

NATURA IMPACT REPORT

In Accordance With the Requirements Of

ARTICLE 6(3)

Of The

EU HABITATS DIRECTIVE

For The

NORTH LOTTS AND GRAND CANAL DOCK PLANNING SCHEME



TABLE OF CONTENTS

INTRODUCTION AND BACKGROUND

1.1 Legal requirement for Appropriate Assessment	3
1.2 Appropriate Assessment purpose and process	4
1.3 Overlap with the Strategic Environmental Assessment of the Planning Scheme	5
1.4 Formal guidance	5
1.5 Integrating Appropriate Assessment into the plan-making process	6
1.6 Methodology	6
1.6.1 Data Sources	8

STAGE ONE – APPROPRIATE ASSESSMENT SCREENING

2.1 Introduction	9
2.2 Assessment Methodology	9
2.3 Description of the Planning Scheme	9
2.4 Brief Description of the Natura 2000 sites	12
2.5 Consideration of other Plans and Projects	23
2.5.1 In combination effects	23
2.6 Objectives of Planning Scheme likely to give rise to impacts on the Natura 2000 sites	28
2.7 Screening Conclusion	47

STAGE TWO APPROPRIATE ASSESSMENT

3.1 Assessment methodology	48
3.2 Potential Impacts of Planning Scheme on Natura 2000 sites	48
3.3 Conservation objectives	52
3.4 Impact prediction	54
3.4.1 Cumulative impacts	54
3.5 Mitigation Measures	54
3.5.1 Mitigation Policy Measures for the Planning Scheme	55
3.6 Implementation of Mitigation Policies and Objectives	59
3.7 Monitoring the Implementation of Policies and Objectives	60
3.8 Outcomes	60
3.9 Conclusion	60
Appendix 1	61

1.1 Legal Requirement for Appropriate Assessment

The Appropriate Assessment (AA) has been undertaken for the North Lotts and Grand Canal Dock Planning Scheme with regards to the European Commission's Methodological Guidance on the provisions of Article 6(3) and 6(4) of the 'Habitats' Directive 92/43/EEC (EC 2001) and the Appropriate Assessment of Plans and Projects in Ireland (Guidance for Planning Authorities, 2010 Revision).

It is the responsibility of the competent authority to complete the Appropriate Assessment. Therefore this document has been produced by Dublin City Council with independent review by Scott Cawley Ltd, ecological consultants to inform the Planning Scheme and objectives therein in accordance with best practice and to meet the statutory requirements under the EU Habitats Directive.

It is necessary that the Planning Scheme has regard to Article 6 of the Council Directive 92/43/EEC of 21 May 1992 on the Conservation of Natural Habitats and of Wild Fauna and Flora (as amended) (hereafter referred to as the Habitats Directive). This is transposed in Ireland by the Planning and Development Act 2010.

Articles 6(3) and 6(4) of the Habitats Directive set out the requirement for an assessment of proposed plans and projects likely to affect Natura 2000 sites.

Article 6(3) establishes the requirement to screen all plans and projects and to carry out a further assessment if required (Appropriate Assessment (AA)):

Article 6(3) states:

“Any plan or project not directly connected with or necessary to the management of the [Natura 2000] site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subjected to an appropriate assessment of its implications for the site in view of the site's conservation objectives. In light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.”

The subsequent paragraph allows proposed plans and projects to be approved in certain conditions.

Article 6(4) states:

“If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, Member States shall take all compensatory measures necessary to ensure that the overall coherence of the Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted. Where the site concerned hosts a priority natural habitat type and/or a priority species the only considerations which may be raised are those relating to human health or public safety, to the beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest.”

This Natura Impact Report is a documentary record of the Appropriate Assessment process and decision process for the Docklands SDZ Planning Scheme.

1.2 Appropriate Assessment Purpose and Process

The North Lotts and Grand Canal Dock Planning Scheme sets out objectives which will guide the sustainable development of the area. The purpose of the AA is to assess the impact of the plan against the conservation objectives of European designated sites and to ascertain if any significant adverse effects from the plan will affect the integrity of any of the sites.

These sites are regarded to be of European importance and are part of the European Commission's Natura 2000 network. They are termed candidate Special Areas of Conservation (cSAC) as per the E.C. Habitats Directive and Special Protection Areas (SPA) as per the E.C. Birds Directive. These two EU Directives are transposed in Ireland primarily by the Planning and Development Act 2010 and the European Communities (Birds and Natural Habitats) Regulations, 2011 (S.I 477). The Irish Government and local planning authorities have a legal obligation to protect these European sites.

The process of examining the plan is a structured exercise with a series of steps. The overall purpose of the Appropriate Assessment process is to ensure that the plan, when implemented, does not result in adverse effects on the "integrity" of these Natura 2000 sites.

The first step is to look at the plan in principle and to answer the question: Is it likely that the implementation of this Plan could result in likely significant effects on Natura 2000 sites? This step is known as Stage 1: Screening for Appropriate Assessment. The Screening Stage is described in more detail in Section 2 of this report. If the screening process results in a judgement that likely significant effects may occur or cannot be ruled out, then a more detailed 'Appropriate Assessment' known as (Stage 2: Appropriate Assessment) is required.

Stage 2 involved analysing the relationship between the proposed objectives in the plan and the sensitivities of the Natura 2000 sites. Where there was the potential for an impact to occur, the assessment team recommended changes to elements of the Plan to avoid or mitigate the potential impact. These recommendations were integrated into the plan so that the final plan will not result in any significant effects on Natura 2000 sites.

Figure 1 overleaf shows the process of the Appropriate Assessment, in relation to the preparation of the Planning Scheme.

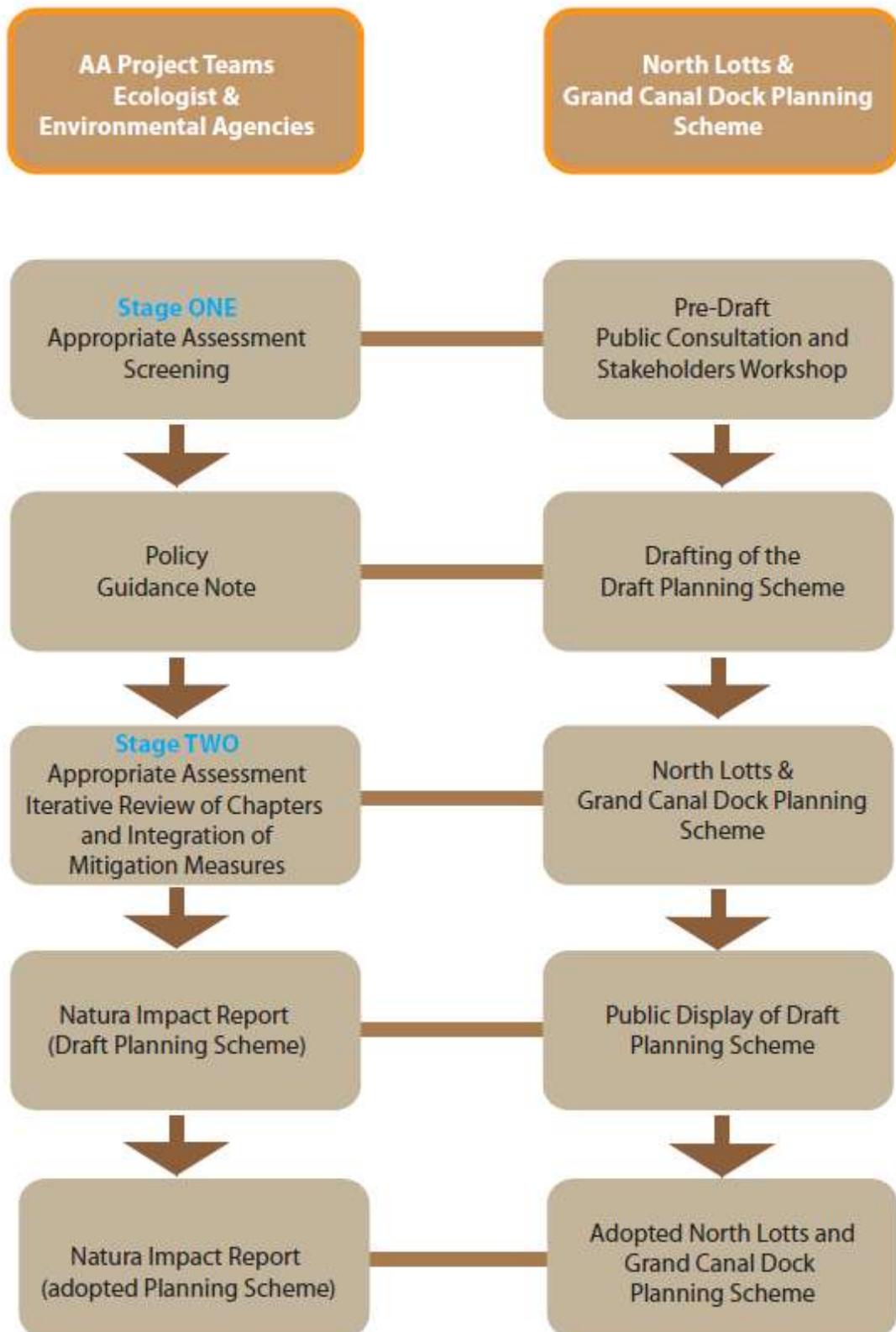


Fig 1: Appropriate Assessment process for planning scheme

1.3 Overlap with the Strategic Environmental Assessment of the Planning Scheme

The Strategic Environmental Assessment of the North Lotts and Grand Canal Dock Planning Scheme was carried out concurrently with the Appropriate Assessment. There were several areas of overlap and in accordance with good practice in terms of data gathering and sharing, data on Natura sites and potential sensitivities and threats was provided to the SEA team. Iterative reviews of the Chapters of the plan were also sent to the SEA Team for their integration into their assessment.

1.4 Formal Guidance

The AA has taken account of guidance contained in the following documents:

- Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities. (Department of Environment, Heritage and Local Government, 2010 revision).
- Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities. Circular NPWS 1/10 & PSSP 2/10.
- Assessment of Plans and Projects Significantly Affecting Natura 2000 sites: Methodological Guidance on the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC (European Commission Environment Directorate-General, 2001); hereafter referred to as the EC Article 6 Guidance Document. The guidance within this document provides a non-mandatory methodology for carrying out assessments required under Article 6(3) and (4) of the Habitats Directive.
- Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitat's Directive 92/43/EEC (EC Environment Directorate-General, 2000); hereafter referred to as MN2000.
- Guidance Document on Article 6(4) of the 'Habitats Directive' 92/43/EEC. Clarification of the Concepts of Alternative Solutions, Imperative Reasons of Overriding Public Interest, Compensatory Measures, Overall Coherence. Opinion of the European Commission (European Commission, January 2007).

1.5 Integrating Appropriate Assessment Into the Plan-making process

Appropriate Assessment (AA) needs to be fully integrated with the various stages of the Docklands SDZ Planning Scheme process in order to ensure that planning scheme does not impact upon the integrity of any areas designated as Natura 2000 sites. Accordingly, Dublin City Council has adopted a pre-cautionary and comprehensive approach, undertaking a assessment exercise of objectives throughout the North Lotts and Grand Canal Dock Planning Scheme process. The chart below shows the different stages of the SDZ Planning Scheme process where the Appropriate Assessment was carried out.

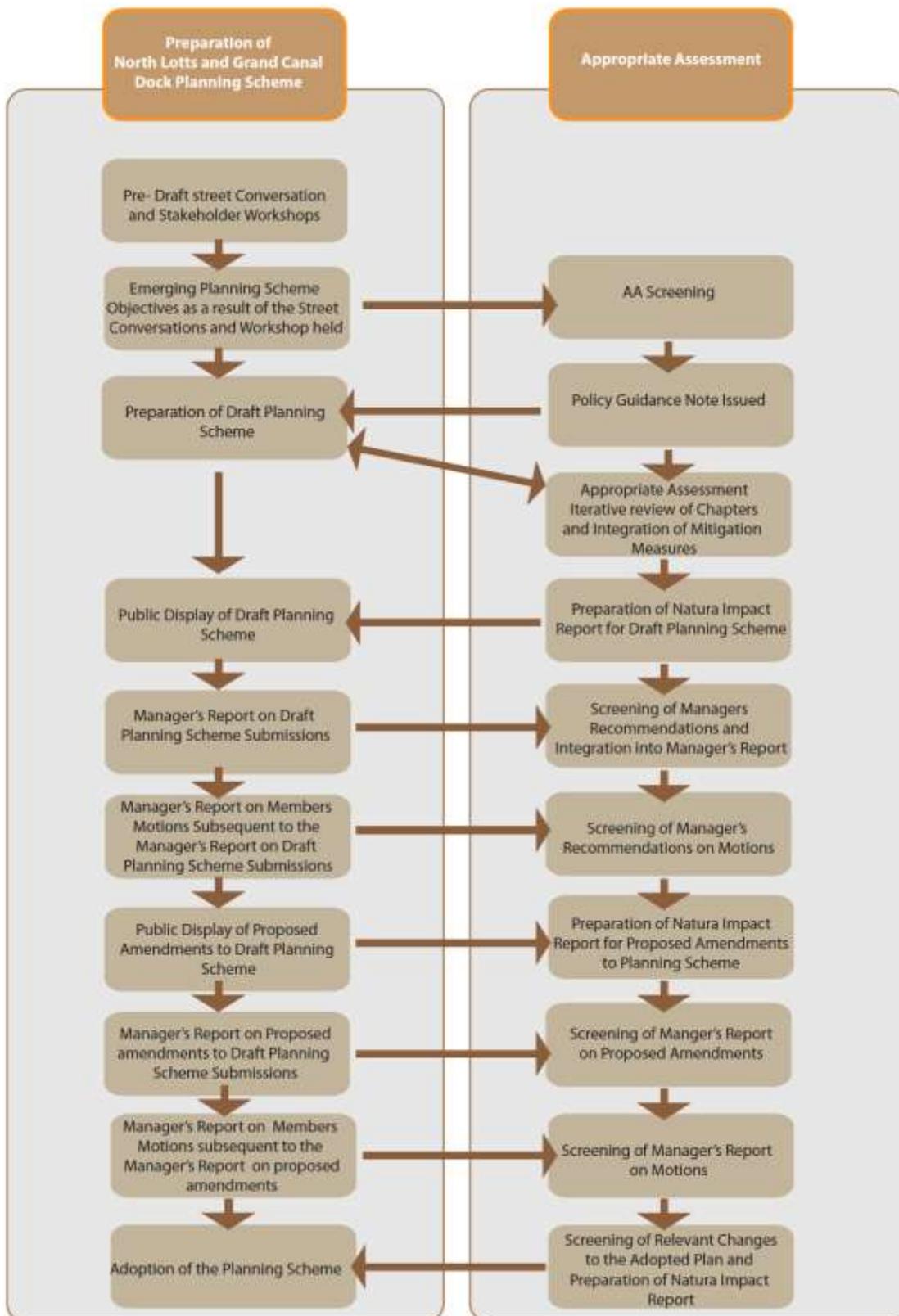


Fig 2: Flow Chart indicating AA Integration into the Plan-making process

To inform the preparation of the Docklands Planning Scheme, a Policy Guidance Note was prepared by the Appropriate Assessment Team. This note highlighted the ways in which the plan may result in impacts on the individual cSACs and SPAs and provided recommended Objectives to be included in the plan to avoid these impacts.

The SDZ project Team provided Chapters of the Planning Scheme for Appropriate Assessment during the process of preparing the plan. These Chapters were reviewed and revised by the project team in an iterative process. The results of stage two of the Appropriate Assessment is provided in Section 3.

Between the first display of the planning Scheme on 25th of March 2013 and the plan being made on the 5th of November 2013, Appropriate Assessment was carried out on Manager's Reports on resulting from submissions, Members' motions and amendments to the plan.

1.6 Methodology

There was an Appropriate Assessment Stage 1: Screening exercise carried out to identify any Natura 2000 sites within the zone of influence (ZOL) of the Docklands SDZ Plan Area and to review the elements of the planning scheme that had the potential to cause negative impacts on European sites.

The zone of influence (ZOL) is the 'effect area' over which changes could give rise to potentially significant impacts. The ZOL over which significant impacts may occur will differ for sensitive ecological receptors depending on the pathway for any potential impacts, as well as the specific nature of different habitats/species (e.g. ability to move/disperse or absorb impacts).

In accordance with guidance from the Department of Environment, Heritage and Local Government (2010) a distance of 15km was used as a starting point for identifying potential impacts. It was found that this 15km distance was more than adequate for capturing all potentially significant impacts within the ZOL of the SDZ Area.

A desktop review was carried out on the identity, location and conservation objectives of all Natura 2000 sites within 15 km radius of the SDZ boundary. The sites' were determined from information obtained from the National Parks and Wildlife Service (NPWS). In addition, previous reports prepared for the planning process of significant applications granted within the plan area were reviewed. The Natura Impact Report of the City Development Plan 2011-2017 and the Eastern River Basin District Management Plan were also reviewed.

In addition to the desktop review, investigative monitoring of the water bodies (River Liffey, Royal Canal, Grand Canal and River Dodder) within the SDZ area was carried out between October and November 2012 to collect information about water quality. An Environmental Risk Assessment for the undeveloped sites in the SDZ Plan area was also carried out.

The Eastern Division of the National Parks and Wildlife Service (NPWS) was consulted in relation to designated areas and records of protected species within the vicinity of the study. The approach to the Appropriate Assessment was also discussed with the NPWS. The Parks Department, Planning Department, Water Services and Engineering Departments were also consulted as part of this study.

As part of the Appropriate Assessment process for the Docklands SDZ Planning Scheme, reference has been made to the following documents

- Water Framework Directive
- Eastern River Basin Management Plan
- The Planning System and Flood Risk Management Guidelines for Planning Authorities
- Natura Impact Report of Dublin City Development Plan 2011-2017.
- Dublin Port Master Plan 2012-2040 Strategic Natura Impact Statement
- Greater Dublin Strategic Drainage Study
- Environment Reports of IPPC licensed facilities within the Plan area (P0345-01 Brooks Thomas and P0468-01 Everlac Paint/Durabond)
- EPA Waste licences within and around the Plan area (W0042-01 Dean Waste, W0097-01 Dublin Waste, W0100-01 DDDA Gasworks, W0108-01 DDDA Gasworks, W0137-01 Haytonvale, W0164-01 Dunloe Ewart & W0232-01 Dublin City Council)
- Guild Street-Macken Street Bridge Environmental Impact Statement
- Dublin Docklands Master Plan 2008 SEA statement and Appropriate Assessment
- Dublin Port Masterplan 2012-2040 Environmental Report

1.6.1 Data Sources

Sources of information that were used to collect data on the Natura 2000 network of sites relied upon are listed below:

- Ordnance Survey of Ireland mapping and aerial photography available from www.osi.ie
- Online data available on Natura 2000 sites as held by the National Parks and Wildlife Service (NPWS) from www.npws.ie
- Information on water quality in the area available from www.epa.ie
- Information on the River Basin Districts from www.wfdireland.ie
- Information on soils, geology and hydrogeology in the area available from www.gsi.ie
- Status of EU Protected Habitats and Species in Ireland. (National Parks & Wildlife Service, 2008)
- The Status of Birds in Ireland: An Analysis of Conservation Concern 2008-2013 (Lynas et al, 2007)

- Natura Impact Report of the Dublin City Development Plan 2011-2017
- Dublin Port Master Plan 2012-2040 Strategic Natura Impact Statement
- Dublin City Biodiversity Action Plan: 2008 –2012

2.1 Introduction

The North Lotts and Grand Canal Dock Planning Scheme (hereafter referred to as Planning Scheme) has been screened in accordance with the requirements of Article 6(3) of the EU Habitats Directive (92/43/EEC). The Screening process has investigated whether any of the consequences of implementing the Planning Scheme would be likely to result in significant effects on the Natura 2000 sites in the “ZOL” of the Scheme.

2.2 Assessment Methodology

Best practice in AA Screening promotes a site-led approach to the process. The site-led approach puts the environmental conditions that maintain site integrity-first. So the first steps in the screening stage are identifying the Natura 2000 sites within the zone of influence of the Planning Scheme and then collecting information as to the qualifying interests¹ and how site integrity may be defined for each Natura 2000 site. The site-led approach focuses on how the site integrity can be maintained by avoiding impacts on the key environmental conditions. This approach allows issues such as cumulative impacts to be identified.

The site-led approach is summarised as follows:

1. Which Natura 2000 sites lie within the Planning Scheme and its zone of influence?
2. What are the qualifying interests for each Natura site?
3. What is the underpinning ecological and environmental conditions required to maintain these qualifying interests at Favourable Conservation Status²?
4. What are the threats – actual or potential- that could affect the underpinning factors?
5. Are there aspects of the Planning Scheme that could give rise to these threats?

2.3 Description of the Planning Scheme

The area has been designated as a Strategic Development Zone (S.I No. 530 of 2012). It is based on the criteria and considerations for the designation of sites for SDZs as set out in Section 166 of the Planning & Development Act, 2000.

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

¹ <http://www.npws.ie/protectedsites/>

² <http://www.npws.ie/protectedsites/conservationmanagementplanning/>

Underground Station at Spencer Dock will potentially result in the lands becoming the most accessible and connected part of the city and state.

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

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

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

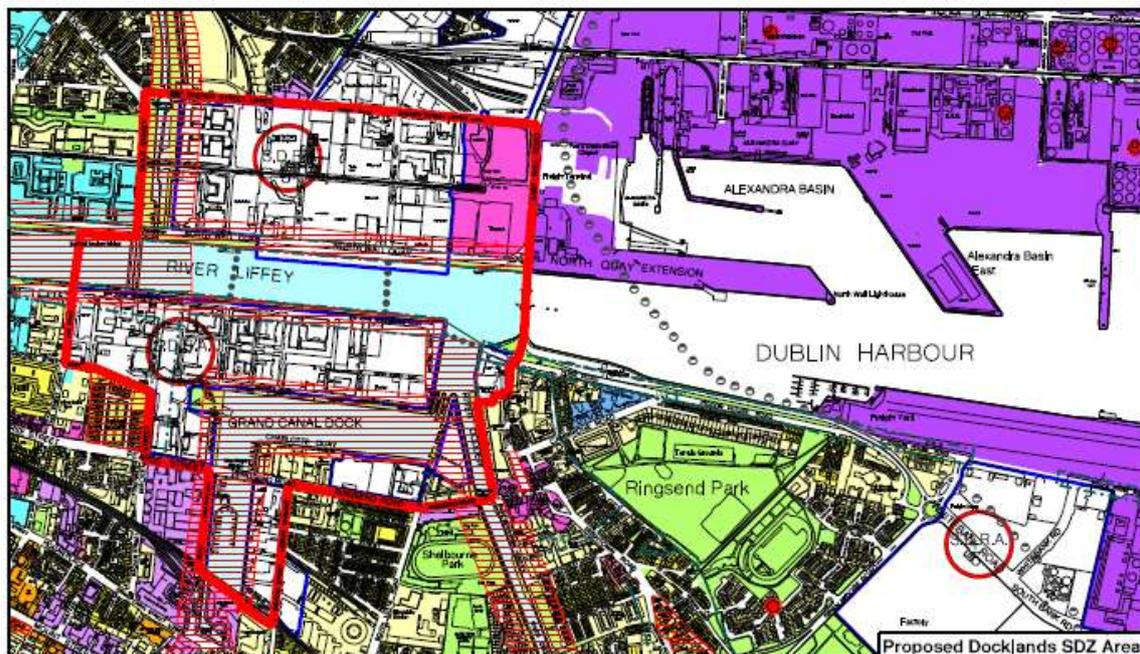


Fig 3: SDZ Area that the Planning Scheme refers to

The Planning Scheme sets out the vision and an overall spatial strategy for the proper planning and sustainable development of the Docklands Strategic Development Zone area. The plan contains the objectives that will guide the development of the area in terms of physical growth and renewal, economic, social and cultural activity and environmental protection and enhancement in accordance with the National Development Plan, the Regional Planning Guidelines for the Greater Dublin Area and the Dublin City Council Development Plan.

The SDZ Area comprises some 66 Ha of the overall 520 Ha Dublin Docklands Area as set out in the Dublin Docklands Masterplan 2008 and relates to the extent of the DDDA's North Lotts and Grand Canal Dock Section 25 Planning Schemes. The SDZ Area is illustrated on figure 2. The developed and undeveloped lands in the SDZ are shown in figure 3.

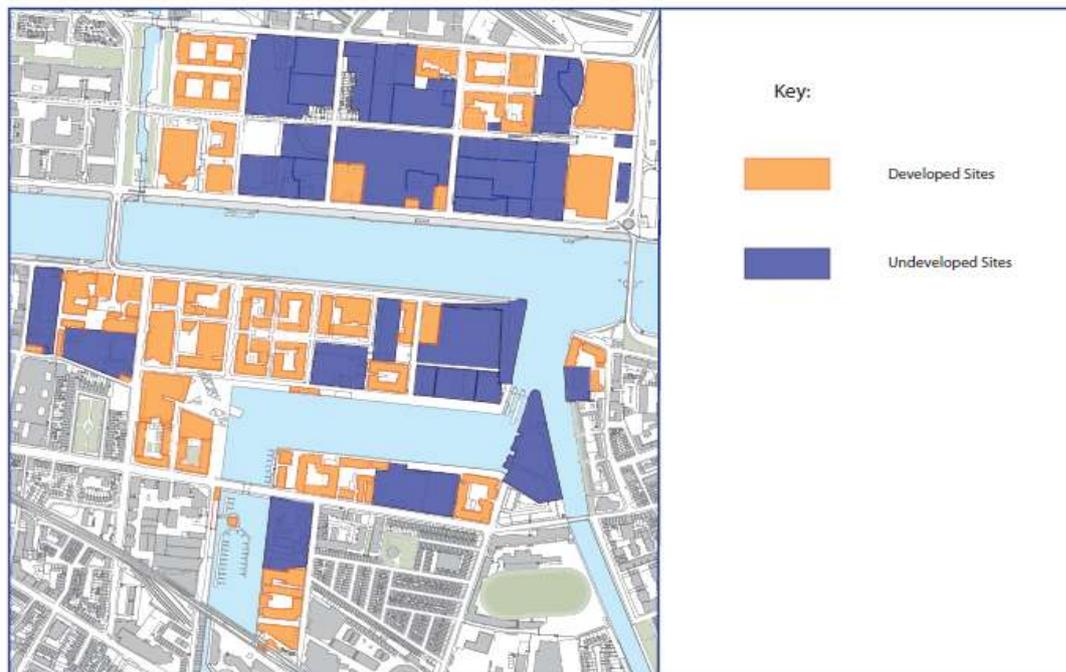


Fig 4: Undeveloped sites within SDZ

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

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

The total quantum of floorspace which it is an objective to deliver in the SDZ, subject to specific site characteristics, is therefore approx. 2600 residential units and c.305,000 sq.m commercial floorspace.

The objectives contained in the planning scheme are informed by the vision to develop a world class maritime quarter with a distinctive Dublin character. The SDZ area to be a model of sustainable inner city regeneration incorporating socially inclusive urban neighbourhoods, a diverse, green innovation based economy contributing to the prosperity of the locality, the city and the country. The area will be supported by exemplary social and physical infrastructure. These objectives are therefore the subject of Appropriate Assessment.

2.4 Brief Description of the Natura 2000 sites

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

1. North Dublin Bay cSAC (IE000206) (4.1km North East plan of area)
2. South Dublin Bay cSAC (IE000210) (1.9km South East of plan area)
3. North Bull Island SPA (IE00406) (4.1km North East of plan area)
4. South Dublin Bay & River Tolka Estuary SPA (IE004024) (1.7km East of plan area)
5. Howth Head Coast SPA (IE004113) (13km North East of plan area)
6. Baldoyle Bay SPA (IE004116) (9km North East of plan area)
7. Baldoyle Bay cSAC (IE000199) (9km North East of plan area)
8. Howth Head cSAC (IE000202) (11.1km North East of plan area)
9. Irelands Eye cSAC (IE002193) (12.8km North East of plan area)
10. Irelands Eye SPA (IE004117) (12.8km North East of plan area)
11. Malahide Estuary cSAC (IE000205) (13km North of plan area)
12. Malahide Estuary SPA (IE004025) (13km North of plan area)
13. Glenasmole Valley cSAC (IE001209) (13km South of plan area)
14. Wicklow Mountains cSAC (IE002122) (12.5km South of plan area)
15. Dalkey Island SPA (IE004172) (12km South East of plan area)
16. Rockabill to Dalkey Islands cSAC (IE003000) (9km East of the plan area)

In addition to the European Sites within the ZOL there are five Natural Heritage Areas (NHAs) or Proposed Natural Heritage Areas (pNHAs) in and adjoining the Planning Scheme area. Although NHAs/pNHAs do not form part of the Natura 2000 network they have been included here for the potential support that they may provide to the Natura 2000 network.

The following pNHAs are present in the plan area and in close proximity of the area.

- Royal Canal pNHA (002103) (0km within the plan area)
- Grand Canal pNHA (002104) (0km within the plan area)
- North Dublin Bay pNHA (000206) (4.1km North East of plan area)
- South Dublin Bay pNHA (000210) (1.9km South East of plan area)
- Dolphins, Dublin Docks (000201) (2.05km East of plan area)

Figure 5 illustrates the Natura 2000 sites within a 15km radius and the Table 1 below describes the Natura 2000 sites within the 15km radius and details the screening for any potential adverse impacts. The screening exercise considered any likely direct, indirect, secondary or cumulative impacts on the plan on the Natura 2000 sites by virtue of³:

- Size and Scale
- Land take
- Distance from the Natura 2000 site or key features of the site
- Resource Requirements
- Emissions
- Excavation Requirements
- Transportation Requirements
- Duration of Construction, Operation, Decommissioning etc

European sites highlighted in grey are those for which potential adverse impacts could not have been screened out.

Table 1: Natura 2000 Sites within 15km of the Planning Scheme boundary

Site Code	Site Name	Approximate Distance from Plan area	Qualifying Interests (www.npws.ie , November 2013)	Likely Impacts
IE000199	Baldoyle Bay cSAC	9km (North East)	Site contains Mudflats and sandflats not covered by seawater at low tide, Salicornia and other annuals colonizing mud and sand, Spartina swards (<i>Spartinion maritimae</i>), Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>), Mediterranean salt meadows (<i>Juncetalia maritimi</i>)	<p>Effluent from the proposed SDZ together with the Greater Dublin Area will be received by Ringsend WWTP and any excess outflow from the plant discharges into the Dublin Bay area. Dublin Bay is hydrologically connected to the Baldoyle Bay cSAC.</p> <p>However the Baldoyle Bay cSAC is 9km north east of the plan area and this separation distance prevents the planning scheme from having a significant adverse impact on the qualifying interest habitats.</p> <p>Recreational pressure may increase due to advances in transport modes and</p>

³ Assessment of Plans and Projects significantly affecting Natura 2000 sites. Methodological guidance on the provisions of Article 6 (3) and (4) of the Habitats Directive 92/43/EEC UK

Site Code	Site Name	Approximate Distance from Plan area	Qualifying Interests (www.npws.ie , November 2013)	Likely Impacts
				routes however it is expected that active management of the SAC by NPWS and Fingal County Council will prevent significant impacts.
IE000202	Howth Head cSAC	11.1km (North East)	Howth Head contains vegetated sea cliffs of the Atlantic and Baltic coasts and European dry heaths, two habitats listed on Annex I of the EU Habitats Directive.	<p>Recreational pressure may increase due to advances in transport modes and routes however it is expected that active management of the SAC by NPWS and Fingal County Council will prevent significant impacts.</p> <p>In addition the separation distance will reduce the level of any potential negative impact with the SAC located 11.1km northeast of the SDZ area</p>
IE000205	Malahide Estuary cSAC	13km (North)	Malahide Estuary contains Fixed Coastal Dunes with Herbaceous Vegetation (Grey Dunes), Mudflats & Sand flats not covered by seawater at low tide, Atlantic Salt Meadows, Spartina Swards, Mediterranean Salt Meadows, Salicornia & other annuals colonizing mud and sand. Shifting Dunes along the shore line with Ammophila arenaria (White Dunes).	<p>Effluent from the proposed SDZ together with the Greater Dublin Area will be received by Ringsend WWTP and any excess outflow from the plant discharges into the Dublin Bay area. Dublin Bay is hydrologically connected to the Malahide Estuary cSAC.</p> <p>However the Malahide Estuary cSAC is 13km north of the plan area and this separation distance prevents the planning scheme from having a significant adverse impact on the qualifying interest habitats.</p> <p>Recreational pressure may increase due to advances in transport modes and</p>

Site Code	Site Name	Approximate Distance from Plan area	Qualifying Interests (www.npws.ie , November 2013)	Likely Impacts
				<p>routes however it is expected that active management of the SAC by NPWS and Fingal County Council will prevent significant impacts.</p> <p>In addition the separation distance of 13km between the two areas will reduced the magnitude of any potential negative impacts on the SAC.</p>
IE 000206	North Dublin Bay cSAC	4.1km (North East)	<p>North Dublin Bay contains Mudflats and sandflats not covered by seawater at low tide, Annual vegetation of drift lines, Salicornia and other annuals colonizing mud and sand, Spartina swards, (<i>Spartinion maritimae</i>), Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>), Petalwort (<i>Petalophyllum ralfsii</i>), Mediterranean salt meadows (<i>Juncetalia maritimi</i>), Embryonic shifting dunes, Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes), Fixed coastal dunes with herbaceous vegetation (grey dunes), Humid dune slacks,</p>	<p>Effluent from the proposed SDZ together with the Greater Dublin Area will be received by Ringsend WWTP and any excess outflow from the plant discharges into the Dublin Bay area. Dublin Bay is hydrologically connected to the North Dublin Bay cSAC.</p> <p>Recreational pressure may increase due to advances in transport modes and routes. This may result in indirect impacts including increased levels of erosion or disturbance of qualifying interest habitats.</p> <p>Potential disturbance and change in water quality during constructions works.</p>
IE000210	South Dublin Bay cSAC	1.9km (South East)	Tidal mudflats and sandflats.	<p>Effluent from the proposed SDZ together with the Greater Dublin Area will be received by Ringsend WWTP and any excess outflow from the plant discharges into the Dublin Bay area. Dublin Bay is</p>

Site Code	Site Name	Approximate Distance from Plan area	Qualifying Interests (www.npws.ie , November 2013)	Likely Impacts
				<p>hydrologically connected to the South Dublin Bay cSAC.</p> <p>Recreational pressure may increase due to advances in transport modes and routes. This may result in indirect impacts including increased levels of disturbance of qualifying interest habitats.</p> <p>Potential disturbance and change in water quality during constructions works.</p>
IE001209	Glenasmole Valley cSAC	13km (South)	<p>Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco Brometalia) (*important orchid sites).</p> <p>Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae).</p> <p>Petrifying springs with tufa formation (Cratoneurion).</p>	<p>Glenasmole Valley cSAC is 13km south of the SDZ area. The separation distance and location upstream prevents them from any likely significant impacts as there is no hydrological pathway.</p>
IE002193	Ireland's Eye cSAC	12.8km (North East)	<p>Vegetated Sea Cliffs of the Atlantic and Baltic Coasts. Perennial Vegetation of Stony Banks.</p>	<p>Effluent from the proposed SDZ together with the Greater Dublin Area will be received by Ringsend WWTP and any excess outflow from the plant discharges into the Dublin Bay area. Dublin Bay is hydrologically connected to the Ireland Eye cSAC.</p> <p>However the Ireland's Eye cSAC is 12.8km north east of the plan area and this separation distance prevents the planning scheme from having a significant adverse impact on the qualifying interest habitats.</p>

Site Code	Site Name	Approximate Distance from Plan area	Qualifying Interests (www.npws.ie , November 2013)	Likely Impacts
IE002122	Wicklow Mountains cSAC	12.5km (South)	Natural dystrophic lakes and ponds. Northern Atlantic wet heaths with <i>Erica tetralix</i> . European dry heaths. Alpine and Boreal heaths. Species-rich <i>Nardus</i> grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe). Blanket bog (*active only). Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>). Calcareous rocky slopes with chasmophytic vegetation. Siliceous rocky slopes with chasmophytic vegetation. Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in British Isles.	Development of the SDZ area will result in an increase in population. Potential exists for an increase of visitor numbers to the Wicklow Mountains cSAC area. However based on the separation distance of 12.5km between the two sites and active management of the cSAC by the NPWS significant adverse impacts are not considered likely.
IE003000	Rockabill to Dalkey Islands cSAC	9km (East)	Reefs and Harbour Porpoise.	Effluent from the proposed SDZ together with the Greater Dublin Area will be received by Ringsend WWTP and any excess outflow from the plant discharges into the Dublin Bay area. Dublin Bay is hydrologically connected to the Rockabill to Dalkey Islands cSAC Recreational pressure may increase due to advances in transport modes and routes. This may result in indirect impacts including increased disturbance levels from recreational activities. Potential disturbance and change in water quality during constructions works.
IE004006	North Bull Island SPA	4.1km (North East)	Species: Light-bellied Brent Goose, Shelduck, Pintail, Shoveler, Oystercatcher, Grey Plover, Knot, Dunlin, Black-tailed Godwit, Bar-tailed Godwit Redshank, Turnstone	Effluent from the proposed SDZ together with the Greater Dublin Area will be received by Ringsend WWTP and any excess

Site Code	Site Name	Approximate Distance from Plan area	Qualifying Interests (www.npws.ie , November 2013)	Likely Impacts
			Additional Special Conservation Interests include: Teal, Ringed Plover, Golden Plover, Sanderling, Curlew, Black headed Gull and wetland & waterbirds	<p>outflow from the plant discharges into the Dublin Bay area. Dublin Bay is hydrologically connected to the North Bull Island SPA.</p> <p>Recreational pressure may increase due to advances in transport modes and routes. This may result in indirect impacts including increased disturbance levels from recreational activities including dog walkers.</p> <p>Potential disturbance and change in water quality during constructions works.</p>
IE004016	Baldoyle Bay SPA	9km (North East)	Species: Light-bellied Brent Goose, Ringed Plover and Bar-tailed Godwit. Additional Special Conservation Interests include: Shelduck, Golden Plover, Grey Plover and Wetland & Waterbirds.	<p>Effluent from the proposed SDZ together with the Greater Dublin Area will be received by Ringsend WWTP and any excess outflow from the plant discharges into the Dublin Bay area. Dublin Bay is hydrologically connected to the Baldoyle Bay SPA.</p> <p>However the Baldoyle Bay SPA is 9km north east of the plan area and this separation distance prevents the planning scheme from having a significant adverse impact on the qualifying interest habitats.</p> <p>Recreational pressure may increase due to advances in transport modes and routes. This may result in indirect impacts including increased disturbance levels from recreational</p>

Site Code	Site Name	Approximate Distance from Plan area	Qualifying Interests (www.npws.ie , November 2013)	Likely Impacts
				activities including dog walkers. However due to the distance of 9km between the two sites and active management of the Baldoyle Bay SPA by NPWS and Fingal County Council, any potential indirect impacts from recreational activities are considered unlikely to result in adverse impacts.
IE004024	South Dublin Bay And River Tolka Valley Estuary SPA	1.7km (East)	Species: Light-bellied Brent Goose, Oystercatcher, Ringed Plover, Grey Plover, Knot, Dunlin, Sanderling, Bar-tailed Godwit, Redshank, Additional Special Conservation Interests include: Black headed Gull, Roseate Tern, Common Tern, Arctic Tern and wetland & waterbirds	<p>Effluent from the proposed SDZ together with the Greater Dublin Area will be received by Ringsend WWTP and any excess outflow from the plant discharges into the Dublin Bay area. Dublin Bay is hydrologically connected to the South Dublin Bay and River Tolka Valley Estuary SPA.</p> <p>Recreational pressure may increase due to advances in transport modes and routes. This may result in indirect impacts including increased disturbance levels from recreational activities including dog walkers.</p> <p>Potential disturbance and change in water quality during constructions works.</p>
IE004025	Malahide Estuary SPA	13km (North)	Species: Light-bellied Brent Goose, Golden eye and Black-tailed Godwit. Additional Special Conservation Interests include: Great Crested Grebe, Shelduck, Pintail, Red Breasted Merganser, Oystercatcher, Golden Plover, Grey Plover, Knot, Dunlin, Bartailed Godwit, Redshank	Effluent from the proposed SDZ together with the Greater Dublin Area will be received by Ringsend WWTP and any excess outflow from the plant discharges into the Dublin Bay area. Dublin Bay is

Site Code	Site Name	Approximate Distance from Plan area	Qualifying Interests (www.npws.ie , November 2013)	Likely Impacts
			and Wetland & Waterbirds	<p>hydrologically connected to the Malahide Estuary SPA.</p> <p>However the Malahide Estuary SPA is 13km north of the plan area and this separation distance prevents the planning scheme from having a significant adverse impact on the qualifying interest habitats.</p> <p>Recreational pressure may increase due to advances in transport modes and routes however it is expected that active management of the SAC by NPWS and Fingal County Council will prevent significant impacts. In addition the separation distance of 13km between the two areas will reduced the magnitude of any potential negative impacts on the SPA.</p>
IE004113	Howth Head - Coast SPA	13km (North East)	Species: Kittiwake	Howth Head Coast SPA is 13km north of the proposed development. Potential indirect impacts include increased disturbance during breeding season however due to breeding habitat type/location on cliffs and distance between the two sites no adverse impacts are envisaged.
IE004117	Ireland's Eye SPA	12.8km (North East)	Species: Cormorant. Additional Special Conservation Interests include: Herring Gull, Kittiwake, Guillemot and Razorbill	Effluent from the proposed SDZ together with the Greater Dublin Area will be received by Ringsend WWTP and any excess

Site Code	Site Name	Approximate Distance from Plan area	Qualifying Interests (www.npws.ie , November 2013)	Likely Impacts
				<p>outflow from the plant discharges into the Dublin Bay area. Dublin Bay is hydrologically connected to the Ireland Eye SPA.</p> <p>However the Ireland Eye SPA is 12.8km north east of the plan area and this separation distance prevents the planning scheme from having a significant adverse impact on the qualifying interest habitats.</p>
IE004172	Dalkey Islands SPA	12km (South East)	Species: Roseate Tern, Common Tern, Arctic Tern.	<p>Effluent from the proposed SDZ together with the Greater Dublin Area will be received by Ringsend WWTP and any excess outflow from the plant discharges into the Dublin Bay area. Dublin Bay is hydrologically connected to the Dalkey Islands SPA.</p> <p>Due to the distance between the two sites and location offshore, no adverse impacts from the SDZ are envisaged.</p>

As a result of the Stage 1 screening, it has been identified that five Natura 2000 sites are likely to be receivers of any potential impacts from the Planning Scheme and its objectives (highlighted in Table 1 in grey). It has been found that the Planning Scheme could potentially impact, either directly or indirectly, on the following Natura 2000 sites due to the current deficiencies of the waste water treatment plant at Ringsend, more population resulting in increased recreation activity and potential impacts from construction works on undeveloped sites.

1. South Dublin Bay cSAC
2. South Dublin Bay & River Tolka Valley Estuary SPA
3. North Dublin Bay cSAC
4. North Bull Island SPA
5. Rockabill to Dalkey Islands cSAC

Figure 5: All designated sites within a 15km radius of the planning scheme area and Table 1 describes the Natura 2000 sites.

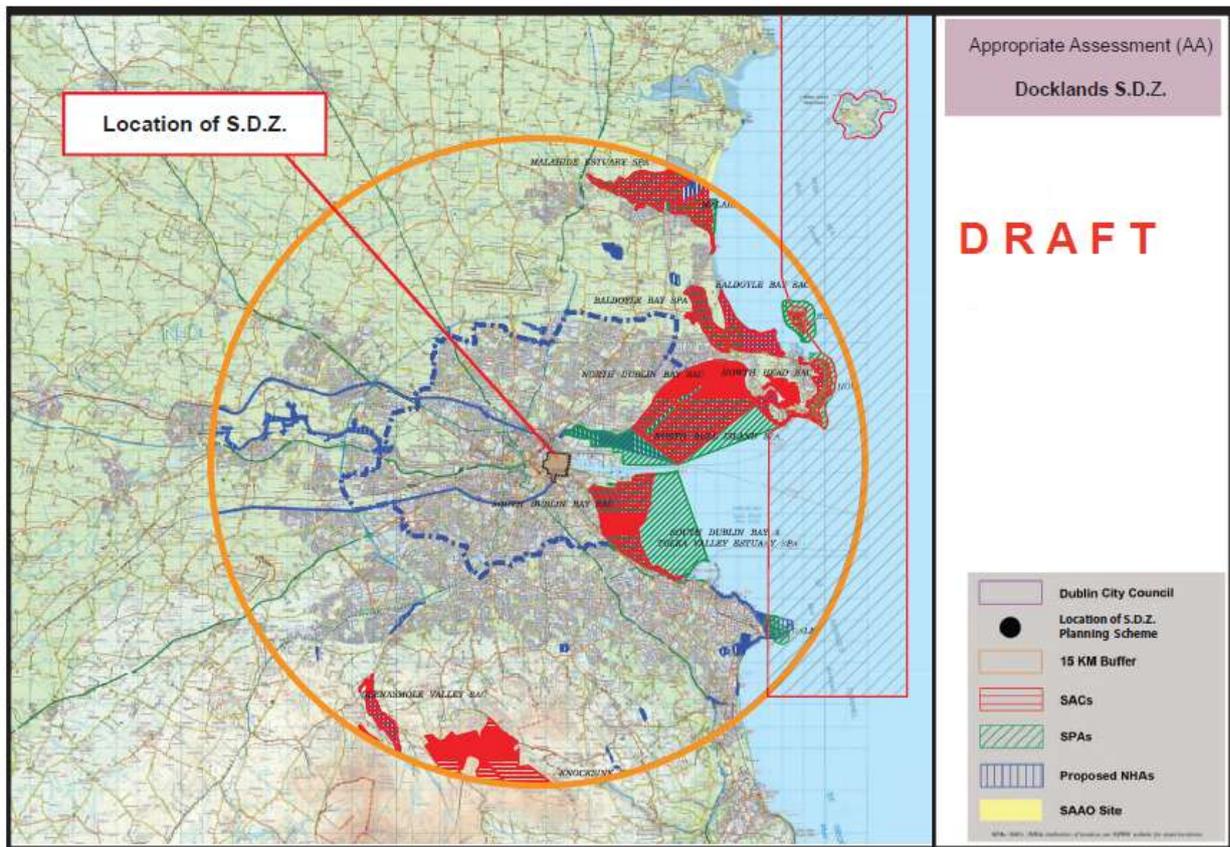
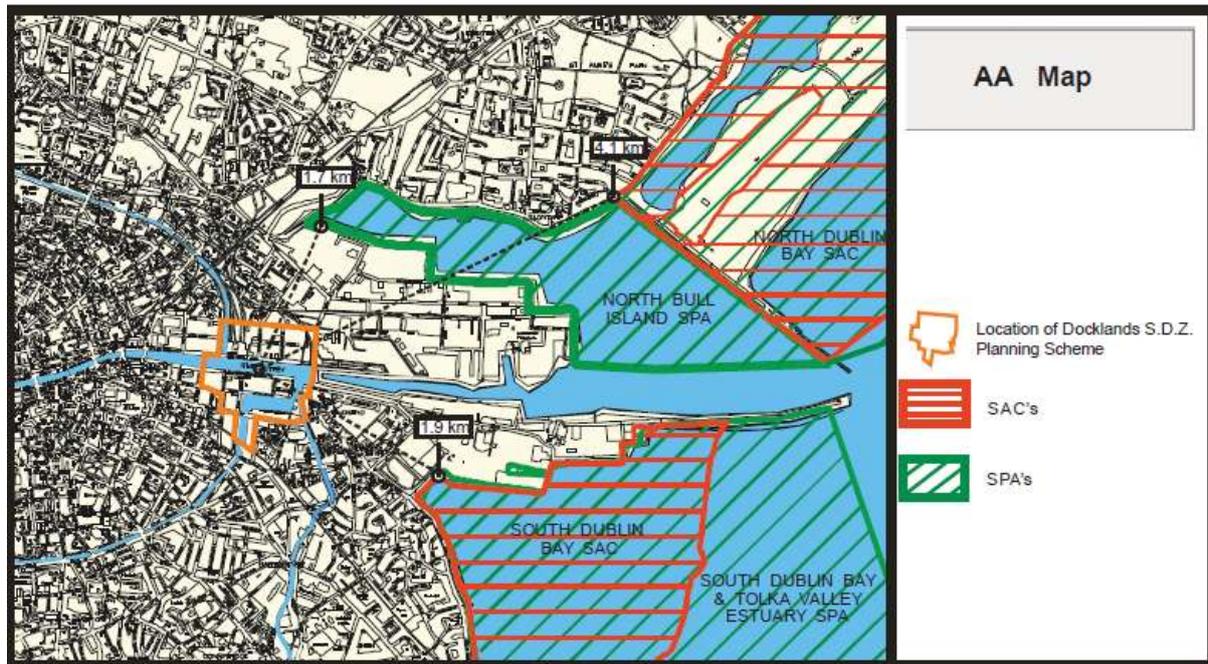


Figure 6: Location of the Planning Scheme lands in context with the more immediate Special Areas of Conservation and Special Protection Areas.



2.5 Consideration of other Plans and Projects

Article 6(3) of the Habitats Directive requires that in combination or cumulative effects with other plans or projects are considered as part of the Appropriate Assessment process. The relevant plans and projects that have been reviewed with potential to result in in-combination effects with the Planning Scheme are as follows:

- Eastern River Basin District Management Plan 2010
- Dublin City Development Plan 2011-2017
- Dublin Port Master Plan 2012-2040
- Dublin Docklands Masterplan 2008
- George's Quay Local Area Plan 2012-2018
- Poolbeg Planning Scheme
- Dublin Port National Development Plan study 2009
- The Dublin Port 6 year Dredge Plan
- North Bull Island Management Plan
- Dublin City Biodiversity Action Plan 2008-2012
- The Dublin Waste to Energy facility
- S2S Dollymount promenade and flood protection project
- S2S – Cycleway and Footway Interim works 2013
- North City Arterial Watermain and Clontarf Flood defences
- Dublin Eastern Bypass project
- Waste Water Treatment Plan Extension works at Ringsend

2.5.1 In combination effects

Screening below indicated that eight plans or projects were assessed as having possible significant in-combination impacts if mitigations are not implemented, while eight projects or plans were assessed as having no in-combination impact. Apart from the Dublin Port National Development Study 2009, all of the plans and planning related report below have gone through an Appropriate Assessment process. Plans and planning related report that have the potential to impact on Natura 2000 sites have provided mitigation measures to avoid impacts. In many cases projects either identified no impacts on Natura 2000 sites or proposed mitigation to ensure that no impacts would take place.

One project was assessed as potentially having a significant in-combination impact, the Dublin Eastern Bypass. A feasibility study for the Eastern Bypass was published in 2007 and recommended a number of route and construction options. Potential impacts on Natura 2000 sites were envisaged but the impacts depended on the final design of the bypass. This project is still at feasibility stage and as such, not enough information available at this time to determine any likely in-combination effects.

Elements of the plan that are likely to have impacts on Natura 2000 sites are the Waste Water Treatment Plant in Ringsend, construction activities and the increased recreational activities. Having regard to elements of the Planning Scheme that are likely to result in impacts, it is considered that, with mitigation in place, significant in-combination effects on Natura 2000 sites are considered unlikely, in relation to the Planning Scheme.

Table 2 below shows the risk of significant in-combination impacts of the Planning Scheme with other plans or projects on European designated sites.

Table 2: Other plans and projects with potential in-combination Impacts

Plan or project	Status	Overview	Possible significant impacts from plan or project	Possible significant impacts in combination effects	Is there a risk of significant "in combination" effects with the Planning Scheme
Eastern River Basin District(ERBD) Management Plan 2010	Published	The ERBD Management Plan describes the actions that are proposed to ensure the necessary protection of our waters over the coming years.	No Appropriate Assessment carried out	No Screening for potential impacts under Habitats Directive Article 6 process is put in place once details of the implementation of the programme of Measures (POMs)	The actions and objectives in relation to the Water Framework Directive and the ERBD Management plan are to protect and restore Protected Areas.

				under the ERBD are known	
Dublin City Development Plan 2011 - 2017	Published	The Dublin City Development Plan sets out policies and objectives for Dublin City. This plan guides how and where development will take place in the city over the next 6 years.	Yes Appropriate Assessment carried out	No Potential impacts are to be avoided through mitigatory policies in the Plan	Major projects within the Dublin City Development plan 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 is also required in accordance with the Habitats Directive
Dublin Port Master Plan 2012-2040	Published	The Master Plan is prepared for future sustainable growth and changes in facilitating seaborne trade in goods and passenger movements to and from Ireland and the Dublin Region.	Yes Appropriate Assessment carried out	No Potential impacts are to be avoided through mitigatory policies in the Plan	Section 7.3 of the Dublin Port Master plan NIS "Mitigation Principles and Strategies" will address any significant impacts on European sites
Dublin Docklands Masterplan 2008	Published	The Masterplan sets out policies and objectives for the sustainable development of Dublin Docklands Region.	Yes Appropriate Assessment carried out	No Potential impacts are to be avoided through mitigatory policies in the Plan	Section 8 of the DDDA Master Plan – Appropriate Assessment "Mitigation Measures" will address any significant impacts on designated sites
George's Quay Local Area Plan 2012-2018	Published	The Local Area Plan sets out policies and objectives for George's Quay area. This plan guides how and where development will take place in the area over the next 6 years.	No Stage 1 screening The LAP will have no adverse effect on the integrity of either of the Natura 2000 sites listed and as such stage 2 AA not required	No	The LAP includes policy and standards to ensure that no negative significant environmental effect will arise, singularly or in a cumulative manner.
Poolbeg Planning Scheme 2008	Published	The Planning Scheme provides a framework to deliver long-term social, economic, planning and environmental benefits for Dublin.	Yes	No	The likely impacts of the scheme were reviewed in the context of the Dublin Docklands Master Plan 2008. Mitigation measures were compliant with those already incorporated into the Master Plan and would be implemented to ensure that integrity of the designated

					sites is protected.
Dublin Port National Development Plan study 2009	Published	The report concerns an assessment of the role and future development of Dublin Port within the context of the National Development Plan.	No	No	the plan is an economic document and does not involve any physical development works
The Dublin Port 6 year Dredge Plan	Approved	This document supports an application for a Dumping at Sea Permit for a 6-year maintenance dredging plan for the period from 2009-2014.	Yes	No	Any dredging and dumping at sea requirements for Dublin Port will be subject to licence by the EPA
North Bull Island Management Plan	Published	The North Bull Island Management Plan aimed to summarize and update the key data, particularly about the current status of habitats and species of conservation status, to discuss the current management issues affecting natural heritage importance of the island and to outline specific recommendations to manage these issues.	No	No	The purpose of this plan was to identify issues that could potentially affect North Bull Island and propose recommendations to address them. The plan will not have any adverse impact on the Natura site.
Dublin City Biodiversity Action Plan 2008-2012	Published	The Biodiversity Action Plan is in place to aid with the objectives of the Dublin City Development Plan relating to quality of life, greenspace and amenity provision, planning development, and the protection of natural heritage in the city.	No	No	The purpose of this plan is to aid objectives of the Dublin City Development Plan relating to the protection of natural heritage in the city. The plan will not have any adverse impact on the Natura 2000 sites.
The Dublin Waste to Energy Facility project	Approved	The Environmental Protection Agency have issued a licence to DCC to operate a non hazardous waste to energy facility. The proposed Dublin Waste to Energy (DWtE) facility will be located on the Poolbeg Peninsula in Dublin.	No	No	There are no significant impacts envisaged on any of the Natura 2000 sites as a result of the DWtE facility. Any impacts on water quality have the potential to interfere with the key relationships and structure of the SPA as the majority of qualifying features are aquatic ecosystem based. However, during construction any discharge will be in accordance with DCC requirements and during operation the cooling water will be discharged into Dublin Bay in accordance with the EPA Waste Licence (0232-01) for the facility. There is the potential for disturbance to the Arctic and common terns nesting on the CDL and ESB Dolphins during the breeding season (May to August) during the construction phase, however mitigation will be put in place

					to reduce this impact.
S2S – Dollymount promenade and flood protection project	Approved	<p>The Dollymount Promenade and Flood Protection Project (DPFPP) is a dual purpose scheme:</p> <ol style="list-style-type: none"> 1. Provide promenade and cycleway connecting existing sections to complete 8km promenade and cycleway in North Dublin Bay and contribute to the overall aim of providing 22km in Dublin Bay. 2. Provide flood defence between the Wooden Bridge and Causeway Road for residences along Clontarf Road and James Larkin Road. 	<p>Yes</p> <p>Appropriate Assessment carried out</p>	<p>No</p> <p>Mitigation policies put in place to minimise impacts</p>	<p>The proposed project has identified a number of potential impacts to the North Bull Island SPA and the South Dublin Bay & River Tolka Estuary SPA. The Appropriate Assessment report has proposed a number of mitigation measure in relation to the proposed scheme and has concluded on the basis of these that there will be no impact on the integrity of the Natura 2000 sites.</p>
S2S – Cycleway and Footway Interim works 2013 project	Awaiting approval	<p>The proposed Works is approximately 2km in length, extending from Bull Road (Wooden Bridge) to Causeway Road linking existing cycle and walking routes at either end</p>	<p>No</p> <p>Stage 1 screening. There is no potential for significant effects on the Natura 2000 sites. As such the project is screened out under the Habitats Directive as not requiring a Stage 2 Appropriate Assessment</p>	<p>No</p>	<p>The AA carried out for the project concludes that the proposed development, with the implementation of the measures detailed in Section 8.0, will have no adverse effect on the integrity of any of the Natura 2000 sites</p>
North City Arterial Watermain and Clontarf Flood defences project	Approved	<p>The New Water Pipeline from Fairview Park to Sutton and construction of flood defences along Clontarf Promenade, Dublin 3 was approved with conditions in 2008.</p> <p>Flood defence works will be carried out affecting the entire area of Clontarf Promenade, an area of public open space with path and cycleways, amenity grassland and ornamental tree and shrub planting. The existing sea wall and the rock-armoured shoreline to the west near Alfie Byrne Road are the boundaries with the area</p>	<p>No</p> <p>Stage 1 screening.</p> <p>The Report concluded "that the project will have no adverse effect on the integrity of either of the Natura 2000 sites listed and as such this report returns a conclusion that there is no potential</p>	<p>No</p>	<p>Some potential impacts have been identified in relation to construction activities. However mitigation measures for wintering waterfowl are proposed and principally comprise of seasonal restriction on construction activity on the pipeline in the section adjoining the South Bull Lagoon. The work on this section of the pipeline will be carried out between mid-April and mid-August. This would ensure that work is completed during the summer months when waterfowl numbers are low, and will minimise disturbance to birds.</p>

			for significant effects on the Natura 2000 sites."		
Dublin Eastern Bypass project	Feasibility	The Dublin Eastern Bypass will complete a full ring motorway for the city by closing the 11km gap that exists on the south-eastern side between the Dublin Port Tunnel and the M50. A 2007 feasibility study recommended three options that included a viaduct or bored tunnel across the Port, a viaduct or tunnel across Sandymount Strand, and tunnels and cuttings from there to the N11 and Sandyford. Whilst there is a commitment to this project, a detailed timetable is not available. However, the proposed development may be implemented by 2030.	Yes	Yes	The feasibility study concluded that a viaduct would have some limited impacts on the ecology of the South Dublin Bay but also that this would require more detailed examination. Bored tunnels were recommended, but the detailed construction techniques would depend on the geology of the area. Temporary construction shafts may be required in the bay. In addition, surface facilities, such as tunnel ventilation points, could have small ecological impacts. A viaduct across the Strand would result in some loss of intertidal habitat, possible interference with local tidal flows, disturbance of seabirds and impacts on Annex I habitats. Additional information is required to finalise route options and thereby determine potential ecological impacts. Possible Natura 2000 sites affected would be the South Dublin Bay SAC and the South Dublin Bay & River Tolka Estuary SPA.
Waste Water Treatment Plan Extension works at Ringsend	Approved	The Project aims to extend the Ringsend Wastewater Treatment Works to its full intended capacity and also to end the discharge of treated water at the Liffey River Estuary, moving it instead to a new point further offshore. The proposed new offshore location would be approximately 9 kilometres out from the Poolbeg Peninsula and would take advantage of improved dilution and dispersion due to greater water depths and stronger tidal currents. It would also be further away from Dublin's bathing waters and wildlife sanctuaries.	Yes Appropriate Assessment carried out	No Mitigation measures put in place to minimise impacts	Some potential impacts have been identified in relation to construction activities. To mitigate against such disturbance, solid screening will be erected prior to construction to reduce or eliminate any visual disturbance. Since the water birds are habituated to traffic and machinery noise within Dublin Port and on the Tolka Estuary, they will not be disturbed by construction noise on the site of the proposed development

2.6 Objectives of the Planning Scheme likely to give rise to impacts on the Natura 2000 sites

The planning scheme is devised of a number of chapters and 178 objectives covering such topics as urban design, environment, community development, economic development, culture, movement and transport etc.

All objectives of the Planning Scheme were assessed for their potential to impact upon any Natura 2000 sites. In accordance with Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities (Department of Environment, Heritage and Local Government, 2010 revision) potential impacts were grouped into the following categories and assessed accordingly:

- i. Potential loss of Habitat area
- ii. Potential habitat or species fragmentation
- iii. Potential disturbance to key species
- iv. Reduction in species population density
- v. Potential change in Water resource
- vi. Potential change in Water quality (indicative chemicals and other elements)

Table 3: Final Appropriate Assessment Screening of Planning Scheme objectives

Specific Objectives	Potential Impact on the integrity of the Identified Natura 2000 sites?	Screen In / Out	Reason for Screening In / Out
Chapter 4 (a) Economic Regeneration			
ER1: To facilitate the growth and consolidation of the emerging spatial clusters of the legal, financial, and digital-media specialisms and Global Services Sector	No	Out	Objective promotes a compact, consolidated, planning scheme area to accommodate additional residential population, encourage economic growth and development in SDZ area which could potentially have a significant adverse impact on water quality as the city's wastewater treatment infrastructure city is at capacity / very close to capacity. While the impact could potentially be significant and adverse it is screened out as these potential significant adverse impacts are addressed within the Dublin City Development Plan's policy (SI45) to upgrade existing, and provide a new regional, wastewater treatment infrastructure which will be capable to supporting additional population and economic growth in the city

ER2: To actively engage with universities and industry players to help create a multi-cluster innovation hub	No	Out	No potential impacts
ER3: To seek an iconic physical space to accommodate a focal point for innovation in the city.	No	Out	No potential impacts
ER4: 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	No	Out	No potential impacts
ER5: To encourage and facilitate a range of office typologies to cater for the key growth areas and to meet business lifecycle needs from start-up to growth phase and maturity.	No	Out	Objective promotes a compact, consolidated, planning scheme area to accommodate additional residential population, encourage economic growth and development in SDZ area which could potentially have a significant adverse impact on water quality as the city's wastewater treatment infrastructure city is at capacity / very close to capacity. While the impact could potentially be significant and adverse it is screened out as these potential significant adverse impacts are addressed within the Dublin City Development Plan's policy (SI45) to upgrade existing, and provide a new regional, wastewater treatment infrastructure which will be capable to supporting additional population and economic growth in the city
ER6: To seek the provision of flexible floorspace and a range of office accommodation in each city block.	No	Out	No potential impacts
ER7: 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.	No	Out	No potential impacts
ER8: 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	No	Out	No potential impacts
ER9: 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	No	Out	No potential impacts

ER10: To seek to deliver a range of outdoor cafés, pedestrian spaces, cultural activities and municipal Wi-Fi zones to create a vibrant urban location and an attractive working environment, as a response to the locational criteria or value system of the tech sector	No	Out	No potential impacts
ER11: 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.	No	Out	No potential impacts
ER12: To liaise and support the government and interested parties to develop an International Shipping Services Centre in the SDZ.	No	Out	No potential impacts
ER13: 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.	Yes	In	potential in-combination impacts exist from the proposed terminal at Alexandra Basin
ER2A: 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	No	Out	No potential Impacts
ER6A: 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.	No	Out	Objective promotes a compact, consolidated, planning scheme area to accommodate additional residential population, encourage economic growth and development in SDZ area which could potentially have a significant adverse impact on water quality as the city's wastewater treatment infrastructure city is at capacity / very close to capacity. While the impact could potentially be significant and adverse it is screened out as these potential significant adverse impacts are addressed within the Dublin City Development Plan's policy (SI45) to upgrade existing, and provide a new regional, wastewater treatment infrastructure which will be capable to supporting additional population and economic growth in the city
ER8A: 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.	No	Out	No potential Impacts
ER8AA: To facilitate agencies and organisations, in particular those engaged in employment and training initiatives in Docklands to work together in a coordinated manner in order to maximise employment, volunteer and training	No	Out	No potential Impacts

opportunities for residents of all ages in the Docklands Area			
Chapter 4 (b) Residential Neighbourhoods			
<p>RN1: To promote the expansion of the residential population in the SDZ and retain the existing young population base as they move from pre family to family formation households by providing high quality adaptable homes that encourage predominantly long term family living while also providing quality residential choices for a range of household types inclusive of single occupants, students, young couples, the elderly and those with special needs.</p>	No	Out	<p>This objective emphasises on provision of quality adaptable homes. Additional population in the planning scheme is been addressed under Objective US12</p> <p>Objective promotes a compact, consolidated, planning scheme area to accommodate additional residential population, encourage economic growth and development in SDZ area which could potentially have a significant adverse impact on water quality as the city's wastewater treatment infrastructure city is at capacity / very close to capacity. While the impact could potentially be significant and adverse it is screened out as these potential significant adverse impacts are addressed within the Dublin City Development Plan's policy (SI45) to upgrade existing, and provide a new regional, wastewater treatment infrastructure which will be capable to supporting additional population and economic growth in the city</p>
<p>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.</p>	No	Out	<p>This objective stresses on quality innovative home designs. Additional population in the planning scheme area is been addressed under Objective US12</p> <p>Objective promotes a compact, consolidated, planning scheme area to accommodate additional residential population, encourage economic growth and development in SDZ area which could potentially have a significant adverse impact on water quality as the city's wastewater treatment infrastructure city is at capacity / very close to capacity. While the impact could potentially be significant and adverse it is screened out as these potential significant adverse impacts are addressed within the Dublin City Development Plan's policy (SI45) to upgrade existing, and provide a new regional, wastewater treatment infrastructure which will be capable to supporting additional population and</p>

			economic growth in the city
RN3: To seek a successful interaction between the residential scheme, streets and public realm to foster a true sense of neighbourhood and encourage interaction between residents. Opportunities for animated ground floors, homes with own door access, private landscaped terraces and a successful integration with communal and public open space shall be encouraged.	No	Out	No potential impacts
RN4: The design of residential schemes, communal open space, public open space and public realm shall be integrated to maximise the opportunities for the community to sit in comfort, socialise and facilitate children's play including play and recreation for children across a range of age groups.	No	Out	No potential impacts
RN5: All residential proposals shall comply with the policies of the Dublin City Development Plan 2011-2017 for Providing Quality Homes in a Compact City (Ch 11), Creating Good Neighbourhoods and Successful Communities (Ch 12), Residential Quality Standards (Ch 17) and provisions of the Dublin City Council Housing Strategy (Appendix 3).	No	Out	No potential impacts
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	No	Out	No potential impacts
RN7 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	No	Out	No potential impacts
RN8: 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	No	Out	No potential impacts
RN9: 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	No	Out	No potential impacts
RN10 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	No	Out	No potential impacts
RN11: To encourage the provision of a variety of housing throughout the area	No	Out	No potential impacts
RN12: All residential proposals shall have regard to the document 'Quality Housing for Sustainable Communities' (Department of the Environment, Heritage	No	Out	No potential impacts

and Local Government 2007) and accompanying manual 'Best Practice Guide' (Department of the Environment, Heritage and Local Government 2009)			
RN6A: 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	No	Out	No potential Impacts
Chapter 4 (c) Community Development			
CD1: To promote a 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	No	Out	No potential impacts
CD2: To support and promote the continued role of the Sean O Casey Community Centre East Wall Road and St Andrews Resource Centre Pearse Street as significant multi use community facilities, social spaces and landmark buildings accessible to the wider community	No	Out	No potential impacts
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	No	Out	No potential impacts
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	No	Out	No potential impacts
CD5: To co-ordinate with the Department of Education and Skills in supporting the important services provided by existing schools in the wider neighbourhood and in particular support their continued role in community development, co-ordinate the provision of enhanced connections (walking and cycling routes) and open space provision to benefit of local schools and promote the provision of enhanced educational services in the wider Docklands area to service the significant growth in population of the SDZ	No	Out	No potential impacts
CD6: To conduct a special review between Dublin City Council and the Department of Education and Skills to ascertain the need to enhance and develop educational facilities in the wider neighbourhood to service the growing	No	Out	No potential impacts

population of the SDZ area			
CD7: To encourage the use of facilities in third level colleges and larger companies (opportunities for meeting rooms as an example) for community benefit and promote the development of a Corporate Social Responsibility policy within larger companies to integrate the community with the commercial sector	No	Out	No potential impacts
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	No	Out	No potential impacts
CD9: To promote a local School Job Placement Programme.	No	Out	No potential impacts
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.	No	Out	No potential impacts
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	No	Out	No potential impacts
CD12: To provide commercial facilities such as local supermarkets, restaurants, cafes and leisure facilities that provide opportunities for local employment and locations for the community to interact, meet and socialise to assist community development	No	Out	Objective promotes economic growth and development in SDZ area which could potentially have a significant adverse impact on water quality as the city's wastewater treatment infrastructure city is at capacity / very close to capacity. While the impact could potentially be significant and adverse it is screened out as these potential significant adverse impacts are addressed within the Dublin City Development Plan's policy (SI45) to upgrade existing, and provide a new regional, wastewater treatment infrastructure which will be capable to supporting additional population and economic growth in the city
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.	No	Out	No potential impacts
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.	Yes	in	iii (see section 2.6) movement of people
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	No	Out	No potential impacts

integral elements in the design and layout of schemes, in particular in the positioning and design of public open space and the design of the public realm.			
CD16: To facilitate the provision of sports and leisure facilities, in particular water based sports in recognition of the special waterside location context of the SDZ, to the benefit of local community and in particular the local youth	Yes	in	iii (see section 2.6) movement of people
CD17: The Council will seek to develop initiatives with relevant stakeholders through Corporate Social Responsibility programmes.	No	Out	No potential Impacts
CD18: The Council will concurrently develop a Community and Social Development Plan for the SDZ area.	No	Out	No potential Impacts
CD19: To develop, facilitate and support educational initiatives undertaken by community and voluntary sector to enhance life opportunities and social cohesion	No	Out	No potential Impacts
CD20: The Council in conjunction with the HSE will facilitate the development of a Health care Service in the North Lotts area of the SDZ	No	Out	No potential Impacts
Chapter 4 (d) Movement			
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'	No	Out	No potential impacts
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.	Yes	in	iii & vi (see section 2.6) Potential disturbance and change in water quality
MV3: To provide additional cycle and pedestrian bridges across the city's canals and rivers to form part of strategic cycling and walking routes.	Yes	in	iii & vi (see section 2.6) Potential disturbance and change in water quality
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	Yes	in	iii & vi (see section 2.6) Potential disturbance and change in water quality
MV5: To provide 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.	No	Out	Objective promotes a compact, consolidated, planning scheme area to accommodate additional residential population, encourage economic growth and development in SDZ area which

			could potentially have a significant adverse impact on water quality as the city's wastewater treatment infrastructure city is at capacity / very close to capacity. While the impact could potentially be significant and adverse it is screened out as these potential significant adverse impacts are addressed within the Dublin City Development Plan's policy (SI45) to upgrade existing, and provide a new regional, wastewater treatment infrastructure which will be capable to supporting additional population and economic growth in the city
MV6: To support the extension of dublinbikes scheme throughout the area.	No	Out	No potential impacts
MV7: To discourage commuter parking and to ensure adequate but not excessive parking provision for short-term shopping, business and leisure use. .	No	Out	No potential impacts
MV8: To provide appropriate levels of car parking to serve a range of uses accordance with development plan car parking standards (section 17.40).	Yes	in	iii & vi (see section 2.6) Potential disturbance and change in water quality
MV9: To provide for sustainable levels of car parking and car storage in residential schemes in accordance with development plan car parking standards (section 17.40) so as to promote apartment living for all age groups and family types..	Yes	in	iii & vi (see section 2.6) Potential disturbance and change in water quality
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.	No	Out	No potential impacts
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.	Yes	in	iii (see section 2.6) movement of people
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.	Yes	in	iii iv & vi (see section 2.6) Movement of people and the potential disturbance and change in water quality during construction. Potential for migration of invasive species.
MV13: To encourage the use of innovative measures, such as car clubs, to reduce the requirement for car parking.	No	Out	No potential impacts
MV 14: 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	No	Out	No potential impacts

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.	No	Out	No potential impacts
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 influence will demonstrate to Iarnród Éireann how the proposal relates to the Dart Underground design. In the interim period until the Dart Underground is in place, temporary uses and/or pavilion structures will be considered, on a short term basis, subject to the agreement of the Dart Underground Office.	No	Out	No potential Impacts
Chapter 4 (e) Sustainable Infrastructure			
S11: To actively seek the funding and delivery of key drainage infrastructure to enable development in the SDZ.	Yes	in	iii & vi (see section 2.6) The delivery of infrastructure could lead to potential disturbance and change in water quality
S12: To manage development and promote the continued provision and upgrading of waste water treatment plans in the region so that new schemes are permitted only where adequate capacity exists in the waste water network	No	Out	Positive Impacts because development within the planning scheme will only be permitted if there is adequate capacity
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.	No	Out	Positive Impacts because the objective seeks to improve the water quality in Grand Canal Basin
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 exists or will become available within the life of a planning permission.	No	Out	No potential impacts
S15: To require all large development proposals to include water conservation and demand management measures.	No	Out	No potential impacts
S16: To require all proposed developments to carry out a site specific Flood Risk Assessment in accordance with the Departmental Guidelines on Flood Risk Management and the Strategic Flood Risk Assessment of this plan, Appendix 1. The flood risk assessment shall accompany the planning application and should be sufficiently detailed to quantify the risks and the effects of any residual mitigation/adaptation together with the measures needed to manage residual risks	No	Out	No potential impacts
S17: To require that all new buildings be designed using Flood Resilient Construction methods. A statement shall	No	Out	No potential impacts

be submitted with each FRA to show how it is intended to comply with the above			
SI8: 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.	No	Out	Positive Impacts on European sites downstream of the Liffey
SI9: That all new developments shall be required to comply with the standards set out in the Greater Dublin Strategic Drainage Study (GSDSDS).	No	Out	Positive Impacts because the objectives seeks to reduce the potential for flooding, provides for amenity spaces and improves water quality
SI10: To achieve best practice and innovations in SUDS design as part of the planning scheme including the successful co-ordination of surface water management with ecology and amenity functions of open space and landscape areas. All planning applications shall be accompanied by a surface water drainage plan which will include proposals for the management of surface water within sites, protecting the water quality of the existing water bodies and groundwater sources, and retrofitting best practice SUDS techniques on existing sites, where possible	No	Out	Positive Impacts because the objectives seeks to reduce the potential for flooding, provides for amenity spaces and improves water quality
SI11: To require the use of ducting for information communication technology within individual new residential and commercial developments	No	Out	No potential impacts
SI12: To facilitate the development of accessible WiFi zones within the 5 hubs of the planning scheme area.	No	Out	No Potential Impacts
SI13: To maintain good air quality in accordance with National and EU policy directives on air quality and where appropriate promote compliance with established targets	No	Out	No Potential Impacts
SI14: To minimise the adverse impacts on noise and promote good health and 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.	No	Out	Positive Impacts because the objective seeks to avoid unacceptable level of noise in the area and reduce potential disturbance on species
SI15: That all proposed developments be district heating enabled in order to provide an environmentally sustainable source of heating & cooling.	No	Out	No Potential Impacts
SI16: To accurately metre the imported gas and electricity to the Dublin Docklands SDZ in order to facilitate the move to a Smart City.	No	Out	No Potential Impacts
SI17: 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	No	Out	Positive Impacts as the objective seeks to avoid leakage from contamination into surface or ground water. And the potential for green spaces that would improve the green network in the planning scheme area

restoration techniques including specialist planting and green initiatives that create aesthetically improved sites, healthy environments and contribute to the provisions of new green spaces as integral parts of newly created areas. Soil Remediation measures shall require a licence from the EPA under the Waste Management Act 1996.			
SI18: That all developments will comply with the waste policy as set out in the Dublin City Development Plan 2011-2017.	No	Out	Positive Impacts because the objective would ensure the protection of qualifying species using the planning scheme area as a movement/flight corridor
SI6A: To require all developments in the SDZ area to comply with Flood Risk Management Guidelines as well as in accordance with the prevailing City Development Plan and the national standards at the time of application.	No	Out	No potential Impacts as flood risk management guidelines and other standards must also comply with EU Directives, (including the Habitats Directive) and the protection of European designated Sites.
SI19: To ensure that surface water quality is protected in the construction of enhanced drainage works to meet requirements of the Water Framework Directive.	No	Out	No potential Impacts
SI20: 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.	No	Out	No potential Impacts
SI21: 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).	No	Out	No potential Impacts
Chapter 4 (f) Built Heritage			
BH1: To ensure that the architectural and historical significance of the docklands area is protected, conserved and enhanced, to include areas of significant streetscape and urban landscape.	No	Out	No Potential Impacts
BH2: To ensure that redundant dock water-spaces are managed and re-used in a way that respects their significance and utilises their potential.	No	Out	No Potential Impacts
BH3: To ensure that new development respects the significance of the site and is appropriate to its historic, spatial context.	No	Out	No Potential Impacts
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.	No	Out	No Potential Impacts
BH5: To ensure the provision of high quality public realm works that embody the maritime and industrial heritage character	No	Out	No Potential Impacts

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.	No	Out	No Potential Impacts
BH7: To interpret and promote the archaeological resource of the area to the local community and visitors.	No	Out	No Potential Impacts
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	No	Out	No Potential Impacts
BH9: To retain historic paving and street furniture, maritime features such as mooring rings and the mid 18 th century street grid pattern of North Lotts.	No	Out	No Potential Impacts
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	No	Out	No Potential Impacts
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	No	Out	No Potential Impacts
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.	No	Out	No Potential Impacts
Chapter 4 (g) Culture			
CR1: To develop an inclusive strategy for culture in the wider Docklands Area based on the findings of the cultural audit undertaken through engagement with cultural, community and corporate stakeholders in the area as set out in the audit report 'The Docking Station'.	No	Out	No Potential Impacts
CR2: To explore the synergies between the professional, community, statutory and corporate sectors to further develop Docklands as a cultural quarter with world class arts, entertainment, festivals and events.	No	Out	No Potential Impacts
CR3: To ensure that the cultural strategy reflects social regeneration objectives by engaging with neighbourhoods and communities and ensuring community access to resources or facilities as key to cultural development in Docklands	No	Out	No Potential Impacts
CR4: To explore the potential for further cultural collaborations and twinning opportunities with other areas of the city and other dockland communities outside Dublin.	No	Out	No Potential Impacts

CR7: To explore a variety of mechanisms to support a structured form of engagement with professional artists living and working in the wider docklands area nurturing a community of artists as part of the creativity of Docklands	No	Out	No Potential Impacts
CR3A: To support the development of a vibrant youth arts scene in the SDZ and wider Docklands Area	No	Out	No Potential Impacts
CR4A: To further develop and support sustainable relationships with established docklands-based organisations.	No	Out	No Potential Impacts
CR5A: To develop the docklands cultural tourism itinerary by expanding the range of high profile events such as commemoration of historical events, musical or circus showcases, water-based activities and family friendly daytime events and to promote low cost or free public events.	No	Out	No Potential Impacts
CR6A: To support the production of artistic work by encouraging the optimum use of existing event infrastructure, civic spaces as event spaces, the use of vacant space for artists and / or a shared creative space for community groups and the provision of new infrastructure for the performing arts, where feasible.	No	Out	No Potential Impacts
CR7A: To promote and showcase the development of new and existing community art forms including urban art, community theatre, writing and music workshops with consideration to the potential for an Annual Docklands Arts & Culture Day.	No	Out	No Potential Impacts
Chapter 4 (h) Retail			
RT1: To foster a rich mix of retail, cultural and leisure activities to support a vibrant urban quarter.	Yes	in	iii (see section 2.6) movement of people
RT2: To provide for sufficient retail facilities to cater for the demands of the population working, living and visiting the SDZ and wider Docklands Area	No	Out	No Potential Impacts
RT3: To support the emergence of niche retail sectors that creates a synergy with the creative and cultural activities in Docklands	No	Out	No Potential Impacts
RT4: To proactively encourage the implementation of the district centre at Point Village, to include a concentration of retail, entertainment, leisure and community facilities, as well as quality and affordable supermarket shopping	Yes	in	iii (see section 2.6) movement of people
RT5: To cluster retail frontages in each of the five hubs along key pedestrian routes, civic spaces and in the vicinity of protected structures and to explore the potential for retail as a mechanism to support a distinct identity and character to	No	Out	No Potential Impacts

each of the hubs (See figure 22)			
RT6: To enliven the campshires and waterbodies with an appropriate level of publically accessible active frontages, including retail, cultural and amenity uses (See figure 22).	No	Out	No Potential Impacts
RT7: To ensure an appropriate level of active ground floor uses on all other main streets, to make a positive contribution to the street level activity (See figure 22).	No	Out	No Potential Impacts
RT8: To implement the strategy for active frontages as shown on Figure 22.	No	Out	No Potential Impacts
RT9: To seek appropriate temporary uses as an interim solution for vacant buildings with particular support for economic and enterprise activities, cultural and creative uses, collaborative space and publicly accessible uses such as community cafés, local markets and art installations	No	Out	No Potential Impacts
RT10: To support a rich mix of complementary uses, particularly in vacant spaces, to actively support new development in the area.	No	Out	No Potential Impacts
Chapter 4 (i) Tourism and Leisure			
TL1: To promote the water bodies as part of Docklands' identity and ensure water based leisure, business, tourist and sporting activities are encouraged and supported in a sustainable manner	Yes	in	iii & vi (see section 2.6) Movement of people, potential disturbance and potential migration of invasive species
TL2: To promote the SDZ area as a destination for cultural tourism and encourage the use of Grand and Royal canals for leisure and recreational purposes.	Yes	in	iii & vi (see section 2.6) Movement of people, potential disturbance and potential migration of invasive species
TL3: Promote and support the National Convention Centre Dublin and encourage the location of business tourism support services in the vicinity of the Centre at Spencer Dock.	No	Out	No Potential Impacts
TL4: To investigate the opportunities to extend existing tourism offering and explore the development of new tourist attractions which will encourage larger numbers of tourists visiting the area such as a maritime quarter.	Yes	in	iii & vi (see section 2.6) Movement of people and potential migration of invasive species
TL5: To facilitate the cruise traffic coming into Dublin and encourage the timing of planned events and festivals to coincide with cruise ship calls at Dublin Port.	Yes	in	iii & vi (see section 2.6) Movement of people and potential migration of invasive species

TL6: To support retention of existing leisure and sports activities in the area and encourage new facilities for the docklands community and visitors to the area, and that they meet the needs of all members of the existing and future communities.	Yes	in	iii Movement of people and potential migration of invasive species
TL7: To encourage community involvement and local integration in recreation and entertainment opportunities, including events and festivals, using indoor and outdoor venues.	No	Out	No Potential Impacts
TL8: To maintain programmes of cultural events in the SDZ Area and include new events such as a Viking Festival	Yes	in	iii & vi (see section 2.6) Movement of people and potential migration of invasive species if such festival involves boating activities
TL9: To promote the recreational use of the water including the rowing, paddling and boating club activities in the area and to seek to ensure that any new infrastructure is provided in a manner which safeguards and protects these recreational resources	Yes	in	iii & vi (see section 2.6) Movement of people and potential migration of invasive species Potential disturbance to qualifying interests of European Sites from water based activities from noise, movement and physical presence. In addition equipment used as part of water based activities may be a source of pollution and vector in the transfer of invasive species through waterways in Ireland with potential for negative impacts on European Sites.
Chapter 4 (j) Urban Structure & Design, Density, Height			
US1: To ensure that urban structure employs an orthogonal layout, consolidating and refining the legacy of the historic city grid whilst allowing for variety as per 5.4.3	No	Out	No Potential Impacts
US2: To define a number of Hub areas[5] in order to create focus and centres of gravity in the spatial structure, incorporate a unique public square, and facilitate the clustering of economic sectors and social and cultural activities.	No	Out	No Potential Impacts
US3: To ensure that the open, civic, and formal character of the Campshires, incorporating generous proportions and scale, shall continue to define the relationship of new development to the waterbodies of the river and canals..	No	Out	No Potential Impacts
US4: To ensure the “City Block” represents the appropriate scale at which to resolve mixed use ratios, configure development plots, achieve permeability and fix crucial aspects of building line, density and height and new public space	No	Out	No Potential Impacts

(or adjacent City Blocks by Agreement as per para 6.1.2).			
US5 To ensure that Mayor St is developed as an internal street spine of the North Lotts incorporating the theme of 'live-work'.	No	Out	No Potential Impacts
US6: To ensure that Sheriff St develops a dynamic role to connect and relate the SDZ to the communities and brownfield lands to the north and that a public realm strategy is designed to assist this.	No	Out	No Potential Impacts
US7: To ensure that the new north-south streets are developed to fine-grain the urban grid, enhance light gain and connect with the river and waterbodies.	No	Out	No Potential Impacts
US8: To ensure that the public realm as a whole is legible, cohesive, of high quality, and operates as a connected network. It must be seen as a crucial infrastructure, underpinning economic, social and environmental sustainability.	No	Out	No Potential Impacts
US9: To ensure that the extensive footprint of waterbodies function as a valuable part of the public realm, and that a water animation strategy is prepared to drive this.	Yes	in	iii, v & vi (see section 2.6) the animation of the water bodies in the planning scheme area could potential have indirect adverse impacts on the qualifying interest of the European designated sites in Dublin Bay
US10: To ensure that principles of Green Infrastructure inform the design of the public realm.	No	Out	Positive Impacts
US11: To ensure that the public realm network of the SDZ interfaces effectively with the strategic public realm network of the inner city	No	Out	No Potential Impacts
US12: To promote and achieve sustainable higher densities throughout the SDZ area, with an emphasis on higher commercial densities within the identified hubs	Yes	In	iii (see section 2.6) the objective seek to provide more residential and commercial population in the area and could potentially lead to disturbance of key species and habitats Objective promotes a compact, consolidated, planning scheme area to accommodate additional residential population, encourage economic growth and development in SDZ area which could potentially have a significant adverse impact on water quality as the city's wastewater treatment infrastructure city is at capacity / very close to capacity. The potential significant adverse impacts on water quality is addressed within the Dublin City Development Plan's policy (SI45) to upgrade existing, and provide a new regional, wastewater

			treatment infrastructure which will be capable to supporting additional population and economic growth in the city
US13: To achieve higher densities, not as a stand-alone objective, but in conjunction with other safeguarding criteria, such as indicative plot ratio, together with other criteria in the City Development Plan, e.g. daylight, open space, amenity space, privacy areas and play space in order to achieve a high quality living and working environment.	No	Out	No Potential Impacts
US14: To promote a variety of residential, duplex and apartment types which will create distinctive neighbourhoods, coherent streets and open spaces, and promote whole life-cycle living.	No	Out	No Potential Impacts
US15: To seek that the design of building footprints, heights and layouts allow for maximum daylight penetration to buildings, minimise overshadowing, as well as allowing for existing wind conditions to be ameliorated	No	Out	No Potential Impacts
US16: Applications for medium and high rise buildings shall be accompanied by a design statement as part of the Assessment criteria for high buildings as set out in section 17.6.3 of the Dublin City Development Plan 2011-2017.	No	Out	No Potential Impacts
Chapter 4 (k) Environment, Open Space & Green Infrastructure			
GI1: To develop a hierarchy of inter-connected open spaces, recreation areas and green landscaped areas, via walking and cycling priority routes, through the SDZ area as green routes	No	Out	No Potential Impacts
GI2 : To promote connections between existing amenity areas in the SDZ, proposed amenity areas and the wider strategic green network of the docklands, Dublin bay and the city including connections to the S2S route and the proposed Dodder Greenway	Yes	In	iii Positive Impacts and Potential adverse impacts in so far as movement of people causing noise and dog walking
GI3: To seek the provision of a wide range of facilities within public open space to provide for both active and passive recreation for various disciplines, age groups and abilities	No	Out	No Potential Impacts
GI4: To increase the provision of green landscaping including tree planting on streets within the SDZ area and to improve amenity, increase opportunities for wildlife and contribute to improvements in air and water quality and water attenuation.	No	Out	Positive Impacts because the objective seeks to provide green areas and enhance the opportunities for wildlife.
GI5: To create visual and environmental	No	Out	No Potential Impacts

improvements on vacant/brownfield not likely to be completed for development or infrastructure projects over the medium and long term. Such initiatives as the removal of unsightly hoardings, temporary uses and recreational opportunities will be promoted where appropriate.			
G16 To require a clear delineation between public space, private space and communal space within the SDZ area.	No	Out	No Potential Impacts
G17: The size and animation of open spaces shall be related to the height of the adjoining buildings, in order to achieve satisfactory levels of sunlight and daylight	No	Out	No Potential Impacts
G18: To pilot and test new green infrastructure installations in the public realm to boost biodiversity and improve surface water management on a number of streets within the SDZ area, including the use of permeable materials for surfaces, planted roofs, and provision of storm water tree trenches.	No	Out	Positive Impacts as objective seeks to provide more green spaces improve water quality and boost bio diversity in the planning scheme area.
G19: To support the development of soft landscaping in public open spaces, where feasible in accordance with the principles of Sustainable Urban Drainage Systems.	No	Out	Positive Impacts as objective seeks to provide more green spaces improve water quality and boost bio diversity in the planning scheme area.
G110: Prior to the redevelopment and operation of any sites, developer(s) shall ascertain the extent, if any, of invasive species, and shall set out measures for their control/removal	No	Out	Positive Impacts as objective avoids spread of invasive species and enhances bio diversity in the area
G111: To enhance the bio diversity value of the local area by protecting habitats, in particular along water bodies, and to create opportunities for new habitats through appropriate native species landscaping schemes, to integrate the natural environment with high quality urban development.	No	Out	Positive Impacts as objective avoid invasive species and enhances bio diversity in the area. the objective will also seek to protect habitats in the planning scheme area.
G112: Any plan or project with the potential to give rise to significant direct, indirect or secondary impacts on a Natura 2000 site(s) shall be subject to an appropriate assessment in accordance with Article (3) of the Habitats Directive	No	Out	Positive Impacts as the objective would ensure that any plan or project that has the potential to significantly impact on European site will require the benefit of an Appropriate Assessment.
Chapter 4 (I) Public Realm			
PR1: To integrate the public domain streets and routes with the surrounding city.	No	Out	No Potential Impacts
PR2: To promote water based recreation and events.	Yes	in	iii & vi (see section 2.6) Noise from boating/recreational activities and potential migration of invasive species

PR3: To facilitate and retain pedestrian access to waterbody frontages.	No	Out	No Potential Impacts
PR4: To promote maritime character with streets, especially north-south streets leading to the waterbodies.	No	Out	No Potential Impacts
PR5: To take in charge the public realm.	No	Out	No Potential Impacts
PR6: To promote and investigate a design brief for the public realm, based on DCC's public realm strategy, with a particular emphasis on enhancing the character of the main east-west streets, Mayor St, Sheriff St, the Campshires, Misery Hill and Ringsend Road	No	Out	No Potential Impacts
PR7: To ensure that the existing and proposed public open spaces / civic spaces form a coherent part of the public realm with at least one 'viewpoint' within the urban block through public spaces.	No	Out	No Potential Impacts
PR8: All bridges to be capable of 'opening' to facilitate sailing ships.	No	Out	No Potential Impacts
PR9: To seek the development of attractive uses on the waterways as set out in the Vision for the Waterways, Waterways Regeneration Strategy, 2008 and the city Canals Plan 2010; review the membership of the Operational Liaison Group to include Dublin Port Authority and the OPW as appropriate; and that its remit be expanded to include the lower reaches of the Dodder and Liffey rivers.	Yes	In	iii & vi (see section 2.6) Noise from boating/recreational activities and potential migration of invasive species
PR10: To support the development of flexible and moveable publicly accessible leisure facilities on the water space and the campshires to facilitate changes in demand.	Yes	in	iii & vi (see section 2.6) Noise from boating/recreational activities. Potential impact on water quality from temporary structures in the water space
PR11: To facilitate boat movement between the two canals as the canals are regenerated for leisure and tourism purposes	Yes	in	iii & vi (see section 2.6) Noise from boating/recreational activities and potential migration of invasive species
PR12: To support the provision of a suitable terminal for cruise liners and other passenger vessels with Dublin Port	Yes	in	iii & vi (see section 2.6) Movement of people and potential migration of invasive species
PR13: To encourage the provision of additional public and private moorings and associated facilities for boats of various sizes according to future requirements	Yes	in	iii & vi (see section 2.6) Noise from boating/recreational activities and potential migration of invasive species
Chapter 4 (m) Landuse & Mix			
LU1: To provide land use mix ratio of 50	No	Out	Objective promotes a compact, consolidated, planning scheme

Residential /50 Commercial up to 30 Residential/70 Commercial in the commercial hubs and up to 70 Residential /30 Commercial in more residential neighbourhoods			area to accommodate additional residential population, encourage economic growth and development in SDZ area which could potentially have a significant adverse impact on water quality as the city's wastewater treatment infrastructure city is at capacity / very close to capacity. While the impact could potentially be significant and adverse it is screened out as these potential significant adverse impacts are addressed within the Dublin City Development Plan's policy (SI45) to upgrade existing, and provide a new regional, wastewater treatment infrastructure which will be capable to supporting additional population and economic growth in the city
LU2: The land use mix requirement does not apply on sites under 0.2ha, although a ground floor active use may be required as per objective LU3	No	Out	No Potential Impacts
LU3: Active and Commercial ground floor uses to be provided in the hubs and streets indicated on figure 22	No	Out	No Potential Impacts
LU4: Social and Affordable housing in accordance with the Councils housing strategy to be provided in all residential schemes, (See Appendix 3 of the City Development Plan 2011-2017)	No	Out	No Potential Impacts
LU5: To encourage "own front doors" in the SDZ, as part of the active neighbourhood objective.	No	Out	No Potential Impacts
LU6: To promote a variety of commercial uses, including hotels and start up units throughout the area.	No	Out	Objective promotes economic growth and development in SDZ area which could potentially have a significant adverse impact on water quality as the city's wastewater treatment infrastructure city is at capacity / very close to capacity. While the impact could potentially be significant and adverse it is screened out as these potential significant adverse impacts are addressed within the Dublin City Development Plan's policy (SI45) to upgrade existing, and provide a new regional, wastewater treatment infrastructure which will be capable to supporting additional population and economic growth in the city

Chapter 4 (n)
Building Quality and Sustainable Design

SD1: To achieve quality building design in accordance with the criteria set out in paragraph 4.14.2 B.	No	Out	No Potential Impacts
---	----	-----	----------------------

* **New objectives added as result of submissions, motions and amendments in grey box**

2.7 Screening Conclusion

The screening process undertaken by Dublin City Council has identified that the five Natura 2000 sites within Dublin Bay have the potential to be adversely affected by the implementation of the Planning Scheme and its objectives. Potential threats to these European Sites include increased population, which is likely to result in increased recreational activity, potential construction impacts and increased amounts of effluent which will be discharged into Dublin Bay via Ringsend WWTP. These threats have potential to result in a deterioration of water quality and disturbance to the qualifying interests of European Sites. These threats, alone and / or in-combination have potential to result in adverse impacts on European Sites and their qualifying interests. Accordingly, a Stage 2 Appropriate Assessment of the North Lotts and Grand Canal Dock Planning Scheme is required.

3.1 Assessment methodology

The Appropriate Assessment (AA) for the Planning Scheme is an assessment, based on best scientific knowledge, of the potential impacts of the Planning Scheme on the conservation objectives of any Natura 2000 site (including Natura 2000 sites not situated in the area encompassed by the plan) it recommends, where necessary, mitigation or avoidance measures to preclude significant negative effects. The impacts assessed include direct and indirect impacts of the plan, considered in-combination with any current or proposed activities, developments or objectives impact or with potential to impact on European sites. The assessment of impacts on the Natura 2000 network of sites was undertaken by the following steps:

1. Establishing site-specific issues of each European sites so that the impact evaluation is correctly informed.
2. Issuing a Policy Guidance Note to Dublin City Council Planning Scheme team to inform the preparation of Objectives.
3. Iterative Review of chapters of the planning scheme to allow the amendment of objectives and supporting text. By doing so, potential impacts were avoided or mitigated through the amendment or addition of objectives.

3.2 Potential Impacts of Planning Scheme on Natura 2000 sites.

There are c 22ha of brownfield sites in the Planning Scheme area and the vision of the plan is to provide an effective framework to facilitate the continued regeneration of vacant, under-used sites in the Docklands and to ensure that future developments create a high quality, sustainable mixed use district that integrates successfully with the city centre, existing regenerated areas in the Docklands and the longer established Dockland neighbourhoods. In achieving this vision, the following has the potential to impact on European sites:

Population

The Planning Scheme provides a framework for sustainable planning and development of the study area and this would lead to increased population. The SDZ will promote a more compact, consolidated, higher density city area to accommodate additional residential population, encourage economic growth and development in Dublin city. However, the city is at capacity / very close to capacity with regard to its wastewater infrastructure. While the impact could potentially be significant and adverse, it can be mitigated against with the Dublin City Development Plan's policies to upgrade existing, and provide a new regional, wastewater treatment infrastructure which will be capable to supporting additional population and economic growth in the whole city.

Furthermore, with increased population levels in the study area, potential for disturbance of species could result as more people seek to visit and / or take part in a wide range of land and water-based recreational activities on, or close to, the identified Natura 2000 sites.

Contamination

Much of the land within the Planning Scheme area has been created through reclamation and used for docklands activities, including the storage of materials now regarded as hazardous. In the 1850s, deep-water berths were provided and allowed the docking of large cargo ships and industrial development developed. The activities that were developed included vitriol plants (sulphuric acid), glass manufacture, iron works and soap works, as well as increasingly coal depots, maintenance and storage yards. On the southside of the River Liffey the gasworks were developed from 1860 onwards, resulting in the range of heavy industries that dominated the Grand Canal Docks area, including coke works, tar pits, foundries and chemical fertiliser plants. Coke-gas was used as the main gas until the arrival of Natural Gas in the 1970s. As the coke-gas industry declined, many of the associated plants around Grand Canal Dock became redundant, and the sites fell into dereliction.

Recent developments in the Planning Scheme area including the former gasworks site at Sir John Rogerson's Quay, the Convention Centre Dublin, the O2 and the Riverside IV development all required extensive remediation. Therefore, the remaining c 22ha of land in the Planning Scheme could potentially be contaminated. A desktop study and qualitative risk assessment was commissioned by Dublin City Council and the findings have been integrated in the planning scheme.

For the purpose of the risk assessment, the sites were divided into 12 plots of land and a risk ranking of these sites. Based on the Risk Assessment undertaken, 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). See www.dublincity.ie for further details of remediation measures.

Waste water

The drainage network in the Planning Scheme area is mostly designed as a single piping system (combined CSO). The Planning Scheme area is part of the City Centre Catchment which ultimately discharges to the Regional Wastewater Treatment Plant at Ringsend via the City Centre Trunk Sewer. The Ringsend Wastewater Treatment Plant is nearing its capacity and in a combined system both rainfall run-off and foul wastewater discharge to the same pipe.

In the last 5 years there has been a steady shift to separate drainage systems for surface water runoff and foul water. The Grand Canal area of the SDZ for instance has been installed with a separate system to replace the combined network. The Planning Scheme would seek to continue with separate drainage systems for future developments.

In addition to this, sustainable urban drainage system (SuDs) techniques will be used as part of any development proposal within the Planning Scheme area and will include on-site storage and attenuation areas. The discharge of surface waters will be designed in accordance with the Greater Dublin Strategic Drainage Study (GSDSDS) requirements. The

use of green roofs and permeable pavements will also be used as a means of reducing and slowing the rate of the surface water runoff from the sites whilst simultaneously enhancing water quality.

Waste Water Treatment Plant at Ringsend

Dublin City Council is at final Phase to extend the Ringsend Waste Water Treatment Plant and also to end the discharge of treated water at the Liffey River Estuary, moving it instead to a new point further offshore. The Plant will be extended to achieve the maximum capacity possible on the existing site. Its current capacity is 1.6 million population equivalent (P.E) and extension would aim to raise this by a further 500,000 to 2.1 million P.E. while still producing treated water of adequate standard. The Plant will use less energy, fewer chemicals, and produce less sludge to be treated and disposed. As a result, greenhouse gas emissions will be reduced. The outfall discharge will also be future-proofed in terms of sea level rise over the WWTP projected 100 year life.

This project has been approved by An Bord Pleanála and subsequently, Dublin City Council have submitted an application to the Environmental Protection Agency (EPA) for a Dumping at Sea Permit, in accordance with Section 5 of the Dumping at Sea Acts 1996 to 2010, for the disposal of the Long Sea Outfall Tunnel spoil that will arise as part of the Ringsend Wastewater Treatment Works Extension Project.

While the commencement of this extension is awaited, the Planning Scheme acknowledges the importance of this project and would ensure that development will only take place in the SDZ area only when there is adequate capacity.

Flooding

The Docklands area is located close to the entrance to Dublin Bay and would be considered to be in a high risk area in terms of flooding. The main flood risks identified in the planning scheme area are principally from coastal/tidal, pluvial and infrastructural overload or failure. As part of the Planning Scheme procedure, a Flood Risk Assessment has been prepared and informed by the DoEHLG Guidelines for Planning Authorities (DoEHLG & OPW, 2009) on 'The Planning System and Flood Risk Management'.

Water Quality

The Plan area is located within the Liffey Water Management Unit (WMU) in the Eastern River Basin District. The main problems identified in this WMU are high nutrients (phosphorous) oxygen demand, low ecological rating, risk of over abstraction, inferior habitats/heavily modified. The Liffey is one of the largest sub-catchments in the ERBD. The river stretches from the very rural areas in the Wicklow Mountains to Poor Stratus in the City Centre. The main pressure preventing achievement of Good Status is thought to be upstream diffuse agriculture and septic tank pollution, point sources and urban diffuse pollution. The objective is to achieve Good Status by 2027.

The most recent water quality monitoring data available from the EPA shows that the stretch of the River Liffey (Hydrometric Area 9) downstream at Leixlip is moderately polluted from suspected sewage and water treatment plant effluents. Biological sampling results from the

nearest sampling stations upstream of the study area give the River Liffey a Q-Value of 3, indicating moderately polluted water.

As part of preparing the SEA and AA for the planning scheme, Dublin City Council Drainage Division carried out monitoring of the River Liffey over a 7 week period from October to November 2012. Six locations were monitored,

- a) River Liffey, Sean O'Casey Bridge.
- b) Royal Canal, Spencer Dock at Sheriff Street
- c) Liffey Opposite New Wapping Street
- d) Liffey D/S Outfall from the Grand Canal Dock
- e) River Dodder at Londonbridge Road
- f) River Liffey D/S of Toll Bridge

The surface and depth samples were taken at 5 of the 6 locations. Compliance with Transitional water quality standards in the Surface Water Regulations (SI 272 of 2009) was met at most of the sampling stations with the exception of the Grand Canal Dock, where samples at depth failed to meet GOOD Physiochemical water quality status over the sampling period due to a slightly elevation mean ammonia concentration See Appendix 1.

It is the principal objective of the Water Framework Directive (WFD) "to achieve good status in all waters by 2015 and [to] ensure that status does not deteriorate in any waters." The WMU has moderate status under the WFD classification and the Liffey Estuary Lower is classified as a heavily modified water body. There is a requirement to achieve good status by 2027 and, given that it is a heavily modified water body, the legal requirement is to achieve 'Good Ecological Potential' rather than 'Good Ecological Status.' It is therefore the aim of the Planning Scheme through the implementation of objectives to achieve good water ecological potential in the SDZ area and downstream.

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 in the SDZ area 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 Planning Scheme will entail the delivery of a number of measures to sustainably manage water demand. New developments and upgrading of existing development will need to install suitable water conservation measures including the use of rainwater harvesting and grey water recycling for example.

Development Activities

Development works on undeveloped sites could impact on water quality during the construction and operational phases, which could have a potential adverse effect on the chemical water quality and biological water quality. Again uncontrolled or untreated surface water discharges and run-off including pollution incidents and non-attenuation of surface water drainage during construction could adversely impact on European sites. The timing of development activities may impact of designated sites as majority of the features of interest in Dublin Bay are wintering birds. The Planning Scheme would ensure that development works are carried out to acceptable international standards

3.3 Conservation Objectives

According to the EU Habitats Directive, favourable conservation status of a habitat is achieved when:

- Its natural range, and area it covers within that range, is stable or increasing, and
- The ecological factors that are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable futures, and
- The conservation status of its typical species is favourable as defined below

The favourable conservation status of a species is achieved when:

- Population data on the species concerned indicate that it is maintaining itself, and
- The natural range of the species is neither being reduced or likely to be reduced for the foreseeable future, and
- There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

The conservation objectives for the five Natura 2000 sites identified in section 2 above are set out below. A site's conservation objectives are a statement of the overall nature conservation requirements for a site, expressed in terms of the favourable condition required for the qualifying features.

South Dublin Bay SAC

Objective:

[1140] To maintain the favourable conservation condition of Mudflats and sandflats not covered by seawater at low tide in South Dublin Bay SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Habitat Area	Hectares	The permanent habitat area is stable or increasing, subject to natural processes.	Habitat area was estimated using OSi data as 720ha

Community extent	Hectares	Maintain the extent of the Zostera-dominated community, subject to natural processes.	Based on an intertidal survey undertaken in 2011(MERC, 2012)
Community Structure: Zostera density	Shoots/m ²	Conserve the high quality of the Zostera-dominated community, subject to natural processes	Based on an intertidal survey undertaken in 2011(MERC, 2012)
Community distribution	Hectares	Conserve the following community type in a natural condition: Fine sands with Angulus tenuis community complex.	Based on intertidal surveys undertaken in 2006 (Aquafact, 2006) and 2011 (MERC, 2012).

Rockabill to Dalkey Islands SAC

Objective:

[1170] To maintain the favourable conservation condition of Reefs in Rockabill to Dalkey Island SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Habitat area	Hectares	The permanent area is stable or increasing, subject to natural processes.	Habitat area estimated as 182ha using 2010 and 2011 intertidal and subtidal reef survey data (MERC,2010, 2012a,b), InfoMar bathymetry and the Arklow to Skerries Islands Admiralty Chart (1468_0)
Habitat distribution	Occurrence	Distribution is stable or increasing, subject to natural processes.	Distribution derived from 2010 and 2011 intertidal and subtidal reef survey data (MERC, 2010, 2012a,b), InfoMar bathymetry and the Arklow to Skerries Islands Admiralty Chart (1468_0).
Community structure	Biological composition	Conserve the following community types in a natural condition: Intertidal reef community complex; and Subtidal reef community complex.	Reef community mapping based on 2010 and 2011 intertidal and subtidal reef survey data (MERC, 2010, 2012a,b).

[1351] To maintain the favourable conservation condition of Reefs in Rockabill to Dalkey Island SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Access to suitable habitat	Number of artificial barriers	Species range within the site should not be restricted by artificial barriers to site use.	See marine supporting document for further details
Disturbance	Level of impact	Human activities should occur at levels that do not adversely affect the harbour porpoise community at the site	See marine supporting document for further details

North Dublin Bay SAC

Objective: To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected:

- [1140] Mudflats and sandflats not covered by seawater at low tide
- [1210] Annual vegetation of drift lines
- [1310] Salicornia and other annuals colonizing mud and sand
- [1330] Atlantic salt meadows (*Glauco-Puccinellietalia maritima*)
- [1395] *Petalophyllum ralfsii*
- [1410] Mediterranean salt meadows (*Juncetalia maritimi*)
- [2110] Embryonic shifting dunes
- [2120] Shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes")
- [2130] * Fixed coastal dunes with herbaceous vegetation ("grey dunes")
- [2190] Humid dune slacks

South Dublin Bay & River Tolka Valley Estuary SPA

Objective: To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA:

- *Branta bernicla hrota* [wintering]
- *Haematopus ostralegus* [wintering]
- *Charadrius hiaticula* [wintering]
- *Pluvialis squatarola* [wintering]
- *Calidris canutus* [wintering]
- *Calidris alba* [wintering]
- *Calidris alpina* [wintering]
- *Limosa lapponica* [wintering]
- *Tringa totanus* [wintering]
- *Chroicocephalus ridibundus* [wintering]
- *Sterna dougallii* [passage]
- *Sterna hirundo* [breeding + passage]
- *Sterna paradisaea* [passage]
- Wetlands

North Bull Island SPA

Objective: To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA:

- *Branta bernicla hrota* [wintering]
- *Tadorna tadorna* [wintering]
- *Anas crecca* [wintering]
- *Anas acuta* [wintering]
- *Anas clypeata* [wintering]
- *Haematopus ostralegus* [wintering]

- Pluvialis apricaria [wintering]
- Pluvialis squatarola [wintering]
- Calidris canutus [wintering]
- Calidris alba [wintering]
- Calidris alpina [wintering]
- Limosa limosa [wintering]
- Limosa lapponica [wintering]
- Numenius arquata [wintering]
- Tringa totanus [wintering]
- Arenaria interpres [wintering]
- Chroicocephalus ridibundus [wintering]
- Wetlands

3.4 Impact prediction

Indirect impacts on Dublin Bay cSACs/SPAs arising from changes to water quality and increased population may occur during the implementation of the Planning Scheme. In the absence of mitigation, it is possible that the Planning Scheme could lead to some negative impacts on the conservation objectives of Dublin Bay cSACs/SPAs Natura 2000 sites identified in section 2 above. Table 3 above identifies the specific objectives in the Planning Scheme that would indirectly impact on the integrity of the Nature 2000 sites in Dublin Bay.

3.4.1 Cumulative Impacts

Having regard to section 2.5.1 above, it is considered that, with mitigation in place, significant in-combination or cumulative effects on Natura 2000 sites are considered unlikely, in relation to the Planning Scheme.

3.5 Mitigation Measures

Dublin City Council recognises that the protection and future conservation of designated sites under EU legislation is an important issue for the Local Authority to address, both directly and indirectly. As a result, a comprehensive set of policies and objectives are contained within the Dublin City Development Plan 2011-2017 which are aimed specifically at protecting the rich and diverse natural environment within the City development plan area.

The Planning Scheme is within the framework of the Dublin City Development Plan as the study area is designated as one of nine Key Developing Areas (KDA's) to deliver the Core Strategy of the city plan. Therefore the mitigatory policies and objectives in the Dublin City Development Plan would apply to the Planning Scheme.

Dublin City Development Plan 2011-2017 provided specific policies in relation to the protection and preservation of designated sites under the EU Habitats Directive and the EU Birds Directive. These policies are as follows:

Policy GC26: To protect flora, fauna and habitats, which have been identified by the Habitats Directive, Birds Directive, Wildlife Act 1976 (as amended), the Flora Protection Order (S.I. no. 84 of 1999), and the European Communities (Natural Habitats) Regulations 1997 (S.I. no. 94 of 1997)

Policy GC27: To conserve and manage all Natural Heritage Areas, Special Areas of Conservation and Special Protection Areas identified and designated, or proposed to be designated, by the Department of Environment, Heritage and Local Government. These designations will allow for protection in the event of any approved boundary changes by the Department of Environment, Heritage and Local Government

The following policies, which are set out in the Development Plan, are aimed specifically at protecting the natural environment within the Dublin City Council administrative area including Planning Scheme area.

Policy GC28: To seek the conservation and management of areas of natural environmental value.

Policy GC29: To conserve priority species, habitats, and natural heritage features identified in the Dublin City Biodiversity Action Plan 2008 - 2012 for priority conservation measures.

Policy GC4: To improve both biodiversity and access connections with the strategic network at the level of local planning. Green corridors will be pivotal in achieving this

Policy GC6: To protect and improve the natural character of watercourses and to promote access, walkways and other compatible recreational uses along them.

Policy GC30: To have regard to the conservation and enhancement of significant non-designated areas of ecological importance in accordance with development standards set out in this plan.

Policy GC31: That any plan or project with the potential to give rise to significant direct, indirect or secondary impacts on a Natura 2000 site(s) shall be subject to an appropriate assessment in accordance with Article 6(3) of the Habitats Directive.

The Dublin City Development Plan also includes additional mitigation measures, in the form of additional policies and objectives. These additional policies are included in the following chapters (see also Table 5 Natura Impact Report of the Dublin City Development Plan 2011-2017):

- Making Dublin the Heart of the City Region
- Shaping the City
- Providing Quality Homes in a Compact City
- Greening the City
- Connecting & Sustaining the City's Infrastructure

3.5.1 Mitigation Policy Measures for the Planning Scheme

The screening process undertaken in Stage 1 of this NIR includes the determination of whether or not each objective has potential impact on the integrity of the Natura 2000 sites, and the reasons for this determination. The majority of objectives do not have an impact. Certain objectives are deemed to have an impact which is positive on Natura 2000 sites, and some of these are devised through the Stage Two Appropriate Assessment process. Together with the mitigatory policies of the Dublin City Development Plan 2011-2017, these protective objectives in the Planning Scheme will be used to avoid or reduce the potential for impacts on the integrity of Natura 2000 sites identified for consideration. The following are specific objectives in the Planning Scheme that will protect the Natura 2000 sites.

Mitigation policies providing alternative areas for socialising, interaction and recreation

CD2: To support and promote the continued role of the Sean O Casey Community Centre East Wall Road and St Andrews Resource Centre Pearse Street as significant multi use community facilities, social spaces and landmark buildings accessible to the wider community

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.

Mitigation policies providing protection of and improving water quality

SI2: To manage development and promote the continued provision and upgrading of waste water treatment plans in the region so that new schemes are permitted only where adequate capacity exists in the waste water network

SI4: To ensure that development is permitted in tandem with available water supply and to manage development, so that new schemes are permitted only where adequate water supply resources exists or will become available within the life of a planning permission.

SI6: To require all proposed developments to carry out a site specific Flood Risk Assessment in accordance with the Departmental Guidelines on Flood Risk Management and Appendix A1 of this plan. The flood risk assessment shall accompany the planning application and should be sufficiently detailed to quantify the risks and the effects of any residual mitigation/adaptation together with the measures needed to manage residual risks.

SI8: To promote the achievement of good ecological status, good ecological potential and good chemical status for the length of the Liffey WMU by 2027 and to implement the programme of measures set out in the River Basin Management Plan 2009 – 2015, in accordance with the Water Framework Directive (WFD) 2000/60/EC.

SI10: To achieve best practice and innovations in SUDs design as part of the planning scheme including the successful co-ordination of surface water

management with ecology and amenity functions of open space and landscaped areas.

SI19: To ensure that surface water quality is protected in the construction of enhanced drainage works to meet requirements of the Water Framework Directive.

SI20: 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.

Mitigation policies providing protection to the designated sites during construction stages of sites

SI17: 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

SI18: That all developments will comply with the waste policy as set out in the Dublin City Development Plan 2011-2017.

SI21: 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).

GI10: Prior to the redevelopment and operation of any sites, developer(s) shall ascertain the extent, if any, of invasive species, and shall set out measures for their control/removal

GI11: To enhance the bio diversity value of the local area by protecting habitats, in particular along water bodies, and creating opportunities for new habitats through appropriate native species landscaping schemes to integrate the natural environment with high quality urban development.

GI12: Any plan or project with the potential to give rise to significant direct, indirect or secondary impacts on a Natura 2000 site(s) shall be subject to an appropriate assessment in accordance with Article (3) of the Habitats Directive

Table 4 below states the objectives which were screened in for Appropriate Assessment following Stage 1 of the AA process. They represent approximately 16.3% of the overall number of objectives contained in the Planning Scheme. The table demonstrates the role in which specific mitigatory policies play in counteracting the policies screened in for potential impacts.

Table 4: Objectives Screened in under Stage 1 and Mitigatory measures, policies and actions

objectives which may have potential impact on the integrity of the identified Natura 2000 sites.	Mitigation Measure (Policies and others actions)
<p>ER13: 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.</p>	<p>A new cruise terminal is outside the planning scheme area and within the Dublin Port Company lands, which is subject to the Dublin Port Master Plan 2012-2040 Strategic Natura Impact Statement (Appropriate Assessment) mitigation principles and strategies P1 – Pollution Control D1 – Noise & Vibration Reduction D2 – Lighting Reduction D3 – Timing development activities D4 – Ship movements DMS – Dredging Mitigation Strategy</p>
<p>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</p>	<p>Dublin City Development Plan 2011-2017 policies GC26, GC27, GC28, GC4 Planning Scheme Objectives SI10, GI11, GI12</p>
<p>CD16: To facilitate the provision of sports and leisure facilities, in particular water based sports in recognition of the special waterside location context of the SDZ, to the benefit of local community and in particular the local youth</p>	<p>Dublin City Development Plan 2011-2017 policies GC4, GC28, GC30, GC6 Planning Scheme Objectives SI2, SI4, SI6, GI11, GI12</p>
<p>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.</p>	<p>Dublin City Development Plan 2011-2017 policies GC26, GC27, GC28, GC4, GC6, GC30 Planning Scheme Objectives SI8, GI10, GI11, GI12</p>
<p>MV3: To provide additional cycle and pedestrian bridges across the city's canals and rivers to form part of strategic cycling and walking routes.</p>	<p>Dublin City Development Plan 2011-2017 policies GC26, GC27, GC28, GC4 Planning Scheme Objectives SI10, GI11, GI12</p>
<p>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</p>	<p>Dublin City Development Plan 2011-2017 policies GC26, GC27, GC28, GC4 Planning Scheme Objectives SI17, GI10, GI11, GI12</p>
<p>MV8: To provide appropriate levels of car parking to serve a range of uses accordance with development plan car parking standards (section 17.40)</p>	<p>Dublin City Development Plan 2011-2017 policies GC26, GC27, GC28, GC4 Planning Scheme Objectives SI17, GI11</p>
<p>MV9: To provide for sustainable levels of car parking and car storage in residential schemes in accordance with development plan car parking standards (section 17.40) so as to promote apartment living for all age groups and family types.</p>	<p>Dublin City Development Plan 2011-2017 policies GC26, GC27, GC28, GC30 Planning Scheme Objectives GI11, GI12</p>
<p>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</p>	<p>Dublin City Development Plan 2011-2017 policies GC26, GC27, GC28, GC4, GC6, GC30 Planning Scheme Objectives SI8, GI11, GI12</p>
<p>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.</p>	<p>Dublin City Development Plan 2011-2017 policies GC26, GC27, GC28, GC4, GC6, GC30 Planning Scheme Objectives GI10, GI12</p>
<p>SI1: To actively seek the funding and delivery of key drainage infrastructure to enable development in the area.</p>	<p>Dublin City Development Plan 2011-2017 policies GC26, GC27, GC28, GC30 Planning Scheme Objectives</p>

	SI8, GI11, GI12
RT1: To foster a rich mix of retail, cultural and leisure activities to support a vibrant urban quarter.	Dublin City Development Plan 2011-2017 policies GC26, GC27, GC28, GC4, GC30, GC6 Planning Scheme Objectives SI17, GI11, GI12
RT4: To proactively encourage the implementation of the district centre at Point Village, to include a concentration of retail, entertainment, leisure and community facilities, as well as quality and affordable supermarket shopping	Dublin City Development Plan 2011-2017 policies GC26, GC27, GC28, GC4, GC30, GC6 Planning Scheme Objectives SI8, GI11, GI12
TL1: To promote the water bodies as part of Docklands' identity and ensure water based leisure, business, tourist and sporting activities are encouraged and supported in a sustainable manner	Dublin City Development Plan 2011-2017 policies GC26, GC27, GC28, GC4, GC30, GC6 Planning Scheme Objectives SI8, GI10, GI11, GI12
TL2: To promote the SDZ area as a destination for cultural tourism and encourage the use of Grand and Royal canals for leisure and recreational purposes.	Dublin City Development Plan 2011-2017 policies GC26, GC27, GC28, GC4, GC30, GC6 Planning Scheme Objectives GI10, GI11, GI12
TL4: To investigate the opportunities to extend existing tourism offering and explore the development of new tourist attractions which will encourage larger numbers of tourists visiting the area such as a maritime quarter.	Dublin City Development Plan 2011-2017 policies GC26, GC27, GC28, GC4, GC30, GC6 Planning Scheme Objectives GI10, GI12
TL5: To facilitate the cruise traffic coming into Dublin and encourage the timing of planned events and festivals to coincide with cruise ship calls at Dublin Port.	Dublin City Development Plan 2011-2017 policies GC26, GC27, GC28, GC4, GC30, GC6 Planning Scheme Objectives SI8, GI10, GI12
TL6: To support retention of existing leisure and Sports activities in the area and encourage new facilities for the docklands community and visitors to the area, and that they meet the needs of all members of the existing and future communities.	Dublin City Development Plan 2011-2017 policies GC26, GC27, GC28, GC30, GC6 Planning Scheme Objectives SI2, SI4, SI6, SI8, SI17, GI10, GI11, GI12
TL8: To maintain programmes of cultural events in the SDZ Area and include new events such as a Viking Festival	Dublin City Development Plan 2011-2017 policies GC26, GC27, GC28, GC4, GC30, GC6 Planning Scheme Objectives SI8, GI10, GI12
TL9: To promote the recreational use of the water including the rowing, paddling and boating club activities in the area and to seek to ensure that any new infrastructure is provided in a manner which safeguards and protects these recreational resources	Dublin City Development Plan 2011-2017 policies GC26, GC27, GC28, GC4, GC6, GC30 Planning Scheme Objectives SI8, GI10, GI12
US9: To ensure that the extensive footprint of waterbodies function as a valuable part of the public realm, and that a water animation strategy is prepared to drive this.	Dublin City Development Plan 2011-2017 policies GC26, GC27, GC28, GC4, GC30, GC6 Planning Scheme Objectives SI8, GI10, GI12
US12: To promote and achieve sustainable higher densities throughout the SDZ area, with an emphasis on higher commercial densities within the identified hubs	Dublin City Development Plan 2011-2017 policies GC26, GC27, GC28, GC4, GC30, GC6 Planning Scheme Objectives CD2, CD15, SI2, SI6, SI8, SI10, GI12
GI2: To promote connections between existing amenity areas in the SDZ, proposed amenity areas and the wider strategic green network of the docklands, Dublin bay and the city including connections to the S2S route and the proposed Dodder Greenway	Dublin City Development Plan 2011-2017 policies GC26, GC27, GC28, GC4, GC30, GC6 Planning Scheme Objectives SI8, GI12
PR2: To promote water based recreation and events.	Dublin City Development Plan 2011-2017 policies GC26, GC27, GC28, GC4, GC30, GC6 Planning Scheme Objectives SI8, GI10, GI12, GI11
PR9: To seek the development of attractive uses on the waterways as set out in the Vision for the Waterways, Waterways Regeneration Strategy, 2008 and the City Canals Plan 2010; review the membership of the Operational Liaison	Dublin City Development Plan 2011-2017 policies GC26, GC27, GC28, GC4, GC30, GC6 Planning Scheme Objectives SI8, GI10, GI12, GI11

Group to include Dublin Port Authority and the OPW as appropriate; and that its remit be expanded to include the lower reaches of the Dodder and Liffey rivers.	
PR10: To support the development of flexible and moveable publicly accessible leisure facilities on the water space and the campshires to facilitate changes in demand.	Dublin City Development Plan 2011-2017 policies GC26, GC27, GC28, GC4, GC30, GC6 Planning Scheme Objectives S18, GI12, GI11
PR11: To facilitate boat movement between the two canals as the canals are regenerated for leisure and tourism purposes	Dublin City Development Plan 2011-2017 policies GC26, GC27, GC28, GC4, GC30, GC6 Planning Scheme Objectives S18, GI12, GI10, GI11
PR12: To support the provision of a suitable terminal for cruise liners and other passenger vessels with Dublin Port	Dublin City Development Plan 2011-2017 policies GC26, GC27, GC28, GC4, GC30, GC6, GC31 Planning Scheme Objectives S117, GI10, GI11, GI12
PR13: To encourage the provision of additional public and private moorings and associated facilities for boats of various sizes according to future requirements	Dublin City Development Plan 2011-2017 policies GC26, GC27, GC28, GC4, GC30, GC6, GC31 Planning Scheme Objectives S18, GI10, GI11, GI12

3.6 Implementation Mitigation Policies and Objectives

The responsibility for implementing the Planning Scheme lies solely with the Planning Authority through the Planning consent process. Applicants who intend to develop within the Planning Scheme area are obliged to ensure that their application is consistent with the objectives of the Plan. If it cannot be shown conclusively that the criteria outlined in the mitigation objective can be met, planning permission will not be forthcoming.

3.7 Monitoring the Implementation of Policies and Objectives

Monitoring will be through the planning process, the programme of the Drainage Section of Dublin City Council and the programme of the Eastern River Basin Management Plan. Mitigation failure would be identified and addressed through the statutory Planning Enforcement as identified in the Planning and Development Act 2010 and the Programme of Measures⁴ of the Liffey Estuary Lower Water Management Unit.

3.8 Outcomes

The Assessment process for this report has resulted in a conclusion that mitigatory measures identified in Stage 2 are adequate to ensure that the protection of the integrity of Natura 2000 European sites will not be receiving significant effects as a result of potential impacts of the objectives contained within the Planning Scheme. Therefore, Stage 3 (Assessment of Alternative Solutions) and stage 4 (where no alternatives exist, an assessment of compensatory issues) are not necessary.

⁴ http://www.erbd.ie/Docs/YourArea_Final/EstuariesLagoons/Transitional%2001.pdf

3.9 Conclusion

The AA process has informed the preparation of the Planning Scheme so that it can be implemented successfully without having adverse effects on the integrity of Natura 2000 sites. This Natura Impact Report has determined that, assuming the successful implementation of the mitigatory objectives contained within the Planning Scheme, there will be no adverse effects on the integrity of Natura 2000 sites arising from the plan in isolation or in combination with other plans and projects.

APPENDIX 1

Monitoring Result

Sampling Point	Sample Taken Date	Sample Taken Time	Sample Received Date	Sample Received Time	Sample Number	Status	Ammonia	B.O.D.	B.O.D. Saline	C.O.D.	Conductivity (20°C)	D.O.	D.O.	E. coli	Nitrate	Nitrite	pH	Phosphorus (React)	Phosphorus (React)	Salinity	Suspended Solids	Temperature	TON	TON	Total Coliforms	
							mg/l as N	mg/l	mg/l	mg/l	µS/cm	% Sat.	mg/l	MPN/100ml	mg/l as N	mg/l as N	pH	µg/l SRP as P	mg/l as P	PSU	mg/l	°C	µg/l as N	mg/l as N	MPN/100ml	
(40382) SP5 Liffey D/S Outfall from Grand Canal Dock (S)	04/10/2012	11:12	04/10/2012	14:04	675069	GOOD	0.04	<1		41	6120	105		1106	0.94	0.008	8.3		<0.03		24	12.3		0.95	14136	
	10/10/2012	11:35	10/10/2012	14:28	677051	<GOOD	<0.03	<1		18	3660	97	10.0	990	1.26	0.009	8.2		<0.03	2.1	<10	12.9		1.27	7270	
	18/10/2012	09:40	18/10/2012	14:02	679631		0.03	2		32	1525	91	9.8	2359	0.74	<0.005	8.1		<0.03	0.6	21	10.0		0.75	11199	
	25/10/2012	09:30	25/10/2012	14:05	682476		0.04	1		33	2140	93	10.2	1860	1.15	0.010	8.2		<0.03	1.1	<10	11.5		1.16	12033	
	01/11/2012	09:20	01/11/2012	11:53	684439			0.072	<2		12230	93	9.6	275			8.1	42		7.7		8.3	1010		3784	
	08/11/2012	09:25	08/11/2012	14:04	687199			0.057	<2		8120	95	10.5	1211			8.1	12		4.9		8.3	440		6488	
	15/11/2012	09:37	15/11/2012	14:00	689915		0.05	1		18	2570	85		5475	1.16	0.018	8.1		<0.03	1.3	<10	10.0		1.18	14136	
	7 week mean							0.043											0.027	0.015						
	(40384) SP5 Liffey D/S Outfall from Grand Canal Dock (D)	04/10/2012	13:10	04/10/2012	14:04	675070		0.128	<1			42500	97		173			8.0	34				13.1	133		1725
		10/10/2012	11:40	10/10/2012	14:28	677052		0.005	3			28800	90	8.3	504			8.0	13		19.7		13.3	989		3873
18/10/2012		09:45	18/10/2012	14:02	679632		0.05	1		<100	5320	90	9.6	1782	0.80	0.006	8.1		<0.03	3.1	34	10.5		0.81	24196	
25/10/2012		09:35	25/10/2012	11:05	682477			0.041	<2		34700	86	7.8	1017			7.9	19		24.2		12.2	143		5475	
01/11/2012		09:25	01/11/2012	11:53	684440			0.074	<2		40200	91	8.8	388			7.9	38		28.7		9.8	233		3282	
08/11/2012		09:30	08/11/2012	14:04	687200			0.087	<2		4080	86	8.9	175			7.9	25		29.2		9.5	216		1137	
15/11/2012		09:40	15/11/2012	14:00	689916			0.076	<2		3940	78		594			8.0	19		28.0		10.3	175		2143	
7 week mean							0.066											0.022	0.015							
(40442) SP1 Liffey (S) Sean O'Casey Bridge		04/10/2012	11:20	04/10/2012	14:04	675061		0.066	<1			10030	98		1014			8.0	43				17.7	959		9208
		10/10/2012	10:15	10/10/2012	14:28	677043		0.04	<1		27	5000	98	9.9	73	1.26	0.012	8.1		<0.03	2.8	16	11.0		1.27	776
	18/10/2012	11:10	18/10/2012	14:02	679623		0.11	3		44	1393	91	9.2	7701	1.16	0.015	8.1		0.10	0.6	32	10.5		1.17	>24196	
	25/10/2012	11:15	25/10/2012	14:05	682468		0.06	<1		<100	6370	94	10.0	987	0.86	0.011	8.1		<0.03	3.1	14	11.8		0.87	12033	
	01/11/2012	10:38	01/11/2012	11:53	684431			0.03	<2		13730	95	9.4	860			7.4	32		8.7		8.7	974		8664	
	08/11/2012	11:12	08/11/2012	14:04	687191			0.034	<2		18100	99	10.3	988			8.0	14		12.1		9.3	585		5475	
	15/11/2012	11:05	15/11/2012	13:59	689907		0.05	<1		32	6930	93		620	1.14	0.019	8.2		0.03	4.1	<10	10.4		1.16	15531	
	7 week mean							0.056											0.032	0.023						
	(40445) SP1 Liffey (D) Sean O'Casey Bridge	04/10/2012	11:23	04/10/2012	14:04	675062		0.005	<1			44800	93		75			8.0	12				12.8	<10		504
		10/10/2012	10:10	10/10/2012	14:28	677044		0.06	<2			40000	92	7.8	591			8.0	28		28.5		12.4	92		6131
18/10/2012		11:15	18/10/2012	14:02	679624		0.07	<2			3350	85	7.2	5172			8.0	41		23.2		11.9	270		>24196	
25/10/2012		11:17	25/10/2012	14:05	682469			0.042	<2		37500	86	8.0	373			7.9	23		26.4		12.3	104		3076	
01/11/2012		10:35	01/11/2012	11:53	684432			0.066	<2		43300	109	10.2	187			7.7	36		31.4		10.0	131		1785	
08/11/2012		11:10	08/11/2012	14:04	687192			0.089	<2		3930	104	9.8	216			7.9	17		28.4		10.0	213		1439	
15/11/2012		11:08	15/11/2012	13:59	689908			0.055	<2		3970	84		97			8.0	10		28.2		10.8	106		650	
7 week mean							0.055											0.024								

Sampling Point	Sample Taken Date	Sample Received Date	Sample Time	Sample Number	Status	Ammonia	B.O.D.	B.O.D. Saline	C.O.D.	Conductivity (20°C)	D.O.	D.O.	E. coli	Nitrate	Nitrite	pH	Phosphorus (React)	Phosphorus (React)	Salinity	Suspended Solids	Temperature	TON	TON	Total Coliforms	
						mg/l as N	mg/l	mg/l	mg/l	µS/cm	% Sat.	mg/l	MPN/100ml	mg/l as N	mg/l as N	pH	µg/l SRP as P	mg/l as P	PSU	mg/l	°C	µg/l as N	mg/l as N	MPN/100ml	
(40448) SP2 Royal Canal (S) Spencer Dock @ Sheriff Street	04/10/2012 13:35	04/10/2012 14:04		675063	GOOD				18	483	106	11.4	30	0.11	0.006	8.4		<0.03	0.0	<10	12.0		0.12	480	
	10/10/2012 11:30	10/10/2012 14:28		677045	<GOOD				21	462	103	10.9	20	<0.09	0.006	8.3		<0.03	0.0	<10	12.7		<0.09	243	
	18/10/2012 09:20	18/10/2012 14:02		679625					13	462	95	10.2	86	<0.09	<0.005	8.1		<0.03	0.0	<10	10.4		<0.09	480	
	25/10/2012 09:15	25/10/2012 14:05		682470					19	475	99	10.5	20	0.13	0.006	8.2		<0.03	0.0	<10	11.3		0.14	373	
	01/11/2012 09:00	01/11/2012 11:53		684433					<10	483	95	10.9	20	0.20	0.005	8.1		<0.03	0.0	<10	7.8		0.21	238	
	08/11/2012 09:05	08/11/2012 14:04		687193					16	500	99	11.6	<10	0.28	0.006	8.3		0.05	0.0	<10	7.5		0.29	74	
	15/11/2012 09:15	15/11/2012 13:59		689909					14	601	96		41	0.35	0.017	8.3		<0.03	0.0	<10	8.5		0.37	148	
	7 week mean						0.052	1.07											0.015						
	(40449) SP2 Royal Canal (D) Spencer Dock @ Sheriff Street	04/10/2012 13:30	04/10/2012 14:04		675064					18	631	104	11.3	52	0.10	0.005	8.3		<0.03	0.0	15	12.1		0.10	238
		10/10/2012 11:50	10/10/2012 14:28		677046					26	534	105	11.1	20	<0.09	0.006	8.3		<0.03	0.0	<10	12.6		<0.09	216
18/10/2012 09:25		18/10/2012 14:02		679626					19	459	94	9.9	63	0.10	<0.005	8.2		<0.03	0.0	<10	10.5		0.10	471	
25/10/2012 09:20		25/10/2012 14:05		682471					17	726	100	10.2	10	0.13	0.006	8.2		<0.03	0.1	<10	11.3		0.14	313	
01/11/2012 09:05		01/11/2012 11:53		684434					<10	751	94	11.0	<10	0.20	0.005	8.2		<0.03	0.2	<10	8.0		0.21	135	
08/11/2012 09:08		08/11/2012 14:04		687194					21	742	98	11.7	20	0.32	0.020	8.2		<0.03	0.2	<10	7.5		0.34	85	
15/11/2012 09:17		15/11/2012 13:59		689910					13	713	97		<10	0.31	0.006	8.3		<0.03	0.1	<10	8.6		0.32	20	
7 week mean						0.015	0.93											0.015							
(40450) SP3 Liffey (S) Opposite New Wapping Street		04/10/2012 11:30	04/10/2012 14:04		675065						10340	94		1989			8.1	42				11.6	935		9208
		10/10/2012 10:25	10/10/2012 14:28		677047						10630	99	9.9	539			8.0	23				12.8	751		4352
	18/10/2012 11:20	18/10/2012 14:02		679627					36	1200	93	9.9	8664	1.17	0.014	8.1		0.10	0.4	30	10.7		1.18	>24196	
	25/10/2012 11:25	25/10/2012 14:05		682472					<100	6970	93	9.9	1317	0.79	0.012	8.1		<0.03	4.1	22	11.8		0.80	>24196	
	01/11/2012 10:42	01/11/2012 11:53		684435						14670	96	9.8	908			8.0	31			9.4		8.8	945	11199	
	08/11/2012 11:17	08/11/2012 14:04		687195						2000	97	10.2	934			8.0	13			13.3		9.2	785	4106	
	15/11/2012 11:18	15/11/2012 14:00		689911					41	7800	77		602	1.16	0.018	8.1		0.03	4.1	<10	10.4		1.18	7701	
	7 week mean						0.055											0.027	0.03						
	(40451) SP3 Liffey (D) Opposite New Wapping Street	04/10/2012 11:27	04/10/2012 14:04		675066						39500	96		218			8.0	30				12.5	52		1624
		10/10/2012 10:20	10/10/2012 14:28		677048						38700	89	7.9	122			8.0	21			27.5		13.0	836	1483
18/10/2012 11:22		18/10/2012 14:02		679628						4370	101	9.2	1274			8.0	28			31.3		12.3	62	1.18	12997
25/10/2012 11:28		25/10/2012 14:05		682473						43400	95	8.5	262			7.9	32			31.1		12.4	49	1529	
01/11/2012 10:40		01/11/2012 11:53		684436						42800	98	8.4	145			7.9	32			31.0		10.3	132	1354	
08/11/2012 11:15		08/11/2012 14:04		687196						3900	97	9.6	298			8.0	13			21.5		10.0	191	1842	
15/11/2012 11:15		15/11/2012 14:00		689912						4290	76		108			8.0	13			30.8		10.7	154	691	
7 week mean						0.054												0.028							

Sampling Point	Sample Taken Date	Sample Taken Time	Sample Received Date	Sample Received Time	Sample Number	Status	Ammonia	B.O.D.	B.O.D. Saline	C.O.D.	Conductivity (20°C)	D.O.	D.O.	E. coli	Nitrate	Nitrite	pH	Phosphorus (React)	Phosphorus (React)	Salinity	Suspended Solids	Temperature	TON	TON	Total Coliforms		
							mg/l as N	mg/l	mg/l	mg/l	µS/cm	% Sat.	mg/l	MPN/100ml	mg/l as N	mg/l as N	pH	µg/l SRP as P	mg/l as P	PSU	mg/l	°C	µg/l as N	mg/l as N	MPN/100ml		
(40457) Liffey (S) D/S Toll Bridge	04/10/2012	11:40	04/10/2012	14:04	675067	GOOD	0.075	<1			11830	98		865			8.1	35				11.7	190		6131		
	10/10/2012	10:35	10/10/2012	14:28	677049	<GOOD	0.015	<2		<100	10130	97	9.7	669			8.1	27			6.3		13.0	956		6131	
	18/10/2012	11:27	18/10/2012	14:02	679629		0.10	3		36	1119	93	9.9	5475	1.18	0.014	8.1			0.10	0.4	31	10.5		1.19	>24196	
	25/10/2012	11:33	25/10/2012	14:05	682474		0.05	<1		23	2570	92	10.4	1396	1.14	0.010	8.2			<0.03	1.3	10	11.5		1.15	12033	
	01/11/2012	10:48	01/11/2012	11:53	684437			0.038	<2		21500	98	9.5	1046			8.0	32					14.3		699	4352	
	08/11/2012	11:28	08/11/2012	14:04	687197			0.035	<2		2060	93	10.4	857			8.0	9					13.7		742	4611	
	15/11/2012	11:25	15/11/2012	14:00	689913			0.05	<1		41	7910	87		1014	0.96	0.018	8.1			0.03	4.1	<10	10.5		0.98	11199
	7 week mean							0.052											0.03	0.03							
	(40461) Liffey (D) D/S Toll Bridge	04/10/2012	11:35	04/10/2012	14:04	675068		0.062	2			42100	98		175			8.0	41				12.6	911		1106	
		10/10/2012	10:30	10/10/2012	14:28	677050		0.005	<2			39600	91	7.9	109			8.0	16			28.2		13.4	990	988	
18/10/2012		11:25	18/10/2012	14:02	679630		0.052	<2			4340	101	8.8	670			8.0	26			31.1		12.1	70	7270		
25/10/2012		11:30	25/10/2012	14:05	682475		0.07	<2			36700	82	7.6	605			8.0	31			25.9		12.3	124	5172		
01/11/2012		10:45	01/11/2012	11:53	684438			0.047	<2		43200	99	8.8	187			8.0	31			31.2		10.4	121	1529		
08/11/2012		11:25	08/11/2012	14:04	687198			0.02	<2		3950	96	9.3	246			8.0	9			28.1		9.8	804	1162		
15/11/2012		11:22	15/11/2012	14:00	689914			0.057	<2		4140	77		109			8.0	13			29.6		10.8	153	1137		
7 week mean							0.045											0.026									
(41077) Dodder River [Tidal] Londonbridge Rd.	04/10/2012	13:00	04/10/2012	14:04	675071		<0.03	<1		11	301	106	11.7	1334	1.04	0.005	8.4			<0.03	0.0	12	11.0		1.05	1199	
	10/10/2012	11:20	10/10/2012	14:28	677053		<0.03	<1		<10	397	101	10.5	644	1.34	0.010	8.4			<0.03	0.0	<10	13.4		1.35	7270	
	18/10/2012	10:00	18/10/2012	14:02	679633		<0.03	2		93	230	94	9.8	2282	0.62	<0.005	8.2			<0.03	0.0	21	9.9		0.63	8164	
	25/10/2012	09:45	25/10/2012	14:05	682478		0.03	<1		20	319	96	10.4	1043	1.08	0.008	8.3			<0.03	0.0	<10	11.3		1.09	6131	
	01/11/2012	09:50	01/11/2012	11:53	684441		<0.03	<1		<10	342	100	11.5	1187	0.95	0.006	8.3			<0.03	0.0	11	8.8		0.96	15531	
	08/11/2012	09:45	08/11/2012	14:04	687201		0.04	1		20	432	99	11.1	1607	1.77	0.010	8.1			<0.03	0.0	57	8.6		1.78	9208	
	15/11/2012	09:46	15/11/2012	14:00	689917		0.05	<1		14	685	90		5794	1.14	0.019	8.2			<0.03	0.1	<10	10.0		1.16	14136	
7 week mean							0.026	0.79												0.015							