To achieve this a street plan will be required setting out the location of utilities, street furniture and the tree pit/ trench. Particular regard shall be had to tree planting along the Quays which shall incorporate large canopy trees. Tree planting provision must be agreed at application stage with management programmes for retained and newly planted trees.

4.11.4.10 Play Space

The development of child friendly facilities within the plan area will encourage and stimulate children and young people to play, move around safely and comfortably. Well designed play space is crucial so that children’s and young people’s physical and social needs are supported and they have an opportunity to experience both outdoor and indoor play facilities.

In order to provide successful play spaces the following principles shall be applied:

- When deciding on the location of play space, regard should be had to the needs of all age groups and comply with the minimum recommended proximity thresholds. Play spaces for small children should be provided close to residential units i.e. within one minute walk of each front door, safe from traffic and other hazards, overlooked informally by residential units. The space should have sunny and shady parts and be equipped with natural play elements and with apparatus for swinging, rocking and climbing
- Provide for a wide range of play experiences
- Be accessible to both disabled and able-bodied children
- Meet the needs of the community
- Allows children of different ages to play together
- Builds in opportunities to experience risk and challenge
- Be sustainable and appropriately maintained
- Allows for change and evolution
- Play facilities for older children should be available either within residential schemes or close by such as in an urban square or green space where good linkages with residential development can be created
- Regard to the Dublin City Play Plan 2012 - 2017

4.11.4.11 Biodiversity

The SDZ Planning Scheme area does not contain an abundance of biodiversity. However, the designated sites of North Bull Island and North and South Dublin Bay constitute part of the Irish and European network of protected areas and are in close proximity to the draft planning scheme area.

The River Liffey and Grand Canal Dock are significant marine biodiversity features within the SDZ Planning Scheme area. The River Liffey in particular supports a significant wildlife resource including migratory eels, salmon, mullet and the occasional feeding otter. The River Liffey is also a commuting route for birds moving to and from Dublin Bay. Of interest is the presence of coastal birds (Black Guillemots and Cormorant). Black Guillemots have started to nest on the river walls in this part of the estuary and are regularly seen perching on the floating jetties on the river. Otter is known to occur along the River Dodder and River Liffey and along stretches of both canals. Seals and larger cetaceans have been known to use the area.

Various species of bats are also known to utilise the SDZ area for commuting, feeding with suspected roosting locations in old buildings, including those along the Grand Canal Basin. It will be required that any public lighting is minimised in areas within 30m of treelines and watercourses, specifically in areas that are important for bats such as foraging and roosting locations. At these locations, lighting shall be installed only where necessary for public safety, with directional illumination and to the minimum lux level consistent with this need.

In terms of terrestrial biodiversity the draft planning scheme area contains very few formal parks, most notably Royal Canal Linear Park, Chimney Park and open space at Spencer Dock. Larger more established parks such as Ringsend Park and Fairview Park while situated outside the area are important in creating linkages to the wider Green Infrastructure network. There are many private and semi private spaces mostly within residential developments which can support a wide range of wildlife habitats and species of local, or even national, conservation interest.

4.11.4.12 Biodiversity and brown-field sites

Brownfield sites can provide valuable opportunities for people to have access to wildlife and recreational space and if managed properly can be a powerful driver of sustainable regeneration. It is a priority of the planning scheme to create visual and environmental improvements on vacant sites including the removal of unsightly hoarding and restoring greenery and landscaping on sites which have a current “brownfield” character due to initial development works.

Such works would be of a temporary nature as the sites in question are zoned and serviced future development sites, many with existing planning permissions in place. However, in addition to the interim use and benefits for the community in improving the condition of these sites, there is an opportunity through these works to establish elements of the long term strategy and open routes that are intended as part of the long term street pattern.

It should be noted that not all sites may be suitable for such temporary measures. Sites where no contamination is present would be more suitable to such measures, as opposed to those which have had a long and diverse history of industrial activities.

4.11.4.13 Designated Areas for Nature Conservation

The SDZ area is set within an entirely urban setting built on reclaimed or in-filled land, and is located at the entrance to Dublin Bay. Dublin Bay is a natural harbour at the confluence of several river basins, and which contains a variety of ecosystems which are biologically diverse and of international and national importance for the species which inhabit them.

Natura 2000 sites are protected habitats for flora and fauna of European importance. They are termed candidate Special Areas of Conservation (cSAC) as per the EU Habitats Directive and Special Protection Areas (SPA) as per the EU Birds Directive. These two EU Directives are transposed in Ireland primarily by the Planning and Development Act 2010 and the European Communities (Birds and Natural Habitats) Regulations, 2011 (S.I 477). The Irish Government and local planning authorities have a legal obligation to protect these European sites. The Appropriate Assessment which accompanies the planning scheme assessed the impact of the plan against the conservation objectives of the European designated sites to ascertain if any significant adverse effects from the plan will affect the integrity of any of the sites.

There are no Natura 2000 Sites in the Planning Scheme area itself but there are Natura 2000 sites, within its zone of influence (i.e. 15km radius). The closest Natura 2000 sites to the area, South Dublin Bay SAC and South Dublin Bay and Tolka Valley Estuary SPA are approximately 2km to the north east and south east. There are 16 Natura 2000 sites within a 15km radius of the Planning Scheme boundary.

In addition to the European Sites within the bay (Zone of Influence), there are five Natural Heritage Areas (NHAs) or Proposed Natural Heritage Areas (pNHAs) in and adjoining the Planning Scheme area. These are areas considered important for the habitats present or which holds species of plants and animals whose habitat needs protection. Although NHAs/pNHAs do not form part of the Natura 2000 network they have been included here for the potential support that they may provide to the Natura 2000 network. Two designated areas for nature conservation are located within the plan area; these are the Royal and Grand Canals (site code 002103, and 002104 respectively). There are three others in close proximity, North Dublin Bay pNHA (000206), South Dublin Bay pNHA (000210) and Dolphins, Dublin Docks (000201).

It is an objective of Dublin City Council:

- GI1 To develop a hierarchy of inter-connected open spaces, recreation areas and green landscaped areas, via walking and cycling priority routes, through the SDZ area as green routes
- GI2 To promote connections between existing amenity areas in the SDZ, proposed amenity areas and the wider strategic green network of the docklands, Dublin bay and the city including connections to the S2S route and the proposed Dodder Greenway
- GI3 To seek the provision of a wide range of facilities within public open space to provide for both active and passive recreation for various disciplines, age groups and abilities
- GI4 To increase the provision of green landscaping including tree planting on streets within the SDZ area and to improve amenity, increase opportunities for wildlife and contribute to improvements in air and water quality and water attenuation
- GI5 To create visual and environmental improvements on vacant/brownfield sites not likely to be completed for development or infrastructure projects over the medium and long term. Initiatives such as the removal of unsightly hoardings, temporary uses and recreational opportunities will be promoted where appropriate
- GI6 To require a clear delineation between public space, private space and communal space within the SDZ area
- GI7 The size and animation of open spaces shall be related to the height of the adjoining buildings, in order to achieve satisfactory levels of sunlight and daylight
- GI8 To pilot and test new green infrastructure installations in the public realm to boost biodiversity and improve surface water management within the SDZ area, including the use of permeable materials for surfaces, planted roofs, and provision of storm water tree trenches
- GI9 To support the development of soft landscaping in public open spaces, where feasible in accordance with the principles of Sustainable Urban Drainage Systems
- GI10 Prior to the redevelopment and operation of any sites, developer(s) shall ascertain the extent, if any, of invasive species, and shall set out measures for their control/removal
- GI11 To enhance the bio diversity value of the local area by protecting habitats, in particular along water bodies, and to create opportunities for new habitats through appropriate native species landscaping schemes, to integrate the natural environment with high quality urban development.
- GI12 Any plan or project with the potential to give rise to significant direct, indirect or secondary impacts on a Natura 2000 site(s) shall be subject to an appropriate assessment in accordance with Article (3) of the Habitats Directive

In circumstances not addressed by the above objectives, the objectives set out in the Dublin City Development plan shall be complied with.

4.12 Public Realm (see also 5.6.1 and 5.6.2)

4.12.1 Introduction

The Public Realm refers generally to the public space of the city, the streets squares and parks, and in the case of Docklands the water bodies. Public space is there primarily to facilitate a rich public life and to provide opportunities for citizens and visitors to enjoy the city in a multitude of ways. While an understanding of the public realm can sometimes be limited to a formal network of public squares and parks, a broader understanding can embrace the kind of experiences a walker may encounter as he/she traverses a city quarter and absorbs the atmosphere of uses, architecture and the culture of the city. The most notable feature of the public realm in Docklands is the nature of its maritime character and how potentially accessible it is. The configuration of the former port area in terms of rivers and canals has created interesting possibilities for urban regeneration and for public space in particular.

4.12.2 Achievements

The Liffey quays and Campshires were built originally for very functional reasons; the containment of the river and to facilitate port trading activities. They are of course recognized as exceptional feats of engineering and are highly valued as an important aspect of Dublin's maritime industrial archaeology. The Docklands Master Plans and Section 25 Planning Schemes to date have recognized the central importance of the Campshires in the urban structure of the area, by requiring new building lines to be at a consistent and generous set-back from the water-bodies. In addition considerable investment has been made in the creation of a high quality public realm along the linear tracts of Campshire bordering both river and canal.

Investment in a high quality public domain has also been a feature of IFSC 1&2 where new public space has complemented the conservation of significant industrial archaeology, including the George's Dock water-bodies, Scherzo bridges and Stack A [CHQ]. IFSC 2 created Mayor Square as a focal point, which is linked to the river and Campshires by a successful new pedestrian street, Excise Walk.

One of the most successful new city spaces is the public square at Grand Canal Plaza. The square embodies wonderful design qualities and incorporates important long views to Grand Canal Dock. The new theatre is a focal point and a source of footfall, but the square is also contained by well designed buildings with mixed use.

Linked to the square is a network of streets, lanes, Campshire areas, and a pocket park [Chimney Park] created out of the 19th century Gasworks site.

Elsewhere in the SDZ area, the public realm is a work in progress. Considerable investment has been made at Point Village and Spencer Dock but the initiatives in these areas have suffered from fragmented implementation and from poor footfall. It is worth acknowledging that new bridge connections, including the Sean O'Casey, Beckett, and Royal Canal [Luas Bridge] have improved the sense of interconnection and network in the public domain. Despite this, the north and south Lotts still remain on the fringe, and in the public mind are perceived to be somewhat detached from the city centre.

4.12.3 Challenges

Creating an attractive and high quality public domain is at the heart of making successful urban places. Docklands contains some new public spaces of very high quality, which has laid the foundation for a future network. The SDZ has the opportunity to build and expand on these achievements. It is logical that the high level themes, and the key structuring principles, which inform the urban structure, will also underpin the public space network. Not all space can have the same

status, and there is a risk of spreading activities too thinly. It is therefore important to consider role and hierarchy and how the various land-uses can best support the public domain in interesting and creative ways.

4.12.4 The Way Forward

4.12.4.1 The 5 Hubs

The proposal for the 5 hub areas provides a basic and legible spatial structure which can integrate the linear elements of Campshires, Luas line, and connect strongly with the water bodies. It is proposed that each hub will incorporate a major 'public square, animated and supported by the sectoral economies that will colonize the hub. The main square will connect to subsidiary spaces and streets. It will be important to develop a brief for the squares, and to consider how a unique design can be realized, funded and implemented. See Fig. 27.

Fig. 27 - Making a Legible City: New Key Spaces and Connections. *(See separate booklet for Figures)*

4.12.4.2 Linear Elements

The character of the Campshires will continue to be central to how both resident and visitor experience docklands and the SDZ. They are very formal in terms of layout, have a strong civic dimension, and contain features which help to communicate the layers of maritime history. The quality of upgrading and repaving to date is of high standard, though the overall impact is somewhat austere, and there is opportunity for appropriate animation.

Mayor Street and the Luas line is challenging from a public domain perspective. Mayor Street is the main internal street of the North Lotts, linking Amiens Street with Point Square. It is anticipated that the 'live-work' theme will engender a robust architectural and urban design response in terms of supporting the status of the street.

This needs to be complemented by an integrated design response for the public domain.

Likewise Sheriff Street, as stated already, constitutes an important interface with urban areas outside the SDZ to the north. Despite the logic of its historic spatial connection to Seville Place, Sheriff Street exhibits an 'edge condition. There is an opportunity to consider public realm initiatives around the theme of connection. See Fig 28.

4.12.4.3 Landscaping / Planting /Greenery

While the Section 25 Planning Schemes have been successful in implementing significant hard public space areas, there is less evidence of landscaping and planting. It has been observed about Dublin's inner-city, that it is less visually green than comparable European cities. It is important that the SDZ integrates an ambitious landscaping strategy into public realm proposals. Many vacant sites in the area communicate an image of semi-dereliction. These sites offer an opportunity for a temporary greening/planting strategy.

Fig. 28 - Existing and Proposed Public Realm. *(See separate booklet for Figures)*

4.12.4.4 Water-Bodies

The broad shape of the river-port of Dublin, combined with the infrastructure of the canals, is part of the Georgian legacy of the city. The Capital was always intimately connected with the sea, and the river was the interface. Historic paintings of a busy port show dozens of sailing ships berthed along

the quays, the intensity of activity on the water matched by the industry on the Campshires. Today the water-body is quiet by comparison, though it explodes from time to time with great festival gatherings like the Tall Ships. Events like these should provoke and inspire ideas about the potential of the amazing marine resource of the River Liffey. See Fig. 29. *(See separate booklet for Figures)*

4.12.4.5 Strategic Spatial Connections

The integration of the north and south Lotts, with the surrounding city, is one of the core objectives of the SDZ. This is particularly relevant to the dimension of the public domain. In the 'Public Realm Strategy' of Dublin City Council, the strategic network of key routes and spaces is the backbone of the public space structure of the city, and it is logical to expand this network to include the spatial area of the SDZ.

Fig 29 - Water Bodies. *(See separate booklet for Figures)*

It is an objective of Dublin City Council:

- PR1 To integrate the public realm, streets and routes with the surrounding city
- PR2 To promote water based recreation and events
- PR3 To facilitate and retain pedestrian access to waterbody frontages
- PR4 To promote maritime character with streets, especially north-south streets leading to the waterbodies
- PR5 To take in charge the public realm
- PR6 To promote and investigate a design brief for the public realm, based on DCC's public realm strategy, with a particular emphasis on enhancing the character of the main east-west streets, Mayor St, Sheriff St, the Campshires, Misery Hill and Ringsend Road.
- PR7 To ensure that the existing and proposed public open spaces / civic spaces form a coherent part of the public realm with at least one 'viewpoint' within the urban block through public spaces.
- PR8 All bridges to be capable of 'opening' to facilitate sailing ships.
- PR9 To seek the development of attractive uses on the waterways as set out in the Vision for the Waterways, Waterways Regeneration Strategy, 2008 and the City Canals Plan 2010; review the membership of the Operational Liaison Group to include Dublin Port Authority and the OPW as appropriate; and that its remit be expanded to include the lower reaches of the Dodder and Liffey rivers.
- PR10 To support the development of flexible and moveable publicly accessible leisure facilities on the water space and the campshires to facilitate changes in demand
- PR11 To facilitate boat movement between the two canals as the canals are regenerated for leisure and tourism purposes
- PR12 To support the provision of a suitable terminal for cruise liners and other passenger vessels with Dublin Port
- PR13 To encourage the provision of additional public and private moorings and associated facilities for boats of various sizes according to future requirements

4.13 Land Use & Mix

4.13.1 Introduction

Recent City Development Plans and Dockland Master Plans have promoted the mixed use approach to urban place making, reflecting best European practice. The mixed use model has largely worked well and forms a central tenet of the current city development plan (2011-2017) in that it helps to produce a more compact, lively city, where people are more likely to live and work close together, which in turn will reduce unsustainable travel patterns, increase the use of local services and public infrastructure, make better use of urban land, and help reduce urban sprawl.

4.13.2 Achievements to date

In order to achieve a mixed use target of an increase in population from 17,000 in 1996 to 42,000 for the wider Docklands area by 2012 (later reduced to c 34600), the Docklands Masterplan 1997 had a key objective that 60% of the site area of new development should be residential and 40% commercial.

The 60 Residential:40 Commercial mix has continued as policy and practice in both subsequent Master plans (2003 and 2008) and Planning Schemes (Grand Canal Dock 2000 and North Lotts 2002). It is generally acknowledged that the 60:40 mixed use approach has been a success, particularly in areas around Mayor Square and Grand Canal Square where the commercial component has been further leavened by educational, entertainment, retail, cultural and hotel uses.

Since 1997, the Docklands has become an established employment quarter employing over 40,000 people and home to a population of 26,703 (up 53% since 1997). According to the DDDA, over 620,000 m² of commercial development has been delivered in the Docklands, many in the banking, legal and digital media sectors.

Part of the success of the 60 Residential/40 Commercial site area split is that there was some flexibility permitted under the overall management of the DDDA, often as landowner. Policy 4.12 of the Grand Canal Dock Planning Scheme 2000 indicated that the 60:40 split is to be achieved overall in the area on all sites above 0.2ha. Variations on the ratio could be considered subject to an absolute minimum of 40% residential and 30% commercial (i.e. a 30% variable), where a development

- (i) Provides open Space
 - (ii) Provides social and affordable housing above the minimum requirement,
- or
- (iii) Provides significant other elements to advance social, physical and economic policies of the master plan

4.13.3 Challenges in relation to Land use and Mix

One of the main challenges for the SDZ scheme is how to achieve a sustainable Land use mix which accords with both the urban mixed use philosophy and the SDZ strategic objective to actively promote development of economic and social importance to the state.

To this end, five hubs have been identified for the SDZ, each with its own commercial character, with more residential, interstitial areas.

The 5 Hubs are

- Spencer Dock

- Point Village
- Grand Canal Square
- Britain Quay
- Boland's Mills

One of the main challenges is to promote a strong commercial yet vibrant character to 3 of these hubs (Station Square, Point Square, Barrow Street) whilst ensuring a residential character predominates in the interstitial areas. The question also arises on how the desired mix can be achieved given the market cycles which have been particularly pronounced in the Irish economy to date. Currently office development is more likely to occur than residential, which could result in an undesirable mono-use "office park" environment being concentrated in parts of the SDZ. It is also recognised that clusters of commercial/cultural uses can kick-start other land uses.

Other challenges include where to concentrate ground floor commercial uses, such as shops and restaurants, to retain vitality in the right areas, and the need to provide for "large floor plate" offices in the 10-25,000m² range.

4.13.4 Way Forward

The Docklands experience is that a mixed land use approach has produced a new Quarter of the city, which although temporarily arrested by the recession, is recognised as generally successful.

While the policy approach in the Docklands to date has been based on the 60 residential/40 commercial land area ratio on all sites over 0.2ha, there was some flexibility in practice, particularly when there was overall management of combined City Blocks by the DDDA. For example the 3 City Blocks at the Grand Canal Dock area have a ratio ranging from 60/40 to 40/60. When taken together with the emphasis on employment creation on the new SDZ, it is considered that the appropriate way forward is to provide for a 50 residential/50 commercial use mix based land area. Uses which are normally associated with a residential neighbourhood, such as local shops, cafes, crèches, health centres, community facilities and those which has a residential character such as student accommodation shall be considered as part of the residential land use ratio. In the interest of clarity, all future developments of hotels will not be considered as residential for the purpose of land use mix calculations. It is considered that this approach will provide the right balance between the sustainability benefits of the mixed use approach, and the need to provide an employment zone of strategic importance.

The SDZ comprises 20 city blocks, within which the hubs and associated City Blocks are located. The appropriate way forward, given the SDZ overall objective is to provide for a 50/50 split over the SDZ area, is for up to 30 Residential/70 Commercial in the commercial hubs, counter balanced by up to 70 Residential/30 Commercial in the areas away from the hubs in residential neighbourhoods. The land use mix for each city block (or adjacent blocks) must be set out in the City Block Rollout Agreement or planning application (See Chapter 6.1.2 below) and if necessary, the undeveloped components shall be landscaped pending redevelopment (or other agreed interim measures provided).

In exceptional circumstances variations to the 30/70 to 70/30 range of ratios may be considered where precise adherence to the specified ratios may not achieve the best planning outcome such as where a proposal can be demonstrated to significantly advance the social, economic, physical policies of the SDZ scheme; where the appropriate mix of uses to achieve the restoration of a group of protected structures with minimum intervention is necessary; or where it can be demonstrated that the inclusion of adjacent buildings significantly contribute to the mixed use objective of the locality.

The Rollout Agreement or planning application must demonstrate how the specified land use ratio for each City block is to be achieved either within that City Block or in combination with adjacent City blocks. It is a policy objective to achieve a 50:50 land use ratio in the overall SDZ and to provide a ratio as close as possible to this mix in each of the constituent hub areas, (including existing built-out blocks) to support the overall SDZ land use mix. However, it is recognised that the 50:50 equilibrium over a hub area may in some cases not be achievable due to specific circumstances, e.g. around the Point Village concert venue. Variations on the 50:50 ratio and the ratios set out in the City Block Objectives (Sections 5.51 to 5.5.22 below) may be considered, subject to a minimum of 30% residential or 30% commercial within each City Block, in order to maintain the overall benefits of a mixed use approach.

In the absence of a City or Joint City Block Roll-Out Agreement and / or where the proposed use ratios over a number of city blocks fail to achieve the above mixed-use approach, the Planning Authority shall determine planning applications in accordance with the objectives of the SDZ Scheme, including the application to the site of the specified use mix ratio under the city block objectives (See also the CBRA or Joint CBRA Requirements under Section 6.1.2)

It is an objective of Dublin City Council:

- LU1 To provide land use mix overall of 50 residential/50 commercial up to 30 residential/70 commercial in the commercial hubs and up to 70 residential /30 commercial in more residential neighbourhoods.
- LU2 The land use mix requirement does not apply on sites under 0.2ha, although a ground floor active use may be required as per objective LU3
- LU3 Active and Commercial ground floor uses to be provided in the hubs and streets indicated on Fig. 22. (*See separate booklet for Figures*)
- LU4 Social and Affordable housing in accordance with the Councils housing strategy to be provided in all residential schemes. (See Appendix 3 of the City Development Plan 2011 - 2017)
- LU5 To encourage 'own front doors' in the SDZ, as part of the active neighbourhood objective
- LU6 To promote a variety of commercial uses, including hotels and start up units throughout the area

4.14 Building Quality And Sustainable Design

The focus of this section is on architectural quality and sustainable design and on how architectural quality can be delivered through the implementation process of the SDZ. Most observers give credit to the DDDA on achieving a good standard of architectural design in the build-out of the Section 25 Planning Schemes to date, though a higher standard is more evident in those areas where the DDDA retained direct control. A particular example is Grand Canal Square where the designs of individual blocks surrounding the square were commissioned directly by the DDDA. Building quality to date has not always been synonymous with sustainable design. Big floorplates, often with deep sections, are often associated with higher energy use, and there is still little evidence of green roofs visible across the landscape of docklands.

The City Development Plan has considered the issue of quality in architecture and rather than lay down architectural principles, has articulated 5 qualities which should be consistently found in good architecture.

These are;

- Clarity
- Generosity
- Order
- Fit
- Craft

These qualities, discussed more fully in Chapter 16.1.10 of the City Development Plan, will form a primary reference in the assessment of architectural quality in the SDZ.

This section on architectural design quality needs to consider two main scales:

- [A] The first is the design response to the broader urban context of the site that is to the street, neighbourhood or square. In Dublin, the street is the basic building block and its positive qualities are evident and appreciated; fine grain, multiple linked buildings forming a terrace to contain the public realm, multiple entrances contributing animation.
- [B] The second scale is the focus on the building itself and how aspects of function, flexibility, comfort, sustainability, legibility and detail are resolved.

4.14.1 [A] Design Response to the Urban Context

- Does the building make a contribution to the street or public square and integrate appropriately into it?
- Do the proposed uses contribute to the life of the street?
- Is there a positive interface with the adjacent public domain?
- Does the building meet the core urban structure objectives of the 'city block'?
- Does the building exploit the maritime context and relate well to historic fabric and/or protected structures?

4.14.2 [B] Design of the Building

Building design will be required to comply with criteria in the following key areas;

- Function and flexibility.
- The use of ecologically friendly building materials.

- Thermal energy and integration into a District Heating Scheme.
- The incorporation of Green Infrastructure.
- Operational life of the building- sustainability in terms of building facility management over a long life cycle.
- Mobility management.
- Comfort, health and well being of workers.
- Elevational composition including choice of materials, glazing design, colour and detailing.

To ensure that architectural quality and sustainable design translate through the implementation process, a 'Compliance Matrix' will be developed to ensure planning applications demonstrate compliance with a clear set of criteria which will include performance criteria where appropriate.

It is an objective of Dublin City Council:

SD1 To achieve quality building design in accordance with the criteria set out in paragraph 4.14.2 B.

Chapter 5 Nature & Extent of Proposed Development

5.1 Introduction

The preceding Chapter 4 sets out the high level themes (including the Framework for a Sustainable Dublin), the key structuring principles, and the key building blocks, together with a suite of objectives, all of which are necessary to achieve a successful city quarter of social and economic importance to the state. This chapter translates these identified themes, principles and objectives into a development code to guide the nature and extent of the proposed development in the SDZ.

The development code is necessary to balance the need to deliver clarity with a degree of flexibility to ensure that variety and creative design are encouraged. As such, the development code is not intended to represent a design solution; its primary function is to define the public realm, to create a strong city streetscape based on the 18th century orthogonal street pattern of the area, and to define the volume and scale providing the context for a quality urban form. The code also provides for a mix of uses ranging from the commercial/cultural hubs to the more residential areas which in combination, contributes to the urban vitality which has been a feature of the more successful parts of the Docklands to date.

5.2 Deriving the Overall Urban Structure

The Overall Framework Plan (See Fig 30) identifies the main structuring principles for the Docklands area and is based on a hierarchy with a declining scale as follows:

1. The historic orthogonal grid laid out in the 18th century, which continues to provide a robust framework for historic and recent development. This large scale grid, exemplified by east-west streets such as Sherriff Street, Mayor Street, the Campshires, Hanover Quay and Ringsend Road, and intersected by north-south streets such as Castleforbes Road and Cardiff Lane, constitutes a primary framework of potentially bustling, multi-mode streets and spaces capable of balancing the needs of all users and providing good levels of access between the SDZ and the rest of the city. These city scale streets, which will be complemented by 3 additional north-south streets on the North Lotts to refine the large city blocks, will have a 'wall-to-wall' width in a range between 14m and 25m (in the case of Mayor Street, to accommodate both the Luas line and provide for access and wide footpaths, to enable the street to fulfil its role as a living/ commercial zone). The cross-sections show the widths and scale of these streets. See Fig 31 (*See separate booklet for Figures*).
2. The City Blocks are the major parcels of land defined by the orthogonal grid street pattern. Typically these large city blocks extend to 150m x 150m approx. They provide a clear and defined outer crust of buildings which define and shape the primary streets and civic spaces. The City Block also provides the framework for managing the mix of uses at a local level and provides for transitions between building types and scales. See Fig 32 (*See separate booklet for Figures*).
3. Local streets and spaces will bring permeability to the large city block and release the potential of sites within the heart of the city block. These streets, typically 12m-15m wide, (see cross-section) will provide a new sequence of serial views through the city blocks, often to local landmarks. Usually one north-south street and one east-west street is sufficient to both open up the block while also providing for four or more robust urban blocks of approx 60m x 60m. At least one of these local streets should offer a new view line through the city block and invite the public to a local public amenity space.

Fig. 30 - Overall Framework Plan (*See separate booklet for Figures*)

4. The Urban Block, a sub-set of the City Block, is further divided into a number of urban plots to ensure diversity. The nature and scale of the urban plot has a number of functions, such as

promoting local character, encouraging diversity in design of building types and providing a framework for safeguarding integrity of Protected Structures. It can also reflect the diversity of different property owners. It is recognised that in some cases a large floorplate office block may absorb a large part of an urban block. Generally, however an urban block, particularly on the Quays, should contain 2 or more buildings of different architectural design.

5. The Public Realm including the streets, civic spaces and the water bodies represents a strong unifying part of the urban structure (See Overall Framework Plan). The public realm is a fixed element of the overall urban structure. As such it provides a coherent framework for the city block and urban block. It is an overall objective that all elements of this public realm (apart from the water bodies) should be taken in charge by the City Council.
6. The Five Hubs: In common with the rest of the city which contains a sequence of hubs/clusters of economic and cultural energy (e.g. IFSC and TCD) five hubs have been identified for the SDZ, as outlined in Chapter 4 above. These hubs are:
 - i. Station Square/Spencer: On the proposed DART Underground/Luas connector, adjacent to the CCD. This is a major medium-long term economic hub.
 - ii. Point Village at the end of the Luas line, has potential as a Key District Centre providing for major retail, events and leisure functions, serving a wider area.
 - iii. Grand Canal Square: Already established as a major cultural, events and mixed use zone, based on a 60/40 residential/commercial mix.
 - iv. Britain Quay: This hub has potential to blend commercial and residential functions with maritime recreation.
 - v. Barrow Street/Boland's Mills: Major digital media hub for international and start up firms, with key worker residential use in the vicinity.

5.3 The Development Code: Fixed and Flexible Elements

As indicated above, certain elements which are considered critical to the delivery of a successful, sustainable docklands quarter are fixed. Other elements, less critical in overall terms, and which provide for local conditions and variety, are more flexible. Any development proposals which conflict with the fixed elements will be deemed not to be in compliance with the Planning Scheme.

The fixed and flexible elements can be divided into two categories:

- those which apply generally to the overall SDZ Scheme and
- those which are specific to each city block (on figure showing block numbers).

5.4 Development Code for the Overall SDZ Scheme

The main overall fixed elements relate to the overall development quantum, the use ratio, the public realm, the block building line and the height, and are set out below. Where objectives and standards are not addressed specifically in the SDZ Development Code or Chapter 4 above, the Planning Authority shall apply those in the City Development Plan. See Fig 33 (*See separate booklet for Figures*).

5.4.1 Overall Quantum

Of the c.60ha of land area in the SDZ area, approximately 22.8ha, remains to be developed. Of this, 13.2ha are on the North Lotts and 9.6ha are on the Grand Canal Dock area. The quantum of

development is equivalent in scale to the IFSC area (24ha), which to date has provided for approx. 1200 residential units and 250,000m² of commercial uses. It is calculated, based on the Overall Framework Plan and Development Code (Fig 30 & Fig 33) that c.1800 residential units and 200,000m² of commercial space can be accommodated on the North Lotts and c.830 residential units plus 105,000m² commercial floorspace on the southside.

The total quantum of floorspace which it is an objective to deliver in the SDZ, subject to specific site characteristics, is therefore 2600 residential units and c.305,000m² commercial floorspace. This overall quantum is fixed having regard to the necessity to make best use of city brownfield land adjacent to existing and proposed international quality transport infrastructure, but is of course subject to the amenity and quality of life safeguards set out in chapter 17 of the City Development Plan. There is however a degree of flexibility in the quantum outcome, related to the possible variations in height and plot depth in particular circumstances. For example, if the 15m depth of building assumption for commercial was increased to 18m throughout the SDZ, the potential amount of commercial floorspace would be increased from 305,000m² to 366,000m² (excluding the added potential from the proposed local landmarks).

Fig 31 - Indicative Street Widths With Street Sections

Fig 32 - City Block Structure

Fig 33 - Overall Development Code (*See separate booklet for Figures*)

5.4.2 The overall use ratio

As described in chapter 4.13 above, the success of the Docklands to date, and indeed other parts of the city centre, is largely due to the mixed use model, which helps to promote a more compact, lively, well connected city. Recent Docklands masterplans have had a key objective that overall 60% of a city block land area should be residential with 40% commercial. The masterplan ratio could be varied, subject to an absolute minimum of 40% residential and 30% commercial where the proposal provides significant alternative social/ public infrastructure, such as public space, or social housing, and where the DDDA retained overall development management control of a site, such as Grand Canal Dock.

Having regard to the above, and the stated purpose of the SDZ to provide for economic and social regeneration, the overall objective is to provide a 50/50 residential/commercial ratio over the area, with a flexibility to provide a ratio of 30/70 in the commercial hubs, counterbalanced by a ratio of up to 70/30 in the more residential neighbourhoods. The ratios for each of the city blocks are set out in the section below.

It is also the case that the land-use ratio in some areas reflects existing development, e.g. Point Village is largely commercial.

For clarity, the land use ratio is based on land area, which relates to the building footprint including any associated ancillary space, and is used to inform the overall land use ratio where the land area reflects the main use of the site over all floors. The methodology to ascertain the amount of residential and commercial uses to be provided on a City Block is as follows:

- (a) Allocate the total land area between residential /commercial as per the use mix ratio set out in the City Block Objective (50/50; 30/70 etc).
- (b) Subtract the already developed residential/commercial land area, from the total land area to give the land area available for residential/ commercial purposes.
- (c) Calculate the use mix ratio needed on the remaining available land area to achieve the specified use mix ratio for the City Block, taking account of any existing residential and commercial development.

5.4.3 The Public Realm

In order to achieve a quality public realm in the build-out time envisaged, and to prevent slippage which could lead to partial or uncoordinated piecemeal delivery, the public realm, including the requirement for the new streets/lanes and civic spaces are fixed, and their location and general alignment indicated are fixed on the Overall Development Code (Fig. 33 and Fig. 35 - *See separate booklet for Figures*).

In relation to the proposed new streets and lanes within the city blocks, the block building line may be varied to provide for a more varied streetscape, including curves, setbacks and indents at corners for sitting out, kiosks, etc, subject to the overall objective of providing connectivity between and through City Blocks being achieved, including the provision of vehicle routes, cycling routes, pedestrian areas and shared surfaces. The precise alignment of the new lanes and streets shall form part of the City Block Rollout Agreement, in order to guide subsequent planning applications.”

The hierarchy of street widths is also shown on the map, ranging from the North Campshire (30m), Mayor Street (24m – to allow for vehicular access and wide footpaths adjacent the Luas line to provide a vibrant live-work street) to 12m on the small streets which irrigate the city blocks. Each of the hubs also has a defined major public space, and each of the large city blocks provides for a more local civic space. The streets and public spaces also set up the view corridors to the water bodies, the Dublin Mountains, and heritage structures which will help to give the SDZ a unique maritime character.

5.4.4 The Block Building Line

The existing and proposed streets and spaces will also define and make a quality urban streetscape, and avoid the risk of isolated buildings which do not harmonise with each other. Accordingly, the extent of any proposed building will not extend forward of the building lines indicated on the City block Development Code (Fig. 35), unless it can be demonstrated that they do not impinge on the key structuring principles set out in section 4.10 above. Examples where they may be acceptable include projecting canopies, glazed atriums, kiosks, high level glazed bridges and balconies. The defensible space required for ground floor residential should not impinge on the public realm (see cross-section showing how this could be achieved).

While the outer edge of the city block and component urban blocks are fixed, the inner building line is flexible, and is depicted by a hatched line on the City Block Development Code (Fig. 35) (*See separate booklet for Figures*). This flexibility allows for a deeper building, although it is envisaged that most buildings will be designed with a shallow floor plan for maximum sustainability. Residential schemes will also be assessed at planning application stage in accordance with development plan standards in relation to communal/shared open space, daylighting/shadowing and other amenity considerations, which will affect the nature and extent of the flexibility in any given circumstance.

5.4.5 Height as part of the Urban Structure (See Fig 34) (*See separate booklet for Figures*)

The height regime for the SDZ is derived from the urban structure hierarchy described in 5.2 above. In essence, the large city blocks fronting the major streets (such as Mayor Street) necessitate a strong streetscape with a sense of enclosure. Typically these buildings are 6 storeys (commercial) or 7 (residential) in height.

Inside this outer crust of higher buildings there is a sequence of more local secondary streets and spaces, typically enclosed by a lower scale of buildings up to 5 storey (commercial) or 6 (residential).

The main modifier to this general pattern is in relation to the Liffey Quays. Here, due to the width of the river and the campshires an 8 storey commercial frontage (10 residential) can be accommodated,

although careful design is required in the vicinity of quayside protected structures and to avoid undue overshadowing.

In the Grand Canal Dock, on Hanover Quay, and Charlotte Quay, a 6 storey commercial / 7 storey residential frontage is provided for due to the scale of the water body, with a lower scale adjacent protected structures.

This range of height reinforces the coherent urban structure, provides a sustainable quantity of development, creates strong streetscapes, yet provides for a varied typology of both larger commercial buildings and more intimate residential areas.

There are opportunities for additional height, by way of quality landmarks, in 4 of the hubs:

- Station Square: Up to 12 storeys commercial, to provide critical mass while not compromising views from the Georgian mile.
- Point Square: A commercial/cultural building up to 22 storeys at north east corner of the O2 building to give definition to the square, yet which allows for a future Luas extension.
- Britain Quay: To define the end of the peninsula at the mouth of the Dodder, where up to 22 storey commercial is permissible.
- Bolands Mill: any new buildings to be no higher than a line between the top of Millennium Tower (54m) and Monte Vetro (61m, equivalent to 15 storeys) may be considered as part of a package to provide a quality public realm onto Grand Canal Quay, and which ensures the refurbishment and adaptive re-use of the Protected Structures on the site.

In addition to these hub landmarks, there are opportunities for further occasional local landmark buildings in the SDZ up to a 4 storey commercial above the prevailing streetscape height in the vicinity. These buildings must have a distinctive vertical emphasis to read as occasional punctuations in the streetscape. Opportunities for local landmarks occur at the corners of the main city streets (Fig 31), at existing and proposed bridgeheads and at the edge of the major civic spaces. Architectural features, such as spires and cupolas, which contribute to the architectural merit of individual buildings, will be considered on their merits, having regard to the criteria in Appendix 5 of the Scheme. These local landmarks must be determined at roll out agreement stage (See 6.1.2).

For the avoidance of doubt, for all proposals for landmark and local landmark buildings, or for buildings more than two storeys higher than those adjacent, a shadow and microclimate analysis must be submitted as part of any planning application.

It is also necessary to safeguard against unsustainable under-development in a recession and to this end, buildings more than 2 storeys less than the identified height will not be considered acceptable. There will be some flexibility in relation to the height of buildings subject to amenity and streetscape consideration.

Fig. 34 - Indicative 3D Model (See separate booklet for Figures)

In addition to the setbacks which may be necessary for design and amenity reasons within the height envelope in Fig. 35, an additional storey, with a setback of 1.5m plus may be considered subject to a shadow analysis and a compelling urban design rationale.

City Block Diagrams and Shadowing

While the City Block diagram (at Fig. 34) defines the maximum envelope of each block, there is design flexibility within the envelope to provide for variety, good architecture and amenity considerations such as overshadowing and other microclimatic impacts. It must be stressed that the

City Block diagrams and indicative 3D model are not final designs; each building must be designed and an application submitted under the block envelope, having regard to the specific objectives in Chapter 5. The 3D model includes a shadow diagram to demonstrate that overall the blocks are generally appropriately scaled in relation to the street structure and distance between blocks. For all buildings which extend above 25° from the horizontal from a residential window, a shadow analysis must be submitted as part of any application. (See also Appendix 6: Indicative Block Shadow Diagram).

5.4.6 Heritage and Protected Structures

The retention and adaptive re-use of the Protected Structures in the SDZ is an important objective. Due to the relative scarcity of these buildings in the area, their retention is a fixed element of the scheme. The City Block Development Code (Fig 35) indicates the new build context for these buildings. It is expected that quality design will be brought to bear to ensure that new buildings, including higher buildings, can be juxtaposed with Protected Structures in a harmonious fashion.

5.4.7 Density and Plot Ratio

As indicated in chapter 4, density and plot ratio are not stand alone objectives; they are tools to help achieve a high quality urban environment; in this case, a successful maritime, residential and commercial city quarter. However, as a general indicator, and in accordance with the Development Plan, an indicative plot ratio of 3:0 is provided for over each city block. Relatively high residential densities have been achieved in the past in the Docklands with a target of 247uph. The Development Code Map (Fig. 35) provides for a range of typologies which will provide for sustainable residential densities in the range of 100-247uph.

5.4.8 Design, Materials and External Finish

Architectural design within the SDZ should be of the highest design quality. Architectural design competitions will encourage the achievement of design quality and diversity in key locations. Within the SDZ, buildings should be designed to provide appropriate enclosure to the streets and civic spaces, in accordance with Chapter 16.1 of the City Development Plan. Throughout the SDZ particular attention should be given to the following elements:

- Buildings should be designed to be adaptable for other uses over time.
- Ground floors should be clearly expressed and in all cases should have a 4.0m to 4.5m floor to ceiling height to allow for shops, service uses and other non-residential occupiers.
- The roofscape should be coherent yet varied. Protruding plant rooms/ structures are not acceptable. An extra floor over that stipulated will be considered, provided there is a 1.5m plus setback from the parapet sufficient to allow for streetscape, shadowing and amenity considerations.”
- At prominent corners, e.g. to the City Blocks, an extra 2 storeys may be considered as part of a designed book-end feature.
- In order to achieve a coherent streetscape at corners, the normal standards in relation to dual aspect apartments may be relaxed.
- A defensible interface of 1.5m should be provided between all residential frontages and the public street at ground level.
- A minimum level of 4.0 OD will be required for residential development and resilient design should be incorporated to manage flooding below this level.

- An important factor in the creation of a successful maritime quarter is the use of high quality, durable materials. The combination of natural old materials and high quality modern materials can enrich the urban design of the area. Materials to be used should include stone/stone cladding, brick, metal cladding, steel and glass. Natural colours should be used. All materials should be sustainable in terms of manufacture, transportation and life time costs.
- Parking/car storage will be predominantly in basements in accordance with Development Plan standards. Vehicular accesses to underground parking should be discreet. Due to their important role as traffic arteries in the future, in addition to urban design considerations, the Liffey Quays and Sheriff Street should be kept free of direct frontage underground parking accesses.

5.4.9 Phasing (see also Chapter 6: Implementation)

The SDZ area covers a land area of circa 60ha, of which 38ha has been built out to a high standard. Given the small area which remains to be developed, together with the fact that the SDZ is close to the city centre, and is served by a new Luas line and a recently commissioned pumping station, both on the north side, it is considered that sequential phasing, in the conventional sense, is not necessary.

There remain some local infrastructure gaps on the remaining 9ha to be developed on the south side, which need to be delivered as part of the development of these particular city blocks. The SDZ area is divided into 23 city blocks, each of which must be provided with the necessary infrastructure prior to the commencement of development within the city block. This will be managed via a Compliance Statement (See Chapter 6). The Compliance Statement will address how the necessary infrastructure will be provided, and how the stated use ratio for each city block (see City Block Specific Objectives below) will be delivered to ensure that particular uses, which are not currently readily marketable, are not end loaded. Furthermore, this approach will allow for development across a number of city blocks, which will act as a magnet for future development, in accordance with the Development Code and Compliance Statement.

The DART Underground postponement presents challenges for the rollout of the implementation, in relation to the line reservation under the Spencer Dock Economic Hub and the transport management measures which must be brought into play until such time as the DART Underground can be provided. The land reservation will be used for a variety of temporary buildings/ activities, while the existing transport assets must be sweated until the DART is provided, by measures such as expedited Mobility Management Plans and more frequent trams.

5.5 Development Code for Individual City Blocks - Urban Form and Design (including height and materials)

The Development Code for the 23 identified City Blocks, Public Realm areas and Water Bodies is to be considered in addition to the Overall Development Code set out above. See Fig. 35 & the individual City Block figures.

The Development Code for each City Block consists of:

- a. a synopsis of the existing context, including relevant history.
- b. the Block specific objectives for Use Mix, Height Range, Public Realm and Infrastructure provision.
- c. a plan of the relevant City Block.

Fig. 35 - Development Code for City Blocks (*See separate booklet for Figures*)

5.5.1 City Block No. 1

a. Existing Context

- Existing use mix ratio on developed site is 85:15 Residential/Commercial approximately
- City block STUV has been built. It comprises of circa 616 residential units, mainly 9 storeys and a 7 storey commercial block fronting Mayor Street.
- One east-west street provided, serving gated inner courtyards.
- Good western aspect onto Royal Canal greenspace, but frontage to elevated part of Sheriff Street is functional.
- Apartments almost fully occupied. Part V Social Housing element has yet to be provided.

b. Specific Objectives

- Seek to improve interface with Sheriff Street.
- Achieve Part V Social Housing obligations, in accordance with the Housing Strategy.

Infrastructure

- All planning applications within the zone of influence of the proposed Dart Underground, as identified in Appendix 7 shall demonstrate to Iarnród Éireann how the proposal relates to the DART Underground. No development shall compromise the integrity of, or adversely impact on the DART Underground Line.

5.5.2 City Block No. 2

a. Existing Context

- Largely undeveloped city block with a small terrace of 2 storey houses on Mayor Street frontage.
- New pumping station (with single storey over ground element) currently being commissioned. It will serve North Lotts and surrounding areas.
- Section 25 Certificates granted in the past for 191 Social Housing units, up to 9 storeys on Block 2B.
- Section 25 Certificate granted for residential on Block 2D ranging from 5-9 storeys in vicinity of terraced houses.
- Blocks A and C to west of city block form part of Dart Underground reservation.

b. Specific Objectives

1. Use Mix

- 40 Residential/60 Commercial over city block with 30/70 residential/commercial on Block 2C fronting Station Square.
- Commercial uses to be concentrated on 2C and west side of 2D to form a commercial hub at confluence of Luas line and Dart Inter-connector.
- Residential to be concentrated to east side of 2D and in blocks fronting civic space in vicinity of new pumping station (between 2B & D). This approach allows for an appropriate transition in height and scale at the hubs interface and affords an opportunity to address the social housing legacy issues associated with block STUV.
- Blocks 2A and 2C on Dart Underground line to be used as location for temporary pavilion structures for a wide range of cultural, innovation and creative events and uses.
- Ground floor active uses to be provided fronting Station Square.

2. Urban Form/Height Range

- Block 2C to be 12 storey (max) commercial (min 10 storey) fronting Station Square, to achieve balance between hub quantum and view lines from Georgian mile. Landscaped plaza south of block.
- Remaining blocks to be range between 5 storey commercial/6 storey residential and 6 storey commercial/7 storey residential, stepping down to 3 residential immediately north and west of the Mayor Street terrace.
- Urban blocks to front Sheriff Street to remake and contain the street.
- The 7 storey residential frontage to New Wapping Street responds to the 2/3 storey terrace opposite, more favourably than the 9 storey scheme previously certified.
- Any temporary pavilion buildings to be up to a maximum of 4 storeys

3. Public Realm

City Block 2 to include:

- East-west street linking existing pedestrian street in STUV block to New Wapping Street approx. midway along block.
- North-south street midway along block linking Sheriff Street with Mayor Street and Station Square.
- A landscaped plaza fronting Block 2C to provide for attractive space adjacent the Luas stop.
- New streets to be within the range of widths as shown on Figure 31 and subject to the criteria set out in Section 5.4.3.

4. Infrastructure

- Each site to complete access and attendant public realm prior to occupation.
- Drainage/water infrastructure to be installed with access installation.
- Foul drainage: South of Site to drain to new 525mm pipeline and onto the Spencer Dock Pumping Station. North of Site to drain to proposed 1,200mm pipeline (currently at Tender Stage) and onto the Spencer Dock Pumping Station.
- Surface water drainage: Storm Water infrastructure to be put in place which will drain northwards to East Wall Storm Pumping Station.
- The hatched line as indicated in city block 2A & 2C, shall be retained as a reservation strip for the future provision of the DART Underground Station. No permanent structures shall be built over this until the position of the DART Underground Station has been confirmed. In the interim period temporary uses and/or pavilion structures will be considered. Any future over site development must incorporate the smoke ventilation and air intake provisions into their design, and that temporary buildings should not pose a risk to the delivery of the station. All applications for buildings within the zone of influence will demonstrate to Iarnród Éireann in their planning application how the proposal relates to the DART Underground Line. (Refer to Appendix 7 for Reservation Strip and Zone of Influence).

5.5.3 City Block No. 3

a. Existing Context

- Largely undeveloped city block apart from a modern apartment scheme on corner of Sheriff Street Upper and Castleforbes Road (North Bank Apartments) and 2 residential terraces fronting New Wapping Street and Mayor Street Upper at the southwest corner (Block 3D).
- Northbank Scheme developed, but open space and fire tender access remain outstanding. Current proposals provide for fire tender access street south of block to Castleforbes Road and rectangular replacement open space on rectangle of land west of block in former ownership of DDDA.
- 30,000m² commercial scheme, 7 storeys, granted certificate on Block 3F, with 31m wide public space provided for to west side.

b. Specific Objectives

1. Use Mix

- 70% residential and 30% commercial use mix over this City Block; with residential emphasis on Block 3D adjacent residential terraces and commercial more dominant on Castleforbes Road/Mayor Street Upper frontage (3F).
- Active frontages to be concentrated on Castleforbes Road, Mayor Street Upper and intermittently along the new Green Route.

2. Urban Form/Height Range

- Up to 7 residential/6 commercial provides strong perimeter to city block.
- 5 storey commercial/6 storey residential on block 3D to provide transition with existing 2 storey terraces, stepping down to 3 storey residential immediately east of the terrace on Mayor Street Upper and to the rear of the northern end of the terrace on New Wapping Street.

3. Public Realm

- 2 new north-south streets provided, due to large size of this city block. A civic space is to be provided between Blocks B & E. This space shall incorporate SUDs features (see para 4.5.4.3.3)
- One new east-west route from New Wapping to Castleforbes Road to be provided.
- New streets to be within the range of widths as shown on Figure 31 and subject to the criteria set out in Section 5.4.3.

4. Infrastructure

- The green route to incorporate active/passive recreation, cycle route, SUDS and biodiversity features, tree-planting.
- Each site to complete access and attendant public realm prior to occupation.
- Drainage/water infrastructure to be installed with access installation.
- Foul drainage: South of Site to drain to new 525mm pipeline and onto the Spencer Dock Pumping Station. North of Site to drain to proposed 1,200mm pipeline (currently at Tender Stage) and onto the Spencer Dock Pumping Station.
- Surface water drainage: Drain eastwards to 930 x 970 storm water pipeline via proposed infrastructure on proposed new roadways.

5.5.4 City Block No. 4

a. Existing Context

- Castleforbes Square and the Liffey Trust Centre have been developed. There is a terrace of 5 vacant units remaining on Mayor Street.
- Overall the city block has a use mix ratio of 75 residential/25 commercial, and a height range between 6 and 8 storeys.

Label all City Block Diagrams as “Indicative layout to achieve objectives of the scheme”.

- There are a number of ground floor active units (some vacant) along east side of block fronting a proposed street which has yet to be developed.
- Residential apartments successful; occupied largely by private rental (key workers etc.).

b. Specific Objectives

1. Use Mix & Height

- Redevelop derelict 2 storeys with a residential/office development up to a maximum height of 6 storeys commercial. Opportunity for pilot scheme of fine grain in-fill residential development, as per the e.g. “Dublin House Initiative” (www.dublincity.ie).

2. Public Realm

- Create new street / lane at interface with Block 5 to east providing link from Sheriff Street to Point Square Luas line.
- Upgrade Sheriff Street as part of Public Realm Strategy.

3. Infrastructure

- Foul drainage: South of Site to drain to proposed 600mm pipeline along Castleforbes Road (currently at Tender Stage). North of Site to drain to proposed 1,200mm pipeline on Sherriff Street (currently at Tender Stage).
- Surface water drainage: Drain westwards to 930 x 970 storm water pipeline via proposed infrastructure on proposed new roadways.

5.5.5 City Block No. 5

a. Existing Context

- City block fronting Point Square has been 60% developed for hotel, cinema and district retail (20,000m² remains vacant) purposes.
- 40% remains to be developed. Covered by Cert DD584, providing for 40/60 residential/commercial, up to 8 storeys with active uses along curved street. Layout also provides for a new east-west street, as a continuation of Castleforbes Square.
- A new north-south street is shown outside the boundary. Basement car park access is from Sheriff Street.

b. Specific Objectives

1. Use Mix

- 30% residential: 70% commercial with emphasis on commercial fronting the civic space due to planning constraints associated with existing commercial uses.
- Emphasis on ground floor active uses to animate Point Square

2. Urban Form/Height

- Block 5A to be 6 storey commercial / 7 storeys residential fronting Sheriff Street. Block 5C to be 6 commercial/7 residential, with 6 commercial only fronting Point Square, stepping down to 5 storey commercial: 6 storey residential on remainder of Block 5C.

3. Public Realm

- 2 new north-south streets to be provided linking Sheriff Street to Point Square/Luas Terminus. Responsibility for developing new street/lane between City Block 4 and City Block 5 to be shared between the landowners.
- New east-west route as an extension of Castleforbes Square to be provided.
- Building fronting Point Square to contribute to quality of Square by design and ground floor active uses.
- Sheriff Street frontage to be designed to contribute to this important street.
- New streets to be within the range of widths as shown on Figure 31 and subject to the criteria set out in Section 5.4.3

4. Infrastructure

- Each site to complete access and attendant public realm/streets/part of Point Square prior to occupation.
- Basement car parking access to be concentrated on non-active streets (and not from Sheriff Street or Point Square).
- Drainage/water infrastructure to be installed with access installation

5.5.6 City Block 6

a. Existing Context

- Large city block adjacent Samuel Beckett Bridge, occupied by The Convention Centre Dublin (CCD) and 7/8 storey office buildings.
- The Royal Canal Park adjoins the block to west and Luas line to the north.
- Block is largely built out apart from site to north of The Convention Centre Dublin, generally used as an open space with occasional markets.
- A Section 25 Certificate (DD374) relates to a 13 storey hotel at the northern end of the CCD.

b. Specific Objectives

1. Use Mix

- Block is 100% commercial, as part of Spencer Dock Hub. Site north of CCD should be developed for any permutation of uses, in order to create a new elevation to the existing blank north wall.

2. Urban Form/Height

- 6 storey commercial / 7 residential, with potential for a local landmark to a maximum of 10 storeys commercial at the north western corner of the block / north of the CCD, having regard to the criteria set out in Section 5.4.5

3. Public Realm

- New frontage on north side of CCD with entrance onto Mayor Street and linear park.

5.5.7 City Block 7

a. Existing Context

- This largely vacant site contains 3 significant protected structures; (the former London and North Western Hotel, the North Wall Road Station and the Woolstore).
- The North West corner of the site (7A) is laid out as a grassed area, as per the Docklands Planning Scheme.
- Western half of the site (7A & C) forms part of the DART Underground reservation.

b. Specific Objectives

1. Use mix

- 30 Residential:70 Commercial, reflecting the strategic objective to create an Economic Hub based on Dart Underground/Luas interchange.
- A variety of commercial uses, with an emphasis on ground floor active uses should be provided for the Protected Structures, and to enliven the public spaces adjacent these buildings. Ground floor active uses should also be promoted fronting Station Square.
- 6 Storey commercial/ 7 storey residential in blocks 7C and D to provide balanced context for the Protected Structures and central Station Square.
- 7 Storey commercial to block 7B fronting Station Square, reducing to 6 storeys commercial (7 residential) to east, having regard to balance between economic hub and residential amenity for terrace north of Mayor St.
- Any temporary pavilion buildings to be up to a maximum of 4 storeys
- 6 storey commercial/7 storey residential in Block 7D raising to 8 storey commercial to North Wall Quay with appropriate transition to the Protected Structure, the former London and North Western Hotel.

3. Public Realm

- Major element is a c. 60m x 55m civic and events space in north-west quadrant. Interim design needed, until Dart Underground “cut and fill” is completed.
- City block and civic space served by 2 new streets, one north-south and the other east-west, to form part of a secondary network with adjacent city blocks. Also provides links to new pedestrian bridge across to Forbes St.
- New streets to be within the range of widths as shown on Figure 31 and subject to the criteria set out in Section 5.4.3

4. Infrastructure

- Each site to complete access and attendant Public Realm prior to occupation.
- Drainage/water infrastructure to be installed with access installation.
- Interim uses / temporary / pavilion structures to be promoted on Wool Store quadrant (7c) until DART is installed.

- Foul drainage: Site to drain via proposed infrastructure following proposed roads to 525mm pipeline and onto Spencer Dock pumping station.
- Surface water drainage: Storm Water Infrastructure to be put in place to drain southwards to the Liffey.
- The hatched line as indicated in City Block 7A and 7C (wool store quadrant), shall be retained as a reservation strip for the future provision of the DART Underground Station. No permanent structures shall be built over this until the position of the DART Underground Station has been confirmed. In the interim period temporary uses and/or pavilion structures will be considered Any future over site development must incorporate the smoke ventilation and air intake provisions into their design, and that temporary buildings should not pose a risk to the delivery of the station. All applications for buildings within the zone of influence will demonstrate to Iarnród Éireann in their planning application how the proposal relates to the DART Underground line. (Refer to Appendix 7 for Reservation Strip and Zone of Influence)

5.5.8 City Block 8

a. Existing Context

- Largely undeveloped city block apart from the 8 storey skeleton of the former Anglo Irish Bank building at the south west corner, and 3 protected structures on Quays – Nos. 73, 81 and 82 North Wall Quay.
- The Anglo building (28,000m²) has a recent permission for conversion to the Central Bank HQ (2948/12). Section 25 Certificates have been issued for 2 office buildings to the east – Building 2 (12,000m²) and Building 2 (11,000m²) under ref DD554 and 3182/09 and DD553 respectively.
- Section 25 Certificate (DD 188) issued for an 8 storey office/residential block adjacent to the Protected Structures.
- No planning history pertaining to the northern half of Block 8.
- b. Specific Objectives

1. Use Mix

- 30% Residential:70% Commercial use over the whole city block
- Active uses to be concentrated on North Wall Quay, Mayor Street and Green Route.

2. Urban Form/Height

- 8 storeys commercial /10 storey residential onto North Wall Quay with a context design solution adjacent to the protected structures, reducing to 6 storey commercial/7 storey residential over block perimeter.
- Blocks 8 A & B to be 6 storeys commercial / 7 storeys residential, having regard to the Mayor Street frontage.

3. Public Realm

- Two new secondary streets introduced; an East West street linking New Wapping Street to Castleforbes Road and a north-south street linking Sheriff Street to the Quays.
- A third route is desirable, leading from Sheriff Street to the Quays along east side of proposed Central Bank.
- To enliven the quays and provide for variety in the streetscape, each urban block within the city block should contain at least two buildings of different architectural design.
- New streets to be within the range of widths as shown on Figure 31 and subject to the criteria set out in Section 5.4.3

4. Infrastructure

- Each site to complete access and attendant public realm prior to occupation.
- Drainage/water infrastructure to be installed with access installation.
- No basement car parking access from North Wall Quay.
- Foul drainage: Site to drain eastwards via new pipelines long proposed roads to 600mm diameter pipeline along Castleforbes Road (this pipeline is at Tender Stage).
- Surface water drainage: Drain eastwards to 930 x 970 storm water pipeline via proposed infrastructure on proposed new roadways.

5.5.9 City Block 9

a. Existing Context

- Largely undeveloped block in close proximity to Luas Terminus & Point Square.
- Section 25 Certificates granted for circa 60% of city block which provide for staggered internal streets and a public open space with heights ranging from 5 storey residential internal to the block and 6-8 storey commercial (DD280, DD290 & DD638).

b. Specific Objectives

1. Use Mix

- For City Block 9, it is an objective to secure the 50:50 residential:commercial use mix.
- Ground floor active uses onto Mayor Street and North Wall Quay with a particular emphasis on quality active uses including retail, cultural and amenity uses in the vicinity of the proposed bridge crossing between Castleforbes Road and Sir John Rogerson's Quay.

2. Urban Form/Height (see map)

- Building heights to range from 5 storey commercial (6 storey residential) to 8 storey commercial (10 storey residential) to allow for residential amenity and appropriate transition in scale, as well as sufficient enclosure onto main streets, and appropriate scale fronting Quays.

3. Public Realm

- New central civic space with SUDs features (See para 4.5.4.3.3)
- New north-south and east-west connections within block.
- New north-south street between city blocks 9 & 10.
- View lines through city block to include central civic space.
- To enliven the quays and provide for variety in the streetscape, each urban block within the city block should contain at least two buildings of different architectural design.
- New streets to be within the range of widths as shown on Figure 31 and subject to the criteria set out in Section 5.4.3

4. Infrastructure

- Each site to complete access and attendant public realm prior to occupation.
- Drainage/water infrastructure to be installed with access
- Foul drainage: Block to drain westwards via new pipelines along proposed road network to 600mm diameter pipeline along Castleforbes Road (this pipeline is at tender stage).
- Surface water drainage: Block to drain westwards to 930x970mm storm water pipeline via proposed new road

• **5.5.10 City Block 10**

a. Existing Context

- This block is substantially built out with the O2 venue, with a building height equivalent to 7 storeys commercial.
- Section 25 Certificate and Planning Permission granted for a commercial/office building to the west of the O2, 7 storeys with ground floor retail use onto Point Square (DD471 & 3484/07), with a five year extension of permission granted in January 2013.
- Section 25 Certificate granted for a mixed-use commercial/retail building to the east of the O2, 5 storeys plus set-back with café, restaurant, retail uses at ground floor level known as the 'Spine Building' (DD566).
- Section 25 Certificate granted for a 39 storey primarily residential building with circa 160 units, known as the 'Watch Tower', located to the north of this block at the eastern edge of Point Square, terminating the vista from Mayor Street (DD430).

b. Specific Objectives

1. Use Mix

- 100% commercial/cultural uses in City Block 10.
- Ground floor active uses onto Mayor Street and North Wall Quay, with a particular emphasis on quality active uses including retail, cultural and amenity uses.

2. Urban Form/Height

- 6 storeys commercial to the west of O2, to contain Point Square and the new street, with 8 storey commercial fronting North Wall Quay, having regard to the established height and visual context of the O2 as a Protected Structure.
- A free-standing landmark building up to 22 storeys commercial would be appropriate to the east side of the O2 to signify the juncture between the port and the city. The building with commercial / cultural uses should complement the eastern elevation of the O2. The building may project northwards at the eastern end of the square provided any potential extension of the Luas Line eastwards is not restricted.
- The eastern end of Point Square to be retained open, to allow for Luas extension to Alexandra Basin area in future.

3. Public Realm

- New plaza to the north of Luas terminus/Point Square.
- New north-south street to be provided between city blocks 9 & 10.
- New streets to be within the range of widths as shown on Figure 31 and subject to the criteria set out in Section 5.4.3

4. Infrastructure

- Each site to complete access and attendant public realm prior to occupation.
- Drainage/water infrastructure to be installed with access installation.
- To maintain an appropriate level of access and exit arrangements in the vicinity of the O2

5.5.11 City Block 11

a. Existing Context

- The majority of this block has been redeveloped including developments such as the Maldron Hotel, Telefonica Ireland and the offices of the ESRI.
- The An Post Delivery Office is situated in the south eastern section of the block.
- The block contains a number of protected structures fronting onto Sir John Rogerson's Quay (B&I Steam Packet Company Office, Tropical fruit Company warehouses, The Ferryman).
- A Section 25 Certificate was granted (DD150) but has not commenced for a mixed use development of offices, residential and retail on a corner site having some frontage on Sir John Rogerson's Quay but the greater frontage on Lime Street. Overall height of office element proposed is 6 storeys.
- View corridor from Misery Hill, to Grand Canal Dock, as originally set out in Docklands Planning Scheme, has not been achieved.

b. Specific Objectives

1. Use Mix

- 50 Residential:50 Commercial, to provide appropriate interface between existing commercial and residential around Pearse Square. Existing use mix is circa 30:70 residential: commercial.
- Commercial uses should predominate adjacent to the Bord Gáis Energy theatre to act as a noise buffer

2. Urban Form/Height

- Existing Protected Structures to be retained. New buildings fronting the northern side of the realigned (East-West) Misery Hill to be 5 storey commercial /6 storey residential; similar scale on Lime Street. 11C to be 5 storey. New buildings along Sir John Rogerson's Quay (11A) may be up to 8 storeys commercial / 10 storeys residential subject to design criteria to safeguard the character of the adjoining protected structure.
- Opportunity to remake North-East corner of Pearse Square with 2/3 storey town houses, rising to 4 storey residential on Cardiff Lane. Cardiff Lane, north of realigned Misery Hill to be 6 storey commercial. (Note: This is outside the SDZ Area)
- The proposed east-west street provides an opportunity for frontage development compatible in scale to Martin Terrace (which is proposed for retention), and provides an opportunity to mitigate the effects of traffic in the area on local residents and improve the pedestrian and cycling permeability of the area. In this regard, environmental improvement measures in the immediate vicinity of Martin's Terrace, which shall be implemented after consultation with the local community, will be undertaken as part of any road realignment.

3. Public Realm

- An important city block at interface between Hanover Street and Grand Canal Quay/Hanover Quay. Misery Hill to be re-aligned East-West to create a strong visual and public transport link between these 2 parts of the south city.
- Urban Blocks 11A and 11C to form west side of enhanced North-South pedestrian route. Further North-South pedestrian route from Sir John Rogerson's Quay to new Misery Hill should be

provided, with small civic space (Whittaker Square) and junction with East-West route adjacent to the ESRI building.

4. Infrastructure

- Each site to complete access and attendant Public Realm prior to occupation.
- Drainage/water infrastructure to be installed as part of access installation.
- Foul drainage: Site to drain to 940 x 1370 pipeline running through the site.
- Surface water drainage: Storm Water Infrastructure to be put in place to drain northwards towards the Liffey.

5.5.12 City Block 12

a. Existing Context

- This block has been built-out in its entirety. It is predominantly 7-8 storeys in height and delivers a successful use mix including residential, commercial, a deluxe hotel and active ground floor uses. High profile commercial office buildings occupy river frontage, whilst the hotel provides animation and vibrancy onto Grand Canal Plaza, as well as being a complimentary use to the Bord Gáis Energy Theatre. Existing use mix is circa 50:50 residential: commercial.
- A number of ground floor retail units, as part of the hotel development, have been provided along Forbes Street. These present an opportunity to animate the street leading into the major civic space of Grand Canal Plaza, particularly as the hotel comes into operation.
- Chimney Park, a children's playground which incorporates an historic red-brick chimney and innovative play features, was delivered as part of this block (circa 1,500m²).

b. Specific Objective

1. Use Mix

- To retain the successful use mix at the overall city block level.
- To promote occupancy of the vacant ground floor units with quality uses such as retail, restaurants, cafes and culture to lend vibrancy to the streets leading to Grand Canal Plaza.
- All planning applications within the Zone of Influence of the proposed DART Underground, as identified in Appendix 7 shall demonstrate to Iarnród Éireann how the proposal relates to the DART Underground Project. No development shall compromise the integrity of, or adversely impact on the DART Underground Line. (see also appendix 7)

2. Public Realm

- Dublin City Council policy to take in charge all elements of the public realm.

5.5.13 City Block 13

a. Existing Context

- This block has also been completely developed with frontage onto Grand Canal Plaza and the Canal Basin. Building heights are in the main 7-storey commercial.
- The primary use within this block is residential, but when taken in conjunction with adjoining City Blocks 12 & 16, it exhibits a successful use mix over the hub area. The residential development benefits from the favourable southerly aspect of Hanover Quay and the water frontage amenity onto the Grand Canal Basin, as the well as the quieter secondary or inner streets within the city block. Ground floor café, restaurants and retail uses animate the basin area. Existing use mix is circa 100% Residential.
- There are active retail frontages onto Hanover Quay. These lend a vibrancy to the area, serving the need of residents and complementary to the cultural and leisure activities related to the theatre and extensive waterbodies.

b. Specific Objective

1. Use Mix

- To retain the successful use mix at the overall city block level.
- To promote occupancy of ground floor units with quality uses to create a vibrancy up to and leading into Grand Canal
- To exploit the southerly orientation and animate the water frontage along Hanover Quay with vibrant retail, cultural and leisure uses.

2. Public Realm

- Dublin City Council policy to take in charge all elements of the public realm.

3. Infrastructure

- All planning applications within the Zone of Influence of the proposed DART Underground, as identified in Appendix 7 shall demonstrate to Iarród Éireann how the proposal relates to the DART Underground Project. No development shall compromise the integrity of, or adversely impact on the DART Underground Line. (See also Appendix 7).

5.5.14 City Block No. 14

a. Existing Context

- Over half of this block has been redeveloped resulting in an existing use mix of circa 40:60 Residential:Commercial. However, four sites within the block remain undeveloped, i.e.,
 - The existing warehouse premises at 76 Sir John Rogerson's Quay / Marine School Walk. Section 25 Certificate for 6-storey and part 8-storey mixed use development (DD331)
 - The former Kilsaran Concrete site at Hanover Quay (no planning history).
 - Block C of the Riverside IV Scheme (north of Kilsaran site) change of use from residential to commercial office development of circa 4,000m², 5-storeys plus setback (DD368).
 - Delivery of Chocolate Park (linked to DD331).
- The building heights range from 5-7 commercial storeys including 8 residential storeys.

b. Specific Objectives

1. Use Mix

- 50:50 Residential:Commercial with fine grain development dominant to the north side of Kilsaran Site.
- Vibrant ground floor uses to be provided along Hanover Quay.

2. Urban Form/Height

- Up to 5 storey commercial / 6 storeys residential fronting Horse Fair Road and 6 storeys commercial/7 storeys residential to Hanover Quay to allow for residential amenity and appropriate transition in scale, as well as adequate presence on Grand Canal frontage.
- Up to 8 storeys commercial / 10 storeys residential fronting Sir John Rogerson's Quay with reduced height fronting the proposed Chocolate Park at Block 14B

3. Public Realm

- A new/enhanced north-south route midway between Blood Stoney Road and Benson Street.
- A new east-west route midway between Sir John Rogerson's Quay and Hanover Quay, linking and leading into new public space Chocolate Park.
- A new public space incorporating SUDs (at Chocolate Park).
- New streets to be within the range of widths as shown on Figure 31 and subject to the criteria set out in Section 5.4.3

4. Infrastructure Provision

- Each site to complete access and attendant public realm prior to occupation.
- Drainage/water infrastructure to be installed with access installation.
- Foul drainage: North and south west of the site to drain to existing 375mm foul pipeline running through the site. North and south east of block to drain to proposed 375mm pipeline.
- Surface water drainage: North and south west of site to drain to existing 525mm storm pipeline running through the block. North and south east of block to drain to proposed 1050mm diameter pipeline.

5.5.15 City Block 15

a. Existing Context

- Only the State Street building has been developed in the city block. A number of warehouses, some of which are protected structures, front Hanover Quay.
- State Street bank has been developed, apart from the 4 residential blocks which were also permitted on the Green Street frontage (Ref DD466).
- On Hanover Quay, a mixed use development, up to 10 storeys, was certified (but not commenced) on site containing protected warehouses (DD238).

b. Specific Objectives

1. Land Use Mix

- 30:70 Residential:Commercial over the City Block.
- Hanover Quay traditional warehouse ranges to be used for variety of commercial/start-up and/or cultural uses.
- Pavilion building east of Britain Quay could have a variety of publically accessible commercial/cultural uses with a maritime flavour.

2. Urban Form/Height

- Northern part of site to accommodate 8 storey commercial / 10 storey residential, up to 22 storey commercial / 29 storey residential at North East corner. Higher part to form part of urban block, appropriately articulated.
- Central part of warehouse range could cater for a 5 storey commercial building. Any new building on western range of warehouses to articulate the gable and roofscape identity of warehouses (10m setbacks minimum). Eastern range (on RPS) to retain roofscape in total.
- Pavilion building west of Britain Quay to be 3 storey commercial/cultural.

3. Public Realm

- Hub to provide for a significant civic space with 2 functions; a sheltered environment surrounded by buildings and a more open space exploiting the views and character of Dublin Bay/Liffey estuary around Britain Quay.
- This civic space to have a pedestrian link to Hanover Quay across Green St East. The link should be largely open to sky (e.g. Italian Quarter, Ormond Quay).
- Public access to be re-opened linking Hanover Quay with Britain Quay.
- New streets to be within the range of widths as shown on Figure 31 and subject to the criteria set out in Section 5.4.3

4. Infrastructure

- Foul drainage: North of Site to drain to proposed 225mm pipeline along Sir John Rogerson's Quay South of Site to drain to 300mm pipeline along Green Street.
- Surface water drainage: North of site to drain to proposed 1,050mm surface water pipeline along Sir John Rogerson's Quay. South of Site to drain to proposed 1,200mm pipeline along Green St.
- Each site to complete access and attendant public realm prior to occupation.
- Drainage/water infrastructure to be installed with access installation.

5.5.16 City Block 16

a. Existing Context

- This block is built out with occupation of most, if not all buildings, save perhaps for a number of smaller units.
- The existing use mix is circa. 40 Residential:60 Commercial.
- It has delivered a successful use mix with cultural, commercial and residential uses, with the buildings fronting onto key public spaces, Grand Canal Square and the Campshires at Gallery Quay, containing vibrant ground floor uses.
- The block acts a hub or centre of gravity fronting onto Grand Canal Basin and including the Liebskind designed Bord Gáis Energy Theatre with its Martha Schwartz landscape designed plaza. These elements of cultural infrastructure and public art combine to reinforce the block as a cultural hub.

b. Specific Objectives

1. Use Mix

- To retain the successful use mix at the overall city block level.
- To promote occupancy of ground floor units with quality uses to create vibrancy up to and leaving into Grand Canal
- To animate the water frontage along Gallery Quay with vibrant retail, cultural and leisure uses.

2. Public Realm

- It is Dublin City Council's policy to take in charge all elements of the public realm.

4. Infrastructure Provision

- All planning applications within the Zone of Influence of the proposed DART Underground, as identified in Appendix 7 shall demonstrate to Iarnród Éireann how the proposal relates to the DART Underground Project. No development shall compromise the integrity of, or adversely impact on the DART Underground Line. (See also Appendix 7).

5.5.17 City Block No. 17

a. Existing Context

- High profile city block containing a number of stone protected structures and high concrete grain/flour silos. Important frontages onto Grand Canal Dock, Ringsend Road and Barrow Street.
- Site has 2 Section 25 Certificates granted in early 2000's which have not been implemented, for c. 7 storey new build and retention of protected structures (DD193 and DD148). Permission was refused in 2006 for a circa 38,000m² development, to 20 storeys (80m) high, including the refurbishment of the protected structures.

B. Specific Objectives

1. Use Mix

- Boland's Mill site, to be developed as a coherent package, integrating the protection and re-use of the protected structures with contemporary buildings and a waterfront public domain.
- 30 Residential:70 Commercial to apply to the Boland's Mills Site having regard to the unique characteristics of this site and in particular the extent of protected structures that will require restoration.

2. Urban Form/Height

If feasibility studies conclude that existing concrete silos cannot be adapted for sustainable use, site could be used for new commercial buildings, subject to:

- Any new buildings to be no higher than a line between top of Millennium Tower (54m) and Monte Vetro (61m) (c.15storeys)
- 2-3 vertical elements can be considered subject to separate and distinct visual forms being achieved, subject to the criteria for tall buildings set out in Appendix 5.
- Any taller buildings and any other new buildings on the site to be located, orientated and designed to maximise sunlight to the civic spaces (see below) and in a manner which protects the residential amenity and minimises overshadowing the fine grain residential area to the east. The other/ remaining buildings to be up to 6 storeys commercial/ 7 storey residential. A new building along Barrow Street should contribute to the remaking of this street – up to 5 storey commercial/6 residential.
- Any modifications / reconfigurations to the two long heritage buildings at the south end of site (2 storey brick gables protected structure ref RPS485) should retain a portion of the building to at least the same extent as the adjoining building to the north, to ensure that the character and integrity of the gables and their relationship and setting to the water is protected..
- Any proposed alteration/amendments to the Protected Structures in the Boland's Mill complex shall respect the significance of the site and be appropriate to its historic and spatial context. This shall be detailed in the design rational in the planning application.

3. Public Realm

- The scheme to provide for a new linked civic space which successfully exploits the Grand Canal Harbour as a water amenity; such a space to have meaningful proportions, i.e. 40m x 20m, as per Temple Bar Square.
- There should be at least two pedestrian links to the waterfront civic space, from Barrow Street, and at least one other from Ringsend Road to be provided at the western end of the Protected Structure. The pedestrian link from Barrow Street must provide at a minimum a double height archway or two-storey equivalent to allow for sufficient light penetration and amenity, in the event of any overhead development.

- New streets/lanes to be within the range of widths as shown on Figure 31 and subject to the criteria set out in Section 5.4.3

4. Infrastructure Provision

- Foul Drainage: To drain to 660 x 1230mm pipeline along Ringsend Road.
- Surface Water Drainage: Separate storm water pipeline to be laid along Ringsend Road, release more capacity in existing combined system.
- Each site to complete access and attendant public realm prior to occupation.
- Drainage/water infrastructure to be installed with access installation.
- All planning applications within the Zone of Influence of the proposed DART Underground, as identified in Appendix 7 shall demonstrate to Iarnród Éireann how the proposal relates to the DART Underground Project. No development shall compromise the integrity of, or adversely impact on the DART Underground Line. (See also Appendix 7).

5.5.18 City Block 18

a. Existing Context

- Rectangular block extending from Charlotte Quay to South Dock Road, between Ringsend Road and Grand Canal Dock.
- Block 60% built out, mainly with residential schemes, including the landmark 15 storey Millennium Building.
- Bus depot occupies central part of City Block. The 4 granite gate piers are protected structures.

B. Specific Objectives

1. Land Use

- 60 Residential/40 Commercial over this City Block.

2. Urban Form/Height

- 6 storey commercial / 7 storey residential along the water frontage to frame Grand Canal Dock and also along Ringsend Road to define the streetscape.

3. Public Realm

- New North South Street to be provided centrally on site, with 25x20m (min) civic space opening onto Grand Canal Dock forming part of a continuous public realm. Street could be pedestrian based with landscaping/SUDS features.
- New streets to be within the range of widths as shown on Figure 31 and subject to the criteria set out in Section 5.4.3

4. Infrastructure

- Foul drainage – Remove a volume of surface water currently generated from the Ringsend Road area by laying a new storm water sewer along Ringsend Road (circa 660x1230m).
- Surface water drainage: Separate storm water pipeline to be laid along Ringsend Road release more capacity in combined system.
- Each site to complete access and attendant public realm prior to occupation.
- Drainage/water infrastructure to be installed with access installation.
- Potential for connection to district heating system.

5.5.19 City Block 19

a. Existing Context

- Unique triangular site circa 1.2ha area at confluence of Grand Canal Dock and River Dodder, containing 3 graving docks (one infilled) and Waterways Ireland Property.
- Camden Lock, a residential development, occupies the southern end of the site.
- There is a pedestrian crossing over the Lock Gates to Britain Quay.
- The site was identified for community purposes in the 2008 Docklands Masterplan, and a joint Venture Agreement between the DDDA (Interests transferred to NAMA since) and Waterways Ireland to provide a multi-use space, training facilities, crèche and office space, when economic conditions allowed.

b. Specific Objectives

1. Use Mix

- 40 residential/30 commercial/ 30 community and recreational or cultural. The residential component to be provided in Block B.
- To ensure the timely delivery of community facilities / social infrastructure component
- Water-based recreational facilities to be promoted. Opportunities for nautical heritage centre should also be explored.

2. Urban Form/Height

- Commercial / community buildings up to 5 storeys to contain the dock space. Residential perimeter block up to a maximum of 7 storeys to northern side of existing Camden Lock Development, subject to an appropriate transition in scale and design criteria which protects the residential amenity and minimises overshadowing of the Camden Lock Development.

3. Public Realm

- Public access to quays/water bodies to be maximised including non-stepped pedestrian access from Ringsend Road, (in which case, a second pedestrian bridge linking recreational facilities to Thorncastle Street may not be necessary). Pedestrian link to Britain Quay to be provided, which does not compromise the use of the locks by barges.
- Feasibility of re-opening one of the infilled graving docks to be included in any development proposals.

4. Infrastructure

- Foul Drainage – Remove the volume of surface water currently generated from the Ringsend Road area by laying a new storm water sewer.
- Surface Water – a storm sewer to be laid on Ringsend Road to capture storm water currently discharging to the combined system in the area.
- Each individual development will be required to provide additional surface water storage equivalent to at least 570m³/ha. Details and location of the retention facility to be agreed with Dublin City Council Drainage Division.
- Accesses, as part of public realm, to be provided prior to occupation of development.

5.5.20 City Block No. 20

a. Existing Context

- This block at the confluence of the River Dodder / River Liffey and opposite the Britain Quay Hub and Graving Docks (Blocks 15 & 19), is primarily built-out save for lands adjoining the Ringsend Community Centre.
- The northern half of the block includes a recent mixed-use development of residential and commercial office with the remainder occupied by Ringsend Community Centre.
- A Section 25 Certificate was granted for an extension and refurbishment of the Ringsend Community Centre to result in a three-storey building with an additional floorspace of circa 630m², to include a crèche facility, youth centre, multipurpose hall, meeting and training rooms. The site includes lands in the ownership of Dublin City Council. (DD624 – Not Commenced).

b. Specific Objectives

1. Use Mix

- A mix of community, recreational and cultural uses with enabling residential / commercial development.

2. Urban Form/Height (see map)

- 4 storeys commercial/cultural as part of transition in scale between the new block to the north and the existing residential to the south.

3. Public Realm

- There should be public accessible frontage onto the waterbody and a pedestrian bridge from Thorncastle Street to the Graving Docks at Plot 19 (formerly Plot 8) in order to allow for a sharing of the recreational facilities on both of these sites.

4. Infrastructure Provision

- Each site to complete access and attendant public realm prior to occupation.
- Drainage / water infrastructure to be installed with access installation.
- Foul Drainage: Block to drain to existing 450mm pipeline.
- Surface Water Drainage: New storm water infrastructure to be put in place

5.5.21 City Blocks 21 & 22 – Campshires and Water Bodies

a. Existing Context

It is acknowledged that both the Liffey Campshires and the Campshires on the Grand and Royal Canals have benefited from a considerable level of investment and from a consistent commitment to good design. That said the work is not complete. Extensive tracts, while paved to a high standard, come across as quite bare and sterile. It is noticeable that the more generously planted areas in the vicinity of IFSC 1&2 contrast with a bleaker context further to the east. There have also been some issues with the maintenance of lighting and street furniture.

The Campshires of the Royal Canal, in the vicinity of Spencer Dock, were to feature at the heart of an ambitious landscaping plan, but due to budget cutbacks, only a very basic programme has so far been implemented.

In the case of Grand Canal Dock, a generally high standard of public domain has been implemented, which also interfaces successfully with Grand Canal Square. Limited access to the water exists in the inner dock area.

In view of the important role of the Campshires in the public domain of the SDZ, it is proposed that a 'Public Domain and Landscape Framework' be prepared, covering the core areas of paving, street furniture, lighting, planting and art. It is recognized that this framework will have to be prepared in the context of a framework for water animation covered in below.

In the extensive public consultation carried out at pre-draft stage, the theme of maritime has been linked consistently to that of identity. Dubliners love the natural setting of their city on a river and close to the sea and the bay. There is frequently an expression of sadness however, that the river has lost a lot of its animation, as commercial shipping activity has moved eastwards with the industrial port. At the same time, events like 'The Tall Ships' bring back a great buzz and remind people of the recreational potential of the waterbodies. The SDZ can play a major role in facilitating an intensive recreational use on the waters of the Liffey and Canals, which are regarded as an integral part of the public domain. It is an objective to draw up a water animation framework, in partnership with the Dublin Port Company and Waterways Ireland.

a. Specific Objectives

- To maximize public pedestrian access to all water-body frontages
- To produce a public realm and landscape framework for the Campshires as an action of the City Council's Public Realm Strategy
- To prepare a water animation framework in partnership with the Port Company and Waterways Ireland
- To allow for limited pavilion style/kiosk development on the Campshires. Such development must provide for the animation of the Campshires, be of high design quality and must not compromise the integrity of the Campshires nor impede pedestrian and cycling access

5.5.22 City Block 23 - Major Public Squares and Streets

a. Public Squares

The delivery of a unique high quality urban square in each of the 5 Hubs is a central objective of the SDZ. The design and delivery of this objective will be achieved in co-operation with relevant stakeholders/owners. A range of design objectives to achieve specific qualities for each of the squares, to complement the existing Grand Canal Square, is outlined below and will inform the preparation of design briefs. The use of design competitions will be encouraged.

Spencer Dock

- Generating a powerful visual centre of gravity through a strong concept and imaginative composition.
- Relating creatively to the cluster of protected structures to the south of the square.
- Integrating the proposed route structure to the Dart Underground.
- Optimizing the relationship to buildings containing the space of the square.
- Maximizing the potential of the route structure from the proposed Liffey pedestrian bridge.
- Integrating pavilion services such as a unique café design.

Point Square

- Achieving a design which tackles the windswept expanse of the current poorly contained space.
- Incorporating sufficient flexibility to facilitate a range of events.
- Taking inspiration from the entertainment culture of the O2 arena.
- Integrating existing and future route structures.
- Relating creatively to proposed buildings defining the eastern edge of the square.
- Responding to subterranean entertainment venues.

Britain Quay

- The exploitation of maritime and canal views.
- The generation of containment and protection.
- The animation through mixed use.
- The creative use of route structure to connect and generate sequence.
- Effective integration of paving, street furniture, lighting, nature and art.
- The need to consider events.

Boland's Mills

- The exploitation of views to Grand Canal [inner dock].
- Drawing on the relationship with retained protected structures.
- Developing an effective route structure to connect the square.
- Effective integration of paving, street furniture, lighting, nature and art.

- Generating a positive interface with new buildings.
- Generating animation through mixed use.
- The need to consider events.

b. Major Spines - Mayor Street/Sheriff Street

A number of streets perform a critical role in the urban structure. Mayor Street is in effect a high street in the North Lotts. The status of the street emerged during the design of IFSC 1&2, has been further strengthened in the Section 25 Planning Scheme for North Lotts, and consolidated by the construction of Luas. The public domain remains weak however.

Sheriff Street is at the interface of the North Lotts and East Wall. To date it has been treated as a design backwater and suffers obvious neglect in terms of its public domain quality.

It is considered that a Public Domain and Landscape Framework should be prepared for both Mayor Street and Sheriff Street and that a brief be prepared which should address opportunities for a co-ordinated design approach to paving, street furniture, lighting, planting and art.

c. Key North-South Streets - New Wapping & Castleforbes

While the SDZ proposals for North Lotts will refine the urban grid, and result in greater permeability and more routes, a number of original streets, due to their scale and orientation, have the capacity to deliver considerable amenity for residents and workers. New Wapping Street is the only street connecting directly with East Wall. Castleforbes has an existing carriageway width of circa 12 metres and has a mainly intact floor of original setts.

It is considered that both New Wapping and Castleforbes would benefit from a major environmental improvement scheme and that a public domain and landscape framework should be prepared to give effect to this.

d. Specific objectives

- To provide a high quality urban space in each of the 5 Hubs in accordance with the specific design briefs
- To produce a public realm and landscape framework for Mayor Street, Sherriff Street, New Wapping Street and Castleforbes Road as an action of the City Council's Public Realm Strategy

Chapter 6 Implementation and Monitoring the SDZ Planning Scheme

6.1 Implementing the SDZ/Delivery Framework

6.1.1 Dublin City Council as Development Agency

The Minister has designated Dublin City Council as the Development Agency for the implementation of the Planning Scheme for the SDZ. In its role as Development Agency, the City Council will actively promote the implementation of the objectives of the Planning Scheme, including community infrastructure, through collaboration and engagement with all relevant stakeholders, proactive project management and ongoing monitoring of progress, together with consultation and feedback mechanisms.

The City Council is responsible for a huge range of services – economic development, urban regeneration, roads and transportation, water and drainage services, housing, community development to name some key areas – and, as Development Agency, it is intended to draw on the range of expertise, skills and responsibilities of the organisation in ensuring the successful delivery of the policies and objectives of the SDZ Planning Scheme.

The City Council is also the planning authority that will assess all planning applications under the Planning Scheme and the Council will ensure that all development is carried out in compliance with the policies, objectives and standards required in the Planning Scheme.

In carrying out its role as Development Agency, the City Council will seek to co-ordinate with all relevant stakeholders, including government departments and agencies, responsible for the provision of infrastructure to ensure co-ordinated delivery and funding.

An Implementation Plan for the Development Agency will be prepared following the adoption of the Planning Scheme to prioritise the investment and funding requirements identified in the Planning Scheme and set out the delivery programme for the Development Agency. Engagement with relevant stakeholders, including landowners and infrastructure providers, will form part of the preparation of the Implementation Plan.

6.1.2 Providing co-ordinated delivery, Requirements for each City Block

Prior to the submission of a planning application for development within a City Block, a City Block Rollout Agreement (CBRA) shall be entered into between developers/ owner (s) and the SDZ Agency in order to secure the co-ordinated delivery of the mix of uses and supporting infrastructure necessary to deliver the objectives of the Scheme within each City Block unless an individual planning application for the City Block addresses these matters.

The CBRA or Joint CBRA shall address inter alia the following:

1. (a) The spatial distribution of the required ratio of commercial to residential across the City Block, to achieve a coordinated, pattern of land use across the block over time, and to ensure the unsustainable end-loading of a mono-use environment is avoided. The mixed use ratio does not apply to small sites under 0.2ha. (2,000m²) except where active uses are necessary to animate the street. Neighbourhood retail and community facilities shall fall into the Residential Category for the purposes of the ratio.
- (b) How social housing units will be provided in accordance with the City Council's Housing Strategy and Government Housing Policy.
- (c) The infrastructure requirements for the City Block including connections to the strategic network, together with a programme of installation works and responsibility for delivering

infrastructure, such that each application can demonstrate the means by which the necessary infrastructure can be installed prior to the occupation of a given unit. Flood management and soil remediation measures are to be provided as necessary as part of development.

- (d) The area to be taken in charge by DCC, with attendant timelines.
 - (e) How interim landscaping or other interim amenity measures on all remaining vacant land within the City Block which is in the applicant's ownership and/or control, will be provided.
 - (f) The design and layout of proposed new streets/lanes/parks and public spaces, having regard to the objectives in Section 5.4.3
 - (g) The location and height of any proposed local landmarks referred to in Section 5.4.5
 - (h) Any identified social infrastructure needs for the area e.g. health centre, crèches etc.
2. Each planning application must be accompanied by a Compliance Statement, demonstrating inter alia, how the (J)CBRA is being implemented. In the absence of a CBRA, the Planning Authority shall determine planning applications in accordance with the objectives of the SDZ Scheme, including the application to the site of the full range of city block objectives.
 3. All planning applications must accord with the General Principles and the Fixed Elements of the SDZ Planning Scheme in addition to those elements addressed in the Compliance Statement for each City Block.
 4. All proposed development in relation to:
 - (a) development built out by the date the SDZ Scheme takes effect and
 - (b) any extensions and/or changes of use in relation to all future completed development in the SDZ, shall comply with the provisions of the SDZ Scheme.
 - (c) In cases where the comprehensive site redevelopment is not envisaged in the short term, proposed extensions to the existing established use shall be considered on their merits, in accordance with Development Plan Policies.
 - (d) In cases where comprehensive redevelopment of existing buildings is envisaged in the future, new proposals shall have regard to the overall proposals in the SDZ and the relevant city block objectives

However, where policies, objectives, principles or standards are not specifically addressed in the SDZ Planning Scheme (e.g. apartment standards), those in the City Development Plan shall apply.

In relation to height, any new building or additional height to existing buildings shall relate to the prevailing height as set out in the relevant city block or adjacent blocks in the Development Code. Proposals involving a material change of use shall accord with the land use mix ratio as set out in the Development Code (See Chapter 5 for Development Code for Individual City Blocks).

6.1.3 Assessing SDZ Planning Applications

Planning Applications under the SDZ Planning Scheme will be allocated a specific prefix 'DSDZ' in addition to their normal planning reference number to identify their Strategic Development Zone status.

All SDZ planning applications must be assessed in the context of the approved Planning Scheme. Where a planning application is made for a development within the SDZ, the normal provisions

governing planning permissions apply except that there is no appeal to An Bord Pleanála against the decision of the planning authority.

Planning permission shall be granted where the development, if carried out in accordance with the application or subject to any conditions which the planning authority may attach to a permission, would be consistent with the Planning Scheme. Planning permission shall not be granted for any development which would not be consistent with such a planning scheme.

In order to assess planning applications under the SDZ and determine whether planning permission should be refused or granted, a Compliance Matrix will be prepared. This Compliance Matrix will include the core high level objectives for the SDZ, the core objectives applying at City Block level, while also focusing on the individual building design to ensure the delivery of building quality. Applicants for planning permission will be required to complete the Compliance Matrix to show how their development matches the strategic and specific design intent of the SDZ Planning Scheme.

6.2 Integration with wider Docklands and the City

6.2.1 The SDZ, the Docklands Area and the City Development Plan

The SDZ is part of the wider Docklands Area, which itself lies within Dublin's Inner City. The reintegration of the area into the City in both policy terms and actual physical connections is essential in completing the large scale redevelopment and regeneration of the area that was commenced under the DDDA Section 25 Planning Schemes and that will be concluded by the SDZ Planning Scheme.

Chapter 6 Implementation and Monitoring the SDZ Planning Scheme

The Docklands Masterplan 2008 set out an ambitious policy framework for the economic, social and cultural renewal of the Docklands Area. The Dublin City Development Plan sets out the strategy for the sustainable development of the City into the future, including a set of specific policies and objectives applicable to the Docklands. However, the Development Plan will be further amended as necessary to incorporate those elements of the Docklands Masterplan that remain relevant, so that the successful legacy of regeneration in the area can be carried on through the City Development Plan. In this way, urban regeneration of the Docklands will be set within the wider context of the City in an integrated way, locking the area into the shared vision for a sustainable city.

6.3 Delivering Public Infrastructure

A range of strategic and local infrastructure and facilities is identified in the SDZ Planning Scheme as essential to facilitate development within the Strategic Development Zone. The delivery and sustainable funding of this infrastructure will be a key focus of Dublin City Council in its role as Development Agency.

Innovative ways of delivering infrastructure and facilities by leveraging implementation through imaginative strategic partnerships such as joint ventures with the private sector and drawing on Corporate Social Responsibility objectives of key stakeholders and will be pursued.

To ensure sustainable funding of projects, finance from a range of sources will be sought, including government, other statutory agencies and private funding.

6.3.1 Development Contributions

Development Contributions will apply to the area. The Planning & Development Act 2000, as amended, enables a Planning Authority, when granting planning permission to attach conditions requiring the payment of a contribution in respect of public infrastructure and facilities benefiting the development of the administrative area of the Planning Authority. This relates to public infrastructure

and facilities that are provided, or that it is intended will be provided, by or on behalf of the Local Authority.

The City Council operates a General Development Contributions Scheme under Section 48 of the Planning & Development Act 2000, as amended, which applies to development across the entire City and this Scheme will continue to apply in the Docklands and the SDZ Planning Scheme Area.

Where there are specific exceptional costs not covered by a General Development Contributions Scheme, the payment of a Special Contribution may be required. It is intended that a Special Contributions Scheme under Section 48(1)(2)(c) of the Planning and Development Act, as amended, will be devised and applicable to the Docklands Area in order to provide for specific projects identified in the SDZ Planning Scheme and wider Docklands Area that benefit proposed development.

The DDDA applied a special development levy to development under the Section 25 Planning Schemes for the provision of the Luas Line from Connolly Station to The Point. In order to ensure contributions towards the cost of provision of the Luas C1 Line are continued, a Supplementary Development Contribution Scheme for the Luas under Section 49 of the Planning & Development Act 2000, as amended, will be introduced and applicable to development within the relevant catchment area.

In devising any new development contribution schemes, the combined impact of the rate of contributions will be considered to ensure that they do not act as a disincentive to development.

6.4 Promotion and Marketing

There is a strong view from the business community, both big companies and small, that Docklands requires specific marketing. Maintaining and enhancing the Docklands brand and international marketability as an attractive and prime location for investment and high-value development is also one of four key focus areas referred to in the Minister's announcement, on the winding up of the DDDA.

The Docklands redevelopment, including the creation of new public spaces, contemporary architecture, and the social regeneration undertaken by the DDDA has created a distinct, recognizable urban quarter.

The Docklands also contains a number of sub-areas, such as IFSC and the emerging 'Silicon Docks' as well as distinct traditional and contemporary residential communities, each with their own unique sense of place and identity.

All of this has combined over the past decade to create a distinctive and interesting place, with an array of outdoor and indoor event spaces and attractions allowing the all-important cultural sphere to intermingle with economic and corporate activity. The area is now considered to be a vibrant, creative, heritage-rich and contemporary part of the City.

The promotion of the Docklands as a vibrant living place with new housing models, an array of attractions and mixed, multi-cultural neighbourhoods has also been successful.

Continuing and evolving this branding of the Docklands as a great living urban environment providing a unique and enriching life choice and experience for residents, workers and visitors alike is vital to the continued successful regeneration of the area.

Successful implementation of the SDZ Planning Scheme will require continued communication about the real benefits of living and working in the area, and creating strong relationships with individual businesses and sectors, communities and cultural actors to build, share and promote a tangible vision of the end product envisaged in the Planning Scheme.

The Docklands brand internationally and amongst international investors is synonymous with an attractive and prime location for investment and high-value development. This international reputation must be carefully maintained and nurtured in order for the area to retain and evolve its role as a key national and international economic engine.

Drawing on the expertise and networks of stakeholders with a mutual interest in the continued success of marketing the Docklands will bring the message to a wide and diverse audience with whom the excitement of creating a new city quarter can be shared. In this regard, working with and drawing on the views and expertise of key stakeholders such as the IDA, Enterprise Ireland, Dublin Chamber, multi-nationals/ big companies and the Docklands Business Forum will be essential.

In addition to the objectives set out in earlier parts of this document, it is intended to develop and implement a marketing strategy, in conjunction with key stakeholders, to promote the Docklands internationally as an attractive, high-value location for economic investment.

6.5 Monitoring Progress

The Planning Scheme relates to the North Lotts and Grand Canal Areas of the Docklands. The City Council, as Development Agency, will be responsible for monitoring and reporting on feedback. The City Council will prepare an Annual Progress Report detailing planning permissions granted, development commenced and/or completed, progress on objectives and progress on sustainability indicators. The Progress Report will also provide annual updates on the monitoring programme set out in Section 9 of the Environmental Report. The Report will be submitted to Dublin City Council, its relevant Area Committees and to any other formal consultative structure put in place to oversee regeneration in the wider Docklands Area.

In addition, a formal twice-annual consultative forum will be held in the Docklands, with representatives of business, community, environmental and other stakeholders in the area to engage in two-way communication and feedback on progress on the SDZ.

Ongoing communication and consultation will be facilitated and promoted through dedicated information channels.

APPENDIX 1 - STRATEGIC FLOOD RISK ASSESSMENT

Introduction

This Flood Risk Assessment was prepared and informed by the DoEHLG Guidelines for Planning Authorities (DoEHLG & OPW, 2009) on 'The Planning System and Flood Risk Management' (and Technical Appendices). The Guidelines state that planning authorities are required to introduce flood risk assessment as an integral and leading element of their development plan functions. It sets out that development plans and local area plans, must establish the flood risk assessment requirements for their functional area.

A Strategic Flood Risk Assessment (SFRA) is an area wide assessment of the existing risks of flooding and the impact on those risks arising from proposed spatial planning decisions. A staged approach was adopted in the preparation of this FRA. The Stage 1 approach has identified that the area is at risk of flooding, and the principle sources of flooding identified are pluvial and coastal flooding. The Stage 2 Flood Risk Assessment will confirm sources of flooding that affect the plan area, and will involve the preparation of a flood zone map, based on best available information. This assessment will also detail flood management strategy for the SDZ area. Where a detailed Flood Risk Assessment is required to assess flood risk areas in sufficient detail and to provide quantitative appraisal of potential flood risk to a proposed or existing development a stage 3 flood risk assessment will be carried out.

The guidelines require the planning system at national, regional and local levels to:

- a) Avoid developments in areas at risk of flooding, particularly floodplains, unless there are proven wider sustainability grounds that justify appropriate development and where the flood risk can be reduced or managed to an acceptable level without increasing flood risk elsewhere.
- b) Adopt a sequential approach to flood risk management when assessing the location for new development based on avoidance, reduction and mitigation of flood risk, and incorporate flood risk assessment into the process of making decisions on planning applications and planning appeals

Strategic Development Zone North Lotts and Grand Canal Docks – Statutory Context

The Minister designated the North Lotts and Grand Canal Dock Area as an SDZ for the following reasons:

- The potential and need for comprehensive planning and development of the site due to its economic and social importance to the State;
- The efficient use of public investment in infrastructural facilities; and
- The giving of effect to the policies contained in the development plan made by Dublin City Council in accordance with section 9 of the Act of 2000.

Part IX of the Planning and Development Act 2000-2011 provides for the designation of a Strategic Development Zone (SDZ) to facilitate development which in the opinion of the Government is of economic or social importance to the State.

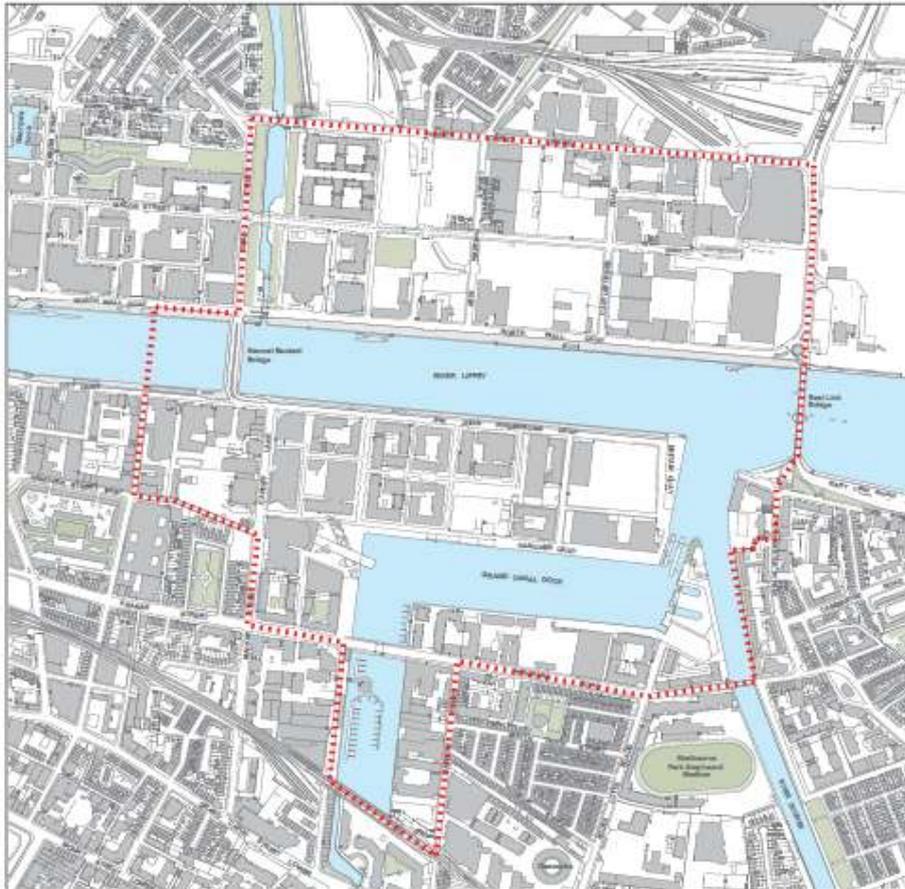
The Government designated lands at North Lotts and Grand Canal Docks in the Dublin Docklands as a site for an SDZ on 18 December 2012 and specified Dublin City Council as the Development Agency (SI No 530 of 2012). Where land is designated as an SDZ by Government Order, a Planning Scheme must be prepared by the Development Agency before any development can be permitted in the SDZ Area.

Description of Study Area

The North Lotts/Grand Canal Dock planning scheme (see Figure 1) is situated on the River Liffey Estuary which flows through Dublin City and between the great South Wall and North Bull Wall before entering Dublin Bay. The Bay itself is a shallow bay with water depths not greater than 20m at low tide at its outer limit between Sorrento Point and Bailey at Howth. The water depth decreases towards the harbour at Bull Island to less than 5m occurring in the inner half of the bay.

The Docklands area has seen a large amount of development over the past fifteen years, however there are a number of strategic sites and vacant lands at the core of the regeneration areas, which need to be developed to consolidate the area and help achieve a critical mass necessary to support a vibrant mixed urban quarter. The Samuel Beckett Bridge provides a vital link between the two locations north and south of the Liffey. The plan area including the water bodies such as Royal Canal (Spencer Dock), the Liffey, Dodder and Grand Canal Basin, is circa 90ha., of which the land take is 62ha whilst the lands to be developed equates to circa 22ha.

Figure 1 – Planning Scheme Boundary



On the basis of the development capacities set out in this scheme, the 22ha of available lands could accommodate an estimated 2,600 residential units and 305,000m² of commercial floorspace, which equates to a residential population of circa 5,800 and circa 23,000 workers.

Identification of Flood Risk

Over the last few decades the risk of flooding has continued to increase in Ireland. Much of this has been attributed to climate change, resulting in increased & more intense rainfall, increased sea water levels, and also due to increasing levels of urbanisation. Coastal erosion can also increase the risk of flooding in some areas. The main types of flooding are from (i) coastal flooding which arises from the sea or estuaries,, (ii) fluvial flooding which arise from rivers or streams, (iii) pluvial or surface water flooding which arises directly from rainfall, (iv) groundwater flooding (v) dam breach and (vi) sewer/infrastructural failure.

Dublin City due to its coastal location is prone to various forms of flooding. The main flood risks identified in the SDZ area are from coastal/tidal, pluvial and infrastructural overload or failure.

As the area is prone to flooding the Justification Test is required. The sequential approach to planning is the key tool in ensuring that development is first and foremost directed towards land which is at low risk of flooding. This is described in Fig 2 below.

Sequential Approach & Justification Test

The key principles of the risk based sequential approach is managing flood risk in the preparation of plans as set out in Chapter 3 of the DEHLG Flood Guidelines and these principles will be followed in Docklands Planning area.

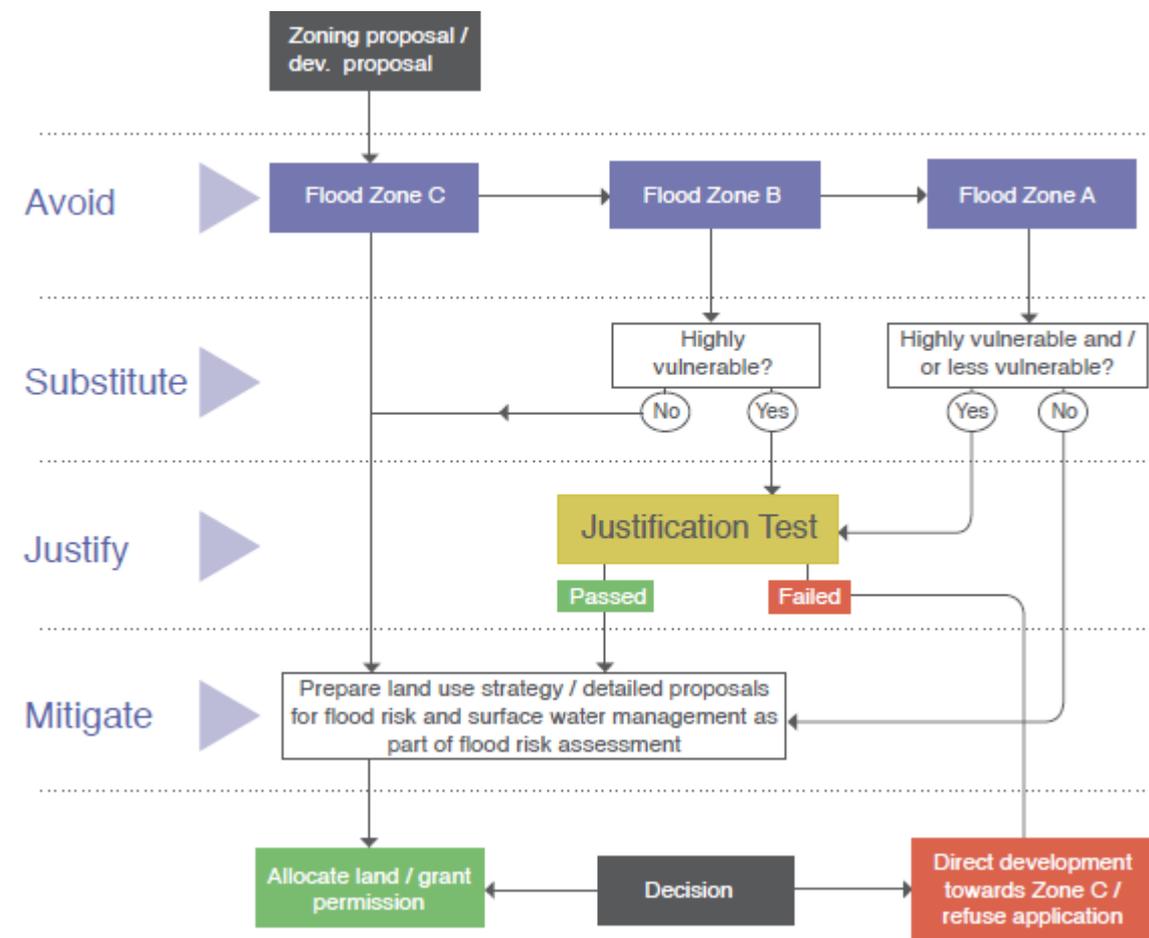
This is the key tool in the decision making process of preparing plans to ensure that development is first and foremost directed towards land that is at low risk of flooding . This approach makes use of existing flood risk assessments (FRA's) and other data identifying flood zones for rivers, coastal and pluvial flooding and the classification of the vulnerability of flooding of different types of development.

The sequential approach in terms of flood risk is based on the following principles:

- The primary objective of the sequential approach is that development is primarily directed towards land that is at low risk of flooding (AVOID).
- The next stage is to ensure that the type of development proposed is not especially vulnerable to the adverse impacts of flooding (SUBSTITUTION).
- The Justification Test is designed to rigorously assess the appropriateness, or otherwise, of particular developments that, for various reasons, are being considered in areas of moderate or high flood risk (JUSTIFICATION).
- The test is comprised of two processes, namely The Plan-Making Justification Test and The Development Management Justification Test.

Figure 2 Sequential Approach Mechanism in the Planning Process

(source 'The Planning System and Flood Risk Management – Guidelines for Planning Authorities' November 2009)



Justification Test for North Lotts and Grand Canal Planning Scheme

The flood risk assessment carried out for the purposes of the planning scheme in the Docklands concluded that certain areas zoned for development are within lands at risk of flooding.

In this context the designation satisfies the Justification Test, in that:

1. The urban settlement is targeted for growth under the National Spatial Strategy, regional planning Guidelines, statutory plans as defined above or under the planning guidelines or planning Directives of the Planning and Development Act, 2000 as amended.

The National Spatial strategy (NSS) recognises Dublin, as the Capital City, plays a vital national role and that the performance of its economy is essential to the success and competitiveness of the national economy. The NSS places particular emphases on the physical consolidation of the metropolitan area, which incorporates the entire functional area of Dublin City Council. The Regional Planning Guidelines (RPG) for the Greater Dublin Area 2010 – 2022 translates the national strategy to the Regional Level with an emphasis on Dublin as the driver of national development and the need to physically consolidate the growth of the metropolitan area.

The RPG recognises that “the settlement hierarchy selected by the Guidelines takes account of the fact that while a number of key towns and the City which are vulnerable to two key sources of flooding, fluvial and coastal, effective management of flood risk coupled to wider environmental, sustainability and economic considerations mean that it is possible to facilitate the continued consolidation of the existing urban structure of the GDA. In line with the sequential and justification criteria set out in the Department’s Guidelines on the ‘Planning System and Flood Risk Management’ it is considered that these locations should be encouraged to continue to consolidate and to grow in order to bring about a more compact and sustainable urban development form while at the same time managing flood risk appropriately”.

The Dublin City Development Plan 2011-2017 has been prepared in accordance with the requirements of the Planning and Development Act, 2000, (as amended) the Planning and Development (Strategic Environmental Assessment) Regulations 2004 and Article 5 of the Habitats Directive 92/43/EEC.

Two areas within the high/medium flood risk fall within the SDZ plan area. These areas relates to two former Section 25 Planning Schemes, namely the North Lotts Scheme and the Grand Canal Scheme and is identified as a Key Developing Area (KDA) and Strategic Development and Regeneration Area (SDRA) under the Dublin City Development Plan 2011 – 2017.

2. The zoning or designation of the lands for the particular use or development type is required to achieve the proper planning and sustainable development of the urban settlement and in particular;

i) To facilitate regeneration and/or expansion of the centre of the urban settlement.

The plan area is located to the East of the City Centre, just outside the inner city zoning in the current development plan, but forms part of the Key Development Areas and Strategic Development and Regeneration Area. The Key Development Areas represent significant areas of the inner and outer city with substantial development capacity and the potential to deliver the residential, employment and recreational needs of the city. The Docklands area in particular is seen as essential as supporting the economic or cultural specialism essential for the growth and diversification of the city’s economy. All of these areas correspond to high levels of public transport accessibility, whether existing or planned under Transport 21.

The scheme is considered to be the most appropriate and effective mechanism to deliver the remaining parts of this area of economic and social importance to the city and state. The extent of the SDZ reflects a sequential approach to development and the need to ensure the effective consolidation of the IFSC with build out of remaining brownfield sites and optimisation for public investment on infrastructure to date including strategic transport infrastructure and public realm projects of city wide importance.

ii) Comprise significant previously developed or underutilised lands

The plan area comprises a significant amount of undeveloped lands. The remaining sites available for development in the North Lotts and Grand Canal Schemes equate to circa 22ha, and area roughly equivalent in scale to the entire Custom House Docks/IFSC Area (24ha). On the basis of the development capacities achieved to date, the 22ha of available lands could accommodate an estimated 2,600 residential units and 350,000m² of commercial floor space, which equates to a residential population of circa 5,800 and circa 23,000 employees.

iii) Will be essential in achieving compact and sustainable urban growth

Dublin City Council considers that the best planning routes to harness the economic and social significance of these lands and to deliver the continued regeneration of the Docklands, is through the fast track planning framework of a Strategic Development Zone (SDZ).

The redevelopment of this area will ensure the efficient use of public investment in infrastructure to date including strategic transport infrastructure such as the Sean O'Casey Bridge, Samuel Beckett Bridge and the Luas Docklands extension, Chimney Park and Royal Canal Linear Park and community facilities such as Sean O'Casey Community Centre. The SDZ will also ensure the effective implementation and phasing of the continued regeneration of the Docklands. _

iv) There are no sustainable alternative lands for the particular use or development type in areas of lower risk.

The Minister for the Environment, Community and Local Government designated the North Lotts and Grand Canal Dock as an SDZ (S.I.No.530 of 2012) for the following reasons:

- The potential and need for comprehensive planning and development of the site due to its economic and social importance to the State.
- The efficient use of public investment in infrastructural facilities, and
- The giving of effect to the policies contained in the development plan made by Dublin City Council in accordance with section 9 of the Act of 2000.

In terms of the Justification Test and the rationale as to why there are no suitable alternative zoned lands, this area has been included in a series of Docklands Masterplans since 1997, and comprised two areas covered by Section 25 planning schemes, the North Lotts Planning Scheme and the Grand Canal Dock Planning Scheme. The vast majority of the Docklands Areas has been successfully redeveloped over the past two decades or relates to long-established residential communities in the vicinity of the development sites, save for the Poolbeg Peninsula. However there are a number of strategic sites and vacant lands at the core of the regeneration areas at the North Lotts and Grand Canal Dock which need to be developed to consolidate the achievements to date and to help sustain a critical mass necessary to support a vibrant mixed –use urban quarter and to attract inward investment.

Dublin City lies entirely within the metropolitan area and the RPGs give direction to Dublin City as the 'gateway core' for high intensity clusters, Brownfield development, urban renewal and regeneration. The SDZ is a Brownfield area, and has been intensely developed for port and related industries in the 19th/early 20th centuries (up to 1970's), employing thousands of people. The National Spatial Strategy designates Dublin as the pre-eminent gateway in Ireland, as the key international gateway of the State. Gateways are strategically located and have a key role to play nationally and relative to their surrounding areas by virtue of their existing economic and social attributes. A core element of the RPGs is the importance of integration of land use, employment and transport. Within the City, as the national hub of employment and transport, it is critical that the policy of encouraging high quality new housing within the core of the gateway continues. The RPGs also takes account that while a number of key towns and the City which are vulnerable to two key sources of flooding – fluvial and coastal – effective management of flood risk couples to wider environmental, sustainability and economic considerations mean that it is possible to facilitate the continued consolidation of the existing urban structure of the GDA. In line with the sequential and justification criteria set out in the Department's Guidelines on the Planning System and Flood Risk Management'

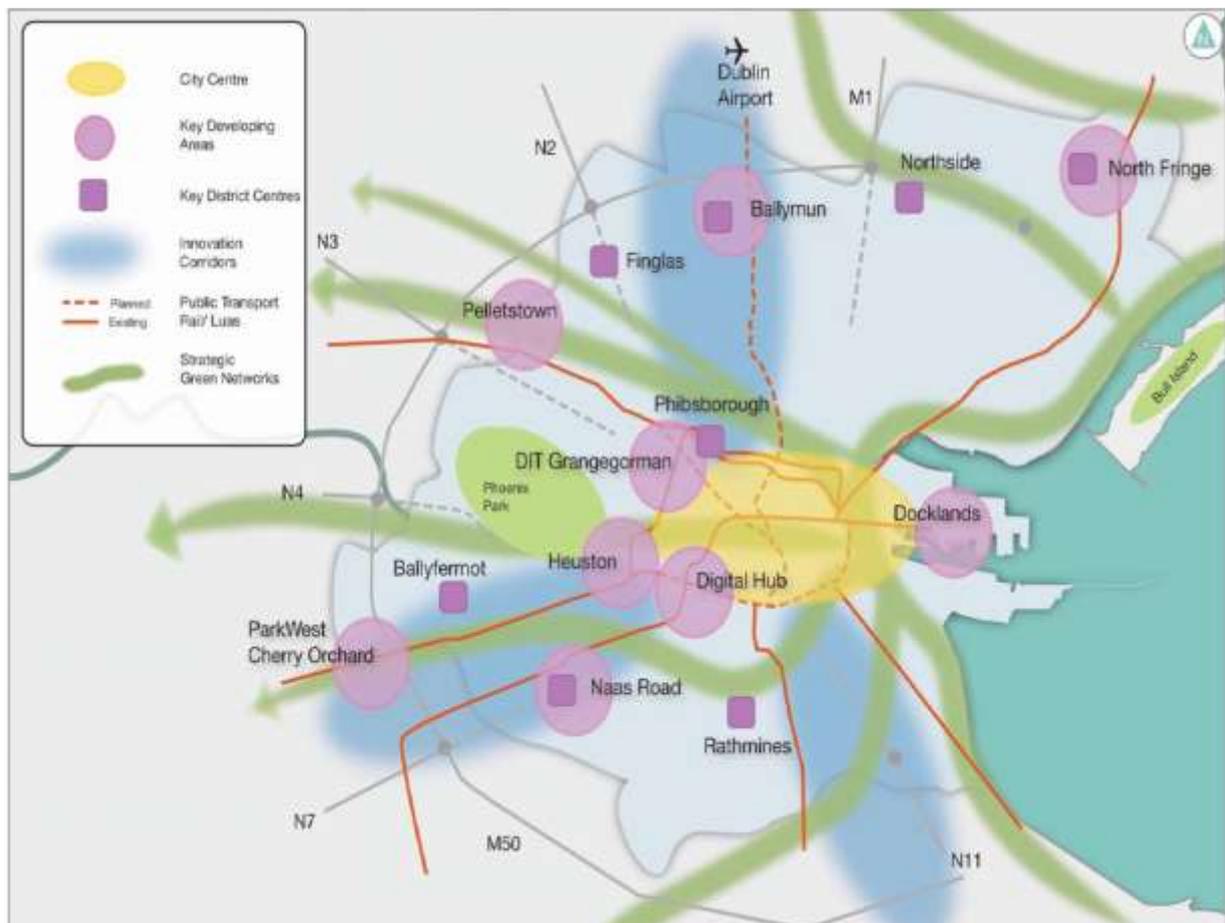
The SDZ will facilitate the future development of the Docklands Area in a consolidated manner. The North Lotts and Grand Canal Dock area of the Dublin Docklands comprises some 66 hectares of the overall 520-hectare Dublin Docklands area and is where the greatest focus and pressure for

redevelopment is likely to occur in the short to medium term. The SDZ is adjacent to the City Centre at the heart of the City Region, in the most radially connected part of the State.

The proposed SDZ will support an eastward extension of Dublin City Centre and the areas involved are well-served by high-quality public transport, including Luas, DART and mainline rail commuter services, while the more long-term proposals for a DART underground station at Spencer Dock would potentially result in the lands becoming the most accessible and connected part of the city. The Samuel Beckett Bridge provides a vital link between the two locations north and south of the River Liffey. The area encompasses several major attractions, including the Convention Centre at Spencer Dock, the O₂ Arena at the Point Village and the Bord Gáis Energy Theatre at Grand Canal Dock in addition to major international employers, such as Google, Facebook, which are forging Digital-Tech clusters. These developing clusters can only be located in this location, rather than in suburban locations. The SDZ area has the potential to become a major magnet for employment and cultural and leisure uses of national importance.

Dublin City Development Plan Core Strategy

The Development Plan's Core Strategy (see fig below) designates the Docklands, including the Docklands SDZ, as a Key Developing Area (KDA) and a Strategic Development Regeneration Area (SDRA).



The Regional Planning Guidelines Settlement Strategy for the metropolitan area includes a strong policy emphasis on the need to gain maximum benefit from existing assets, such as public transport and social infrastructure, through the continuation and consolidation and increasing densities within the existing footprint of the city. It should be noted that there is only circa 503 Ha of available zoned residential land which is capable of meeting the RPGs housing unit allocation of 42,4000 for the period 2006 – 2016.

The Docklands area is one of 9 Key Developing Areas,(in addition to the inner City), which represent significant areas of the overall city with substantial development capacity and the potential to deliver the residential, employment and recreational needs of the city, such as Pelletstown, North Fringe, and Naas Road lands, whilst several will support the economic or cultural specialism's essential for the growth and diversification of the city's economy, namely, the Docklands, Digital Hub/Liberties, Grangegorman and Heuston. The table below is from the Dublin City Development Plan Table 3.3 and shows the estimated capacity of key developing areas.

Table 3.3 Estimated capacities of Key Developing Areas (DCDP 2011 - 2017)

KDAs	Housing (Estimated) Units	Zoned Commercial/Employment Lands (Estimated)
1. Inner City	6,340	475 Ha
2. North Fringe	4,000	170 Ha
3. Ballymun	3,950	60 Ha
4. Pelletstown	1,800	41 Ha
5. Park West/Cherry Orchard	2,000	121 Ha
6. Naas Road Lands	2,100	63 Ha
7. Docklands	1,950	207 Ha
8. Digital Hub / Liberties	1,200	59 Ha
9. Heuston	1,200	49 Ha
10. Grangegorman/Phibsborough	800	34 Ha
Rest of City	6,340	350 Ha
Total	31,680	1,629 Ha

Note: The estimated capacities in the Core Strategy relates to the 6 year Development Plan period, whereas the estimated capacity in the SDZ relates to eventual build-out. The 207 Ha relates to the SDRA as depicted in Development Plan Zoning Map E.

The Docklands area is also designated a Strategic Development & Regeneration Area, which are important Brownfield sites with the potential to deliver a significant quantum of mixed uses and create synergies to regenerate their respective areas. As stated above, the SDZ has been designated by Government as a growth hub of economic importance to the state, and these uses can only go in certain KDAs such as the Docklands, Digital Hub/Liberties, Grangegorman and Heuston, and not in the other KDAs such as Pelletstown, North Fringe, Naas Road Lands, and Grangegorman, which are intended for other purposes such as to deliver the residential, employment, recreational and educational needs of the city. These suburban lands are not suitable for the type of HQ and FDI economic activities which the SDZ is set up to attract. Furthermore, the City Centre, with its historic Georgian fabric, cannot accommodate the large floor plates needed to compete with the capital city region.

The Development Plan sets out a series of Guiding Principles in Chapter 16 for the North Lotts and Grand Canal Dock SDRAs. These principles promote the creation of a new urban neighbourhood with a socially cohesive community and high quality physical environment.

The core strategy of the Development Plan is to achieve the vision in a manner that is consistent with the guidance, strategies and policies at national and regional levels. In particular, the National Spatial Strategy 2002- 2020 (NSS), The Regional Planning guidelines for the Greater Dublin Areas 2010 – 2022 (RPGs - and the governments' Smarter Travel – A Sustainable Transport Future 2009 – 2020,

all guide and direct the fundamentals of the City Council housing Strategies which in turn are integrated into the overall development plan vision and core strategy for 2011 – 2017.

Section 4.4.1.2 of the DCDP sets out the approach to the Docklands area and the Port area. It recognises that significant achievements have been made to date not only in the scale of new commercial and apartment development, but also in other symbols of regeneration and new place-making such as the Point Depot (The O2) the public square and Theatre at Grand Canal Dock and the camp shires. A number of policies in the Dublin City Development Plan 2011 - 2017 (Policy SC1, RE2, and RE14), refer to consolidating the inner city and linking the critical mass of existing emerging clusters such as the Docklands areas, also promoting the role of Dublin as the National and economic engine and drive of economic recovery and growth, including the Docklands as its core economic generator. Policies also recognise that cities are crucibles of innovation and that the city centre and inner city including the Docklands area is the crucial metropolitan and national resource for innovation.

It is concluded that there are no suitable alternative lands for the particular employment specialism's and clusters for which the SDZ has been designated by the Minister, and given that the remaining zoned lands in the city are designated for other purposes.

A flood risk assessment to an appropriate level of detail has been carried out as part of the SEA which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere.

Flood risk was considered as an issue in the screening process for the Strategic Environmental Assessment that was undertaken for the Dublin City Development Plan 2011 -2017. The SDZ plan was screened in line with implementation of SEA Directive (2001/42/EC), Assessment of Certain Plans and Programmes on the Environment – Guidelines for Planning Authorities to determine whether or not a full Environmental Report would nevertheless be appropriate. It was determined that a full Environmental Report was required.

A flood Risk assessment has been carried out to an appropriate level of detail. It is recognised that Dublin City is vulnerable to flooding. The majority of the lands in the SDZ would be prone to occasional flooding and would be at risk mainly from coastal and pluvial flooding, however Dublin City Council are undertaking a number of projects to improve the defences of Dublin City.

Sources of Flooding Introduction

The main flood risks identified in the SDZ area are from coastal/tidal, pluvial and infrastructural overload or failure.

The OPW, as part of the National Flood Risk Management Policy has developed a number of information resources for the public. These resources provide information through a number of websites: (www.floodmaps.ie, www.opw.ie/hydro, www.flooding.ie.)

The Preliminary Flood Risk Assessment for the Republic of Ireland was published in late 2011. This was a requirement of the EU Floods Directive (2007/60/EC). The objective was to develop a method to indicatively assess potential future flood risk to enable the identification of 'Areas of Potentially Significant Flood Risk (APSRs) using available data. These APSRs will form the focus of the more detailed Catchment Based Flood Risk Assessment and Management (CFRAM) Studies.

Catchment Flood Risk Assessment and Management Studies.

CFRAMS is a Catchment Flood Risk Assessment and Management Study and its purpose is to manage flood risk to the area being studied. CFRAM Studies are to be carried out for the whole of Ireland, for larger rivers and streams and all coastal areas.

The OPW commissioned RPS to undertake the Eastern Catchment Flood Risk Assessment and Management Study (Eastern CFRAM Study) in June 2011. The study covers four units of Management including HA09 (Liffey-Dublin Bay). The principle river in HA09 is the River Liffey which rises in the Wicklow Mountains and flows initially towards Newbridge, then turn north east towards Lucan and finally flows eastward through Dublin City, directly to Dublin Bay. The Dodder CFRAM

Study is one of four pilot studies in Ireland and is the first comprehensive study undertaken with a view to producing a single flood risk management strategy for the whole of the Dodder catchment.

Within HA09 there are 16 discrete Areas for Further Assessment (AFA) in addition to Dublin City under the Eastern CFRAM study. Dublin City AFA is defined by four High Priority Watercourses (HPW), the Liffey, Camac, Poddle and Santry Rivers (as well as the Dodder and Tolka from previous studies). The principal source of flood risk within HA09 is fluvial flooding at 12 of the 16 AFAs. Tidal Flood risk influences one AFA (Sutton and Howth North) with 3 other AFAs within HA09 (Sutton & Baldoyle, Clontarf and Sandymount) considered to have some element of combined fluvial/coastal flood risk.

Dublin City with its specified High Priority Watercourse (HPWs) is also subject to combined fluvial/tidal flood risk. Many of the watercourses within the Greater Dublin Area were previously studied as part of the Greater Strategic Drainage Study (GSDSDS).

Sources of Flooding – Docklands SDZ

- **Flooding from Fluvial & Sea Level Rises / Coastal Flooding**

The area within the SDZ boundary is tidal dominant with little fluvial influence. Based on the Dublin Coastal Flooding Protection Study (April 2005) it has been determined that the dominant flooding mechanism is coastal to the Rory O'More Bridge on the Liffey (2.5km upstream of the proposed Docklands SDZ) and London Bridge on the Dodder.

Following recent extreme tide and flood events, and also predictions of a rise in sea levels due to climate change, Dublin City Council carried out a review of the capacity of the existing coastal flood defences to provide protection against tidal flooding or urban areas resulting from extreme weather conditions in the short to long term. The review was carried out as part of the Dublin Coastal Flooding Protection project and was published in 2005. The Dublin Coastal Flood Protection Report prepared identified a number of locations where the current level of flood defences was below that required for the future predicted sea levels. As described below in section *Indicative Flood Zone Maps*, some works have since been completed with further works in the final design stages in this area since the completion of the Dublin Coastal Flooding Protection project.

In the case of Coastal flood risk, the Final Report of the Eastern CFRAMS Liffey Study, currently underway, will determine the 1000 year extent and by doing such identify the location of zone B and zone C. Previous studies identified the 200 year extent, identifying zone A. These preliminary flood zone maps are expected to be complete in January 2014 after which there will be engagement between the local authorities and the OPW, followed by a three month period of public display and consultation. The CFRAMS report will ultimately be used to identify specific measures required in the area. In the interim, the early warning systems outlined above in conjunction with capital works such as the South Campshire Flood Protection Project (currently at advanced design stage), existing Spencer Dock Gate and existing flood defences along the Dodder provide alleviation to flood risk in the area. As it is proposed to completely protect the proposed SDZ area from coastal flooding and there is no risk of fluvial flooding to the 0.5% AEP level plus 50 years of forecast global warming, there will be no depth, hazard or velocity maps for this area once protected.

- **Surface Water Flooding**

Surface water flooding occurs when the local drainage system cannot cope with the rainfall. The rainwater does not drain away through the normal drainage systems or soak into the ground but lies on or flows over the ground instead. Surface water flooding is unpredictable as it depends on a number of factors including ground levels, rainfall and the local drainage network. There are a number of schemes ongoing aimed at improving the infrastructure within the SDZ boundary. These include the

- Recently constructed Spencer Dock Pumping Station and associated rising main and new services tunnel across the Liffey.
- Contract to bring flows from the East Road Pumping Station to Spencer Dock Pumping Station, this has been tendered

- Contract for large combined sewers along Sheriff Street and Castleforbes Street which is currently at detailed design.
- Preliminary design for Phase 2 of the Grand Canal area is complete
- Greater Dublin Regional Project (GDRDP), City Centre Sewerage Scheme, Preliminary Stage.

- **Groundwater Flooding**

Ground water flooding is usually a result of water rising up from the underlying rocks or from water flowing from abnormal springs. This tends to occur after much longer periods of sustained rainfall or very high tides. Higher rainfall means that water will infiltrate into the ground, and causing the water table to rise. Groundwater flooding tends to occur in low lying areas, where with additional groundwater flowing towards these areas, the water table can rise to the surface causing groundwater flooding. Most of the ground within the SDZ is on reclaimed land making most of it is relatively impermeable. However some sections which have good soil permeability are closely linked to tide level plus normal groundwater level on top of that. There are many lenses of permeable material which can be joined up by the drainage network. Basement construction should provide impermeable solutions with possible pumping for seepage. A lot of the land is contaminated and a detailed SI is required before any development and there is also a requirement for a detailed disposal plan, refer to *Desktop Study and Qualitative Risk Assessment of Potentially Contaminated Undeveloped Sites within North Lotts and Grand Canal Dock, 14-11-2012, Flannery Nagel Environmental Ltd.* which outlines remediation measures to be followed.

- **Poulaphuca Dam**

It should be noted for the Flood Risk Assessment that there is a minor risk of infrastructural failure associated with a possible dam burst at Poulaphuca, which dams the River Liffey. This dam is one of four major sources of Dublin's Water Supply.

- **Flooding from the Canal Water Bodies**

The Royal Canal and Grand Canal outfall into the River Liffey within the SDZ study area. In terms of flood risk from the various canals within the plan area, they already overflow into other rivers and areas further inland before they get into the Docklands area of the city and are likely to have low flows in this zone. There was flooding issues at the Royal Canal within the SDZ boundary due to the tide. Flood gates were fitted at Spencer Dock to alleviate this problem.

- **Pluvial Flood Risk**

Pluvial Flooding results when heavy often sudden rainfall, causes flooding before it can infiltrate the ground, or enter a natural or man-made drainage system or watercourse or enter a conveyance system because the system is already full to capacity. Pluvial flooding is associated with Surface Water Flooding which is a combination of true pluvial flooding, sewer flooding (due to heavy rainfall) groundwater flooding and flooding from urban watercourses. An Extract Pluvial Type 1 Flood Depth Map for the 100 year 180 minute storm is given in the Flood Map section (see Figure D).

In the case of Pluvial flood risk, the 100 year 3 hour map from the city wide SAFER project has identified the very small localised areas at risk. These will be catered for by managing individual developments at planning stage which will prevent any cross-boundary flood water movements.

Dublin City Council is in the process of implementing the Flood Resilient City Project and within this a Flood Risk Management Strategy. This strategy will provide further guidance in spatial planning and appropriate flood measures, if required In accordance with the requirement of the EU Floods Directive (2007/60/EC) the Office of Public Works (OPW) is currently responsible for co-ordinating the development of Flood Risk Management Plans (FRMPs) across Ireland.

Indicative Flood Zone Map,

In the absence of detailed CFRAM studies for the River Liffey, Dublin City Council are using the best information available. The indicative Flood Zone Map (for coastal/fluvial) is based on information from

the Dublin Coastal Flooding Protection Project (DCFPP) 2005. This provides information on the 1 in 200 year flood event for Coastal Flooding or the equivalent of Zone A in the OPW classification.-

Subsequent to the completion of the Dublin Coast Flooding Protection Project (DCFPP) 2005, flood protection works have been carried out in this area.

- The Spencer Dock flood gates were installed in the canal and this now protects the Zone A area north of the Liffey, see Figure A & Figure B attached. This was designed to a level of 3.65m OD Malin. This includes 200mm for climate change and 250mm freeboard.
- Works have also been carried out with further works ongoing along the Dodder River south of the Liffey. These again are shown on Figure A & Figure B. and include vehicle ramps and wall and balcony strengthening.
- A wall will be constructed along the campshire south of the Liffey. This is currently at detail design stage, see Figures A & C. This wall will be 3.7m OD Malin in height. This includes an allowance of 200mm for climate change and 300mm freeboard.
- Following tidal flooding of 1st February 2002 footpath levels were raised by 100mm at the low points on the south campshires.

It is not possible to clearly identify the 1 in 1000 year flood event, so Zones B and C cannot be accurately delineated until flood map outputs from the Eastern Region Catchment Flood Risk Assessment Management Study are received around the end of 2013, however any development adjacent to Zone A must be considered to be in Zone B up to the 4.0m Contour level, unless disproved by further analysis.

In the absence of catchment flood risk assessment and management study (CFRAM) for the River Liffey, information on flood risk was obtained from a number of sources outlined below:

- Development plans, policies and recent planning applications were studied.
- Responses from statutory bodies during the consultation process were examined, with particular reference to concerns relating to flood risk.
- The nature and location of the area in the vicinity of the proposed development was described in terms of the existing hydrological environment.
- The existing site geology and hydrogeology was examined in terms of how it relates to the flooding history and the potential for drainage methods of the proposed scheme.
- All existing historical information on previous events, studies and surveys, was examined as made available from the Office of Public Works (OPW) flood hazard mapping website.
- The Greater Dublin Strategic Drainage Study flood maps which show the one in a hundred year flood events.

Flood Zones

Flood Zones are geographical areas within which the likelihood of flooding is in a particular range and they are a key tool in flood risk management within the planning process as well as in flood warning and emergency planning. There are three types or levels of flood zones defined in the DECLG and OPW Guidelines on Flood Risk Management:

- Zone A – High probability of flooding – Where the average probability of flooding from rivers and sea is highest (greater than 1% annually or more frequent than 1 in 100 years for river flooding or 0.5% annually or more frequently than 1 in 200 years respectively for coastal flooding). Most forms of development are deemed to be inappropriate here, only water compatible development including essential infrastructure which cannot be located elsewhere, would normally be allowed.
- Zone B – Moderate probability of flooding – (Risk between 0.1% annually or 1 in 1000 and 1 % annually or 1 in 100 years for river flooding, and between 0.1% or 1 in a 1000 years and 0.5%

annually or 1 in 200 years for coastal flooding) highly vulnerable development including hospitals, residential care homes, Garda, fire and ambulance stations, dwelling houses and primary strategic transport and utilities infrastructure would generally be considered inappropriate unless the requirements of the justification test is met. Less vulnerable development such as retail, commercial and industrial uses, short term let for caravans,/camping, and secondary strategic transport and utilities infrastructure might be considered appropriate in this zone. Less vulnerable development should only be considered in this zone if adequate lands or sites are not available in Zone C and subject to a flood risk assessment to the appropriate level of detail to demonstrate that flood risk to and from the development can or will be adequately be managed.

- Zone C – Low probability of flooding – (Risk is less than 0.1% annually or 1 in 1000 years for both rivers and coastal flooding) Development is appropriate from a flood risk perspective (subject to flood hazard from sources other than rivers and coast meeting normal proper planning considerations).

Residual Risks (After Flood Defences are in Place)

- *Fluvial*: Possibly the 0.1% AEP from the Liffey CFRAMS will produce some risk in combination with a high tide, but this is extremely doubtful.
- *Coastal*: The 0.1% AEP tide level will be catered for initially in the global warming addition to flood defence levels. 3 day warning of any such significant tidal event will be possible to give everyone plenty of notice. Tides are monitored 365/24/7 by DCC. Closing of tide gates in at risk areas is an integral part of DCC's Emergency Plan.
- *Pluvial*: Significant citywide rainfall events can be forecast 24-48 hours in advance, giving plenty of time to activate local flood plans. Monitoring of levels in local sewers in flood prone areas is another DCC initiative which can be incorporated into local flood plans.
- Thunderstorm events are the most difficult to forecast due to the short notice of such events. The localised risk from these can be addressed by having specific planning conditions for the small zones identified on the 100 yr – 3hr pluvial flooding map.

Flood Risk Management Strategy

Dublin City Council and its partners such as the OPW have implemented several measures and projects to address the main flood risks in the docklands area to allow for continuing development in the area. These include:

The Triton and Tidewatch early warning systems, based on sensors in Dublin Bay providing continuous information on sea-level changes and then sending alarm messages to relevant personnel in the Council. The former provides a 1 day advance warning of high tides and the latter provides a 3 day advance warning of same. These early warning systems then provide the necessary information to inform the subsequent emergency response strategy.

- Dodder Flood Protection Scheme Advance works, consisting of raising the flood defence walls along the tidal stretches of the Dodder see Figure A
- Flood Gate at Spencer Dock, see Figure A
- South Campshire Flood Protection Project: this is at design stage and involves the construction of a flood wall along the south quays extending as far downstream as Sir John Rogerson's Quay.
- The Dodder CFRAMS which carried out a major study on the Dodder River. This resulted in recommendations for further flood protection measures along the river.
- The Eastern Region Catchment Flood Risk Assessment and Management Study (Eastern CFRAM) which includes the Liffey and is ongoing
- Newly constructed Pumping Station at Spencer Docks (SDPS, due to be commissioned this year) with associated rising mains and a new services tunnel under the river Liffey. This new infrastructure reduces the risk of flooding from the foul wastewater network in the area.

- New trunk sewers to serve the SDPS.
- New drainage infrastructure in south Docklands - As part of Phase 1 of the DDDA developments in the area an entire foul and surface water network was laid. Separation of flows reduces potential flooding and contamination of any floodwaters.
- City Centre Sewerage Scheme: this catchment study is currently being progressed and will result in recommendations for new and upgraded infrastructure in the city centre and docklands area. Again separation of storm water and foul flows will reduce the potential flooding and contamination of floodwaters.
- A Flood Emergency Plan is in place in Dublin City Council (a Sub-plan of Dublin City Council Major Emergency Plan).
- This plan involves rescue agencies such as the Civil Defence and the Fire Brigade, both of which organisations have extensive experience and resources available, in terms of trained personnel and high bodied vehicles suitable for navigating through flood waters.
- There will be a net beneficial impact in terms of reduced SW run-off from the current situation where the SDZ area is practically 100% hard standing with high run-off. The implementation of SuDS and SW storage together with new SW pipelines to remove SW from the existing combined drainage network, will reduce pluvial flood risk both within the SDZ area and to adjacent areas.
- It is not the intent of DCC that flood prevention measures are delegated to individual developments. Rather, it is clearly outlined in the SDZ Report (for example, in the section on Infrastructure) that major capital projects, such as the Campshires Flood protection project and new SW pipelines in public roads, also require implementation in the area. As is normal in these cases, such projects are progressed in conjunction with other state stakeholders such as the OPW (on the CFRAMS Study and Campshire project) or the DECLG (on drainage infrastructure).
- It is normal practice that the state provides the necessary infrastructure within the public realm and the private sector mirror that by complying with planning requirements that complement that infrastructure within their individual developments.

Settlement Strategy and Flood Risk

It is the strategy of Dublin City Council in accordance with the Guidelines to reduce the potential risk to people, property and the environment caused by flooding, through a hierarchy of avoidance, followed by substitution of lower vulnerability used and, only if avoidance and substitution are not possible, reduction and management of the risks through a variety of techniques. Dublin City Council will continue its policy to steer new developments on Greenfield sites to areas with the lowest probability of flooding. Areas with moderate or high risk will require site specific Flood Risk Assessments in any new planning applications, and a subsequent Justification Test.

From an initial examination of the flood risks in the Docklands SDZ, it is noted that coastal, and pluvial flooding are the main risks in the plan area. This area is zoned for development in the Dublin City Development Plan 2011 -2017, and there are a number of key sites within the SDZ boundary due for redevelopment, some of which are within the Flood risk areas.

Flood Resilient Design

Generally the approach to deal with flood protection would involve raising the ground floor levels above the level of extreme high tides. However in some parts of the plan area, which are already developed, ground floor levels for flood protection could lead to floor levels being much higher than adjacent streets, thus creating a hostile streetscape for pedestrians. This would cause problems for infill development sites if floor levels were required to be significantly higher than those of neighbouring properties. In this regard for the key sites in the plan area it has been recognised that ground floor levels below predicted high tide levels could be allowed, in limited circumstances, on a site by site basis. However, if this is the case then these would be required to be flood resistant construction using water resistant materials, and electrical fittings places at higher levels. For areas in high risk areas it would also be necessary to impose planning restrictions in these areas. Residential Uses would not be permitted at ground flood levels in high risk zones.

Planning policies also play a major part in minimising flood risk, Dublin City Council were the first Irish local authority to require storm water management from developers in 1998 and then subsequently implemented a Sustainable Drainage Systems (SuDS) Policy in 2005. In essence these planning policies require developers to reduce the storm water run-off from newly paved areas to what it was before the development took place. This will ensure that development can take place in a sustainable manner without increasing the risk of flooding.

Almost all of the docklands area is categorised as brown field, (i.e. previously reclaimed and developed in the past). In terms of minimising flood risk at the regional level, this presents a significant case for targeting economic investment to the area as the drainage infrastructure is in place and can be readily enhanced to address particular challenges rather than such investment going to green field sites on the outskirts of the city which would result in extensive new hard paved surfaces with additional stormwater run-off generated.

In relation to basements and ground level access protection the following Flood Resilience and Adaptation Measures are recommended:

Doorway and access threshold levels are an important factor in determining the susceptibility of domestic and commercial properties and below ground infrastructure to pluvial and other types of flooding. This can be especially important in flat areas where although the depth of ponding may be relatively shallow it can be extensive and potentially affect many properties if doorway and access thresholds are close to street level or even below street level. For low doorway accesses to domestic properties raising of the threshold step may be practical in some instances but not always – in such circumstances temporary door-guards should be considered but these will require advance warning for installation.

Doorway accesses to public, commercial and ritual properties are often at ground level to facilitate access. Shallow ramping may be sufficient to keep pluvial floodwater out of the building.

Vehicular accesses may also ramp down to underground car parks or basement loading areas for example. Again raised ramping across the entrance may be sufficient to mitigate the risk.

Drainage augmentation across entrances may assist but in itself may not be sufficient to deal with surface flows arising from high intensity rainfall.

Particular care should be taken where there are street level accesses to below-ground infrastructure such as underground or low-level transportation systems – in such circumstances rapid inundation could pose a threat to life as well as potentially causing major disruption and damage.

Access protection should be considered as a potential 'early win' particularly for one-off situations where shallow ramping is feasible and relatively inexpensive to install. If the number of properties with low thresholds is extensive then provision of financial incentives to support property resistance measures can be considered, however no centrally funded scheme is yet available for this yet.

Conclusions and Recommendations

Having regard to important status of Docklands SDZ, which is a major transportation hub, the existence of an already built up area, close to the city centre, the existing planning permissions already granted in the area, and also the key sites for redevelopment, the designation of development of lands contiguous to existing zoned lands and the lack of availability of alternative lower flood probability areas, the flood management measures already in place, it is considered that the development of the lands in flood risk areas satisfies the justification test as set out in the Planning System & Flood Risk Management Guidelines for Planning Authorities, November 2009.

All Planning applications for proposed development within the SDZ area should include a site specific flood risk assessment (FRA).

Until the CFRAM Studies are completed and the flood protection and management options are finalised, the flood map should only be taken as indicative. All planning applications will be required to submit a site specific flood risk assessment addressing risks from all sources of flooding, using the best available data. All new development will be required to comply with the Greater Dublin Strategic Drainage Study for surface-water management, with possible provision for the CFRAMS High End

Future Scenario. This will ensure that there is no increase in flood risk to properties downstream as a result of future development. In addition, in order to mitigate against the effects of flooding to new development, floor levels should be set to recommended levels. It is anticipated that specific recommendations for floor levels may issue from the CFRAMS Study. In the meantime, a precautionary approach should be taken of the 100 year fluvial flood level plus a minimum of 10% increase in rainfall intensity plus 300mm freeboard. A floor level of 4.0m Malin Head is required for all residential accommodation.

An assessment of the effects of existing development within the plan area on flood risk to properties downstream will be undertaken, and where possible, recommendations made in relation to possible retrofitting of additional flood storage areas within the study area in order to bring existing development in line with current best practice flood management methods. This may result in the creation of areas of multi-functional recreational space within the SDZ lands using principles of sustainable drainage design.

Flood Risk Management Objectives (See Planning Scheme)

Chapter 4.5

- SI6: To require all proposed developments to carry out a site specific Flood Risk Assessment in accordance with the Departmental Guidelines on Flood Risk Management and the Strategic Flood Risk Assessment of this plan, Appendix 1. The flood risk assessment shall accompany the planning application and should be sufficiently detailed to quantify the risks and the effects of any residual mitigation/adaptation together with the measures needed to manage residual risks.
- SI7: To require all developments in the SDZ area to comply with Flood Risk Management Guidelines as well as in accordance with the prevailing City Development Plan and the national standards at the time of application.
- SI8: To require that all new buildings be designed using Flood Resilient Construction methods. A statement shall be submitted with each FRA to show how it is intended to comply with the above.
- SI10: That all new developments shall be required to comply with the standards set out in the Greater Dublin Strategic Drainage Study (GSDS).
- SI11: To achieve best practice and innovations in SuDS design as part of the planning scheme including the successful co-ordination of surface water management with ecology and amenity functions of open space and landscaped areas. All planning applications shall be accompanied by a surface water drainage plan which will include proposals for the management of surface water within sites, protecting the water quality of the existing water bodies and groundwater sources, and retrofitting best practice SuDS techniques on existing sites, where possible.

Chapter 4.11

- GI4: To increase the provision of green landscaping including tree planting on streets within the SDZ area and to improve amenity, increase opportunities for wildlife and contribute to improvements in air and water quality and water attenuation.
- GI8: To pilot and test new green infrastructure installations in the public realm to boost biodiversity and improve surface water management.
- GI9: To support the development of soft landscaping in public open spaces, where feasible in accordance with the principles of Sustainable Urban Drainage Systems.

Chapter 5.4.8

- A minimum level of 4.0 OD will be required for residential development and resilient design should be incorporated to manage flooding below this level.

Chapter 6.1.2 (c)

- The infrastructure requirements for the City Block including connections to the strategic network, together with a programme of installation works and responsibility for delivering infrastructure, such that each application can demonstrate the means by which the necessary infrastructure can be installed prior to the occupation of a given unit. Flood management and soil remediation measures are to be provided as necessary as part of development.

See also Appendix 2 (Planning Scheme) - SuDS Measures for New Developments

Disclaimer

It is important to note that compliance with the requirements of *The Planning System and Flood Risk Management - Guidelines for Planning Authorities, 2009*, and of the Floods Directive 2007 60/EC is a work in progress and is currently based on emerging and incomplete data as well as estimates of the locations and likelihood of flooding. In particular, the assessment and mapping of areas of flood risk awaits the publication of Catchment-Based Flood Risk Assessment and Management Plans [CFRAMP]. As a result, this guide for Flood Risk Assessment is based on this available information and may require revision as new information becomes available.

Accordingly, all information in relation to flood risk is provided for general policy guidance only. It may be substantially altered in light of future data and analysis. As a result, all landowners and developers are advised that Dublin City Council can accept no responsibility for losses or damages arising due to assessments of the vulnerability to flooding of lands, uses and developments. It remains the principal responsibility of owners, users and developers to take all reasonable measures to assess the vulnerability to flooding of lands in which they have an interest prior to making planning or development decisions.

The indicative flood map does not show indicative flood hazard associated with any of the following:

- Extreme fluvial dominated combinations within the pluvial flows to the river
- Extreme pluvial events
- Blocked drains
- High ground water level conditions
- Other unforeseen events e.g. bridge/culvert collapse etc.

Dublin City Council makes no representations, warranties or undertakings about any of the information provided in this local area plan including, without limitation, on its accuracy, completeness, quality or fitness for any particular purpose. To the fullest extent permitted by applicable law neither Dublin City Council nor any of their members, officers, associates, consultants, employees, affiliates, servants, agents or other representatives shall be liable for loss or damage arising out of, or in connection with, the use of, or the inability to use, the information provided in this plan including, but not limited to, indirect or consequential loss or damages, loss of data, income, profit, or opportunity, loss of, or damage to, property and claims of third parties, even if Dublin City Council has been advised of the possibility of such loss or damages, or such loss or damages were reasonably foreseeable. Dublin City Council reserves the right to change the content and / or presentation of any of the information provided in this report at their sole discretion, including these notes and disclaimer. This disclaimer shall be governed by, and construed in accordance with, the laws of the Republic of Ireland. If any provision of this disclaimer shall be unlawful, void or for any reason unenforceable, that provision shall be deemed severable and shall not affect the validity and enforceability of the remaining provisions.

UNCERTAINTY

Although great care and modern widely-accepted methods have been used in the preparation of this plan there is inevitably a range of inherent uncertainties and assumptions made during the estimation of design flows and the construction of flood models.

FLOOD MAPS

Notes in Relation to Flood Maps (see Figures A, B, & C below)

- 1) These maps present tidal flood hazard for a 200 year return period event (shown as flood extent) for the category shown in the legend and as described in the notes below. The justification of these maps and the information presented on them arises through the flood risk assessment work undertaken as part of the Dublin Coastal Flooding Protection Project, completed by Royal Haskoning for Dublin City Council and Fingal County Council in April 2005.
- 2) Before use is made of these maps the following notes should be read carefully to avoid incorrect interpretation of the information presented. The maps must be used in conjunction with and in acceptance of the information, exclusions and disclaimers set out in these notes.
- 3) Tidal Flood Hazard is taken to mean areas at risk from combinations of
 - a. Extreme tide levels with wave action as appropriate along the open coastline
 - b. Extreme tide levels with a component of fluvial discharge as appropriate within tidal reaches on the river.
- 4) Definition of flood hazard areas and protected area in the context of the information presented on these maps.
 - 1/200 Flood Hazard Area/Extent – Indicative flood hazard extent for a 200 year event taking into consideration the effect of the existing defences and the possibility of plausible failure scenarios of those defences at any given location
 - Protected Area (Based on 200 year event) – The indicative area within the 1/200 Flood Hazard Area that is protected or defended against flooding for a 200 year event as a result of the existence of the current defences, i.e. the existing defences remain intact then the area shown green hatched with light grey background will be protected against flooding for the 2000 year event. The area is a protected flood hazard area.

Note: The residual blue area within the 1/200 Flood Hazard Area (not overlain with green hatch and light grey background) shows the indicative flood area extent taking into account the effect of the existing defences, i.e. the standard of protection (SoP) of some or all of the defences is less than 200 years. The blue area is not defended to a 200 year event.

For more details of the definitions and a description of how the areas have been assessed for the production of these maps, see the definitions presents at the beginning of these maps and also the Flood Hazard Manual produced to accompany these maps.

A 200 year extreme tide level at Dublin Port has been assessed as 3.14 m ODM (5.64 LAT)
- 5) The work undertaken and hence the information presented on these maps is relative to the year 2005.

As such none of the categories presented make any allowance for climate change.
- 6) These type 1 maps show the indicative extent of flooding for the categories presented in note 4 and also the legend
- 7) The maps do not show indicative flood hazard associated with any of the following:
 - Extreme fluvially dominated combinations within the tidal reached of the river.
 - Extreme pluvial events.
 - Blocked drains
 - High ground water level conditions
 - Other unforeseen event, e.g. bridge collapse etc.
- 8) It should be noted that a residual risk remains for the other areas (light grey) located outside those defined as being at risk from tidal flooding on this map, as a result of flooding through the mechanism identified in note 7 above.
- 9) For more detailed description of the information presented on these flood hazard maps, see the Flood Hazard Map Manual.
- 10) All level information presented on these maps related to ordnance datum Malin Head, (MODM) for Conversion from mODM to mLAT relative to Dublin Bay ass 2.51m
- 11) These maps are to be used and read in conjunction with the DCFPP final report and the Flood Hazard Map Manual produced to accompany them. The manual presents details of the work

undertaken to produce the maps together with the constraints and assumptions as appropriate for given locations.

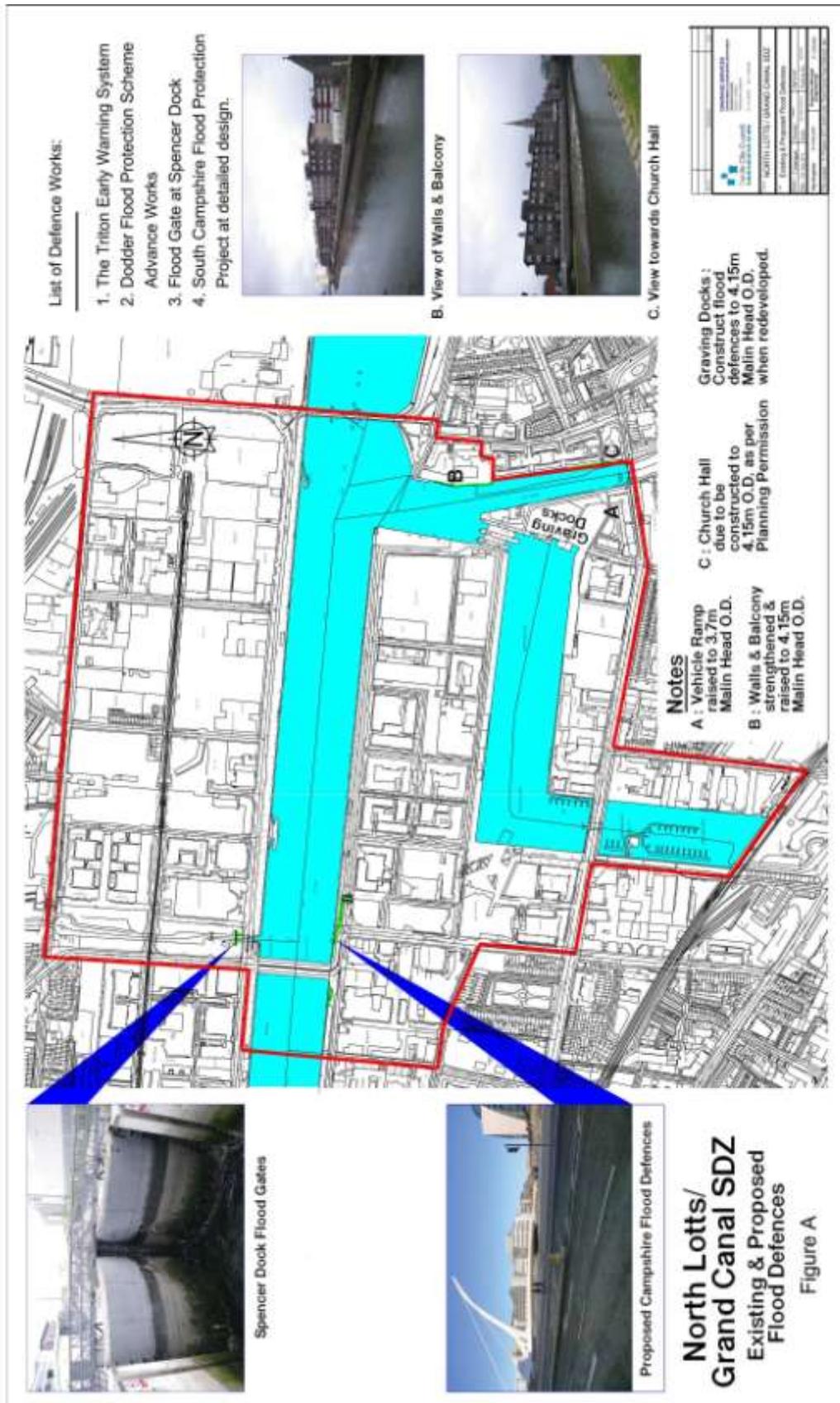
- 12) Whilst the utmost care and quality control has been undertaken in the interpretation of level data and modelling results for the production of these maps, the information presented is indicative only and is subject to the normal uncertainties associated with ground level and modelling accuracy. Accordingly, the maps should not be used in isolation for decision making purposes and should be read and interpreted by suitably experienced persons using all associated and additional data available for the area to aid in the decision making process.
- 13) Dublin City Council makes no representations, warranties or undertakings about any of the information in these maps, including without limitations, their accuracy, their completeness or their quality or fitness for any particular purpose.
- 14) Dublin City Council reserves the right to change the content and /or presentation of any of the information contained in these maps at its sole discretion, including these notes and disclaimers. Use of any of the maps for whatever purpose, signifies his or her agreement to be bound by these notes and disclaimers.

Figure 3 South Campshire Flood Cell



Source: South Campshire Flood Protection Project, Georges Quay, City Quay & Sir John Rogerson's Quay, Dublin 2, EIS, Vol. 2 of 4, 201

Figure A – North Lotts – Grand Canal Dock – Existing and Proposed Flood Defences



**North Lotts/
Grand Canal SDZ
Existing & Proposed
Flood Defences**

Figure A

Figure B – North Lotts – Grand Canal Dock SDZ - Existing Flood Zone Map

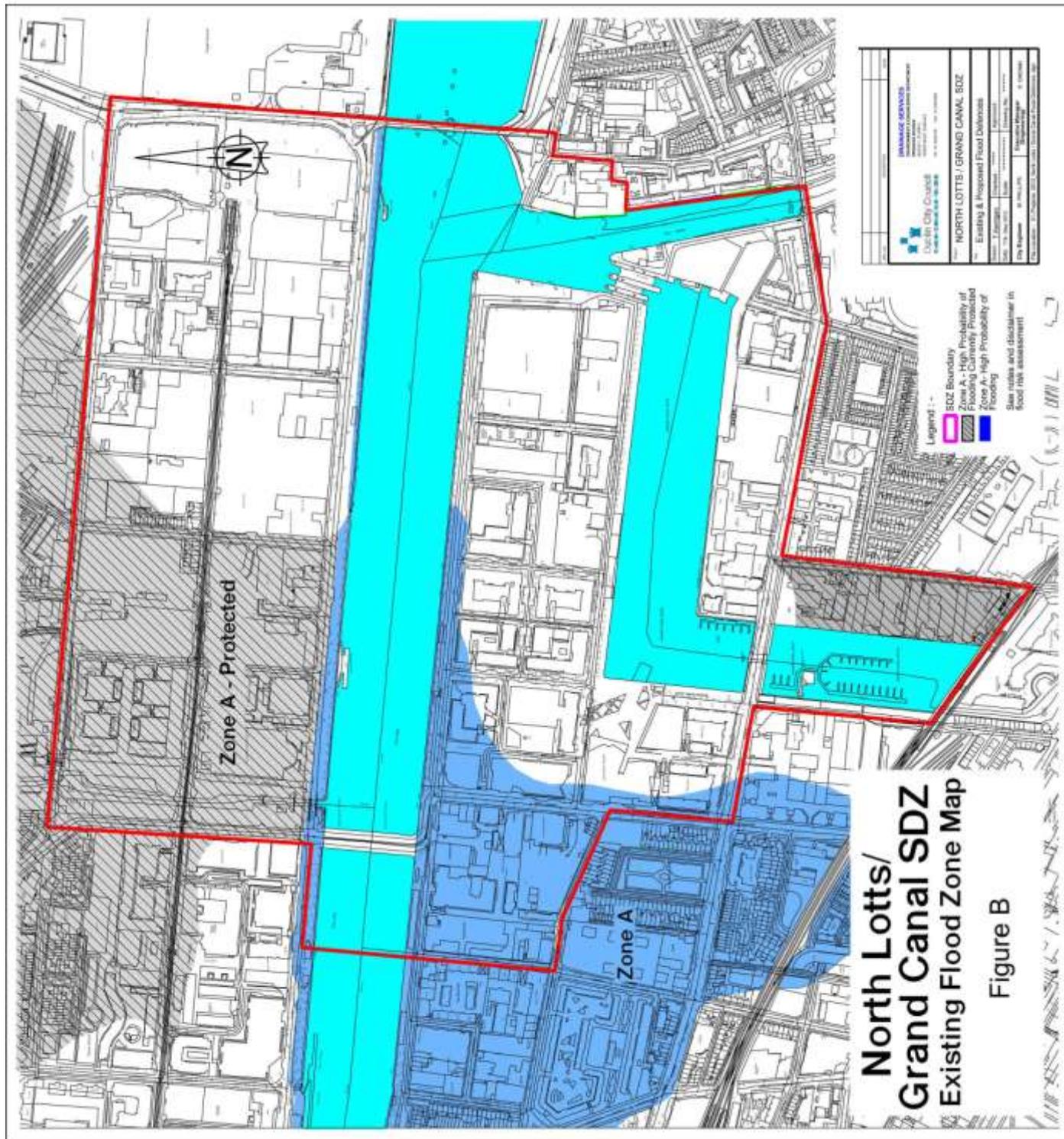


Figure C – North Lotts and Grand Canal Dock SDZ - Proposed Flood Zone Map

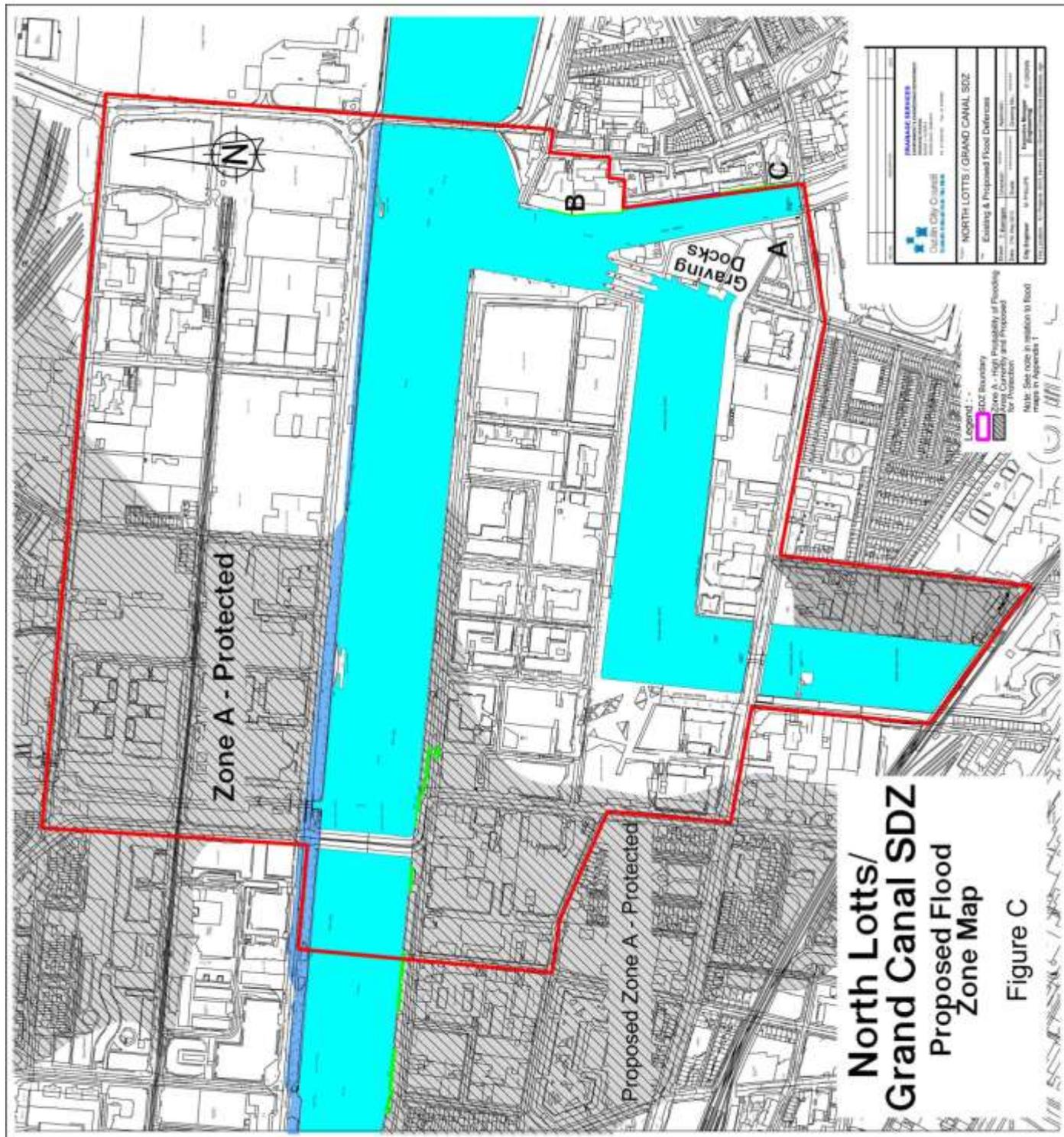
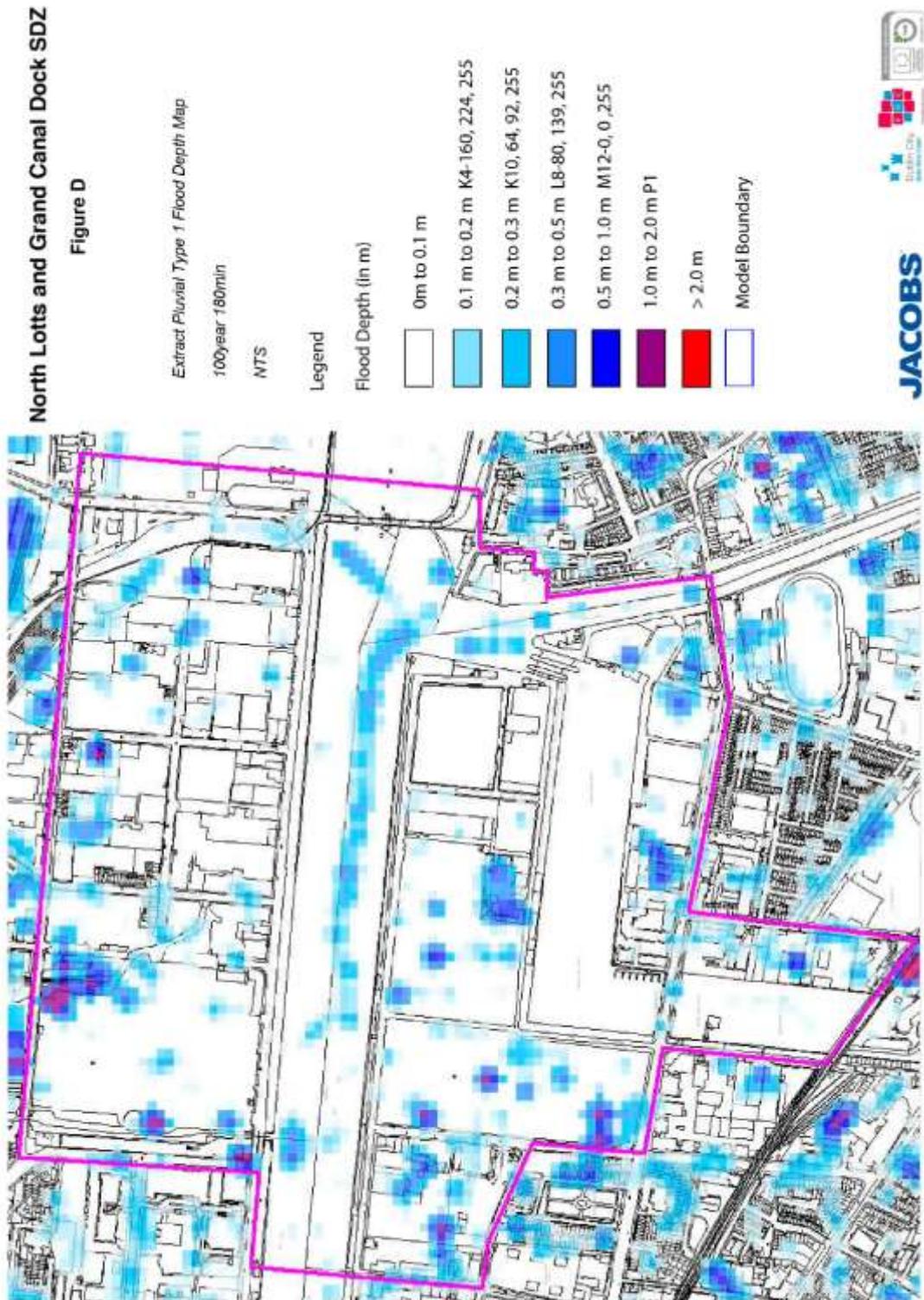


Figure D – North Lotts and Grand Canal Dock SDZ – Extract Pluvial Type 1 Flood Depth Map



Bibliography

- Greater Dublin Strategic Drainage Study, Regional Drainage Policies, Technical Document (March 2005)
- DoEHLG Guidelines for Planning Authorities (DoEHLG & OPW), The Planning System and Flood Risk Management (2009)
- Dublin Coastal Flooding Protection (April 2005)
- River Dodder Catchment Flood Risk Assessment and Management Study (Dodder CFRAMS) 2012
- Assessment of Potentially Contaminated Undeveloped Sites within North Lotts & Grand Canal Dock, Flannery Nagel Environmental Ltd., November 2012
- Flood Emergency Plan – A sub-plan of Dublin City Council Major Emergency Plan, January 2013
- Easter Catchment Flood Risk Assessment Management Study (Eastern CFRAMS) (Ongoing)

APPENDIX 2 SuDS MEASURES FOR NEW DEVELOPMENT

SUDS in Development Sites

Green Roofs: As well as providing environmental benefits, the installation of green roofs allows for more efficient use of space. Properly placed roof terraces and gardens visible from offices or residential units within a building enhance the aesthetic experience of the building and open up additional space for amenity, recreational and commercial use. The internal courtyard and 5th floor terrace of the Gibson Hotel at the Point Village provide wonderful examples of the design of multifunctional space.

A green roof, roof terrace and restaurant/bar are currently being retrofitted on the roof of the Grand Canal Hotel in the Docklands, with all surface-water runoff being directed through the planted areas. This means that the development achieves full compliance with the interception storage requirement of the GSDS, despite having 100% site coverage.

Rainwater Harvesting: Rainwater harvesting for use in toilets and for irrigation of planted areas should also be considered. A well-designed green roof and rainwater harvesting two-stage treatment train could provide a close to optimal solution for the management of surface-water in developments with a high percentage of site coverage as it creates the conditions for the possibility of achieving zero runoff during summer storms depending on saturation levels and use of harvested water.

Permeable Surfacing: Where courtyards and walkways in landscaped areas are proposed, it is suggested that permeable surfacing is considered. A variety of new durable permeable surfacing solutions is now available on the market. Where tidal ingress may be an issue in quayside development, a suggested solution would be to retain surface-water drainage from the permeable surfacing in a tanked or piped retention facility for possible re-use.

Soakaways and Rain Gardens: The incorporation of soakaways and rain gardens in landscaped areas can provide additional storage for the drainage of surrounding impermeable paved and roofed areas.

Rilles: These open drainage channels can be used as an alternative to traditional piped systems, are easier to maintain and can be used to improve public awareness of natural water cycles.

SUDS in the Public Realm

Permeable Surfaces in Pedestrian Areas: Permeable surfacing should be incorporated into suitable sections of public streetscapes. This type of surfacing is suitable for lightly trafficked areas and where future maintenance of underground services will not be affected. Details of permeable surfacing proposals should have the approval of both the Roads & Traffic Department and the Drainage Department of Dublin City Council as proper co-ordination of future maintenance requirements is essential.

Bioretention Areas: Rainfall from impermeable areas, or overflow from permeable surfaces could be directed to bioretention areas or suitable designed tree-pits at kerb edges.

Rilles: See above. Rilles could be used to direct surface-water overland flow to the nearest existing surface-water outfall or to sunken squares or detention areas in green spaces.

Sunken Squares: Sunken Squares can be used as amphitheatres or recreational areas and designed to have additional storm-water management functionality by storing overflows from the primary drainage stage during extreme storm events. A slow drain-down mechanism should be incorporated so that flows can be directed back into the drainage network following a high tide or extreme rainfall

event. The CIRIA document "Retrofitting to manage surface water" provides guidance on the use of sunken squares as water management mechanisms.

APPENDIX 3 – PLANNING SCHEME COMPLIANCE MATRIX

The Planning and Development Act, 2000 (as amended) requires that development within a Strategic Development Zone (SDZ) be in accordance with the relevant Planning Scheme and that any proposed development which is deemed to comply with the Planning Scheme must be granted planning permission.

Planning permission shall be granted where the development, if carried out in accordance with the application or subject to any conditions which the planning authority may attach to a permission, would be consistent with the Planning Scheme. Planning permission shall not be granted for any development which would not be consistent with such a Planning Scheme.

It is a requirement of the Planning Scheme that prior to the submission of a planning application for development within a City Block, a City Block Rollout Agreement (CBRA) shall be entered into between the developers/ owner(s) and the SDZ Agency in order to secure the co-ordinated delivery of the mix of uses and supporting infrastructure necessary to deliver the objectives of the Scheme within each City Block, unless an individual planning application for the City Block addresses these matters. The SDZ Agency may enter a Joint City Block Rollout Agreement with the developers/owner(s) of the adjacent underdeveloped City Blocks, in order to achieve the objectives of the hub within which the City Blocks are located and the overall Scheme.

In order to ensure co-ordinated and equitable delivery at the level of City Blocks, it is also a requirement of the Planning Scheme and CBRA that each planning application within a City Block must include a “Compliance Statement” indicating inter alia how the CBRA is being implemented and how the proposed development complies with and matches the strategic and specific design intent and objectives of the SDZ Planning Scheme.

To assist in the preparation of the Compliance Statement and the CBRA, this Compliance Matrix has been prepared and sets out the minimum standards required in order to assess compliance with the Planning Scheme.

(A) CITY BLOCK ROLLOUT AGREEMENT (CBRA)

The CBRA or Joint CBRA shall address inter alia the following:

- 1 (a) The spatial distribution of the required ratio of commercial to residential across the City Block, to achieve a coordinated, pattern of land use across the block over time, and to ensure the unsustainable end-loading of a mono-use environment is avoided. The mixed use ratio does not apply to small sites under 0.2ha. (2,000sqm) except where active uses are necessary to animate the street. Retail and community facilities shall fall into the Residential Category for the purposes of the ratio.
- (b) How social housing units will be provided in accordance with the City Council’s Housing Strategy and Government Housing Policy.
- (c) The infrastructure requirements for the City Block including connections to the strategic network, together with a programme of installation works and responsibility for delivering infrastructure, such that each application can demonstrate the means by which the necessary infrastructure can be installed prior to the occupation of a given unit. Flood management and soil remediation measures are to be provided as necessary as part of development.
- (d) The area to be taken in charge by DCC, with attendant timelines.
- (e) How interim landscaping or other interim amenity measures on all remaining vacant land within the City Block which is in the applicant’s ownership and/or control, will be provided.

- (f) The design and layout of proposed new streets/lanes/parks and public spaces, having regard to the objectives in Section 5.4.3
 - (g) The location and height of any proposed local landmarks referred to in Section 5.4.5
 - (h) Any identified social infrastructure needs for the area e.g. health centre, crèches etc.
- 2 Each planning application must be accompanied by a Compliance Statement, demonstrating inter alia, how the (J)CBRA is being implemented. In the absence of a CBRA, the Planning Authority shall determine planning applications in accordance with the objectives of the SDZ Scheme, including the application to the site of the full range of city block objectives.

(B) COMPLIANCE STATEMENT

The Compliance Statement shall address inter alia the following:

1 Compliance with Vision and High Level Themes for Scheme

The Compliance Statement should indicate how the development proposal has been designed to take account of the Planning Scheme Vision and is consistent with the six High Level Themes in Chapter 3 of the Scheme and set out hereunder for clarity.

- High Level Theme No. (i) – Sustainability
- High Level Theme No. (ii) - Economic Renewal and Employment
- High level Theme No. (iii) - Quality of Living
- High Level Theme No. (iv) - Identity
- High Level Theme No. (v) - Infrastructure
- High Level Theme No. (vi) - Movement & Connectivity

2(a) Nature and Extent of Proposed Development

Certain elements which are considered critical to the delivery of a successful, sustainable Docklands Quarter are fixed. Any development proposals which conflict with the fixed elements will be deemed not to be in compliance with the Planning Scheme. The Compliance Statement should indicate how the development proposal has been designed to take account of the Planning Scheme Fixed elements set out below, having regard to Chapter 5 of the Scheme.

Development Code Fixed Elements

- Overall development quantum
- Use ratio
- Public realm
- City Block building line
- Height
- Heritage and protected structures

The Statement should indicate how the core objectives for each block are being met and how the capacity of the remaining plots in the block to satisfy the said core block objectives will not be undermined.

2(b) Compliance with Development Code City Block Specific Objectives

The Compliance Statement should also indicate how an additional range of infrastructures will be provided both at City Block level and at individual building plot scale, and how sustainable objectives for quality in building construction and materials will be satisfied.

3 Sustainable Energy

The ambitions for the SDZ as articulated by the Sustainable Energy Community (SEC) / Codema as an Energy Positive or at least a carbon-neutral district are of considerable merit and it is appropriate to help achieve this status by applying energy standards in excess of the BER Rating. Accordingly, it is a requirement that all proposals for development on sites above 0.2 Ha (0.5acres) apply the minimum standards of international building performance frameworks such as such as BREEAM, LEED or other European-based standards which are considered as equivalents (DGNB and Living Building Challenge). Applicants to choose a system and provide resources for the design and implementation process through final certification.

An Energy Statement should accompany any application 0.2 Ha (0.5acres), illustrating how the proposal incorporates the above design considerations and how it addresses energy efficiency with regard to the demolition, construction and long-term management of the development.

4 Infrastructure

The Provision of infrastructure including funding responsibilities shall be addressed at both site and strategic network level, in accordance with the criteria set out in the Infrastructure Schedule (Appendix 4).

5 Social Audits and the Provision of Social Infrastructure

Large-scale residential and/or mixed-use schemes, typically 200 units or 20,000sqm depending on local circumstances, must be accompanied by a Community Infrastructure Statement comprising of an audit of existing facilities in the area. This audit must show how the proposal will contribute to the range of supporting community infrastructure and how it will deliver a key social infrastructure element.

6 Providing Co-ordinated Delivery

All planning applications must accord with the General Principles and the Fixed Elements of the SDZ Planning Scheme in addition to those elements addressed in the Compliance Statement for each City Block.

All proposed development in relation to (a) development built out by the date the SDZ Scheme takes effect and (b) any extensions and/or changes of use in relation to all future completed development in the SDZ, shall comply with the provisions of the SDZ Scheme.

However, where policies, objectives, principles or standards are not specifically addressed in the SDZ Planning Scheme (e.g. apartment standards), those in the City Development Plan shall apply.

In relation to height, any new building or additional height to existing buildings shall relate to the prevailing height as set out in the relevant city block or adjacent blocks in the Development Code.

Proposals involving a material change of use shall accord with the land use mix ratio as set out in the Development Code (See Chapter 5 for Development Code for Individual City Blocks).

APPENDIX 4 – INFRASTRUCTURE SCHEDULE

Strategic Infrastructure & Services – Implementation / Funding Responsibilities			
Hubs 1,2,3,4,5 * Spencer Dock Hub Point Village Hub Grand Canal Dock Hub Britain Quay Hub Boland's Mills Hub Overall capacity Of SDZ Area (approx 22ha) Residential Units c.2,600 Commercial Floorspace 305,000m2. Equates to a residential population of circa 5,800 and circa 23,000 workers. <i>*A more detail assessments will be required on a City Block basis</i>	Lead Agency/Agencies for Implementation	Agency/Agencies with Primary Funding Responsibilities	Other Involvement Stakeholders (including State Agencies and Government Departments)
Provision of internal Bus Infrastructure, traffic management, signs, bus shelters etc	Developer/DCC	Developer/NTA/DCC	RPA , Bus Operators NTA NAMA
Major Infrastructure Required. Dart Underground	Córas Iompair Éireann	Córas Iompair Éireann	Córas Iompair Éireann NAMA RPA
Provision of streets networks/paths	Developer/DCC	Developer/NTA/DCC	RPA NAMA
Provision of New/improved walking/ cycling links	Developer/DCC	Developer/NTA/DCC	NAMA NTA
New Bridges	Developer/DCC	Developer//NTA/DC C	NAMA OPW Dublin Port NTA
Public Realm Areas	Developer/DCC	Developer/DCC	NAMA
Community and Recreational Infrastructure	Developer/DCC	Developer/DCC	NAMA
Provision of Drainage / Water Infrastructure, Foul Drainage, Storm Drainage, Water mains, Excavation, Ducting Services	Developer/DCC	Developer/DCC	NAMA
Flood Management/ SUDS/ Biodiversity Features, tree planting.	Developer/DCC	Developer/DCC	OPW NAMA
Soil Decontamination	Developer/DCC	Developer/DCC	NAMA
Public Lighting	Developer/DCC	Developer/DCC	NAMA
Services including Electricity, Gas, WiFi, Phone	Developer	Developer	Service Providers NAMA

Note: Infrastructure schedule to be developed on a city block basis in conjunction with the CBRA and Compliance Matrix. For the individual city blocks, a more detailed assessment will be required which sets out the baseline data, assessment of need, any identified gaps and cost of implementing same

In order to assist the prioritisation of infrastructure over the remaining 22ha, the spatial phasing is likely to follow this sequence (It is important to note this sequence is intended to be indicative only);

- Phase 1: The core of the 5 Hub Areas, with City Block 8 (Spencer Hub area) and City Block 17 (Boland's Hub area) likely to be developed first.
- Phase 2: The Britain Quay and Point Hub areas.
- Phase 3: The mainly residential parts of the Spencer and Britain Quay Hub Areas, e.g. City Block 2, 3 and 15.
- Phase 4: The DART Underground and Dublin Bus lands, i.e. west of City Block 2 and 7 plus City Block 18. (But will be prioritised if funding becomes available).

APPENDIX 5 – ASSESSMENT CRITERIA FOR HIGH BUILDINGS

All proposals for mid-rise and high buildings must have regard to the assessment criteria for high buildings as set out below.

When submitting plans for high buildings the developer will be required to submit a visual impact analysis study including a 3-D model of the scheme, photomontages of the impact of the building(s).

When developing landmark high-buildings, the Planning Authority will encourage architectural design competitions and the exploration of different architectural concepts for sites on which higher buildings are proposed. Dublin City Council will have a role in monitoring and agreeing the best architectural solution for these significant proposals through the planning process, in the interests of achieving best practice in urban design and quality.

The Irish Aviation Authority must be notified in all cases where a proposed development exceeds 45m in height.

All proposals for high buildings must have regard to the following criteria:

Urban Form and Spatial Criteria

- Exhibit exceptional architectural character and quality, creating a building which is of slender proportions, elegant, contemporary, stylish and in terms of form and profile, makes a positive contribution to the city skyline, city structure and topography.
- Create a positive relationship with the immediate surroundings, both existing and proposed buildings and prominent features in the vicinity, as well as streets and existing open spaces.
- Successfully incorporate the building into the existing urban grain: proposals to be accompanied by a design statement.
- Create positive urban design solutions.
- Have regard to important views, landmarks, prospects, roofscapes and vistas.
- Protect the built and natural heritage of the city.
- Ensure that the site is of an appropriate size and context to allow for a well-designed setting of lower buildings and/or landscaped open space.
- Include an outstanding ground floor and entrance design.
- Ensure that the entrance is proportionate to the scale of the entire building and relates directly to the sites principal street frontages and allow easy access for all users.
- Use materials of the highest quality in the design of the building façade.
- Consider signage, branding and lighting at the outset as part of the overall design approach and submit details at the application stage, including an assessment of potential impacts of light pollution on the immediate and wider context.
- Consider the impact on the scale and quality of existing streetscapes, spaces and buildings.
- Consider the impact on protected structures, conservation areas, and the architectural character and setting of existing buildings, streets, and spaces of artistic, civic and historic importance, in particular, the buildings relationship with the historic city centre, the river Liffey and quays, Trinity

College, Dublin Castle, the historic squares and precincts, the Phoenix Park, the Royal Hospital, Kilmainham and the canals.

Environmental / Sustainable Criteria

Illustrate exemplary standards of environmental sustainable design and building solutions

with regard to the following:

- Building Energy Conservation
- Opportunities for renewable energy generation
- CCHP Systems (combined cooling, heating and power and other appropriate technology)
- Waste Management and Recycling Strategy
- Dublin City Council's Climate Change Strategy

Give special consideration to a micro-climatic assessment including shadow impacts and down draft effect. Proposals must be accompanied by the following:

- Shadow Impact Assessment
- Wind Impact Analysis
- Assessment of Building Ventilation
- Demonstrate flexibility of layout and construction to accommodate possible future changes in the building use.

Social Criteria

- Minimise overshadowing and overlooking of surrounding properties and adverse impacts on established or emerging residential communities.
- The development contributes to the social/community development of the city block.
- Be part of a mixed-use city block which contributes to the vibrancy of the area throughout the day.
- Contribution to the animation of the street at ground floor level.

Economic Criteria

- Represent a strategic intervention in terms of significant regeneration and/or a significant economic contributor.

Transport and Movement Criteria

- Maximise access and permeability to public transport connections.

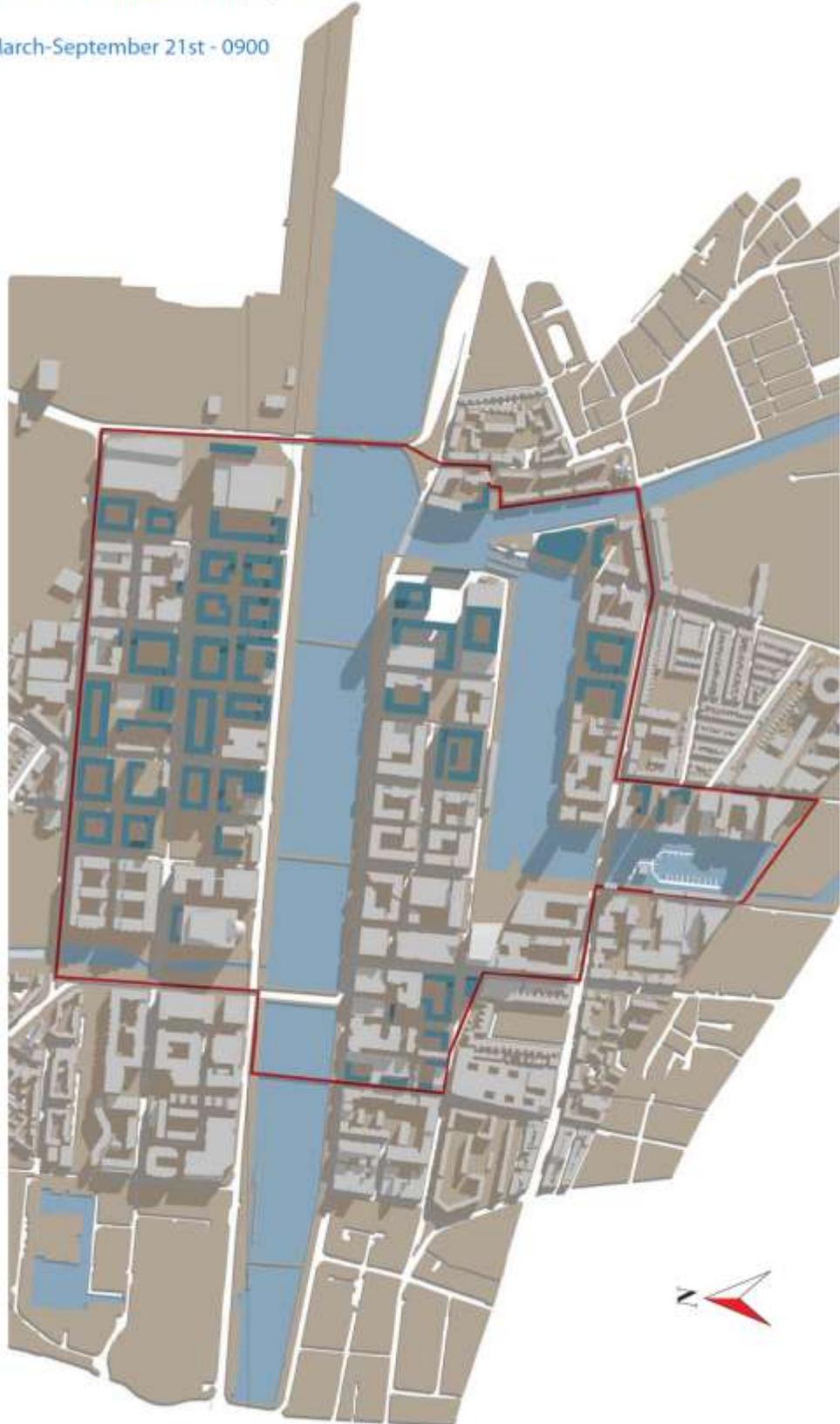
- Form part of an integrated movement strategy to reduce the reliance on the use of private cars and to promote increased use of low energy sustainable forms of transport, such as public transport, cycling and walking. A Travel Plan may be required in this regard.
- Demonstrate links with public open spaces with high quality pedestrian and cyclist routes.

Cultural Criteria

- Include provision for cultural facilities at a suitably accessible location in all city blocks catering for high buildings.
- Provide for high quality public art as an element of all proposals to create visual interest and a sense of place in the public realm.

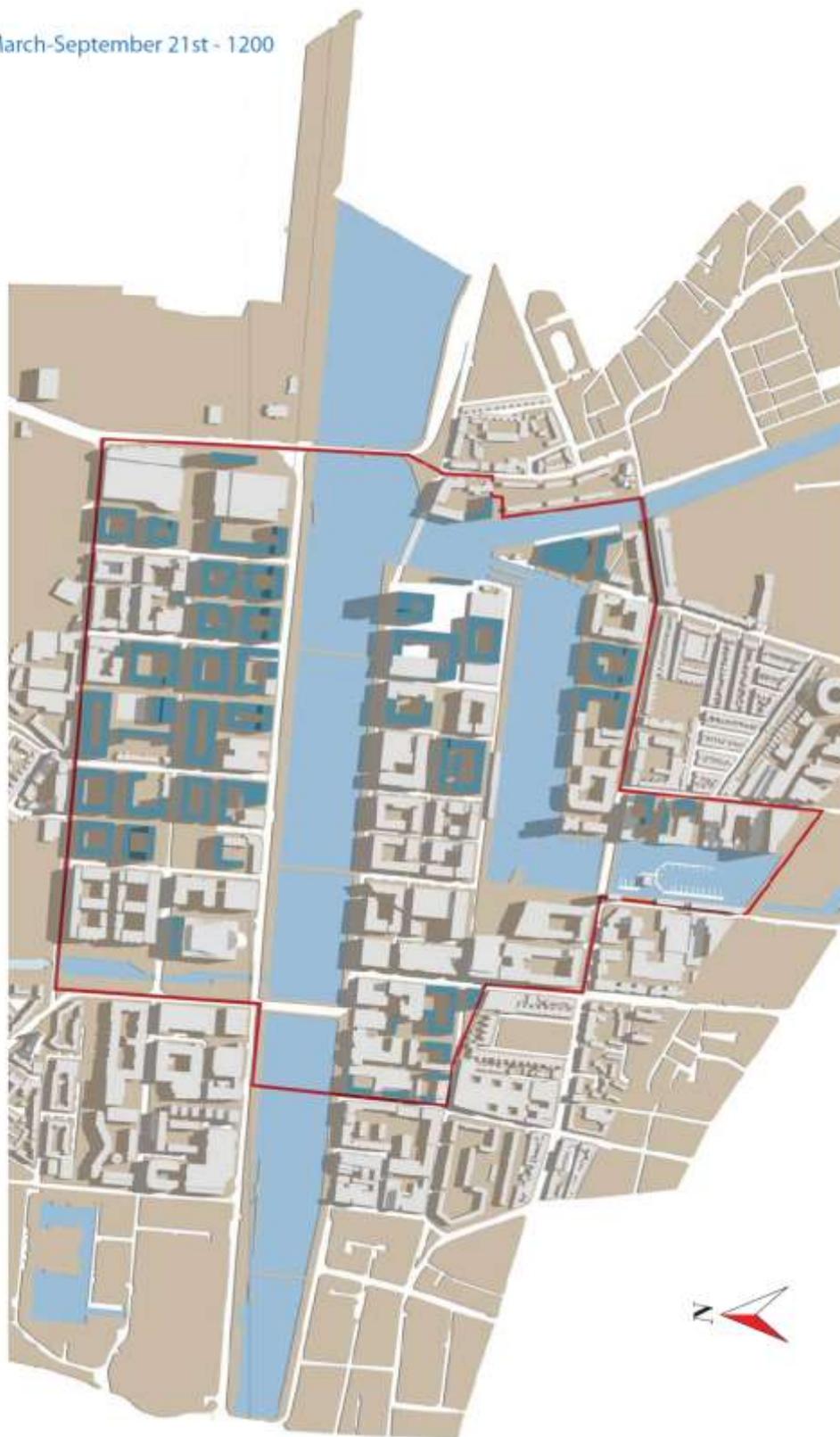
Appendix 6 - Shadow Analysis

Shadows: March-September 21st - 0900



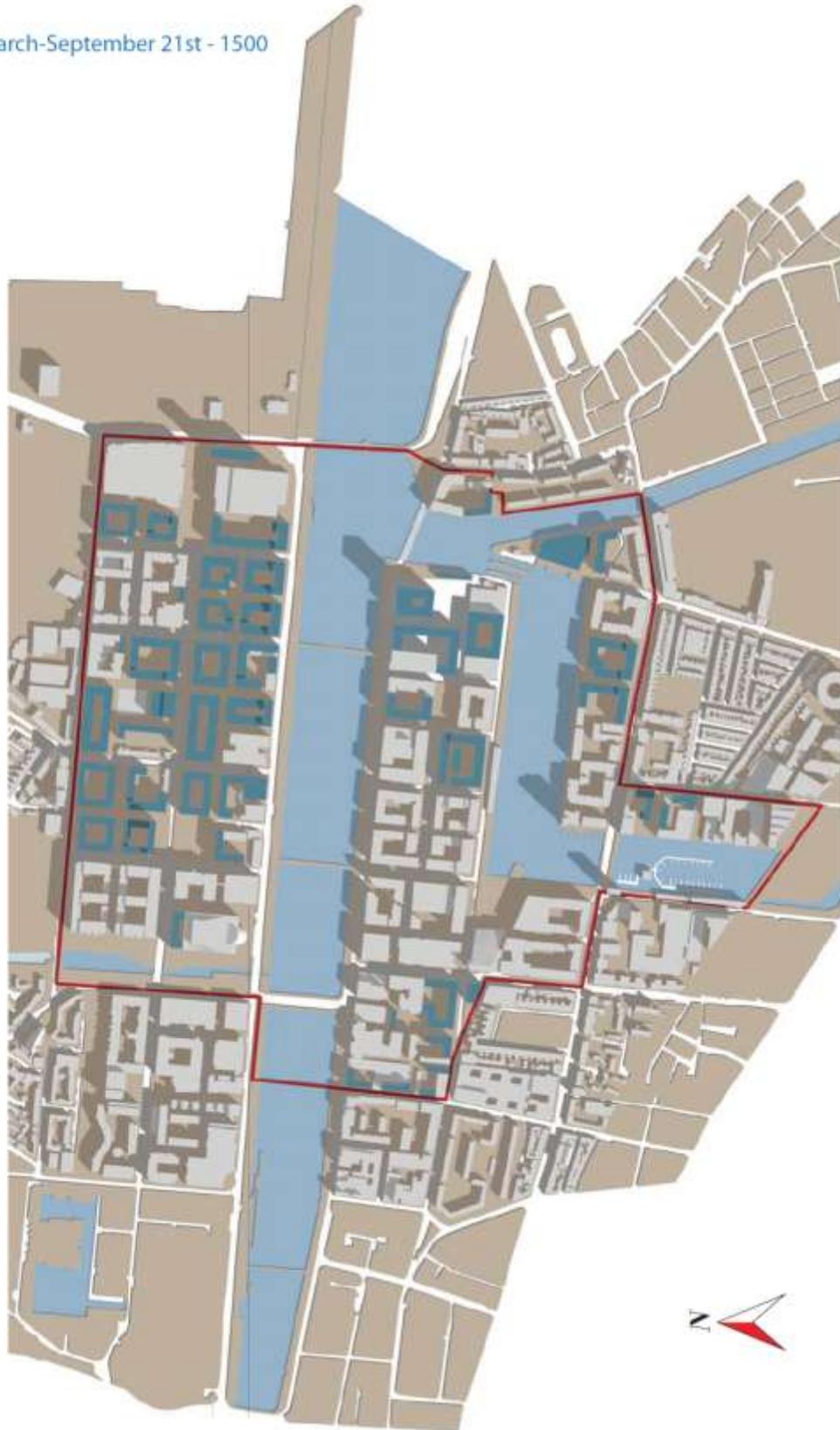
Appendix 6 - Shadow Analysis

Shadows: March-September 21st - 1200



Appendix 6 - Shadow Analysis

Shadows: March-September 21st - 1500



Appendix 6 - Typical Cross Section

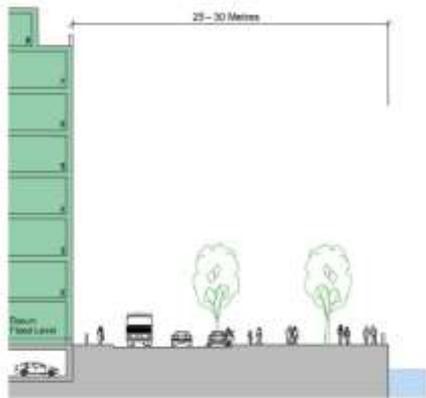


Diagram 1:
North Wall Quay
St John Rodgers Quay
Building Height (including setbacks)
8 storey commercial / 10 storey residential

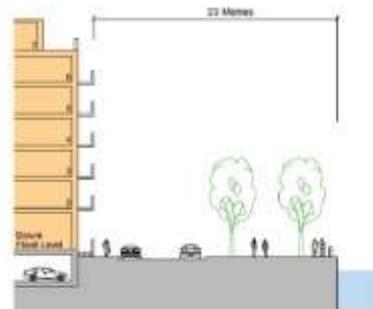


Diagram 2: Hanover Quay
Building Height (including setbacks)
8 storey commercial / 7 storey residential

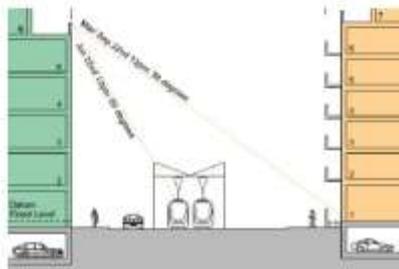


Diagram 3: North Lotts- Mayer Street
Building Height (including setbacks)
6 storey commercial / 7 storey residential

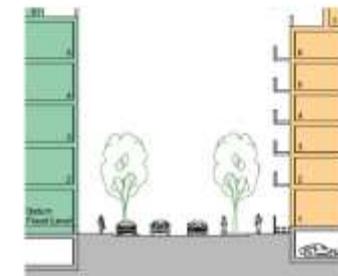


Diagram 4: Typical City Street
Building Height (including setbacks)
6 storey commercial / 7 storey residential

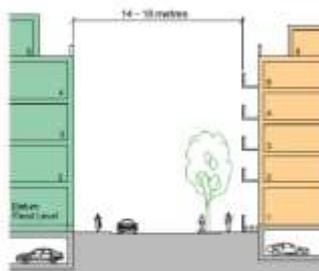


Diagram 5: Typical Local Street
Building Height (including setbacks)
5 storey commercial / 6 storey residential

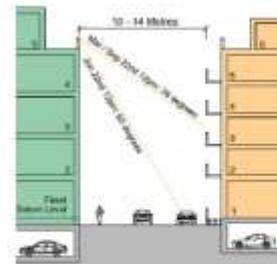
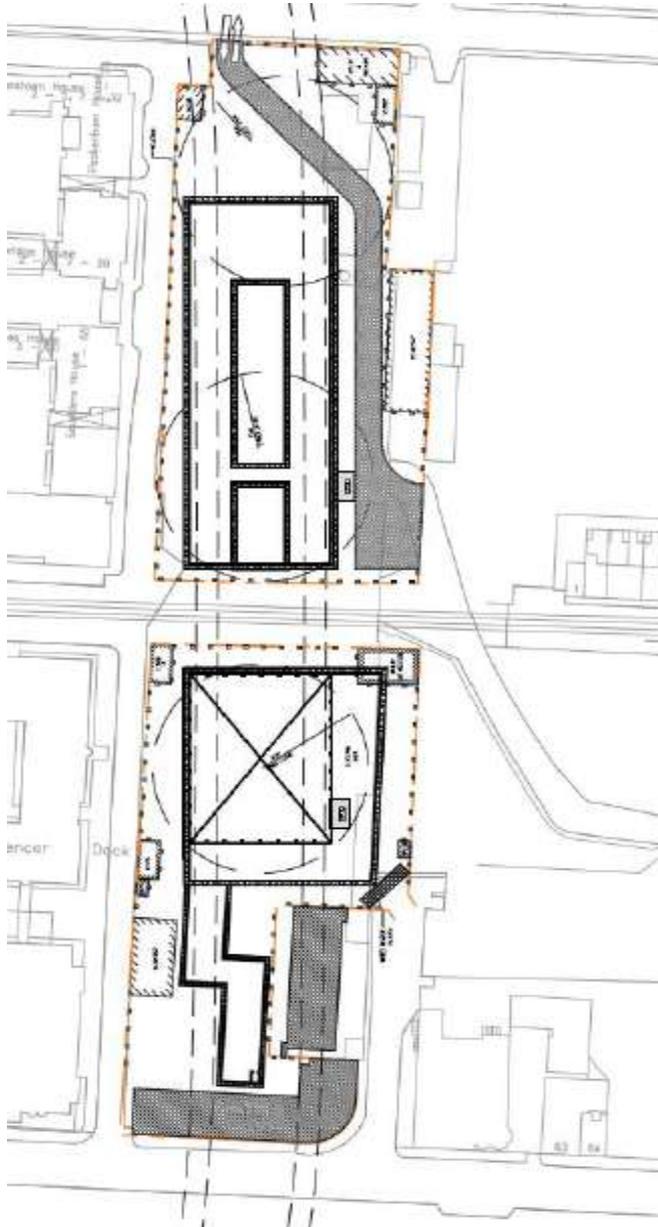


Diagram 6: Typical Laneway
Building Height (including setbacks)
5 storey commercial / 6 storey residential

Appendix 7 – Proposed DART Underground Line Reservation Strip

Figure 36 - Extent of Reservation Strip required for DART Underground Station Construction - Relates to City Blocks 2 & 7.

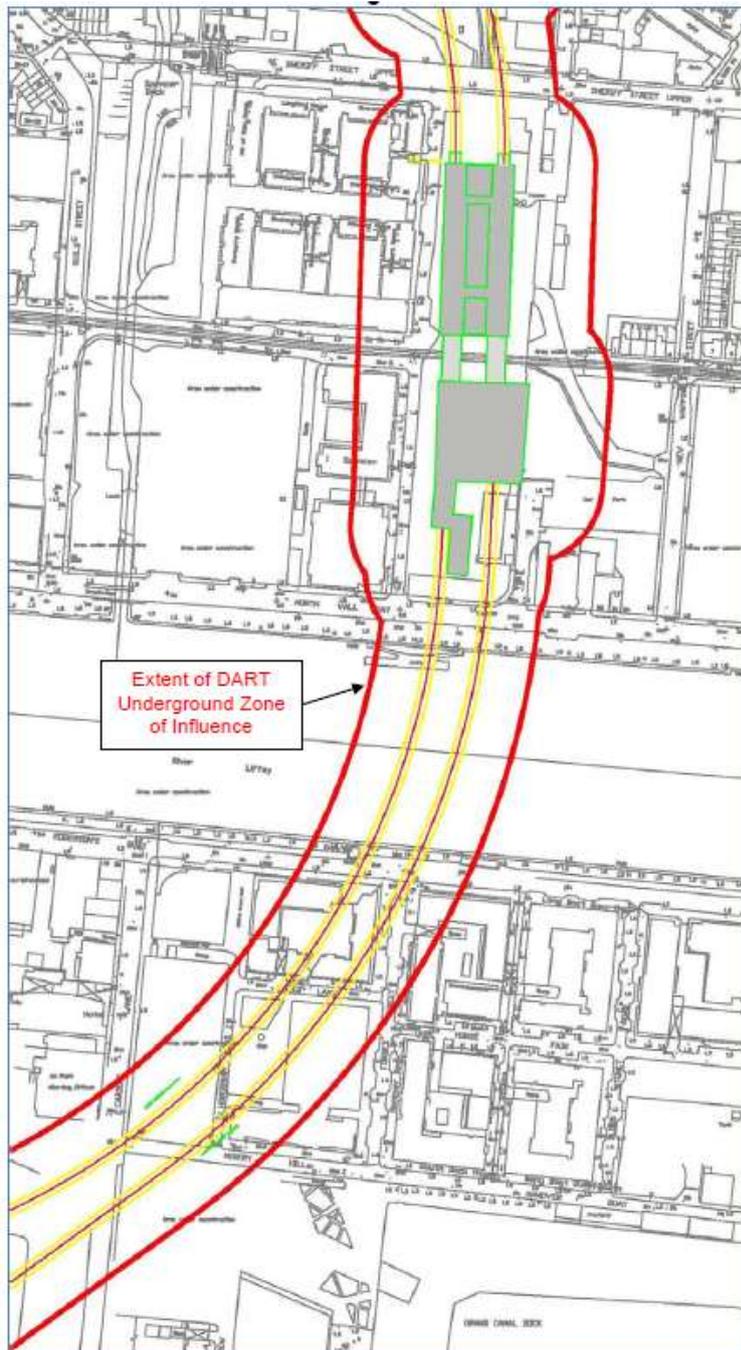


Source: Iarnród Éireann DART Underground Project Office

DART Underground Reservation Strip.

Note: DART Underground requires a reservation strip to protect certain lands and allow for the construction of the DART Underground Station at Spencer Dock. The lands necessary for construction of the station are shown in Figure 1 below. These lands should be reserved and no land uses that could result in adverse impacts should be permitted in advance of the DART Underground Line.

Figure 37 – Zone of Influence of DART Underground

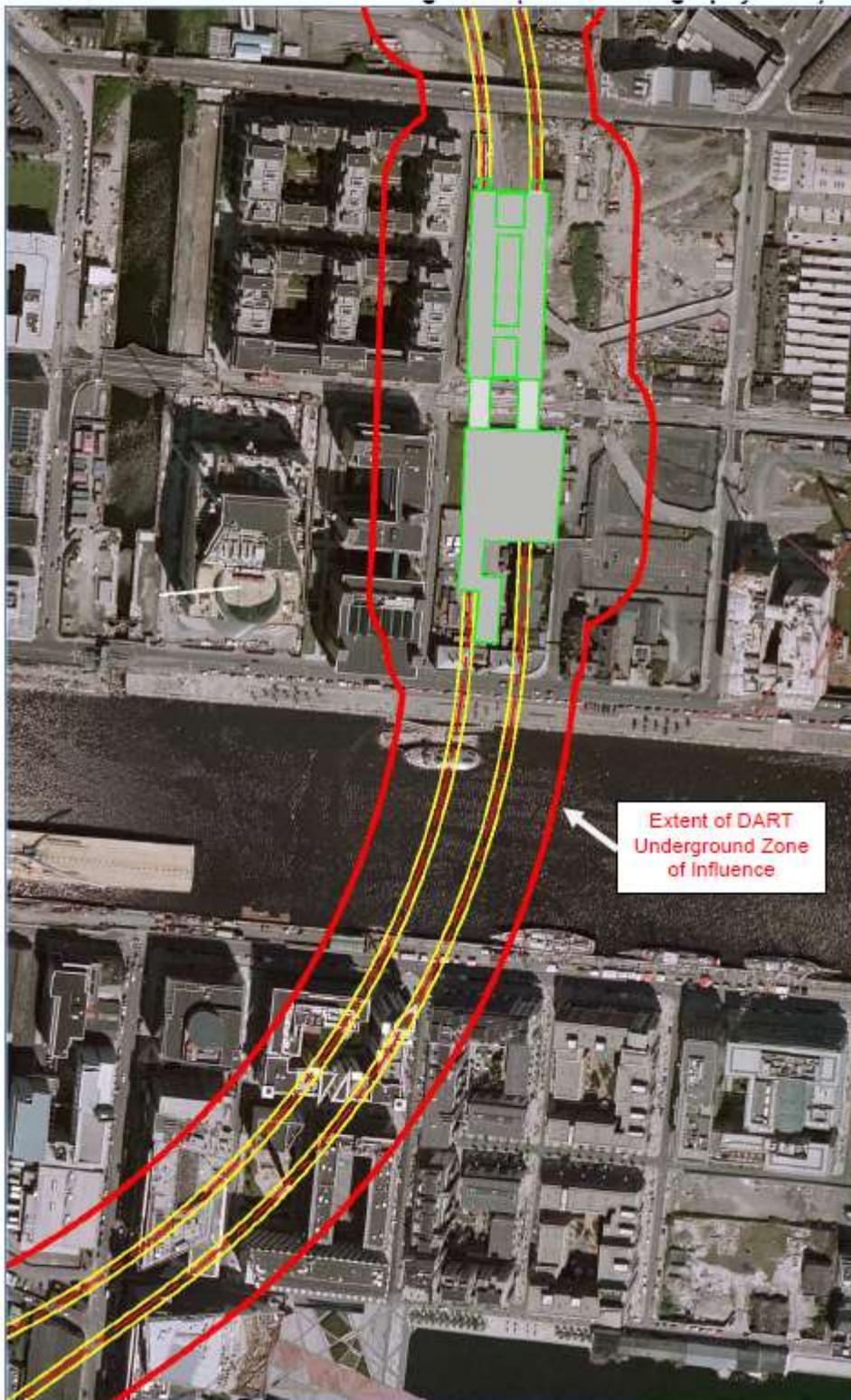


Source: Iarnród Éireann DART Underground Project Office

Zone of Influence

The Zone of Influence of DART Underground is all land enclosed within the predicted 1mm greenfield settlement contour. The predicted 1mm greenfield settlement contour extends laterally, approximately 50m from the underground structures (e.g. stations) and 30m from the edge of tunnels. The extent of the Zone of Influence of DART Underground is shown on Figure 37 and Figure 38 herein. The Zone of Influence extends into City Blocks 1, 2, 6, 7, 12, 13 and 16 as defined in the Planning Scheme.

Figure 38- Zone of Influence of DART Underground (Aerial Photography View)



Source: Iarród Éireann DART Underground Project Office

Zone of Influence

The Zone of Influence of DART Underground is all land enclosed within the predicted 1mm greenfield settlement contour. The predicted 1mm greenfield settlement contour extends laterally, approximately 50m from the underground structures (e.g. stations) and 30m from the edge of tunnels. The extent of the Zone of Influence of DART Underground is shown on Figure 37 and Figure 38 herein. The Zone of Influence extends into City Blocks 1, 2, 6, 7, 12, 13 and 16 as defined in the Planning Scheme.