

Chapter 4



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 headquarters 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 The 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 competitive 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 multi-national 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 technology 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 The 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 The 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. 9.

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.

KEY



FINANCIAL

1. IFSCI & I I
2. CITI GROUP
3. NATIONAL COLLEGE OF IRELAND
4. COMMERZ BANK
5. CONVENTION CENTRE DUBLIN
6. PWC
7. CENTRAL BANK & NATIONWIDE BUILDING SOCIETY
8. CREDIT SUSSIE INTERNATIONAL
9. FMB CHARTER ACCOUNTANTS & MONEY MATE
10. HSBC
11. ACCENTURE
12. STATE STREET BANK
13. NTMA & NAMA
14. BANK OF IRELAND
15. BNY & QBE



LEGAL

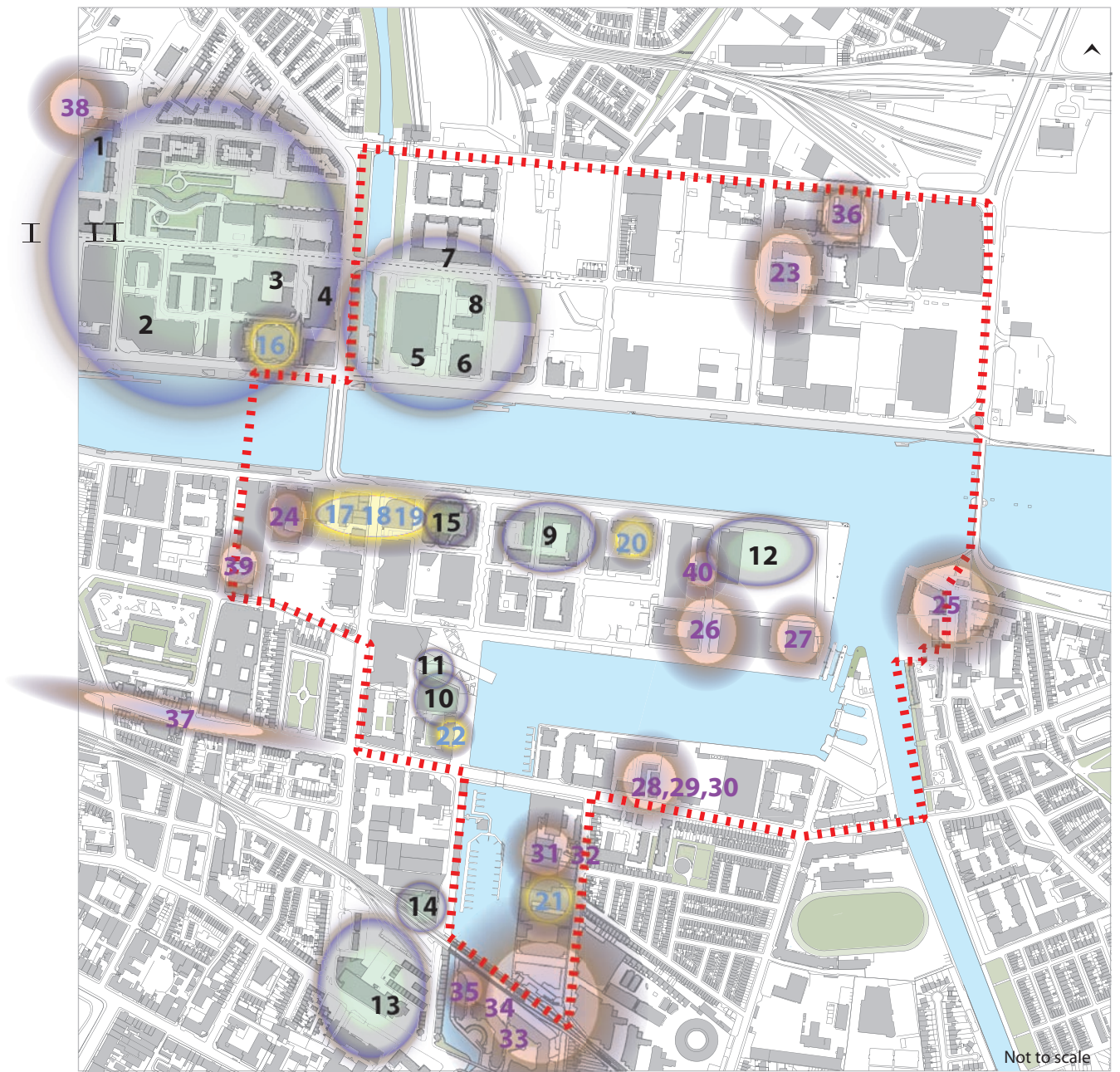
16. A & L GOODBODY
17. DILLON & EUSTACE
18. MCCANN FITZGERALD
19. BEAUCHAMP SOLICITORS
20. MATHESON
21. MASON HAYES CURRAN
22. BYRNE WALLACE



DIGITAL/MEDIA/ CREATIVE

23. CLASSIC HITS 4 & RADIO NOVA, UTV RADIO STATION
24. UTV TELEVISION
25. O2 & TELEFONICA
26. CYBERCOM STRATEGEM
27. FACEBOOK
28. NBK ARCHITECTS MEDIA & DESIGN COMPANIES
29. WINDMILL LANE STUDIOS
30. PULSE COLLEGE
31. CRAZY FILMS
32. DOGPATCH LABS
33. THE FACTORY
34. GOOGLE
35. BT
36. ACCENTURE ANALYTICS INNOVATION CENTRE
37. LIFFEY TRUST, DANCE & RECORDING STUDIO
38. DIGITAL & GAMING COMPANIES
39. PULSE COLLEGE - DUBLIN EXCHANGE BUILDING
40. LIME STREET SAND STUDIOS
- LINKEDIN

Fig. 9 Emerging Spatial Clusters



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 technology 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 technology and media start-ups 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 IFSC1 & IFSC2.

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 inter-action 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 an American 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 environment of collaboration and industry networks could be created with the conversion of the warehouse structures in Docklands for incubator space. See Fig. 10.

4.1.4.3 Digital-Tech Sector

Dublin is increasingly becoming a hub for the technology 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.

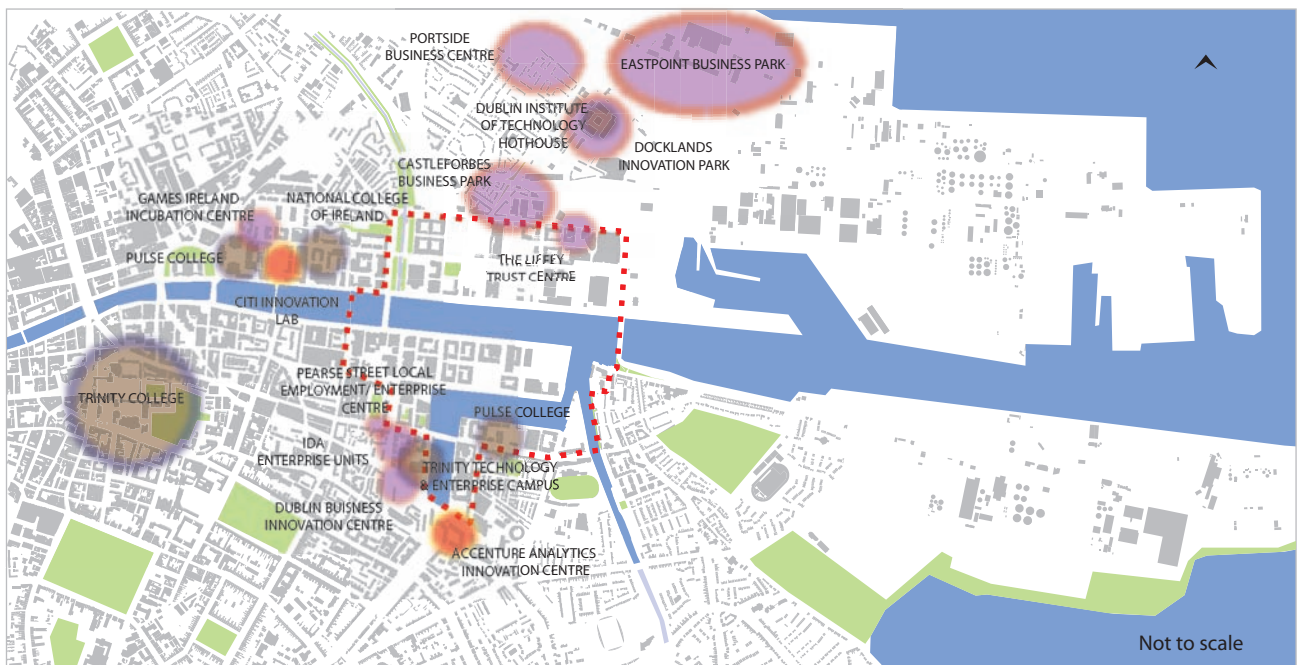


Fig. 10 Innovation & Enterprise Zones SDZ & Wider Docklands Area

KEY

UNIVERSITIES & COLLEGES



BUSINESS, INDUSTRIAL PARKS & INCUBATION UNITS



GLOBAL CORPORATE INNOVATION CENTRES



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 fledgling 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 technology 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 life-cycle 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 headquarters 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 technology 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 technology 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 non-standard 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 technology companies also seek an ecosystem of smaller technology companies to feed them. Technology 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 Headquarters 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 overarching sustainable framework to the regeneration of substantial city-centre brownfield lands.

4.1.4.6 The Marine Economy

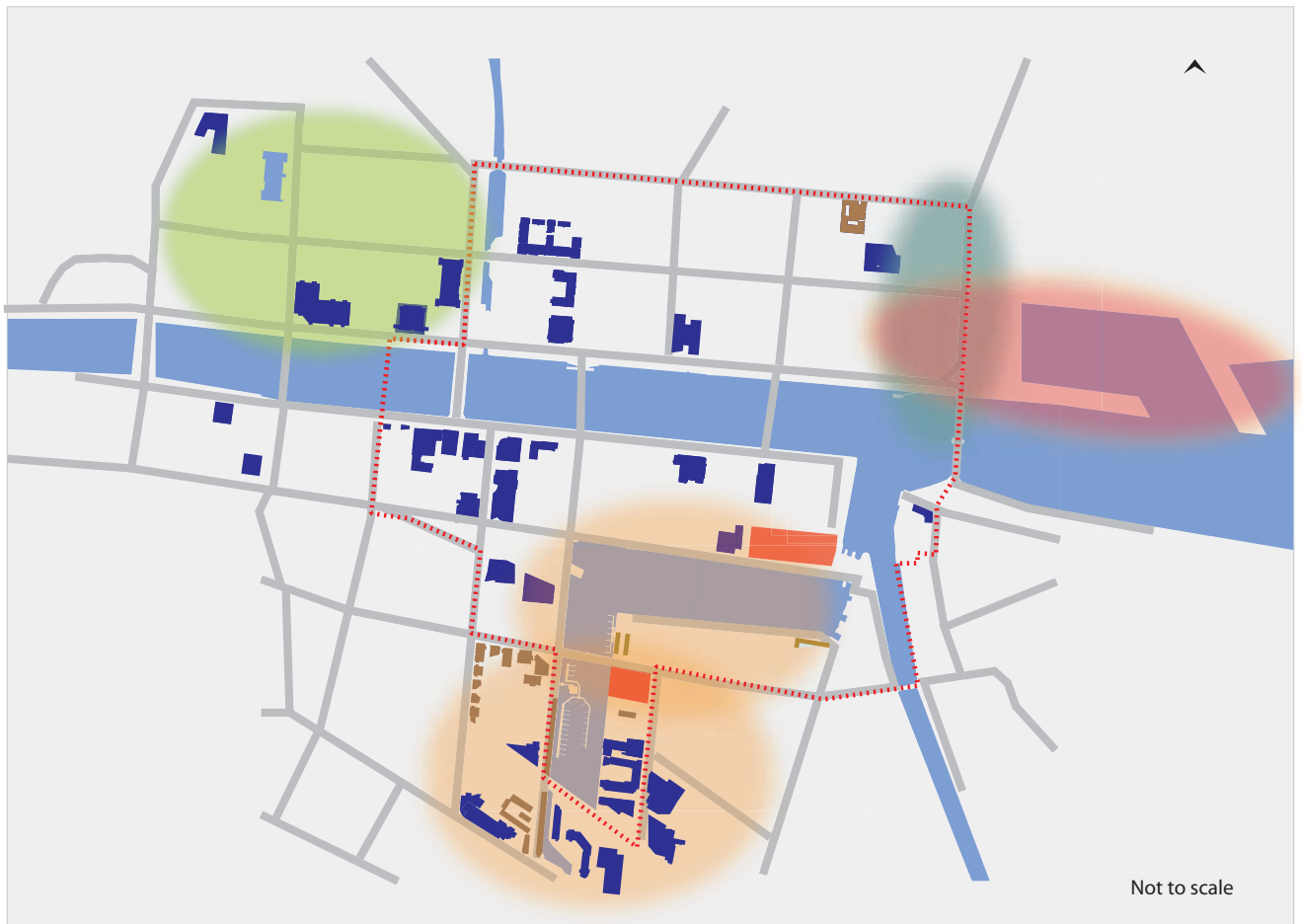
Ireland has established itself as among the top fifteen international centres for the growing sector of ship finance and maritime commerce. There is significant further potential for this niche sector given that Dublin is currently recognised as the leading centre for aviation lease finance in the world. 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 The Point Village, as well as being of wider strategic economic importance to the city. See Fig. 11.





Not to scale

Fig. 11 Economic Drivers

KEY

IFSC/GREEN IFSC

DUBLIN PORT/ CRUISE TOURISM/
MARINE SERVICES

TECH AND CREATIVE MEDIA

POINT VILLAGE DISTRICT CENTRE

SMALL GROUND FLOOR OFFICES

WAREHOUSE LOCATIONS-
POSSIBLE INNOVATION/CREATIVE/TECH-START UPS

LARGE OFFICE FLOOR PLATES



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 life-cycle needs from start-up to growth phase and maturity.
- ER7** To seek the provision of flexible floor-space 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 co-ordinated 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 technology 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.

4.2.1 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.

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, multi-cultural 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.

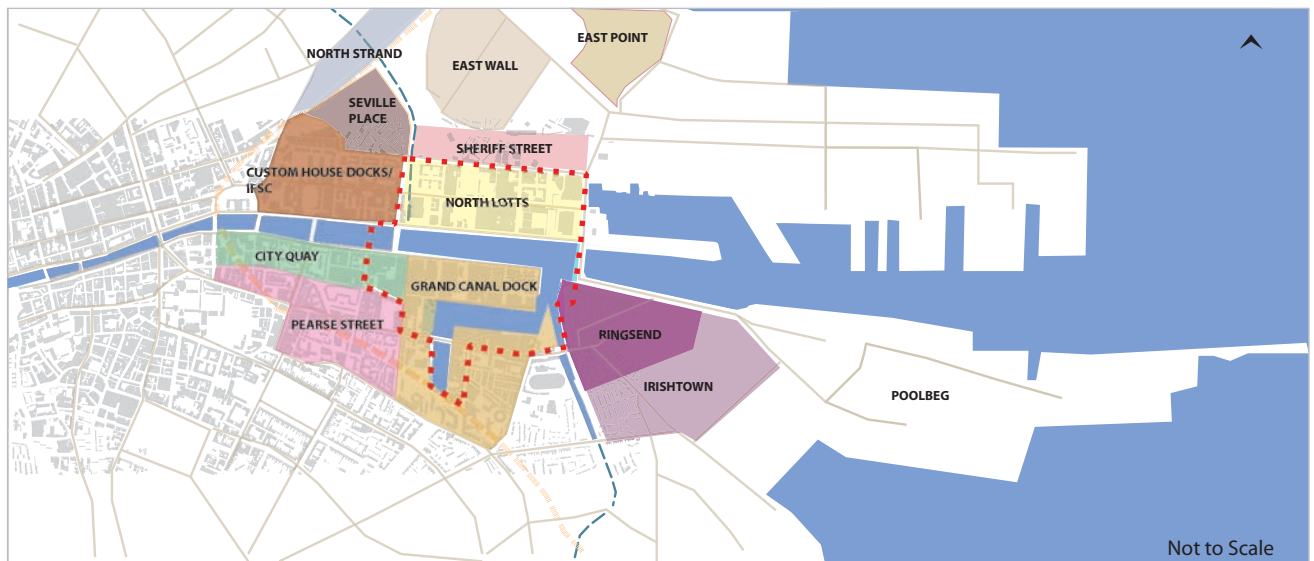


Fig. 12 Docklands Neighbourhoods

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 Clúid, Liffey Trust and Túath 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 life-cycle 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 utilise 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 socialise, 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 recognised 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, as may be updated
- Develop and implement a programme of supported housing in co-operation 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

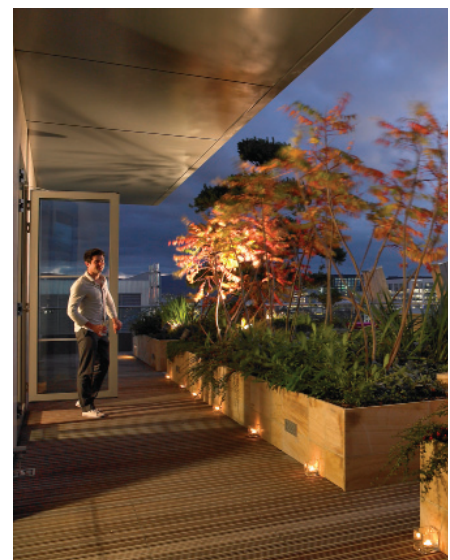
for additional school capacity, the preferred option is the rebuilding/upgrading of St. Laurence O'Toole School.

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 a stronger, more substantially funded voluntary and co-operative housing sector, playing a much greater role in the supply of social housing without reliance on capital funding

- The voluntary and co-operative 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 22 Ha 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, Clúid, Liffey Trust and Túath Housing, is recognised for its importance in developing and implementing housing policy in the area. Dublin City Council will work with approved voluntary and co-operative 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 life-cycle 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 inter action between the residential scheme, streets and public realm to foster a true sense of neighbourhood and encourage inter action 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 (Chapter 11), Creating Good Neighbourhoods and Successful Communities (Chapter 12), Residential Quality Standards (Chapter 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)

4.3.1 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. 13.



Connecting the area with public transport, developing high levels of amenity along the campshires, requiring active commercial uses such as shops and cafés at street level, running a year-round programme of festivals and events 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

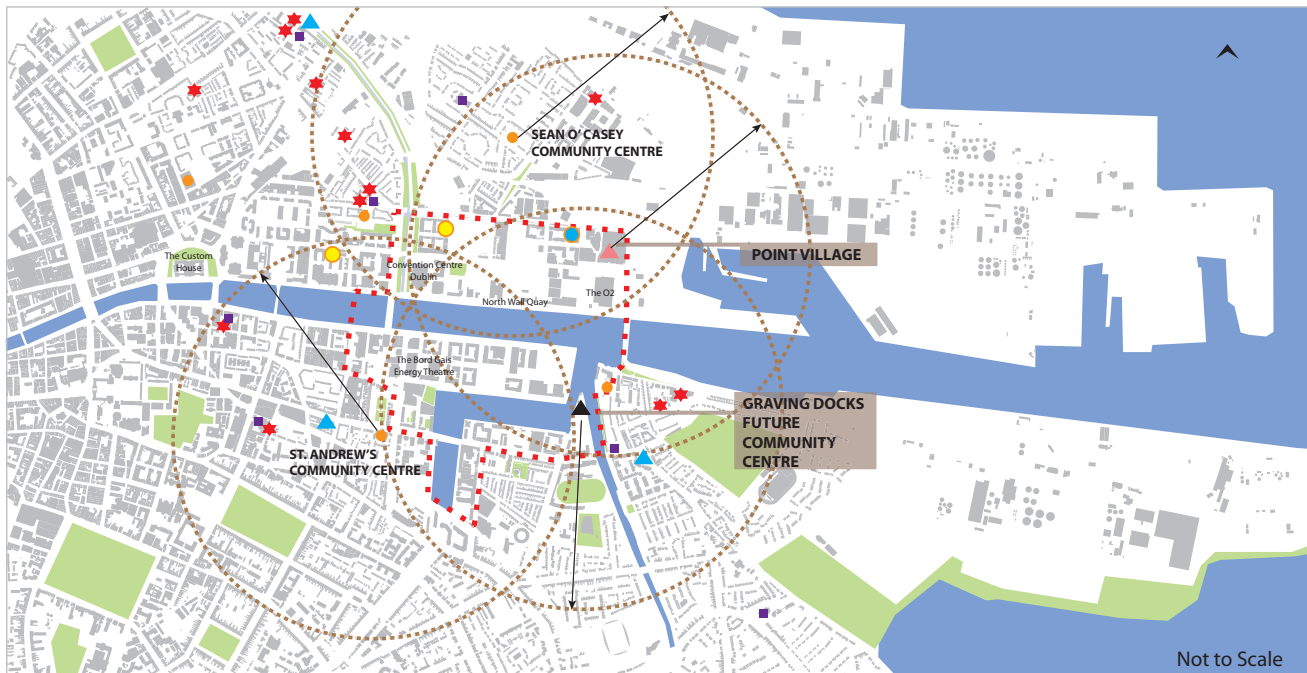


Fig. 13 Community Facilities Map

KEY			
SCHOOLS	★	COMMUNITY ENTERPRISE	●
COMMUNITY CENTRES	●	CRÈCHE	●
LIBRARY	▲	FUTURE POTENTIAL COMMUNITY FACILITIES	▲
CHURCH/ RELIGIOUS	■	800 METRE RANGE	○
PUBLIC OPEN SPACE	■	POINT VILLAGE HUB	▲
		LOCATION OF EXISTING AND FUTURE MIXED SERVICE FACILITIES	▲

award-winning Seán 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 Gáis 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. Andrew's Resource Centre is contained within a historic school building (dating from 1895), a landmark 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).



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 by 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 them.

The SDZ Planning Scheme seeks to encourage the maximum use of established assets through shared use and shared cost, to ensure that 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 doctors' 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 20,000m² 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, cafés, 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 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-wide 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 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 has 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 has access to third-level education, training and skills development, to gain access to jobs in the industries located in the Docklands and in 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 to assist the social and economic development of households (assisting the development of children and parents to have employment options).

There is an increasing population of 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 is 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 community, cultural and recreational development on the peninsula site of the graving 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 Seán O'Casey Community Centre, East Wall Road and St. Andrew's 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 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** Within 18 months of publication of this Scheme, 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. The review shall include consideration of phasing and funding requirements
- 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, cafés and leisure facilities that provide opportunities for local employment and locations for the community to inter-act, 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 the 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. The Plan shall be informed by the community audit provided under CD21
- CD19** To develop, facilitate and support educational initiatives undertaken by community and voluntary sectors to enhance life opportunities and social cohesion.
- CD20** The Council in conjunction with the HSE will facilitate the development of a Healthcare Service in the North Lotts area of the SDZ.
- CD21** In order to optimise, align and integrate the individual City Block Social and Community Infrastructure Audits and the Community Infrastructure Statements, the Development Agency will carry out and maintain a Community Audit for the entire Strategic Development Zone. This will expand on and complement the Cultural Audit.
- The Community Audit shall be completed and published within 12 months of the publication of the approved Strategic Development Zone scheme, and shall be updated at least every two years.



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. 14.

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.

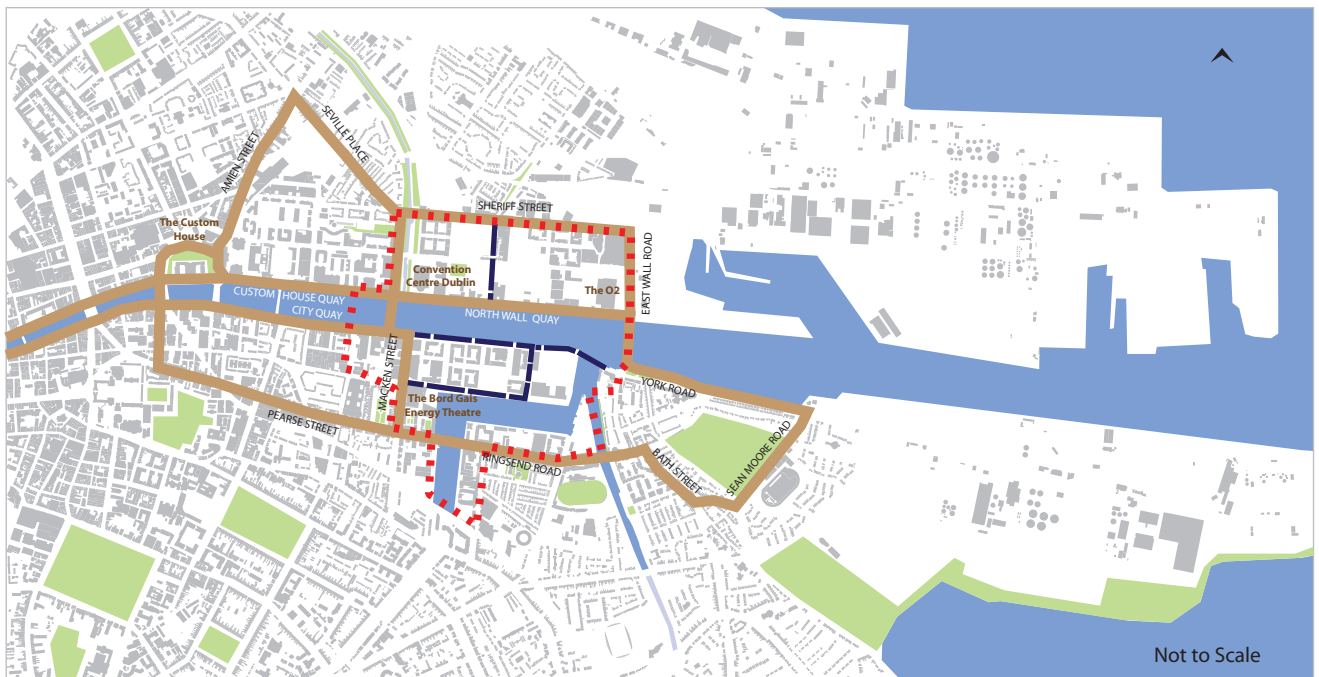


Fig. 14 Main Traffic Routes

KEY

- Main Traffic Routes
- Indicative Proposed Main Routes
- SDZ Boundary

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 Seán 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, seven of which operate on North Wall Quay, East Wall Road, Sheriff Street and New Wapping Street, while a further six 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 2014.

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 into 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 southside and Luas on northside. 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.

Works for the provision of new public transport, or in the furtherance of existing or permitted public transport, shall be considered on their merits, in accordance with the policies and objectives of the Dublin City Development Plan.

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



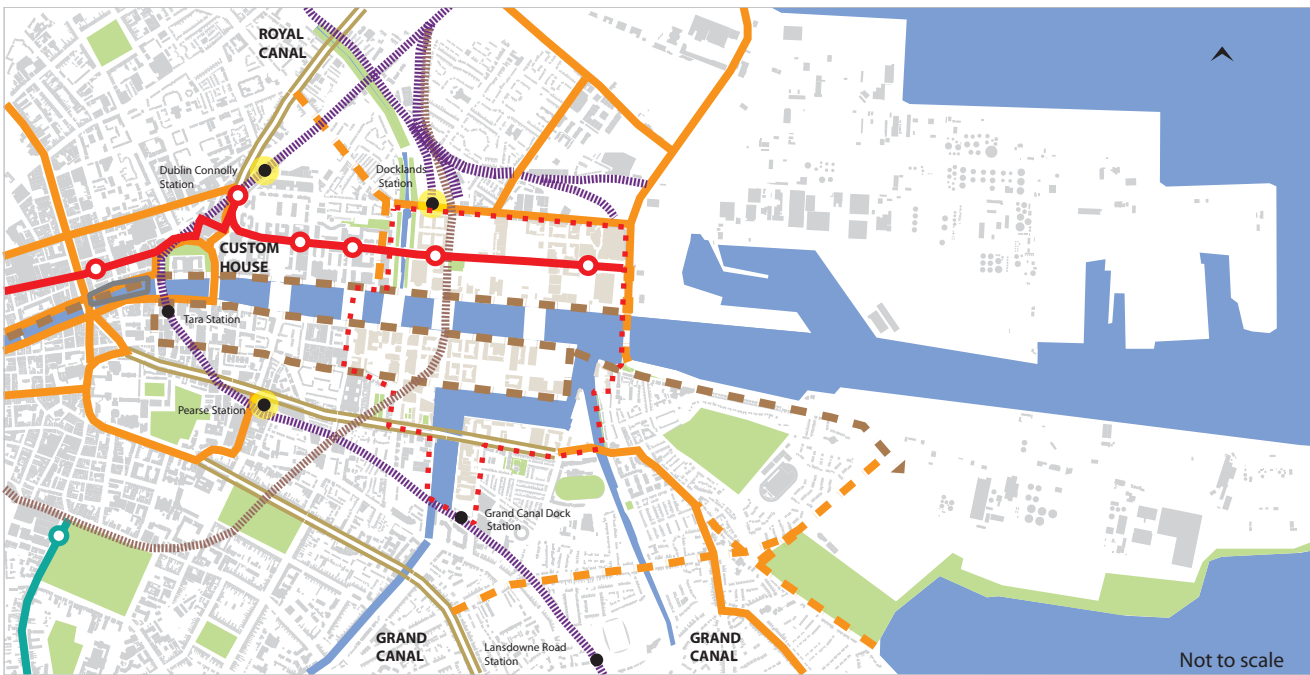


Fig. 15 Public Transport Map

KEY

BUS

- QUALITY BUS CORRIDOR (QBC)
- POTENTIAL FUTURE DOCKLANDS RAPID TRANSIT/QBC
- MAIN BUS ROUTES
- POTENTIAL FUTURE BUS ROUTES

RAIL

- DART LINE RAIL LINE
- RAIL STATIONS
- PROPOSED (INDICATIVE) LINE OF DART UNDERGROUND

LUAS

- LUAS RED LINE AND STOPS
- PUBLIC TRANSPORT INTERCHANGE
- EXISTING LUAS GREEN LINE AND STOPS
- SDZ BOUNDARY



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. 15.

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% has 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.

Proactive 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.



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, is 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 Sir 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 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.

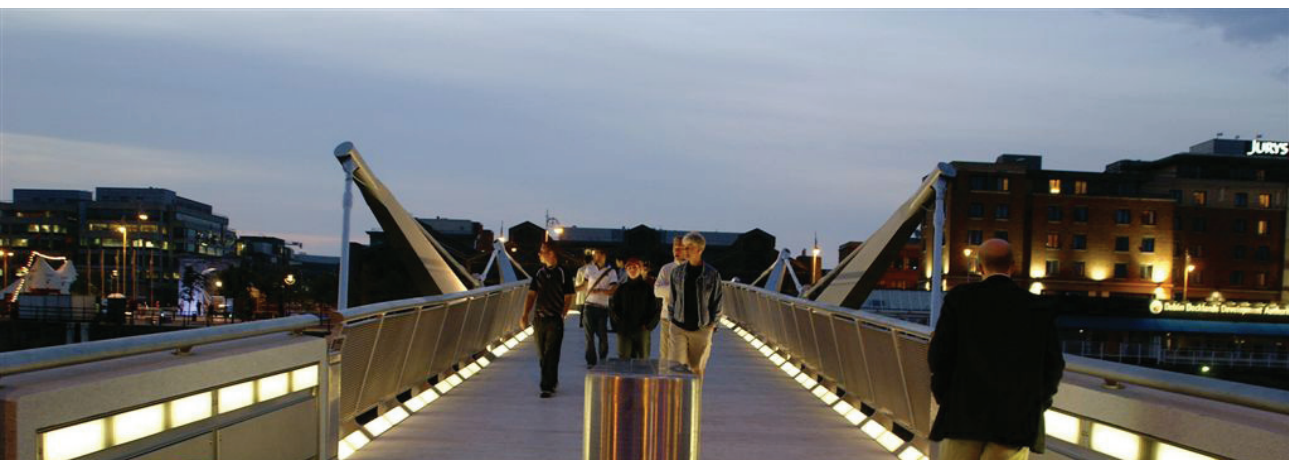
4.4.4.5 Supporting & Promoting Innovation

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 approach.



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 the 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 in 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 Iamród 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.



4.5.1 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 organisations, 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. The Sustainable Energy Communities Programme has 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 centred 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/fluviat (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 population equivalent (PE) 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 currently advancing plans for the construction of two major trunk sewers along Sheriff 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.

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.

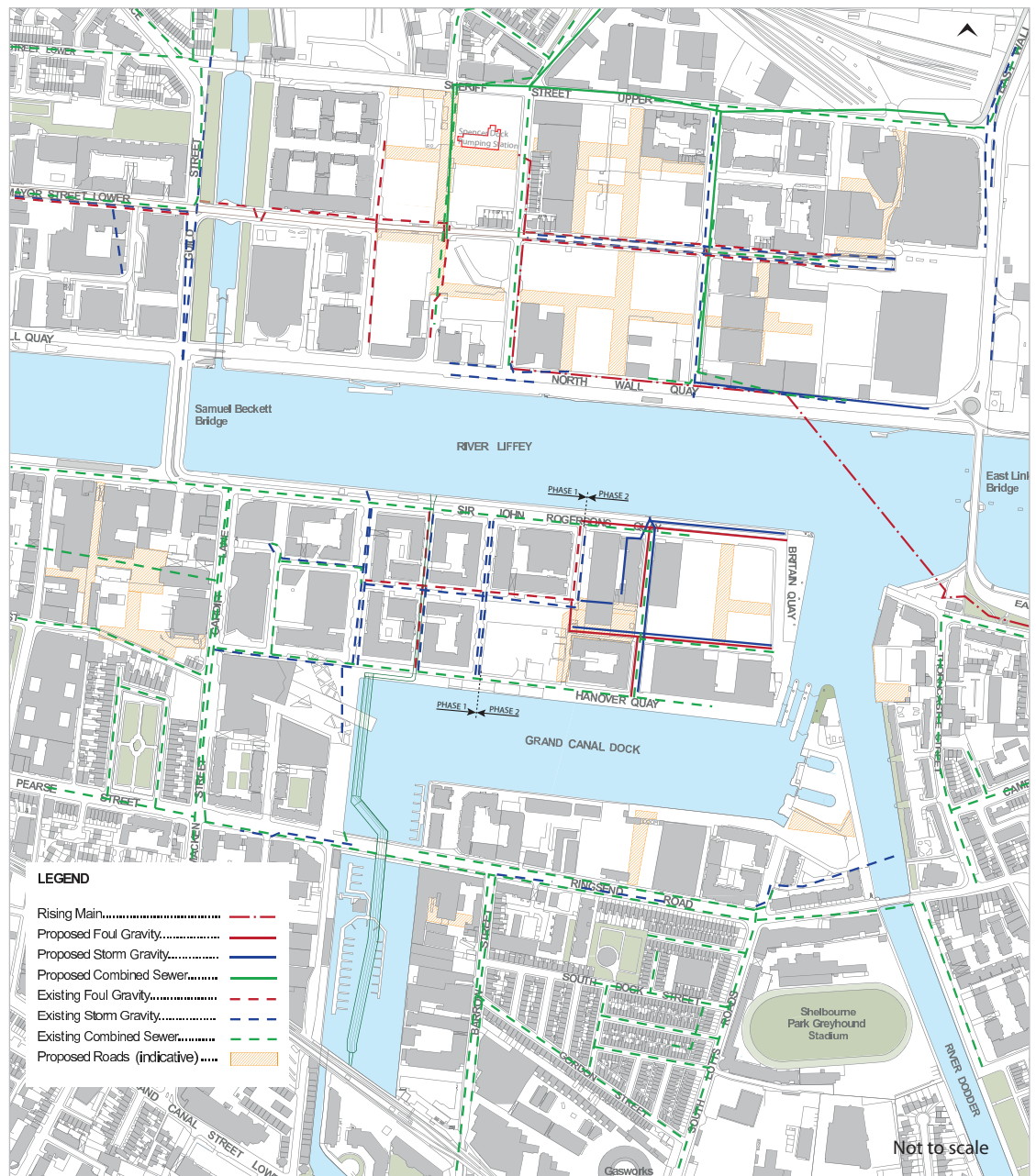


Fig. 16 North Lotts / Grand Canal Dock SDZ Existing and Proposed Drainage Infrastructure

New developments and upgrading of existing developments 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) ground water 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 run-off from new development to green-field rates. New development in the SDZ will be required to limit surface water run-off to a maximum of 2l/s/ Hectare 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.

Note : 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.

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 bio-diversity, 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 publication of the GSDS. Given the 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 bio-diversity 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 hand-over 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 bio-diversity 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
- Bio-retention 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 Programme 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 40 bar in the North Lotts area and a separate line to the south of the River Liffey operating at 19 bar.

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 to 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 Wi-Fi 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 allow 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

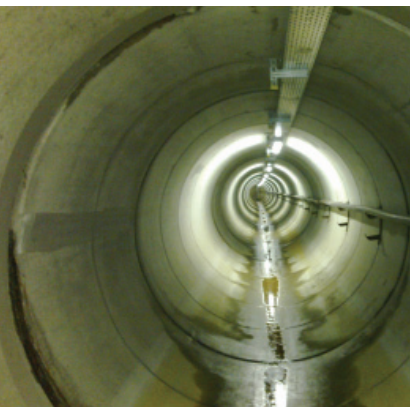
- The subsequent use of the material (if still classified as waste) at the site, e.g. by putting it back into the excavation, will require waste authorisation.

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:

- S11** To actively seek funding for the delivery of key drainage infrastructure to enable development in the SDZ
- S12** To manage development and promote the continued provision and upgrading of wastewater treatment plans in the region so that new schemes are permitted only where adequate capacity exists in the wastewater network
- S13** To complete, as a priority, the relocation of the Grand Canal Surface Water Outfall from the Grand Canal Dock Basin to the River Liffey.
- S14** 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 exist or will become available within the life of a planning permission
- S15** To require all large development proposals to include water conservation and demand management measures
- S16** To require all proposed developments to carry out a site specific Flood Risk Assessment (SSFRA) that shall demonstrate compliance with:
- The Planning System and Flood Risk Management, Guidelines for Planning Authorities (Department of the Environment, Heritage and Local Government, November 2009, as may be revised/updated).
 - The prevailing Dublin City Development Plan.
 - Appendix 1 of this Planning Scheme.
- The SSFRA shall not be required to carry out a justification test, given that this exercise has already been carried out in developing the Planning Scheme, which is a blueprint for a mixed-use development of the Strategic Development Zone area.
- The SSFRA shall pay particular emphasis to residual flood risks, site-specific mitigation measures, flood resilient design and construction, and any necessary management measures (Appendix B4 of the above mentioned national guidelines refers).
- Attention shall be given in the SSFRA and in building design to creating a successful interface with the public realm through good design that addresses flood concerns but also maintains appealing and functional streetscapes
- S17** 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
- S18** That all new developments shall be required to comply with the standards set out in the Greater Dublin Strategic Drainage Study (GSDSDS)
- S19** 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 ground water sources, and retrofitting best practice SUDS techniques on existing sites, where possible.

- SI10** To require the use of ducting for information communication technology within individual new residential and commercial developments
- SI11** To facilitate the development of accessible Wi-Fi zones within the five hubs of the planning scheme area
- SI12** To maintain good air quality in accordance with national and EU policy directives on air quality and where appropriate promote compliance with established targets
- SI13** 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
- SI14** That all proposed developments be district heating-enabled in order to provide an environmentally sustainable source of heating and cooling
- SI15** To accurately meter the imported gas and electricity within the SDZ in order to facilitate the move to a Smart City
- SI16** 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.
- SI17** That all developments will comply with the waste policy as set out in the Dublin City Development Plan 2011-2017.
- SI18** To ensure that surface water quality is protected in the construction of enhanced drainage works to meet requirements of the Water Framework Directive
- SI19** 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
- SI20** 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)
- SI21** To require that each planning application be accompanied by a Construction Management Plan, which shall include information on construction traffic routes, hours of operation, control of noise, and environmental effects.

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-date 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, Libeskind'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 Sheriff 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 inter-tidal 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

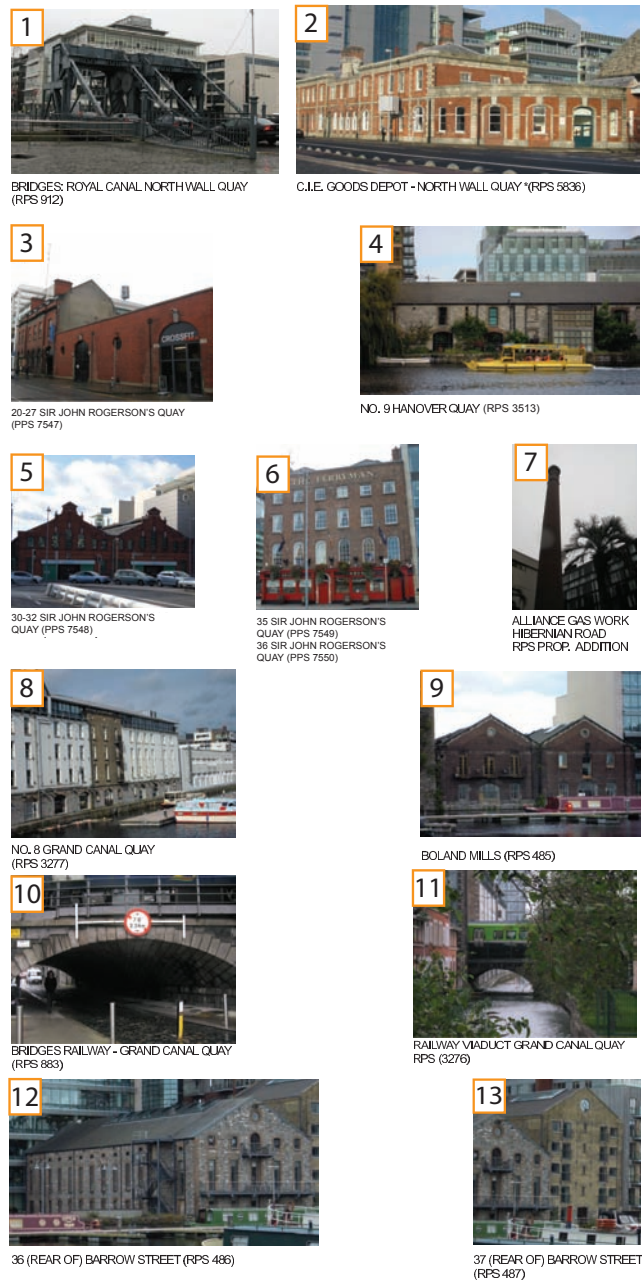


Fig 17 - Record of Protected Structures Map

Built Heritage



14 THE WOOL STORE NORTH WALL QUAY (RPS 5837)



15 GRANITE WALLS NORTH WALL QUAY (RPS 5839)



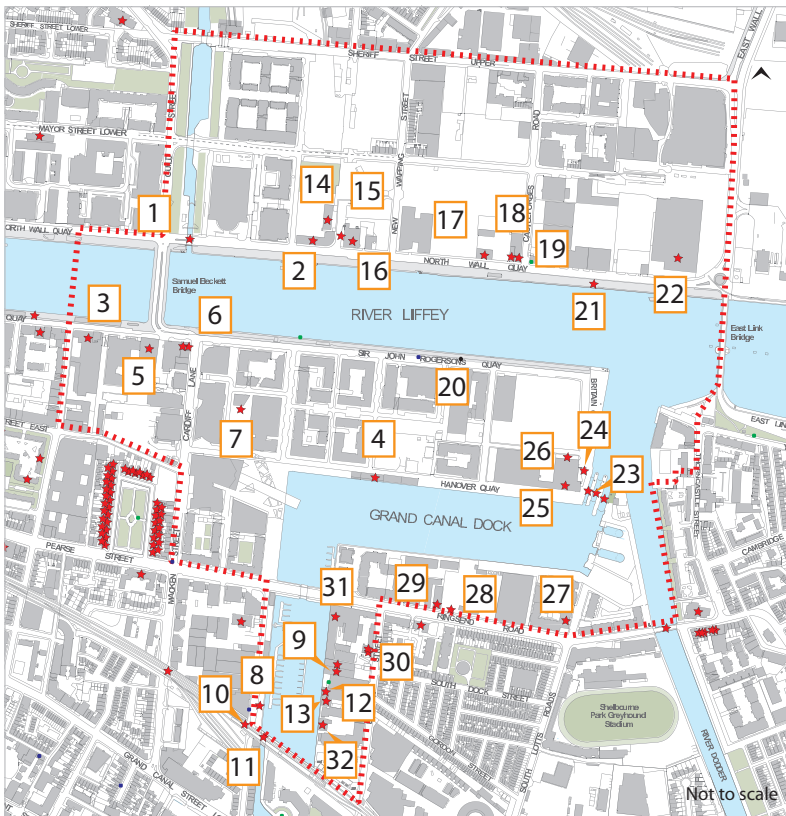
16 58-69 NORTH WALL QUAY (RPS 5838)



17 73 NORTH WALL QUAY (RPS 5840)



18 81 NORTH WALL QUAY (RPS 5841)



19 82 NORTH WALL QUAY (RPS 5842)



20 GRANITE QUAY WALLS & ASSOCIATED ELEMENTS SHELBOURNE QUAY (RPS 7512)



21 GRANITE QUAY WALLS & ASSOCIATED ELEMENTS NORTH WALL QUAY (RPS 5835)



22 FORMER GOODS DEPOT - NORTH WALL QUAY (RPS 5843)



23 BRITAIN QUAY / HANOVER QUAY (RPS 987)



24 FORMER LOCK KEEPERS COTTAGE BRITAIN QUAY (RPS 986)



23 BRITAIN QUAY / HANOVER QUAY (RPS 987)



25 3 GABLE WAREHOUSES HANOVER QUAY (RPS 3512)



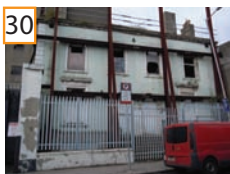
26 2 GREEN STREET EAST (RPS 3328)



32 38-40 BARROW STREET (RPS 488)



31 1 RINGSEND ROAD (RPS 7377)



30 33-34 BARROW STREET (RPS 483 & 484)



29 RINGSEND SHELBOURNE PIERROT CLUB RINGSEND RD. (RPS 7381)



28 C.I.E. BUS DEPOT RINGSEND RD. (RPS 7380)



27 FORMER IRISH GLASS COMPANY 50 RINGSEND ROAD (RPS 7379)

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.

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 overarching 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 wool store 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' cottages 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 The 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 criss-cross 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 The 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 port's 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, represents 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 quay walls, lock-keeper's cottage, lock gates 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 façades 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 the 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 data-sheet 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 Convention Centre Dublin and Old North Wall Railway

Station complex (View 3), St. Joseph's Church (View 6), St. Patrick's Church and the Aviva Stadium (View 2), the Poolbeg Chimneys (Views 9 & 10), the proposed The Point Square building (View 13), and Holles Street Hospital (View 11).

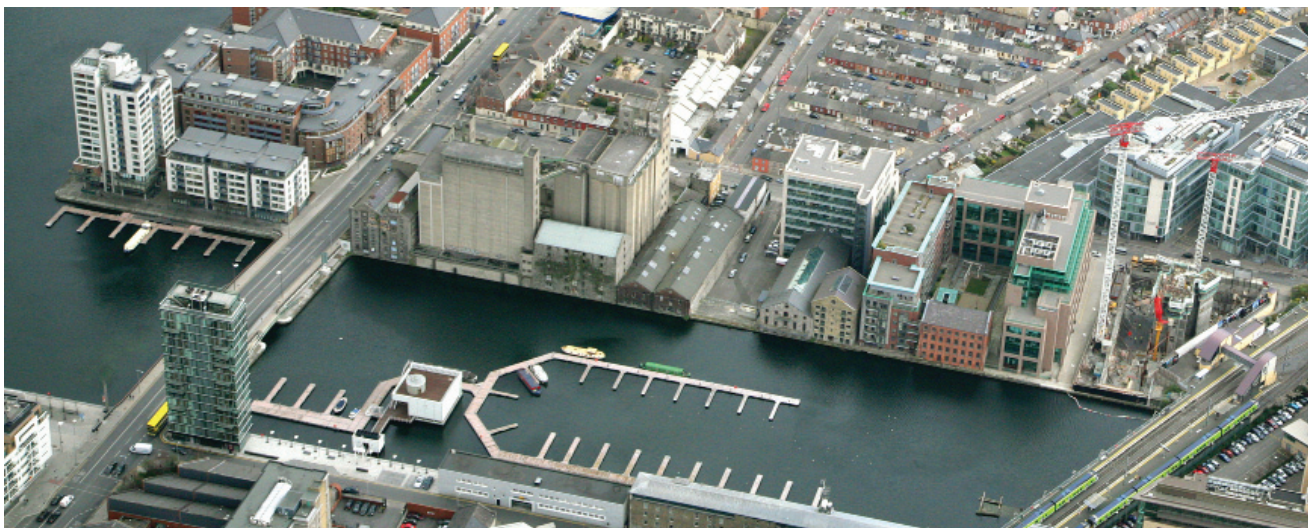
View 4, taken from Grand Canal Square looking eastwards towards the Poolbeg Chimneys and the spire of St. Patrick's Church in Ringsend, will be curtailed by the proposed residential development at the southern end of the dry dock site. It is noted that dependent on what is proposed to the north of that 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 Sheriff 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.



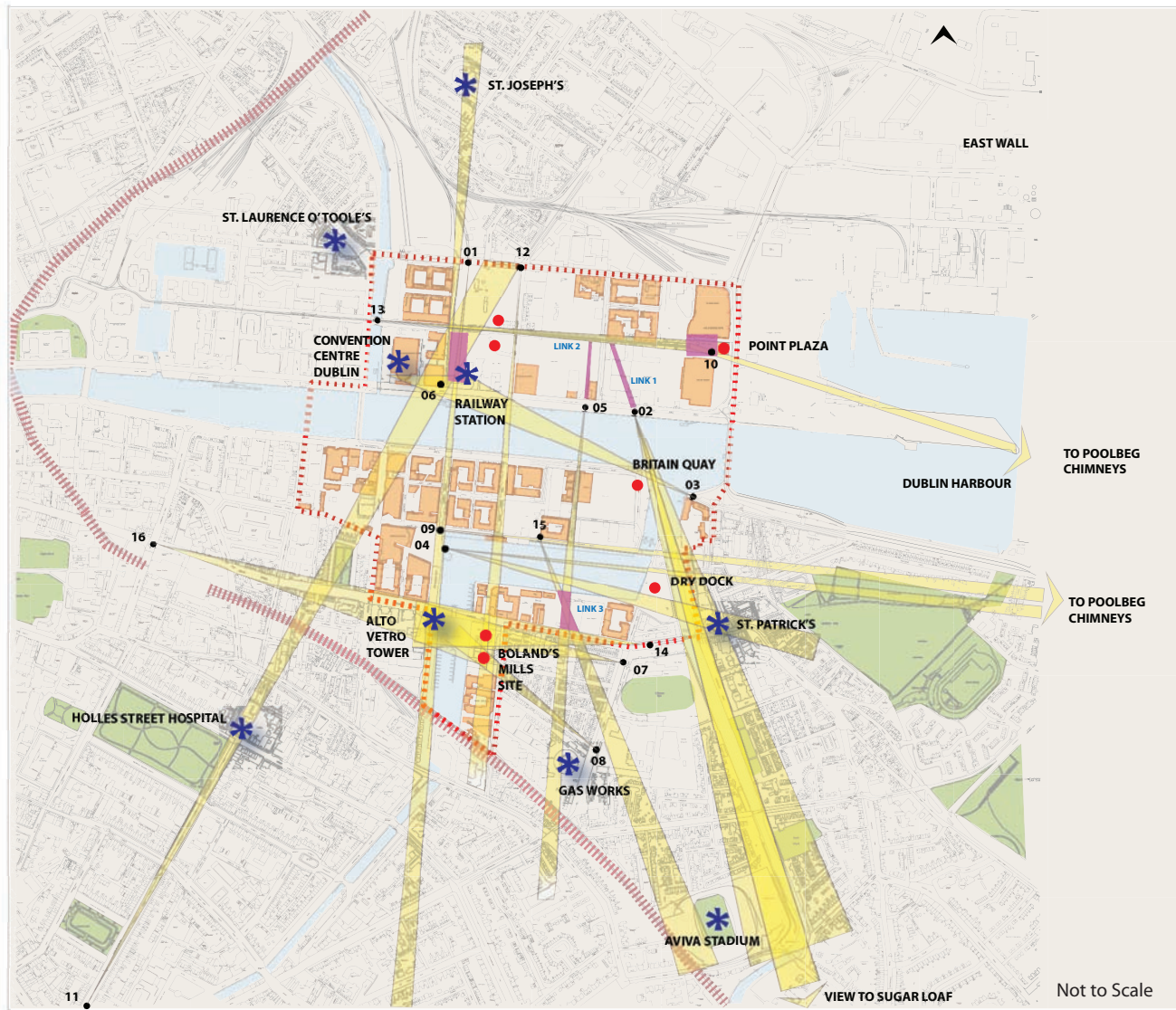


Fig. 18 Views and Vistas

KEY

VIEWING POINT



NEW POTENTIAL LANDMARK SITES



VIEWING CONE



DEVELOPED SITES



EXISTING LANDMARKS



POTENTIAL NEW STREETS/ PUBLIC SPACES



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.



4.7.1 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 instil 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 Libeskind-designed Bord Gáis Energy Theatre and the expansion of The O2.

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

