An Bord Pleanála

Inspector's Report ABP-304888-19

Development	15-year permission for development at Oil Berth 3 and Oil Berth 4, Eastern Oil Jetty and at Berths 50A, 50N, 50S, 51, 51A, 49, 52, 53 and associated terminal yards to provide for various elements including new Ro-Ro jetty and consolidation of passenger terminal buildings.
Location	Dublin Port, off Jetty Road and Breakwater Road South, Terminal Road South, Alexandra Road Extension, Alexandra Road, Tolka Quay Road and Promenade Road, Dublin 1 and 3.
Planning Authority	Dublin City Council North
Applicant(s)	Dublin Port Company
Type of Application	Strategic Infrastructure Development
Observer(s)	The Irish Academy or Engineering, Clontarf Residents Association, Docklands Business Forum, Port of Cork Company, Birdwatch Ireland, Donna Cooney, Hollybrook Grove

	Householders Association (Peadar Buckley) and Peadar Farrell.
Prescribed Bodies	Irish Water; Transport Infrastructure Ireland; Inland Fisheries Ireland; Department of Communications, Climate Action and Environment – Geological Survey Ireland; Department of Culture, Heritage and the Gaeltacht; and Office of Minister for Agriculture, Food and the Marine
Date of Site Inspection	14 November 2019
Inspector	Una Crosse

Contents

1.0 Introduction

Pre-Application Consultation

1.1. Dublin Port Company requested Pre-Application Consultations under Section 37B of the Planning and Development Act, 2000, as amended, on 13 October 2017 for works in the Eastern section of Dublin Port (Ref. 29N.PC0252). Three Pre-Application Consultation meetings took place between An Bord Pleanála (the Board) and the prospective applicant on 1 December 2017, 24 April 2018 and 2 July 2018.

1.2. The Board determined under Section 37B(4)(a) of the Planning and Development Act 2000 (as amended) on 9 August 2018 that the proposed development is strategic infrastructure development. As outlined in the report of the Inspector on the pre-application file, the Board's advice to the prospective applicant during the course of the pre-application meetings provided that the following matters should be addressed, and is summarised as follows:

(a) Rational and justification for the proposed development.

(b) Request for 15-year planning permission to be justified.

(c) Scale and rational for the proposed new jetty/Berth 53 clearly stated/need justified; consult with NPWS on potential impacts on the South Dublin Bay and River Tolka Estuary SPA; potential visual impacts assessed.

(d) Detailed assessment of construction and design of new jetty/Berth 53 required, layout and servicing details including boundary treatment, buffers, landscaping and phasing.

(e) Current national advice in relation to the implementation of EIA Directive 2014/52/EU.

(f) Comprehensive and detailed EIAR which has particular regard to the impact of the proposed development on coastal processes, ecology (aquatic and terrestrial), archaeology, industrial heritage, water quality, flood risk and traffic management (including any new or modified road or rail proposals such as a Luas extension).

(g) Comprehensive and detailed NIS having regard to the presence of several European sites in the surrounding area.

(h) Due consideration to be given to in-combination effects on the environment with other proposed developments in the wider area.

(i) Public consultation to be as extensive as possible and consultations should take place with Prescribed Bodies and the local community.

Submission of Application

1.3. The application was received by the Board on 11 July 2019. Submissions were received from eight observers and four prescribed bodies. These are summarised at Sections 7 & 8 of this report, respectively. It came to my attention following receipt of the application that a number of reports included as appendices to Chapter 8 of the EIAR (Volume 3 - Part 2B) were not included on the project website www.dublinportmp2.ie. In response to same, the applicant re-advertised by way of site and newspaper notices dated 10 October 2019. Submissions were invited with 5.30 on 22nd November 2019 the stated closing date. These are summarised in Section 9 of this report.

2.0 Site Location and Description

2.1. The site of the proposed development is located within Dublin Port Estate, the Liffey Channel and Dublin Bay and comprises a stated area of approximately 165.2 hectares along the north side of the Liffey Channel. It is noted that the Northern lands of the Port comprise an area of c.207 hectares. The site is bound to the north and east by the Tolka Estuary with the North Bull Wall to the northwest. To the south the site is adjoined by the Lower River Liffey and the navigation channel within same which is the main navigational channel for the port. The Great South Wall is located to the south east of the site boundary. Further Port uses are located on the southern banks of the Liffey. The Port is accessible from the national road network via the Port Tunnel, from the city centre via the East Wall Road and is connected to the national rail network with an internal rail network within the Port estate. The subject site includes a number of operational areas within this part of the Port which I will address in turn.

2.2. Ro-Ro Terminals: - To the east of the application site, the site includes the three existing Ro-Ro (Roll-on Roll-Off) terminals which currently include five berths – Berths 49, 51, 51A, 52 and 53. These terminals are currently operated by Irish Ferries, Stena and Seatruck. Planning permission was previously granted for the infilling of Basin 52/53 to create a yard area and the construction of a new riverside

berth at the entrance to existing Basin 52/53 which is referred to as Berth 52 as part of the redevelopment of Alexandra Basin and associated works (Ref.29N.PA0034). The subject site extends out into Dublin Bay from the existing Berths. Existing berths cater for accompanied and unaccompanied freight. Accompanied freight refers to trailer units with the cab attached which leave the Port immediately upon driving off and unaccompanied which provides that trailers are delivered and collected from compounds adjacent to the vessel with the trailers driven on and off the ship by Port workers. The main stated difference operationally is the amount of land required for parking of the unaccompanied freight.

2.3. Lo-Lo Terminals:- the existing Lo-Lo (Lift-On Lift-Off) container terminal is located within the centre of the site boundary and currently accommodates three berths – 50A, 50S and 50N which is operated by Dublin Freight Terminal (DFT). The terminal contains primary and secondary handling equipment required to lift containers on and off vessels and stack them on Port lands. The stacks occupy a large area of port land with the Dublin Port Company having a utilisation target of 40,000 TEU (twenty-foot equivalent units) per hectare per annum for the ports container freight terminals.

2.4. Oil Jetties: - to the west of the application site there are two oil jetties. The eastern oil jetty has two berths (OB3 & OB4) and the western oil jetty also has two berths (OB1 & OB2). The western jetty (OB1 & OB2) facilitate the majority of petroleum product imports at the Port. The eastern jetty (OB3 & OB4) facilitate the majority of bitumen products and all of the Liquid Petroleum Gas (LPG) imports at Dublin Port. It is noted that OB4 is rarely used (5 arrivals in 2017).

2.5. Ferry terminals: - There are currently three terminal buildings within the area of the application boundary. Terminal 2 (Stena Line), Terminal 5 (Seatruck) and Terminal 1 (Irish Ferries, with seasonal use by Isle of Man Steam Packet Company). It is proposed as part of proposed development to demolish the Terminal 2 and Terminal 5 buildings with the existing Terminal 1 Building to be used as a unified terminal building in future. It is proposed that the Seatruck operation at Terminal 5 will be relocated to the west of the Dublin Port Estate to a facility permitted by the ABR Project. It is then proposed that the P&O operation located at Terminal 3 in the western area of the Port will move to the east of the Port.

2.6. The following tables provides a summary of the existing use of the berths:

Operator	Existing Terminal	Ex. Berth Number
Irish Ferries	1	49 & 51A
Stena	2	51
Seatruck	5	52 & 53
DFT	Lo-Lo	50A & 50(N)&(S)
P&O (ABR)	3	21

2.7. It is noted that Dublin Port's navigation channel and fairway are currently maintained to a standard depth of -7.8m CD. The main navigation channel and fairway are currently being deepened to -10.0m CD which was permitted by way of the Alexandra Basin Redevelopment (ABR) Project (ABP Ref. 29N.PA0034).

2.8. An area of to the south of the Navigational Channel east of the Poolbeg jetty is proposed to be dredged and is included within the application boundary.

2.9. The development permitted under the ABR Project is outlined in Section 4 below but within subject application boundary comprises infilling of current Basin 52/53 (two Ro-Ro ramps operated by Seatruck) and the construction of a new riverside berth – Berth 52 – at entrance to Basin 52/53.

2.10. The site includes the Eastern Breakwater and the Pier Head which marked the eastern extremity of the Port during the end of the 19th century and which it is proposed to demolish as part of the subject proposal.

3.0 Proposed Development

3.1. Context

3.1.1. The proposed development referenced as the 'MP2 Project' is principally located on the northeast side of the port lands which currently accommodates Irish Ferries, Stena, Seatruck, Dublin Ferryports Terminal (DFT) and oil zone terminals and berths. It is stated that the principal focus of the MP2 Project is to complete the development of a single unified Ro-Ro ferry terminal to cater for a combination of traffics on multi-purpose ferries such as Irish Ferries (*Ulysses*, *W.B. Yeats*), Stena

Line (*Stena Adventurer* and *Superfast X*) and P&O Ferries (*Norbank*, *Norbay* and *European Endeavour*) providing services to ports in Britain, and increasingly to ports in France. A 15 year permission is sought. The rationale set out for same relates to: - gaps between phases to allow other consents to be secured, design development, procurement and compliance agreements. It is intended to complete the works within 122 months (c.10 years).

3.1.2. It should also be noted that the proposed development includes elements which amend/update or tie into other extant permissions within the port area. These are outlined in detail in Section 4 below but for ease of reference include – the ABR Project (ABP29N.PA0034), the Dublin Port Internal Roads Project (Ref.3084/16 amended by Ref.2684/17) and the Interim Unified Passenger Terminal including check in facilities and state services (Ref. 3638/18).

3.2. Documentation

3.2.1. In addition to the Planning/Engineering and Heritage Drawings at A1 & A3, the following documentation was submitted with the application:

- Report entitled Planning Particulars (includes Statutory Documents & Application Form and appendices to same).
- Planning Report
  - Appendix A – Project Rationale
  - Appendix B – Description of Port Operations
  - Appendix C – Community Gain
- Conservation Strategy and Industrial Heritage Appraisal
- Industrial Heritage and Compensation Planning and Design Report
- Control of Major Accident Hazards (COMAH) Land Use Planning Assessment
- Draft Construction Environmental Management Plan (CEMP)
- Environmental Impact Assessment Report (EIAR)
  - Volume 1 – Non-Technical Summary
  - Volume 2 – Main Document – Part 1
  - Volume 2 – Main Document – Part 2
  - Volume 3 – Appendices – Part 1

- Volume 3 – Appendices – Part 2a
- Volume 3 – Appendices – Part 2b
- Volume 3 – Appendices – Part 3
- Volume 3 – Appendices – Part 4

- Summary of Mitigation Measures
- Natura Impact Statement
  - Main Document
  - Appendices

3.3. Development Description

3.3.1. The proposed development as described in the public notices and documentation seeks to provide for the following at Dublin Port:

- New Ro-Ro jetty (Berth 53) for ferries up to 240m in length on an alignment north of the port's fairway and south and parallel to the boundary of the South Dublin Bay and River Tolka Estuary SPA (004024). This includes dredging at proposed Berth 53 and channel widening to a standard depth of -10.0m CD (proposed amendment to the channel dredging as permitted under the ABR Project (ABP Ref. 29N.PA0034).
- Reorientation of Berth 52 permitted under ABP Ref. PL29N PA0034;
- Lengthening of an existing river berth (50A) to provide the Container Freight Terminal with additional capacity to handle larger container ships with the works including the infilling of the basin east of Oil Berth 4 on the Eastern Oil Jetty.
- Redevelopment of Oil Berth 3 to provide a future deepwater container berth for a Lo-Lo Container Freight Terminal changing the use of the berth from petroleum importation to container handling. The dredging of a berthing pocket to a standard depth of -13.0m CD at Oil Berth 3 will require stabilisation of the existing quay wall at Jetty Road. It is not proposed to use this quay wall for the berthing of vessels.
- Consolidation of passenger terminal buildings, demolition of redundant structures and buildings, removal of connecting roads and reorganisation of access roads to increase the area of land for the transit storage of Ro-Ro freight units.

- Heritage zone to accommodate a public art installation of 20.4m in height including an elevated viewing platform and material from Eastern Breakwater Pier Head which it is proposed to demolish.
- ESB substation, toilet blocks.

3.3.2. The following section provides more detail in respect of the constituent elements of the proposed development as outlined above.

Berth 53

3.3.3. The proposed works to facilitate the development of proposed Berth 53 include the construction of a new Ro-Ro jetty structure of approximately 406m in overall length to accommodate a new river berth. It is stated that the proposed berth will be used predominantly for the berthing of Ro-Ro ferries and will accommodate ferries of up to 240m in length (bow-to and stern-to). This part of the proposal includes the following elements:

- New Ro-Ro jetty structure of 406m in length which is constructed by:
  - 8 reinforced concrete mooring dolphins on tubular steel piles to provide a new berthing face of c.284m in length;
  - New linkspan structure to allow two-tier access to the Ro-Ro ferries;
  - New ramp structure to access the upper linkspan tier;
  - New deck structure to allow access to the lower linkspan tier and dolphins;
  - Reinforced concrete access/maintenance route to the dolphins;
  - Reinforced concrete bankseat for the linkspan;
- Dredging of a berthing pocket to a standard depth of -10.0m CD with removal of 159,595m^3 of material;
- Installation of scour protection mattresses to provide slope stabilisation and scour protection to the dredged berthing pocket;
- Installation of a wash protection structure to the north line of the 406m jetty structure;
- Jetty furniture including visual screening barriers, fenders, mooring bollards, handrails and an automated mooring system;
- Power outlet for Ship to Shore Power which will be fed from the proposed substation adjacent to the proposed parking and set down area.

Berths 52 & 49

3.3.4. **Berth 52** was permitted as part of the ABR Project (ABP Ref. PL29N.PA0034) but the proposed development of Berth 53 requires that the permitted Berth 52 is repositioned. It is proposed that Berth 52 will accommodate the berthing of a wide range of ferries up to 240m in length. It is proposed that Berth 52 will be used predominately for the berthing of Ro-Ro ferries. The proposed amendments to Berth 52 comprise the following:

- Rotation of Berth 52 and all associated elements including Ro-Ro jetty (288m) by approximately 9 degrees (clockwise),
- Rotation of proposed linkspan structure to allow two-tier access to the Ro-Ro ferries, ramp structure to access the upper linkspan tier and reinforced concrete bankseat for the linkspan
- Power outlet for Ship to Shore Power which will be fed from the proposed substation adjacent to the proposed parking and set down area, and;
- New piled quay wall structure approximately 52m in length to accommodate the linkspan structure associated with Berth 52 and to provide additional operational quayside space at Berth 49.
- C.143,357m^3 of imported material required for Berth 52 of which 121,374m^3 was consented via the ABR Project providing a net increase of 21,982m^3 of imported fill material.

3.3.5. **Berth 49** was permitted as part of the ABR Project and requires the following minor amendments to facilitate the repositioning of Berth 52:

- Enclosing the eastern dolphins associated with Berth 49 within a new poled quay wall structure (40m in length) at eastern end of Berth 49.
- No alteration to permitted length or functionality of Berth 49 which can accommodate vessels of up to 240m in length.

Berth 50A

3.3.6. It is proposed to extend existing Berth 50A to provide a multi-purpose predominately Lo-Lo Container Vessel berth. This involves:-

- Demolition of the Eastern Breakwater Pier Head (which forms part of the Eastern Breakwater Dublin City Industrial Heritage Record 19-09-002) with an overall area of 2,950sq.m, the southern end of the Eastern Oil Jetty (275sq.m), the Port Operations Building and ancillary structures (600sq.m), and the existing pilot boat pontoon and gangway;
- Construction of a new quay wall approximately 125m in length to act as the berthing face extending Berth 50A westwards to provide an overall quay length of approximately 305m;
- Dredging of a berthing pocket to a standard depth of -11.0m CD with removal of 69,640m^3 of material.
- Installation of quay and deck furniture including crane rails, fenders, mooring bollards and emergency ladders.
- To commemorate the location of the Eastern Breakwater Pier Head, which it is proposed to demolish, it is proposed to inscribe the location with commemorative text to provide a permanent in situ record of its former presence.

Eastern Oil Jetty - Oil Berth 03 and Oil Berth 04

3.3.7. Eastern Oil Jetty comprises Oil Berth 3 and Oil Berth 4 with access from Jetty Road. The removal of Oil Berth 4 and consolidating operations to Oil Berth 3 is proposed to be designed as a multi-purpose structure for oil tanker berthing initially, with future potential use as a Lo-Lo container vessel berth. It is proposed that the infilled area will provide additional container terminal storage area. Consolidation of operations at the Eastern Oil Jetty will facilitate multi-purpose berthing at Oil Berth 3.

3.3.8. The proposal provides for the following:

- Demolition of the southern end of the Eastern Oil Jetty (275sq.m) as per description of Berth 50A above and the existing pilot boat pontoon and gangway;
- Construction of a new steel sheet pile combi-wall a minimum of 5m distance from the face of the existing with the new quay wall having an approximate length 239m in front of Oil Berth 3;
- Infilling of the basin of Oil Berth 4 with engineered fill material and other suitable waste with void between existing Oil Berth 3 and proposed new sheet pile wall also to be filled with the quantity of fill anticipated at approximately 145,000m^3

- Installation of a sheet pile anchor wall and ties to support the combi-wall and new tubular steel piles to support the potential future extension of the crane rails.
- Construction of a new piled reinforced concrete deck (20,000 sq.m) including works to the Eastern Breakwater.
- Construction of a c.2m high wall as a separation boundary between the Container Freight Terminal and Oil Berth 3;
- Dredging of a berthing pocket to a standard depth of -13.0m CD with removal of 93,414m^3 of material and stabilisation of the existing quay wall at Jetty Road through the construction of a new quay wall in front of the existing Jetty Road quay approximately 120m long and the re-decking of Jetty Road;
- High mast lighting (30m) and installation of quay and deck furniture to include fenders, mooring bollards and emergency ladders.

Channel Widening/Dredging Works

3.3.9. Permission was granted as part of the ABR Project (Ref. 29N.PA0034) to deepen the navigation channel from -7.8m CD to -10.0m CD, including a portion adjacent to the current application boundary. This dredging scheme commenced in October 2017 with dredging activity taking place within the navigation channel and fairway within Dublin Bay. It is stated that the capital dredging of the section of navigation channel adjacent to the proposed development is scheduled for the winter season October 2020-March 2021. It is stated in the documentation that all capital dredging works will take place within the period October to March and it is intended that the capital dredging permitted as part of the ABR project will have finished prior to the commencement of the proposed dredging in the subject proposal.

3.3.10. In addition to the dredging proposed in the other constituent elements of the project as outlined above it is proposed to undertake:-

- Dredging works to facilitate channel widening works to the south of the existing navigation channel east of Poolbeg Oil Jetty to a standard depth of 10.0mCD to facilitate manoeuvring of design vessels from Berths 49, 52 & 53. The volume of material proposed to be removed is 111,995m^3

3.3.11. It is stated that this part of the proposal is required in order to facilitate the safe navigation and turning of vessels of up to 240m in length and the expected frequency of sailings.

3.3.12. The estimated overall volume of capital dredging required from the channel and berthing basins is 424,644cu.m. The loading and dumping of the dredged material is subject to separate licenses from the Environmental Protection Agency as set out in Section 3.4 below.

Unified Ferry Terminal (UFT)

- A Unified Ferry Terminal is proposed at the eastern end of the port, to facilitate Irish Ferries, Stena Line, P&O and other seasonal operators.
- It is proposed that the existing Seatruck operation within this area will be relocated to the western end of the port with P&O moving from the western area.
- The eastern end of the port currently includes facilities for traffic and passengers both within the International Ship and Port Facility Security (ISPS) (this line is outlined in yellow on the site layout plan) restricted area and areas outside the restricted area where there is public access.
- It is proposed to relocate all public access to the perimeter of the site leaving the internal area free for unified port operations in order to improve efficiency and optimise the Ro-Ro yard area.
- It is proposed that upon completion the area will comprise approximately 34.4 hectares of hardstanding space with flexibility proposed in terms of its use as the Port evolves to include staging and marshalling areas for accompanied HGV's, accompanied cars and unaccompanied trailers (the State Services Yard was constructed under the Dublin Port Interim Unified Passenger Terminal – Ref. 3638/18 and comprises an additional 1.4 hectares of space).
- Circulation routes are proposed to route vehicles from the check in area to each of the staging areas and then onto the berths. It should be noted that the ABR Project granted by the Board permitted the infilling of Basin 52/53 which facilitates the development of the proposed terminal as outlined with proposals within the current application to regrade this area.

- It should also be noted that it is proposed to retain the existing Terminal 1 Building (currently Irish Ferries) as the Unified Ferry Terminal Building for all operators.
- It is also noted that the proposed land element will not impede on the existing railway lines within the Port.

3.3.13. To facilitate the proposed Unified Ferry Terminal, permission is sought for:-

- Demolition of Terminal 2 building (1,058sq.m), Terminal 2 check-in (603sq.m) part of which was permitted under the Interim Unified Ferry Terminal DCC Ref. 3638/18 (these facilities will be developed as permitted and continue to be used for a temporary period until the yard is developed), Terminal 5 building (796sq.m), Terminal 5 check-in (97sq.m), three Terminal 5 sheds (325sq.m, 162sq.m and 316sq.m) and two ESB substations (47sq.m and 100sq.m);
- Demolition of Terminal 1 car check-in booths (72sq.m);
- Regrading of infill area permitted under ABP Ref PL29N.PA0034 and provision of a new surface to the unified ferry terminal yard;
- Construction of road access to the unified ferry terminal yard and car park/drop off area including amendments to the tie-in with the permitted Dublin Port Internal Road Network DCC Ref. 3084/16 (amended by Ref. 2684/17);
- Two check-in areas with associated check-in booths at Alexandra Road and adjacent to Alexandra Road Extension;
- Overhead gantry signage and passenger walkway plant for vessels berthed at Berths 51 and 52;
- Drop-off facilities and proposed pedestrian underpass from parking area to Terminal 1 building.
- 4m high International Ship and Port Facility Security (ISPS) fence, bus shelter, car, bicycle and bus parking;
- High mast lighting (30m), repositioning of high mast lighting (30m) permitted under ABR project, ESB substation (160sq.m) and 3 toilet blocks (each 80sq.m);

<u>Proposed Access and Egress within Unified Ferry Terminal</u>

3.3.14. In relation to the proposed access and egress arrangements to the UFT, HGV check-in is proposed by a 6-lane (3 booths) HGV check-in facility at Alexandra Road. A dual use 8-lane (4 booths) check in facility to the northeast corner of the site is proposed for car/tourism vehicle check-in and HGV's with gantry signage proposed to separate cars and HGV's queuing.

3.3.15. As part of the Dublin Port Internal Roads Project (Ref. 3084/16 as amended), there are 7 southbound lanes proposed to link the Promenade Road Extension to the entrance to the UFT at Alexandra Road and 4 north bound lanes to link arrivals from UFT to the Tolka Quay Road. In order to provide the 7 departure lanes and public access to Terminal 1 the full width of the area from the State Services Area to the Greenway is required which requires that the 4 northbound arrival lanes permitted under Ref. 3084/16 are omitted

3.3.16. The existing Terminal 1 building will facilitate foot passengers for all berths. A set-down area for cars and buses with parking facilities is proposed outside of the ISPS line in the south-east corner of the Unified Ferry Terminal with access from here to the building on foot via a pedestrian underpass. It is proposed that foot passengers will use the existing check-in facilities to pass into the ISPS restricted area within the building. Access to ships on Berth 49 is available directly from the building with access to vessels on other berths facilitated by bus to locations either within the vessels or at passenger walkway structures.

3.3.17. A new State Services facility was permitted as part of the Interim Unified Ferry Terminal (IUFT) Project (Ref. 3638/18) with all arrivals/vehicles disembarking from vessels required to depart the port via this area with checkpoint and inspection facilities provided for State officials. (Figure 3-19 in the EIAR outlines arrival routes from each of the proposed berths). Unaccompanied units will be unloaded by port tractors to a designated unaccompanied trailer holding area.

3.3.18. It is proposed that arriving foot passengers will be transported back to the terminal by bus (and walkway from Berth 49). They will exit the ISPS Restricted Area through the check point for State Services using the facilities already in place in Terminal 1, proceeding through the public side of the pedestrian underpass to access the pick-up and public transport facilities available at the set down and parking area. Vehicles departing this area will then pass along the public perimeter road on the north and

east boundary of the UFT and cross the HGVs queuing pre-check-in using the proposed signalised junction before joining the main port exit route on Tolka Quay Road.

3.3.19. A pedestrian underpass is proposed to facilitate pedestrian links to the existing Terminal Building. It is proposed that the structure will have two independent corridors to separate passengers within the ISPS restricted area, accessing the Terminal Building from the Accompanied Staging Area, from members of the public, accessing the Terminal Building from the set down and parking area.

Heritage Zone

3.3.20. An Interpretive Heritage zone is proposed to accommodate an architectural installation marking the evolution of the ports development and the easternmost point of the port at the end of the permitted Port Greenway creating a public realm visitor experience that includes the re-use of the granite blocks and related elements of the Eastern Breakwaters Pier Head and stored elements from the former Lighthouse celebrating the cultural and natural heritage of the Port. The public art installation of 20.4m in height, referred to as the 'Marker' would comprise a tower housing the lantern recovered from the former Lighthouse. Beneath the 'Marker' it is proposed to provide an informal performance space in the shape of the breakwater roundel creating a small amphitheatre defined by retained granite from the Pier Head. A lower viewing interpretive deck will be accessible from the Port Greenway permitted under Ref. 3084/16 which was amended by Ref. 2684/17 with provision also proposed for gate control access at certain intervals to the end of the pedestrian and cycleway.

Ancillary Works

3.3.21. It is proposed to provide the following ancillary works:

- Site clearance, boundary treatments, landscaping, construction compounds, public street lighting, utilities and all ancillary site works.
- As noted elsewhere in this report, Planning Order S.I. No. 57 of 2019 provides for development on two sites within the Port by the OPW. It is stated by the applicant that while the proposed development does not propose development at the former Crosbie's Yard, temporary works are proposed at the former Storecon site

which it is proposed will be used as a temporary construction compound when the site is not occupied by the OPW.

3.4. Related matters

The following licences will be required from other authorities:

- Dumping at Sea Permit from the EPA.
- Foreshore Licence from the Department of Housing, Planning and Local Government (DHPLG).

3.5. Phasing

3.5.1. A phasing plan is set out in Chapter 3 of the EIAR (Figure 3-24 preliminary phasing programme) and proposes 'Land Phases' of which there are 4 (L1-L4) and 'Marine Phases' of which there are 7 (M1-M7) and may be subject to adjustment as a result of external influences such as avoidance activity within certain periods close to sensitive habitats. The phasing proposed with estimated time and commencement is as follows:

Land Based

Phase L1 – Northern Access Road – c.6 months/Q1, 2022

Phase L2 – Eastern Access Road - c.6 months/Q1, 2027

Phase L3 – Unified Ferry Terminal Yard - c.12 months/Q3, 2027

Phase L4 – Heritage Installation - c.9 months/Q3, 2031

Marine Based

Phase M1 – Berth 52 - c.33 months/Q1, 2022

Phase M2 – Berth 53 - c.24 months/Q1, 2025

Phase M3 – Channel Widening Works - c.1 month/Q1, 2027

Phase M4 – Jetty Road - c.12 months/Q1, 2029

Phase M5 – Oil Berth 3 - c.12 months/Q1, 2030 with dredging c.1 month in Q1,2031

Phase M6 – Berth 50A - c.15 months/Q1, 2031

Phase M7 – Dredging of Berth 50A - c.1 months/Q1, 2032

3.5.2. It is stated that as Dublin Port is an operational port the sequencing of the phases will, in the majority, be undertaken sequentially rather than in tandem. The objective of the construction programme is to enable the Port to continue to operate at optimum levels with an estimation of 122 months to facilitate the construction.

3.6. Planning Report

3.6.1. The Planning Report addresses the following subject matters:

- Project Evolution and Relevant Planning History
- Nature and Scope of Proposed Development
- Principle of Proposed Development
- Consideration of Alternatives
- Duration of Permission
- Movement and Access
- Brexit
- Community gain

The main considerations proposed by the applicant in the report to support the proposal can be summarised as follows:-

- Proposal is a vital component in sustaining a key economic driver of Ireland's economy by removing capacity constraints within the Port to throughput of trade.
- Dublin Port is a Core Port and a designated Node on the North Sea – Mediterranean Core Network Corridor in the TEN-T Network with Dublin Port largest and most important Port in the country with Ro-Ro share of national volumes, 88.7% and 72.6% for Lo-Lo.
- Dublin Port's envisaged capacity up to 30 years to 2040 is 77.2m gross tonnes per annum with proposal representing second phase of Ports development reflecting increased growth trends since ABR project permitted with MP2 project providing 30.2% of increased capacity required.
- Proposal enables Dublin Port to keep pace with developments in shipping internationally where larger ships are becoming the industry norm with requirement for deeper berths, reconfigured quays to cater for longer vessels and reconfiguration of landside storage areas to cater for increases in volume.

- Documentation has addressed all the planning and environmental issues that arise with a development of this nature in this location.
- Applicant has engaged and responded to interested parties to successfully address challenging issues in relation to the conservation within the port itself and the context within which it is located.
- Proposal complies with all statutory plans, guidelines, policies and objectives at EU, national, regional and local levels and with its own Masterplan and positively addresses responsibilities placed on applicant by EU and National Ports Policy.
- Proposal is in accordance with the objectives of the National Port Policy 2013 and National Planning Framework 2040 to facilitate the development of the port.
- Extensive programme of public consultation undertaken with statutory consultees and stakeholders.
- Proposal complies with objectives set out in the Regional Spatial and Economic Strategy translating national policy to the region with respect to the port and the policies and objectives of the Dublin City Development Plan 2016-2022.

3.6.2. The Planning Report includes the following Appendices:

- Appendix A - MP2 Project - Project Rationale
- Appendix B - Description of operations in Dublin Port
- Appendix C - Community gain proposal

3.7. Other Reports

3.7.1. The following reports have also been submitted with the application documentation:-

Conservation Strategy and Industrial Heritage Appraisal

The purpose and objectives of this report, as proposed by the applicant, can be summarised as follows:

- Proposal around the area of the Eastern Breakwater is a response by the applicant to the operational role played by the deep water facility and the requirement for sustainable development of the facility to ensure future use which involves significant interventions to elements of the Victorian construction without

which there is a danger that the cultural significance of the port both past and future, would be lost.

- Best practice approach adopted to conservation on the site to preserve the cultural significance of Dublin Port as a Deep Water Port with a detailed historical analysis with an Industrial Assessment informing the process of developing a conservation strategy to best practice standards for the development.
- Applicants commitment to public interaction through a policy of “soft” values, interpretive public realm elements designed at the Eastern boundary of the port involving re-building an element of the pier head terminus and incorporating the salvaged lantern and bell from the now demolished Victorian lighthouse to reinstate the totemic elements of the port.
- Consider development proposals and mitigation measures proposed under the Conservation Strategy accord with best conversation practice.

Industrial Heritage and Compensation Planning and Design Report

The purpose and objectives of this report, as proposed by the applicant, can be summarised as follows:

- Articulate a contemporary design response to the objectives, principles, and recommendations of the Conservation Strategy and Industrial Heritage Appraisal addressing potential impacts of the proposed
- MP2 Project in Dublin Port, specifically in respect of the proposed demolition of the Terminus of the Eastern Breakwater (Tolka Quay, 1858-1884), referred to as the Pier Head.
- Informed by applicants commitment to its Soft Values Project Strategic
- Framework, which commits to supporting initiatives framed to reconnect and/or forge new relationships with the City and beyond.
- Proposals build on related proposals embodied in the Alexandra Basin
- Redevelopment (ABR) Project, and projects such as the Diving Bell on Sir John Rogerson’s Quay, and publicly oriented reconfiguration of the Dublin Port offices.

- Previously consented Internal Road and Greenway Project (DCC Ref 3084/16), flanking the Eastern fringe of the Port will facilitate public access to the easternmost point of the port.
- Report outlines proposals for a Heritage Zone in the general area, with objective of creating a memorable destination, accessible to the public.

Control of Major Accident Hazards (COMAH) Land Use Planning Assessment

- The assessment seeks to examine the development in the context of the Health and Safety Authority's COMAH land use planning guidance, to identify the types of development that may be compatible with the COMAH risk zones around the Calor (and other COMAH) establishment, and to conduct a high-level review of the Calor installation to ascertain whether the risk zones could be reduced.
- Chapter 6 of the EIAR also addresses Risks of Major Accidents and Disasters.

Draft Construction Environmental Management Plan (CEMP)

The draft CEMP comprises two parts.

- The first section sets out all the mitigation measures contained within the EIAR and NIS and proposes that within this requirements of conditions attached to statutory consents (Planning, Foreshore Licence/Dumping at Sea Permit) would be included.
- The second part of the Plan, proposes to provide a suite of Construction Phase Management Plans which will be finalised upon the grant of development consents. The content of these Management Plans is presented in draft form in the application documentation and will be finalised through discussion and agreement of Dublin City Council.
- I would also note that the Draft Plan is also included as Appendix 5 of the NIS.

3.8. The Environmental Impact Assessment Report

3.8.1. The EIAR includes a Non-Technical Summary which is referenced as Volume 1 of the document.

3.8.2. The main document of the EIAR contains the following Chapters within Volume 2 Part 1 and Part 2:

- Introduction (Chapter 1)
- Need for the MP2 Project (Chapter 2)
- Project Description (Chapter 3)
- Assessment of Alternatives (Chapter 4)
- Project Scoping & Consultation (Chapter 5)
- Risks of Major Accidents and Disasters (Chapter 6)
- Biodiversity, Flora and Fauna (Chapter 7)
- Soils, Geology & Hydrogeology (Chapter 8)
- Water Quality & Flood Risk Assessment (Chapter 9)
- Air Quality & Climate (Chapter 10)
- Noise & Vibration (Chapter 11)
- Material Assets – Coastal Processes (Chapter 12)
- Material Assets – Traffic & Transportation (Chapter 13)
- Cultural Heritage (incl Industrial & Archaeological) (Chapter 14)
- Landscape & Visual (Chapter 15)
- Population & Human Health (Chapter 16)
- Waste (Chapter 17)
- Cumulative Effects and Environmental Interactions (Chapter 18)
- Summary of Mitigation Measures (Chapter 19)

3.8.3. **Appendices**

Volume 3 of the EIAR includes a large number of appendices presented in 5 parts and including the following:

Volume 3 – Part 1

- Appendix 4-1 – Summary of navigation simulation studies
- Appendix 5-1 – Pre-consultation Meeting Minutes (ABP)
- Appendix 5-2 – Pre-consultation Meeting Minutes (DCC)

- Appendix 5-3 – Pre-consultation Meeting Minutes (Statutory Consultees)
- Appendix 5-4 – Statutory & Non-Statutory Responses
- Appendix 5-5 – Community Newsletter on the MP2 Project
- Appendix 6-1 – Location of COMAH Establishments
- Appendix 6-2 – Population Data used for Assessment
- Appendix 6-3 – COMAH Risk Contour Map
- Appendix 6-4 – Dublin Port Incident Diversion Routes
- Appendix 6-5 – Dublin Port Emergency Management Plan
- Appendix 7-1 – Terrestrial Biodiversity Data Tables
- Appendix 7-2 – Bat Assessment Report (2019)
- Appendix 9-1 - Dublin Port Extreme Water Levels
- Appendix 12-1 - Coastal Processes – Additional Modelling Information
- Appendix 12-2 - Hydrographic Surveys Particle Size Analysis
- Appendix 14-1 - Hydromaster Archaeo-geophysical Report
- Appendix 16-1 - Population and Human Health Baseline Information
- Appendix 17-1 - DPC Ships Waste Management Plan
- Appendix 17-2 - DPC Sustainability Report (2017)

Volume 3 – Part 2A

- Appendix 8-1 – Preliminary Risk Assessment
- Appendix 8-2 – Generic Quantitative Risk Assessment

Volume 3 – Part 2B

- Appendix 8-3 – Sediment Chemistry Results and Comparison Tables

Volume 3 – Part 3

This volume includes a large number of management plans which are presented in draft format.

- Appendix 19-1 - Draft Traffic Management Plan

- Appendix 19-2 - Draft Invasive Species Management Plan
- Appendix 19-3 - Draft Construction Waste Management Plan
- Appendix 19-4 - Draft Noise Management Plan
- Appendix 19-5 - Draft Dust & Odour Management Plan
- Appendix 19-6 - Draft Marine Mammal Management Plan
- Appendix 19-7 - Draft Birds and Marine Ecology Management Plan
- Appendix 19-8 - Draft Archaeology & Cultural Heritage Management Plan
- Appendix 19-9 - Draft Water Quality Management Plan
- Appendix 19-10 - Draft Dredging Management Plan
- Appendix 19-11 - Draft Pollution Incident Response Plan
- Appendix 19-12 - Outline Mobility Management Plan

Volume 3 – Part 4

- Appendix 13-1 - 3rd May 2018 Vessel Movements Manifest
- Appendix 13-2 - Existing Traffic Flows
- Appendix 13-3 - Proposed Traffic Flows
- Appendix 13-4 - Percentage Impact Diagrams
- Appendix 13-5 - LinSig-UFT Access Results
- Appendix 13-6 - LinSig UFT Tabulated Results
- Appendix 13-7 - LinSig Internal Roads Tabulated Results
- Appendix 13-8 - LinSig Modelling Files and Geo Parameters (CD attached)
- Appendix 15 - Zone of Theoretical Visibility Map
- Appendix 15 - Viewpoint Location Map
- Appendix 15 - Landscape Character Area Map
- Appendix 15 - Photomontages
- Appendix 15 - Cumulative Photomontages

- Appendix 18-1 - Stage 1 & 2 – Identification and shortlisting of existing and/or approved projects

3.9. The NIS

3.9.1. This report addresses the likely significant effects on European sites and includes a number of appendices as follows:

- Appendix 1 – Conservation Objectives
- Appendix 2 – Air Quality Assessment
- Appendix 3 – Underwater Noise Assessment
- Appendix 4 - Coastal Processes Assessment
- Appendix 5 – Draft Construction Environmental Management Plan (CEMP)

4.0 Planning History

4.1. Alexandra Basin Redevelopment (ABR) Project

4.1.1. One of the most recent significant permissions granted in respect of the Port and which is of relevance to the current proposal is ABP-29N.PA0034 (SID) which was granted permission in July 2015 by the Board and is referred to as the **ABR Project.** This project is currently being implemented – the proposal comprises three main elements as follows:

Berth 52 and 53

• Demolition of existing Berths 52 and 53;

• Construction of a jetty at Berth 52 (500sq.m);

• Concrete Dolphin at Berth 53 (500sq.m);

• Construction of:

– New river berth at Berths 52/53 (300m);
– New 75m mooring jetty at new river berth;
– New 40m long mooring jetty to extend existing Berth 49 (50m long);

• Infilling of the Terminal 5 Ro-Ro basin (45,650sq.m);

• Raising of existing levels by 1.4m over an area of 95,000sq.m; and

• Dredging of new river berth to -10.0m CD.

Liffey Channel

• Construction of a marina protection structure to a height of +7.0m CD and a length of 220m on the south side of the river channel.

• Dredging of the shipping channel to a depth of -10m CD from a point 55m to the east of the East link bridge, to a location in the vicinity of Dublin Bay comprising a total distance of 10,320m.

Alexandra Basin

• Excavation and restoration of historic Graving Dock No. 1;

• Infilling of Graving Dock No. 2 (6,055sq.m);

• Demolition of the bulk jetty (3,200sq.m);

• North Wall Quay extension (21,700sq.m);

• Extension of Alexandra Quay West (130m);

• Construction of a new Ro-Ro jetty (273m) and 3 Ro-Ro ramps; and

• Dredging of 470,000m.cu of contaminated material, to a depth of -10.0m CD over an area of 194,000m.cu within the redeveloped Alexandra Basin, and its remediation.

Ref. S0024-01 - EPA Dumping at Sea Permit –granted September 2016.

4.2. Other Projects

4.2.1. The following table provides a short summary of the other significant recent planning history on the site:

Reference	Nature of Proposal	Decision and Date
29N.PA0007 (SID)	Gateway Project - extension of 21 hectares of landfill to the east of the port to provide for both additional open container storage, handling areas, new quayside facilities and berth	Permission refused by the Board in 2010 for ecological reasons.
3638/18	Interim unified passenger terminal – consolidated vehicle check-in facilities and State Services facility for control and inspections of passengers and freight	Grant – Jan. 2019 (being implemented)
3084/16 amended by 2684/17	Road works - works to the port's private internal road network and includes works on public roads at East Wall Road, Bond Road and Alfie Byrne Road and includes the proposed 4km greenway.	Permission granted September 2016 & amendment permitted July 2017 (Being implemented)

4.2.2. The following table outlines other decisions made in respect of the Port area.

Reference	Nature of Proposal	Decision and Date
3176/19	Ramp and approach way to Berth 49	Grant - July 2019
4250/18	ESB substation demolition and construction of new substation	Grant – June 2019 (not commenced)
3488/18	Demolition of redundant storage tank and provision of yard	Grant – Nov 2018 (not commenced)
3269/18	Yard upgrade former Calor site	Grant – Nov 2018 (not commenced)
3540/18	Demolition of Calor Offices and Provision of Yard	Grant – Oct 2018 (Implemented)
3314/18	Upgrade of access to Dublin Port Operations Centre and Dublin Ferryport Terminals (DFT)	Grant – Sept 2018

		(being implemented)
3143/18	Vehicle service/maintenance facility and office accommodation, car parking	Grant – Aug 2018 (not commenced)
4216/17	Floating dock sections (pontoons) with an area of c.321sq.m	Grant – Feb. 2018 (Implemented)
2429/17	Demolition of buildings and Provision of Yard	Grant – Sept. 2017 (being implemented)
2199/17	Tedcastle Operations building and Substation	Grant – Aug. 2017
2034/16	Retention of fencing, walls and boundary treatments at Branch Road North	Grant – April 2016
3022/15	Yard and other works at Promenade Road	Grant – Sept. 2015
2596/15	Relocation of existing vehicular and pedestrian accesses on Breakwater Road South	Grant – July 2015
2310/15	Provision of fencing, walls and boundary treatment	Grant – July 2015
3221/14	Modifications to permission granted under 3171/12	Grant – Nov. 2014

4.3. **Other Consents/Licences**

4.3.1. The following are considered of relevance/note to the proposal or are referenced in the documentation.

4.3.2. **Dumping at Sea Licences (Environmental Protection Agency)**

Ref. S0004-02 – Application made by Dublin Port Company on 11 April 2019 for maintenance dredging which is required in order to restore the depths with the

navigation channels and berths of Dublin Port back to their advertised Chart Datum depths. Decision awaited.

Ref. S0024-01 – Licence granted on 13 September 2016 for the loading and dumping of a maximum of 8,760,000 tonnes of dredged material from Dublin Port. It is stated that all loading & dumping activities shall be completed by 31st March 2021.

Ref. S0004-01 – Licence granted on 28 July 2011 for the loading and dumping at sea of dredged material by trailing suction hopping dredger (4,000,000 tonnes) with requirement that the loading and dumping was completed within 6 years of the commencement of activities.

4.3.3. **Industrial Emission Licence (IEL)**

Licence Number P1022-01 – Dublin Port Company obtained an Industrial Emission Licence in respect of the existing Sea Truck terminal site. The existing Seatruck terminal area is also identified as an Integrated Pollution Prevention and Control Facility.

4.3.4. **Licenced Hazardous Waste**

Licence – Ref. W0036-02 – Indaver Ireland Limited has a licenced hazardous waste facility to the north of Tolka Quay Road.

5.0 Policy Context

EU Directives and Policy

5.1. Habitats Directive

5.1.1. The Habitats Directive deals with the Conservation of Natural Habitats and of Wild Fauna and Flora throughout the European Union. Article 6(3) of this Directive requires that any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. The competent authority must be satisfied that the proposal will not adversely affect the integrity of the European site.

5.2. European Communities (Birds and Natural Habitats) Regulations, 2011

5.2.1. These Regulations consolidate the European Communities (Natural Habitats) Regulations 1997 to 2005 and the European Communities (Birds and Natural Habitats)(Control of Recreational Activities) Regulations 2010, as well as addressing transposition failures identified in judgments of the Court of Justice of the European Union (CJEU).

5.3. EC Guidance on the implementation of the Birds and Habitats Directives in estuaries and coastal zones, with particular attention to port development and dredging, 2011

5.3.1. This document provides sector specific guidance on the implementation of the Birds and Habitats Directives in estuaries and coastal zones. Ports are often situated in or near estuaries which are dynamic and highly productive ecosystems and in many cases designated Natura 2000 sites; estuaries provide the necessary shelter and suitable conditions for maritime access to ports; and ports fulfil a strategic role in the development and realisation of global trade and they periodically need to expand. This document provides a number of recommendations and elements of good practice to enhance port development and management in or near Natura 2000 sites. In particular section 3.2 deals with spatial planning and the integrated management of ports, estuaries and the coastal zone.

5.4. Trans-European Transport Network (TEN-T) Regulations, 2013

5.4.1. The TEN-T network is based on a comprehensive network and a core network and these networks comprise the highest level of infrastructure planning within the EU. The preamble states that appropriate measures should be taken for the development of the Core network by 2030. It is proposed that action will concentrate on those components of the TEN-T network with the highest European added value, in particular cross-border sections, missing links, multimodal connecting points and major bottlenecks, serving the objective of reducing greenhouse gas emissions from transport. Maritime ports of the Core network must be connected with the railway and road transport network by December 2030. There is one Core Network Corridor crossing Ireland which comprises the North Sea – Mediterranean Corridor that

stretches from Belfast, Cork and Dublin, through the UK, Belgium, Luxembourg and France. Regulation (EU) No. 1315/2013 refer and establishes guidelines for the development of a trans-European transport network comprising a dual-layer structure consisting of the comprehensive network and of the core network, the latter being established on the basis of the comprehensive network. This repeals Decision No. 661/2010/EU Regulation which establishes guidelines for the development of a trans-European transport network comprising a dual-layer structure consisting of the comprehensive network and of the core network, the latter being established on the basis of the comprehensive network.

5.4.2. (EU) No. 1316/2013 establishes the Connecting Europe Facility ("CEF"), which determines the conditions, methods and procedures for providing Union financial assistance to trans-European networks in order to support projects of common interest in the sectors of transport, telecommunications and energy infrastructures and to exploit potential synergies between those sectors. The application documentation notes that once the UK withdrawal process from the EU is completed, parts of the alignment of the North Sea – Mediterranean Core Network Corridor related to the United Kingdom will become obsolete. To address this, Regulation (EU) No. 2019/495 amends Regulation (EU) No 1316/2013 providing for a realignment of the corridor once the United Kingdom leaves the EU. This regulation also makes provision for infrastructure for purposes of security and checks on external borders. As noted elsewhere in this report, the Minster for Public Expenditure and Reform has made an Order to enable infrastructure provisions to be put in place.

5.5. European Union Ports 2030 Gateways for the Trans European Transport Network, 2014

5.5.1. This document states that the EU is highly dependent on seaports for trade with the rest of the world and within its Internal Market. Ports are the nodes from where the multimodal logistic flows of the trans-European network can be organised, using short sea shipping, rail and inland waterways links to minimise road congestion and energy consumption. The 2011 White Paper on Transport and the Single Market Act II emphasised the need for well-connected port infrastructure, efficient and reliable port services and transparent port funding. The availability of adequate port

infrastructure, good performance of port services and a level playing field are vital if the EU is to remain competitive in the global markets, improve its growth potential and create a more sustainable and inclusive transport system.

5.6. Marine Spatial Planning Directive

5.6.1. The adoption of Directive 2014/89/EU in 2014 established an EU-wide framework for maritime spatial planning. The following summary provides the requirements of the Directive:

- Balanced and sustainable territorial development of marine waters and coastal zones;
- Optimised development of maritime activities and business climate;
- Better adaptation to risks; and
- Resource-efficient and integrated coastal and maritime development.

5.6.2. Ireland transposed the Directive through the European Union (Framework for Maritime Spatial Planning) Regulations 2016 and is required to have a National Marine Spatial Plan in place by 31 March 2021.

5.7. National Planning Context

5.8. Planning Order S.I. No. 57 of 2019

The Planning and Development Act 2000, Section 181(2)(a) Order No. 1, 2019 [S.I. No. 57 of 2019] was made by the Minister for Public Expenditure and Reform, in February 2019, in advance of the impending withdrawal of the United Kingdom from the European Union. Pursuant to that Order, the provisions of the Planning and Development Act 2000, and the provisions of Part 9 of the Planning and Development Regulations, 2001 shall not apply to the development being carried out on behalf of the Minister by the Office of Public Works.

5.8.1. The locations and descriptions of the development are set out in the schedule included within the order. The order relates to development on the following sites:

- Former Crosbie's Yard at Crosbies Yard, Tolka Quay Road, Dublin Port, Dublin 1, DO1 K7T3;

- Former Storecon site at Tolka Quay Road (site bounded by 1 Branch Road South to the east and by Promenade Road to the north), Dublin Port, Dublin 1.

5.8.2. It is noted that both of these sites are located within the application boundary for the proposed development.

5.8.3. **S.I No. 285/2019 -** Planning and Development Act 2000, Section 181(2)(a) Order No. 4, 2019 - refurbishment of existing industrial buildings with demolitions to facilitate the construction of ancillary custom, agriculture and health inspection structures to provide for the required infrastructure for customs, sanitary and phytosanitary and health checks and controls at Terminal 10, Tolka Quay Road, Dublin Port

5.9. National Ports Policy, Department of Transport, Tourism and Sport, 2013

5.9.1. This document sets out Government policy in relation to the ports in the State. It states that the core objective of national policy is to facilitate a competitive and effective market for maritime transport services. It is stated that given we are an island nation, that it is critically important that our international maritime gateways are fit for purpose. It outlines that the long term international trend imports and shipping is toward increased consolidation of resources in order to achieve optimum efficiencies of scale with this trend having knock-on effects in terms of vessel size, water depth in ports and the type and scope of port hinterland transport connections. This in turn has led to the gradual consolidation of Irish commercial ports. It is outlined that the ports differ greatly in current capability and future potential.

5.9.2. In respect of Dublin Port, it is categorised as one of the three Tier 1 Ports of National Significance which is responsible for 15-20% of overall tonnage, with clear potential to lead the future development of port capacity in the medium and long term. The other two Tier 1 ports of national significance are Port of Cork and Shannon Foynes. Reference is made to the Trans European Network Transport (TEN-T) but it is noted that the Ports Policy predates the Regulations which I outline in Section 5.4 above. Section 2.5 of the Ports Policy document defines Ports of National Significance (Tier 1) and have been defined as those responsible for at least 15-20% of overall tonnage through Irish ports and those that have clear potential to lead the development of future port capacity in the medium and long term. It is specifically

stated that the continued commercial development of these three ports of National Significance (Tier 1) is a key objective of National Ports Policy.

5.9.3. The policy document states at section 2.5.1 in relation to Dublin Port Company, that is the State's largest port company and handles approximately 43% of all seaborne trade in the State with its importance even more pronounced in the higher-value unitised (LoLo & RoRo) sectors where it handles approximately 70% of all LoLo and 85% of all RoRo trade in the state. The policy document outlines the Masterplan for the port and the three core principles which are: maximisation of usage of existing port lands; regeneration of the port within the city and development of the port to the highest environmental standards. The document states that it is recognised that the location of Dublin Port Company inevitably gives the port competitive advantage over other ports and will give rise to competition concerns but that a continuation and strengthening of the landlord model of operation in the ports estate will allow for continued intra-port competition between the privately operated port terminals within the port estate. It is stated that the Government endorses the core principles of the masterplan and development of a trans-European transport network

5.10. National Development Plan

5.10.1. The National Development Plan 2018 - 2027 (NDP) sets out the investment priorities that will underpin the implementation of the National Planning Framework, through a total investment of approximately €116 billion. Reference is made at Section 1.3 to the fundamental objectives of the NPF which include: Further supporting Ireland's high-quality international connectivity which is crucial for overall international competitiveness and addressing opportunities and challenges from Brexit through investment in our ports and airports. Major national infrastructure projects include investment at Ports including Dublin Port to create high quality international connectivity. In respect of planning and investing for the implications of Brexit, significant investment in international access and supply chains through our ports and airports is highlighted (section 4.1).

5.11. Project Ireland 2040 National Planning Framework

5.11.1. Project Ireland 2040 National Planning Framework (NPF), published in July 2018, is the primary articulation of spatial, planning and land use policy in Ireland. The framework is based on directing development to existing settlements rather than allowing the continual expansion and sprawl of cities and towns. The NPF confirms that the role of Tier 1 ports (Dublin Port Company) will be considered in tandem with long-term infrastructural requirements as part of the Regional Spatial and Economic Strategy and Metropolitan Area Strategic Plan processes through National Policy Objective 40 which states:

> "*Ensure that the strategic development requirements of Tier 1 and Tier 2 Ports, ports of regional significance and smaller harbours are addressed as part of Regional Spatial and Economic Strategies, metropolitan area and city/county development plans, to ensure the effective growth and sustainable development of the city regions and regional and rural areas*".

5.12. National Marine Planning Framework

5.12.1. Marine Spatial Planning (MSP) is stated by Government as a new way of looking at how we use the marine area and planning how best to use it into the future. MSP will try to balance the different demands for using the sea including the need to protect the marine environment. It's about planning when and where human activities take place at sea. It's about ensuring these activities are as efficient and sustainable as possible. Marine spatial planning involves stakeholders in a transparent way in the planning of maritime activities. A road map for the development of Ireland's first marine spatial plan, entitled Towards a Marine Spatial Plan for Ireland was published in December 2017 which includes a four stage process. An Advisory Group has been established to facilitate participation in the MSP process by all relevant stakeholders from the economic, environmental and social pillars. The Government is required to have a National Marine Spatial Plan in place by 31 March 2021.

5.13. Regional Planning Context

5.14. Regional Spatial and Economic Strategy for the Greater Dublin Area 2019-2031

5.14.1. The Regional Spatial and Economic Strategy (RSES) for the Eastern and Midland Region including the Metropolitan Area Spatial Plan (MASP) for Dublin was published in June 2019. The RSES is a strategic plan and investment framework to shape the future development of the region to 2031 and beyond. Growth enablers for Dublin City and Metropolitan area include protecting and improving access to the global gateways including Dublin Port and to support and facilitate its continued growth. The M50 Dublin Port South Access is considered a key transport investment. Dublin Port has the potential to connect into a number of strategic greenways including the East Coast Route and River Liffey Greenway. Section 8.5 of the RSES addresses international connectivity with Dublin Port stated as the largest port in the Country with growth of 35.7% over the last five years with a record throughput of 38million gross tonnes in 2018. Relevant regional Policy Objectives guiding the development of ports, and specifically Dublin Port, within the RSES include:

- RPO 8.21: The Eastern and Midland Region Authority will support the role of Dublin Port as a Port of National Significance (Tier 1 Port) and its continued commercial development, including limited expansion and improved road access, including the Southern Port Access Route.

5.15. Greater Dublin Area Transport Strategy 2016-2035

5.15.1. The Strategy provides a framework for the planning and delivery of transport infrastructure and services in the Greater Dublin Area (GDA) from 2016-2035 providing a transport planning policy around which other agencies involved in land use planning, environmental protection, and delivery of other infrastructure such as housing, water and power, can align their investment priorities. Section 3.3.7 of the Strategy addresses international gateways including Dublin Port and states that the safeguarding of landside access to the national gateways at Dublin Port and Dublin Airport should be considered as a priority strategic objective for all relevant agencies.

5.15.2. The majority of goods vehicles using Dublin Port are required to travel to and from the port estate via the Dublin Port Tunnel, the M50 and the various national radial

routes connecting with the M50. It is, therefore, essential that the capacity of these routes is safeguarded for strategic trips of high economic value, particularly for the movement of goods. The need to facilitate the expansion of activity at Dublin Port into the future, as both a commercial and passenger port, must, therefore, be supported by the Strategy, through the clear identification and safeguarding of designated access routes. As such, the current vulnerability of the main access routes to the Port and Airport to congestion associated with general traffic, presents a risk to their functionality and, by association, to the essential role they play as international gateways of high economic importance at both a regional and national level.

5.15.3. Section 5.8 of the Strategy details the 'Road Network' and in respect of National Roads includes the proposal to deliver a road link connecting from the southern end of the Dublin Port Tunnel to the South Port area, which will serve the South Port and adjoining development areas. It is noted that in the case of the Eastern Bypass, while the section of the route from the Dublin Port Tunnel to the South Port area is included for delivery in this Strategy, the remainder of the route is not proposed for development during the Strategy period but the retention of a route corridor for this scheme is recommended.

5.15.4. In relation to Freight Movement (section 5.8.4) it is stated that given the geographic size of Ireland and the proximity of Dublin Port to the various centres in the GDA, movement by road is, and will continue to be, the dominant mode of freight transfer in the region, and throughout the wider State. The management of the strategic (national) road network within the GDA is considered critical to the overall efficiency of freight movement. While movement of freight by rail will continue to be supported and encouraged, the Strategy has to address the reality that most freight movement will be by road. A series of measures are proposed include the following:

- Implement demand management measures on the M50 motorway to ensure that it retains sufficient capacity to fulfil its strategic functions, including freight movement;
- Implement, when appropriate, demand management measures on the radial national routes approaching the M50 motorway (M1, M2/N2, N3/M3, N/M4, N/M7,

M11) to ensure that these routes retain sufficient capacity to fulfill their strategic functions, including freight movement;

- Ensure that the Dublin Port Tunnel continues to perform its primary function of providing access to Dublin Port for freight traffic;
- Provide for the continuation of the current Dublin City Heavy Goods Vehicle (HGV) Management
- Strategy and for its further expansion to other vehicle types, potentially with an expanded exclusion area;
- Assess the potential for, and, if appropriate, introduce, similar HGV management measures in other town centres in the GDA;
- Provide goods vehicle parking facilities at on-line motorway service areas and other appropriate locations within the GDA in accordance with relevant planning guidelines and official policy;
- Require the clear identification in development plans of appropriate locations for freight intensive developments, and the implementation of Distribution and Servicing Plans for such developments as part of the planning process;

5.16. **Local Planning Context**

5.17. **Dublin City Development Plan 2016-2022**

Context

5.17.1. Chapter 4 provides the context within which the role of the Port in the City is expressed where it is stated that Dublin City Council fully supports and recognises the important national and regional role of Dublin Port in the economic life of the city and the region and the consequent need in economic competitiveness and employment terms to facilitate port activities which may involve port development or relocation in the longer term. In addition to the strategic support, the City Plan contains a number of specific policies and objectives facilitating Dublin Port operations and activities, including inter alia:

- SC9: To support and recognise the important national and regional role of Dublin Port in the economic life of the city and region and to facilitate port activities and development, having regard to the Dublin Port Masterplan 2012 - 2040.
- CEE23 (iii): To recognise that Dublin Port is a key economic resource, including for cruise tourism, and to have regard to the policies and objectives of the Dublin Port Masterplan.

5.17.2. Section 7.6.3 recognises the role of Cruise Shipping and Retail for Dublin City stating that since 2010, between €35m and €50m has been generated for the local economy through cruise traffic.

5.17.3. Section 16.21 notes that the planning authority will have regard to the following in assessing proposals for the Dublin Port area:

- Recognition of the important role of Dublin Port in the economic life of the city and the region and the consequent need in economic and employment terms to facilitate port development;
- Periphery of the port area facing residential areas to be designed and landscaped to minimise the impact of its industrial character
- Impact on nature conservation, recreation, and amenity use, and other environmental considerations, including having regard to the designation of Dublin Bay as a UNESCO biosphere and other environmental designations such as Special Area of Conservation (SAC) and Special Protection Area (SPA);
- Protection of the amenities of residential and commercial uses in adjoining areas;
- Design criteria including landscaping, finishes, signage and site layout;
- Facilitating plans to make Dublin a 'home port' for cruise tourism, with complementary cruise tourism facilities in the port and wider city/region.

5.18. **Zoning**

5.18.1. There are two zonings within the application boundary. The majority of the lands are zoned Z7 Industry and Employment, the objective of which is '*to provide for the protection and creation of industrial uses and facilitate opportunities for employment creation'.* A small area of the site along its periphery are zoned Z9 Amenity/Open Space Lands/Green Network which seeks '*to preserve, provide and improve*

recreational amenity and open space and green networks'. Port-related industries and facilities are permitted in principle within the Z7 land-use zoning objective. Section 14.8.7 acknowledges that the primary uses on Z7 lands include those which can result in a standard of amenity which would not be acceptable in other areas, and can result in disamenity which needs to be managed through the planning process to safeguard adjoining residential amenities. The Z9 (Amenity/Open Space Lands/Green Network) zoned lands provide a green buffer along the northern and eastern site boundary. The City Development Plan permits open space uses in principle on Z7 lands while Community facilities and Cultural/recreational buildings and uses are listed as being Open for Consideration.

5.19. **Built Heritage**

5.19.1. Policy CHCO10 seeks "*to have regard to the city's industrial heritage and Dublin City Industrial Heritage Record (DCIHR) in the preparation of Local Area Plans (LAPs) and the assessment of planning applications and to publish the DCIHR online. To review the DCIHR in accordance with Ministerial recommendations arising from the national Inventory of Architectural Heritage (NIAH) survey of Dublin City and in accordance with the Strategic Approach set out in Section 11.1.4 of this chapter*".

5.20. **Natural Heritage**

5.20.1. The following policies are considered to be relevant:

- GI23: *"To protect flora, fauna and habitats, which have been identified by Articles 10 and 12 of Habitats Directive, Birds Directive, Wildlife Acts 1976–2012, the Flora (Protection) Order 2015 S.I No. 356 of 2015, European Communities (Birds and Natural Habitats) Regulations 2011 to 2015".*
- GI24: *"To conserve and manage all Natural Heritage Areas, Special Areas of Conservation and Special Protection Areas designated, or proposed to be designated, by the Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs".*

5.21. **SEVESO Directive Sites**

5.21.1. Appendix 12 of the plan sets out policies in relation to SEVESO III sites which outlines that Directive 2012/18/EU (known as the SEVESO III directive) was adopted taking into account changes in EU legislation on the classification of chemicals and

the rights of citizens to access information in this regard. The directive was transposed into Irish legislation through SI No. 298 of the 2015 Chemicals Act (Control of Major Accident Hazards involving Dangerous Substances) Regulations 2015. This directive came into effect on 1 June 2015, replacing the SEVESO III directive. Policy SI28 seeks "*to have regard to the provisions of the Major Accidents Directive (2012/18/EU), relating to the control of major accident hazards involving dangerous substances and its objectives are to prevent major accidents and limit the consequences of such accidents. Dublin City Council will have regard to the provisions of the directive and recommendations of the HSA in the assessment of all planning applications located on or impacted by such sites*."

5.22. **Dublin Port Masterplan 2012-2040**

5.22.1. Dublin Port Company prepared this non statutory document to guide development in Dublin Port up to 2040. It was framed within the context of EU, national, regional and local development plan policies. The masterplan was reviewed in 2018 which concludes that the Port should be developed to provide capacity based on an increased average annual growth rate of 3.3% from 2010-2040 rather than the originally assumed 2.5%. The revised plan seeks to allow essential projects to be brought forward through the consenting process and to be constructed in time to meet demand. The Masterplan provides an indication of how the Port will be developed to meet needs in the coming years. The fundamental approach of the masterplan is to provide capacity in the Port to maximise the utilisation of brownfield lands rather than resort to an infill/reclamation option.

5.22.2. The proposed development, referred to as the MP2 Project, encompasses the areas annotated as Areas C & D on the masterplan and is one of three projects which also includes the already permitted ABR projected permitted under ABP Ref. 29N.PA0034 which is currently under construction. The other strategic project envisaged provides for the development of land areas annotated as K, L, M, N & O and possibly including the development of the Southern Port Access Route to provide connectivity between Dublin Port Tunnel and the south port lands as envisaged in the Transport Strategy for the Greater Dublin Area 2016-2035.

5.22.3. The particular proposals in the Masterplan for Areas C & D are as follows:

Area C (38.8 hectares)

It is proposed to create a Unified Ferry Terminal which would incorporate the existing Terminals 1, 2 and 5.

In doing this:

- Existing internal roadways would be eliminated and existing buildings would be removed to create an additional three hectares of usable terminal area.
- A new single set of in-gates would be provided north of the existing terminal areas accessed from the new Promenade Road Extension to be built as part of the project to redevelop the Port's internal road network.
- A new jetty would be built at the eastern end of the Port to provide a fifth Ro-Ro berth
- A new ferry terminal building would be provided to the north overlooking the Tolka Estuary.
- In developing the new Unified Ferry Terminal, necessary State facilities would be provided for border controls by a range of State agencies.

Area D (18.5 hectares)

This option provides for a considerable expansion of the already existing container terminal both in terms of berthage and, more particularly, storage land for the transit storage of imported and exported containers from Lo-Lo container ships.

The option includes:

- The removal of existing buildings on the terminal to provide additional transit storage capacity for containers
- The cessation of an existing empty container depot operation
- The infill of Oil Berth #4
- The reconstruction of Oil Berth #3 to facilitate its reuse as a container berth as when it is no longer required for petroleum imports
- The extension of the existing river berth (Berth 50A)
- The development of a nearby 2.8 hectare yard overlooking the Tolka Estuary as a back area for the transit storage of containers

- Existing check-in facilities will be moved to a remote shared facility in Area E close to the Promenade Road entrance to the Port.

5.23. **Local Action Plan City of Dublin – Cruise Traffic and Urban regeneration of City Port Heritage as a key for Sustainable Economic, Social and Urban Development, 2011**

5.23.1. The Cruise Traffic and Urban Regeneration (C.T.U.R) project was established under the URBACTII EU programme in respect of Dublin and 10 other partner cities and resulted in the compilation of integrated strategies (Local Action Plans) for cruise tourism opportunities connected to the sustainable development and regeneration of deprived or under-utilised areas on the waterfront, and to allow for the preservation of waterfront heritage buildings.

5.23.2. The stated overall goal of the Dublin Local Action Plan (LAP) is to develop a strategy for the development of cruise traffic and the urban regeneration of the port area. It is stated that this would create an urban quarter that facilitates sustainable and consolidated growth in Dublin City and articulates a new relationship between the city and the port through the development of the cruise tourism sector.

Adjoining Planning Schemes

5.24. **North Lotts and Grand Canal Dock 2014**

5.24.1. Approved by the Board in May 2014, this scheme relates to an area between the Samuel Beckett Bridge and the East Link Bridge bounded to the north by Sherriff Street Upper and to the south by the Grand Canal Dock. This statutory Planning Scheme recognises the importance of cruise tourism in section 4.9.4.6.

5.25. **Poolbeg West SDZ 2016**

5.25.1. Approved by the Board in April 2019 this SDZ and includes lands within the ownership of the Dublin Port Company to the south of the River.

6.0 EIA Screening

6.1.1. The proposed development falls within the definition of a project under the EIA Directive as amended by Directive 2014/52 and falls within Class 10(e) of Annex II of the Directive 2014/52/EU which relates to the construction of roads, harbours and port installations, including fishing harbours (projects not included in Annex I). In terms of National Regulations, the scope of Class 10(e) as set out in Part 2 Schedule 5 of the Planning and Development Regulations, 2001-2018 provides for new or extended harbours and port installations, including fishing harbours, not included in Part 1 of this Schedule, where the area, or additional area, of water enclosed would be 20 hectares or more, or which would involve the reclamation of 5 hectares or more of land, or which would involve the construction of additional quays exceeding 500 metres in length.

6.1.2. It is further noted that Section 37E(1) of the Planning and Development Act 2000, as amended states that an application for permission for development in respect of which a notice has been served under Section 37B(4)(a) shall be made to the Board and shall be accompanied by an environmental impact assessment report in respect of the proposed development. Therefore, EIA is mandatory and the applicant has submitted an EIAR. An EIA is undertaken at Section 13 of this report.

7.0 Observations

Eight observations were received by the Board during the statutory consultation period and are summarised as follows:

7.1. Docklands Business Forum

The submission is summarised as follows:

- Purpose of Dockland Business Forum (DBF) is to ensure Docklands realises its full potential by becoming a world centre for international commerce, entrepreneurial innovation and maritime tourism.
- Current Docklands SDZ and smaller Poolbeg SDZ soon built out and city left with few large areas of land to accommodate growing population and wider consequences for city's sustainability as inviting urban centre need consideration.

- Docklands most successful urban regeneration and fastest growing urban area producing 9% of GDP & over 45,000 professional jobs in former urban wasteland.
- New Services Port is appropriate for such a city centre location.
- Regret applicant did not consult with DBF during pre-app consultation process with no business in regenerated docklands on list of pre-consultation documents.
- DBF have number of concerns expressed as questions which they seek to have responded to at an oral hearing.
- Port seeking to double its capacity with DCC objectives to promote residential development within the city centre seemingly incompatible and cause strain on urban infrastructure.
- Continued location of the port in city centre an unresolved issue with many cities (Barcelona, Amsterdam, Bilbao, London) moving their ports liberating land to create beautiful new cities and out of step with international best practice for a port in city centre to seek to double its capacity.
- Proposal will protect company's dominance in the export market with share of Ro-Ro - 88.7% and Lo-Lo - 72.6% dwarfing all competitors, if private company possessed such market power there would be calls for it to be curtailed with question of whether this dominance in interests of city or country important.
- Evidence that current Port site not fit for purpose with land purchased to west of the city in 2016 to facilitate ongoing activities, cruise ship visits halved to facilitate space needed for export growth and acknowledged that Port will reach ultimate capacity of 77.2mil tonnes by 2040 with nowhere to go.
- Welcomes heritage and community gain element of proposal with many business carrying out extensive restorations of Docklands industrial heritage but concerns that heritage zone may not receive footfall appropriate to succeed due to location deep inside working port campus with EPIC struggling for many years to realise success with applicant having none of locational advantages of EPIC.
- Concern regarding external infrastructure to deliver increased capacity with Port Tunnel at capacity with frequent delays with significant negative impact on surrounding road network caused by doubling of capacity of campus adversely affecting lives.

- Dept. Transport, Tourism and Sport research outlines unused capacity in other ports such as Rosslare with improved motorway access from Dublin with potential that Rosslare could deliver increased capacity leaving Dublin Port able to concentrate on space for Cruise and Ferry terminals, help build Ireland's overall export capacity in preparation for Dublin reaching its limit and in context of Brexit, Rosslare has less travel time to continental market.

7.2. **Port of Cork Company**

The submission is summarised as follows:

- Supports proposal which is generally consistent with European policy set out in TEN-Transport and with national policy with additional infrastructural capacity for Ro-Ro and Lo-Lo services justified by overall growth in Irish economy and need to provide for larger vehicles.
- Note that project rationale understates Ro-Ro and Lo-Lo capacity of Port of Cork and appears to imply that MP2 project is designed to facilitate a further increase in share of national Ro-Ro traffic passing through Dublin Port.
- Reference to para 2.5.1 of National Ports Policy noting that while provision of increased capacity may have the beneficial effect of increasing competition between shipping services within Dublin Port, project should not be promoted on basis that it will result in a reduction in the share of national Ro-Ro traffic passing through Rosslare or Cork.
- Note reference in Project Rationale that choices made by shipping lines to use Dublin Port do not arise from capacity constraints elsewhere in Irish Port system;
- Tables presented listing volumes of trade recorded in 2018 used to support questionable conclusions that only two ports in Ireland handle significant volumes of Ro-Ro freight (Dublin & Rosslare), that Dublin Lo-Lo is more than three times larger than next biggest port (Cork) with highest growth rate over past 5 years of three container terminal ports;
- Dublin share of national volumes result of location close to largest population concentration and depth of water available and Ro-Ro capacity in Cork not

considered because demand for Ro-Ro freight through the port is so small (2018-3,561 units).

- Do not agree that snapshot of volumes carried in 2018 supported by average over previous 5 years provides a reliable basis to assess long-term trend in Ro-Ro and Lo-Lo traffic through Port of Cork with reduction in Ro-Ro traffic in 2011 resulting from termination of Cork-Swansea service, largely restored in 2018 with Cork-Santander service with short term fluctuation not affecting the projected future growth in Ro-Ro and Lo-Lo trades through Port of Cork.
- Port of Cork Company estimate existing infrastructure at Ringaskiddy Terminal has capacity to handle 35,000 Ro-Ro units per annum not taking account of additional capacity of new permitted 314m multi-purpose berth (PA0035) which is under construction and should be taken into account in assessing need for MP2.
- Planning rationale underestimates Lo-Lo capacity of permitted container terminal at Ringaskiddy given as 240,000 TEU p.a with Board approved particulars of new Ringaskiddy berth (PA0035) assumed capacity of 279,000 TEU p.a with potential to accommodate 332,000 TEU when dwell time reduced.
- Planning Rationale should not assume existing distribution of population between Dublin region and rest of country maintained in long term with Section 1.2 of NPF referencing overconcentration of population in Dublin and eastern area which cannot be let continue unchecked with aim to have roughly 50/50 distribution of growth with 75% to be outside Dublin and its suburbs.
- Depth of water and existing and proposed berths in Ringaskiddy more than adequate for larger Ro-Ro ferries with no requirement for dredging along approaches to berths.
- Agree with planning rationale in relation to potential effects of Brexit and accept effect on national economy may be short term but may not apply to the spatial implications of the change in trade patterns as increasing proportion of trade using direct routes to Continental Europe is likely to continue into the long term.
- Dublin Port is a Core Port in the TEN-T and a Designated Node on the North Sea – Mediterranean Core Network Corridor and Dublin Ports market share of Irish

trade could be attributed to its current status as a designated node on the land bridge through the UK to Continental Europe.

- Map of TEN-T Corridors demonstrates that withdrawal of UK from TEN-T networks may generate increased demand for direct shipping services from Ireland to Continental Europe which could lead to transfer of some of the Ro-Ro traffic to Lo-Lo and/or transfer of some Ro-Ro services from Dublin to Cork.

7.3. The Irish Academy of Engineering

The submission is summarised as follows:

- Calculated that if real economic growth increased at 3% p.a. in period 2019-2040, as advised by ESRI for longer term analysis, the index of GNI would increase from 130.0 in 2018 to 249.1 in 2040 (base year 2010).
- Based on Growth of unitised freight traffic v's growth of economic activity, index of unified freight correspondingly increases from 132.0 in 2018 to 256.9 in 2040.
- Total demand for unified freight predicted to grow from 1.297 million units in 2010 (base year) to 3.332 million units in 2040.
- Dublin Port's projections consistent with observer's analysis, provided Dublin Port's share of total market for unified freight in Ireland exceeds 95% by 2040.
- Short term - observer's research highlighted need to plan for 'Hard Brexit' and corresponding desirability of increasing throughput via the south coast ports, to provide shorter sea crossings to Continental Europe and more balanced regional development, understand that Department of Tourism Transport and Sport commissioned a port capacity study to examine this potential.
- Dublin Port assessment of potential for utilising south coast ports, specifically Ringaskiddy, assumes M28 restriction would continue indefinitely and also ignored potential for operating both the Tivoli and Ringaskiddy Lo-Lo facilities until M28 completed, not proposed initially but understood now under consideration by Port of Cork Co.
- Potential to maximise capacity of other ports needs to be considered in greater detail particularly given the potential impact of Brexit.

- Medium term - application envisages unified freight traffic through Dublin will increase from 1.439m units in 2018 to 3.174m units in 2040 (120% increase) but application silent on how additional traffic would access Dublin port assumed Port Tunnel & M50 will continue to accommodate the substantially increased traffic volume but TII's National Roads Network Indicators 2018 report shows traffic volumes on M50 increasing steadily since 2013 in both directions and now exceed Stable Flow Capacity for much of the day between 06.00 and 21.00 with increase in volume of HGV traffic to and from Dublin Port have very serious consequences for M50 traffic flows with problem made more acute by NTA proposal that completion of proposed MetroLink, from Swords to Sandyford, would not commence for 20 years.
- Welcome proposed 'inland port' at Coldwinters for storage and repair of empty containers but note proposed inland port would make little contribution to reducing additional HGV traffic envisaged in application.
- Conscious of international trends in port development with requirement to locate adjoining cities no longer applicable with ports moving or developing some distance from major cities with Dublin Port now largest surviving cityport on these Islands.
- Long Term - requirement to protect cities, in the future, against the potential adverse impact of rising sea levels and appears prudent to assume that it may not be possible to arrest sea level rise and that remedial measures must be planned for.
- Dublin City Council report 'Integrated Water Resource Management Planning for the Dublin City/Dublin Coastal Region' concluded that may be necessary to provide a tidal barrier across the mouth of the Liffey, between the eastern extremities of the North and South Bull Walls, to protect city from flooding in foreseeable future with potential that construction and operation of such a barrier could have very significantly adverse implications for port operations and this issue needs to be addressed as part of longer term port planning and as part of this application.

7.4. **Birdwatch Ireland**

The submission is summarised as follows:

- BI been monitoring waterbirds and Terns of Dublin Bay as part of Dublin Bay Birds Project since 2013.

- One area of concern with proposed dredging, (Fig. 3.12 NIS) area at very base of Great South Wall in Liffey channel where there is a cooling water outfall and while not indicated on map is notable for numbers of waterbirds that use the area with the area immediately south of same proposed to be dredged.
- BI not able to discount that disturbance from operational activities to the species of conservation interest would not be an issue in this area.
- Black-headed gull one of the species of North Bull Island SPA and South Dublin Bay and Tolka Estuary SPA that use the outfall in significant numbers (Appendix 1) with 593 Black-headed gulls counted (March 2019) at outfall site and 2018 Dublin Bay Birds project showing 17,776 Black-headed gulls using the bay with number associated with the outfall 3.3% of figure.
- Outfall area of importance to Black-headed gulls and other SCI's of adjacent SPA's, potential exists for dredging and operational impacts to species in area.
- Impacts to terns addressed in mitigation measures, no assessment of impacts of works from October – March on the SCI's using the small area below the channel to be widened which is required to rule out any likely significant impacts on the SCI's and ensure that conservation objectives of the SPA are met.
- Particular concern that ex-situ factors such as these activities near the outfall could pose challenges to meeting objective 1.
- Potential effects on overwintering special conservation interest of the SPA's with mitigation proposed by construction of Berth 53 and heritage installations temporarily ceasing during periods of greatest low spring tides to avoid disturbance at exposed feeding grounds with the Tolka Estuary and use of gates at greenway with BI requesting a schedule of extreme low tides be provided by project developers relating to when these works are planned and be alerted when works cease and recommence, based on previous experience of application of mitigation measures on the ground and request this is a condition if consented.
- Little information available on Guillemot nesting within the Port and appropriate monitoring required to determine productivity at the site with proposed mitigation of nest boxes satisfactory which should be rat proof and should be commitment to monitoring these breeding birds.

- In transitional phase between works should be no blocking of access of existing holes and surfaces until late summer when potential breeding birds have finished nesting activities and setting replacement nest structures up on appropriate solid structures in advance also important and imperative that potential nesting sites are examined before any demolition works undertaken.
- BI concerned about timing of works and impacts on important bird populations within Bay and Liffey Channel with mitigation measures proposed to ensure works carried out which would not impact Tern and waterbird populations but some works not due to begin for several years such as M2/Berth 53 c.2025 with potential impact on wintering waterbirds at extreme low tide.
- Imperative that one or more ecological Clerk of Works is onsite monitoring activities and that monitoring reports are circulated as despite best intensions of mitigation measures, differences can arise in implementation.
- Request absolute care taken to ensure mitigation measures complied with in years to come and repeat request that cessation of works during extreme low-tides be communicated to BI and relevant monitoring reports and specific information in relation to low-tide works sent to BI.

7.5. **Donna Cooney**

The submission is summarised as follows:

- Outlines Natura 2000 sites and those with priority habitats and notes some of the sites overlap with others.
- Concern about accumulated effects on habitats as conditions in planning allowed time for seasonal recovering on sea bed and local habitat between dredging and dumping materials with silt also preventing sunlight.
- Conservation objective for Harbour Porpoise seeks to maintain favourable conservation condition with objectives stating that human activities should occur at levels that do not adversely affect the Harbour Porpoise community at the site.
- Concern about effects on Porpoise during dredging and dumping at sea and concern that NIS mitigation proposed (pg.378) that once normal operations commence there is no requirement to halt or discontinue the project.

- Request no night-time dredging or dumping at sea to protect the Porpoise as statement at page 399 that capital dredging works are remote from residential properties and are proposed to be undertaken on 24/7 basis.
- Concerned at potential increased negative impacts to air quality with nearest residential and commercial receptors outlined and noted that ecological receptors can be affected by deposition of air pollutants such as nitrogen oxides and sulphur dioxide with nearest sensitive ecological sites outlined.
- Noted NIS (pg 287) assessment on NO_2 and ambient air quality is outdated with reference to EPA Dublin monitoring from 2002-2017 with results so far in July 2019, particularly at Port Tunnel, show levels above legal limits that are a danger to human health from NO_2 levels.
- Increased activity should be measured against July 2019 results with EU ambient air quality directive requiring a local air quality plan and activities may need to be limited or cease if causing danger to human health.
- PM_{10} levels also exceeding WHO Guidelines 2018 in port areas of Breakwater Road South and Port lands adjacent to Tom Clarke Bridge with proposed air quality mitigation measures and Governments 'National Clean Air Strategy' unlikely to become effective in short-medium term.
- Table 1-19 (Air-Quality – operational) indicated increased level of air pollution in four receptors.
- Underwater noise pollution with site noise sensitive due to proximity of marine species, impact on recreational diving sites, popular wreck sites.
- Negative effects of dredging and dumping of dredged materials with temporary impacts on water quality having potential to occur during the construction phase of the works with mobilised suspended sediment release through capital dredging and disposal activities the principal potential sources of environmental impact.
- Process of dredging unavoidably causes disturbance of sediment on channel bed and dispersal of some material in the water column with release at dumping at sea site resulting in sediment release with potential impacts on marine life and water quality in the form of a suspended sediment plume within the water column.

- Accumulated effects of Alexander Basin redevelopment and current proposal leave little time for recovering, concern at potential impact on wild salmon numbers with negative effects on returning salmon to be addressed.
- Support proposal for greenway for walking and cycling on North Port lands.

7.6. Clontarf Residents Association

The submission is summarised as follows:

- Welcome Dublin Port no longer plans to reclaim 52 acres instead is re-tasking Port lands for core Port activities which is long held favoured option of observer.
- Concerns centred around impact on neighbouring communities and uniquely sensitive environment.
- Seek that ABP impose such conditions as are reasonably necessary to ensure all activities undertaken during development done in sympathy with local communities and essential that Dublin Port be required to ensure that particularly noisy or disruptive activities are project managed to ensure minimal inconvenience to their neighbours.
- All work must be undertaken in an environmentally sensitive way that seeks to protect and enhance the flora and fauna of Dublin Bay for future generations.

7.7. Hollybrook Grove Householders Association (c/o Peadar Buckley)

The submission is summarised as follows:

- Information provided to public sparse and website difficult to navigate with lot of people in Clontarf unaware of proposal with many on holidays.
- Clontarf residents thought expansion of Port into Clontarf side ended after reclamation proposal withdrawn.
- Scale of jetty unclear but masterplan proposal for two jettys appear enormous reducing sailing and boating area between the Bull Wall and the north docks for boats and leisure craft with sailing areas and depth in Clontarf reducing because Bay is silting up.

- Consider proposal should be refused as Port has been swallowing parts of area with constant need for more of the Bay.
- Detrimental effect on physical environment in Clontarf and proposed Berth 53 will have a detrimental effect.
- Infill of Berth 4 should be refused due to potential future needs of the Port and because all berths are a strategic asset with berths being filled in by the Port for many years leading to continued demand for more berths further out in the Bay.
- Disappointing that Clontarf Sailing Club have not objected.
- Concern that fuel leaks or accident on or near open jetty at Berth 53 will be washed into the bay area in Clontarf impacting on marine life and threatens species such as Curlew.
- Shipping in open Berth 53 unattractive for visitors and residents in Clontarf, impact on swimmers at the Bull Wall and danger of oil or fuel leakage.
- Physical and visible environment when viewed from the Clontarf Promenade and Bull Wall will become less attractive and more industrialised by construction of Berth 53 and its use by large Ro-Ro shipping with no proposals for screening.

7.8. **Peadar Farrell**

The submission is summarised as follows:

- ABP previously adjudicated on proposal in 2015 with the Port changing their minds again with little of PA0034 completed with reasons set out for need.
- Timescale for project disturbing with completion date of 2032 and grossly unfair to permit such a duration.
- Reasoned motivation by Port to get applications permitted prior to housing development coming on stream in adjoining green fields depriving new residents such as Glass Bottle site to have any say with members of public entitled to say on what happens in City including Port area with multiple permissions pertaining.
- Berths with varying depths of 10, 11 & 13 m and fairway excavated to 10m and consider ABP will have to adjudicate on another application when noted.

- Planned excavation with a dredger likely to impact possible shipping antiquities with these sensitive areas requiring areas should be excavated out in the dry to ensure proper archaeological procedure.
- Proposal and change of mind from previous permission appears based on advent of much larger container ships wishing to use Port with public debate necessary about bringing such ships into City with application not addressing the following in respect of these ships - air pollution from dirty fuel, turning, manoeuvring and risk to other users, noise pollution, increased dredging and dumping into the Bay, ships would require 2 lengths of Croke Park to berth.
- Proposal would cause 424,644cm of sea floor to be excavated which is 700,000 tonnes which it is planned to dump on the Burfort Bank.
- Divers using Dublin Bay see silt spread all over plants and sealife with material dumped at the site used by Port coming back into the Bay spreading and adding to silting up of Blue Lagoon/Causeway between Sutton/Dollymount/Bull Island.
- River ports have dirty sea floors with oil berths adding chemicals to be dispersed to the marine life in the Bay.
- Proposed dumping adds to 10 mil tonnes permitted by PA0034 with EPA permitting additional 1mil tonnes in maintenance dredging and question if permitted dumping to be withdrawn as new application supersedes PA0034.
- What would prevent a further change of mind by Port and seek permission for changed works and more dumping.
- Excavations to extend Port eastwards to take place in or adjacent to two SPA's with dumping occurring inside the Rockabill to Dalkey SAC with dump site a feeding and breeding area for porpoise which are protected with dumping undertaken at night and in wave conditions making it impossible to see a porpoise in the water.
- IWDG hired as consultants and observers on the dredgers and are compromised to comment on this development and their findings ignored.
- Dumping undertaken 12 months a year as different permissions stitched together.

- While claiming not to dump at certain times, EPA licence facilitates dumping during these times.
- Divers in Dublin Bay restricted with sewage outflows with visibility impaired.
- Applicant abusing planning system with contiguous applications designed to baffle observers.

8.0 Prescribed Bodies

Submissions were received from four prescribed bodies and are summarised as follows:

8.1. Transport Infrastructure Ireland

The submission is summarised as follows:

- TII notes proposal includes works within eastern port area and recommends that if ABP consider granting permission that planning conditions associated with DCC Ref. 3084/16 should be attached.
- In particular Condition 6 of same would be appropriate with minor revisions to Item B to include – prior to commencement of development the developer shall prepare a Construction Traffic Management Strategy for Dublin Tunnel for duration of works which shall be submitted to an agreed with PA in consultation with TII and operators of Dublin Tunnel.

8.2. Irish Water

The submission is summarised as follows:

- Any connection to a public water supply or wastewater network is subject to a connection agreement with Irish Water and connected water services must be designed and provided in accordance with Irish Waters standards and codes of practice.
- Prior to any construction, applicant may contact IW in respect of potential diversion/build over.

- Request that project be cognisant of existing outfall in vicinity of development and that Dublin Port engage with IW as development plans progress.

8.3. **Inland Fisheries Ireland**

The submission is summarised as follows:

- Liffey important salmonid system with fish groups utilising coastal habitat in vicinity of proposal with Liffey known to contain three species of Lampray with fish species having to pass through the Liffey Estuary/Dublin Harbour to reach sea or return to spawning grounds.
- Estuaries/transitional waters include variety of different habitats of importance to passage to/from sea and spawning/nursery areas.
- Ground and seabed preparation and associated construction works including dredging have significant potential to cause release of sediments and pollutants into surrounding waters with potential for habitats to be altered.
- All measures necessary should be taken to ensure potential of local aquatic ecological integrity by complete impact avoidance in first place and through mitigation by reduction and remedy as a secondary approach.
- Foreshore works should be designed and implemented in an ecologically sound and sustainable way involving consultation with IFI with method statements to be submitted for approval in advance of any 'in-stream' works.
- Consultation required with IFI for any application for a section 4 licence for discharge of effluent to surface waters.
- Use of concrete/cement and other construction materials strictly controlled and monitored with appropriate licencing.
- Implementation of comprehensive environmental management planning systems essential for all construction activities.
- SuDS approach should not result in a deterioration of water quality or habitat in natural river/stream channels or any receiving waterbody.
- Comprehensive method statement and specification detail for any settlement lagoon with proposed discharge to surface waters required.

- Comprehensive and integrated approach for achieving freshwater and marine protection during construction and operation to be implemented.
- On-site attenuation ponds to allow for settlement of fine/particulate materials before discharge to waters.
- Class 1 petrol/oil interception and hydro-brake controls to be in place on individual high risk discharges and on surface water discharges to protect receiving waters with comprehensive long term maintenance programme for same required.
- Mitigation measures as outlined in EIAR to protect integrity of Liffey system to be strictly adhered to and strict monitoring regimes put in place with plans in Appendices 19-7, 19-9, 19-10 & 19-11 of particular importance.
- Recommended that Guidelines on protection of fisheries during construction works and adjacent to waters consulted when undertaking works.
- IFI to be consulted (if development proceeds) directly in relation to all matters concerning fisheries and surface water quality.
- Reporting of aquatic monitoring data extended to IFI on a scheduled basis.
- Highlighted that appropriate environmental protection measures responsibility of developer and contractor.
- Ongoing aquatic ecological monitoring both during construction and operational phases should be implemented.

8.4. **Department of Communications, Climate Action and Environment - Geological Survey Ireland**

The submission is summarised as follows:

- Process for designating County Geological Sites (CGS's) outlined. No CGS located within vicinity of proposed sites and no envisaged impact on integrity of CGS's but if proposal is altered further consultation required.
- GSI groundwater programme outlined. Need to identify areas for integrated constructed wetlands and recommend using the GSI's National Aquifer and Recharge maps on Map viewer.

- Geohazards outlined. Recommend that geohazards be taken into consideration especially when developing areas where these risks are prevalent and encourage use of data when doing so.
- Geothermal energy outlined. Recommend use of Geothermal suitability maps to determine most suitable type of ground source heat collector for use with heat pump technologies.
- GSI highlights consideration of mineral resources and potential resources as a material asset which should be explicitly recognised within environmental assessment process. Active quarries, mineral localities and aggregate potential maps available on Map Viewer.

9.0 Further Submissions

As outlined in Section 1.3 above, following receipt of the application by the Board it was noted that a number of reports included as appendices to the EIAR were not included on the project website www.dublinportmp2.ie. In response to same, the applicant re-advertised by way of site and newspaper notices dated 10 October 2019. In response to the invitation 3 submissions were received which are summarised as follows.

9.1. Department of Culture, Heritage and the Gaeltacht

The submission is summarised as follows:

Underwater Archaeology

- Department's recommendation that Mitigation Measures detailed in the Archaeological Assessment are carried out in full.
- Geophysical anomalies documented in the Dublin Port MP2 Archaeo-geophysical Report of the Environmental Impact Assessment Report Appendices (Part 1) should be subject to a dive survey. The dive survey should be carried out by a suitably qualified archaeologist and licensed under the National Monuments Acts 1930-2004.

Nature Conservation

- Recommends that all mitigation measures identified in NIS including in plans and assessments in appendices to the document, are implemented in full.
- Notes the measures outlined in the Draft Construction Environmental Management Plan and the draft Environmental Management Plans in Appendix 5 of the NIS and requires that all of the measures in these draft plans need to be incorporated into the final version of these documents so that they are implemented in full as they form part of the mitigation required.
- Noted on page 275 of the NIS and in the Draft Birds and Marine Ecology Management Plan that gates will be used at the site of the Greenway to control the movement of people during periods of greatest low spring tides to avoid disturbance at exposed feeding grounds within the Tolka Estuary. Any grant of permission should ensure that measures to provide for the effective control of these gates at the specified times are in place for the whole operational lifespan of the project.
- Recommends that all mitigation measures identified in the Environmental Impact Assessment Reports including in plans and assessments in appendices to the document, are implemented in full.

9.2. Transport Infrastructure Ireland

- No additional issues raised.

9.3. Office of Minister for Agriculture, Food and the Marine

The submission is summarised as follows:

- Correspondence acknowledged and will be brought to attention of the Minister

10.0 Planning Authority

10.1. Overview

A report was received from Dublin City Council on 19 September 2019. The report addresses EIA, AA and provides a planning assessment as well as a number of appendices from other Departments in DCC. The report is summarised under the assessment headings/Department Reports as follows:

10.2. **EIAR Assessment**

Scoping

- Approach deemed satisfactory based on existing legislative requirements and to gain a comprehensive understanding of the environmental issues.

Introductory chapters

- Provides background information to existing environment within development site and within surrounding area with information provided considered adequate.

Alternatives

- Considered at both strategic and project levels with process for selection of preferred option described in detail and justified with approach considered satisfactory.
- Noted that Parks and Landscape Services raise queries in relation to exploration of alternatives for dredged material, which will be produced from channel widening and deepening operations.

Risk of Major Accidents

- Response and input of the Health and Safety Authority would be key in determining the adequacy of and conclusions reached within Chapter addressing subject EIAR.

Biodiversity, Flora, and Fauna

- Outlines comments of Parks and Landscape services summarised in Section 10.8 below which for ease of reference include:
- Requests that a) sites be identified for post-construction restoration of native flora and b) the establishment of new planting areas be included by Landscape Architect to provide for local pollinators.
- Landscape Plan for Greenway to include specific measures for otter.
- No piling or dredging during month of March should be permitted.
- Recommends remedial and mitigation measures for visual scanning of Harbour Porpoises should be set at WMO Sea State 2 (≈Beaufort Force 2 conditions).
- Recommends remedial and mitigation measures for visual scanning of common and grey seals should be set at WMO Sea State 3 (≈Beaufort Force 3 conditions).

- Monitoring of Black guillemot within development area should be conducted to ensure no disturbance to nesting pairs. Measures are requested below.
- Arctic and Common Tern - clarification required as to: a) whether or not Applicant has conducted an analysis of the optimum location(s) for siting of the pontoons and b) if these are permanent locations or subject to further changes as part of the Master Plan for Dublin Port.
- DCC recommends that Applicant provide clarification that pontoons will remain in position undisturbed between the months of March and September.
- DCC requests that Applicant provide an area equivalent to that which is proposed to be permanently infilled at Oil Berth 4 basin and void at Oil Berth 3 of newly-constructed marine habitat using best available technology by way of a design of artificial surfaces to be agreed with NPWS, IFI and DCC Parks and Landscape Services with monitoring of constructed marine habitats to be undertaken and reported.

Soil, Geology and Hydrogeology

- Matters addressed by Parks and Landscape Services Division which are outlined in Section 10.8 below. They relate to concerns previously raised about soils contamination with Dublin Port.
- Useful if applicant were able to put Soils and Geology into context more fully, as GSI has done.
- Information regarding geogenic or anthropogenic causes for levels of chemicals,
- Requested that clarification on results of analysis for Beryllium provided.
- Examination of alternative options in EIAR should examine alternative uses of the dredged material, not only dumping at sea.

Water Quality and Flood Risk Assessment

- Summarised and noted that proposal reviewed by Dublin City Council's Drainage Division who have not raised any objection to proposed development, subject to conditions being imposed.

Air Quality and Climate

- Issue of air quality and climate consideration appears to be adequately addressed by applicant and no significant adverse effect is likely to arise as a

result of proposed development. Also noted that site-specific recommendations received from Air Quality Monitoring and Noise Control Unit of DCC.

Noise and Vibration

- EIAR adequately addresses issues in relation to noise and vibrations. Also noted that site-specific recommendations received from Air Quality Monitoring and Noise Control Unit of DCC.

Material Assets - Coastal Processes

- Summary provided.

Material Assets - Traffic and Transportation

- Includes the content of Roads and Planning report which is summarised at Section 10.5 below.

Cultural Heritage (Including Industrial and Archaeological)

- Industrial: Eastern Breakwater of industrial heritage interest and submitted reports prepared by Southgate Associates have appraised The Terminus (Pier Head) of Eastern Breakwater as being 'Nationally Significant' and Lighthouse Lantern as 'Regionally Significant'. Conservation Section have objected to proposed deconstruction, removal and relocation of historic 19th century Bindon Blood Stoney Pier which is outlined in Section 10.6 below. Clear that pier headwall has significant heritage value and its loss, as currently proposed, is regrettable but clear existing port is spatially confined, and updated Port Masterplan focuses upon optimisation of existing lands. Considered that extension to permitted greenway and proposed heritage zone a substantial mitigation and planning gain. On balance proposed loss of existing Pier Head considered acceptable.
- South Wall, North Bull and Dublin Harbour: - Noted that there has been a continued deterioration in condition of the South Wall in recent times, which has not been addressed and concerns are raised that may continue to negatively impact upon the south wall.
- Archaeological - concurs that an archaeological monitoring brief should be included as a condition with any grant of permission for the proposed development.

Landscape & Visual

- Includes a cumulative assessment, which incorporates development at Berth 49, which was consented under Ref. 3176/19. PA concur with findings of LVIA that proposal would have a negligible change in existing industrial character of Port but note concerns raised by the Conservation Section, about proposed Berth 53, which would be a part single-story/part two-story structure that would be located approx. 6.2 meters above high watermark, at its highest.
- While noticeable change in receiving environment, particularly when viewed from the south wall of Dublin Port, considered proposal would not result in significant negative landscape and visual effects, either individually or cumulatively.
- In terms of mitigation and overall greening of the port recommended that a landscape/greening plan should be prepared for application site area and this should be conditioned as outlined in Section 10.8 below.

Population and Human Health

- Contents and conclusion of Chapter is summarised.

Waste

- Contents and recommendations contained within waste chapter of EIAR is currently under review by Waste Management Division of DCC and will be forwarded to An Bord Pleanala in due course.

Cumulative Effects and Environmental Interactions

- Summary provided.

10.3. **Appropriate Assessment**

- Includes content of the Parks and Landscape Services Division which is outlined at Section 10.6 of this report below.
- Having reviewed NIS, PA concur with conclusions reached and have no reason to deviate from results of the assessment.

10.4. **Planning Assessment**

Principle

- Current proposal to increase capacity at the Port complies with stated aims of City Development Plan as well as zoning objective, as it provides for port-related facilities and activities which are permitted uses.

- PA recognises that current proposal which will facilitate an increase in capacity in the port will ultimately enhance the economic life of the city which is a core aim of the City Development Plan.
- Proposal will minimise the extent of any physical impacts on the character and amenities of the coastal zone/bay and will also allow for greater physical connectivity with the city and the reuse of existing resources.
- While the port-related development and proposed “Heritage Zone” would be confined to Z7 zoned lands, noted that the red line boundary includes a portion of Z9 zoned land located along the eastern boundary of the site, within which development related to pedestrian and cycling greenway is proposed.
- Proposal is considered to comply with the zoning provisions of the Dublin City Development Plan 2016-2022.

Cruise ships and Cruise tourism

- Noted that in response to the previous SID 29N.PA0034 concerns were raised by DCC with regards the potential for development to prejudice the future development of a cruise terminal building with applicant stating that landside provision for cruise ships will be delivered within the adjoining Alexandra Basin and will complement the development permitted as part of the ABR Project.
- Stated that cruise vessels are being accommodated on available berths on demand and it is considered that current development would not prejudice the ongoing provision for and development of cruise ship tourism and is therefore considered to be acceptable in this instance.

Conservation and Built Industrial Heritage

- Conservation Officer has raised serious concerns regarding proposed removal of the Eastern Breakwater Pier Head (see summary of report at Section 10.6 of this report below).
- PA recognises that Dublin Port is required to facilitate modern commercial ships which are typified as large vessels with a deep draft, and suitable berthing facilities for mooring, loading and unloading required for such vessels.
- Noted that updated Dublin Port Masterplan focuses upon the optimisation of existing port lands, rather than the expansion eastward which would likely have a

detrimental impact on the adjoining Natura 2000 sites, as previously proposed and refused by ABP.

- History of Port is a continually evolving infrastructure with challenge to manage change in a way that allows for the retention of character and special interest.
- Strategic importance of port and its capacity to fulfil its role must be balanced against demolition of existing Pier Head, which, as set out by both the applicant and Council's Conservation Section has significant national heritage value but not included on Council's Record of Protected Structures.
- Clear that pier headwall has significant heritage value and its loss, as currently proposed is regrettable but existing port is spatially confined, and updated Port Masterplan focuses upon the optimisation of the existing lands.
- Extension to permitted greenway and proposed heritage zone a substantial mitigation and planning gain and on balance, proposed loss of existing Pier Head considered acceptable and worthy of support.
- Proposed plans illustrate the installation of a gate along the route which would limit access to the western portion of the greenway and the heritage zone and recommended as part of mitigation (Chapter 7 EIAR) that the gate be used to control access during periods of low spring tides to avoid disturbance of feeding grounds within the Tolka Estuary and requested that the applicant, by condition, required to clarify the management of this area and when access would be restricted to this portion of the greenway.
- Parks and Landscape Services welcomed the proposed installation, the 'Marker', to incorporate features which will inform visitors of the port's industrial, maritime and ecological heritage and it has been recommended that DPC engage with the UNESCO Biosphere's Conservation and Research Group with regard to the ecological content of this important installation as a means to gain expertise and input from the wider community of environmental organisations of Dublin Bay's natural heritage.
- PA's Conservation Section raised concerns about the continued and likely impacts of increased scouring/dredging/water movements that will arise from the proposed development on the South Wall, which currently displays serious defects and noted that there has been a continued deterioration in the condition

of the South Wall in recent times and recommended that the applicant be requested to address the concerns of DCC's Conservation Section in relation to the negative impact upon the south wall of the port.

Impact on amenity

- While proposal is an intensification of existing port operations some of the proposed elements, the proposed Berth 53, would be substantial and visible from outside the port, particularly from the South Wall.
- Acknowledged that development has been designed specifically to meet the requirements of the port and would be located on established port lands.
- PA would concur with findings of the LVIA that development would have a negligible impact on the existing industrial character of the port lands and no objection is raised to this element of the proposed development.

Roads and Traffic

- Roads and Traffic Planning Division has assessed the proposal and while supportive of the proposed development require further agreement, specifically the timing of the closures of the accesses and traffic management measures from East Wall Road.
- Recommended that a condition be attached, should permission be granted, requiring the timing of road closures to be agreed with Dublin City Council.

Community Gain

- Proposal for Community Gain (Appendix C) is acceptable in principle to DCC Parks and Landscape Services and requested that the applicant provides a site location map of the proposed site(s) for the Community Gain proposals.

Conclusion

- Opinion of DCC that proposed development which aims to provide increased capacity at the Port by increasing the depth and navigability of the access channel and providing more multi-purpose berths accords with policies and objectives of the Dublin City Development Plan 2016-2022 and other relevant plans.

- Intention to deliver the project by redeveloping existing infrastructure and by increasing the productivity of existing port lands and without any major reclamation works (in contrast to previous proposals) is welcomed by DCC
- Acknowledged that proposal would further support the long term growth of Dublin Port, and would enable the port to keep pace with developments in shipping internationally where larger ships are becoming the industry norm.
- Noted that proposal accords with principles of relevant policies and objectives of DCC, number of issues which the PA would like clarified or if granted would be conditioned to ensure the development is carried out in accordance with the proper planning and sustainable development of the area.
- Noted that concerns have been raised by the Conservation Section in relation to the potential impacts upon of the development on the south wall of the port.
- PA request recommendations of EIAR and NIS would be carried through in any grant of permission in order to safeguard the character and amenities of the River Channel, Dublin Bay and reduce any potential impacts on the site of the development and adjoining lands.

10.5. **Roads and Traffic Planning**

- To facilitate infrastructure for departures and public access to Terminal 1 the full width available in this area from the edge of the State Services yard to the west to the edge of the greenway to the east, is required which will prevent installation of the four northbound arrival lanes as consented under the Internal Roads Project with traffic diverted through the State Services Yard.
- Detailed outline of construction compounds and phasing provided.
- Draft Construction Traffic Construction Management Plan outlined
- Noted that an outline Mobility Management Plan has been included
- Traffic Impact Assessment in EIAR outlined and stated that detailed traffic modelling has been carried out on impact of the proposed development on the internal and external road networks.
- Stated that TIA notes that the proposed development will not impact on the potential extension of the Luas as currently included in NTAs Transport Strategy for the Greater Dublin Area for 2016-2035.

- TIA concludes that existing, permitted and proposed road network and transportation measures will accommodate the trips generated by the MP2 Project.
- States that increased road capacity will be provided on the external road network by the closure of the Port Estate accesses along East Wall Road, and the delivery of the Southern Port Access Road (SPAR) will provide further capacity benefits along East Wall Road.
- Also notes that the Dublin Port Tunnel and Toll Plaza will have sufficient capacity at 2040 when the MP2 Project is complete and operational.
- Transportation Planning Division is satisfied with the information submitted as part of the EIAR and with the principle of the proposed development overall.
- Conditions recommended in respect of Mobility Management Plan for agreement with the Planning Authority prior to occupation; Construction Management Plan shall be submitted to the planning authority for written agreement prior to commencement of development providing details of intended construction practice for the development, including traffic management, hours of working, noise management measures and off-site disposal of construction/demolition waste; compliance with the requirements set out in the Code of Practice; All costs incurred by DCC, including any repairs to the public road and services necessary as a result of development, shall be at the expense of the developer. Work in the public road may only be carried out by Dublin City Council.

10.6. **Conservation**

- Eastern Breakwater Pier Head recognised as one of most important and innovative surviving remnants of the historic port, and is included in the Dublin City Industrial Heritage Record (DCIHR No. 19-09-002) with lantern and bell from Lighthouse salvaged by Dublin Port.
- South Wall (RPS Ref. No. 6798) and North Wall/Bull Wall (DCIHR, Ref. 19-05-001) while outside subject site, likely to be impacted by the proposed works such as scouring/dredging and intensification of water movements from large vessels and assessed as they form an intrinsic part as the visible boundary of the historic Dublin Harbour, constructed in 1715-1795 and 1819 – 1824 respectively.

- Planning Report (4.1.2) notes 'no architectural features of built heritage designated within the development area'. Southgate and Associates have appraised The Terminus (Pier Head) of the Eastern Breakwater as being 'Nationally Significant' and the Lighthouse Lantern as 'Regionally Significant'.
- Noted that Bindon Blood Stoney's North Quay, Eastern Breakwater and Alexandra Deep Water Basin displayed innovative new construction techniques and execution using concrete with vast majority of quaysides in Ireland's ports up to this constructed with bonded rubble masonry faced with large cut facing stones with this method employed for the quays along the Liffey which were built in the late eighteenth and nineteenth centuries.
- Proposed development and expansion of the port to improve its economic viability and the new cycleway and public amenity at its east end are supported in principle provided the remaining historic fabric within the port is not damaged or compromised by the proposed works.
- Eastern Breakwater Pier End is not included in the Record of the Protected Structures, but it is of Architectural, Archaeological, Technical and Social Interest as defined as Categories of Special Interest set out in the 2000 Planning Act with proposed deconstruction, removal and relocation of the historic 19th century Bindon Blood Stoney Pier end within a new *'evocation of the roundel…that illustrates the geometry of the Pier Head*' in the 'Heritage Zone' not supported by the Conservation Section and does not accord with best conservation practice and conservation principles, nor the Dublin Principles in relation to Industrial Heritage and would result in the loss of one of the last surviving significant features of maritime interest within the port area.
- Refer to Dublin Principles, adopted by ICOMOS General Assembly (2011), of protect (Principle 2) and conserve (principle 3).
- Adoption of the Dublin Principles by ICOMOS General Assembly was a major step in the recognition of the significance of industrial heritage, and the need for its conservation, protection and enhancement.
- Conservation principles set out within the Architectural Heritage Protection Guidelines 2011 are contravened by the proposed works.

- Acknowledged that ongoing development and alteration within a commercial port is inevitable, concerns relate to the continued incremental losses where the special category of interest and special significance is adversely impacted by such development with illustrations in Industrial Heritage and Compensation Planning and Design Report outlines extent of removal of structures in the area.
- Proposed removal and relocation of 19th century Pier End has not been sufficiently justified in the documentation provided by applicant and consider that the separation of the Pier Head from last visible remains of the historic breakwater (possibly buried) and its 'evocation' at the east end of the proposed new 'Heritage Zone' with the former lighthouse lantern within the new 'Marker' feature offers little mitigation for its dismantling, removal and relocation.
- Existing stone steps adjoining Pier End not referred to in the proposed works.
- Report notes that the base of the 'Marker' will echo the actual plan of the Pier Head Lighthouse, but does not indicate which one (that constructed in 1907 or the earlier lighthouse).
- Any remains discovered should be respected in any works arising, and a detailed methodology should be provided for the demolition and removal of the Operations Building from the Pier End to avoid any damage to the historic fabric.
- Legacy of Bindon Blood Stoney would be better served by retaining the Pier Head in its existing location in terms of protecting the architectural heritage and recommend that applicant reconsiders proposed removal of the Pier End, and this important historic features remains in its current location and an alternative design is developed to accommodate a large berth 50A for larger vessels.
- Grave concerns about the continued and likely impacts of increased scouring/dredging/water movements that will arise from the proposed development on the South Wall, a Protected Structure and Recorded Monument within a Conservation Area, which currently displays serious defects that include cracked stones, large continuous gaps along the edges of the wall at upper and lower levels, and obvious subsidence and dipping in particular on the northern side with any further significant works that would intensify the amount of dredging/scouring/water movements arising from increased traffic volumes will continue to have a significant effect on the historic fabric of the South Wall.

- EIAR statements that there will be no impacts from proposal on the Sea wall - Great South Wall to Poolbeg Lighthouse has not been adequately demonstrated.
- Refer to DCC Development Plan 2016 - 2022 Objective CHCO10 – 6 which seeks to have regard to the city's industrial heritage and Dublin City Industrial Heritage record (DCIHR) in the preparation of Local Area Plans and the assessment of planning application' and 14 which seeks 'to implement and promote The Dublin Principles (ICOMOS,2011).
- South and North Walls (Protected Structures), Policy CHC2 seeks 'To ensure that the special interest of protected structures is protected'.
- New Berth 53 and Heritage Zone **-** Proposed new stepped feature and evocative Marker hugely dependent on the quality of the materials used, particularly the concrete, in the formation of this new public place. Based on images provided in Industrial Heritage Impacts and Compensation Planning and Design Report, the new two-tiered concrete Berth 53 obstructs the views of the bay looking south.

10.7. **Air Quality Monitoring and Noise Control**

- The mitigation measures in EIAR Report must be implemented in full.
- Measures outlined in Air Quality Monitoring and Noise Control Unit's Good Practice Guide for Construction and Demolition must be implemented in full with the risk category is high risk for this purpose.
- Site and building works required to implement the development shall only be carried out between the hours of: Monday to Friday - 07.00 a.m. - 6.00 p.m; Saturday 08.00 a.m. - 2.00p.m and no activity on site Sundays and Bank Holidays with deviation from these times will only be allowed in exceptional circumstances where prior approval has been received from Dublin City Council. Such approval may be given subject to conditions pertaining to the particular circumstances being set by Dublin City Council.
- Air quality monitoring network to monitor air pollution during construction and operational phases must be proposed and approved by DCC with proposal having regard to the provisions of the Air Quality Standards Regulations 2011.

10.8. **Parks and Landscapes Services Division**

Consultation

- Consultation with Division on matters concerning biodiversity, flora, fauna and landscape impacts has been brief (meetings outlined).
- No recent discussions with Division and little opportunity to discuss the data or proposal submitted or query its contents with capacity to review the application limited and the sections which were reviewed are noted below.
- Lack of comments on sections not covered below should not be interpreted as agreement with their contents or conclusions.

Rationale

- Preferable to previous strategies for expansion of the Port through reclamation with an opportunity through this development to increase green infrastructure, especially along coastal edges which should be demonstrated in accordance with Development Standards
- Proposed intensification of development, particularly areas proposed for extension and widening of the channel, have potential to cause a variety of environmental impacts through disturbance of protected species and emissions with timeframe of nine years means impacts are sustained and that phasing and timing of proposed works and mitigation measures need to be clearly set out and adhered to.

Monitoring

- Must be timely to ensure that any deleterious effects or failures in mitigation are rapidly identified and addressed.
- Post-construction monitoring measures will vary according to the requirements of several protected species that are identified as impacted or potentially impacted.
- Additional plans or projects may arise over such a lengthy period cumulative impacts of which will need to be accounted for in terms of the proposed Environmental Management Plan.

Dublin Port Master Plan

- Must be fully integrated with the Natura 2000 sites within Dublin Bay and, if disposal at sea is proposed, with the marine SAC associated with this and all sites en-route or impacted.

Flora and Habitats

- While EIAR (pg 7-23) states no significant impacts in relation to flora across habitats, site includes habitats of local importance for wildlife, particularly pollinators, which will be lost permanently by the proposed development with condition recommended that a) sites be identified for post-construction restoration of native flora and b) the establishment of new planting areas be included to provide for local pollinators.

Terrestrial Mammals

- While otter not found in the terrestrial component of proposal, otter – including juveniles – have been reported in several repeated surveys by DCC and others on River Tolka with measures along the coastal edge of the proposed Greenway near the Tolka Estuary could be conditioned for otter.

Atlantic salmon

- Salmon smolt migration takes place in March to May with applicant proposing cessation of piling from March until May (EIAR & NIS) to mitigate disturbance to the migration of salmon smolts but dredging activity proposed during the winter months - October and March to mitigate any impacts on nesting terns and on salmonid migration (NIS, pages 218 & 234) which is contradictory with condition recommended that no piling or dredging during the month of March should be permitted.

Harbour Porpoise

- Current marine mammal mitigation proposes sea conditions for effective visual monitoring by MMOs are WMO Sea State 4 (≈Beaufort Force 4 conditions) or less with Irish Whale and Dolphin Group preferred protocols for surveying for Harbour Porpoises is a WMO Sea State (≈Beaufort Force 2 conditions) due to the smaller size of the animal and the height of its pectoral fin out of the water compared to other cetacean and recommend that remedial and mitigation measures for visual scanning of Harbour Porpoises should be set at WMO Sea State 2 (≈Beaufort Force 2 conditions).

Common and Grey Seals

- Current marine mammal mitigation for proposed development proposes sea conditions for effective visual monitoring by MMOs are WMO Sea State 4 (≈Beaufort Force 4 conditions) or less with NPWS guidelines (NPWS 2014)

stating that detection improves considerably below WMO Sea State 3 (≈Beaufort Force 3 conditions), recommended that remedial and mitigation measures for visual scanning of common and grey seals should be set at WMO Sea State 3 (≈Beaufort Force 3 conditions).

Black Guillemot

- EIAR states that Black guillemot (Cepphus grille) not disturbed by existing ABR works, also states numbers of Black Guillemot in Dublin Port have declined over the period 2013-2018 with black guillemot nesting within development area 14% of population of birds in the locality with proposal requiring that guillemot natural nesting sites are replaced by man-made nesting boxes.
- Unclear whether birds nesting close to pile driving in natural nesting sites are less exposed to noise and vibration compared to sites in man-made structures that may be more exposed to noise and vibrations and while proposed cessation of piling from March - May helps mitigate disturbance to species, monitoring of Black guillemot within the proposed development area should be conducted to ensure there is no disturbance to nesting pairs with measures outlined.
- Monitoring of Black guillemot within the proposed development area should be conducted to ensure that there are no impacts from the proposed development on breeding success with sampling designed to compare breeding success rates between Black guillemots nesting in cavity walls or pipes and those that nest in artificial structures as this would provide clearer evidence that mitigation measures are suitable and appropriate to the site and rule out the proposed development as a cause of any future population decline and if mitigation measures not succeeding, need to take an adaptive management approach and agree with the NPWS and DCC an alternative mitigation strategy to prevent further population decline if possible.
- Monitoring programmes should incorporate regular reviews (after every 2 years) to provide a mechanism for adaptive management and to learn from monitoring results with review structures based on parties involved in the ABR project and the reviews should be made publicly available.

Arctic and Common Tern

- Relocation of a tern colony pontoon at area M on the Poolbeg Port Lands proposed in Masterplan as Poolbeg area also being considered for future development works and unclear whether the relocated tern colony pontoon will have to be moved again as part of any future schemes.
- Position of the relocated pontoon should be considered and located to a position further than 250m from the site of construction works to reduce any potential disturbance to nesting birds.
- Pontoons should be in position and not disturbed between the months of March and September with clarification required as to: a) whether or not the Applicant has conducted an analysis of the optimum location(s) for siting of the pontoons and b) if these are permanent locations or subject to further changes as part of the Master Plan for Dublin Port.
- Clarification required that the pontoons will remain in position undisturbed between the months of March and September.

Benthic impacts

- Proposal proposes permanent loss of benthic habitat at Oil Berth Basin 4 and as this site is interconnected with the Liffey estuarine habitats should be viewed as one ecosystem habitat in accordance with European Commission guidance (EC 2011) and applicant should be required to provide new benthic habitat within the Port lands to offset this loss and provide fishery enhancement measures for MP2 project to offset loss of benthic habitat within Oil Berth 4 basin with an equivalent area of habitat.
- Inland Fisheries Ireland also raised the marked long-term decline in number of salmon migrating through inner Liffey channel and importance of maintaining the benthic community for protection of fishery interests (5-14) and also the need to create rough surfaces to encourage marine growth (5-15). Technical solutions - specially designed precast concrete tiles currently being trialled through the Ecostructure project and proposal should incorporate 'best available technology' in accordance with the EC's guidance (EC 2011) with Applicant confirming willingness to provide such measures in response to the IFI's request.
- DCC recommends condition requiring Applicant provide an area equivalent to that which is proposed to be permanently infilled at Oil Berth 4 basin and the void

at Oil Berth 3 of newly-constructed marine habitat using best available technology by way of design of artificial surfaces to be agreed with the NPWS, IFI and DCC Parks and Landscape Services with monitoring of the constructed marine habitats to be undertaken and reported as part of the Environmental Management Plan and outcomes made available by publication using open access methods to allow dissemination for use at other sites in Ireland.

Soils and Geology

- DCC has consistently raised concerns about soils contamination with Dublin Port on planning applications with findings of SURGE Project included in the previous City Development Plan and its accompanying SEA report and DCC will continue to ensure that these impacts are assessed in relation to this historic contamination, which the applicant has stated is widespread and is part of the baseline for both surface and groundwaters from the surveys undertaken by them.
- Useful if applicant were able to put Soils and Geology into context more fully, as the GSI has done and in terms of assessment noting for each chemical tested if there are geogenic or anthropogenic causes for the levels, if these are atypical for Dublin's coastline, if they are typical of ports or if there are known causes due to industrial site history to explain the levels with the SURGE report providing an account of historic causes for several of these at Dublin Port.
- Section 8.4.8.1 states that 24 soil samples were sent for chemical analysis for a range of elements and compounds including Beryllium but no results reported for these tests in the EIAR with DCC noting SURGE project (2012) states that "Beryllium concentrations are elevated (above the 90th percentile concentration for Be) in the heavy industry zone in the Dublin port area with clarification requested on the results of the analysis for Beryllium.
- Volume of marine sediments proposed for dredging and dumping at the Burford Bank is proposed as 424,644 m3 with the proposed disposal site is located within Rockabill to Dalkey Island SAC. DCC requests that the EIAR include an analysis of alternative uses of the dredged marine sediment, including finer materials, as an alternative to disposal at sea as waste.

Landscape & Visual Impact Assessment

- Found to be acceptable, in terms of mitigation and overall greening of the port recommended that a landscape/greening plan should be prepared for the application site area.
- Alterations to Existing Greenway Proposal - DCC recommends that applicant engage with the UNESCO Biosphere's Conservation and Research Group with regard to the ecological content of heritage installation as a means to gain expertise and input from the wider community of environmental organisations of Dublin Bay's natural heritage.

Marine Mammal Management Plan

- Proposed measures (Appendix 19-6 Draft Marine Mammal Management Plan) considered acceptable but should be conditioned that that DCC, as landowner of North Bull Island and as the local authority for North Bull Island SPA, has access to the data from this monitoring programme not just the annual summary reports to facilitate the revisions of the City Biodiversity Action Plan, the City Development Plan, periodic review reporting to UNESCO and to permit future analyses of biodiversity and climate change impacts in Dublin Bay UNESCO Biosphere.

Birds and Marine Ecology Management Plan

- Proposed measures (Appendix 19-7 Draft Birds and Marine Ecology Management Plan) considered acceptable but should be conditioned that DCC has access to the data from this monitoring programme not just the annual summary reports to facilitate the revisions of the City Biodiversity Action Plan, the City Development Plan, periodic review reporting to UNESCO and to permit future analyses of biodiversity and climate change impacts in Dublin Bay UNESCO Biosphere.
- Proposal to close the gates at the Greenway during tern feeding periods is acceptable to DCC for biodiversity reasons but timing of, and reasons for, the gate closure need to be clearly communicated to the public by DPC with potential that public health and safety issues may arise in terms of the location and design of closure points.

Cumulative Impacts

- Impacts of the various sub-projects under the Greater Dublin Area Cycle Network Plan (NTA) should be considered with regard to potential impacts on protected species and habitats particularly their potential disturbance to winter migratory birds.

Community Gain

- Acceptable in principle to Division but request that the applicant provide further clarification as to the exact location of the proposed City Farm and recommended the Applicant provide a site location map of the proposed site(s) for the Community Gain proposals.
- Recommend applicant contribute at least a sum of 50% of the site value of the Polefield at the date of the grant of permission to a maximum contribution of €1m towards the provision of public open space in the locality with these sums in addition to the current community based initiatives and special projects that Dublin Port Company is undertaking.

10.9. **Drainage Division**

- No objection subject to compliance with Greater Dublin Regional Code of Practice for Drainage Works.
- Development is to be drained on completely separate foul and surface water systems.
- Appropriate oil water separators and silt traps installed on internal drains as indicated on drainage layout drawing (CP1770-ATK-01-ZZ-M2-CE-0501, Rev.00)
- Incorporate Sustainable Drainage Systems in management of surface water with full details to be agreed in writing with Drainage Division prior to commencement of construction.
- Flood mitigation measures as detailed in submitted Flood Risk Assessment to be implemented.

10.10. **Central Area Committee of Dublin City Council**

10.10.1. A meeting of the Area Committee was held on 10 September 2019. The report on same states that the application was noted by the elected members and no

additional comments were made in relation to the subject application or the submitted report.

11.0 **Oral Hearing**

11.1. An oral hearing in respect of the proposed development was held on 16 December 2019 in the offices of An Bord Pleanala and lasted one day. The following provides a brief summary of the principle matters arising. The oral record of the hearing is attached.

11.2. The applicant was represented by the following persons who made presentations to the hearing, a number of which were composite submissions from a number of contributors all of whom were in attendance to respond to questions arising. In addition to their Legal Counsel of Jarlath Fitzsimons, Senior Counsel and Sinead Bell, Barrister-at-Law who provided a legal submission to the hearing, the applicant submission was presented by the following:

- Adam Cronin, Byrne Looby Consulting Engineers, Design Team Project Manager provided the requested overview of the proposed development.
- Eamonn O'Reilly, Chief Executive Dublin Port Company, outlined the project rationale and associated issues.
- Helena Gavin, RPS, outlined matters related to planning policy.
- Dr. Alan Barr, RPS responded to matters related to EIAR issues.
- Celine Daly, RPS outlined matters related to traffic and transportation.
- Adrian Bell, RPS addressed matters related to coastal processes, flood risk, soils, geology and hydrogeology. The presentation was also prepared by Andrew Jackson, Joseph McGrath and Alan Barr.
- Paul Chadwick, RPS provided a response to the matter of air quality and climate.
- James McCrory, RPS addressed matters relating to ecology. The presentation was also prepared by Gerard Morgan, Dr. Simon Berrow, Richard Nairn, Grace Glasgow, Stephen Cleary and Eugene McKeown.
- Richard Nairn, Natura addressed matters relating to Habitats Directive Appraisal. The presentation was also prepared by James McCrory, Gerard Morgan, Dr.

Simon Berrow, Grace Glasgow, Stephen Cleary, Eugene McKeown, Paul Chadwick and Adrian Bell.

- Raymond Holbeach, RPS addressed matters related to landscape and visual.
- Niall Brady, ADCO addressed matters related to cultural heritage, industrial heritage impacts, compensation planning and design. The presentation was also prepared by Chris Southgate and Sean O'Laoire.
- Captain Michael McKenna provided a response to matters relating to navigation.

11.3. The applicant was specifically requested to address the submissions and observations received by the Board in their presentations to the hearing and same are detailed within the presentations delivered at the hearing.

11.4. The applicant was also requested to address the environmental factor of 'Land' at the oral hearing. This matter was addressed in the submission of Dr. Alan Barr relating to EIAR issues and in the legal submission provided by Jarlath Fitzsimons, S.C. In response the applicant outline that the matter of land has been addressed within the EIAR under a number of other factors and that none of the conclusions reached or mitigation proposed would be different to that proposed if the matter had been addressed specifically.

11.5. Dublin City Council were represented by Deirdre O'Reilly from the Planning Department but did not make a submission nor did they ask questions.

11.6. Four observers attended the hearing with three making an oral submission to the hearing as follows:

- Alan Robinson, Dublin Docklands Forum made an oral submission which addressed the following matters: Principle of doubling capacity of Port within city centre, capacity increase dwarfing of all other Ports in State, impact on Port tunnel and infrastructure, Docklands Forum detailed, fails to meet dramatic changes in exporting landscape, concentrating almost all export in one city centre location, dominant market share, final capacity in 20 years depending on growth in exports with nowhere to go after major public investment, Docklands tourism growth/urban regeneration damaged, no pre-consultation undertaken with Docklands businesses, more suitable alternative sites for proposal, projected growth in Dublin cannot be accommodated in City, potential for joint venture with

Rosslare, co-operating network of Ports within the State required, Port site is too small, inland Port required, cutting cruise ship visits, request permission refused.

- Cllr. Donna Cooney, Green Party made an oral submission which addressed the following matters: Application and preparation of air quality management plan in the area, use of trains to transport goods to Port, potential closure of Port tunnel, EPA data, effect of sea salt on data, impact on salmon and lamprey from pile driving and dredging, contradictions in reports in terms of salmon, concern at night-time dredging, impact on harbour porpoise, question time allowed for recovery, concur with Birdwatch Ireland concerns.
- Peadar Farrell made an oral submission which addressed the following matters: Scuba diver in the Bay with diving suspended 16 times in last season, cannot dive at certain times due to silt from disposal, proposal is easterly extension of the Port, use of 'MP2' deceptive, continuous dredging undertaken, data from monitoring not made public, ability to dive affected so must affect marine life, potential for Port 'road' fairway to be shut down with impact on State, dispersal of silt is retained within Bay, air pollution mitigation measures in Port Tunnel, archaeology present within the site with shipwrecks found within outer area, inappropriate excavation of archaeology by dredger.
- Deirdre Tobin representing Clontarf Residents Association attended the hearing but did not make an oral submission.

11.7. Questions of the applicant included the following matters:

- Provisions of Annex 3 of Air Quality Directive and Schedule 3 of Regulations
- Air quality management plans
- Use of EPA data,
- Linkage by applicant of sea salt to PM10,
- Contradictions in reports in terms of requirement for mitigation
- Impact on harbour porpoise,
- Dredging Impacts
- Time allowed for recovery from dredging
- Legal guarantee regarding reclamation of lands and seaward expansion.

- Extent of proposed reduction in cruise ship visits
- Port Network Designations
- Potential to change zoning of the Port
- Damage to road network caused by HGV's
- Current condition of East Wall Road

11.8. The applicant's team were provided with an opportunity to respond to the matters and the matters are addressed in the assessment below.

11.9. Inspector's questions related to clarifications in the EIAR particularly in Chapter 7 and the NIS, location of the cooling outfall, volumes used to extrapolate growth figures, proposed berthing locations and timeline for works to East Wall Road.

11.10. Closing submissions were made by Cllr. Donna Cooney, Deirdre Tobin, Alan Robinson and the applicants Legal Counsel.

12.0 **Assessment**

The following matters are addressed in the following planning assessment

- Principe of Proposal
- Specific Matters Requested
- Traffic and Transport
- Biodiversity
- Soils, Dredging, Dumping at Sea and Water Quality
- Flood Risk
- Landscape and Visual Impact
- Cultural and Industrial Heritage
- Air quality
- Consultation
- Community Gain

12.1. Principle of Proposal

For ease of reference, the consideration of the principle of the proposal is addressed under a number of subheadings as follows:

- Compliance with National Policy
- Compliance with Local Policy
- Need and Justification
- Dominance of Dublin Port/Capacity of Other Irish Ports
- Moving the Port
- Brexit

12.1.1. Compliance with National Policy

12.1.1.1. Section 7.2 of the applicant's Planning Report deals with the principle of the proposal and addresses national and local policy. In respect of National policy it is stated that Project Ireland 2040 National Planning Framework recognises the role of ports and their ability to provide additional port capacity in a timely and predictable manner noting that port and shipping services play an important role as enablers of economic growth and are critical infrastructure for international trade, with over 90% of our international trade moving by sea. It is stated that airports and ports are vital to the nation's survival, competitiveness and future prospects. The NPF acknowledges National Ports Policy designation of Dublin Port as a Tier 1 Port of National Significance and states that the strategic development requirements of Tier 1 Ports, and Dublin Port in particular, be addressed as part of the Regional Spatial and Economic Strategy, metropolitan area and development plans. The National Development Plan highlights that significant investment in Ireland's airports and ports will play a major role in safeguarding and enhancing Ireland's international connectivity which is fundamental to Ireland's international competitiveness, trading performance in both goods and services and enhancing its attractiveness to foreign direct investment. The NDP clearly states that the importance of this objective cannot be understated in the context of the UK's exit from the EU in 2019.

12.1.1.2. Furthermore, in relation to the principle of redeveloping brownfield lands, as outlined by the applicant, some of the existing infrastructure within this area of the Port is either at the end of its useful life or is not of scale which can facilitate changes in modern shipping design i.e. larger and longer vessels. One of the central principles of the NPF is to promote more compact forms of development and it focuses on reusing previously developed 'brownfield' land. The Dublin Port Masterplan 2040, which was reviewed in 2018, is underpinned by this development model whereby it is proposed that in order to meet projected growth existing lands within the Port would be optimised rather than seeking to reclaim land in the Bay which has previously been refused permission. In this regard I consider that the proposal complies with National Planning Policy.

12.1.1.3. In terms of National Port Policy, Dublin Port is designated as a Tier 1 port and it is specifically stated that the continued commercial development of these three ports of National Significance (Tier 1) is a key objective of National Ports Policy. The Policy states that it is recognised that the location of Dublin Port Company inevitably gives the port competitive advantage over other ports and will give rise to competition concerns but that a continuation and strengthening of the landlord model of operation in the ports estate will allow for continued intra-port competition between the privately operated port terminals within the port estate. I would also note that Dublin Port is part of the North Sea – Mediterranean Corridor that stretches from Belfast, Cork and Dublin, through the UK, Belgium, Luxembourg and France. This is a Core Network Corridor within the trans-European transport network. I submit to the Board that the development principle of the proposed development is wholly consistent with national infrastructure policy and objectives for Dublin Port and international trade.

12.1.2. **Compliance with Local Policy**

12.1.2.1. At the outset I would note that there are two zonings within the application boundary. The majority of the lands are zoned Z7 Industry and Employment, the objective of which is '*to provide for the protection and creation of industrial uses and facilitate opportunities for employment creation'.* Port-related industries and facilities are permitted in principle within the Z7 land-use zoning objective. Section 14.8.7

acknowledges that the primary uses on Z7 lands include those which can result in a standard of amenity which would not be acceptable in other areas, and can result in disamenity which needs to be managed through the planning process to safeguard adjoining residential amenities. I consider that the proposal accords with this zoning objective. A small area of the site along its periphery are zoned Z9 Amenity/Open Space Lands/Green Network which seeks '*to preserve, provide and improve recreational amenity and open space and green networks'*. The Z9 (Amenity/Open Space Lands/Green Network) zoned lands provide a green buffer along the northern and eastern site boundary. The City Development Plan permits open space uses in principle on Z7 lands while Community facilities and Cultural/recreational buildings and uses are listed as being Open for Consideration. I consider that the proposal to create a heritage zone would comply with the objective.

12.1.2.2. I would note that the Development Plan, at Chapter 4 in particular, expressly states that Dublin City Council fully supports and recognises the important national and regional role of Dublin Port in the economic life of the city and the region and the consequent need in economic competitiveness and employment terms to facilitate port activities which may involve port development or relocation in the longer term. In addition to the strategic support, the City Plan contains a number of strategic policies and objectives specific to Dublin Port operations and activities, such as Policy SC9 which seeks to support and recognise the important national and regional role of Dublin Port in the economic life of the city and region and to facilitate port activities and development, having regard to the Dublin Port Masterplan 2012-2040. Furthermore, CEE23 (iii) states that it is policy to recognise that Dublin Port is a key economic resource, including for cruise tourism, and to have regard to the policies and objectives of the Dublin Port Masterplan.

12.1.2.3. In relation to cruise tourism, Section 7.6.3 of the Plan, recognises the role of Cruise Shipping and Retail for Dublin City stating that since 2010, between €35m and €50m has been generated for the local economy through cruise traffic. I would note that at the oral hearing, in response to matters included in an observation and questions at the oral hearing, Mr. Eamonn O'Reilly, Chief Executive of Dublin Port stated that Cruise ships berthing in the Port has been reduced for three years while infrastructural works are being undertaken as part of the ABR project and that after

that as many bookings will be taken as the berths can accommodate. It was also outlined that the consultation stage process of a report into cruise operations at the Port was seeking confirmation from operators that they would use the shore power facility which it is proposed to build in the Port while they are berthed which it was noted was expensive to develop as was all marine infrastructure.

12.1.2.4. I would also note that in terms of dealing with applications in respect of the Port, the Development at Section 16.21 provides an outline of the matters which they consider should be addressed when assessing proposals for the Dublin Port area. These relate to the following: Recognition of the important role of Dublin Port in the economic life of the city and the region and the consequent need in economic and employment terms to facilitate port development; Periphery of the port area facing residential areas to be designed and landscaped to minimise the impact of its industrial character; Impact on nature conservation, recreation, and amenity use, and other environmental considerations, including having regard to the designation of Dublin Bay as a UNESCO biosphere and other environmental designations such as Special Area of Conservation (SAC) and Special Protection Area (SPA); Protection of the amenities of residential and commercial uses in adjoining areas; Design criteria including landscaping, finishes, signage and site layout; and Facilitating plans to make Dublin a 'home port' for cruise tourism, with complementary cruise tourism facilities in the port and wider city/region. I would note, for the Boards information that this assessment addresses all of the relevant parts of the matters outlined.

12.1.2.5. In terms of built heritage, I would refer the Board to section 12.10 of this assessment and s13.10 of the EIAR where cultural heritage is specifically addressed. I consider that it is appropriate to conclude that the proposed development would accord with the relevant polices in the Development Plan including Policy CHCO10. In terms of Natural Heritage and policies GI23 & GI24 I would refer the Board to the specific sections within this planning assessment on biodiversity (s.12.4), the EIAR also in terms of biodiversity (s.13.3) and the Appropriate Assessment (s.14) which assesses the proposal in terms of the Habitats Directive. It is considered that it can be concluded that the proposal would comply with the policies relating to same in the Development Plan.

12.1.3. **Need and Justification**

12.1.3.1. One of the matters specifically requested by the Board at pre-application stage was a rational and justification for the proposed development. The documentation specifically addresses the matter of need for the proposed development in a report entitled Project Rationale included as Appendix A of the Planning Report and is also addressed I would note in Chapter 3 of the EIAR. As outlined in Section 7.1.5 of the Planning Report the applicant states that the fundamental approach of the Masterplan to providing capacity in Dublin Port for the 77.2m gross tonnes per annum projected by 2040 is to maximise the utilisation of Dublin Port's existing brownfield lands rather than seeking to reclaim land from the foreshore or building new additional port facilities at a greenfield location. In this regard the construction of the proposed development is stated to be an essential step towards ensuring that Dublin Port is largely confined to its existing footprint and is based on a cornerstone of proper planning and sustainable development; the redevelopment of obsolete, redundant, brownfield land.

12.1.3.2. One of the main considerations is the provision of increased capacity within the existing Port to meet the projected growth arising up to 2040. Total envisaged increase in Dublin port's capacity up to 2040 is an increase of 48.3m gross tonnes per annum from 28.9m in 2010 to 77.2m by 2040. This is an average annual growth rate of 3.3% cumulatively across difference cargo modes and for ease of reference is set out in the following table.

Projected Growth by Mode as set out by Applicant

Mode	**Current** (gross tonnes per annum)**	**2040 Projection (gross tonnes per annum)**	**% Growth p/a**
Ro-Ro	16.4m	54.3m	4.1%
Lo-Lo	0.6m	15.3m	3%
Bulk Liquid	4m	4m	0%
Bulk Solid	2.1m	3.5m	1.8%

Break Bulk	0.096m	0.1m	0.1%
Passengers (predominately in car)	1.76m passengers (2010 from masterplan)	Not projected – but stated greater frequency in ships will increase numbers	

12.1.3.3. It is stated that with proposed development in place the indicative daily increase in Ro-Ro throughput in Area C from 2018-2040 is 61%. The following table outlines the berths and Ferry services within (masterplan) Area C. Area C will be the only area in Dublin Port where passenger ferry services will operate.

Indicative Berth Usage in Area C (Table 7-1 Planning Report)

Berth	**Indicative Use**
51	Freight Services to Liverpool
51A	Fast Craft passenger services and occasional use for freight
49	Combined freight/passenger services to Holyhead
52	Combined freight/passenger services to Holyhead
53	Combined freight/passenger services to Continental Europe

12.1.3.4. Area D (masterplan area) Section 7.1.3.2 of Planning Report states Lo-Lo development in Area D will result in immediate loss of Oil Berth 4 and planned cessation of petroleum imports through oil berth 43 in the future as petroleum imports decline with the immediate loss of Oil Berth 4 of no consequence to the Port's overall throughput capacity. While throughput and utilisation of Oil Berth 3 are stated to also be low, it provides essential back-up capacity in the event of an outage on Oil Berth 1 or Oil Berth 2 which is considered of importance given that petroleum imports through Dublin Port account for over 55% of national consumption. The Eastern Oil Jetty, which contains Oil Berth 3 and Oil Berth 4, is now almost 60 years old and the requirement for major capital refurbishment works is foreseeable within the lifetime of the Masterplan. It is considered timely now to plan to complete this refurbishment and, by doing this, to future proof Oil Berth 3 for use for alternative purposes. At the oral hearing, Eamonn O'Reilly Chief Executive outlined that it is

proposed to move P&O from their location at Terminal 3 (Berth 21) in the western area of the Port to Berth 51 by the end of 2021 and to move Stena from Berth 51 to the new Berth 52. Terminal 3 has a dedicated access directly from the East Wall Road and moving P&O will facilitate the closure of the exit onto the East Wall Road. Seatruck would move to the west end of the Port.

12.1.3.5. The Hollybrook Residents Group state that the scale of the jetty is unclear but that the masterplan proposal for two jettys appear enormous reducing the sailing and boating area between the Bull Wall and the north docks for boats and leisure craft with sailing areas and depth in Clontarf reducing because the Bay is silting up. They also consider that proposal should be refused as the Port has been swallowing parts of the area over the years with a constant need for more of the Bay. I consider that the proposed development is clearly outlined in terms of its scale and visual impact in the documentation provided. The suite of information provided to the Board is very comprehensive. The Port operates as an important engine of this economy facilitating the import and export of goods from what is an island economy and therefore its use of the Bay is of strategic importance to the State. They state that the infill of Berth 4 should be refused due to the potential future needs of the Port and because all berths are a strategic asset with berths being filled in by the Port for many years leading to continued demand for more berths further out in the Bay. It is clear from the documentation provided that Oil Berth 4 is effectively redundant and its infilling provides for the future proofing of Oil Berth 3 as a future Lo-Lo berth when required. I consider that the proposal as set out is well considered and sufficiently justified.

12.1.3.6. Mr Farrell in his observation states that the proposal appears to be a change of mind from the previous permission and appears based on the advent of much larger container ships wishing to use the Port with a public debate necessary about bringing such ships into the City. He also contends that the application does not address the impact of same in terms of air pollution from dirty fuel, turning, manoeuvring and risk to other users, noise pollution, increased dredging and dumping into the Bay, ships would require 2 lengths of Croke Park to berth. I would note that the project rationale outlines in some detail the need to facilitate larger vessels particularly those coming from European ports. While I address many of the

matters raised in other sections of this report, I consider that in principle it is appropriate to facilitate larger and longer vessels particularly given the need to facilitate trading routes with Continental Europe. The applicant has provided a clear and rational justification for the proposed development.

12.1.4. **Dominance of Dublin Port/Capacity of Other Irish Ports**

Dominance of Dublin Port

12.1.4.1. One of the observers considers that the proposal is protecting the applicant's dominance in the export market. I note the response at the oral hearing by Port Chief Executive Eamonn O'Reilly whereby he states that the phrase market dominance used by observers gives a mistaken impression that there are significant competitive forces within the Irish Port system where there are not. He then references a 2013 report by the Competition Authority where it is stated that the characteristics of the Irish Port sector is such that competition between ports appears limited. I also note the contention expressed by the applicant that the proposal seeks to maximise competition within the Port by expanding the capacity of one of the three Lo-Lo terminals and providing additional capacity for competing Ro-Ro services.

12.1.4.2. A number of the observers consider that the potential to maximise the capacity of other ports, Port of Cork and Rosslare in particular, needs to be considered in greater detail particularly given the potential impact of Brexit and their closer proximity to Mainland Europe. Firstly, I would note that while these ports may be more proximate to Europe, Dublin Port is more proximate to the region that it serves and this is the fundamental reason for the expansion of the Port, that being growth within the Greater Dublin Area and hinterland. I would suggest that the enhancement of capacity at Dublin Port does not prevent the further or future growth of other ports in the State. I would also note that as presented at the oral hearing, by Mr. Eamonn O'Reilly, the quantum of available Ro-Ro capacity in Rosslare and Cork, now or in the future is small in comparison to the growth projected in Dublin Port and therefore not sufficient to meet the growth projected.

12.1.4.3. Furthermore, the capacity in other ports would be required to meet growth in their own hinterlands. On the basis of the information provided by the applicant within the

documentation I do not consider that the observer's assertion is relevant to the Boards determination of the proposal. The application before the Board relates to the development of Dublin Port and the implications in terms of land-use planning and environmental effects. It is not a review of National Port Policy as the Board have no role in establishing or reviewing National Port Policy. In terms of concerns expressed regarding the market share of Dublin Port when compared to UK ports, this was satisfactory rebutted by the applicant at the oral hearing, wherein the different density of population and short sea trade routes with Europe are determined. This is reasonable. I will address matters specific to Cork and Rosslare in the following sections.

Port of Cork

12.1.4.4. The Port of Cork Company in their submission raise a number of matters which I note relate primarily to their operation in Cork and the applicants quantification of same rather than matters related to the proposal which they appear to support in principle. In summary the issues they raise include the following: project rationale understates Ro-Ro and Lo-Lo capacity of the Port of Cork; project should not be promoted on the basis that it will result in a reduction in the share of national Ro-Ro traffic passing through Rosslare or Cork; 2018 data used to support questionable conclusions on ability of other ports to handle volumes of freight; question basis of information presented on trends in Port of Cork; planning rationale underestimates the Lo-Lo capacity of the permitted container terminal at Ringaskiddy; planning rationale should not assume that existing distribution of population between Dublin region and rest of country will be maintained in long term; depth of water and existing and proposed berths in Ringaskiddy are more than adequate for larger Ro-Ro ferries with no requirement for dredging; withdrawal of the UK from TEN-T networks may generate increased demand for direct shipping services from Ireland to Continental Europe which could lead to transfer of some services from Dublin to Cork; concerns regarding the use of data which relates to throughputs prior to completion of M28 and the potential for the use of the combined use Tivoli and Ringaskiddy.

12.1.4.5. I would point out that it is not the role of the Board to determine the location of shipping services in the State. I consider that the proposed development at Dublin

Port is not an either or proposal when considered in the context of other Ports. Arguably, other ports including the Port of Cork are not limited in their short, medium or long term growth forecasts by what is proposed in Dublin. It appears that the concern of PoC is that the proposed development may be impacting on their potential to take some of this share. The proposal before the Board relates to development at Dublin Port which is based on growth projections for the region it serves and therefore in terms of the land-use and environmental considerations it is required to be assessed on same. I would note that as per the long term growth outlined in the project rationale, growth of Dublin Port relates principally to the projected population and related economic growth in the Dublin and Mid/East region whereby the NPF has determined that c.50% of population growth envisaged nationally will occur in this region. I would point the Board to page 22 of the Project Rationale (Appendix A of Planning Report) and to the presentation to the oral hearing by Helena Gavin, where in terms of long-term growth trends reference is made to 49% of the population increase envisaged in the NPF would occur in the Eastern and Midland Region. It is stated that the population projection for 2040 is the planning assumption in the NPF and the volume projection is from the Masterplan. I do not consider that the applicant's planning rationale has assumed anything else.

12.1.4.6. Certainly, the observer has not provided any evidence to suggest a contrary projection has been applied but by my reading it appears that same has been inferred. Furthermore, as outlined in the project rationale, shipping companies choose the routes and Ports they wish to use and it would be inappropriate for the Board, in my opinion, to dictate that they should use one Port over another. I would also note that the Chief Executive of Dublin Port, Eamonn O'Reilly, in his presentation to the oral hearing responds to the concerns raised by the Port of Cork. As I outline above, the capacity available at Cork is not sufficient to cater for the growth projected and secondly, that the capacity of other Ports including Port of Cork will be required to meet demand in their own hinterlands. I consider that the proposed development at Dublin Port either in principle or detail does not compromise the potential of the Port of Cork.

Capacity at Rosslare

12.1.4.7. It is asserted by an observer that Department of Transport, Tourism and Sport research outlines unused capacity in other ports in the country with significant untapped capacity in Rosslare. They contend that with the journey time from Dublin greatly improved with recent motorway network improvements, Rosslare could deliver increased capacity for a fraction of the cost with Dublin Port then able to concentrate on space for Cruise and Ferry terminals. They also state that using Rosslare's capacity would help build Ireland's overall export capacity in preparation for Dublin reaching its limit and in the context of Brexit given that Rosslare has less travel time to the continental market. While the considerations relating to untapped capacity in Rosslare are all based on facts I consider that the applicant in their project rationale and in their response presented at the oral hearing has outlined effectively the reasons why shipping companies choose to berth in Dublin Port rather than ports such as Rosslare. Proximity to markets is an essential factor in this regard and therefore the contention that the proposed development could somehow be dispersed amongst other Ports with existing capacity is unfounded. I would also note the comments made at the oral hearing by the applicant firstly, that the capacity available at Rosslare is not sufficient to cater for the growth and secondly, that this capacity will be required to meet demand in their own hinterlands. I have addressed the matter of cruise ships in Section 12.1.2 above.

12.1.5. **Moving the Port**

12.1.5.1. A number of observers reference the potential to move the port from its current location for a number of reasons including that the doubling of the Ports capacity is at odds with the Council's objectives to promote residential development in the city centre and the strain on urban infrastructure. It is also stated that other cities have moved their Port facilities out of city centre locations with the current proposal to double capacity of a city centre Port out of step with international best practice with examples provided of Cities where ports have been relocated – e.g. Barcelona & Bilbao. Other concerns expressed state that the current port site is not fit for purpose as there has been the need to develop an inland port, cut cruise visits and the ultimate capacity of the Port will be reached by 2040 with nowhere to go. While I note all of the concerns expressed and while there may be merit in the suggestions that the Port could be moved freeing up city centre lands in principle, Government

policy supports the continued expansion of the current Ports facilities. This is outlined in the National Ports Policy and the National Planning Framework amongst others.

12.1.5.2. I would also refer the Board to the submission made to the Oral Hearing by Eamonn O'Reilly, Chief Executive of Dublin Port Company in response to the matter of moving the port. The presentation pays particular attention to the examples provided by observers of other cities where Ports have been moved and I would note, outlines that reclamation has formed a central part in the developments in such cities as Copenhagen, Barcelona and Rotterdam. As pointed out by the applicant the proposal put forward by Dublin Port Company to reclaim lands was refused permission by the Board. I concur with the applicant's statement that simplistic comparisons between the situations in different ports does not provide a reliable basis for the proper planning and sustainable development of the Port. Furthermore, the Board have permitted as part of the ABR Project in 2015, phase one of the redevelopment of the existing Port Lands which provides, I consider, a precedent for the principle of facilitating the proposed development. The application before the Board relates to development at the current Port site and therefore it is this proposal that I intend to assess in the following sections.

12.1.6. **Brexit**

12.1.6.1. While I have addressed Brexit above, as it relates to the closer proximity of both Cork and Rosslare to the European Mainland, the applicant has addressed Brexit in their Project Rationale which is included as Appendix A of the Planning Report. In relation to Brexit, the applicant notes that following the referendum in the UK in June 2016, patterns of trade have changed with increased growth on services between Dublin and ports in Continental Europe such as Rotterdam, Zeebrugge and Cherbourg. It is also stated that following the withdrawal of the UK from the EU parts of the North Sea – Mediterranean Core Network Corridor alignment will become obsolete and in order to address same, Regulation (EU) 2019/495 amending Regulation (EU) No 1316/2013 provides for a realignment of the corridor once the UK leaves the EU. The applicant considers that while the consenting phase of the proposed development coincides with Brexit and the construction and operational

phases of the project will take place in the aftermath of Brexit. Given the long life cycle for the development and operation of port infrastructure, it is expected that in the long term the effects of Brexit as the proposal is constructed and comes into operation will not be significant. It is considered that the additional capacity of Berth 53, of the extended Berth 50A and the future availability of Oil Berth 03 as a Lo-Lo berth all facilitate the provision of services to support changing trade patterns which are already evident with increased deployment of new large ships on direct routes to Continental Europe. I consider that the proposed development will assist the State in respect of the challenges which Brexit may bring particularly given that the longer berths will facilitate larger vessels coming from Continental Europe.

12.2. Specific Matters Requested

12.2.1. The Board determined under Section 37B(4)(a), Planning and Development Act 2000, as amended, (Ref. 29N.PC0252) that the proposed development is strategic infrastructure development. As outlined in the report of the Inspector on the pre-application file, the Board's advice to the prospective applicant during the course of the pre-application meetings provided that the following matters should be addressed, and is summarised as follows with their consideration in this report included in brackets for ease of reference:

(a) Rational and justification for the proposed development (section 12.1 above).

(b) Request for 15-year planning permission to be justified (within this section).

(c) Scale and rational for the proposed new jetty/Berth 53 clearly stated/need justified (within this section); consult with NPWS on potential impacts on the South Dublin Bay and Tolka Estuary SPA (Section 12.11 and Section 14); potential visual impacts assessed (section 12.7 below).

(d) Detailed assessment of construction and design of new jetty/Berth 53 required, layout and servicing details including boundary treatment, buffers, landscaping and phasing (within this section).

(e) Current national advice in relation to the implementation of EIA Directive 2014/52/EU (Section 13 below).

(f) Comprehensive and detailed EIAR which has particular regard to the impact of the proposed development on coastal processes, ecology (aquatic and terrestrial),

archaeology, industrial heritage, water quality, flood risk and traffic management (including any new or modified road or rail proposals such as a Luas extension) (Section 13 below).

(g) Comprehensive and detailed NIS having regard to the presence of several European sites in the surrounding area (Section 14 below).

(h) Due consideration to be given to in-combination effects on the environment with other proposed developments in the wider area (Section 14 below).

(i) Public consultation to be as extensive as possible and consultations should take place with Prescribed Bodies and the local community (Section 12.11 below).

12.2.2. As outlined above, many of the matters raised by the Board are addressed elsewhere in this assessment (as annotated) and therefore it is not considered necessary to repeat the matters here. Therefore this section will address matters not addressed elsewhere as follows:

- Request for 15-year planning permission.
- Scale and rational for the proposed new jetty/Berth 53.
- Detailed assessment of construction and design of new jetty/Berth 53 required, layout and servicing details including boundary treatment, buffers, landscaping and phasing.

12.2.3. **15 year permission**

12.2.3.1. In addition to the specific request by the Board, concern has been expressed by an observer at the proposed timescale for the project which is considered disturbing and grossly unfair to permit such a duration. The applicant seeks permission for 15 years in order ensure that the entire development as proposed is implemented as a single permission. The reason underpinning the applicant's request for a 15-year period is that there is an overriding imperative to ensure that Dublin Port continues to operate effectively during the construction process to facilitate different terminals to operate without any loss of service. It is noted that only minor works may be carried out in tandem while others will need to be carried out sequentially where works for one element cannot commence until an earlier related element is concluded. Works to berths must occur in a sequential basis as the port must remain open for operation

throughout therefore simultaneous works to berths is not a construction programming option available to the applicant.

12.2.3.2. Both the permitted ABR Project and the proposed MP2 Project are part of the Dublin Port Masterplan which covers the period up to 2040. Projects defined in the Masterplan have been planned and designed as part of a structured and integrated development programme that considers the complex environmental impact and cumulative effects of their construction and ultimate delivery. Specific and comprehensive mitigation measures, through scheduling for avoidance and limiting overlap of these projects and sensitive periods with respect to environmentally designated areas adjacent to the site, have been prescribed to ensure that there will be little impact due to cumulative effects. This is reflected in the construction programme for implementation of the proposed development as set out in Chapter 3, Volume 2 of the EIAR.

12.2.3.3. Based on its experience with respect to the ongoing delivery of the ABR Project, the applicant estimates that the overall length of time required to construct the development would be 122 months. Critically however there will be gaps between each package to allow for other consents to be secured (e.g. Foreshore Licence), design development, procurement, compliance agreements, therefore a 15-year permission is being sought. In this regard the construction programme has been broken into two main phases to deal with marine and land side construction works. The construction of the proposed development can be further classified into 11 parts as follows and which are illustrated on Figure 5-10:

- Northern access road (Phase L1 – 6 months).
- Adjustment of the permitted Berth 52 layout to accommodate the proposed new Berth 53.

Work will commence at the same time as Phase L1. Piling works on this element will not take place during March and May. Construction works on this element will not take place during extreme low Spring Tides (Phase M1– 33 months).

- Construction of a new Ro-Ro berth – Berth 53, with dredging, scour protection mattresses and wash protection structure. This phase will commence after Phase M1 is completed.

Construction works on this element will not take place during extreme low Spring Tides (Phase M2 – 24 months).

• Eastern access road will commence after the Phase M2 (Phase L2 – 6 months).

• Redevelopment and optimisation of the ferry terminal yard. (Phase L3 – 12 months).

• Channel dredging works will be carried out after the dredging of Phase M2 (Phase M3 – 1 month between October and March).

• Jetty Road quay wall will commence after the completion of Phase M3 (Phase M4 – 12 months).

• Construction of new quay at Oil Berth 03 and infilling of the basin at Oil Berth 04 will occur after Phase M4 is completed (Phase M5 – 12 months).

• Extension of Berth 50A by the removal of the existing Port Operations Building and the Pier Head of the Eastern Breakwater will occur after Phase M5 is completed (Phase M6 – 15 months).

• Dredging at Berth 50A to accommodate future vessels will commence on completion of

Phase M6 (Phase M7 – 1 month).

• Heritage Installation (Phase L4 – 9 months).

12.2.3.4. I would also note that the legal submission presented to the oral hearing by the applicant's legal counsel, addresses the matter of the 15 year permission sought. It is stated that the maximum limit of 10 years, as set out in Section 41(4) of the 2000 Act as amended, applies only to residential development with the Board thereby entitled to grant permission for 15 years. It is stated that the principle factor in the consideration of the duration is the nature and extent of the development with the proposed documentation including public notices identifying same. The proposed development consists of the redevelopment of existing terminals which are and must remain operational as construction takes place, as areas in which construction work is proposed are in daily use and dealing with throughput of cargo from/to berthed vessels. All relevant environmental assessments in respect of the proposed development undertaken at this stage are on the basis of a 15-year construction period. These assessments are presented within the EIAR and NIS submitted with

this application in order to enable the Board, as the competent authority, to complete the assessments required by the Habitats and EIA Directives. In addition to this, I would suggest to the Board that the Port is a critical element of the State's infrastructure and a balance must be struck between ensuring the Port remains operational and facilitating its redevelopment. I consider that it is reasonable for the Board, if they are minded to grant permission, to determine that a 15 year duration is appropriate.

12.2.4. **Scale and rational for the proposed new jetty/Berth 53**

12.2.4.1. The need for river Berth 53 is set out in the Project Rational prepared by the applicant which is appended to the planning report. In summary, it is set out that part of the ABR Project infilled the basin within which existing Berths 52 and 53 were located leading to the replacement of basin Berths 52 and 53 with a river berth, referred to as Berth 52. Basin Berth 53 was not replaced at the time as it was envisaged then that the new river berth (Berth 52) would suffice based on the estimated average annual growth of 2.5% from 2010 to 2040 facilitating volume growth of 60m gross tonnes per annum, or an increase of 31m gross tonnes per annum. However, to meet with the revised projected growth in volumes passing through Dublin Port (increased from 2.5% to 3.3%), an additional river berth similar to Berths 49 and 52 is required to cater for the vessels which will visit the Port. Berth 53 will be used predominantly for the berthing of Roll On/Roll Off (Ro-Ro) ferries with the indicative Ro-Ro freight berth capacity in 2040 for the five berths in Area C is 1,280,000 units per annum with Berth 53 proposing to cater for 240,000 units per annum or 18.75% of capacity. I consider that the need for this berth has been appropriately provided particularly as set out in the revised Masterplan.

12.2.5. **Construction and design of new jetty/Berth 53**

12.2.5.1. The final matter in this section relates to the construction and design of the new jetty/berth 53. I would propose to the Board that this has been satisfactorily addressed within the documentation provided with the application including within the planning report which outlines the proposed development. The evolution of the design is provided in detail in the alternatives section of the EIAR and in matters

such as visual impact of the proposed berth in Chapter 15 of the EIAR. I consider that proposed construction and design of the new River Berth has been appropriately outlined.

12.3. Traffic and Transport

12.3.1. The matter of traffic and transport is addressed in relation to environmental impacts in the EIA undertaken at Section 13 of this report (s.13.9). This section seeks in the main to address the concerns expressed by the observers in the submissions received by the Board. At the oral hearing, the applicant's Traffic Consultants provided a response to the concerns raised and I will reference same in the following assessment. At the outset I would note that in presenting the application to the Board that the Applicant has sought to include a number of measures to address movement and access in the Port and I consider that it is important that the Board are aware of same.

12.3.2. Firstly, in terms of access and egress to the east end of the Port where the proposal is located, it is proposed that the existing vehicular exit onto Tolka Quay Road and the vehicular entry and exit routes at Breakwater Road South for the Freight Container Terminal will remain. As outlined in the EIAR, and assessed in the EIA below, the context within which the port is set with regard to connections and accessibility to road and rail is outlined with the applicant outlining the active travel measures which exist and are proposed within the Port and within the city centre. The applicant outlined their commitment to a Mobility Management Plan for the proposal. It is envisaged that the Mobility Management Plan for the Unified Ferry Terminal and Container Freight Terminal will, in the fullness of time, fall under the hierarchy of the port wide Transport/Travel Plan as the Masterplan continues to be implemented over the next 21 years.

12.3.3. In addition, to ensure a high quality public transport service between the Unified Ferry Terminal and the density of sustainable transport services located at the perimeter of the Port, the applicant proposes to provide finance, of up to €100,000 for a period of five years (€500,000 total) to a shuttle service operating to create a connection between the Unified Ferry Terminal, the DART in Clontarf and the LUAS at the Point. It would link into East Point Business Park, have multiple stops throughout the northern Port estate and connect with the ferry terminal building at

the Unified Ferry Terminal (section 13.7.9 of EIAR). It is also confirmed that the proposed development will in no way impact on the potential extension of the Luas as currently included in NTAs *Transport Strategy for the Greater Dublin Area for 2016-2035* nor does the proposal affect the existing operations of the freight trains within the Port Estate.

12.3.4. I would also note that Chapter 13 of the EIAR provides a very useful outline of how the existing Port operates from an access and egress perspective outlining existing access point and approaches to the Port. The Strategic Transportation Study is also outlined as are road and transport schemes considered relevant to the proposal including the new Promenade Road extension which will connect directly to the Unified Ferry Terminal. I would also note that as outlined in the EIAR and by Eamonn O'Reilly Chief Executive at the oral hearing, it is proposed to move P&O from their location at Terminal 3 (Berth 21) in the western area of the Port to Berth 51 by the end of 2021 and to move Stena from Berth 51 to the new Berth 52. Seatruck would move to the west end of the Port. Terminal 3 has a dedicated access directly from the East Wall Road and moving P&O will facilitate the closure of the exit onto the East Wall Road which is part of the Masterplan and an objective of the City Council as they are progressing a potential scheme to provide widening of the East Wall Road and to replace the Point Roundabout with a signalised junction. As stated in the EIAR, the future closure of the Dublin Port Estate's accesses along East Wall Road facilitates the delivery of the DCC scheme by removing the requirement for vehicles to U-turn at the roundabout to travel towards the Dublin Port Tunnel and therefore facilitate removing the roundabout. (U-turning is not permitted at signalised junctions). In addition, if this scheme is realised, additional controlled walking and cycling crossing facilities could be provided at East Wall Road in the location of the current Point Roundabout, and the Alexandra Road access will be relocated to Sheriff Street Upper. While this is not part of the proposed development, I consider that the Board should be aware of the potential changes to the road network which the proposed development would facilitate. Finally before addressing the matters raised by the observers in turn, as outlined in the EIA below, the Board should be aware that the Port has three peak hours rather than the conventional two. The peak hours are as follows: 07.30-8.30 in the morning and 16.45-17.45 in the evening and an internal peak hour occurs between 06.15 and 07.15 am.

12.3.5. The first matter is the potential impact of the proposed development on the Port Tunnel and the M50. The Docklands Business Forum outline their concern that the Port Tunnel has reached its operational capacity and cannot be increased. In response Celine Daly, RPS for the applicant outlined at the oral hearing that the traffic survey at the Tunnel carried out for the EIAR/TTA reconfirmed the analysis carried out in the Dublin Port Strategic Transportation Study of 2018 that the Tunnel is operating at approximately a quarter of its modelled daily capacity and approximately half of the modelled capacity during peak hours with details provided to support same. I would note that the traffic flows are expressed in PCU's (Passenger Car Units) using conversion factors from the TII Project Appraisal Guidelines for National Roads such that a car is 1 PCU, a HGV is 2.3 PCU and a bus/coach is 2 PCU. To provide a more robust assessment given that the Port has a high proportion of unitised freight or containerisation a PCU conversion rate of 2.9 which results in 16.7m of road space has been assigned. In this regard the applicants confirmed at the oral hearing that the proposal total of 84,996 PCU per day does not exceed the 182,400 PCU capacity of the Tunnel or the 91,200 PCU capacity per direction. Reference is also made to the proposals by TII for a major upgrade of the tolls at the tunnel replacing equipment and software and which would result in a significantly better performance of the tolls than the existing with the potential for barrier free tolling being considered for the future. I would also note that the applicant responded to the assertion by the observer of 6 hour delays in the Tunnel that this constituted an 'atypical' event. I consider that the rational provided is reasonable. Concerns expressed at the impact on the road network are addressed with the assessments undertaken for the TTA outlining that the proposal can be accommodated within the existing road network. The proposal as outlined above to close the East Wall access to Terminal 3 facilitated by the proposed development is considered a planning gain and I would agree with this contention.

12.3.6. The Irish Academy of Engineering (IAE) reference the proposed growth in unified freight traffic from 2018-2040 but consider that the application is silent on how additional traffic would access Dublin Port. They reference the TII's National Roads Network Indicators 2018 report which they state shows traffic volumes on the M50 increasing steadily since 2013 in both directions and consider that the increase in volume of HGV traffic to and from Dublin Port would have very serious

consequences for M50 traffic flows amplified by the length of time the Metro will take to complete. In a very comprehensive response to this concern, Celine Daly for the applicant at the oral hearing provided a detailed response to the concern expressed. It is stated that the traffic distribution matrix for each of the 3 peak hours is included in Tables 13-13 to 13-15 of the EIAR detailing the origin-destination matrix for the four Port accesses and the five approach roads during each of the assessed peak hours. They also reference the need to consider traffic growth over a 10 year period rather the 6 years referenced by the observer and noting that high sensitivity growth rates were used in order to provide a robust assessment for the TTA. The response provided to the oral hearing also provides details of the M50 performance summary 2018 undertaken by the TII with the applicant stating that the peak hour capacity issues on the M50 reflect patterns associated with commuter non-Port traffic flows. I consider that the applicant has satisfactorily addressed the concerns outlined.

12.3.7. The IAE also state that while they welcome the proposed development by Dublin Port Company of an 'inland port' at Coldwinters for the storage and repair of empty containers that they note that the proposed inland port would make little contribution to reducing the additional HGV traffic envisaged in this application. In response the applicant states that no conclusion can be drawn from this source on the overall impact that the Dublin Inland Port will have on the surrounding road network either at peak times or off-peak times or subsequent traffic reductions provided at the main Port Estate.

12.3.8. Transport Infrastructure Ireland (TII) submission notes that the proposal includes works within the eastern port area and recommends that if the Board consider granting permission that planning conditions associated with DCC Ref. 3084/16 (Dublin Port Internal Roads) should be attached. They state, in particular Condition 6 of same would be appropriate with minor revisions to Item B to include the requirement that prior to commencement of development the developer shall prepare a Construction Traffic Management Strategy for the Port Tunnel for the duration of the works which shall be submitted to an agreed with the PA in consultation with TII and the operators of Port Tunnel. At the oral hearing, the applicant stated that the application referenced (DCC Ref. 3084/16) relates to the Dublin Port Road Network Improvement Project which is currently under construction and that the applicant is willing to accept the same planning conditions attached to the referenced permission

and the suggested amendment. I would suggest that the condition as amended should be attached to any grant of permission.

12.3.9. Dublin City Council suggest a number of conditions in respect particularly of the Mobility Management Plan and Construction Management Plan to which the applicant has no objection and I consider that the conditions should be attached to any grant of permission requiring that the draft or outline versions of these plans submitted should be submitted to the Planning Authority in complete format.

12.3.10. In conclusion I consider that the Traffic and Transportation Assessment undertaken is extremely comprehensive, detailed and provides a very satisfactory consideration of the traffic impacts likely to arise.

12.4. **Biodiversity**

12.4.1. Firstly, I would note that section 13.3 of this report addresses Biodiversity, Flora and Fauna. In addition, Section 14 provides an Appropriate Assessment and addresses matters relevant to the species of conservation interest within the relevant Natura 2000 sites. Therefore this section, which seeks to specifically address concerns raised by the planning authority, prescribed bodies and observers, should be read in conjunction with both of these sections.

12.4.2. Birdwatch Ireland's observation to the Board, states at its introduction that it has been monitoring the waterbirds and Terns of Dublin Bay as part of Dublin Bay Birds Project since 2013. In their submission they address a number of concerns which have been addressed by the applicant in their presentation to the oral hearing primarily in the presentations delivered by Richard Nairn and James McCrory. The first matter raised relates to the potential impacts of the proposed dredging to the south of the channel, (Fig. 3.12 NIS) at very base of Great South Wall in Liffey channel where there is a cooling water outfall which they state is notable for the numbers of waterbirds that use the area. They state that they are not able to discount that disturbance from operational activities to the species of conservation interest would not be an issue in this area. They note that the Black-headed gull, one of the species of North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA, use the outfall in significant numbers (Appendix 1) with 593 Black-headed gulls counted in March 2019 at the outfall site and 2018 Dublin Bay Birds

project showing 17,776 Black-headed gulls using the bay with number associated with the outfall 3.3% of the figure.

12.4.3. While I address dredging specifically in the next section of this report, I consider that this concern relates more specifically to the appropriate assessment which I have provided in Section 14 of this report as this is a species of conservation interest. I would note that I specifically requested that the applicant indicate the location of this outfall on a map for the Boards information and this was provided. Furthermore, in order to address the matter further, the applicant has undertaken an additional bird survey of the ESB power station cooling water outfall over six days between 22 – 27 October 2019 (Appendix 1 of Adrian Bell presentation) which coincided with capital dredging works associated with the ABR project in the navigational channel with dredging occurring 200m from the area of interest on four of the six days. It is stated none of the disturbance events occurred due to the dredging with no potential from dredging activities likely to cause impacts. Therefore, there will be no appreciable decrease in the range, timing or intensity of use of this area as a result of dredging.

12.4.4. Birdwatch Ireland express concern that there is very little information available on Guillemot nesting within the Port and that appropriate monitoring is required to determine productivity at the site with proposed mitigation of nest boxes satisfactory which should be rat proof and that there should be a commitment to monitoring these breeding birds. Dublin City Council also raise a matter related to this species and the potential impact from pile driving on natural nesting sites. In response, the applicant at the oral hearing, stated that Table 7-20 of the EIAR provides a comprehensive account of the annual changes in populations of black guillemots within the Port since 2013. I consider that the information provided clearly demonstrates that sufficient information on this species has been provided. In relation to the productivity of the species and the monitoring of same I would concur with the applicant's concerns with regard to the suggested counting of eggs, which are located in nests in inaccessible locations, in that such intrusion would disturb the species. I consider that the ongoing monitoring is satisfactory. In relation to the concerns raised by DCC regarding the pile driving on natural nesting sites the applicant responded by stating that all nesting sites for this species in the Port are in artificial structures such as quay walls and ramps with no natural sites and that there is no evidence of any impact on the species. I consider the matter has been

appropriately addressed with the mitigation measures proposed in the EIAR appropriate.

12.4.5. Birdwatch Ireland also request that in the transitional phase between works that there should be no blocking of access of existing holes and surfaces until late summer when potential breeding birds have finished nesting activities and setting replacement nest structures up on appropriate solid structures in advance is also important and that it is imperative that potential nesting sites are examined before any demolition works are undertaken. In relation to this request that controls be put in place in advance of demolition of structures to prevent disturbance or injury the applicant has stated that they would accept a condition in respect of same. I consider that this is reasonable. Concern is also expressed with regard to the timing of works and potential impacts on bird populations, and that it is imperative that one or more ecological Clerk of Works is onsite monitoring activities and that monitoring reports are circulated as despite best intensions of mitigation measures, differences can arise in implementation. They also request that absolute care is taken to ensure mitigation measures complied with in years to come and repeat request that cessation of works during extreme low-tides be communicated to BI and relevant monitoring reports and specific information in relation to low-tide works are sent to BI. I would note that at the oral hearing, the applicant stated that they seek to achieve the highest possible standards of environmental management. I would suggest to the Board that the survey work and monitoring of species which has been undertaken in the Port supports the approach proposed by the applicant. The breadth and depth of information provided in respect of species within and in the vicinity of the Port area must be complemented. Monitoring undertaken as part of the ABR project has informed the approach to the proposed development and I consider that the applicant quite appropriately state that they have demonstrated their ability to put into practice the environmental commitments proosed. It is stated that the applicant is committed to appointing a full time Facilities Manager (Clerk of Works) to ensure all mitigation and monitoring requirements within the EIAR and NIS are implemented.

12.4.6. I would also note that concern has been expressed regarding the proposed dredging and dumping at sea in respect of the cumulative effects with the ABR project and also the potential effects on the harbour porpoise in particular and to night time

dredging. I would refer the Board to the Appropriate Assessment undertaken below which addresses these matters and also to the next section of this report which addresses dredging and dumping at sea. I would however note that the potential impact on the Porpoise, while addressed in the EIAR and NIS was also addressed at the oral hearing with Dr Simon Berrow of the IWDG responding to concerns expressed by Councillor Donna Conney on the same matter as raised herein by Mr. Farrell. Dr Berrow noted that the night time dredging proposed is consistent with the NPWS guidelines. He also noted that porpoise are not curious but rather are evasive and references the very precautionary 500m mitigation zone which is proposed and the provision of a 30 minute pre-watch. He also noted that the Porpoise do not operate on a similar day/night routine as humans do and therefore the particular concern regarding night time dredging would not arise with the mitigation measures addressing the concerns expressed. It was also noted that there is no overlap with the dredging campaign for the ABR project. As noted by the applicant at the oral hearing the dredging proposed is intended to be carried out over 4 seasons spread across 8 years between 2024 and 2032 after the completion of the ABR campaign, and while the dredging window extends from October to March the actual dredging occupies a much shorter time within that window as is the case with the current ABR dredging campaign.

12.4.7. I would note that concerns expressed regarding the impact of noise from piling at construction stage and noise from operational activities on fish and marine mammals has been comprehensively addressed in both the Biodiversity and Noise sections of the EIAR at sections 13.3 and 13.7 respectively. In relation to the request by the Parks and Landscape Services Division of DCC that the Landscape Plan for the Greenway include specific measures for otter, the applicants state that the Greenway project was permitted under a different permission, the ecological reports accompanying which observed a neutral impact on otters with no significant environmental effects predicted with the greenway remaining above the high water mark and outside designated areas. Mitigation measures proposed within the permitted development include a pre-construction survey for otters. I would agree with the applicant that the measures outlined in the permitted greenway development are appropriate to address this species and that it is not necessary to include measures within this proposed development to address same. DCC also requested

that a) sites be identified for post-construction restoration of native flora and b) the establishment of new planting areas be included by the Landscape Architect to provide for local pollinators. At the oral hearing, the applicant referred to the biodiversity section of the EIAR where recolonizing bare ground habitats typical of areas within the Port are of local importance for wildlife including pollinators. They also note that the proposed development avoids such areas and the areas referenced by DCC appear to coincide with the permitted greenway site which has its own mitigation. I consider that it is not appropriate in this regard to require measures which do not specifically relate to the proposal currently before the board.

12.4.8. The Parks and Landscape Division have also requested that no piling or dredging during the month of March should be permitted. I note that the EIAR states that it is not intended to carry out any piling along the river front in the month of March with the applicant highlighting that notwithstanding this commitment that the risk from the dredger to smolts is negligible given the practicalities of the dredger effort. I consider that the matter has been appropriately addressed.

12.4.9. In relation to Arctic and Common Tern, clarification is required by Dublin City Council (Parks and Landscape Services Division) as to: a) whether or not the Applicant has conducted an analysis of the optimum location(s) for siting of the pontoons and b) if these are permanent locations or subject to further changes as part of the Master Plan for Dublin Port. At the oral hearing the applicant stated that the pontoons have been sited in optimum locations within the Port to ensure that they will not be disturbed by port operations or predators. It is confirmed that there is no requirement as part of this proposal to move the existing pontoons. They go further and state that if there is a requirement in the future to move the pontoons that they would only be moved in the non-nesting season but that they will remain undisturbed between March and September. I consider that the applicant have appropriately addressed this concern which I note is outside the remit of the proposed development.

12.4.10. DCC requests that the Applicant is to provide an area equivalent to that which is proposed to be permanently infilled at Oil Berth 4 basin and the void at Oil Berth 3 for newly-constructed marine habitat using best available technology by way of a design of artificial surfaces to be agreed with the NPWS, IFI and DCC Parks and Landscape Services with monitoring of the constructed marine habitats to be

undertaken and reported. I do not consider that this request is reasonable as the existing habitat is not considered to comprise a high quality habitat.

12.4.11. Inland Fisheries Ireland state that the River Liffey is an important salmonid system with fish groups utilising the coastal habitat in vicinity of proposal with Liffey known to contain three species of Lampray with fish species having to pass through the Liffey Estuary/Dublin Harbour to reach sea or return to spawning grounds. They also note that estuaries/transitional waters include a variety of different habitats of importance to passage to/from sea and spawning/nursery areas. In terms of the proposed development they consider that proposed ground and seabed preparation and associated construction works including dredging have significant potential to cause release of sediments and pollutants into surrounding waters with potential for habitats to be altered. I would suggest to the Board that many of the matters raised by the IFI comprise recommendations which should be implemented by the applicant and request that the applicant consult with the IFI on matters related to fish. They state that all the measures necessary should be taken to ensure potential of local aquatic ecological integrity by complete impact avoidance in the first place and through mitigation by reduction and remedy as a secondary approach. They also state that foreshore works should be designed and implemented in an ecologically sound and sustainable way involving consultation with IFI with method statements to be submitted for approval in advance of any 'in-stream' works. They also note that consultation with the IFI is required for any application for a section 4 licence for discharge of effluent to surface waters.

12.4.12. In terms of specific measures/recommendations proposed, the IFI recommend that the use of concrete/cement and other construction materials should be strictly controlled and monitoring with appropriate licencing. They consider that the implementation of comprehensive environmental management planning systems is essential for all construction activities. In terms of surface water drainage they consider that the SuDS approach should not result in a deterioration of water quality or habitat in natural river/stream channels or any receiving waterbody. They state that a comprehensive method statement and specification detail for any settlement lagoon with proposed discharge to surface waters required. They request that a comprehensive and integrated approach for achieving freshwater and marine protection during construction and operation is implemented. They also request that

on-site attenuation ponds to allow for settlement of fine/particulate materials before discharge to waters. Other controls required include that Class 1 petrol/oil interception and hydro-brake are in place on individual high risk discharges and on surface water discharges to protect receiving waters with comprehensive long term maintenance programme for same required.

12.4.13. They also require that mitigation measures as outlined in EIAR to protect the integrity of the Liffey system are strictly adhered to and strict monitoring regimes put in place with plans in Appendices 19-7, 19-9, 19-10 & 19-11 of particular importance. They recommend that Guidelines on protection of fisheries during construction works and adjacent to waters are consulted when undertaking works. They also require that the IFI are consulted (if development proceeds) directly in relation to all matters concerning fisheries and surface water quality. It is also request that reporting of aquatic monitoring data is extended to the IFI on a scheduled basis. It is also highlighted that appropriate environmental protection measures responsibility of developer and contractor and that ongoing aquatic ecological monitoring both during construction and operational phases should be implemented.

12.4.14. As I note above, the submission from the IFI includes matters which I consider comprise recommendations which should be implemented by the applicant and I am satisfied are covered by the mitigation measures within the EIAR. I would also note that the applicant provided a response to the matters raised by the IFI at the oral hearing. They outlined modelling undertaken, which is supported by data obtained during the construction phase of the ABR, in relation to potential impacts on water quality and the mitigation measures proposed. It is clarified that construction operations including dredging will not prevent the passage of any Annex II fish and that the timing of the dredging is outside of the main migratory window of both salmon smolts and adult salmon.

12.5. Soils, Dredging, Dumping at Sea and Water Quality

12.5.1. Soils are also addressed in the EIAR below (Section 13.4) but I would note that in respect of the concerns raised about dredging and dumping at sea that I intend to address the matter of soils and particularly the dredging proposed as part of the subject application in this section. I would also note that some of the concerns expressed arise from the potential impacts of dredging but are principally concerned

with water quality which I will address in this section in tandem. I would note for the Board's information that water quality and flood risk are addressed in Section 13.5 of my EIA below. I address flood risk separately in the following section of this assessment.

12.5.2. It is proposed to dredge 424,644m3 of materials/soils as part of the proposed development. The rationale for same, as stated in the documentation, is that the berthing pockets are required to provide sufficient depth of water at all stages of the tide, to vessels berthed at the Port and to facilitate the safe and effective operation of the Port including facilitating larger ferries, manoeuvring of vessels, more frequent sailings and the future growth of the Port. As I note elsewhere in this report, while permission for dredging is sought as part of the subject application the dumping-at-sea of the dredged material is subject to a licence which is determined by the EPA. I would note that the development permitted by the Board under Ref. 29N.PA0034 known as the Alexandra Basin Redevelopment (ABR) Project includes significant dredging with a licence granted by the EPA (Permit S0024-01- granted September 2016) for the dumping at sea of the material. I consider that the principle of dredging the channel and the berths has been established. I would also note that there is a current licence application with the EPA for a programme of maintenance channel dredging for 2019-2021 (Ref. S0004-02) which is awaited. Therefore, currently permitted dredging comprises a capital dredging programme as part of the ABR project. I would note the relevance of same, particularly as monitoring of same is ongoing and informs the proposal within the current application.

12.5.3. For ease of reference, the proposed dredging is located within the following areas of the application site and comprises the following volumes (taken from Table 3-1 of the EIAR).

Location	Proposed Dredge Level	Volume of Material
Berth 53	-10.0m CD	159,595m^3
Channel Widening	-10.0m CD	111,995m^3
Oil Berth 3	-13.0m CD	93,414m^3
Berth 50A	-11.0m CD	69,640m^3

Total Volume of Material	**424,644m^3**

12.5.4. In terms of soils, I would note that the Parks and Landscape Services Division of DCC raise concerns about soil contamination with Dublin Port and state that it would be useful if the applicant were able to put the Soils and Geology into context more fully, as the GSI has done. They refer to information regarding geogenic or anthropogenic causes for levels of chemicals and request that clarification on the results of the analysis for Beryllium is provided. While as I note above, soils are addressed in the EIAR below, I would note that as outlined in Chapter 8 of the EIAR, a chemical sediment sampling and analysis programme confirmed that the marine sediments are classified as Class 1 (uncontaminated, no biological effects likely) in accordance with the Guidelines for the Assessment of Dredge Material for Disposal at Sea (Marine Institute, 2006). I would also note that the matter was addressed at the oral hearing in the presentation given by Adrian Bell, where this concern is specifically addressed. The applicant noted that the Preliminary Risk Assessment indicated that the site had been reclaimed beginning in the late 19th century and developed in the 1960's with the site reclaimed and infilled with made ground. It is stated that the Dublin Surge Project Report was consulted and a comparison was made with the soil laboratory analytical results obtained from the ground investigation undertaken. It is stated that it is likely that soil chemical concentrations recorded outside the range identified in the Surge report are of historical anthropogenic origin with no risk to human health identified. In terms of beryllium in particular, reference is made to Appendix 8.2 of the EIAR where concentrations recorded were significantly below the generic screening value with no risk present to human health. I consider that the matter has been satisfactorily addressed. The dredged marine sediments are considered suitable for disposal at sea.

12.5.5. Birdwatch Ireland outline one area of concern with regard to the proposed dredging, and it relates to the area at the very base of the Great South Wall in the Liffey channel (Fig. 3.12 NIS) where there is a cooling water outfall. They state that this area is notable for numbers of waterbirds that use the area which is immediately south of area proposed to be dredged. I specifically requested that the applicant indicate the location of this outfall on a map for the Board's information and this was

provided. In respect of the impacts envisaged on waterbirds, I would note that this matter is addressed in Section 12.4 above in respect of biodiversity.

12.5.6. I note that the observation received from Councillor Donna Cooney outlines the potential for negative effects of dredging and dumping of dredged materials with temporary impacts on water quality having potential to occur during the construction phase of the works with mobilised suspended sediment release through capital dredging and disposal activities the principal potential sources of environmental impact. She also states that the process of dredging unavoidably causes disturbance of sediment on the channel bed and the dispersal of some material in the water column with the release at the dumping at sea site resulting in sediment release with potential impacts on marine life and water quality in the form of a suspended sediment plume within the water column. I would note that the concerns expressed are also shared by Mr. Peadar Farrell, a diver in Dublin Bay and I will respond to the concerns expressed in tandem. In this regard, the concerns raised regarding the proposed dredging on water quality were addressed at the oral hearing. Reference was made to the assessment of coastal processes undertaken (chapter 12 of EIAR) which found that owing to the fully dispersive nature of the disposal site, mud and silt does not settle to the seabed but is carried beyond Dublin Bay by prevailing tidal current. This is verified by turbidity measurements recorded in the Bay as part of the ABR monitoring programme which demonstrated that dredging campaigns in 2017 & 2018 did not cause any discernible increase in turbidity at the disposal site. It is also stated that the naturally occurring re-suspension of bed material is integral to physical and biological functioning of any coastal system including Dublin Bay and without same the exchange of sediment with the surrounding area including beaches would be reduced resulting in the loss of important habitat. The applicant includes, at Figure 4.1 of the presentation by Adrian Bell, a satellite image of Dublin Bay recorded on 8th April 2017 showing naturally elevated sediment levels prior to the ABR capital dredging campaign which commenced in October 2017. I consider that the matter has been satisfactorily addressed.

12.5.7. Concerns were expressed by an observer with regard to varying depths of berths within the port at 10m, 11m & 13 m and the proposal to excavate the fairway to 10m and the concern that ABP will have to adjudicate on another application when such variance is realised. I consider that the documentation submitted with the application

is very clear on the depth of berths and the proposed depth for the channel and the rationale for same. I do not consider that the concerns expressed, in this regard, are reasonable. The observer also states that river ports have dirty sea floors with oil berths adding chemicals to the marine life in the Bay. The detailed analysis provided of soil testing demonstrates that the material to be dredged can be appropriately dumped at sea. The applicant responded to this matter at the oral hearing referencing the marine ground investigation undertaken and further, stating that the full results of the sediment chemistry sampling and analysis were provided to the Marine Institute who examined them and confirmed no objection to the disposal of the marine sediments which are classified as Class 1 – uncontaminated, no biological effects likely.

12.5.8. It is stated that divers using Dublin Bay see silt spread all over plants and sealife in the Bay with material dumped at this site used by the Port coming back into the Bay spreading all over the Bay adding to silting up of the Blue Lagoon/Causeway between Sutton/Dollymount/Bull Island. At the oral hearing, the applicant clarified that the slope caused by the dumped material, which the applicant estimated is an average of 1 in 150 and therefore extremely gradual, does not cause all dumped material to come back into the Bay. The applicant outlines that extensive environmental monitoring is ongoing in relation to the dumping of dredged spoil from the ABR project and the results of the monitoring (Chapter 9 of EIAR) shows that capital dredging to date has not caused any discernible increase in turbidity above recorded background levels outside the footprint of the disposal site. It is stated that the site is dispersive for clays and silts and that strong tidal currents measured at the site, supported by computational modelling shows that clays and silts are dispersed within the Irish Sea and therefore does not contribute to the silting of the Blue Lagoon between Sutton/Dollymount and Bull Island. It is further noted that the disposal site is advantageous in that the sands and gravel elements of the dredged material are retained within the natural Dublin Bay sediment cell and that silts and fine sands are carried away and when significant energy arises in the form of storms, that sand is moved back into the Bay. I consider that the applicant's response to the concerns expressed is comprehensive and supported by the monitoring of the current capital programme associated with the ABR. It is also noted by the applicant that it is a normal occurrence to see silt spread all over plants and sealife in the Bay.

I would also note that the applicant confirmed that the monitoring results from the three monitoring buoys at the dumpsite and control site are publically available with the results of monitoring given annually to the EPA in the form of the Annual Environmental Report and are available for the ABR for 2017, 2018 and by March 2020 will have 2019.

12.5.9. Concern is expressed that the proposed dumping would add to the 10 mil tonnes permitted by PA0034 with EPA permitting additional 1mil tonnes in maintenance dredging and question if permitted dumping is to be withdrawn as the new application supersedes PA0034. The timing of the proposed dumping is also addressed with the contention expressed that dumping is undertaken 12 months a year as different permissions are stitched together and that while claiming not to dump at certain times, the EPA licence facilitates dumping during these times. The applicant responded to this concern regarding the cumulative impact of this sediment disposal at the oral hearing in the presentation by Adrian Barr. I would note that as pointed out by the applicant, the cumulative effects of the proposed capital dredging is addressed at Chapter 18 of the EIAR. As outlined, the capital dredging scheme for the ABR project will be complete prior to the commencement of dredging associated with the proposal therefore there would be no overlap. In terms of the maintenance dredging which is proposed and subject of an EPA licence application, it is stated that it would be confined to a 4-6 week period each year within the April to September window with no overlap with the dredging proposed as part of the proposed development which would be confined to October to March. I also consider that the documentation provided to the Board is very clear on the existing and proposed dumping at sea licences. The permitted licence provides the conditions within which it can be carried out. The Board has no role in such licences. It is also clear that a new license is required from the EPA to facilitate the dumping at sea proposed in the current application. While the Board is not the consenting authority for this licence, the information provided to the Board to facilitate its assessment of the proposed development is comprehensive. The matters arising with the timing of both dredging and dumping are central to the mitigation measures related to both biodiversity and water quality and are clearly outlined.

12.5.10. Concern is expressed in relation to the potential impacts from dredging and dumping on the feeding and breeding area for the Harbour Porpoise which are a

qualifying interest in the Rockabill to Dalkey SAC. The particular concern related to dumping undertaken at night and in wave conditions which may make it impossible to see a Harbour Porpoise in the water. I have addressed this matter in the biodiversity section of this assessment at section 12.4 above. I would also note the concern expressed by the observer that IWDG work for Dublin Port as consultants and observers on the dredgers and are, therefore, compromised to comment on this development and that their findings should be ignored. I do not consider that this is reasonable given the expertise of this group and their role in the monitoring of the permitted development and the overall monitoring of marine mammals in the Port which is addressed in detail in Section 12.4 above and in Section 13.3 of the EIA below. I consider that the applicant has comprehensively addressed the matter of dredging and disposal at sea.

12.6. **Flood Risk**

12.6.1. In relation to flooding and flood risk, I note the concerns expressed by the Irish Academy of Engineering regarding the requirement to protect cities, in the future, against the potential adverse impact of rising sea levels and that it appears prudent to assume that it may not be possible to arrest sea level rise and that remedial measures must be planned for. They also reference the Dublin City Council report 'Integrated Water Resource Management Planning for the Dublin City/Dublin Coastal Region' which they state concluded that it may be necessary to provide a tidal barrier across the mouth of the Liffey, between the eastern extremities of the North and South Bull Walls, to protect the city from flooding in the foreseeable future. They consider that the construction and operation of such a barrier could have very significant adverse implications for port operations and this issue needs to be addressed as part of longer term port planning and as part of this application. I have addressed flood risk in Section 13.5 of my EIA below which provides an assessment of the potential impacts of the proposal.

12.6.2. In terms of the specific concerns raised by the observer, at the oral hearing, the applicant responded by stating that there are no current plans in place to undertake a tidal barrier project and therefore it could not be considered in any assessment of flood risk. They state that Andrew Jackson, who prepared the flood risk section of the EIAR visited the Maeslantkering flood defence barrier at the mouth of the

channel leading to Rotterdam Port which was constructed in the 1990's and designed to protect Rotterdam from a storm surge of up to 1 in 10,000 year return. They note that this barrier had to take account of the operations and movements associated with Rotterdam Port, which at the time was the largest in the world, and demonstrates that an operating port can exist and benefit from a tidal barrier. It is clarified that the proposed development would not impede the construction of a future tidal barrier. I consider that the matter has been satisfactorily addressed.

12.7. Landscape and Visual Impact

12.7.1. Firstly, I would note that the EIAR below (section 13.11) specifically addresses landscape and visual impact with 14 views specifically addressed by way of photomontage which are considered in detail. For the Board's information, at the oral hearing, Mr. Raymond Holbeach addressed the concerns raised in the submissions which relate to landscape and visual. The Hollybrook Grove Householders Association raise concerns that, when viewed from Clontarf Promenade, the Bull Wall will become less attractive and more industrialised by the construction of Berth 53 and its use by large Ro-Ro shipping with no proposals for screening. I do not concur. The photomontages as outlined in Section 13.11 specifically address the view from Clontarf Promenade (View 12) where the significance of the visual effect is considered to be minor to moderate. While Berth 53 extends the Port into the Bay beyond the existing limit of the Port when viewed from Clontarf it is absorbed into the industrial area to the south of the Port and given the industrial context within which it is set I consider that the Berth structure and vessels docking at same would be read as an expected element of the Port landscape.

12.7.2. I would also note that the Planning Authority state that they concur with the findings of the LVIA that the proposed development would have a negligible change in the existing industrial character of the Port. They do however note the concerns raised by the Conservation Section, about proposed Berth 53 but consider that while the proposal would result in a noticeable change in the receiving environment, particularly when viewed from the south wall of Dublin Port, they consider that the development would not result in significant negative landscape and visual effects, either individually or cumulatively.

12.7.3. I note that the Planning Authority makes particular reference to mitigation and the overall greening of the port and they recommend that a landscape/greening plan should be prepared for the application site area and this should be conditioned. I consider that the area of the proposed application provides little opportunity for 'greening' given the nature of the activities proposed and design and use of the new infrastructure. The proposed greenway and the heritage park proposed are of considerable importance in terms of 'greening' the area. In conclusion on the matter of landscape I consider that the proposed development would not impact in any significant way on the overall visual amenity of the Bay.

12.8. Cultural and Industrial Heritage

12.8.1.1. I would note for the Boards ease of reference that the subject of cultural and industrial heritage is also addressed in Section 13.10 below in the Environmental Impact Assessment. At the outset I would note, as stated by the applicant, the built heritage of the port is essentially industrial archaeological heritage rather than architectural heritage with the heritage consisting primarily of engineering works. There are five matters which I consider require consideration in respect of this subject and I will address each in turn.

12.8.2. Demolition of Pier Head of the Eastern Breakwater

12.8.2.1. The proposed development provides for the demolition of the existing Pier Head which marks the terminus of the Eastern Breakwater and part of what was the end of the original Blood Stoney port design. This forms part of the Eastern Breakwater Dublin City Industrial Heritage Record 19-09-002 (1858-1884). The pier head currently accommodates the Port Operations Building and ancillary structures (600sq.m) which it is also proposed to demolish but it previously accommodated the lighthouse which was demolished, parts of which are still retained and which it is proposed to incorporate into the Heritage Zone which is discussed in the next section. The demolition is proposed in order to extend existing Berth 50A to provide a multi-purpose predominately Lo-Lo Container Vessel berth and to facilitate the infilling of Oil Berth 4 and the consolidation of operations to Oil Berth 3 which is

designed as a multi-purpose structure for oil tanker berthing initially, with future potential use as a Lo-Lo container vessel berth.

12.8.2.2. While I note the concerns expressed by the Conservation Section of Dublin City Council in respect of the historical significance of this element of the Port, as pointed out by the Planning Officer for the Planning Authority, a balance must be sought in respect of preserving the City's industrial heritage and facilitating the future growth of the Port. I note the applicant's contention that, an over-riding concern is that the cultural significance of Dublin Port as a deep-sea port is retained but that this significance is threatened if the port loses its ability to handle larger ships. Therefore in essence, I would suggest that the ability to operate as a port is as significant in cultural terms as the actual historic fabric. The applicant, state they are mindful that conservation of historic or interesting features is a key planning consideration but unlike in the past where the port continued to expand eastwards into Dublin Bay and left historic quayside structures behind to become part of City, it has now to re-engineer existing facilities that are part of the working port. It cannot afford to leave and abandon redundant infrastructure but must repair, reconfigure or adapt as required. This is fundamental to the principle of the proposal herein where instead of reclaiming land from the Bay which was previously refused permission by the Board, the proposal seeks to reuse existing structures and by so doing some of the original fabric must be removed.

12.8.2.3. In this regard, I acknowledge the original significance of this Pier Head as the historical termination point of the Port, however this is no longer the case. I note the extensive documentation presented within the documentation on this element of the proposal including the Conservation Strategy and Heritage Appraisal and the report on Industrial heritage impacts and conservation planning and design report. I note that the Conservation Strategy and Heritage Appraisal describes it as a granite ashlar masonry breakwater wall originally as the Eastern extent of, and to protect the Alexandra Basin. It also states that the wall itself has been subsumed into the port as it was infilled leaving only the pier head terminus visible. This is a curved protruding mass granite masonry terminus to the breakwater, tilted at an angle to the South East. The assessment provided includes very useful historical maps which outlines the breakwater as originally designed which highlights how the development

of the Port has changed its context. As the Heritage Assessment states the Port has extended significantly beyond this point and the Pier Head has been subsumed within the Port and therefore does not form its intended function nor has it any visible prominence within the Port because it has been effectively dwarfed within the port complex. Furthermore, it no longer accommodates its original lighthouse structure and in this regard I consider that it is reasonable, on balance to facilitate its removal subject to a comprehensive record of same being undertaken and the mitigation measures carried out. One of these measures is that the historical location is marked on the new structure with a simple text explanation of the historical context of the location. I note that this will not be accessible to the public but as pointed out in the applicant's assessment it is a durable and sustainable means of denoting the location and the extent of its lifetime. It is also expected that elements of the original Eastern Breakwater exist under Breakwater Road, and that these elements will survive in situ beneath Berth 50A. It is proposed that archaeological monitoring of ground and seabed disturbance activities will take place across the proposed development area, to ensure that a robust record is maintained and that any new archaeological observations are resolved fully. I consider that this is a reasonable approach and I would also note that the Conservation Strategy and Heritage Appraisal submitted which I have referenced above provides in itself a useful record of the feature.

12.8.3. **New Heritage Zone**

12.8.3.1. One of the proposals put forward to mitigate the loss of the Pier Head is the creation of a new heritage zone at the end of the modern port infrastructure, a new terminus in effect. It is outlined in detail in the documentation submitted but for the Board's information it is proposed as an Interpretive Heritage zone to accommodate an architectural installation marking the evolution of the port's development and the easternmost point of the port at the end of the permitted Port Greenway. It seeks to create a public realm visitor experience that includes the re-use of the granite blocks and related elements of the Eastern Breakwaters Pier Head and stored elements from the former Lighthouse celebrating the cultural and natural heritage of the Port. The public art installation of 20.4m in height, referred to as the 'Marker' would comprise a tower housing the lantern recovered from the former Lighthouse.

Beneath the ‘Marker’ it is proposed to provide an informal performance space in the shape of the breakwater roundel creating a small amphitheatre defined by retained granite from the Pier Head. A lower viewing interpretive deck is proposed to be accessible from the Port Greenway which was permitted under DCC Ref. 3084/16 which was amended by Ref. 2684/17 with provision also proposed for gate control access at certain intervals to the end of the pedestrian and cycleway.

12.8.3.2. The Docklands Business Forum state that they welcome the heritage and community gain element of proposal with many businesses carrying out extensive restorations of Docklands industrial heritage but that they are concerned that the proposed heavy investment in the heritage zone may not receive the footfall appropriate to succeed due to the location of the ‘zone’ deep inside working port campus. They outline that the ‘EPIC’ facility struggled for many years to realise success and that it will be extremely difficult for the applicant to attract footfall given that they have none of the locational advantages of EPIC. While I acknowledge the concerns expressed I would note that the rationale for the location of the proposed heritage zone, in addition to creating a new terminus for the Port is the terminus of the permitted greenway which creates a new amenity in itself for the city terminating in the Heritage zone. The whole rationale for the space, accessed by the greenway is completely different to the EPIC centre and I consider that the proposal provides a new addition to the suite of attractions in the City. I consider that the design of the heritage zone is very well considered with the heritage elements salvaged from the former lighthouse taking centre stage.

12.8.3.3. With specific reference to the proposed Greenway which terminates at the proposed Heritage Zone, the applicant stated at the hearing that the implementation of the Port Greenway, permitted under Reg. Ref. 3084/16 which comprised the provision of a greenway along the northern and eastern boundary of the Port as part of a wider proposal to the internal road network, is currently being procured. They stated that the quality design measures in respect of visual amenity are being implemented by the applicant at appropriate locations as part of the permitted development. The applicant submitted a drawing to the hearing prepared by MOLA (Drwg 2600) which is a full size version of the drawings included at Figure 3.3 in Helena Gavin’s presentation to the hearing and Appendix C of same. They outlined the area of

overlap between the permitted and proposed development and illustrated the additions proposed as part of the proposed development. I consider that the information provided is satisfactory and provides the Board with a comprehensive understanding of the interconnected elements and includes the mitigation measures proposed within the application including the proposed 'bird gate' and I note that these matters are also considered in terms of biodiversity, AA and visual impact. I consider that the matter has been appropriately addressed.

12.8.4. **Great South Wall**

12.8.4.1. The Conservation Section of Dublin City Council raised a concern that increased scouring, dredging and water movements in the vicinity of the Great South Wall would impact on the integrity and lead to the continued deterioration in the condition of the South Wall. I note that the concerns expressed appear to be a result of visual inspection rather than any detailed examination of the structure itself as no assessment of the structural integrity of the Great South Wall has been presented to support the contention. In response the applicant addressed the matter at the oral hearing in the presentation provided by Adrian Bell and others. It is stated that in terms of water movements which could either cause scouring or damage to the wall that these can only result from tidal currents, natural wind waves or ship movements. While I address coastal processes in the EIA below (section 13.8) I would note that, in addition to the conclusions reached in the EIAR, the applicant undertook a detailed assessment of the water movements and wash at both of the Bull Walls resulting from ship traffic. The detailed report is entitled 'Ship Wake Assessment Study'. The report is a very useful assessment of the impact of wave disturbances from shipping traffic on the integrity of the Bull Walls and concludes that the ship wash waves that approach the Bull Walls when vessels travel at the maximum permissible speed of 9 knots were found to be very small and equivalent to natural waves generated during offshore Beaufort Force 4 winds which are experienced in the Port for c.410 hours annually which is almost 6 times greater than the equivalent generated by the additional hours of ship wash disturbance, calculated to be c.69 hours, generated by the proposed development. It is concluded that the proposal will not impact the stability of either the Great South Wall or North Bull Wall in any

appreciable way. I consider that the applicant has satisfactorily addressed the concern raised in respect of this matter.

12.8.5. **Archaeological Monitoring**

12.8.5.1. The matter of archaeological heritage is addressed in Section 13.10 below and I would refer the Board to that section for matters relating to archaeological impacts including to the suggested condition by the Department in respect of additional underwater dives. However, I would note that an observer has raised concerns about the means by which archaeological excavation is undertaken. It was noted by Mr. Farrell at the oral hearing that two shipwrecks had been found during the course of dredging of the channel suggested that the use of dredging for archaeological excavation was not appropriate. In response Niall Brady for the applicant stated that two wrecks had not been found during dredging but that one, referred to as the Millstone wreck was discovered, the fate of which he outlined highlighted the historical treachery of access to the Port. He clarified that archaeological excavation is not undertaken by dredging, but rather that when dredging is ongoing monitoring is undertaken to fine tune hotspots and that if anything is found, an exclusion zone is created and the dredger then pulls off site facilitating an underwater dive and inspection. I consider that this is reasonable and comprises the process in place since the ABR project and associated dredging was commenced.

12.9. **Air Quality**

12.9.1. Firstly, I would also note that the EIA at section 13.6 below addresses air quality and climate. This section addresses the matters raised by observers in relation to air pollution and air quality. At the outset I will reference the relevant Regulations and Guidelines. The Air Quality Standards Regulations 2011 (S.I. 180 of 2011), which transpose the EU Directive, provide the relevant limits for the protection of human health. Table 10-2 of the EIAR outlines the limits for pollutant sources as set out in these Regulations. The WHO 2005 Air Quality Guidelines set out limits for a number of pollutants but these Guidelines are not statutory. Table 10-6 of the EIAR outlines the WHO Guidelines with the values for NO_2, SO_2, PM_{10} and $PM_{2.5}$.

12.9.2. One observer states that they are concerned at potential increased negative impacts to air quality with nearest residential and commercial receptors outlined and noted that ecological receptors can be affected by deposition of air pollutants such as nitrogen oxides and sulphur dioxide with nearest sensitive ecological sites outlined. As detailed by the applicant Schedule 3 of the Air Quality Regulations (S.I. 180 of 2011) state that compliance with limit values for the protection of human health do not apply at specific locations such as those where members of the public do not have access, where there is no human habitation or at industrial installations. In this regard, the potential for elevated levels within the port itself will not pose a risk to human health from air quality. However, as noted at the oral hearing, Mr. Paul Chadwick stated that the analysis undertaken in the air quality assessment concentrated in residential areas and shows that the statutory limits will not be breached in these areas by the proposed development.

12.9.3. The presentation, by Mr. Chadwick to the oral hearing, also addresses the release of additional reports by the EPA in relation to air quality. Firstly, in September 2019 (following the lodgement of the current application), the EPA published their annual air quality report for 2018 which monitors and reports on air pollutant levels in Ireland and compares them to the legally binding EU limits values for the protection of human health (EU Ambient Air Quality and Cleaner Air for Europe Directive (2008/50/EC)). The applicant states that in 2018 all levels of air pollutants were in compliance with the EU limits at all monitoring stations. The presentation provided by Mr. Chadwick updates the data provided in the EIAR and NIS for years 2015-2017 with the data for 2018 and it outlines that the results at the monitoring stations are within the statutory limits.

12.9.4. Councillor Cooney refers to the air quality assessment in the NIS where she considers the assessment on NO_2 and ambient air quality is outdated with reference EPA monitoring dated July 2019, particularly at the Port Tunnel, which shows levels above legal limits that are a danger to human health. Councillor Cooney also states that any increased activity should be measured against the July 2019 results with the EU ambient air quality directive requiring a local air quality plan for such breaches and that activities may need to be limited or cease if causing danger to human health. As outlined above, the information outlined in the applicants documentation was the latest publicly available dataset at the time of lodging the application with the

information available since then (2018 data) not materially affecting the baseline presented in the EIAR.

12.9.5. The July 2019 report referred to by Councillor Cooney, as clarified by the applicant, is an EPA report entitled 'Urban Environmental Indicators: Nitrogen dioxide levels in Dublin, July 2019' which, it is noted, is separate to the annual EPA reports upon which the air quality assessment is based. The applicant states that the EPA report is a modelling document which modelled road traffic emissions with potential for elevated levels along the M50 and Port Tunnel. The applicant clarifies that the report does not provide monitored values but uses predicted values based on a computer dispersion model and it does not relate to measured values. It is based on indicative methods with the results of these spatial assessments indicative only illustrating areas of the city where air pollution levels are higher. They state that the 2019 report referenced cannot be used to determine compliance with EU legislation. The observer questioned the applicant on this matter at the oral hearing with the applicant outlining the difference between the results from the monitoring undertaken and reported both by the EPA and DPC and the virtual predicted results from the July 2019 report.

12.9.6. It is further noted that data referenced in the EIAR and NIS is from Dublin Port Company's own monitoring network at the Port and environs up to December 2018 which is more up to date than the latest EPA monitoring data. It is caveated that the DPC data cannot be used to determine compliance with the limits for protection of human health, however it can be used as indicative data to support the EPA levels. Therefore it is useful supporting data for the purposes of establishing baseline levels.

12.9.7. In relation to the reference to air quality plans, the applicant refers to air quality management plans, whereby under the applicable regulations where levels of pollutants in ambient air exceed any limit value or target value in an area, an air quality management is required in order to achieve the related limit value. Reference is made to elevated levels of $N0_2$ in Dublin City Centre in 2009 with the EPA requiring an Air Quality Management Plan to improve levels. The applicant states that levels of monitored $N0_2$ in Dublin have all been in compliance with the limits for the protection of human health in recent years.

12.9.8. In relation to concerns expressed in respect of PM_{10} levels, which the observer notes exceed the WHO Guidelines 2018 in the port areas of Breakwater Road South and Port lands adjacent to Tom Clarke Bridge, the matter was also addressed at the oral hearing and while the PM10 levels may exceed the stricter WHO Guidelines, they are within the statutory parameters set out in the Air Quality Regulations (S.I. 180 of 2011). I also note that the applicant clarified that the linkage between sea salt and PM10 is a linkage put forward by the EPA in air quality monitoring reports (Air Quality in Ireland 2018) and is not being proposed by the applicant. I consider that the applicants have satisfactorily addressed the matter of air quality.

12.10. Consultation

12.10.1. At the outset I would note that advice within the report prepared in respect of the pre-application process required that public consultation was to be as extensive as possible and consultations should take place with Prescribed Bodies and the local community. Chapter 5 of the EIAR deals with project scoping and consultation. Reference is made to the Masterplan Review process in 2017 which is outlined in detail and included an SEA and AA of the proposals to revise the masterplan. There was a further consultation process in 2018 with the observations on same outlined in Chapter 5 (pg5-5). Consultation specific to the MP2 project is outlined in Section 5.3 of Chapter 5 and includes the pre-application meetings undertaken with An Bord Pleanala. Meetings with Dublin City Council are also detailed as are meetings with Statutory Bodies which are summarised. Table 5.3 provides a list of the Statutory and Non-Statutory bodies consulted with as part of the EIA process and Table 5.4 provides a summary of responses received. Public consultation was undertaken between April 2018-July 2018 with the wider public on the MP2 project and includes a community newsletter and meetings with local community groups. Additional consultations with local groups was undertaken between January and June 2019 as summarised in Table 5-5. The Chapter concludes noting the consultation required as part of the application process.

12.10.2. I would note that a number of observers refer to lack of engagement with them in particular or to the general public. The matter was also raised at the oral hearing. I would note that the Docklands Business Forum state that they were not consulted with at pre-application stage with no business in the regenerated

docklands on the list of consultees. I would refer the Board to the extensive consultation undertaken by the applicant as outlined in Chapter 5 of the EIAR and as summarised above. The observer does not indicate if they engaged at any stage when consultation processes were open to the public. I consider that while the observer may feel aggrieved that they were not engaged with, there has been ample opportunity for all interested participants to engage with the applicant. The Hollybrook Grove Householders Association consider the information provided to public sparse and website difficult to navigate with a lot of people in Clontarf unaware of proposal with many on holidays. I do not agree with this consideration given the amount of information available particularly in the form of newsletters to local communities. I would note that Peadar Farrell states that the applicant is abusing the planning system with contiguous applications designed to baffle observers. I consider that the contrary is the case, the masterplan undertaken clearly outlines the projects proposed for the overall development of the Port area. I consider that the applicant has undertaken a comprehensive consultation process.

12.11. **Community Gain**

12.11.1. Appendix C of the Planning Report submitted with the application set out the community gain proposal submitted by the applicant who consider that it could be included by way of condition in any permission by the Board for the proposed development. This proposal is a result of consultation with Dublin City Council, local communities and interested parties and it is stated that the proposal has found widespread support. The proposal is two-fold as follows:

1. Applicant will allocate a sum of 50% of the site value of the Polefield (or sales price achieved) at the date of the grant of permission to a maximum contribution of €1m towards the provision and operation of a City Farm on lands owned by Dublin City Council adjacent to the Port – either in Fairview Park or on Alfie Byrne Road. These lands will be of sufficient scale to support a viable City Farm Project. It is stated that the structure for the delivery of the funding and for the development of the City Farm will need to be confirmed in an agreement between Dublin City Council and the applicant and will be the subject of a distinct Part 8 consent by DCC.

2. Following the grant of permission for the proposal, the applicant proposes to allocate a sum of €1m to be invested for the enhancement and support of education provision for St Josephs Co-Ed Primary School in accordance with a scheme to be developed with local schools and key stakeholders.

12.11.2. It is stated that all of these sums will be in addition to the current community based initiatives and special projects that the applicant is undertaking and that there will be considerable gain to the local communities and to Dublin as a whole. I would note that Dublin City Council have stated that the proposal for Community Gain (Appendix C) is acceptable in principle to DCC Parks and Landscape Services and requested that the applicant provides a site location map of the proposed site(s) for the Community Gain proposals. I would suggest to the Board that the proposal is acceptable and if they are minded to grant permission that a condition requiring same is attached which also requests the submission of the site location map as suggested by DCC when the location of the proposed City Farm has been determined.

13.0 **Environmental Impact Assessment**

13.1. **Legislative Context**

13.1.1. This application was submitted to the Board after 1st September 2018 and therefore after the commencement of the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 which transpose the requirements of Directive 2014/52/EU into Irish planning law.

13.1.2. Section 1.7 of the EIAR states that the proposal falls within the class of development identified in paragraph 10(e) of Annex II of the Directive 2014/52/EU which provides for the 'construction of roads, harbours and port installations, including fishing harbours (projects not included in Annex I). It is stated that screening undertaken determined that the relevant thresholds were exceeded and that an EIAR was required. Notwithstanding this, the application is made under Section 37E of the Planning and Development Act 2000, as amended which provides at Section 37E(1) that an application for permission for development in respect of which a notice has been served under section 37B(4)(a) shall be made to the Board and shall be

accompanied by an environmental impact assessment report in respect of the proposed development. Therefore an EIAR is mandatory.

13.1.3. The EIAR is laid out in three volumes in 8 documents, the non-technical summary (Volume I), the main document in one volume (Volume 2) in two parts (Parts 1 & 2), and the Appendices in one volume (Volume 3) comprising 5 parts (Parts 1, 2A, 2B, 3 & 4). The outline of the EIAR is detailed in Section 3.8 above.

13.1.4. The likely significant direct and indirect effects are considered under the following headings, after those set out in Article 3 of the Directive from Chapter 7-17 as follows:

- Biodiversity, Flora and Fauna
- Soils, Geology & Hydrogeology
- Water Quality & Flood Risk Assessment
- Air Quality & Climate
- Noise & Vibration
- Material Assets – Coastal Processes
- Material Assets – Traffic & Transportation
- Cultural Heritage (incl Industrial & Archaeological)
- Landscape & Visual
- Population & Human Health
- Waste

13.1.5. In advance of the oral hearing the applicant was specifically requested to present their considerations in respect of 'land' as provided for in Section 171A(b)(i)(III) of the Planning and Development Act, 2000 as amended, at the oral hearing. The matter was addressed in two presentations provided on the applicant's behalf. One of the assessments provides a technical assessment of the matter (Dr Alan Barr) and the other provides a legal assessment of the matter (Legal Counsel). Section 13.14 of this assessment below addresses the technical matter of land as proposed by the applicant, the basis for which is supported by the Legal submission. I consider that the matter has been satisfactorily addressed.

13.1.6. I have carried out an examination of the information presented by the applicant, including the EIAR, and the submissions made during the course of the application and at the oral hearing. A summary of the submissions made by the prescribed bodies and observers has been set out at Sections 7, 8 & 9 of this report. I would note that in the report prepared in respect of the pre-application consultation process, a number of matters were raised by the Board in respect of the EIAR. These are as follows: - current national advice in relation to the implementation of EIA Directive 2014/52/EU; Comprehensive and detailed EIAR which has particular regard to the impact of the proposed development on coastal processes, ecology (aquatic and terrestrial), archaeology, industrial heritage, water quality, flood risk and traffic management (including any new or modified road or rail proposals such as a Luas extension). These matters have been addressed within the EIAR and are assessed within this EIA.

13.1.7. I have carried out an examination of the information presented by the applicant, including the EIAR, and the submissions made during the course of the application. A summary of the submissions made by the prescribed bodies, planning authority and observers has been set out at Sections 7, 8, 9 & 10 of this report and include matters relevant to the EIA. The relevant issues raised are addressed below under the relevant headings, and as appropriate in the reasoned conclusion and recommendation including conditions.

13.1.8. I am satisfied that the EIAR has been prepared by competent experts to ensure its completeness and quality, and that the information contained in the EIAR and supplementary information provided by the developer, adequately identifies and describes the direct and indirect effects of the proposed development on the environment, and complies with article 94 of the Planning and Development Regulations 2000, as amended. I would note that the EIAR includes Chapters outlining the need for the proposed development (Chapter 2), provides a project description (Chapter 3) and details the project scoping and consultation undertaken. For the Boards information, I have addressed the principle of the proposal in Section 12.1 of the planning assessment above. A detailed description of the proposed development is set out in Section 3 of this report. Consultation is specifically considered in Section 12.11 of the planning assessment above. Therefore it is not

considered necessary to repeat the principle of the proposal or a description of same in this assessment.

13.2. Alternatives

13.2.1. The submitted EIAR outlines the alternatives examined at Chapter 4. I would note that the Directive requires that the applicant provides a description of reasonable alternatives. Article 5(1)(d) of the 2014 EIA Directive requires the following:

"*a description of the reasonable alternatives studied by the developer, which are relevant to the project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, taking into account the effects of the project on the environment.*"

Annex IV (Information for the EIAR) provides more detail on 'reasonable alternatives':

"*2. A description of the reasonable alternatives (for example in terms of project design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects.*"

The consideration of alternatives is outlined under a number of headings as follows:

Masterplan/Location

13.2.2. The consideration of alternatives outlines the strategic considerations underpinning the proposed development. It is outlined that at a strategic level, the Masterplan identified that the MP2 Project is a key element of its implementation, the fundamental objective of which is to provide capacity in Dublin Port for the 77.2m gross tonnes projected by 2040 by maximising the utilisation of Dublin Port's brownfield lands to provide the capacity required. It is stated that the Masterplan process identified that the development in this area of the Port is the most sustainable approach and the desired approach from a strategic point of view. I would note that alternatives considered included no port expansion, optimising port lands and increasing port lands. The options considered are set out in considerable detail with an assessment of same outlined in Table 4-1 with further assessments

detailed which include environmental considerations. The masterplan process was itself an assessment of alternatives and I would agree that the masterplan and the process undertaken in the development of same is a valid element of the consideration of alternatives in respect of location.

Design

13.2.3. The EIAR provides a detailed consideration of this aspect of alternatives in Section 4.3 providing alterative engineering design/layouts and technology. It is stated that the design team's approach to developing and progressing the scheme design was based on examining layouts of key infrastructure elements that avoided or minimised any adverse environmental impacts while meeting the requirements of the project brief. The EIAR then addresses the individual elements of the proposed development and considers them in respect of alternative designs including the location of Berth 53 and the South Dublin and Tolka Estuary SPA, potential impact on the Great South Wall, COMAH sites and the demolition of the Pier Head. This is set out in detail with predicted impacts of options and progressions outlined and environmental effects of each. I consider that the information presented is extremely comprehensive.

Dredged Material

13.2.4. I would note that the Parks Report from Dublin City Council considers that alternatives to the dumping at sea of dredged material should be presented. As outlined elsewhere in this report, it is proposed to dredge a total of 424,644m^3 of material. It is stated that the berthing pockets are required to provide sufficient depth of water at all stages of the tide, to vessels berthed at the Port and to facilitate the safe and effective operation of the Port including facilitating larger ferries and more frequent sailings. I would point out that Sections 4.3.8 (channel widening) and 4.3.9 (dredging/disposal/re-use) of the EIAR provides a comprehensive consideration of the channel widening and dredging/disposal/re-use of the material. In relation to the dredging this includes beneficial re-use, disposal on land, incineration and disposal of the dredged material. While I address the matter of dredging in Section 12.4 above, I would note that while permission for dredging is sought as part of the subject application that the dumping-at-sea element is subject to a licence which is determined by the EPA. I consider that the matter has been addressed in detail.

Therefore the concerns expressed by DCC regarding this matter have been addressed.

Conclusion

13.2.5. It is therefore considered that the issue of alternatives has been adequately addressed in the application documentation, which is to be considered by the Board as the competent authority in the EIA process.

Assessment of Likely Significant Direct and Indirect Effects

13.3. **Biodiversity, Flora and Fauna**

13.3.1. Chapter 7 of the EIAR refers to biodiversity. I would also refer the Board to Section 14 below where an appropriate assessment of the proposed development is provided. In addition, I have addressed the matter of biodiversity in the planning assessment at section 12.4 above which addresses, in the main, the matters raised in the observations in respect of concerns surrounding biodiversity. This Chapter of the EIAR has been divided into sub-sections as follows: Terrestrial Biodiversity, Benthic Biodiversity and Fisheries, Marine Mammals, Avian Biodiversity and Designated Sites (Other than European Sites) with different ecological experts responsible for each of the sections as outlined in the EIAR and in the presentations received at the Oral Hearing. For ease of reference I will carry out my assessment below under the sub-headings used in the EIAR which I have annotated A, B, C & D.

A - Terrestrial Biodiversity

13.3.2. Habitat surveys were conducted on 3rd May 2018 and 22nd and 23rd May 2019. All habitats were mapped and categorised in accordance with the Heritage Council's *Guide to Habitats in Ireland*. All visible signs of mammals were recorded, and the site visually assessed, in particular for potential breeding or resting areas for protected mammal species. Night-time bat surveys were completed during the hours of 21:45hrs to 01:15hrs. Dawn surveys were completed from 03:50hrs to 05:10hrs. The receiving environment is set out in Section 7.2.2 and divided into two areas (outlined in Figure 7-1). The areas described as Habitat Group 1 and Habitat Group 2 with the surveys undertaken determining that the area within Habitat group 1 is of local (lower) site value and Habitat Group 2 of local (higher) value. In respect of terrestrial

animals, while no evidence of badger or otter were recorded, it is considered that the terrestrial component of the proposal is of negligible value to local populations of these species. No bat roosts were recorded at any of the buildings or structures to be demolished nor were any observed foraging or commuting with the site considered to be of negligible value for local bat populations. The EIAR outlines the vegetated features which will be affected by the proposal including recolonizing bare ground, woodland and amenity grassland all of which are of local value with the permanent loss of same predicted to result in a minor adverse magnitude of effect. No protected flora or fauna are predicted to be impacted.

13.3.3. In terms of cumulative impacts, there are no likely significant effects on terrestrial biodiversity features predicted as a result of the construction or operation of any of the projects listed in the EIAR, and no remedial or mitigation measures are required to reduce the magnitude of the effects predicted in the relevant assessment. I consider that this is reasonable. In relation to mitigation, I would concur that there are no potential significant impacts arising which require avoidance, reduction or counterbalancing measures to mitigate or offset their adverse effects. In turn, there is no requirement for monitoring.

B - Benthic Biodiversity and Fisheries

13.3.4. The methodology undertaken to inform the report is outlined with biomass samples (Tables 7-2,7-5, 7-6, 7-7 of note) taken within the Bay to assist with the benthic biodiversity and desk and field surveys informing the fisheries aspect with the species found in the surveys outlined. It is also noted that the Lower Liffey is also a migratory corridor for salmon and river lamprey both of which are Annex II species under the EU Habitats Directive and both of which occur in the wider Liffey catchment with fish counters operated by IFI on the lower and upper Liffey (salmon counter returns – Table 7-12). Section 7.3.3.2 details the disposal site in terms of benthos. Table 7-13 outlines the total quantity of dredge spoil disposal at the Burford Bank site from 2001-2018 with the sediment characterisation across the sea bed outlined in Figure 7-13. Monitoring of the disposal site is detailed in the EIAR and I note that it states that in May 2018, a further survey of the disposal site was undertaken to assess impacts associated with the ABR Project capital dredge spoil disposal from 2017/2018 (ASU, 2018). This found that although abundances and biomass were reduced, the faunal communities present were similar to those

identified prior to commencement of the ABR Project capital dredge spoil disposal. Species of fish likely to be found at the disposal site based on ASU surveys are outlined in Table 7-14. It is noted that commercial fishing does not take place around the application site and is limited within the open water of Dublin Bay. There are no classified production areas for bivalve molluscs and aquaculture is undertaken in the Bay. Recreational fishing is limited in the main to the piers and harbour around the Bay.

13.3.5. In terms of potential impacts, four impacts are proposed in the EIAR – habitat removal, habitat disturbance due to dredging, impacts associated with dredge spoil disposal and impacts of piling noise which I will address in turn.

Habitat Removal

13.3.6. It is proposed to reclaim 2.18 ha of benthic soft sediment with the infilling of Oil Berth 4 which comprises habitat common to the Port with the impact considered permanent, slight negative. The removal of the Pier Head at the Eastern Breakwater will result in a gain of 0.28 ha of subtidal soft benthos which is considered a permanent, slight positive impact. As part of the construction works, it is proposed to place concrete mats on the sloping edges of the across a limited area of dredge areas to prevent slumping of sediment resulting in the permanent loss of 1.9 ha of soft sediment benthos but the introduction of equivalent area of hard-benthos associated with the placement of the 1.78 ha of concrete mattresses resulting in an increase in biodiversity over several years with the impact considered permanent, slight positive.

13.3.7. 10.331 ha of subtidal habitat will be temporarily disturbed due to the requirement to dredge deeper berth pockets and to widen the channel adjoining Berth 53 reducing the benthic food available to bottom dwelling species. Given there is a quick recovery this is considered a temporary disturbance and is therefore a minor, negative and short-term impact in the context of the widespread availability of feeding benthic feeding habitat.

Habitat disturbance due to dredging

13.3.8. The proposed development will result in the dredging of 10.33 ha of soft sediment subtidal benthos, less the 1.78 ha of concrete mattresses which will be placed on the seabed with the habitat either plentiful within the area or will rapidly recover with the

predicted impact considered a negative, temporary to short-term, slight impact and which I consider is reasonable. In terms of fisheries impacts arise from the concentrations of suspended solids in the water column within the local area and also the potential for fish entrainment in the dredger. In terms of suspended solids the EIAR considers that it is unlikely that individual fish will be exposed to very high suspended solids (i.e. >100mg/l) for extended periods because the dredger will be moving with the area of peak suspended solids also constantly moving. The time of the greatest perceived risk would be during the outward migration of smolts from the Liffey but the dredging will be undertaken between October and March and therefore not be an issue. In terms of entrainment, the greatest risk would be to a group of high value or protected species (e.g. Annex II fish) concentrated into a narrow channel where there would be a greater chance of entrainment such as salmon smolts but dredging will occur between October and March with smolts not be adversely impacted. It is predicted that overall the loss of fish and invertebrates as a result of dredging can be categorised as slight adverse and short-term given the vast bulk of what will be entrained will be the most widespread and common species and the impact will be confined to a small area relative to the wider Liffey Estuary and Dublin Bay where all the same species will occur to varying degrees. I consider that the conclusions are reasonable. I also note the mitigation proposed by way of the use and operation of dredgers.

Impacts associated with dredge spoil disposal

13.3.9. As noted elsewhere in this report it is proposed to dispose the dredged material at the Burford Bank disposal site, located within the Rockabill to Dalkey Island cSAC. It is stated that in terms of benthos, no qualifying interests are present within the footprint of the disposal area and the area is an active site which is regularly used to dispose of sediments from Dublin Port maintenance dredging. The proposal requires the deposition of c. 424,644 m3 of mixed sediments, which consists primarily of sands and clays which it is proposed to spread over at least 4 winter seasons between 2024 and 2031. I would note that the EIAR refers to surveys undertaken as part of the ABR Project monitoring programme in 2018, 3 months following disposal of circa 1.3 million m3 of sediment in 2017/2018, which indicate that although biomass and diversity is reduced, faunal groupings present in large parts of the area are similar to those of the baseline survey in 2016 which it is proposed illustrates the

resilience of the faunal communities at the disposal site. It is therefore determined that the impact associated with the proposed disposal is considered a negative, short-term, moderate impact, with recovery on site expected to occur within 1-3 years following cessation of disposal activities at the site. I note that mitigation is proposed by way of the use of specific dredger and the timing and duration of the works. I also note the learnings from the ongoing monitoring of works associated with the ABR project. I consider that this is reasonable.

13.3.10. Potential impact on fisheries from the disposal is also outlined with same considered to be slight, adverse and short-term because of the widespread availability of feeding habitat in the sea area. An indirect impact on the diet of the harbour porpoise who feed on a wide range of fish including small benthic species is also considered. However as noted in the EIAR this species are highly mobile with the cSAC covering 273km2 and therefore no direct or indirect impact is likely to arise. I also note that reference is made to a recent survey of the disposal site and its immediate area confirmed the presence of a fish community typical of similar habitats in the Irish Sea with 14 species surveyed within 6 months after the first ABR project capital dredge spoil disposal exercise.

Impacts of piling noise

13.3.11. I would note for the Board's information that underwater noise is specifically addressed at Chapter 11 of the EIAR and in Section 13.7 of this assessment. The EIAR states that extensive research has been undertaken in recent years to relate sound energy output from impact piling to adverse impacts in fish including mortality, recoverable injury and behavioural responses. It is also noted that currently there are no Irish or European regulations or guidance governing the impact of piling noise on fish however targeted research provides guidance for same which is outlined in Table 7-16. Table 11-30 in Chapter 11 sets out the noise impact zones for fish as a result of the sound output from driving circular piles for the proposal which were derived from the underwater noise model developed (EIAR s.11.2.5.4). It is stated that as indicated in Table 11-30 fish within a radius of 12 m from an active pile are potentially susceptible to being killed or injured. The more important species including salmon, river lamprey and eel are all migratory and apart from yellow eels that are resident in the estuary, generally tend to move through the piling area either upstream or downstream on inward or outward migrations, rather than delay in the

active piling area which reduces risk to them coupled with their tidally induced responses to transport themselves reducing potentially injurious levels of sound pressure. I also note the consideration of common resident marine and estuarine species (non-conservation importance) and recreational fishing neither of which the proposal is considered to have a potential significant negative effect upon. Mitigation is proposed in by way of the timing of works and the use of materials and equipment. I consider that the matter has been appropriately addressed.

Cumulative Impacts

13.3.12. I note that three projects are specifically considered in respect of addressing the potential for cumulative impacts. These are the ABR project, Post 2019 maintenance dredging and the Marina Extension at Howth Golf Club. In respect of the ABR project the anticipated cumulative impacts are considered as comprising the loss of habitat, dredging and disposal with varying impacts predicted. The cumulative impact associated with the disposal of material at Burford Bank is considered to be short-term, moderate and negative but as noted above recovery is expected to be rapid. Similarly with the maintenance dredging campaign, it is stated that the disposal of material from the proposed development will be undertaken over 4 events facilitating recovery.

C - Marine Mammals

13.3.13. At the outset I would note, for the Boards information, that potential effects on the Harbour Porpoise and the Grey and Common Seal are addressed in considerable detail in the Appropriate Assessment undertaken in Section 14 of this report as they are qualifying interests in the Rockabill to Dalkey Island SAC and Lambay Island SAC respectively.

13.3.14. The EIAR acknowledges that Dublin Bay is recognised as an internationally important site for marine mammals. In this regard, the EIAR outlines the extensive surveys undertaken of same. A Cetacean Sighting Scheme has been run by The Irish Whale and Dolphin Group (IWDG) since 1991. Dedicated harbour porpoise surveys off County Dublin were first carried out in 2008, when distance sampling was used to calculate density and abundance estimates in North County Dublin and Dublin Bay and subsequent to SAC designation as the Rockabill to Dalkey Island SAC in 2011, surveys of the site were carried out in 2013 and 2016. In relation to

Seals, Dublin Bay was surveyed for both grey and common seals between 1997 and 1998 and during All-Ireland seal surveys in 2003, 2005 and between 2009- 2012 and in 2012 by a number of different experts. A number of field studies have been carried out under the ABR Project marine mammal monitoring programme which has led to a significant increase in knowledge of harbour porpoise and seals in Dublin Harbour, Dublin Bay and in the surrounding area. These include sightings during maintenance and capital dredging campaigns (2017- 2018) as detailed in Figure 7-17 and acoustic monitoring (Figure 7-18) and monthly seal counts of a haul out site on Bull Island since May 2016. From the ongoing surveys and monitoring it is determined that Harbour porpoise do not use the immediate port area and are rarely recorded inside the harbour with the species in Dublin Bay only affected by dredging and dumping of spoil and shipping traffic and not construction activities or site investigations within the Liffey channel. The figures for Seals suggest the areas of the port that will be affected by the proposed construction of the proposal, the Liffey Channel is used by seals and is the same area as affected during the ABR Project. Seals using the outer harbour and in Dublin Bay will only be affected by dredging and dumping of spoil and shipping traffic. Therefore I consider that it is clear that significant baseline information is available to the applicant in respect of the reporting of potential impacts.

13.3.15. Potential impacts on marine mammals arise from noise associated with piling, dredging and dumping and shipping traffic associated with the Port. The main potential impacts of the proposal on harbour porpoise are considered to be disturbance during dredging outside Dublin Harbour along the approach channel, and dumping at the proposed disposal site. The disposal site is situated within the Rockabill to Dalkey Island cSAC which includes harbour porpoise as a qualifying interest. The likelihood of impacts on harbour porpoise without mitigation is moderate but with the implementation of mitigation measures and propose the implementation of the NPWS Guidelines and include the provision of a Marine Mammal Observer for works including piling, dredging and disposal, there are no residual impacts predicted.

13.3.16. The main impact of the proposed development on seals will be exposure to demolition and piling operations within Dublin Port and disturbance during dredging inside Dublin Harbour and along the approach channel and dumping at the proposed

disposal site. The likelihood of impacts on seals without mitigation is moderate. However, with the implementation of mitigation measures such as implementation of the NPWS Guidelines, appropriate mitigation zone and monitoring are proposed including underwater noise monitoring with no residual impacts predicted. There is a potential for moderate indirect impacts through disturbance from long term increases in vessel noise associated with increased marine traffic and potential impacts on the distribution and abundance of preferred prey species through dredging and dumping. No long-term impacts on fish distribution or abundance is predicted (See Section 7.3) which provides that the likelihood of indirect impacts on prey abundance and distribution is low. In terms of cumulative impacts, I note the EIAR addresses the potential impacts of the proposal with the ABR capital dredging scheme, maintenance dredging with which there will be no overlap and therefore no cumulative impacts arise. In terms of the Marina Extension at Howth Yacht Club the amount of proposed dredge material is outlined which it is stated would not alter any of the conclusions in the EIAR which I consider is reasonable on the basis of the information provided.

D - Avian Biodiversity

13.3.17. I would note at the outset that the Appropriate Assessment at Section 14 below addresses breeding and non-breeding waterbirds in considerable detail including the surveys undertaken of same. It is clear that there is a significant amount of survey information dating back to the 1990's on the species. Notwithstanding the ongoing surveys and the ABR surveys, additional surveys were undertaken monthly between 2013 and March 2019 as part of the Dublin Bay Birds Project. To address the area north of Berth 53, additional surveys were undertaken during extreme low tides on 8 dates in 2018 & 2019. In terms of breeding tern surveys it is stated that from 2013 to 2018 monitoring of Common Terns and Arctic Terns nesting within Dublin Port has been carried out by BirdWatch Ireland as part of the Dublin Bay Birds Project which is funded by Dublin Port Company with tern colony locations are set out in accompanying drawings. Breeding Black Guillemot surveys have also been undertaken between 2013 and 2018. I would note for the Board's information that this species is not a species of conservation interest in any of the relevant SPAs addressed in the AA in Section 14.

13.3.18. The breeding black guillemot is addressed in Section 7.5.3 with Table 7-20 outlining estimated total number of the species and their location from 2013-2029 with the peak and mean outlined with the numbers noted to be falling. I would note that it is stated that temporary artificial nest sites have been installed in the Oil jetty to replace any nest sites which are unavailable during the construction of the ABR Project. The EIAR notes that this species is the only one breeding in the construction area of the proposed development and are generally present from March to August dispersing outside this breeding season within the wider area of the Bay. Two species of breeding tern are found in the Port – Common Tern and Artic Tern - with the tern colony currently occupying four separate sub sites entirely on artificial structures with the populations in 2018 set out in Table 7-21 (this species is addressed in the Appropriate Assessment in Section 14). The numbers of the species between 2013 and 2018 are set out in 7-22 and I would note that the terns do not nest or roost within the application site. Non-breeding waterbirds within 200m of proposed Berth 53 are outlined in Table 7-23 the greatest numbers being the Black headed gull and the herring gull. The use at low of the area to the north of proposed Berth 53 is outlined and I would note that this matter is also addressed in the AA below.

Direct Impacts

13.3.19. In terms of potential impacts on the Black Guillemot the proposal would necessitate the removal of several nest sites in the quay walls and ro-ro ramps within OB3, OB4, Berths 50A & 52/53 directly affecting c.9 birds. Indirect impacts from noise disturbance are not considered to be significant given the birds occupy the existing port including proximate to the construction activities in the ABR project area. In relation to mitigation it is proposed to provide a number of custom made nest boxes within adjacent areas for displaced birds with this species having readily nested in such structures to date. I consider that this is satisfactory.

Non-Direct Impacts

13.3.20. The main predicted impacts on breeding terns relates to noise disturbance during construction and effects of dredging on foraging areas. In terms of noise it is predicted that worse case predicted noise levels at construction from the proposal will be less than 63dB(A) at the tern colony on the CDL Dolphin which is well below

the 85dB(A) referenced as likely to result in disturbance. In relation to dredging it is noted that terns have continued to forage in the channel during regular maintenance dredging with no evidence that dredging operations affects small shoaling fish that are their prey. By way of mitigation it is proposed that capital dredging works will be confined to the winter months (Oct-March) when the species are abroad.

13.3.21. In respect of Non-Breeding Waterbirds, the main potential impacts during the construction phase disturbance to foraging on sand in shallow water to north of proposed Berth 53. In terms of potential mitigation it is considered that construction of the berth will cease during low tide events and this mitigation measure has been noted elsewhere in this report with a condition recommended below in respect of the proposed 'bird gate'. Other impacts include noise from pile driving and lighting. In relation to noise, worse case predicted noise levels at construction stage from the proposal will be less than 63dB(A) which is close to below the 65.5dB(A) considered as the threshold for noise likely to result in a behavioural response. In terms of lighting the potential exists to impact on marine feeding, studies have found artificial lighting to assist in feeding of gulls. During the operational phase access to the greenway is proposed to be limited during low tide to avoid disturbance which is considered reasonable. In terms of the potential operational phase impact of ship movements in the area of Berth 53 propeller and thruster jet scour calculations were undertaken with results outlined in Chapter 12. Mitigation is proposed in the design of the proposed Berth by way of a wash protection structure which is designed to reduce scouring associated with vessels using Berth 53.

13.3.22. I would note that the avian environment has been monitored over a significant period of time as part of the Dublin Bay Bird Project which it is proposed to continue for the full period of construction and for a specified period after and provides a considerable breath of information on the avian species within and in the vicinity of the Port.

Designated Sites (Other than European Sites)

13.3.23. This section of the EIAR addresses designated sites excluding European sites which are addressed separately in the Appropriate Assessment in Section 14 below. The receiving environment is described as a coastal wetland complex of considerable nature conservation value in a European and International context and

the UNESCO designated Dublin Bay Biosphere extends to over 300km^2 containing or overlapping with multiple European sites. The sites which are considered in Section 7.6 of the EIAR are outlined in Figure 7.28. The EIAR seeks to assess the proposal for its potential to affect designated sites for which a pathway of effect can be reasonably established between a receptor and the source of effect. Four designated sites are outlined as follows: proposed Natural Heritage Areas three of which – North Dublin Bay, South Dublin Bay and Dolphins, Dublin Docks – could potentially be affected by the proposal; North Bull Island Ramsar site; Sandymount Strand/Tolka Estuary Ramsar site; and Dublin Bay Biosphere.

13.3.24. The EIAR outlines potential impacts – water quality and habitat deterioration and noise and disturbance. In relation to water quality and habitat deterioration, potential construction impacts include potential for sediment release or spillages of polluting substances. In relation to operational phase impacts, increased suspended sediment levels due to port operations including ongoing maintenance dredging of the proposed new berths, general water quality impacts from machinery, discharges from vessels and cargo handling and storage. It is considered that in the absence of mitigation that temporary adverse water quality and marine habitat deterioration effects could occur in coastal zones of the designated sites. Potential for air quality impacts at the operational phase are also considered. In relation to noise and disturbance proposed marine engineering construction includes many activities which have the potential to produce underwater noise with an inherent risk of noise induced effects on the marine species. As noted elsewhere in this report, waterbird use of the Tolka estuary occurs but is dependent on tidal conditions with the potential for temporary disturbance or displacement effects on waterbirds which could have a significant impact. Mitigation measures are outlined so that pollution can be avoided, to avoid disturbance of marine mammals and to avoid waterbird disturbance at construction and operational stages.

13.3.25. I have considered all of the written submissions made in relation to biodiversity, flora and fauna. I am satisfied that the identified impacts would be avoided, managed and mitigated by the measures which form part of proposed scheme, the proposed mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct or indirect impacts in terms of biodiversity, flora and fauna.

13.4. Soils, Geology & Hydrogeology

13.4.1. In relation to solid geology, the entire Dublin area including the Port is underlain by the Lucan formation which ranges from 300-800m in thickness and is carboniferous. In terms of drift geology and recent deposits, it is noted that Dublin Port is located entirely on made ground (fill deposits). The hydrogeology of the area has been described by the GSI as complex and very variable with the limestone bedrock considered to be indurated and dominated by fissure permeability. It is stated in the EIAR that it is generally expected that groundwater levels beneath the site will remain close to sea level and may exhibit tidal variation. The site falls within an area of low groundwater vulnerability with a groundwater borehole of unknown use located to the northwest of the site. In addition to the designations within the area noted elsewhere in this report, it is noted that the Tolka Estuary and Liffey Estuary are classified as nutrient sensitive estuaries under the Waste Water Treatment Directive Sensitive Area. Section 8.4.6 of the EIAR details the site investigation undertaken and the rationale for their location with the ground conditions outlined in the following section with made ground identified to a maximum depth of 6m bgl. Groundwater strikes are set out in Table 8-4 and monitoring levels in Table 8-5. Twenty four soil samples were sent for analysis for a mixture of a range of materials and compounds including sulphate, sulphur, cyanide, PAH's, VOC's and Phenols. It is stated that all contaminants returned concentrations below their respective screening values for a commercial end use. Table 8-6 outlines the presence of asbestos in soil samples.

13.4.2. I note that groundwater contamination is addressed at Section 8.4.9 with Table 8-7 outlining groundwater contaminant concentrations exceeding screening values and the locations where such exceedances are occurring. The EIAR notes that it is considered that exceedances of the groundwater or surface water regulations are more pertinent to the assessment with the assessment of a number of contaminants not considered necessary as the IGV's are superseded by same. Exceedances in terms of drinking water standards are also not considered relevant as groundwater is not used as a potable water supply with no risk to human health from boron or selenium. In respect of the EIAR assessment, exceedances of groundwater/surface regulations were recorded for Nitrate as N, Arsenic, Chromium, Lead, Nickel and Zinc.

13.4.3. To determine the suitability of the marine sediments for disposal at sea, the Marine Institute prepared a Sampling and Analysis Plan (SAP) specifying the sample locations, depths and contaminants to be tested. A total of 30 samples were required to be tested at locations (Figure 8-6). In August 2018, an intrusive marine ground investigation was undertaken to collect the sediment samples for laboratory analysis in accordance with the SAP. The sediment samples were sent for sediment chemistry analysis and can be described as a sandy CLAY with pockets of gravel. It is noted that no rock is required to be dredged to achieve the design depths of the channel widening and berthing pockets. Table 8-9 outlines the parameters and proposed guidance values for sediment quality provided by the Marine Institute. While the sediment chemistry results and comparison tables are outlined in Appendix 3, a summary is provided within the EIAR chapter which notes concentrations below and in some cases marginally above. In one instance it is specifically noted that the sediment chemistry at Sample Location S30 (approach channel and berthing pocket at Berth 53) has a high level of Nickel (Class 3) making it unsuitable for disposal at sea with the likely cause of the contamination the historic disposal of cables at this location. In respect of avoidance of impacts, it is outlined that the proposal has been engineered to avoid the requirement for capital dredging at this location. It is stated that the full results of the sediment chemistry sampling and analysis were provided to the Marine Institute who examined the results in detail in combination with other relevant data they hold and they confirmed that they would have no objection to the disposal of this sediment at the licensed offshore disposal site. The marine sediments can therefore be classified as Class 1 (Uncontaminated: no biological effects likely).

13.4.4. Construction impacts are described in Section 8.5 in respect of soils and geology and separately hydrology. Four potential impacts are identified in relation to soils and geology as follows: demolition works, infill of oil berth 4, piling and dredging all of which are considered to have neutral impacts which I consider is explained satisfactorily. In relation to hydrogeology potential impacts also include demolition works, piling and dredging with the same conclusion that the potential impacts would be neutral and I consider that this is reasonable. In terms of operational impacts, as they relate to soils and geology references is made to the conceptual site model developed for the site as part of the contamination assessment with no soil source-

pathway-receptor links identified with potential risk to human health from sub-soil contamination negligible. It is also noted that the demolition and removal of a number of potential sources of contamination including fuel storage tanks reduced potential for hydrocarbon contamination. In respect of hydrogeology, it is not anticipated that the development will introduce significant new sources of potential groundwater contamination with potential existing contamination sources as outlined above to be removed with a neutral impact anticipated which I consider is reasonable. Mitigation measures have been identified in Chapter 9 in relation to surface water quality which are considered relevant to this Chapter. The importation of fill material to infill Oil Berth 4 will be sourced from authorised quarries with minimal potential to introduce contamination. No residual impacts are predicted.

13.4.5. I have considered all of the written submissions made in relation to soils, geology and hydrogeology. I am satisfied that the identified impacts would be avoided, managed and mitigated by the measures which form part of proposed scheme, the proposed mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct or indirect impacts in terms of soils, geology and hydrogeology.

13.5. Water Quality & Flood Risk Assessment

13.5.1. This Chapter comprises two parts. Water Quality is addressed in Section 9.1 and a Flood Risk Assessment is provided in Section 9.2. I will address each in turn.

Water Quality

13.5.2. At the outset I would note that I have addressed the matter of water quality in Section 12.6 of the assessment above and therefore I do not consider it necessary to repeat all the matters addressed therein but note that this section should be read in conjunction with that section. Figure 9-1 illustrates that the proposal including its capital dredging scheme is located within the Liffey Estuary and Dublin Bay which encompass two surface water bodies: 'Liffey Estuary Lower' transitional water body (EA_090_0300) and 'Dublin Bay' coastal water body (EA_090_0000).The proposal is located within the 'Dublin Urban' groundwater body (EA-G-008). This water body has achieved and maintained 'good' status since the 2007-2012 WFD Monitoring Cycle as reported in 2017. I would note that the EIAR states that due to the nature of the

proposed development and the relatively limited scale of geotechnical activities in the application area, there are no likely significant water quality effects on groundwater expected and these have not been assessed further in the EIAR Chapter. I consider that this is reasonable. This assessment therefore relates to the potential impacts on the relevant surface water bodies. Table 9-6 provides a breakdown of the WFD Status for each of the waterbodies in respect of the ecological and chemical status and their constituent elements as appropriate. I note that the assessment of likely significant effects on water quality has been undertaken having regard to the necessity to comply with the WFD and in doing so ensuring that the proposal does not prevent the achievement of the WFD objectives for these water bodies in subsequent RBMP cycles.

13.5.3. It is noted that protected areas within the Dublin Port and Dublin Bay area include areas of Bathing Water, Nutrient Sensitive Waters and Natura 2000 sites with the EIAR outlining each in some detail. Other matters addressed in the EIAR are the Marine Strategy Framework Directive (MSFD) (2008/56/EC) which was formally adopted by the European Union in June 2008 and is transposed into Irish law by the European Communities (Marine Strategy Framework) Regulations 2011, as amended. The EPA Water Quality Indicators Reports are also outlined with three relevant indicated for Transitional and Coastal Waters (Indicator 9 - Trophic Status, Indicated 10 – Nitrogen and Indicator 11 – Phosphorous). It is also noted that the Marine Institute (MI) monitors water quality at two locations in Dublin Bay and one location in the Liffey Estuary Lower (Figure 9-7) with details outlined in Figure 9-8. Monitoring undertaken by the applicant is outlined in detail and it is stated that the applicant is carrying out extensive monitoring of water quality in Dublin Port and Dublin Bay as part of its ABR Project with monitoring stations established in the port to provide detailed information on relevant water quality parameters, the locations of which have been agreed with the Planning Authority. I note that they measure real time water quality and continuously relay the data to a shore-based location with trigger levels which initiate investigations set for key water quality indicators to allow a quick response and remedial actions, including the temporary cessation of the works where appropriate. It is also stated that monitoring stations have been established at the licensed dredge dumping site as required by Dumping at Sea Permit to provide for the protection of the marine environment by way of monitoring

of the impacts associated with the loading and dumping at sea activity during dredging operations. Continuous real-time turbidity monitoring is carried out at four stations and at various depths along with tidal current and wave climate. The monitoring specifically addresses turbidity and total suspended solids; and dissolved oxygen, temperature and salinity with the four monitoring locations outlined in detail for all the aforementioned and the coasteye buoy monitoring locations. It should also be noted that the Marine Institute monitoring provides turbidity, temperature and dissolved oxygen datasets for the estuary and Dublin Bay which are comparable with the ABR Project monitoring datasets.

13.5.4. Potential construction impacts are outlined. These include increased suspended sediment levels due to the accidental release of sediment to the water column during demolition works, berth and associated construction works and capital dredging and sediment disposal operations. Accidental release of highly alkaline contaminant from concrete and cement, general water quality impacts associated with construction including machinery, construction materials. In terms of operational impacts these are considered to include increased suspended sediment levels from port operations including ongoing maintenance dredging of the new berths. The other identified operational impact relates to general water quality impacts associated with works machinery, infrastructure and on-land operations. Table 9-18 in the EIAR presents the potential impacts for both phases for each element which I would note is presented in the absence of mitigation. This is a very useful table and for the Boards information I have reproduced it below.

	Significance of Environmental Impact			
Construction Phase	**Demolition of Ex. Buildings & Structures**	**Berth Construction**	**Capital Dredging**	**Landside Works**
Suspended sediments/ sedimentation	Significant	Imperceptible	Profound	Significant
Concrete and cement pollution	Significant	Significant	No Impact	Significant

Impacts assoc. with general construction works	Significant/Moderate			
Operational Phase	**Buildings & Structures**	**Berth Operation**	**Maintenance Dredging**	**Landside Works**
Suspended sediments/ sedimentation	Imperceptible	Imperceptible	Significant	Imperceptible
Impacts assoc. with general port operation activities	Significant			

13.5.5. Section 9.1.4 describes each of the likely significant impacts at both construction and operational phases in detail and I consider that they are reasonable and describe the likely impact appropriately. As outlined above, the impacts are set out in the absence of mitigation measures which I note are addressed in Section 9.1.5 for both phases. These include adherence to best practice guidelines on the control of water pollution. Of particular note I would suggest is the mitigation proposed to address the impacts arising from dredging and disposal. The EIAR states that the applicant completed its first winter capital dredging season (October 2017 – March 2018) as part of the ABR Project. This dredging campaign was fully compliant with the requirements of all the development consents, as confirmed by high resolution environmental monitoring results reported in the Annual Environmental Report submitted to the Office of Environmental Enforcement (OEE) in March 2018. The monitoring included year-round real-time measurement of water quality parameters in the Liffey Channel and in Dublin Bay at eight monitoring stations and at various water depths. This was supplemented by sediment plume and hydrographic monitoring that validated Plume Dispersal Modelling. Summary results are presented in Chapter 12 (Section 12.4.1). A Dredging Management Plan was developed for the ABR Project and is set out in *Alexandra Basin Redevelopment Project Construction Environmental Management Plan (CEMP) Rev. F August 2018*. The mitigation for dredging operations in the proposed development has been informed by ABR Project monitoring and

experience working in the same locations. A comprehensive suite of measures is provided. It is stated that where the above mitigation measures are employed during capital dredging and disposal operations, the potential impact to receiving water environment will be negligible thus reducing the significance of environmental effect to *Imperceptible.* I would note that Table 9-19 addresses the potential impacts outlined in the table reproduced about but with mitigation measures included with the effect that the significance of the impacts identified is imperceptible or no impact.

13.5.6. While I address cumulative impacts at Section 13.7 below I would note that in relation to monitoring that Section 9.1.8 of the EIAR states that it is proposed to maintain the four water quality monitoring stations already in position for the ABR Project the locations of which are shown in Figure 9-23. In addition, four water quality monitoring stations within Dublin Bay which have been operational since September 2017 will continue to operate until April 2021. The monitoring buoys are scheduled to be removed in April 2021 following completion of the monitoring under Dumping at Sea Permit S0024-01.

Flood Risk

13.5.7. Firstly, I would note that this assessment considers coastal processes at Section 13.8 below which outlines the models developed to understand the coastal process pre and post development and in particular addresses the wave climate within the Port which is relevant to the consideration of flood risk. I note that, as referenced in the EIAR, a Strategic Flood Risk Assessment (SFRA) was previously undertaken in support of the Masterplan 2040 (review in 2018), for the redevelopment of Dublin Port. The SFRA provided the framework as to how all subsequent developments within the port should manage flood risk and identified the need to undertake a site-specific flood risk assessment for all sites identified as being at risk from flooding. The EIAR states that the assessment provided is equivalent to a site-specific flood risk assessment and has been prepared in accordance with 'Planning System and Flood Risk Management Guidelines for Planning Authorities'. The SFRA identified a number of considerations for the consideration of individual elements within the Masterplan area with the level of detail varying depending on the risks identified and the proposed land use.

13.5.8. In relation to sources of flooding, it is noted in the EIAR, that extreme flood events are likely to be dominated by coastal flooding and extreme fluvial events will not further increase the extreme levels predicted during extreme tidal and storm events. It is determined that fluvial flood risk would not be considered further in the assessment on the basis that coastal flood risk is the predominant source of flood risk at this location. I consider that this is rational. The predicted tidal water levels of the analysis of the extreme water levels at Dublin Port are as shown in Table 9-23. The flood zones for the proposal have been derived based on the predicted tidal water levels indicated in Table 9-23 without the inclusion of climate change factors. Figure 9-26 shows the extent of present day flood zones in relation to the proposed site with a significant portion of the proposed site within Flood Zones A & B and the remaining areas in Flood Zone C. As part of the ABR Project works, a number of areas of the proposed development site are to be infilled and raised from original ground levels to a level of 4.58mOD, which is above the proposed site specific analysis of predicted tidal flood levels. The post ABR Project Flood Zones are used as the basis for the assessment of the proposed development. In terms of the impact assessment undertaken I would note that a number of the elements of the project are water compatible such as the berths and therefore are appropriate in all flood zones. The unified ferry terminal area is considered to be a dockside activity and therefore also water compatible and appropriate in all flood zones.

13.5.9. As outlined above, an assessment of the change in wave climate resulting from the port marine works was undertaken to determine any potential flooding impact on the landside port and adjoining receptors due to the development. As presented in Chapter 12 (Section 12.4.2) changes to the wave climate due to the proposal show no noticeable change in relevant proximate areas such as Clontarf, Fairview and Ballybough bordering the Tolka Estuary. Changes in wave height within the Port are not significant. The risk of potential coastal flooding due to the proposal in these areas is determined to be negligible. No further mitigation is therefore considered necessary in respect of the change in wave climate. In terms of mitigation measures a number have been proposed where appropriate to prevent vehicles and people remaining in the areas if an extreme tidal event is predicted. Whilst there will be no damage to the majority of the site if a flood were to occur, mitigation measures have been proposed for the existing terminal building. I consider that this is satisfactory.

13.5.10. I have considered all of the written submissions made in relation to water quality and flood risk. I am satisfied that the identified impacts would be avoided, managed and mitigated by the measures which form part of proposed scheme, the proposed mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct or indirect impacts in terms of water quality and flood risk.

13.6. Air Quality & Climate

13.6.1. For the Boards information, the matter of air quality is addressed in the planning assessment in Section 12.6 above which addresses principally the concerns expressed by some of the observers. These concerns relate principally to the use of the most up to date data available and levels of NO_2 in the vicinity of the Port. Chapter 10 addresses the matter of air quality and climate and references the requirements as per Annex IV of the 2014 Directive in relation to climate change – climate change mitigation and climate change adaptation. I would note that the existing carbon foot-printing of Dublin Port is derived from the annual sustainability report prepared by DPC on its operations with a carbon footprint inventory of all port emission sources commenced as part of Sustainability Report in 2015. This is detailed in Section 10.1.10.2 of the EIAR with the 2017 results showing the main emissions sources are electricity use, transport fuels and space heating. It is noted that emissions from transport fuels are generally increasing. The potential construction stage impacts are detailed as construction dust, emissions associated with construction traffic, potential odours and greenhouse gas emissions. Operational impacts are outlined as road traffic emissions, shipping emissions, operational emissions and climate change adaptation. Table 10-2 outlines the limits for pollutant sources as set out in the Air Quality Standards Regulations 2011 (S.I. 180 of 2011). Table 10-6 outlines the WHO 2005 Air Quality Guidelines with the values for NO_2, SO_2, PM_{10} and $PM_{2.5}$. Cumulative effects with other projects such as the ABR project are addressed in some detail with concurrent construction activities the principal cumulative air quality impact. The existing, receiving environment is detailed in section 10.3 with details of the four facilities within Dublin Port licenced by the EPA outlined and the Seveso (COMAH) sites set out in Table 10-7.

13.6.2. The EIAR presents the annual averages of all the stations included within the EPA monitoring undertaken within the Dublin Conurbation for a number of pollutants. In relation to NO_2, in addition to the EPA monitoring (table 10-8 outlines results of EPA monitoring), details are outlined of the applicants ambient air quality monitoring of NO_2 with the results presented in Table 10-9. Elevated levels are shown in a number of locations such as the Alexandra Road Extension and the East Link Toll Booth which are stated to relate to road traffic at lower speeds generating higher emissions than traffic operating at more efficient speeds. The EIAR also outlines both EPA monitoring results and DPC monitoring for PM_{10} and $PM_{2.5}$ which are within the limits set out in the Air Quality Standards Regulations. The EIAR and DPC results for SO_2 are below the relevant limits as are the results for CO. In relation to dust, Table 10-16 outlines the results for dust deposition monitoring undertaken in the Port from 2014-2018.

13.6.3. As outlined above, the existing carbon foot-printing of Dublin Port is derived from the annual sustainability report prepared by DPC on its operations with the 2017 results showing the main emissions sources are electricity use, transport fuels and space heating. Table 10-18 details the carbon footprint from 2009-2017 with the do-nothing scenario outlining the challenges faced by the transport sector in respect of achieving emissions reductions.

13.6.4. In relation to construction impacts, the EIAR predicts that impacts from construction dust, odour and traffic will have a negligible impact on air quality and climate. I note that mitigation measures proposed includes the proposed Construction Environmental Management Plan (CEMP) which outlines dust mitigation measures. I consider that both the predicted impacts and mitigation proposed are reasonable. The CEMP also includes a draft odour management plan. The total estimated greenhouse gas emissions associated with the proposed construction of the development is stated to be 38,090 tonnes of CO2eq (Table 10-21) which it is predicted will result in a permanent slight adverse impact for climate. Section 10.1.14.3 of the EIAR outlines a suite of proposed mitigation measures to minimise CO_2 emissions which are appropriate.

13.6.5. In terms of predicted operational phase impacts, road traffic is stated as the principal impact. Table 10-22 outlines the local impact to air quality (NO_2, PM_{10} & $PM_{2.5}$) as a result of the operational traffic on four residential areas along the routes. The existing

scenarios as well as the do-minimum and do-something scenarios for 2026 and 2040 are outlined with the results showing that all levels of pollutants are predicted to remain within the limited required with the impacts negligible. In terms of CO_2, the EIAR states that the regional impact of the proposed operational road traffic has been assessed in terms of the total mass of CO_2 emitted and the results are presented in Table 10-23. The results of the assessment indicate that the total GHG emissions as CO_2 from the 2026 Do-Something Scenario will increase with the proposed development in operation. This approximate 13% increase equates to 5,108 tonnes of carbon dioxide per annum in 2026 compared to the Do-Nothing scenario with theses impacts considered as permanent slight adverse impact. Mitigation is proposed through improvements in fuel and engine technology driven by EU legislation resulting in a reducing emissions per vehicle profile. It is also outlined that the applicant is currently developing an initiative with the haulier companies operating in the port to provide the necessary Compressed Natural Gas (CNG) fuelling infrastructure across the port to facilitate the future trend for HGVs to change fuel from diesel to CNG. Table 10-26 outlines the EMEP/EEA 2016 Tier 1 emission factors for both fuel types are shown for a range of pollutants illustrating significant reductions in pollutants generated when using CNG relative to diesel highlighting the potential value of this DPC mitigation to local air quality.

13.6.6. In relation to shipping emissions, Section 10.1.13.2 outlines the projected changes in shipping numbers associated with the MP2 Project and cumulatively with the overall Masterplan to 2040 detailed in Table 10-25. The results indicate an increase in shipping emissions associated with the proposal as a result of the increased Ro-Ro and Lo-Lo shipping numbers and cumulatively, a further associated increase with the shipping predicted under Masterplan 2040. The impact is considered to be a long term and permanent slight adverse impact. International mitigation is implemented by the Marpol Convention, the applicant has proposed port specific mitigation with a view to reducing emissions while vessels are berthed at the port such as the shore to ship power (SSP) on berths 52 and 53 for vessels at these berths. This would facilitate powering of the berthed vessels by the national grid which will allow the vessel to turn off their main and auxiliary engines for the duration of berthing reducing direct emissions from the ships while in port and at the closest point to the sensitive human receptors in the area.

13.6.7. In terms of climate change adaptation, predicted impacts relate to climate induced sea level rise and flooding. Reference is made to the first climate adaptation plan for the transport sector, *Developing Resilience to Climate Change in the Irish Transport Sector* (November 2017) by the Department of Transport, Tourism and Sport (DTTAS) which outlines climate research and analysis on the likely impacts of climate change for transport – including more frequent storm events, rising sea levels and increased incidents of flooding. With particular reference to ports, the plan outlines a number of potential impacts including damage to port infrastructure, service disruption and changing patterns of siltation. The flood risk assessment of the proposed development is referenced (Chapter 9) of this EIAR and section 13.5 above (this report) which states that the proposed land uses within the proposal can be considered as Water-compatible development and this type of development is considered appropriate in all flood zones but the risk remains that it may change during the lifetime of the development which require the implementation of mitigation measures to reduce this risk and allow for adaptation of the development to future climate change which are outlined in the EIAR and which include the development of elements of the proposal at levels in excess of the 0.5% AEP tidal level and the finished floor level of the Existing Passenger Terminal 1 Building is 3.37m OD. The EIAR also states that the applicant is committed to formulating a Climate Adaption Plan cognisant of National Policy.

13.6.8. I have considered all of the written submissions made in relation to air quality and climate. I am satisfied that the identified impacts would be avoided, managed and mitigated by the measures which form part of proposed scheme, the proposed mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct or indirect impacts in terms of air quality and climate.

13.7. Noise & Vibration

13.7.1. Chapter 11 addresses Noise and Vibration and I would note that it is divided into two section, terrestrial noise and vibration (s11.1) and underwater noise (s.11.2). I would note that one observer Cllr. Donna Cooney raises concern with regard to underwater noise pollution given the noise sensitive nature of the site due to proximity of marine species. I would also note that the Clontarf Residents Association request that

activities undertaken as part of proposal are done in sympathy with local communities and requires that the applicant ensures that particularly noisy or disruptive activities are project managed to ensure minimal inconvenience to their neighbours. At the outset I would remind the Board that the site is located within an existing working port and therefore the baseline noise environment, which is addressed in the EIAR, is based on the existing environment. The EIAR describes the existing noise environment in the vicinity of the port as being dominated by road traffic noise, with contributions from various other industrial and human noise sources including the existing port activities. I consider that this is a reasonable explanation of the existing situation.

13.7.2. I will address terrestrial and underwater noise in turn.

Terrestrial Noise

13.7.3. Figure 11-1 outlines the noise monitoring locations (3) and noise prediction locations/sensitive receptors (20). The Chapter outlines the assessment methodology employed for both noise, both assessment and monitoring and vibration in detail. In relation to baseline noise monitoring, as outlined in Figure 11-1, three locations were chosen for monitoring which are considered representative of nearest residential properties to the north, south and west of the Port. The noise monitoring data is outlined in Tables 11-11 to 11-19 with day-time, evening-time and night-time noise levels provided for the three locations.

13.7.4. I would note that the predicted construction impacts relate to construction activity and construction phase traffic. In order to predict the cumulative noise level associated with construction phase activities at the nearest noise sensitive properties a detailed noise model was created of the Port and surrounding noise sensitive receptors with the most significant plant/equipment likely to be used during the construction phase of the proposal outlined in Table 11-20. I would also note that reference is made to likely construction hours as it is within these hours that such impacts would be likely to arise. A representative sample of sensitive receptors within the most proximate residential location to the proposal are outlines in Table 11-21 with predicted worse case construction noise outlined. Table 11-22 then compares these levels to noise threshold limits in NRA Guidelines and British Standard S5228:2009+A1:2014 the thresholds for which is slightly lower. It is

demonstrated that the predicted impact at each property is well within both limits but as noted in the EIAR, notwithstanding same, it is standard practice to recommend mitigation measures are put in place in order to ensure that construction noise levels are reduced to the lowest possible levels where practicable with Noise mitigation measures for construction activities outlined in Section 11.1.6 and which I note comprise best construction practice and which I consider are reasonable. I agree with EIAR statement that the likely effects of construction traffic noise will be imperceptible and that construction phase vibration impacts will be neutral given the nearest piling activity will be over 500m from the nearest sensitive receptor.

13.7.5. In terms of the operational phase of the proposal, I would agree that the noise levels resulting from changes to operational phase plant/equipment will be substantially less than the predicted noise levels outlines in Table 11-21 for the construction phase with no impact on noise levels at the nearest noise sensitive properties. In terms of traffic impacts, traffic noise changes as a result of the proposed development, as outlined in table 11-23, illustrate a neutral impact which I consider is reasonable. I would also note that no cumulative impacts with other projects are predicted and I consider that this is reasonable. It is proposed to undertake noise surveys during the construction period and that a monitoring programme will ensure that noise levels will be within the relevant thresholds.

Underwater Noise

13.7.6. The EIAR states that underwater noise arising during the construction and operation phases of the proposal has the potential to impact human activities such as diving and has the potential to impact on marine mammals and fish which are listed for protection. For the Boards information, I would note that underwater noise is quantified in frequency (Hertz) and intensity (decibels) with decibel levels in water significantly higher and cannot be compared directly to decibel levels in air. Another important consideration detailed in the EIAR, in relation to noise, is that it is not a persistent pollutant, once the noise source ceases noise levels drop very quickly to pre-existing levels. The EIAR quite rightly points out that the natural underwater soundscape is not silent, biological sounds from fish and marine mammals are mixed with sounds from waves and surface noise, current flow and turbulence and rain and storm noise. The ambient noise levels in coastal water, bays and harbours are subject to wide variations, particularly with breaking waves. Wind speed determines

wave activity and underwater noise levels significantly. The principal underwater noise impacts predicted include: ground investigation work, excavation of marine infrastructure, piling during installation, dredging, disposal of dredged material and increased vessel traffic. Dublin Bay has been monitored and underwater noise levels reported on several occasions given the recent applications within the area and it is outlined that construction and dredging noise occurs sporadically from maintenance activities and in recent years from the construction of the ABR Project.

13.7.7. In terms of the receiving environment, the central port area from Berth 53 to the Alexandra Basin West is heavily trafficked on a daily basis with this working area relatively noisy in comparison to the greater Dublin Bay area with noise in the port area coming from shipping and a multitude of industrial sources. It is also stated that the narrow shallow channel has the effect of confining noise from the port within that area and a short section of the channel and the River Liffey upstream. The site is noise sensitive due to the proximity of marine species including fish; Salmon, River Lamprey, Sea Lamprey, Eel, Smelt and Shad, and marine mammals, primarily the resident seal population and Harbour Porpoise associated with the nearby Special Area of Conservation with the outer part of Dublin Bay popular for recreational diving. It is stated that noise levels from construction in the port will be contained in the dredged channel close to the source and will not propagate out to the wider bay area.

13.7.8. As part of the ABR Project, underwater noise levels were measured and are set out in Table 11-24. The noise sources outlined are natural background, shipping and piling with the EIAR outlining the 2017 Piling Noise Monitoring Report undertaken. Underwater noise levels related to proposed development are predicted to increase temporarily during construction and revert to shipping traffic related noise once constructed with two main impacts to be assessed; project construction, during which the worst case noise will relate to piling activity, and the normal port operation during and post construction. Table 11-25 outlines the extent of dredging and piling activity proposed as part of the proposed development and Table 11-26 outlines typical underwater noise levels. The EIAR, at Table 11-27, also outlines the underwater noise impact criteria for human divers, fish, cetaceans, pinnipeds and mustelids.

13.7.9. The underwater noise impacts will occur in two phases, the construction phase and the operations phase. During the operations phase, the impact will be confined to vessel traffic at the port. Underwater noise levels will remain as they are currently, i.e. elevated levels for a short period in the outer bay as a vessel navigates the channel and elevated levels for short periods (10 to 30 minutes) while the vessel berths in the port. The noise levels associated with shipping traffic are outlined in Table 11-26. Noise levels during construction will be significantly higher than those arising from port operations. The main activities required during construction with potential underwater noise impacts are outlined in Table 11-28. Noise from impact piling described will represent the worst case noise event during construction. The assessment of underwater noise impacts will be carried out on the basis of the impact piling noise during construction as all other activities will have lower impacts. The cumulative impact of all activities is addressed in Section 11.2.2.

13.7.10. Due to the proximity of sensitive protected species and the potential for high levels of underwater noise from impact piling in particular, this EIAR includes this specific assessment of underwater noise levels. Section 11.2.5.4 outlines comprehensively the details of the Underwater Noise model undertaken which seeks to model the propagation of sound between a source and receiver and concludes that due to the confined shallow space and narrow channel width, the worst case impact zone is quite small in extent with the potential injury zones outlined which includes potential injury to fish limited to 12m from the source, permanent threshold shift injury to marine mammals 1m and disturbance to same 120m from the source. Table 11-30 outlines the underwater noise impact zones with the impact radius clearly demonstrated as being localised. In terms of mitigation it is proposed that pile driving activity will be undertaken as efficiently as possible during a portion of each day and not at night with specific mitigation measures and details of compliance with NPWS Guidelines outlined in Chapter 7 in respect of marine mammals.

13.7.11. In terms of cumulative impacts, I note that the EIAR outlines the works currently underway on the ABR Project and the phasing of the permitted and proposed projects. Other projects at planning stage in the area are detailed. I note and I would concur with the conclusion that no cumulative impacts are predicted which would cause a significant effect.

13.7.12. I have considered all of the written submissions made in relation to noise and vibration, both terrestrial and underwater. I am satisfied that the identified impacts would be avoided, managed and mitigated by the measures which form part of proposed scheme, the proposed mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct or indirect impacts in terms of noise and vibration, either terrestrial or underwater.

13.8. Material Assets – Coastal Processes

13.8.1. Coastal processes is specifically addressed in Chapter 12 of the EIAR, the assessment methodology for which, outlines the suite of coastal process models used to inform the assessment with 3D versions of pre and post-project scenario models developed. I would also note that I have addressed in Section 12.8.4 above, the potential impacts from coastal processes on the Great South Wall and therefore it is not intended to repeat same in this section. A summary of the numerical models developed for the proposal assessment and their purpose is outlined in Table 12-1. It is noted that the pre-project scenario provides for the ABR Project being in place which comprises the baseline conditions with the post-project scenario including the proposed development. Figure 12-2 provides the bathymetry of Dublin Port pre-proposal (post ABR) (mean sea level). Figure 12-3 provides the bathymetry of the Port (mean sea level) post project. The pockets to be dredged are specifically delineated (in red) for ease of reference. It is stated that since September 2017 current velocities are also being continuously recorded at the centre of the dump site with the recordings also used to validate the Dublin Bay model (Dumping at Sea Permit S0024-01). It is stated that the model verification process confirmed that the present Dublin Bay model provides a very good representation of the coastal processes in the Dublin Port and Dublin Bay areas. Table 12-3 provides the mean annual (and winter) discharge rates from the Liffey, Dodder and Tolka Rivers used in the coastal process models. As outlined above, the receiving environment is outlined which is the pre proposal scenario but with the ABR in place. Typical tidal flow patterns for a spring ebb and spring flood tide are presented in Figures 12-7 & 12-8. These tidal flow diagrams illustrate that the current speeds in the central navigation channel are marginally higher during mid-ebb conditions relative to mid-flood

conditions owing to the contribution of flow from the Liffey, Dodder and Tolka. Offshore wave conditions are summarised in Table 12-3. Figure 12-9, Figure 12-10 and Figure 12-11 present the inshore wave heights in Dublin Bay at spring high tide during north easterly, easterly and south easterly storm events respectively with the simulations showing the largest waves that propagate into Dublin Port occur during easterly storm events at spring high water. It is also noted that the wave climate is currently being continuously recorded at the centre of the dump site since September 2017.

13.8.2. There are a number of potential impacts at construction phase which I address in turn. In terms of capital dredging works in the navigation channel and berthing pockets (Oil Berth 3/Berth, 50A, Berth 53 and the channel dredging works to south of navigation channel) the proposal will result in the removal of 424,644 m3 of marine sediments causing disturbance of sediment on the channel bed and dispersal of some material in the water column. I would note that potential impacts on marine life and water quality in the form of a suspended sediment plume within the water column are addressed elsewhere in this assessment. Plume modelling was undertaken. The EIAR outlines that as the Liffey channel in the Port is influenced by a number of fresh water river inflows and by thermal inputs from three power station cooling water systems, stratification of the water column occurs under certain tidal conditions in the Liffey channel particularly in the central section of the harbour. The EIAR concludes that the dredging operations required will not result in any significant impact to either the water quality in terms of suspended sediments, or the nearby environmentally designated areas in terms of sediment deposition. I consider that the comprehensive modelling and investigation undertaken which are outlined in detail are satisfactory in this regard.

13.8.3. The impact of dredging on existing outfalls and power station cooling water systems is outlined. For the Boards information, the location of the various power station cooling water intake systems and the Ringsend Waste Water outfall is illustrated in Figure 12-28. It is stated that in order to determine whether any of the dredging operations associated with the proposal would impact upon any of these cooling water intake systems or outfall, an analysis of the modelling results from the dredging simulations was carried out. The EIAR also includes for comparison the peak and average background suspended sediments levels based on Dublin City

Council and ABR Project monitoring in the interval 2015 to 2017 with the results of the simulations showing that the increased levels of suspended sediment concentrations at the power station intakes and Ringsend WwTW outfall are generally very small by comparison with background levels in the Liffey Estuary and are unlikely to have any effect on the quality of intake waters at power stations in terms of suspended solids content. I would also note that it is customary practice that the applicant notifies the power station operators in advance of each dredging campaign. This allows the operations to temporarily stop abstracting water from the Liffey for a short duration in the event that dredging is required within the immediate vicinity of their intake works.

13.8.4. It is also outlined that the disposal of dredge spoil at the licenced dumping site in Dublin Bay also results in sediment release and I note that that chemical sediment analysis found that the sediments to be dredged from the Ports navigation channel and basins are suitable for conventional dumping at sea. Water quality monitoring during previous dredging campaigns shows that during disposal of dredged fine sands at the licensed disposal site, the fine sand falls rapidly to the bottom and any sediment plume is short lived and is not dispersed widely. The EIAR concludes that the disposal operations associated with the proposed development will not result in any significant increases to the background level of suspended sediments and will not, therefore, impact the existing water quality in the greater Dublin Bay area

13.8.5. In terms of mitigation for this phase, I would note that as, outlined in the EIAR, (Section 9.1.5.1.1), the applicant completed its first winter dredging season (October 2017 - March 2018) as part of the ABR Project which it is stated was fully compliant with the requirements of the Dumping at Sea, Foreshore and Planning Consents. This, the applicant states, is confirmed by high resolution environmental monitoring results reported in the Annual Environmental Report submitted to the Office of Environmental Enforcement (OEE) in March 2018. I would also note that a Dredging Management Plan was developed for the ABR Project with the mitigation for dredging operations in the proposed development informed by the ABR Project monitoring and experience working in the same locations with the EIAR detailing a suite of proposed mitigation measures. I consider that the approach undertaken and the conclusions reached are reasonable and based on the monitoring from the most recent undertaking.

13.8.6. In terms of Operational Phase Impacts the EIAR states that the proposal consisting of the construction of structures and/or changes in the configuration of the seabed bathymetry through capital dredging works has the potential to impact on coastal processes. The potential for changes to the existing tidal regime is the first identified. As outlined in terms of the construction impacts, detailed modelling was undertaken for the pre and post scenarios. Typical tidal flow patterns for a spring ebb and spring flood tide from the post-MP2 Project simulation are presented in Figure 12-32 and Figure 12-33. The difference in modelled current velocities for the pre proposal and post proposal simulations for the mid spring ebb and the mid spring flood tides are set out in Figure 12-34 and Figure 12-35. The EIAR provides a very comprehensive assessment of the tidal regime and I would concur with the conclusions reached that the tidal regime is predicted to remain substantially unchanged post proposal with the risk of impact is determined to be negligible and no mitigation is required.

13.8.7. Another operational phase impact addressed include potential alteration to wave climate (and its associated possible impact on flood risk). Again the modelling undertaken facilitated the simulation of the inshore wave climate in the Port and the adjacent Dublin coastline post project (Figure 12-37 to Figure 12-39) for north easterly, easterly and south easterly storm events at spring high tide show that, during all storm events modelled, only small changes in the wave climate in Dublin Port are predicted and no discernible change in the adjacent coastline areas i.e. Clontarf, Tolka Estuary, Sandymount. Predicted changes in wave heights predicted are negligible. I also note that the EIAR states that changes in bathymetry due to dredging activities have the potential to alter the energy with which waves break and could conceivably result in wave overtopping of structures and flood defences but that the modelling undertaken demonstrates that there would not no discernible change in relevant proximate areas such as Clontarf, Fairview and Ballybough bordering the Tolka Estuary. Changes in wave height within the Port beyond the immediate footprint of the proposed development is predicted to be less than ±0.075m during typical storm conditions and I would concur that these changes are not considered significant and will not impact operations within the Port with the risk of potential coastal flooding due to the proposal in these areas is determined to be negligible and no mitigation is required. I would also refer the Board to the matter of flood risk which is specifically addressed in Section 9.2 of the EIAR.

13.8.8. Another potential impact addressed in the EIAR is the potential for changes to the sediment transport regime in the Port and surrounding area. I would note for the Boards information that biodiversity is addressed in Chapter 7 of the EIAR and that an appropriate assessment has been undertaken in the following section of this report which also addresses the matter of sediment. The EIAR states that it is important to provide sediment transport regime information for the purposes of the relevant Habitats Directive assessments and in particular to consider whether either the Berth 53 structure or subsequent ship movements from this berth would impact the winter foraging areas within the Tolka Estuary during low tide. In order to determine the potential operational phase impact of ship movements in the area of Berth 53, propeller and thruster jet scour calculations were undertaken for representative ship manoeuvres from navigational simulation. It was concluded that when ship bow thrusters operated at 100%, the velocity would likely result in scour of the neighbouring SPA area which was considered potentially significant as it could impact the long term stability of the dredged side slope at Berth 53 and potentially affect bed levels and modify the position of the lowest astronomical tide across the winter foraging areas within the Tolka Estuary. To mitigate same, a wash protection structure is proposed in order to reduce scouring associated with manoeuvring vessels within the Berth 53 area. The assessment undertaken found the wash protection structure effectively reduced propeller and thruster jet velocities caused by manoeuvring ships and therefore reduced scour in the area of Berth 53 with the predicted impact imperceptible. I would also refer the Board to the water quality monitoring programme proposed to provide additional safeguards to the receiving environment and to confirm the effectiveness of the mitigation measures implemented to address any potential environmental impacts to the receiving environment during the construction phase of the works. I would also note that the Ports existing Environmental Management System (EMS) which will monitor the operational activities to confirm that measures to address operational impacts are effective and provide adequate protection to the sensitive receiving waters.

13.8.9. I have considered all of the written submissions made in relation to material assets – coastal processes. I am satisfied that the identified impacts would be avoided, managed and mitigated by the measures which form part of proposed scheme, the proposed mitigation measures and through suitable conditions. I am therefore

satisfied that the proposed development would not have any unacceptable direct or indirect impacts in terms of material assets – coastal processes.

13.9. Material Assets – Traffic & Transportation

13.9.1. At the outset I would note that I have addressed the matter of traffic in Section 12.3 above in respect of the planning assessment. The EIAR outlines the existing port traffic at the existing Terminals with 40-50 vessel movements carried out within the Port on the day of the survey by the operators using the Port. It is also noted that there are 4 existing accesses (Promenade Road, Alexandra Road, Terminal 3 (P&O) and Access to Cruise Berth at North Wall Quay Extension). The 5 main origin/destination routes are also outlined (Dublin Port Tunnel, East Wall Road, Sherriff St. Upper, North Wall Quay and Tom Clarke Bridge (formerly East Link Bridge). In terms of policy it is stated that a Strategic Transportation Study was prepared to inform the masterplan which was reviewed as part of Masterplan review.

13.9.2. I would also note that section 13.4 of the EIAR sets out schemes relevant to the TTA which include the permitted ABR project and the road upgrade consented under Ref. 3084/16 which includes the new Promenade Road Extension which will connect directly to the Unified Ferry Terminal (UFT). It is stated in the Chapter that this scheme will be complete and operational prior to the completion of the proposed development. What is also of relevance to the consideration of this section is the proposal, as part of the masterplan, to close existing accesses to the Port from the East Wall Road. The Terminal 3 & Cruise Berth accesses will close completely. It is proposed that the Alexandra Road access will close to all operational traffic with only traffic related to the Port Centre and some cruise traffic permitted as well as the rail freight. It is noted that the applicant is progressing a scheme with DCC for the upgrade of the East Wall Road and the replacement of the Point roundabout with a signalised junction. For the Boards information the greenway proposed to terminate at the heritage installation was permitted as part of the proposed road upgrade. Details of same are outlined in the Chapter (s.13.7.1) as are the consented landmark bridge for cyclists and pedestrians across Promenade Road and the consented cycle/pedestrian underpass at the Promenade Road roundabout.

13.9.3. Of note in terms of existing operations within the application area is that the existing Seatruck (unaccompanied freight operator) operation at Basin 52 & 53 is proposed

to relocate to the western end of the Port. The proposed access and egress arrangements are outlined in detail in 13.5. Figure 13-8 outlines the proposed access and egress arrangements to and from the proposed UFT with departures from the Port accessing the UFT via the Promenade Road Extension and arrivals leaving the UFT via the Tolka Quay Road. Access and egress to and from the Lo-Lo terminal (Dublin Freight Terminal (DFT)) is proposed as exists via Breakwater Road South onto Tolka Quay Road. In respect of requirements identified in the pre-application process, it is stated that the proposal will not impact on the potential extension of the Luas as currently set out in the NTA's transport strategy for the GDA. Figure 13-16 outlines the application boundary as it relates to the existing protection corridor for the Dublin Eastern By-Pass with which, I note, there is no overlap. The outline mobility management plan and accessibility assessment have been provided to address DCC's requirements for sustainable transport. The Chapter provides a comprehensive overview of existing cycle, bus and rail/light-rail transport facilities serving the Port and wider area. Pedestrian access from the proposed car park/bus set down area to the Terminal building via the proposed underpass is outlined in detail in Figure 13-49/50/51. Section 13.7.9 outlines proposals for a shuttle bus service from DART and Luas services to the UFT to be subsidised by the applicant, which I note, is to be progressed independently of but in parallel to the proposed development as is the possible Luas extension to cross the river in the vicinity of the existing East Link Bridge with no impact on same from the proposed development.

13.9.4. Section 13.10 outlines the methodology used to undertake the traffic impact assessment. A traffic turning count surveys were undertaken over a 24 hour period on 23 May 2018 at 24 junctions. It is stated that this was a typical day in terms of Ro-Ro and Lo-Lo activities with one cruise ship berthed at Cruise Berth 18. I would note that the data collected was compared to the traffic data loop on Promenade Road in May 2019 which outlined that traffic flows had decreased compared with the same period in 2018 with rationale for same proposed to be related to uncertainty over Brexit. Data collected to inform the Strategic Transportation Study undertaken in November 2017 was also used to inform the assessment. It should be noted that the surveyed traffic flows were converted to Passenger Car Units (PCU's) using TII conversion factors with rationale for the factor proposed for OGV2 (Other Goods Vehicles Type 2) which comprise articulated vehicles 2.9 PCU. Peak Hours were

determined as 07.30-8.30 in the morning and 16.45-17.45 in the evening. Given the City Centre 5 axle ban between 7AM and 7PM an internal peak hour occurs between 06.15 and 07.15 am. This provides that three peak hours are taken forward for detailed traffic impact assessment.

13.9.5. Figure 13-58 provides a manifest of vessel movements for the same survey period with the peak hours highlighted and vessels within same outlined in detail including the type of vessel (Ro-Ro/Lo-Lo). I would note for the Boards information that the vessels in the early Port peak hour include (7) arrivals and departures whereas the AM peak are all (3) departures and the PM peak are all (4) arrivals. Section 13.10.5 outlines the traffic profiles for the main operators within the Port. The EIAR outlines the existing traffic flows at Dublin Port Tunnel with the existing flows for the three peaks set out in Table 13-10 with 28,507 vehicles using the DPT the day of the survey of which 41.2% were HGV and Buses which translates into 47,056 PCU's. Table 13-12 details the existing traffic flows for the 3 peaks at the 4 existing Port Access points with the early Port peak the busiest peak at these access points. The assessment years selected are 2016, 2031 and 2040. Growth of non-Port traffic on the external road network has been addressed using TII's Project Appraisal Guidance (PAG) for National Roads Unit 5.3 – Travel Demand Projections (May 2019). Port related traffic flows have been assigned the 3.3% per annum growth rate (Table 13-17) with Port traffic 204.3% higher in 2040 than 2018 flows, more than double. Table 13-18 outlines existing and proposed lane metres being assessed in the Unified Freight Terminal (UFT).

13.9.6. The TTA assessment undertaken in the EIAR uses the 3.3% per annum increase providing for a projected 1,481,000 Ro-Ro units through the UFT in 2040 which is considered robust and beyond upper limit of what is physically achievable on the ground. Proposed traffic flow diagrams produced are based on all of the proposed changes to the external road layout, the Port accesses, internal road layout and the proposed MP2 project. The proposed actions are detailed in a step by step sequence in Table 13-22. In order to determine future traffic flows, the traffic flows from the 3 operators (Irish Ferries, Stena & P&O) are increased by 204.3% for 2040 giving an indication of traffic patterns arriving and departing at the proposed UFT in 2040 and is shown in PCU's in Figures 13-72/74. The EIAR also outlines how the proposed barriers have capacity to deal with the projected traffic flows. The

information to support the projections is very comprehensive. Table 13-24 outlines that the 240 PCU's capacity for HGV's is never exceeded, is reached during the Port Peak but has surplus capacity at all other times. I would also note that there are a suite of measures proposed by the applicant to control and manage the pattern of traffic arriving and the operations within the UFT. These include the use of gantry signs if which 7 additional signs are proposed in the current application. Others include the reallocation of access barriers, varying vessel departures, controlling arriving traffic, improving technology for barriers. The in-built adaptability of the design of the UFT is also considered to provide it with the capability to adapt. It is also outlined that the adjoining road network between the 14 barriers to the UFT and the Promenade Road roundabout provides 5.6km of stacking area to provide contingency for occurrences such as technical faults and adverse weather conditions minimising impact on the external road network.

13.9.7. One of the matters raised in an observation received is the potential impact on the Port Tunnel. Traffic Impact on the DPT and Toll Plaza is addressed in Section 13.10.15 and Table 13-25. The NTA Regional Transport Model provides the DPT with a capacity of 3,800 PCU's per hour per direction (total 7,600 PCU per hour) and it is outlined that this total is not reached during reached during any of the three peak hours. This is supported by surveys undertaken in 2017 to support the Strategic Transportation Study. It is also outlined that the toll plaza has sufficient capacity to cater for the proposed development. In terms of the external road network, the EIAR presents the percentage impact on the external road network in tabular and visual format for each of the peaks. I would note that I consider that satisfactory information and detail has been provided to support the conclusion that the planning gain provided by the applicant by closing the Dublin Port Estate accesses and removing traffic from the external road network has been demonstrated for each of the junctions along East Wall Road, even with Port traffic increasing from 2.5% per annum to 3.3% per annum. It is considered that there are environmental benefits in reducing the number of large vehicles that travel along this section of road, with associated noise & air pollution benefits and reduction in the physical impact on the carriageway. As per the TII TTA Guidelines detailed modelling is not required on the external road network as the percentage impacts never exceed 5% or 10%. The access closures also facilitates Dublin City Council to implement their potential

scheme, as outlined above, which would provide enhanced walking and cycling crossing facilities along East Wall Road and replaces the Point Roundabout with a signalised junction. It has been highlighted that although the 'SPAR' is not part of the proposals for the proposed development, should it be realised in future years it will provide even further planning gain to this section of the adopted road network. In relation to the impact on and from the freight train at Alexandra Road camera footage confirms that it didn't enter or exit the Port during the peak traffic hours assessed, demonstrating that the operation of the train doesn't impact on the peak hour traffic flows along East Wall Road.

13.9.8. In terms of impact on the internal road network within the Port, Figure 13-90 outlines the junctions modelled with Table 13-30 providing a summary of the results which show that the majority of the results demonstrate that the internal road network will have comfortable capacity to deal with peak traffic flows with a number of locations approaching capacity by 2031 at peak times. In terms of junction 10, the consented Promenade Road Roundabout Design, will exceed capacity between 2031 and 2040 at Port Peak and PM peak. Table 13-31 specifically addresses Junction 10 addressing each arm of the roundabout which highlights the arms exceeding capacity. I would note that this issue is explained by reason of the roundabout design being based on the original annual growth rate of 2.5% whereas the new growth rate is 3.3%. Mitigation is proposed effectively by way of the proposed SPAR which it is proposed will be operational by 2031 which would coincide with the roundabout coming to the end of its design life. In addition I would note a suite of measures are proposed which are available to the applicant to control and manage traffic arriving to the Port in future years which relate principally to the management of non-Port traffic and the use of 'E' plots located to the north of the Port estate to hold non-critical traffic until the relevant peaks have passed.

13.9.9. In terms of construction traffic which is addressed in Section 13.10.19, the indicative Construction programme which is addressed elsewhere in this report has been used to determine construction traffic anticipated on the road network. Table 13.32 provides an outlines predicted construction daily traffic flows. The peak of 17 HGV's per hour is considered to have an imperceptible impact on the road network. A draft Construction Traffic Management Plan is presented in Appendix 19 and I would consider that, if the Board are minded to grant permission, a condition requiring a

final plan is agreed with the Planning Authority is included. In relation to cumulative impact, the Chapter provides a very comprehensive consideration of consented schemes within the Port including the Road Network Improvement Scheme and in the vicinity of same including the North Lotts and Grand Canal Dock Planning Scheme and Poolbeg West SDZ. The Planning Order for Brexit Compounds is also addressed.

13.9.10. I have considered all of the written submissions made in relation to material assets – traffic and transportation. I am satisfied that the identified impacts would be avoided, managed and mitigated by the measures which form part of proposed scheme, the proposed mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct or indirect impacts in terms of material assets – traffic and transportation.

13.10. Cultural Heritage (incl. Industrial & Archaeological)

13.10.1. At the outset I would note for the Boards information that I have addressed the matter of cultural heritage in the planning assessment in Section 12.8 above and where matters have been specifically addressed in that section they are not addressed in detail herein. I would also note that as outlined above, the documentation submitted includes a number of other reports which are referenced within this section but which address specific matters related in particular to the industrial heritage impacts and proposals. The EIAR outlines the assessment methodology which includes a variety of assessment and surveys including a marine geophysical survey and underwater inspections following same, site investigations, topographic survey (detailed laser-scan & multi-beam) of the Pier Head, walkover surveys and conservation strategy and industrial heritage appraisal. These are outlined in detail in s.14.3.3. Details of the underwater inspection of the acoustic anomalies is provided in Table 14-2 and I would note facilitated further investigation of the Pier Head, the structure of which is outlined in detail.

13.10.2. In terms of the receiving environment, the history of the Ports development is outlined. Table 12-1 outlines the known archaeological and industrial heritage sites within and in proximity to the proposed development site and in particular the status of each as some of the features are no longer visible/in existence. It is stated that there are two known wreck sites within the study area to the north of the proposed

development area, in the sandflats that are east of the Port area and north of the new Berth 53. In relation to the breakwater and Pier Head, the EIAR states that the breakwater that defines the eastern limit for the nineteenth-century deepwater basin is the principal feature on the north side of the channel and is registered as two elements in the Industrial Heritage Record, the breakwater itself (DCIHR 19-09-002) constructed between 1858 and 1884, and which today lies under the active road surface that is Breakwater Road, which leads from Tolka Quay Road south to the quayside at the Port Operations/VTS building. The terminus or Pier Head of the breakwater is stone-built and is described in sections 14.3.3.4 and 14.3.3.5. It is constructed in the same manner as the North Quay Extension that was built under the direction of Port Engineer Bindon Blood Stoney, and it marks the original entrance to the deep-water basin of Dublin Port. The other element is the site of the lighthouse (DCIHR 19-09-003) built *c*. 1884 which was located at the terminus of the breakwater and which does not survive *in situ* and was formerly a stone-built square-planned structure on which was placed the necessary lantern and bell. The lantern, its housing and the bell are retained within the Port and are proposed to be reused as part of the proposal, reinstating a heritage element to the active port area. In relation to the south side of the channel, the Great South Wall (RMP DU019-029002, DCIHR 19-09-010, RPS 6797, RPS 6798) and the structures built on it over several centuries, including Pigeon House harbour and fort, as well as the more recent elements of industrial heritage, including the chimneys that are part of the Pigeon House generating station.

13.10.3. In terms of likely significant impacts I would note at the outset that no impacts are predicted to the Great South Wall which I consider is appropriate. I have addressed this matter in Section 12.8.4 of the planning assessment above. I consider that those identified are reasonable.

13.10.4. The main significant impact is the demolition of the Pier Head of the Eastern Breakwater to facilitate the construction of Berth 50A which are direct and permanent impacts and which it is anticipated will expose elements of the 19th century breakwater currently buried. In terms of mitigation, a number of measures are proposed. It is proposed to develop a 3D record of the existing structure. Archaeological monitoring is proposed of all ground disturbances with the proviso to resolve fully any archaeological material. it is also proposed to create a public realm

visitor experience at the new eastern limit at the end of the proposed Greenway that includes the re-use of the granite blocks and related elements of the Eastern Breakwater Pier Head and the Breakwater Lighthouse (demolished circa 20 years ago) redeveloped as what is described in the EIAR as '*an experiential place where walkers and cyclists can learn about the cultural and natural heritage of the Port'*. In addition, the former location of the pier head will be marked with inscribed commemorative text, to ensure that there is a permanent *in situ* record of its former presence. The residual impacts identified acknowledge that this proposal will remove the original entrance to the Port's deepwater basin from the land and seascape of the Port. I consider that the mitigation measures outlined including the new heritage space provide adequate measures to ensure an appropriate balance of developing the Port and acknowledging its historical evolution.

13.10.5. In relation to impacts identified, they include works which will expose the breakwater, the reclamation of land within Oil Berth 3. In terms of mitigation, archaeological monitoring is proposed. The five ships timbers and one metal piece identified which are located in temporary wet storage under the Pilot Boat pontoon will be removed to the secure Heritage Zone storage area for the ABR Project, where they will be placed in waterfilled tanks.

13.10.6. Proposed dredging particularly of the previously un-dredged area to the south side of the channel leading to direct and permanent impacts. This area was a wider mooring for ships in the 18th century before the construction of Pigeon House Harbour and is considered an area of high archaeological potential and the recovery of shipping debris and/or shipwreck can be anticipated. The EIAR states that the work commissioned to further inform the cultural heritage risk for the proposal has conducted a series of comprehensive surveys (marine geophysical survey, site investigations and archaeological inspection), which did not identify significant materials of archaeological importance. The location is a shallow area filled with silt with the removal of this silt providing the opportunity to further examine the potential which it is proposed will be done by archaeological monitoring of the dredging works at construction time, and recording by record any observations made at that point. In terms of mitigation, archaeological monitoring is proposed of all seabed disturbances. In terms of residual impacts, it is states that the potential for this work to uncover and expose previously unrecorded archaeological material, and

principally shipwreck, exists, and the protocols are in place to ensure that any new discoveries will be fully and properly resolved.

13.10.7. A detailed suite of archaeological monitoring and management measures are proposed including retaining a project archaeologist and heritage architect and complying with licences and monitoring subject to the approval of the National Monuments Service at the Department of Culture, Heritage and the Gaeltacht. I would also note that the Department in their submission have recommended that a dive survey be carried out in respect of the geophysical anomalies identified and I consider that this is reasonable and same should be incorporated by condition if the board are minded to grant permission.

13.10.8. I have considered all of the written submissions made in relation to cultural heritage. I am satisfied that the identified impacts would be avoided, managed and mitigated by the measures which form part of proposed scheme, the proposed mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct or indirect impacts in terms of cultural heritage.

13.11. Landscape & Visual

13.11.1. Chapter 15 of the EIAR refers to the landscape and visual impact. I would note for the Boards information that I have addressed that matter of landscape and visual impact in Section 12.6 above. The assessment of visual effects considers the direct impacts of the proposed development on views of the landscape through intrusion or obstruction. The reaction of viewers who may be affected (residents, walkers, road users) and the overall impact on visual amenity. The Chapter details the methodology and outlines the rationale outlined for visual receptor sensitivity, magnitude of change and the significance of the visual effect. In terms of the receiving environment, in addition to describing to wider area, it is stated that the proposed development is located on the north port area within the existing Dublin Port Estate and is surrounded by tall buildings and structures in a busy and active harbour context that is in a constant state of flux on a 24 hour basis with ships and HGV traffic coming and going on a very regular basis. I consider that this is a very reasonable assessment of the receiving environment. The assessment addressed 14 viewpoints ranging from long distance views to proximate views in the vicinity of

the site for which photomontages are presented in Appendix 15. In respect of the landscape character of the port. It is stated that the visual quality of this existing landscape is low. This landscape character area has a low sensitivity to change. The magnitude of change in landscape resource is negligible. The predicted significance of landscape impact is negligible to minor. I consider that this is reasonable. The site is within a working port which includes considerable existing structures. In addition large vessels enter, dock and depart from the various berths within the port creating a moving context to the landscape effect.

13.11.2. Section 15.4.2 of the EIAR sets out the viewpoints and assesses the following:

- Viewer Sensitivity,
- Existing visual resource,
- Predicted view,
- Magnitude of Change and
- Significance of Visual Impact

The following table summarises the assessment undertaken in the EIAR other than the existing visual resource which in each instance provides a description of the context of the view and how the viewpoint relates to the Port.

Viewpoint	**Viewer Sensitivity**	**Predicted view***	**Magnitude of Change**	**Significance of Visual Impact**
1. Sutton Cemetery	High	Not visible	Negligible	Minor
2. Sutton Strand	High	Distant, part of existing Port	Negligible	Minor
3. Bull Island	High	Distant, part of existing Port	Negligible	Minor
4. St Anne's Park, Clontarf	High	Not visible/part of existing Port	No Change	None

5. Clontarf Road	Medium	Distant, part of existing Port	Negligible	Minor
6. Bull Wall	High	Difficult to discern from existing Port.	Small	Minor to Moderate
7. Alfie Byrne Road	High	Not visible	No Change	None
8. Fairview park	High	Difficult to discern from existing Port.	No Change	None
9. Toll Bridge North	Medium	Read in context of existing Port.	Small	Minor
10. East Link Toll	Low	Difficult to discern from existing Port.	Small	Negligible to Minor Negative
11. Sandymount Strand	High	Not visible	No Change	None
12. Clontarf Rd. Promenade	High	Difficult to discern from existing Port/ Berth 53 read in context of existing Port/Great South Wall/Poolbeg.	Small	Minor to Moderate
13. Idrone Terrace, Blackrock	High	Not visible	No Change	None
14. Killiney Hill	High	Not visible	No Change	None
15. Great South Wall	High	Noticeable/read in context of ex. Port	Small	Minor to Moderate

*My summary of text in EIAR.

13.11.3. I would concur with the assessment undertaken and summarised above of visual receptor sensitivity, magnitude of change and significance of the visual effect

proposed for each of the views. I note that the predicted magnitude of change range from no change or negligible on longer range views to significant in more localised views. Furthermore, the significance of the impact ranges from none to minor to moderate depending on proximity to the Port area. I would also note that in a number of instances the photomontages include an additional montage showing a vessel at the proposed new berth which I consider is very useful. This also serves to show the inherent change in the view given the nature of the ports operations with vessels arriving and departing on a regular basis throughout the day and night.

13.11.4. In relation to cumulative impacts I would agree with the authors that when potential construction and operational stage cumulative landscape and visual effects are considered for the proposal in combination with permitted and planned projects that they will not result in any significant effects given separation distances, intervening developments and the nature of the proposals. The proposal comprises amendments to and extension of an existing operational port. I note that remedial and mitigation measures include the integration of constructed elements and the colour of materials in addition to directional lighting which I consider are appropriate. Residual effects are addressed in Section 15.7 of the EIAR and are summarised in Tables 15-12 and 15-13. I concur with the predicted significance proposed with and without mitigation. The EIAR concludes that the broader landscape character area and visual context around the Port Area has the capacity to absorb a development of this scale and I consider that this is reasonable and rational.

13.11.5. I have considered all of the written submissions made in relation to Landscape and Visual. I am satisfied that the identified impacts would be avoided, managed and mitigated by the measures which form part of proposed scheme, the proposed mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct or indirect impacts in terms of Landscape and Visual.

13.12. Population & Human Health

13.12.1. Chapter 16 of the EIAR addresses population and human health. As outlined in the methodology, the reporting provides both qualitative and quantitative analysis of potential population and health effects with the approach proposed as drawing from and building upon the wider technical outputs of the EIAR. The methodology is

described as bespoke comprising the following key stages: scoping, baseline, consultation and assessment which are all outlined. The study area for consideration is set out in Figure 16.1 and includes the electoral divisions immediately adjacent to the site and from where it is visible. I would note the conclusions of the baseline considerations of the receiving environment where it is stated that overall, the local community surrounding the proposed development are not considered particularly sensitive to population and health effects resulting from changes to environmental or socio-economic health determinants. I consider that the information provided in the report supports this conclusion. Reference is also made in the chapter to consultation which I have addressed elsewhere in this report but note that the consultation process undertaken with the public including the local community has been extensive.

13.12.2. Section 16.5 of the Chapter provides an appraisal of significance. In terms of the construction phase, air quality, noise and vibration, transport and accessibility and socio-economic factors are addressed. In terms of air quality, it is concluded that neither the change in concentration or exposure to construction emissions are sufficient to quantify any change in health outcome at a population level with the magnitude of impact negligible with the same conclusion reached for noise and vibration where it is stated that The potential change in noise is not of a timing, duration or magnitude sufficient to result in sleep disturbance or quantify any manifest health outcome at a population level resulting from annoyance. In relation to transport and accessibility a (construction) peak of 17 HGV movements each way per hour between 07:00am and 08:00am is predicted which it is considered will be imperceptible to the external road network and no more noticeable than the ordinary fluctuations in traffic flows. On the basis that the magnitude of change in transport nature and flow rate is not anticipated to result in any manifest health outcome at a population level, the magnitude of impact on population and health would be negligible. In terms of socio-economic considerations, construction employment over the 11 year period is predicted as an annual average of 38 Full Time Equivalent (FTE) jobs to deliver the project. The peak annual average FTE is expected to be 66 in 2021 with a sufficient pool of local labour to meet the construction but it is noted that employment would dependent on the specific procurement strategy employed with the project itself resulting in increased employment in the wider supply chain. It

is also noted that the construction GVA, which measures contribution to the economy, would be approximately €128 million of total construction costs. This in addition to the employment and indirect benefits are considered to be positive impacts for population and health.

13.12.3. In terms of the predicted operational impacts, many of the impacts outlined are considered positive, these include employment, additional growth facilitated by greater imports and exports, additional tax and increased tourism opportunities. I would concur with the conclusions reached. In terms of air quality, it is determined that operational emissions would remain within air quality objectives and is not of a concentration or exposure sufficient to result in any manifest health outcome at a population level. In relation to noise and vibration, as detailed elsewhere in this assessment, there would be no perceptible increases in operational noise levels. In relation to transport and accessibility there would be a low impact on the road network with positive accessibility impacts by way of the greenway leading to the heritage area. I consider that the documentation submitted is comprehensive in its consideration of the impacts on population and human health and subject to adherence to the conditions of any permission which may be granted it is considered acceptable.

13.12.4. I have considered all of the written submissions made in relation to population and human health. I am satisfied that the identified impacts would be avoided, managed and mitigated by the measures which form part of proposed scheme, the proposed mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct or indirect impacts in terms of population and human health.

13.13. **Waste**

13.13.1. It is outlined that a review of the potential waste streams generated during the construction and operation of the proposed development was undertaken as part of the assessment in relation to waste management. In relation to construction related waste, demolition of building and structures on site with localised demolition estimated to generate approximately 17,640 m^3 Construction and Demolition waste (CDW) materials. It is also noted that c.7,000 m^3 of masonry units from the Pier Head will be removed and salvaged for relocation elsewhere on site. In addition to

demolition, it is proposed to infill the basin of Oil Berth 4 with engineered fill material and suitable CDW arising from aforementioned demolition works within the footprint of the proposal. It is also proposed that the void between existing Oil Berth 3 and the proposed new sheet pile wall and the bridging structure in Berth 50A will also be filled with engineered fill material. It is outlined that CDW will be subject to treatment at site prior to recovery in Oil Berth 4 which will require a waste permit and is subject to the proposed phasing plan. I would note that the EIAR states that worst case scenario is that if the CDW cannot be used on site it will be transported to landfill. In relation to the overall predicted impact of the construction phase I would note that it is stated that adherence to the CEMP and C&D WMP will ensure waste arisings are minimised with the effect of the construction phase deemed to be neutral. I consider that this is reasonable and I would suggest that the final CEMP and C&D WMP are agreed in writing with the Planning Authority.

13.13.2. In relation to the operational phase I would note that the Port currently operates a port waste management plan "Dublin Port Ship's Waste Mismanagement Plan 2017" which underpins all waste related operations at the Port. Therefore I would note that there is an existing established process for the management of operational waste. While a minor increase in waste arisings due to anticipated increased usage of the unified passenger terminal may occur, it is predicted that there will be no discernible effects to waste management once operational due to recycling and reuse policies, procedures and the implementation of the Waste Management Plan. It is outlined that there is capacity within the existing waste management infrastructure to manage waste arising from the operational phase of the development works with the effect of same deemed to be neutral.

13.13.3. I have considered all of the written submissions made in relation to waste. I am satisfied that the identified impacts would be avoided, managed and mitigated by the measures which form part of proposed scheme, the proposed mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct or indirect impacts in terms of waste.

13.14. **Land**

13.14.1. As outlined at Section 13.1.5 above, in advance of the oral hearing the applicant was specifically requested to present their considerations in respect of 'land' as provided for in Section 171A(b)(i)(III) of the Planning and Development Act, 2000 as amended, at the oral hearing. The matter was addressed in two presentations provided on the applicant's behalf. It is stated that land as defined by Section 2 of the 2000 Act has been appraised within the EIAR but has not been complied under a separate 'Land' heading. Soil has been addressed in Chapter 10 and Water in Chapter 9. Reference is made to the requirements of Schedule 6 of the Planning and Development Regulations 2001 and the EPA Draft Guidelines on the information to be contained in an EIAR. Page 31 of the Guidance refers under the heading 'Land and Soils' to land with an example of same provided as land take with a footnote explaining same to mean the removal of productive land from potential agricultural or other beneficial uses. The applicant outlines further reference to 'land' which they consider relates to land take. I would note that the applicant's presentation outlines the references to the assessment of land within the EIAR. These include the existing land use and proposed land use during both construction and operational phases all of which are described in detail in Chapter 3 of the EIAR. It is also stated that Chapters 7-16 address specific environmental factors including matters related to expected residues, emissions and sources of fill.

13.14.2. It is also stated that the Masterplan recognises the finite availability of land for port related activity with same focusing on the redevelopment of existing brownfield lands, berthing pockets and navigation channel in order to provide for the projected growth by 2040. The environmental appraisals undertaken are stated to take into account the environmental implications of the land resource including nearest sensitive receptors. It is stated that there are no additional mitigation measures required to be added to the EIAR as a result of the appraisal of land to those already included within the EIAR. I would refer the Board to the assessment of biodiversity, soils, geology, hydrogeology, material assets- coastal processes and cultural heritage which address land and land take in particular. I consider that the applicant has satisfactorily addressed the matter of land as requested and that the EIAR adequately addresses the matter of land within the Chapters provided. I would also note that given the planning history of the Port lands and the Masterplan and review

of same which underpin the proposed development that the matter of 'land' is a central tenet of the development strategy for the Port.

13.14.3. I have considered all of the written submissions made in relation to land. I am satisfied that the identified impacts would be avoided, managed and mitigated by the measures which form part of proposed scheme, the proposed mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct or indirect impacts in terms of land.

13.15. Major Accidents and Disasters

13.15.1. Chapter 6 of the EIAR addresses risks of major accidents and disasters. These include risks from COMAH establishments and natural events. The subject site is located within the vicinity of several establishments that fall within the scope of the Chemical Act (Control of Major Accident Hazards Involving Dangerous Substances) Regulations, 2015 (the COMAH Regulations). I note that approximately 30% of the overall area of the proposed development (the land-side and marine-side development) lies within the COMAH land use planning zones. I would also note that the documentation submitted also includes a Control of Major Accidents Hazards (COMAH) Land Use Planning Assessment under separate cover. Table 6-1 outlines that COMAH establishments in the vicinity of the application site and outlines whether they are Upper and Lower Tier in addition the planning permissions pertaining to same are set out (Table 6-2) including their status and includes a permission granted (Fareplay Yard 2) which has expired. Section 6.3 of the report addresses the Port and Environs including the Port area itself, residential areas in the vicinity, commercial and industrial activity and road traffic. The report also addresses shipping traffic (8,000 vessel arrivals and departures - 16,000 movements), cruise liners (155 liners) and ferry traffic from the 4 ferry terminals (services and timetables set out in Tables 6-5 & 6-6) with peaks noted in the summer period for tourist passengers. In terms of natural events, the Chapter addresses earthquakes, lightning strikes, flooding, extreme weather events and aircraft impact.

13.15.2. The report provides a comprehensive assessment of both individual and societal risk. I consider that the major accident scenarios (Table 6-11) are set out appropriately. Section 6.5.2 outlines the results for both individual and societal risk

with Table 6-15 outlining the development sensitivity levels applicable or analogous to the proposed development. Particular consideration is given to the check-in booths and stacking areas and state services with other areas considered including staff car park and cabins/offices. Shunter drivers, HGV check-in booths and queues and state services are considered to have a sensitivity level of 1 with maximum occupation levels recommended. I would also note than Non-COMAH events are also addressed including the transport of dangerous substances by road and the common oil pipeline. Reference is made at Section 6.7 to Emergency Response Management with the Plan for same for the Port detailed which includes a Port Alarm system.

13.15.3. In respect of the conclusions reached in the assessment I note that it is stated that taking into account that the COMAH establishments are required to manage their establishments such that the risks are as low as reasonably practicable, it is concluded that the societal risk satisfies the HSA's land use planning criteria. I consider that this is reasonable. It is also concluded that the natural events that could impact on sites within the Port, including on the proposed development, are no more significant than the potential impacts from the COMAH establishments and would not have a significantly different impact on the proposed development compared to the current layout of the terminals and surrounding area. Similarly, the potential impacts on the proposed development from an accident involving the transport of a dangerous substance either by road or by pipeline are not significantly different than those on the current Port layout. This is satisfactory in my opinion. What I consider of central consideration is that the proposed development itself does not present any risks to other areas of the Port that are different to, or greater than, the current risks within the Port. I consider that the matter has been appropriately and comprehensively considered.

13.16. Interactions between Environmental Factors

13.16.1. Chapter 18 (S.18.2) of the EIAR deals with the interactions between environmental factors. The primary potential interactions are summarised in matrix format in Table 18-5 of the EIAR with Table 18-6 providing a detailed account of the potential interactions between the relevant environmental factors with a consideration of the potential interaction. Each of the potential interactions are

outlined with the potential impact and the mitigation provided noting that the matters are addressed in each of the relevant chapters.

- Biodiversity, Flora and Fauna is considered with several factors having the potential for significant interactions including soils and geology and hydrogeology/waste, water quality and flood risk assessment, noise & vibration and coastal processes. I also consider that this factor would also interact with the factor of land. With the relevant mitigation measures in place no significant residual negative impacts on biodiversity are predicted.
- Soils & Geology & Hydrogeology is considered with several factors having the potential for significant interactions including biodiversity, flora and fauna, water quality and flood risk assessment, air & climate, noise & vibration, traffic and transportation and population and human health. I also consider that this factor would also interact with the factor of land. With the relevant mitigation measures in place no significant residual negative impacts on soils, geology & hydrogeology are predicted.
- Water Quality and Flood Risk Assessment is considered with several factors having the potential for significant interactions including biodiversity, flora and fauna, coastal processes, population and human health, soils, geology & hydrogeology and waste. I also consider that this factor would also interact with the factor of land. With the relevant mitigation measures in place no significant residual negative impacts on Water Quality and Flood Risk Assessment are predicted.
- Air quality and climate is considered with several factors having the potential for significant impacts including soils, geology & hydrogeology and waste, traffic and transport, population and human health, landscape and visual. With the relevant mitigation measures in place no significant residual negative impacts on air quality and climate are predicted.
- Noise and Vibration is considered with several factors having the potential for significant impacts including biodiversity, flora and fauna and population and

human health. With the relevant mitigation measures in place that no significant residual negative impacts on noise and vibration are predicted.

- Coastal processes is considered with potential interactions with biodiversity, flora and fauna, water quality and flood risk assessment, population and human health and soils, geology and hydrogeology. I also consider that this factor would also interact with the factor of land. With the relevant mitigation measures in place no significant residual negative impacts on coastal processes are predicted.
- Traffic and Transport is considered with potential interactions with air quality & climate, noise and vibration, population and human health. With the relevant mitigation measures in place no significant residual negative impacts on traffic and transport are predicted.
- Landscape and Visual is considered with potential interactions with air quality & climate, population and human health. I also consider that this factor would interact with biodiversity, flora and fauna, archaeological and cultural heritage and the factor of land. With the relevant mitigation measures in place no significant residual negative impacts on landscape and visual are predicted.
- Cultural heritage is not expressly considered in the EIAR but I consider that there are potential interactions with soils and geology, landscape and visual and the factor of land. With the relevant mitigation measures in place no significant residual negative impacts on cultural heritage are predicted.
- Population and human health is considered with several factors having the potential for significant interactions including water quality and flood risk assessment, coastal processes, air quality and climate, soils, geology and hydrogeology, noise and vibration, landscape and visual and traffic and transport. I also consider that this factor would also interact with the factor of land. With the relevant mitigation measures in place no significant residual negative impacts on population human health are predicted.
- Waste is considered with several factors having the potential for significant interactions including biodiversity, flora and fauna, water quality and flood risk

assessment, air quality and climate and population and human health. With the relevant mitigation measures in place that no significant residual negative impacts on waste are predicted.

13.16.2. The various interactions have been properly described in the EIAR and have been considered in the course of this EIA.

13.17. Cumulative Impacts

13.17.1. Firstly, I would note that I have considered cumulative impacts above in the sections related to biodiversity, air quality, noise, traffic and landscape. However, the EIAR provides a very comprehensive consideration of the cumulative impacts which may arise between the proposed development and other relevant developments. A very detailed methodology is provided within Chapter 18 (Section 18.1) to detail the three stage process by which the developments considered were derived for the purposes of this matter. The projects considered during the three stage process are also mapped. Table 18 provides a summary matrix showing the potential cumulative effects between the proposed development and other exiting and or approved projects in the vicinity of the port and in the surrounding area. Each of the existing/approved projects are presented in tabular format which is very useful.

13.17.2. The first project proposed for consideration is the ABR project which adjoins the subject site and which is referenced multiple times in this report. Permission was granted by the Board for the development in 2015 and related to the redevelopment of the Alexandra Basin and berths 52 & 53 including dredging of the channel of the Liffey. Two potential cumulative effects are presented those being: water quality as a result of dredging and disposal of sediments and biodiversity though habitat deterioration, noise and visual disturbance. It is concluded that there will be no cumulative effects as firstly, in terms of water quality the dredging of the existing and proposed schemes are not programmed to overlap and in terms of biodiversity that the timing of the dredging and mitigation proposed would not create any cumulative effects.

13.17.3. The applicants reference potential cumulative effects with a roads project off Breakwater Road however they state that it has been implemented and therefore I

do not consider that cumulative effects could arise with the proposed development. Even if the Board disagree with this contention I would agree with the conclusion reached in the EIAR that potential cumulative impacts in relation to biodiversity and traffic would not arise. In terms of cumulative effects with the Dublin Port Internal Road network development which includes the proposed greenway, I note that the permission is currently being implemented but is not complete. Cumulative effects considered to arise include biodiversity, traffic and landscape and visual and each of these are outlined. I would agree, that with the mitigation measures proposed, no adverse cumulative effects will arise. Other permitted developments within the port estate are outlined with the potential for cumulative effects in terms of biodiversity examined and excluded which I consider is reasonable. Permission was granted for an upgrade to the Dublin Ferryport Terminal access (Lo-Lo terminal) and the Interim Unified Passenger Terminal, under separate permissions and an examination is provided of each in respect of the potential cumulative effects as they relate to biodiversity and traffic however I would agree with the applicant that no effects are likely to arise.

13.17.4. An application for the dumping at sea licence for the Dublin Port Post 2019-2021 Maintenance Dredging Campaign was submitted in April 2019 and the proposal is considered for the purposes of cumulative effects in relation to biodiversity. It is noted that the proposed maintenance dredging is proposed to occur at alternative times of the year to the proposed development and not concurrently and therefore no cumulative effects would arise. The potential for cumulative effects to arise between the proposed development and the Inland Port facility permitted close to the airport is considered in terms of traffic and it is concluded that none would arise which I consider is reasonable.

13.17.5. Permitted developments within the surrounding area of the Port considered in respect of cumulative impacts include the North Lotts and Grand Canal Dock Planning Scheme and the Exo Building where traffic is considered but excluded as a potential cumulative effect. In relation to the Poolbeg West SDZ cumulative effects arising in respect of traffic and water quality are outlined and I consider that no cumulative effects would arise when considered in conjunction with the proposed development. In terms of the potential cumulative effects with the Irish Water Ringsend Upgrade Project permitted in April 2019, while potential cumulative effects

on biodiversity/water quality and coastal processes are examined it is concluded that no cumulative effects would arise and I consider that the rationale outlined for same is rational. In terms of potential cumulative effects associated with the proposed development and maintenance dredging associated with the Howth Yacht Club, that while no restrictions exist on timing for the Yacht Club that they require the approval of the Dublin Port Harbour Master who will not permit simultaneous dumping at sea and therefore no cumulative effects would arise in terms of biodiversity and water quality. I consider that the matter of cumulative effects has been comprehensively addressed by the applicant and that the Board can be satisfied that no significant cumulative effects will arise.

13.18. Reasoned Conclusion on the Significant Effects

13.18.1. Having regard to the examination of environmental information set out above, to the EIAR and other information provided by the applicant, and to the submissions from prescribed bodies and observers in the course of the application, it is considered that the main significant direct and indirect effects of the proposed development on the environment are as follows:

- Significant positive long-term impacts on **population and human health** including increased employment, additional growth facilitated by greater imports and exports facilitated by the increased berth lengths for longer vessels, additional tax and increased tourism opportunities and the redevelopment of brownfield lands.
- Significant negative permanent impact on **cultural heritage** from the demolition of the Pier Head of the Eastern Breakwater to facilitate the construction of Berth 50A which it is anticipated will expose elements of the 19th century breakwater currently buried. While it is not proposed to mitigate the actual loss, it is proposed to develop a 3D record of the existing structure, archaeological monitoring is proposed of all ground disturbances with the proviso to resolve fully any archaeological material and it is also proposed to create a public realm visitor experience at the new eastern limit at the end of the proposed Greenway that includes the re-use of the granite blocks and related elements of the Eastern Breakwater Pier Head and the Breakwater Lighthouse and the former location of

the pier head will be marked with inscribed commemorative text, to ensure that there is a permanent *in situ* record of its former presence.

- Direct and permanent impacts on **cultural heritage** from the proposed dredging of the previously un-dredged area to the south side of the channel leading which is considered an area of high archaeological potential and the recovery of shipping debris and/or shipwreck can be anticipated. Subject to mitigation including archaeological monitoring of all seabed disturbances, the potential to uncover and expose previously unrecorded archaeological material, and principally shipwreck, exists, and protocols are proposed to ensure that any new discoveries will be fully and properly resolved.
- Significant permanent impacts on **Avian biodiversity** in respect of the removal of several Black Guillemot nest sites in the quay walls and ro-ro ramps within OB3, OB4, Berths 50A & 52/53 directly affecting c.9 birds. This impact will be mitigated by way of the timing of the removal and the provision a number of custom made nest boxes within adjacent areas for displaced birds with this species having readily nested in such structures to date.
- Potential significant impacts on **biodiversity/coastal processes** from ship movements in the area of Berth 53 and the potential for scour of the neighbouring South Dublin Bay & River Tolka Estuary SPA impacting the long term stability of the dredged side slope at Berth 53 and potential effect on the bed levels and modifications of the position of the lowest astronomical tide across the winter foraging areas within the Tolka Estuary. With the provision of a wash protection structure to reduce scouring associated with manoeuvring vessels within the Berth 53 area, effectively reducing propeller and thruster jet velocities caused by manoeuvring ships with the predicted residual impact imperceptible.
- Significant negative temporary impacts on **avian biodiversity** during the construction and operations phases from disturbance to foraging on sand in shallow water to north of proposed Berth 53. Ceasing construction of this berth during low tide events during the construction stage and controlling access to this area of the greenway and heritage zone when operational during low tide to avoid disturbance within this area by way of the provision of a controlled gate will ensure that there are no residual impacts.

- Moderate impacts on **marine biodiversity** arising from noise associated with piling, dredging and dumping during the construction phase with the implementation of mitigation measures and implementation of the NPWS Guidelines including the provision of a Marine Mammal Observer for works including piling, dredging and disposal, will not result in significant residual impacts.
- Permanent and slight negative effects on **Benthic biodiversity/Land** from the proposal to reclaim 2.18 ha of benthic soft sediment with the infilling of Oil Berth 4 which comprises habitat common to the Port with a permanent, slight positive impact to biodiversity from the removal of the Pier Head at the Eastern Breakwater resulting in a gain of 0.28 ha of subtidal soft benthos. A permanent, slight positive impact will arise from the proposal to place concrete mats on the sloping edges across a limited area of dredge areas to prevent slumping of sediment, which while resulting in the permanent loss of 1.9 ha of soft sediment benthos, will introduce an equivalent area of hard-benthos associated with the placement of the concrete mattresses. Negative, temporary to short-term, slight impacts from the dredging of 10.33 ha of soft sediment subtidal benthos with the habitat either plentiful within the area or rapidly recovering.
- Potential for short term negative impacts on **water quality** during the construction phase from increased suspended sediment levels due to the accidental release of sediment to the water column during demolition works, berth and associated construction works and capital dredging and sediment disposal operations. With mitigation measures to be employed during capital dredging and disposal operations including in particular the timing of such works the potential impact to receiving water environment will not have a significant residual impact.

13.18.2. The proposed development is not likely to have significant adverse effects on air quality and climate and landscape and visual. The likely significant environmental effects arising as a consequence of the proposed development have therefore been satisfactorily identified, described and assessed. They would not require or justify refusing permission for the proposed development or requiring substantial amendments to it.

14.0 Appropriate Assessment

14.1. Introduction and Context

14.1.1. The application was accompanied by a Screening for Appropriate Assessment and Natura Impact Assessment (NIS). Section 2 of the document outlines the methodology used for the preparation of the document. I note that Section 3 of the document provides a detailed description of the proposed development which it is noted is as per the description provided at Chapter 3 of the EIAR, 'project description'. Section 3.3 of this report provides a detailed description of the proposed development and therefore it is not considered necessary to include the same within this Appropriate Assessment. Section 4 of the Document includes the Screening Appraisal which notes that measures to avoid or reduce harmful effects (mitigation measures) have not been taken account in the screening stage appraisal. The Stage 2 Assessment is outlined in Section 5 of the document. As will be outlined elsewhere in this assessment, it provides a more detailed examination and analysis of the implication of the proposal on the conservation objectives of the European sites where the possibility of likely significant effects could not be excluded at the screening stage in the absence of further evaluation and analysis including mitigation measures.

14.1.2. It is clarified at Section 1.4 of the document that the proposed development is not directly connected with or necessary to the management of any site as a European site.

14.1.3. The NIS was accompanied by the following supporting documents:-

- Appendix 1 – Conservation Objectives
- Appendix 2 – Air Quality Assessment
- Appendix 3 – Underwater Noise Assessment
- Appendix 4 - Coastal Processes Assessment
- Appendix 5 – Draft Construction Environmental Management Plan (CEMP)

14.1.4. I would also note that the report of the Inspector on the pre-application file, included a summary of the Board's advice to the prospective applicant during the course of the pre-application meetings which included the following matters:

- Comprehensive and detailed NIS having regard to the presence of several European sites in the surrounding area.
- Due consideration to be given to in-combination effects on the environment with other proposed developments in the wider area.

14.1.5. Having reviewed the NIS and supporting documentation, I am satisfied that it provides a comprehensive document which includes information in respect of the baseline conditions, clearly identifies the potential effects, and uses sound scientific information and knowledge. Details of mitigation measures are outlined in detail in Section 5.7 of the NIS. I am satisfied that the information is sufficient to allow for an appropriate assessment of the proposed development.

14.1.6. I would also note that a detailed appropriate assessment was undertaken by the Inspector and the Board as part of the assessment of the ABR Project Ref. PA0034. I would also point out that one of the observers considered that the baseline air quality data used was out of date with reference made to page 287 of the NIS. However as pointed out at the oral hearing by Mr. Paul Chadwick and as referenced elsewhere in this report, the data used was the latest available at the time the application was submitted. An observation also references Atlantic Salmon but as noted by the applicant, this species is not a qualifying interest in any of the European sites relevant to the application. Finally, I would note that in response to a request for clarification by myself at the oral hearing, a number of typographical errors in the NIS were rectified, pages 204, 237-238, 240, 262 and 268.

14.2. STAGE 1 - SCREENING

14.2.1. Dublin Bay is described in Section 4.1 of the applicant's document as a social wetland complex of considerable nature conservation value in a European and international context and the UNESCO designated Dublin Bay Biosphere extends to over 300km^2 containing or overlapping with 14 European sites. The most up to date conservation objectives for the European sites under consideration and details in relation to the qualifying interests and special conservation interests of these European sites are provided in Table 4.1 of the document. This is a detailed account of each qualifying interest and special conservation interest within each of the 19 European Sites and the attributes, measures and targets for each interest. Figure 4.1

in the screening document which outlines the SACs and cSACs considered in the appraisal and Figure 4.2 outlines the SPAs considered.

14.2.2. I would also note for the Boards information that the Screening and NIS document addresses both the proposed development and the disposal at sea site. While the Board are not the relevant consent authority for the dumping at sea licence, the effects of the proposed dumping at sea are a relevant consideration in respect of in-combination effects.

14.2.3. As noted above, Table 4.1 of the Screening and NIS document outlines each of the qualifying interests and special conservation interests and their conservation objectives for 19 sites located within a c. 20-25km radius of the proposed development site and the dumping at sea site which are as follows (I have placed them in order of proximity to the proposed development site):

Site Name	**Site Code**	**Distance from Proposal (by sea)**	**Distance from Dumping at Sea Site (by sea)**
Special Areas of Conservation and candidate Special Areas of Conservation			
South Dublin Bay cSAC	000210	30m (straight line) 2.3km (by sea)	8km
North Dublin Bay cSAC	000206	950m	4.8km
Rockabill to Dalkey Island SAC	003000	5km	Within Site
Howth Head cSAC	000202	5.6km	3km
Irelands Eye cSAC	002193	12.9km	7.6km
Baldoyle Bay cSAC	000199	13.8km	8.4km
Malahide Estuary SAC	000205	18.8km	16km
Lambay Island cSAC	000204	21.6km	16km
Rogerstown Estuary SAC	000208	23.5km	19km

Codling Fault Zone cSAC	003015	31.9km	22.9km
Special Protection Areas			
South Dublin Bay & River Tolka Estuary SPA	004024	18m (flush to boundary of proposed Berth 53)	6.7km
North Bull Island SPA	004006	875m by sea	3.3km
Howth Head Coast SPA	004113	7.9km by sea	2.6km by sea
Dalkey Islands SPA	004172	9km by sea	5.5km by sea
Ireland's Eye SPA	004117	12.3km	7.2km
Baldoyle Bay SPA	004016	15.4km by sea	7.5km
Rogerstown Estuary SPA	004015	19.3km by sea	15.1km by sea
Malahide Estuary SPA	004025	20km by sea	14km by sea
Lambay Island SPA	004069	21.6km	16km by sea

14.2.4. The Screening document outlines possible effects at section 4.3 under four potential impact pathways. These are habitat loss, water quality and habitat deterioration, underwater noise and disturbance; and aerial noise and visual disturbance. I consider that the four impact pathways outlined are reasonable and I would not consider that there are any others that have been omitted. I would further note, for the Boards information, that it has become common practice at screening stage to address sites under potential effects but the subject Screening document goes further and addresses impacts on specific qualifying interests and special conservation interests for screening purposes in considerable detail under the relevant potential impact pathways. This provides for an extremely comprehensive screening exercise. However given the amount of sites involved I will address each of the sites and the potential impact pathways relating to same in turn rather than follow the approach in the Screening document, as outlined, but I will refer to the

scientific information provided in the Screening document. Prior to same however, I consider it is reasonable to address the potential effect of habitat loss.

Habitat Loss

14.2.5. While the subject site is not within any European site and therefore no direct habitat loss is anticipated it is located in close proximity to the boundary of the South Dublin Bay and River Tolka Estuary SPA. While no habitat loss would occur, impact on the habitat of this SPA is considered in the context of the potential effects on the habitats of the SPA during construction and operation and in addition whether aspects of the proposal would give rise to indirect effects on qualifying habitats or species of this and other European sites.

Special Areas of Conservation and candidate Special Areas of Conservation (SAC's and cSAC's)

South Dublin Bay cSAC – Site Code 000210

14.2.6. This site is located 30m from the proposed development as the crow flies and 2.3km by sea. It is 8km from the dumping at sea site.

The qualifying interests for this site are as follows:

- Mudflats and sandflats not covered by seawater at low tide [1140]
- Annual vegetation of drift lines [1210]
- Salicornia and other annuals colonising mud and sand [1310]
- Embryonic shifting dunes [2110]

The conservation objectives seeks to maintain the favourable conservation condition of the mudflats and restore objectives of the dunes.

The site is hydrologically linked to the proposed development site.

Potential Effects relevant to this site are addressed as follows:

Water Quality and Potential Habitat Deterioration - This is examined in detail in the Screening document which addresses the conservation targets and attributes for each one. It is stated that the proposed development will not present any threat to maintaining the area or range, structure or function of the saltmarsh community (Salicornia and other annuals colonising mud and sand) or sand dunes (Annual vegetation of drift lines and Embryonic shifting dunes) in this SAC. I am satisfied that

they can be excluded on the basis that the proposal will not present any physical obstructions to the natural circulation of sediments and organic matter within the relevant communities of these qualifying interests. However, I would note that the Screening document states that uncertainty remains as to the risk that may arise from deposition of dredge plumes in respect of the Annex I habitat referenced as mudflats and sandflats not covered by seawater at low tide and this cannot be excluded at Screening Stage. I consider that the rationale outlined is reasonable and this qualifying interest should be brought forward to Stage 2. I consider that the scientific information supporting excluding the other interests within this site is reasonable.

Qualifying Interest to be carried forward to Stage 2 - Mudflats and sandflats not covered by seawater at low tide.

Site to be carried forward to Stage 2 – Yes.

North Dublin Bay cSAC – Site Code 000206

14.2.7. This site is located 950m from the proposed development by sea and is 4.8km from the dumping at sea site.

The qualifying interests for this site are as follows:

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

The conservation objectives seek to maintain the favourable conservation condition of features apart from the dunes where the objective is to restore the favourable conservation condition.

The site is hydrologically linked to the proposed development site.

Potential Effects relevant to this site are addressed as follows:

Water Quality and Potential Habitat Deterioration - This is examined in detail in the Screening document and addresses the conservation targets and attributes for each one. It is stated that the proposed development will not present any threat to maintaining the area or range, structure or function of the saltmarsh community (Salicornia and other annuals colonising mud and sand) or the five sand dunes (Annual vegetation of drift lines, Embryonic shifting dunes, Shifting dunes along the shoreline with Ammophila arenaria (white dunes), Fixed coastal dunes with herbaceous vegetation (grey dunes), Humid dune slacks) in this SAC. I am satisfied that they can be excluded on the basis that the proposal will not present any physical obstructions to the natural circulation of sediments and organic matter within the relevant communities of these qualifying interests. Neither will the proposal present any threat to the maintenance of the natural hydroligcal regime of the water table as it relates to the dunes. In addition petalwort has been excluded given its sole location within this SAC on Bull Island and the separation of this site from the proposed development. However, I would note that the Screening document states that uncertainty remains as to the risk that may arise from deposition of dredge plumes in respect of the Annex I habitat referenced as mudflats and sandflats not covered by seawater at low tide and this cannot be excluded at Screening Stage. I consider that the rationale outlined is reasonable and this qualifying interest should be brought forward to Stage 2. I consider that the scientific information supporting the exclusion of the other interests within this site is reasonable.

Qualifying Interest to be carried forward to Stage 2 - Mudflats and sandflats not covered by seawater at low tide.

Site to be carried forward to Stage 2 – Yes.

Rockabill to Dalkey Island SAC – Site Code 003000

14.2.8. This site is located 5.km from the proposed development by sea and is within the dumping at sea site.

The qualifying interests for this site are as follows:

- Reefs [1170]

- Phocoena phocoena (Harbour Porpoise) [1351]

The conservation objectives seeks to maintain the favourable conservation condition of the features.

The site is part of the proposed disposal site related to the proposed development site.

Potential Effects relevant to this site are addressed as follows:

Water Quality and Potential Habitat Deterioration - This is examined in detail in the Screening document in respect of the potential effect from the proposed disposal of dredged material at the proposed disposal site which is within the subject site. It is noted that while the site itself is large at 27,000ha the reef habitat accounts for less than 1% of same occurring at numerous locations but it is noted that it is not within the location of the disposal site itself with the closest qualifying reef habitat 3.3km to the north of the proposed disposal site and 5km from the proposed development site. I note the conclusion in the screening document that while there is significant capacity in Dublin Bay to dilute elevated concentrations of suspended sediments and polluting substances, construction and operational phase risks remain in the absence of further evaluation and analysis and on this basis the possibility of likely significant effects cannot be excluded. The possibility of likely significant effects on the Harbour Porpoise from this potential effect can be excluded and I concur with the rationale for same as outlined in the Screening section of the NIS.

Underwater Noise and Disturbance – While the possibility of likely significant effects on the Harbour Porpoise were appropriately, in my opinion, excluded in respect of water quality above, it is considered that the potential for exposure to underwater noise at construction and operational stages cannot be excluded. Potential noise sources include ground investigation works, demolition on site, marine piling, dredging of materials, and disposal of dredged material and increased vessel traffic. The potential effects identified at construction stage relate to the potential effect on the distribution and abundance of preferred prey species which cannot be excluded. In addition, persistent exposure to increased levels of underwater noise at operational stage resulting in disturbance of the community cannot be excluded.

Qualifying Interest to be carried forward to Stage 2 – Reefs and Harbour Porpoise.

Site to be carried forward to Stage 2 – Yes.

Howth Head cSAC – Site Code 000202

14.2.9. This site is located 5km from the proposed development by sea and is 3km from the dumping at sea site.

The qualifying interests for the site are as follows:

- Vegetated sea cliffs of the Atlantic and Baltic coasts [1230]
- European dry heaths [4030]

The site is hydrologically connected to the subject development.

The conservation objectives seek to maintain the favourable conservation condition of the features.

Potential Effects

Water Quality and Habitat Deterioration – no impact pathway.

Underwater Noise and disturbance – no impact pathway.

Aerial Noise and visual disturbance – no impact pathway.

Qualifying Interest to be carried forward to Stage 2 – none

Site to be carried forward to Stage 2 – No.

Irelands Eye cSAC – Site Code 002193

14.2.10. This site is located 12.9km from the proposed development by sea and is 7.6km from the dumping at sea site.

The qualifying interests for the site are as follows:

- Perennial vegetation of stony banks [1220]
- Vegetated sea cliffs of the Atlantic and Baltic coasts [1230

The site is hydrologically connected to the subject development.

The conservation objectives seek to maintain the favourable conservation condition of the features.

Potential Effects

Water Quality and Habitat Deterioration – no impact pathway and distance from site.

Underwater Noise and disturbance – no impact pathway.

Aerial Noise and visual disturbance – no impact pathway.

Qualifying Interest to be carried forward to Stage 2 – none

Site to be carried forward to Stage 2 – No.

Baldoyle Bay cSAC – Site Code 000199

14.2.11. This site is located 13.8km from the proposed development by sea and is 8.4km from the dumping at sea site.

The qualifying interests for the site are as follows:

- Mudflats and sandflats not covered by seawater at low tide [1140]
- Salicornia and other annuals colonising mud and sand [1310]
- Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330]
- Mediterranean salt meadows (Juncetalia maritimi) [1410]

The site is hydrologically connected to the subject development.

The conservation objectives seek to maintain the favourable conservation condition of the features.

Potential Effects

Water Quality and Habitat Deterioration – distance from site.

Underwater Noise and disturbance – no impact pathway.

Aerial Noise and visual disturbance – no impact pathway.

Qualifying Interest to be carried forward to Stage 2 – none

Site to be carried forward to Stage 2 – No.

Malahide Estuary SAC – Site Code 000205

14.2.12. This site is located 18.8km from the proposed development by sea and is 16km from the dumping at sea site.

The qualifying interests for the site are as follows:

- Mudflats and sandflats not covered by seawater at low tide [1140]
- Salicornia and other annuals colonising mud and sand [1310]
- Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330]
- Mediterranean salt meadows (Juncetalia maritimi) [1410]
- Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120]

- Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]

The site is hydrologically connected to the subject development.

The conservation objectives seek to maintain or restore the favourable conservation condition of the features.

Potential Effects

Water Quality and Habitat Deterioration – distance from site.

Underwater Noise and disturbance – no impact pathway.

Aerial Noise and visual disturbance – no impact pathway.

Qualifying Interest to be carried forward to Stage 2 – none

Site to be carried forward to Stage 2 – No.

Lambay Island cSAC – Site Code 000204

14.2.13. This site is located 21.6km from the proposed development by sea and is 16km from the dumping at sea site.

The qualifying interests for this site are as follows:

- Reefs [1170]
- Vegetated sea cliffs of the Atlantic and Baltic coasts [1230]
- Halichoerus grypus (Grey Seal) [1364]
- Phoca vitulina (Harbour Seal) [1365]

The conservation objectives seeks to maintain the favourable conservation condition of the features.

The site is hydrologically linked to the proposed development site.

Potential Effects relevant to this site are addressed as follows:

Water Quality and Potential Habitat Deterioration - This is examined in the Screening document which addresses the conservation targets and attributes for both the reefs and sea cliffs in detail. It is stated that the proposed development will not present any threat to maintaining the area or range, structure or function of the either feature and that both features can be excluded. I concur with the findings and would note that these features are a significant distance from both the proposed development site (21.6km) and the disposal site (16km) and therefore the significant separation

distance from the qualifying interests to the proposed development would provide that potential effects on the reefs and vegetated sea cliffs can be excluded.

Underwater Noise and Disturbance – While the possibility of likely significant effects on the grey seals and harbour seals were appropriately, in my opinion, excluded in respect of water quality above, it is considered that the potential for exposure to underwater noise at construction and operational stages cannot be excluded. Potential noise sources include ground investigation works, demolition on site, marine piling, dredging of materials, and disposal of dredged material and increased vessel traffic. The potential effects identified at construction stage relate to the potential effect on the distribution and abundance of preferred prey species cannot be excluded. In addition, persistent exposure to increased levels of underwater noise at operational stage resulting in disturbance of the community cannot be excluded.

Qualifying Interest to be carried forward to Stage 2 – Grey Seals and Harbour Seals.

Site to be carried forward to Stage 2 – Yes.

Rogerstown Estuary SAC – Site Code 000208

14.2.14. This site is located 23.5km from the proposed development by sea and is 19km from the dumping at sea site.

The qualifying interests for the site are as follows:

- Mudflats and sandflats not covered by seawater at low tide [1140]
- Salicornia and other annuals colonising mud and sand [1310]
- Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330]
- Mediterranean salt meadows (Juncetalia maritimi) [1410]
- Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120]
- Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]

The site is hydrologically connected to the subject development.

The conservation objectives seek to maintain or restore the favourable conservation condition of the features.

Potential Effects

Water Quality and Habitat Deterioration – distance from site.

Underwater Noise and disturbance – no impact pathway.

Aerial Noise and visual disturbance – no impact pathway.

Qualifying Interest to be carried forward to Stage 2 – none

Site to be carried forward to Stage 2 – No.

Codling Fault cSAC – Site Code 003015

14.2.15. This site is located 31.9km from the proposed development by sea and is 22.9km from the dumping at sea site.

The qualifying interests for the site are as follows:

- Submarine structures made by leaking gases [1180]

The site is hydrologically connected to the subject development.

The generic conservation objectives seek to maintain or restore the favourable conservation condition of the feature.

Potential Effects

Water Quality and Habitat Deterioration – distance from site.

Underwater Noise and disturbance – no impact pathway.

Aerial Noise and visual disturbance – no impact pathway.

Qualifying Interest to be carried forward to Stage 2 – none

Site to be carried forward to Stage 2 – No.

Special Protection Areas (SPAs)

South Dublin Bay & River Tolka Estuary SPA – Site Code 004024

14.2.16. This site is located 18m from the proposed development by sea, flush with boundary of proposed berth 53 and is 6.7km from the dumping at sea site.

The special conservation interests for the subject site are as follows:

- Light-bellied Brent Goose (Branta bernicla hrota) [A046]
- Oystercatcher (Haematopus ostralegus) [A130]
- Ringed Plover (Charadrius hiaticula) [A137]
- Grey Plover (Pluvialis squatarola) [A141] (proposed for removal)
- Knot (Calidris canutus) [A143]

- Sanderling (Calidris alba) [A144]
- Dunlin (Calidris alpina) [A149]
- Bar-tailed Godwit (Limosa lapponica) [A157]
- Redshank (Tringa totanus) [A162]
- Black-headed Gull (Chroicocephalus ridibundus) [A179]
- Roseate Tern (Sterna dougallii) [A192]
- Common Tern (Sterna hirundo) [A193]
- Arctic Tern (Sterna paradisaea) [A194]
- Wetland and Waterbirds [A999]

The conservation objectives seeks to maintain the favourable conservation condition of the features. The conservation objectives state that the grey plover is proposed for removal from the list of special conservation interests. I would note however that the Screening document, in the interest of completeness includes this species.

The site is hydrologically linked to the proposed development site. It is proposed that Berth 53 will be constructed 20m from the SPA boundary running parallel to same to the east. In addition works proposed include the dredging of part of the site area including the existing channel and berths is proposed as is infilling of parts of same.

Potential Effects relevant to this site are addressed as follows:

Water Quality and Potential Habitat Deterioration

Overwintering Birds - this is examined in the screening document and addresses the conservation targets and attributes for overwintering birds. It is stated that given the possibility that the construction of Berth 53 and berthing pocket could result in a plume of suspended sediments entering the SPA and decrease in the range, timing or intensity of use of part of the SPA by the species undermining the conservation targets for the overwintering species. The operation of Berth 53 and associated berth pocket could result in changes to the existing tidal patterns, currents or wave action and may result in localised changes to the transport sediment regime or morphology of the seafloor with potential for decrease in range, timing or intensity of use of part of the SPA by wintering species. Potential effects upon the adjacent intertidal area of the SPA where qualifying populations of waders and waterbirds can occur with potential for dredging activities to result in a plume of suspended sediments are also

outlined. In addition, potential for operational changes to tidal patterns and currents, increased wave heights resulting in localised changes to the transport regime changing to the morphology of the seafloor are noted. Other potential sources of pollution are identified as suspended sediment levels including ongoing dredging, water quality impacts, discharges from vessels and cargo handling and cargo storage areas. It is stated that the possibility of likely significant effects cannot be excluded despite the significant capacity of the estuaries to dilute elevated concentrations or polluting substances. I consider that this is reasonable.

Breeding Seabirds – these include the three species of tern with the concern that the proposal could affect the prey biomass available to the species with the screening document outlining that the issue is whether or not a reduction in prey biomass available would be likely if it were to occur temporarily and only in a small part of the SPA. On the basis of information available it is stated that a decrease in prey biomass available during breeding season would not occur as a result of dredging or disposal over the winter period. However at operational stage it is outlined that localised changes to the transport sediment regime or morphology of the seafloor to the north of Berth 53 where terns feed could alter prey biomass availability and potential risks remain in the absence of further evaluation and cannot be excluded.

Aerial Noise and Visual Disturbance

Potential disturbance from the construction and operation of the proposal arises and cannot be excluded at screening stage. The screening document details the potential effects on the waders and gulls and waterbirds and I consider that it is clear that this potential effect cannot be screened out. I also note the detail included in terms of lighting and the displacement effects which can arise. In relation to breeding seabrids no direct impacts are predicted on breeding sites as none occur within the immediate area of the proposed development. I note that no part of the proposal is located within 300m of any tern breeding sites which are well documented in the drawings submitted. It is stated that a risk remains that construction or operation of the proposal in proximity to intertidal feeding areas of the SPA might result in disturbance and or loss of attractiveness of the areas used by the species and while such risk remains that the possibility of likely significant effects cannot be excluded at screening stage.

Special conservation interest to be carried forward to Stage 2 – over-wintering birds, wetland habitat, breeding waterbirds and non-breeding waterbirds.

Site to be carried forward to Stage 2 – Yes.

North Bull Island SPA – Site Code 004006

14.2.17. This site is located 875m by sea from the proposed development and is 3.3km from the dumping at sea site.

The special conservation interests for the site are as follows:

- Light-bellied Brent Goose (Branta bernicla hrota) [A046]
- Shelduck (Tadorna tadorna) [A048]
- Teal (Anas crecca) [A052]
- Pintail (Anas acuta) [A054]
- Shoveler (Anas clypeata) [A056]
- Oystercatcher (Haematopus ostralegus) [A130]
- Golden Plover (Pluvialis apricaria) [A140]
- Grey Plover (Pluvialis squatarola) [A141]
- Knot (Calidris canutus) [A143]
- Sanderling (Calidris alba) [A144]
- Dunlin (Calidris alpina) [A149]
- Black-tailed Godwit (Limosa limosa) [A156]
- Bar-tailed Godwit (Limosa lapponica) [A157]
- Curlew (Numenius arquata) [A160]
- Redshank (Tringa totanus) [A162]
- Turnstone (Arenaria interpres) [A169]
- Black-headed Gull (Chroicocephalus ridibundus) [A179]
- Wetland and Waterbirds [A999]

The conservation objectives seek to maintain the favourable conservation condition of the features.

The site is hydrologically linked to the proposed development site.

Potential Effects relevant to this site are addressed as follows:

Water Quality and Potential Habitat Deterioration

Overwintering Birds - this is examined in the screening document and addresses the conservation targets and attributes for overwintering birds. It is stated that given the possibility that the construction of Berth 53 and the berthing pocket could result in a plume of suspended sediments entering the SPA and decrease in the range, timing or intensity of use of part of the SPA by the species undermining the conservation targets for the overwintering species. The operation of Berth 53 and associated berth pocket could result in changes to the existing tidal patterns, currents or wave action and may result in localised changes to the transport sediment regime or morphology of the seafloor with potential for decrease in range, timing or intensity of use of part of the SPA by wintering species. There are also potential effects upon the adjacent intertidal area of the SPA where qualifying populations of waders and waterbirds can occur with potential for dredging activities to result in a plume of suspended sediments. The potential for operational changes to tidal patterns and currents, increased wave heights resulting in localised changes to the transport regime changing to the morphology of the seafloor also exists. Potential sources of pollution are identified as suspended sediment levels including ongoing dredging, water quality impacts, discharges from vessels and cargo handling and cargo storage areas. Therefore, the possibility of likely significant effects cannot be excluded despite the significant capacity of the estuaries to dilute elevated concentrations or polluting substances. I consider that this is reasonable.

Aerial Noise and Visual Disturbance

Potential disturbance from the construction and operation of the proposal arises and cannot be excluded at screening stage. The screening document details the potential effects on the waders and gulls and waterbirds and I consider that it is clear that this potential effect cannot be screened out. I also note the detail included in terms of lighting and the displacement effects which can arise. In relation to breeding seabrids no direct impacts are predicted on breeding sites as none occur within the immediate area of the proposed development. I note that no part of the proposal is located within 300m of any tern breeding sites which are well documented in the drawings submitted. It is stated that a risk remains that construction or operation of the proposal in proximity to intertidal feeding areas of the SPA might result in

disturbance and or loss of attractiveness of the areas used by the species and while such risk remains that the possibility of likely significant effects cannot be excluded at screening stage.

Special conservation interest to be carried forward to Stage 2 – waterbirds, wetland habitat and non-breeding waterbirds.

Site to be carried forward to Stage 2 – Yes.

Howth Head Coast SPA – Site Code 004113

14.2.18. This site is located 7.9km by sea from the proposed development and is 2.6km from the dumping at sea site.

The special conservation interests for the site are as follows:

- Kittiwake (Rissa tridactyla) [A188]

The site is hydrologically connected to the subject development.

The generic conservation objectives seek to maintain or restore the favourable conservation condition of the bird species.

Potential Effects

Water Quality and Habitat Deterioration – can be excluded given dredging proposed at time of year that breeding seabird is not present.

Underwater Noise and disturbance – no potential for exposure.

Aerial Noise and visual disturbance – no potential for significant likely effect given distance.

Special conservation interest to be carried forward to Stage 2 – none

Site to be carried forward to Stage 2 – No.

Dalkey Islands SPA – Site Code 004172

14.2.19. This site is located 9km by sea from the proposed development and is 5.5km from the dumping at sea site.

The special conservation interests for the site are as follows:

- Roseate Tern (Sterna dougallii) [A192]
- Common Tern (Sterna hirundo) [A193]
- Arctic Tern (Sterna paradisaea) [A194]

The site is hydrologically connected to the subject development.

The generic conservation objectives seek to maintain or restore the favourable conservation condition of the bird species.

Potential Effects

Water Quality and Habitat Deterioration – can be excluded given dredging proposed at time of year that breeding seabird not present and the distance from the proposal.

Underwater Noise and disturbance – no potential for exposure.

Aerial Noise and visual disturbance – no potential for significant likely effect given distance.

Special conservation interest to be carried forward to Stage 2 – none

Site to be carried forward to Stage 2 – No.

Ireland's Eye SPA – Site Code 004117

14.2.20. This site is located 12.3km by sea from the proposed development and is 7.2km from the dumping at sea site.

The special conservation interests for the site are as follows:

- Cormorant (Phalacrocorax carbo) [A017]
- Herring Gull (Larus argentatus) [A184]
- Kittiwake (Rissa tridactyla) [A188]
- Guillemot (Uria aalge) [A199]
- Razorbill (Alca torda) [A200]

The site is hydrologically connected to the subject development.

The generic conservation objectives seek to maintain or restore the favourable conservation condition of the bird species.

Potential Effects

Water Quality and Habitat Deterioration – can be excluded given dredging proposed at time of year that breeding seabird not present and distance from proposal.

Underwater Noise and disturbance – no potential for exposure.

Aerial Noise and visual disturbance – no potential for significant likely effect given distance.

Special conservation interests to be carried forward to Stage 2 – none

Site to be carried forward to Stage 2 – No.

Baldoyle Bay SPA – Site Code 004016

14.2.21. This site is located 15.4km by sea from the proposed development and is 6.7 km from the dumping at sea site.

The special conservation interests for the site are as follows:

- Light-bellied Brent Goose (Branta bernicla hrota) [A046]
- Shelduck (Tadorna tadorna) [A048]
- Ringed Plover (Charadrius hiaticula) [A137]
- Golden Plover (Pluvialis apricaria) [A140]
- Grey Plover (Pluvialis squatarola) [A141]
- Bar-tailed Godwit (Limosa lapponica) [A157]
- Wetland and Waterbirds [A999]

The site is hydrologically connected to the subject development.

The conservation objectives seek to maintain the favourable conservation condition of the bird species.

Potential Effects

Water Quality and Habitat Deterioration – can be excluded given distance from proposal.

Underwater Noise and disturbance – no potential for exposure.

Aerial Noise and visual disturbance – no potential for significant likely effect given distance.

Special conservation interests to be carried forward to Stage 2 – none

Site to be carried forward to Stage 2 – No.

Rogerstown Estuary SPA – Site Code 004015

14.2.22. This site is located 19.3km by sea from the proposed development and is 15.1km from the dumping at sea site.

The special conservation interests for the site are as follows:

- Greylag Goose (Anser anser) [A043]
- Light-bellied Brent Goose (Branta bernicla hrota) [A046]
- Shelduck (Tadorna tadorna) [A048]
- Shoveler (Anas clypeata) [A056]
- Oystercatcher (Haematopus ostralegus) [A130]
- Ringed Plover (Charadrius hiaticula) [A137]
- Grey Plover (Pluvialis squatarola) [A141]
- Knot (Calidris canutus) [A143]
- Dunlin (Calidris alpina) [A149]
- Black-tailed Godwit (Limosa limosa) [A156]
- Redshank (Tringa totanus) [A162]
- Wetland and Waterbirds [A999]

The site is hydrologically connected to the subject development.

The conservation objectives seek to maintain the favourable conservation condition of the bird species.

Potential Effects

Water Quality and Habitat Deterioration – can be excluded given distance from proposal.

Underwater Noise and disturbance – no potential for exposure.

Aerial Noise and visual disturbance – no potential for significant likely effect given distance.

Special conservation interests to be carried forward to Stage 2 – none

Site to be carried forward to Stage 2 – No.

Malahide Estuary SPA – Site Code 004025

14.2.23. This site is located 20km by sea from the proposed development and is 14km from the dumping at sea site.

The special conservation interests for the site are as follows:

- Great Crested Grebe (Podiceps cristatus) [A005]

- Light-bellied Brent Goose (Branta bernicla hrota) [A046]
- Shelduck (Tadorna tadorna) [A048]
- Pintail (Anas acuta) [A054]
- Goldeneye (Bucephala clangula) [A067]
- Red-breasted Merganser (Mergus serrator) [A069]
- Oystercatcher (Haematopus ostralegus) [A130]
- Golden Plover (Pluvialis apricaria) [A140]
- Grey Plover (Pluvialis squatarola) [A141]
- Knot (Calidris canutus) [A143]
- Dunlin (Calidris alpina) [A149]
- Black-tailed Godwit (Limosa limosa) [A156]
- Bar-tailed Godwit (Limosa lapponica) [A157]
- Redshank (Tringa totanus) [A162]
- Wetland and Waterbirds [A999]

The site is hydrologically connected to the subject development.

The conservation objectives seek to maintain the favourable conservation condition of the bird species.

Potential Effects

Water Quality and Habitat Deterioration – can be excluded given distance from proposal.

Underwater Noise and disturbance – no potential for exposure.

Aerial Noise and visual disturbance – no potential for significant likely effect given distance.

Special conservation interests to be carried forward to Stage 2 – none

Site to be carried forward to Stage 2 – No.

Lambay Island SPA – Site Code 004069

14.2.24. This site is located 21.6km by sea from the proposed development and is 16km from the dumping at sea site.

The special conservation interests for the site are as follows:

- Fulmar (Fulmarus glacialis) [A009]
- Cormorant (Phalacrocorax carbo) [A017]
- Shag (Phalacrocorax aristotelis) [A018]
- Greylag Goose (Anser anser) [A043]
- Lesser Black-backed Gull (Larus fuscus) [A183]
- Herring Gull (Larus argentatus) [A184]
- Kittiwake (Rissa tridactyla) [A188]
- Guillemot (Uria aalge) [A199]
- Razorbill (Alca torda) [A200]
- Puffin (Fratercula arctica) [A204]

The site is hydrologically connected to the subject development.

The conservation objectives seek to maintain the favourable conservation condition of the bird species.

Potential Effects

Water Quality and Habitat Deterioration – can be excluded given distance from proposal.

Underwater Noise and disturbance – no potential for exposure.

Aerial Noise and visual disturbance – no potential for significant likely effect given distance.

Special conservation interests to be carried forward to Stage 2 – none

Site to be carried forward to Stage 2 – No.

14.3. Conclusion on Stage 1 Screening

14.3.1. I would note that the Screening and NIS document provide a very comprehensive conclusion on the screening that was undertaken with Table 4.2 outlining each of the sites examined and the sites and in particular the qualifying interests and special conservation interests which could not be screened out. Section 4.6 then addresses

each of the sites and outlines the rationale for inclusion or exclusion for Stage 2 purposes.

Section 4.6.3 provides the conclusion that having regard to the methodology employed an appropriate assessment of the implications of the proposal on the following European sites in view of their conservation objectives is required as follows:

The possibility of likely significant Water Quality and Habitat Deterioration effects on:

- Mudflats and sandflats not covered by seawater at low tide in North Dublin Bay cSAC;
- Mudflats and sandflats not covered by seawater at low tide in South Dublin Bay cSAC;
- Reefs in Rockabill to Dalkey Island SAC;
- the intertidal wetland areas of the Tolka Estuary as a resource for the regularly occurring migratory waterbirds of:

  (i) South Dublin Bay & River Tolka Estuary SPA;

  (ii) North Bull Island SPA; and
- the prey biomass available for the breeding waterbird Special Conservation Interest species of South Dublin Bay & River Tolka Estuary SPA.

The possibility of likely significant Underwater Noise and Disturbance effects on:

- the Grey seal population of Lambay Island cSAC;
- the Harbour seal population of Lambay Island cSAC; and
- the Harbour porpoise community of Rockabill to Dalkey Island SAC.

The possibility of likely significant Aerial Noise and Visual Disturbance effects on:

- the breeding waterbird Special Conservation Interest species Special Conservation Interest species of South Dublin Bay & River Tolka Estuary SPA;
- the non-breeding waterbird Special Conservation Interest species Special Conservation Interest species of South Dublin Bay & River Tolka Estuary SPA;
- the non-breeding waterbird Special Conservation Interest species of North Bull Island SPA.

14.3.2. It is reasonable to conclude that on the basis of the information on the file which I consider extremely comprehensive that the proposed development either individually or in combination with other plans or projects would not be likely to have a significant effect on European Sites:-

- Howth Head cSAC (site code 000202)
- Irelands Eye cSAC (site code 002193)
- Baldoyle Bay cSAC (site code 000199)
- Malahide Estuary SAC (site code 000205)
- Rogerstown Estuary SAC (site code 000208)
- Codling Fault Zone cSAC (site code 003015)
- Howth Head Coast SPA (site code 004113)
- Dalkey Islands SPA (site code 004172)
- Ireland's Eye SPA (site code 004117)
- Baldoyle Bay SPA (site code 004016)
- Rogerstown Estuary SPA (site code 004015)
- Malahide Estuary SPA (site code 004025)
- Lambay Island SPA (site code 004069)

14.3.3. I agree with the conclusions of the Screening document that a Stage 2 AA is required. I also concur that the Stage 2 AA can be confined to the following European sites and in particular to the relevant qualifying interests and special conservation interests which could not be excluded which I have included in brackets as follows:

- South Dublin Bay and River Tolka Estuary SPA (wetlands, prey biomass available, waders and waterbirds) (Site code: 4024)
- North Bull Island SPA (wetlands, waders and waterbirds) (Site code: 4006)
- North Dublin Bay cSAC (mudflats and sandflats) (Site code: 0206)
- South Dublin Bay cSAC (mudflats and sandflats) (Site code: 0210)
- Rockabill to Dalkey Island cSAC (Reefs and Harbour Porpoise) (Site code: 3000)

- Lambay Island cSAC (Grey Seals and Harbour Seals) (Site code: 000204)

14.4. STAGE 2 – APPROPRAITE ASSESSMENT

14.4.1. As outlined above, this Stage 2 assessment relates to specific qualifying interests and special conservation interests within 6 European Sites which I will address in turn. As set out in the Stage 1 assessment, I have excluded specific qualifying interests and special conservation interests within these 6 sites on the basis that there is no likely significant effect and on this basis there cannot adversely affect the integrity of the relevant sites.

- South Dublin Bay and River Tolka Estuary SPA – special conservation interests - wetlands, prey biomass available, waders and waterbirds - (Site code: 4024)
- North Bull Island SPA – special conservation interests - wetlands, waders and waterbirds (Site code: 4006)
- South Dublin Bay cSAC – qualifying interests - mudflats and sandflats (Site code: 0210)
- North Dublin Bay cSAC – qualifying interests - mudflats and sandflats (Site code: 0206)
- Rockabill to Dalkey Island cSAC – qualifying interests - Reefs and Harbour Porpoise (Site code: 3000)
- Lambay Island cSAC – qualifying interests - Grey and Harbour Seals (Site code: 000204)

South Dublin Bay and River Tolka Estuary SPA (Site code: 4024)

14.4.2. The NIS in respect of the consideration of this site addresses breeding waterbirds and non-breeding waterbirds and this I consider is a logical way of considering the matters arising. I will address each in turn.

Breeding Waterbirds

14.4.3. The species considered in this section are Roseate Tern, Artic Tern and Common Tern the conservation objectives for which seek to maintain the favourable status of the species. The first two have 5 conservation attributes and targets with the

Common Tern having 9. The NIS outlines same in detail. I would note that most targets require no decline but in terms of disturbance at breeding roosting site and breeding site for the common tern that the target is that human activities should occur at levels that do not adversely affect the numbers of the species.

Non-Breeding waterbirds

14.4.4. The 10 species considered under this heading are: Light-bellied Brent Goose, Oystercatcher, Ringed Plover, Grey Plover, Knot, Sanderling, Dunlin, Bar-tailed Godwit, Redshank, Black-headed Gull (Grey Plover proposed for removal but including in NIS so included in this assessment). The conservation objectives seek to maintain the favourable condition of the species with 2 attributes and targets relating to population trend and distribution.

Bird Surveys

14.4.5. The NIS outlines the bird surveys which have been undertaken at Section 5.5.1.3 of the NIS and it is clear that there is a significant amount of survey information dating back to the 1990's on the species. Notwithstanding the ongoing surveys, the NIS states that to ensure that the area north of Berth 53 was adequately assessed, additional surveys were undertaken on eight dates in 2018 and 2019 with the rationale for the dates selected outlined. Table 5.6 outlines the waterbirds recorded in the area within 200m of the proposed Berth 53 during extreme low tides on 8 dates in 2018 & 2019 with peak numbers for the species also provided. In terms of breeding tern surveys it is stated in the NIS that from 2013 to 2018 monitoring of Common Terns and Arctic Terns nesting within Dublin Port has been carried out by BirdWatch Ireland as part of the Dublin Bay Birds Project which is funded by Dublin Port Company with tern colony locations are set out in accompanying drawings. A comparison between the total number of nests in each of the sub-sites over the six years 2013-2018 is given in Table 5.8 where it is noted that the number of nests in the overall colony had declined in 2016 which the NIS states is due to the partial collapse of the ESB Dolphin and possible disturbance on the CDL Dolphin but this was partly buffered by the provision of the two pontoons by the applicant. I consider that it is very clear that there is a significant amount of baseline information regarding the bird populations, both breeding and non-breeding within the area.

Potential Effects - Aerial Noise and Visual Disturbance Effects

14.4.6. The principle concern in respect of this site is the potential aerial noise and visual disturbance effects on breeding and non-breeding waterbird species. The NIS notes that significant noise producing activities, and the movement of personnel and machinery has the potential to cause disturbance. It is also stated that the construction and operation of the proposed development will involve a range of activities emitting aerial noise and associated movement of people, vehicles and vessels at the eastern end of the Port in the application area and dredging activity in the river channel. I would note for the Board's information that the construction period is estimated at approximately 9 years, with existing port operations continuing during the construction period.

14.4.7. In the first instance I would note that the NIS usefully addresses the matter of disturbance whereby the potential effects on the species from disturbance are outlined but it is also noted that not all observed effects (flying or walking away) are negative effects with the term habituation outlined which describes birds that have become accustomed to particular sources of disturbance. Disturbance for the purposes of human interference is described as any situation in which human activities cause a bird to behave differently from the behaviour it would be reasonably expected to exhibit without the presence of that activity. The NIS notes in particular that in the estuarine environment, disturbance can manifest in a number of forms of varying severity depending on the nature, duration and intensity of the disturbance source. The NIS details the results of a number of studies on the impact of noise on birds from various construction activities including dredging and human activities.

14.4.8. The NIS states that the only bird species breeding in the site of the proposed development is the Black Guillemot which is not an SCI of any SPA and it is not appraised in the NIS for this reason. I would note for the Board's information that this species is addressed in Section 12.4 of this planning assessment in response to a concern raised by Birdwatch Ireland and in Section 13.3 of the EIA above.

Breeding Birds

14.4.9. The NIS details that both the Common Tern and Arctic Tern nest on several artificial structures within the port as described in Tables 5.6 and 5.7 of the NIS with the nearest of these structures approximately 250m from the proposed construction area. It is outlined that during the breeding season (May to August) the birds nest in

dense colonies on these structures. Their main foraging areas are in the wider area of Dublin Bay but occasionally the birds forage in the wake of ships moving through the port where prey items are brought to the surface by the movement of the ships.

14.4.10. Worst-case predicted construction noise levels from the proposed development will be less than 50dB(A) at the tern nesting locations (see Figure 5.27). The NIS then refers to literature prepared by Cutts et al. (2009) which describes 50dB(A) as being a noise threshold below which no effect of construction disturbance on birds has been observed to occur. It is also noted that a tern colony itself generates noise up to 70 to 80 dB(A) in the breeding season through the continuous calling of the terns. This would far exceed the noise being generated at the proposed development construction site.

14.4.11. In relation to the proposed dredging within the River Liffey Channel I note from the NIS that terns have continued to forage in the River Liffey channel over the duration of Dublin Port's regular maintenance dredging operations over the period 2012 – 2018 in addition to capital dredging permitted by the ABR Project and that their breeding populations in Dublin Port have been increasing during this period (refer Table 5.7).

14.4.12. I am satisfied therefore, that this supports the conclusion that the proposed construction including the channel dredging would not adversely affect the breeding bird population within this site.

Non-Breeding Waterbirds

14.4.13. The NIS states that non-breeding waterbirds use the site north of the proposed Berth 53 in several different ways depending on the time of year and tidal level. In particular it is noted that at some low spring tides, when some intertidal sediment is exposed for short periods, flocks of waders and gulls select this area for feeding with the visits generally short and infrequent due to the limited period of exposure (usually a maximum of 1-2 hours per day). Most of the extreme low tide periods in winter months occur in darkness or poor light. Waterbirds do not use the site at other parts of the tidal cycle (median or high tides) or on other dates when spring tides do not occur. It is also stated that there are no non-breeding waterbird high tide roosts on or close to the site.

14.4.14. Table 5.6 of the NIS details that 6 feature species of this SPA occur within 200m of proposed Berth 53 and the heritage installations. Those species are: Black-headed Gull, Black-tailed Godwit, Curlew, Oystercatcher, Pale-bellied Brent Goose and Redshank. I would note that Figure 5.27 in the NIS outlines the 6 locations and values of worst case noise levels in the SPA which were used to predict the likelihood of aerial noise induced effects at construction stage. The NIS states that the highest worst-case predicted noise level of 63 dB(A) occurs at location C immediately to the north of Berth 53 which while close to the noise threshold of 65.5dB(A) cited in Wright et al. (2010) as being the value above which impulsive construction noise is more likely to result in a behavioural response of some kind, it is below the threshold. The other predicted worst-case noise levels range from 45-49 dB(A) which is below the value of 50dB(A) cited in Cutts et al. (2009) as being a noise threshold below which no effect of construction disturbance on birds was observed to occur, providing certainty beyond reasonable scientific doubt.

14.4.15. It is stated that the feature species that use this part of the site do so only at very low tides, as outlined above and included in Table 5.6 and while this is a small part of the SPA, and is only available for intertidal feeding on average, 23 times each year for one hour at a time, loss of attractiveness of this part of the SPA as a result of construction of elements of the proposed development when it would otherwise be available would decrease the range, timing or intensity of use of this part of the SPA for the feature species of the SPA which use it. This necessitates that mitigation measures must be applied at construction stage to prevent noise (and principally pile-driving activities) from significantly decreasing the range, timing or intensity of use of this part of the SPA when it becomes available for the feature species of the SPA that use it.

14.4.16. In their submission Birdwatch Ireland outline a number of concerns which I note have been addressed by the applicant in their presentation to the oral hearing primarily in the presentation delivered by Richard Nairn and James McCrory. The first matter which I address relates to the potential impacts of the proposed dredging to the south of the channel, (Fig. 3.12 NIS) at very base of Great South Wall in Liffey channel where there is a cooling water outfall which they state is notable for the numbers of waterbirds that use the area. They state that they are not able to discount that disturbance from operational activities to the species of conservation

interest would not be an issue in this area. They note that the Black-headed gull, one of the species of North Bull Island SPA and South Dublin Bay and Tolka Estuary SPA, use the outfall in significant numbers (Appendix 1) with 593 Black-headed gulls counted in March 2019 at the outfall site and 2018 Dublin Bay Birds project showing 17,776 Black-headed gulls using the bay with number associated with the outfall 3.3% of the figure. They consider that this highlights that the outfall area is of importance to Black-headed gulls and other SCI's of adjacent SPA's and that the potential exists for dredging and operational impacts to the species using this area. Birdwatch Ireland consider that while impacts to terns are addressed in the mitigation measures, no assessment of impacts of the dredging works from October – March on the SCI's using this small area below the channel to be widened and that same needs to be undertaken and included to rule out any likely significant impacts on the SCI's and ensure that conservation objectives of the SPA are met. They also state that they are concerned that ex-situ factors such as these activities near the outfall could pose challenges to meeting objective 1.

14.4.17. I would also note that I specifically requested that the applicant indicate the location of this outfall on a map for the Board's information and this was provided. In respect of the impacts envisaged I would refer to the response provided by the applicant at the oral hearing. They state, in the presentation provided by Richard Nairn, that this area is not within the South Dublin Bay and River Tolka Estuary SPA with reference to section 5.2 of the supporting document for this site (NPWS Oct 2014) (extract in folder) which deals with the use of alternative habitats by waterbird species. The applicant states that Table 5.2 of the referenced supporting document describes the black-headed gull as being a very adaptable species having the widest range of foraging guilds of any of the sites SCI species. It is stated that this area of concern for Birdwatch Ireland has no records within the maps for black-headed gull at page 106 of the supporting document. It is also noted that this area is not a coded Dublin Bay IWeBS count sub-site but is included in the survey areas for the Dublin Bay Bird Project and holds regular number of Black-headed gulls. In terms of the number of Black-headed gull using Dublin Bay, the applicant notes the numbers of the species referenced by Birdwatch Ireland and reference survey data in the 2014 NPWS supporting document which indicates almost double the number quoted using the Bay. It is noted that the distance from the area of concern to the nearest point

where shipping would turn is 172m with c.48 existing shipping movements per day including throughout the wintering season with no negative effects of disturbance to waterbirds as a result of shipping movements observed. I note that on the day I visited this outfall site, the birds using this area were not disturbed by the vessel which left the port at that time. The applicant states that shipping is not generally perceived to be a threat to non-breeding waterbird with black-headed gulls highly habituated to human activity with the species one of the most habituated, adaptable and opportunistic SCI species in the SPA. It is noted in this regard that the type of vessels involved in dredging are low moving and would not represent any greater threat to waterbirds than other commercial shipping movements.

14.4.18. However, in order to address the matter further, the applicant has undertaken an additional bird survey of the ESB power station cooling water outfall over six days between 22 – 27 October 2019 (Appendix 1 of Adrian Bell presentation) which coincided with capital dredging works associated with the ABR project in the navigational channel with dredging occurring 200m from the area of interest on four of the six days. It is stated that out of 100 potential events, 18 disturbance events resulted in behavioural change of the birds as follows: 11 events caused by small wakes by passing ships resulted in behavioural change (vigilance) but not flight, 5 events caused by potentially predatory birds flying over resulted in some birds taking flight but returning soon after and two events caused by wakes produced by the Port pilot vessel passing at speed resulting in some birds taking flight and not returning. As can be seen none of the events occurred due to the dredging with no potential from dredging activities to cause impacts. It is stated that dredging of the channel in front of the cooling outfall is not an ex-situ factor that could potentially impact on the attainment of Objective 1 for the overwintering SCI species of the SPA. There will be no appreciable decrease in the range, timing or intensity of use of the area as a result of dredging.

14.4.19. Mitigation is presented in Section 5.5.1.5 of the NIS and includes a Bird Management Plan a draft of which is within Appendix 5 of the NIS. It is also proposed that the capital dredging scheme will be confined to the winter months when the terns have migrated from the site. In addition construction of Berth 53 and the heritage installations will temporarily cease during period of greatest low spring tides. I would note that Birdwatch Ireland have sought further details in terms of the

times of these tides and request a schedule of the extreme low tides is provided to it. I note that the applicant stated at the oral hearing (presentation of Richard Nairn) that they have no objection to such a condition should the Board consider that same is necessary. Gates are also proposed to control the movement of people on the greenway. I would note that the submission of Dublin City Council while stating the acceptability of the gates, consider that the timing of and reasons for the gate closure need to be clearly communicated. I would note that the applicant at the oral hearing (presentation of Richard Nairn) states that the restriction on access is proposed during the overwintering season during the period of greatest low spring tides. He stated further that the timing of and reasons for the gate closure will be clearly communicated by the applicant and notes that as expressed in the NIS (p 155) that this occurs on approximately 40 occasions, 24 of which are in the overwintering period (September to March) most of which will be in the hours of darkness.

14.4.20. I am satisfied that following the implementation of the mitigation which is designed to prevent disturbance that the construction and operation of the proposal will not adversely affect the integrity of the South Dublin Bay and River Tolka SPA in respect of the conservation objectives set for its breeding and non-breeding waterbird qualifying interests.

Potential Effects - Water Quality and Habitat Deterioration Effects

Wetlands

14.4.21. One of the potential effects which could not be screened out at Stage 1 was the potential effect that Berth 53 and its associated berthing pocket could possibly result in changes to the existing tidal patterns, currents or wave action in an adjacent area of South Dublin Bay & River Tolka Estuary, and may result in localised changes to the transport sediment regime or morphology of the seafloor in the SPA, such changes could potentially decrease in the range, timing or intensity of use of parts of the SPA by the wintering SCI species. If it were to occur this could potentially undermine the conservation targets set for overwintering SCIs in either or both of the South Dublin Bay & River Tolka Estuary SPA and the North Bull Island SPA (which I address separately in the next section).

14.4.22. Appendix 4 of the NIS contains a coastal processes assessment which is referenced elsewhere in this NIS and also within the EIA above. As outlined in the NIS, Section 5 of this coastal processes assessment provides an analysis of potential changes to the sediment transport regime to determine if operating Berth 53 would disrupt the circulation patterns and sediment transport processes that may impact upon foraging areas within the Tolka Estuary during low tide, due to the changes in bathymetry and construction of the Berth 53. The assessment undertaken included propeller and thruster jet scour calculations for representative ship manoeuvres from navigational simulation studies (Section 1.5.2.3 of Appendix 4) which found that, under normal conditions the piled deck structure of Berth 53 results in a small localised change to the sea bed within the SPA but that this principally occurs in the subtidal area with a very limited effect on intertidal bird feeding areas. I would note that the NIS states that simulations also found that when ship bow thrusters operated at 100%, the resultant peak axial velocity at the boundary of the SPA will be c. 4.3m/s and that this velocity would likely result in scour of the neighbouring SPA area. This was considered potentially significant as it could impact the long term stability of the dredged side slope at Berth 53 and thus, in the longer term, potentially affect bed levels and modify the position of the lowest astronomical tide across the winter foraging areas within the SPA. Such an effect could result in a decrease in the range, timing or intensity of use of this area by the six non-breeding waterbird feature species that use it. It was determined in the NIS that mitigation was required to prevent morphological changes in the Tolka Estuary significantly decreasing the range, timing or intensity of use of this part of the SPA when it becomes available for the feature species of the SPA that use it.

14.4.23. In terms of mitigation, the NIS sets out design measures included in the proposed development such as the wash protection structure which, it is stated, has been designed to reduce scouring associated with manoeuvring vessels within the Berth 53 area. The design and performance of this wash protection structure was assessed and quantified through an extensive numerical modelling programme which is detailed in the NIS. The assessment found the wash protection structure effectively reduced propeller and thruster jet velocities caused by manoeuvring ships and therefore reduced scour in the area of Berth 53. I am satisfied that the particular area under consideration will remain available and the project will not result in a

decrease in the range, timing or intensity of use of the area by the six non-breeding waterbird SCI species that regularly use it.

Prey biomass available for Breeding waterbirds

14.4.24. The NIS references the screening conclusion in respect of this potential effect where it was concluded that in the absence of measures intended to avoid or reduce pollution at construction and operational stages of the proposed development, the possibility of likely significant effects on prey biomass available for breeding terns in the SPA could not be excluded. In this regard, the NIS sets out a suite of mitigation measures so that the harmful effects of any pollution event could be avoided or reduced. These include a water quality management plan, a draft of which is included in Appendix 5 of the NIS. Other mitigation measures proposed include the Dredging Management Plan (Appendix 5) and the CEMP and its constituent elements. Measures are also proposed in respect of construction best practice and relate to controlling spillages and other measures particular to concrete and cement. A project specific Pollution Incident Response Plan has been prepared and is attached as an Appendix to the NIS. In relation to the operational phase of the proposal, it is proposed to collect storm water run-off in a dedicated storm water drainage system and that it will not be permitted to discharge directly into the marine environment from new jetties and hardstanding areas with oil interceptors incorporated into the network.

Conclusion

14.4.25. Therefore I consider it is reasonable to conclude that the proposed development would not adversely affect the integrity of the South Dublin Bay and River Tolka SPA in view of its conservation objectives.

North Bull Island SPA - (Site code: 4006)

14.4.26. North Bull Island SPA is designated for 17 regularly occurring migratory waterbird species and wetland habitat. These species are Light-bellied Brent Goose, Shelduck, Teal, Pintail, Shoveler, Oystercatcher, Golden Plover, Grey Plover, Knot, Sanderling, Dunlin, Black-tailed Godwit, Bar-tailed Godwit, Curlew, Redshank, Turnstone, Black-headed Gull, Wetland and Waterbirds.

14.4.27. The Conservation Objectives for the overwintering species SCIs in the SPA is to maintain the favourable conservation condition of the target species in the SPA, as defined by 2 SSCO attributes and targets which are Population trend and Distribution. The NIS notes that the North Bull Island SPA & South Dublin Bay and River Tolka Estuary SPA (addressed in the previous section) Conservation Objectives Supporting Document (NPWS, 2014) notes that factors that can adversely affect the achievement of these objectives include activities that modify discreet areas or the overall habitat(s) within the SPA in terms of how one or more of the listed species use the site (e.g. as a feeding resource) and which could result in the displacement of these species from areas within the SPA and/or a reduction in their numbers. NPWS (2014) also notes in relation to the conservation objective for wetland habitat that, in order to be in favourable condition, the permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 3,904ha, other than that occurring from natural patterns of variation.

14.4.28. It notes that the wetland habitats can be categorised into three broad types: subtidal; intertidal and supratidal, and that over time and through natural variation these sub-components of the overall wetland complex may vary due to factors such as changing rates of sedimentation, erosion etc. It is further noted that many waterbird species will use more than one of the habitat types for different reasons throughout the tidal cycle.

14.4.29. The section above which deals with the South Dublin Bay and River Tolka Estuary SPA sets out the monitoring undertaken on behalf of the applicant of both breeding and non-breeding waterbirds and therefore it is not considered necessary to repeat the detail other than to provide reference to same and to note the comprehensive nature of the baseline information available in respect of birds.

Potential Effect - Aerial Noise and Visual Disturbance effects

14.4.30. The screening stage appraisal concluded that possibility of likely significant disturbance effects on the non-breeding SCI species of North Bull Island SPA could not be excluded at the screening stage. It is noted that the species relevant to this SPA are similar to the non-breeding waterbirds addressed in respect of the South Dublin Bay and River Tolka Estuary SPA and included in Table 5.6 of the NIS. The primary potential effect therefore is similar to that outlined above in the South Dublin Bay and River Tolka Estuary SPA that being the potential effects on the species of

North Bull Island SPA that regularly use the area of the Tolka Estuary proximate to Berth 53 and the heritage installations. Therefore it is clear that the considerations outlined in respect of the species as they relate to the South Dublin Bay and River Tolka Estuary SPA also relate to and are applicable to the North Bull Island SPA SCI's. As stated in the NIS, the analysis concludes that although this is a small part of the South Dublin Bay and River Tolka Estuary SPA, and is only available for intertidal feeding on average 23 times each year for one hour at a time, loss of attractiveness of this part of the SPA as a result of construction of elements of the proposed development when it would otherwise be available would decrease the range, timing or intensity of use of this part of the SPA for the feature species of North Bull Island SPA which use it. For this reason, mitigation measures must be applied at construction stage to prevent noise, including pile-driving activities, and visual stimuli causing disturbance and significantly decreasing the range, timing or intensity of use of this part of the South Dublin Bay & River Tolka Estuary SPA when it becomes available for the feature species of North Bull Island SPA that use it.

14.4.31. In response to a concern expressed in an observation about the potential effect on the curlew, the applicant at the oral hearing noted that the most recent report by Birdwatch Ireland on the Dublin Bay Birds Project shows the peak number of curlew in Dublin Bay in 2018/2019 to be 1332 birds showing a slight increase over the period of the birds project since 2013 with the threats to curlew in Ireland primarily to breeding birds. It is stated that following the implementation of the mitigation measures in s5.6.1.3 of the NIS that the proposal will not adversely affect the integrity of this SPA in respect of the conservation objectives for this site with no reasonable scientific doubt remaining. I consider that this is reasonable.

14.4.32. Therefore as set out above for the South Dublin Bay and River Tolka Estuary SPA, the mitigation measures required so that the harmful effects of any pollution event could be avoided or reduced include a Water quality management plan, a draft of which is included in Appendix 5 of the NIS. Other mitigation measures proposed include the Dredging Management Plan (Appendix 5) and the CEMP and its constituent elements. Measures are also proposed in respect of construction best practice and relate to controlling spillages and other measures particular to concrete and cement. A project specific Pollution Incident Response Plan has been prepared and is attached as an Appendix to the NIS. In relation to the operational phase of the

proposal, it is proposed to collect storm water run-off in a dedicated storm water drainage system and will not be permitted to discharge directly into the marine environment from new jetties and hardstanding areas with oil interceptors incorporated into the network.

Conclusion

14.4.33. Therefore I consider it is reasonable to conclude that the proposed development would not adversely affect the integrity of the North Bull Island SPA in view of its conservation objectives.

South Dublin Bay cSAC - (Site code: 0210)

Water Quality and Habitat Deterioration Effects - mudflats and sandflats not covered by seawater at low tide

14.4.34. South Dublin Bay cSAC incorporates three benthic community types of this Annex I habitat with the Conservation objectives for habitat to maintain the favourable conservation condition of mudflats and sandflats not covered by seawater at low tide in the South Dublin Bay cSAC, as defined by 4 SSCO attributes and targets which are habitat area, community extent, community structure and community distribution.

14.4.35. I would note that the NIS at pages 237-240 when addressing this site refers to the North Dublin Bay cSAC. In questioning at the oral hearing the applicant confirmed that this was a typo and that North in this instance should be read as South.

14.4.36. I note and concur with the consideration in the NIS that given the distance of the site from the proposed development, that the construction or operation of the proposal would not comprise a threat to maintaining the conservation target relating to habitat area. The habitat is notably less than 1km by sea from the proposed capital dredging locations with the Stage 1 screening undertaken concluding that in the absence of plume modelling uncertainty would remain as to the potential risk from depiction of dredge plumes. Potential for sources of pollution at construction and operation stage could also not be excluded. Therefore, the issue remaining is whether or not elevated concentrations of suspended sediments from the proposed dredging or pollutants could result in likely significant effects on the qualifying

habitat. I would also note that the NIS addresses the potential for air pollution at operational stage but I do not consider that it requires further consideration. I will address each in turn.

Dredging

14.4.37. The NIS outlines investigations undertaken to address the matter including the hydrodynamic numerical modelling software package to address potential coastal processes. This is presented in the NIS in considerable detail and the modelling outputs and an assessment of the effects of dredging as a result of the construction of the proposal is outlined in Appendix 4 of the NIS 'Coastal Processes Assessment' (I would note for the Boards information that this Assessment is largely the same document as Chapter 12 of the EIAR – Material Assets – Coastal Processes).

14.4.38. The dredging proposed as part of the proposed development is outlined in detail elsewhere in this report (see section 12.5) but relates principally to Berth 53, channel widening to the south of the channel and OB3 and berth 50A. The NIS details the potential effects from the dredging of each of the proposed elements and therefore there is considerable scientific information provided as to the detail of each of the dredging proposals. The results of the modelling undertaken is set out in Figures 10-24 of Appendix 4 with the predicted deposition of silt fractions lost to the water column during typical low water, mid flood high water and mid ebb phases during a spring tidal cycle for each of the proposed dredging elements. It highlights how the deposition of sediment is generally confined to within the immediate area of the dredging operation. Plumes do not extend as far as the South Dublin Bay cSAC. The NIS also states that the coastal processes assessment (mentioned above) provides scientific certainty that the risk of suspended sediments escaping into the wider marine environment will not imperil the conservation objectives for the habitat. I am satisifed that the proposed dredging will not adversely affect the integrity of the South Dublin Bay cSAC.

Potential Sources of Pollution

14.4.39. The other potential effect addressed in the NIS and which I consider is reasonable is the potential sources of pollution from cement releases and spillages of polluting substances from potential discharges from dredging vessels at

construction stages and vessels using the Port. Mitigation measures are proposed to address this concerns including good practice guidance on the control of water pollution. A water quality management plan is proposed. Other mitigation measures proposed including the Dredging Management Plan and the CEMP and its constituent elements. Measures are also proposed in respect of concreate and cement. A project specific Pollution Incident Response Plan has been prepared and is attached as an Appendix to the NIS. I consider that with the implementation of this pollution prevention mitigation, construction and operation of the proposal will not adversely affect the integrity of mudfalts and sandflats not covered by seat water at low tide in the South Dublin Bay cSAC and no reasonable scientific doubt remains as to the absence of such effects.

Conclusion

14.4.40. Therefore I consider it is reasonable to conclude that the proposed development would not adversely affect the integrity of the South Dublin Bay cSAC in view of its conservation objectives.

North Dublin Bay cSAC - (Site code: 0206)

Water Quality and Habitat Deterioration Effects - mudflats and sandflats not covered by seawater at low tide

14.4.41. North Dublin Bay cSAC incorporates three benthic community types of this Annex I habitat with the Conservation objectives for habitat to maintain the favourable conservation condition of mudflats and sandflats not covered by seawater at low tide in the North Dublin Bay cSAC, as defined by 4 SSCO attributes and targets which are habitat area, community extent, community structure and community distribution. I note and concur with the consideration in the NIS that given the distance of the site from the proposed development, that the construction or operation of the proposal would not comprise a threat to maintaining the conservation target relating to habitat area. The habitat is notably less than 1km by sea from the proposed capital dredging locations with the Stage 1 screening undertaken concluding that in the absence of plume modelling uncertainty would remain as to the potential risk from depiction of dredge plumes. Potential for sources of pollution at construction and operation stage could also not be excluded.

Therefore, the issue remaining is whether or not elevated concentrations of suspended sediments from the proposed dredging or pollutants could result in likely significant effects on the qualifying habitat. I would also note that the NIS addresses the potential for air pollution at operational stage but I do not consider that it requires further consideration. I will address each in turn.

Dredging

14.4.42. As it did for the South Dublin Bay cSAC, the NIS outlines investigations undertaken to address the matter including the hydrodynamic numerical modelling software package to address potential coastal processes. This is presented in the NIS in considerable detail and the modelling outputs and an assessment of the effects of dredging as a result of the construction of the proposal is outlined in Appendix 4 of the NIS 'Coastal Processes Assessment' (I would note for the Boards information that this Assessment is largely the same document as Chapter 12 of the EIAR – Material Assets – Coastal Processes).

14.4.43. The dredging proposed as part of the proposed development is outlined in detail elsewhere in this report (see section 12.5) but relates principally to Berth 53, channel widening to the south of the channel and OB3 and Berth 50A. The NIS details the potential effects from the dredging of each of the proposed elements and therefore there is considerable scientific information provided as to the detail of each of the dredging proposals. I would also note that monitoring of the Liffey and Tolka Estuaries between East Link Bridge and the entrance to the Port at Poolbeg Lighthouse has been undertaken by the ABR Project with measurements of turbidity also included. The results of the modelling undertaken is set out in illustrations of the predicted deposition of silt fractions lost to the water column during typical low water, mid flood high water and mid ebb phases during a spring tidal cycle for each of the proposed dredging elements. It highlights how the deposition of sediment is generally confined to within the immediate area of the dredging operation. The NIS also states that the coastal processes assessment (mentioned above) provides scientific certainty that the risk of suspended sediments escaping into the wider marine environment will not imperil the conservation objectives for the habitat. I am satisfied that the proposed dredging will not adversely affect the integrity of the North Dublin Bay cSAC.

Potential Sources of Pollution

14.4.44. The other potential effect addressed in the NIS and which I consider is reasonable is the potential sources of pollution from cement releases and spillages of polluting substances from potential discharges from dredging vessels at construction stages and vessels using the Port. Mitigation measures are proposed to address this concern including good practice guidance on the control of water pollution. A water quality management plan is proposed. Other mitigation measures proposed including the Dredging Management Plan and the CEMP and its constituent elements. Measures are also proposed in respect of concreate and cement. A project specific Pollution Incident Response Plan has been prepared and is attached as an Appendix to the NIS. I consider that with the implementation of this pollution prevention mitigation, construction and operation of the proposal will not adversely affect the integrity of mudfalts and sandflats not covered by seat water at low tide in North Dublin Bay cSAC and no reasonable scientific doubt remains as to the absence of such effects.

Conclusion

14.4.45. Therefore I consider it is reasonable to conclude that the proposed development would not adversely affect the integrity of the North Dublin Bay cSAC in view of its conservation objectives.

Rockabill to Dalkey Island cSAC - (Site code: 3000)

14.4.46. The Stage 1 screening undertaken by the applicant has identified that the potential effects on the Harbour Porpoise from underwater noise and disturbance effects and on reefs from water quality and habitat deterioration effects could not be screened out and required further consideration. I concur with this conclusion and I will address the two species in turn.

Underwater Noise and Disturbance Effects - Harbour Porpoise

14.4.47. As outlined in the NIS the conservation objectives for this Annex II species is to maintain the favourable conservation condition of the Harbour Porpoise population in this site which are defined by 2 SSCO attributes and targets. These are: access to suitable habitat and disturbance. The NIS states that the species is more commonly found in estuarine, coastal and offshore waters. The breeding season is predominately during the months May to September and the principle calving period

occurs in May and June. As outlined in the NIS, the NPWS (2013) notes that the harbour porpoise is an aquatic predator that feeds on a wide variety of fish, cephalopod and crustacean species occurring in the water column or close to the seabed, with dive depths in excess of 200m having been recorded for the species. Foraging areas for harbour porpoise are often associated with areas of strong tidal current and associated eddies; and the occurrence of porpoises close to shore or adjacent to islands and prominent headlands is commonly reported.

Marine Mammal Monitoring

14.4.48. The NIS outlines in considerable detail the monitoring undertaken of marine mammals with dedicated porpoise surveys commenced in 2008 while surveys have been carried out since then and as part of the ABR Project with 77 sightings of harbour porpoise during the first season of the ABR Project capital dredging campaign and one sighting of a single bottlenose dolphin (Figure 5.4 & 5.5). Findings of a Static Acoustic Monitoring Campaign are also outlined in the NIS. I would note that it is stated that harbour porpoise do not use the immediate port area and are rarely recorded inside the harbour and in terms of the proposed development the potential effects relate to the dredging and dumping of spoil and shipping traffic rather than construction activities and I consider that this is reasonable.

14.4.49. The NIS outlines how the targets in the conservation objectives are relevant to the proposed activities and operations. This is clearly outlined and is very useful for the Boards assessment purposes. The sea disposal site is located within this European site and given the proposed disposal of material it could possibly result in the permeant exclusion of harbour porpoise from part of its range within the site or permanently prevent access for the species to suitable habitat within the site. The disposal at sea is proposed over 4 winter seasons between 2024 & 2031 which are estimated in the NIS wherein the applicant states that it is a short-term activity which as advised by the NPWS (2013) does not apply to the conservation target with the conclusion that there is no aspect of the proposed project which could permanently exclude the Harbour Porpoise from parts of its range within the SAC or prevent access to suitable habitat. While noting that target 1 and part of target 2 could not be impacted, reference is made to the potential for the proposal to result in a deterioration of key resources upon which the species depend.

14.4.50. The existing noise environment within the Port area is detailed in what I consider is a very reasonable fashion with the receiving environment during the construction period described as an enclosed section of a busy port with existing underwater noise levels in the area elevated in the presence of shipping traffic but attenuating quickly due to absorption on the seabed. It is stated that noise levels from construction in the port will be contained in the dredged channel close to the source and will propagate out to the wider bay area with shipping traffic resulting in localised increases. Noise levels within the Bay are provided including information gathered from measurements of underwater noise level in 2017 & 2018 as part of the ABR Project which provides very useful information for this assessment. It is detailed in Appendix 3 of the NIS.

Potential Significant Effects

14.4.51. As outlined above, the potential significant effect which could not be screened out in respect of this site related to the potential for exposure to underwater noise at construction stage. The elements of the construction considered are piling, dredging, disposal of material and impact on preferred prey species of the seal as a result of the activities. I consider that the NIS has identified all potential significant effects and I concur with same.

14.4.52. In relation to the potential effects arising from the piling proposed, it is noted that the potential injury zones for the mammals and fish species is limited to the navigation channel and the River Liffey (Table 5.1 outlines the noise impact zones). Given the narrow extent of the noise impact zones, piling proposed as part of the proposed development will not adversely affect the integrity of this site. In terms of dredging and disposal it is outlined that studies have confirmed that noise emitted from dredging operations does not significantly impact marine mammals at a range exceeding 200m but noise from the disposal operations may disturb harbour porpoise at closer range. For the avoidance of any doubt the NIS states that it is proposed to provide mitigation measures to ensure target 2 shall not be imperilled in any way for the harbour porpoise. Mitigation is proposed by way of both a marine mammal management plan and a dredging Management Plan which are both included as appendices to the NIS and which I consider are satisfactory. A suite of further precautionary measures are proposed and I note that it is considered that

following the implementation of same that dredging and disposal at sea activities will not adversely affect the integrity of the harbour porpoise in the SAC.

14.4.53. I would also note that the NIS addresses the potential effect of shipping traffic on the qualifying interests. As outlined at section 5.1.1.6.3 the proposal would result in an increase in the average number of RoRo sailings per day from 13 in 2018 to 18 in 2040 and LoLo increased per week from 8.3 in 2018 to 11 in 2040. I would concur with the NIS that this is a modest increase in vessel numbers and shipping is one of the dominant existing background noise sources in Dublin Bay which it is anticipated will continue. Future shipping noise will not adversely affect the integrity of the cSAC.

Water Quality and Habitat Deterioration Effects - Reefs

14.4.54. Rockabill to Dalkey Island SAC is an enormous site (in excess of 27,000ha) but the Annex I reef habitat for which it is designated accounts for less than 1% of the site and occurs at a number of locations throughout the European site. The seabed at the disposal site is not in itself a location of Annex I reef habitat and is not a location of a qualifying interest of the European site. This is very well documented in the NIS. Conservation objectives for this Annex II species is to maintain the favourable conservation condition of Reefs in Rockabill to Dalkey Island SAC, as defined by 3 SSCO attributes and targets which are habitat area, habitat distribution and community structure.

14.4.55. As outlined in the Stage 1 screening undertaken, the conservation targets for 'Habitat Area' and 'Habitat Distribution' will not be undermined by any potential water quality or habitat deterioration effects of the proposed development. The conservation target for the other attribute, community structure, relates to the structure and function of the reefs and therefore it is of relevance to those activities that may cause disturbance to the ecology of the habitat. The reefs may be affected by plumes arising from the disposal of dredged material or polluting events if the activities resulted in elevated concentrations of suspended sediments or pollutants in or at the reef community complexes for prolonged periods. The closest qualifying reef habitat is located 3.3km north of the proposed disposal site and 5km from the proposed development in Dublin Port. The issue is whether or not elevated concentrations of suspended sediments or pollutants could result in likely significant effects on the qualifying reef habitat. The NIS outlines investigations undertaken to address the matter including the hydrodynamic numerical modelling software

package to address potential coastal processes. This is presented in the NIS in considerable detail and the modelling outputs and an assessment of the effects of dredging as a result of the construction of the proposal is outlined in Appendix 4 of the NIS 'Coastal Processes Assessment'.

14.4.56. The disposal of sediments at sea has the potential to cause a temporary increase in suspended sediments and turbidity levels during the disposal operations and, under certain conditions, could have adverse effects on marine biota (for example, through siltation of benthic communities), changes to sediment structure, or interference with feeding in reduced visibility.

14.4.57. As shown in Figure 5.8 the sediment plume outside the area of the dump site is less than 200mg/l and does not extend further than 750m to the north or south of the dump site and on the basis of these results, it can be concluded that the disposal operations associated with the proposal will not result in any significant increases to the background level of suspended sediments. On this basis, suspended sediment plumes under any tidal and wave climate scenario do not reach within 2.5km of the closest qualifying reef habitat (located 3.3km north of the proposed disposal site at the coastline of Howth Head).

14.4.58. This coastal processes assessment provides scientific certainty that the risk of suspended sediments escaping into the wider marine environment beyond the disposal site will not imperil the conservation target to conserve the Intertidal and Subtidal reef community complexes in Rockabill to Dalkey Island SAC in a natural condition. Disposal of dredge material at sea will not adversely affect the integrity of Rockabill to Dalkey Island SAC and no reasonable scientific doubt remains as to the absence of such effects.

14.4.59. The other potential effect addressed in the NIS and which I consider is reasonable is the potential sources of pollution from the spillages of polluting substances from potential discharges from dredging vessels at construction stages and vessels using the Port. Mitigation measures are proposed to address this concern including good practice guidance on the control of water pollution. A project specific Pollution Incident Response Plan is also proposed. Other mitigation measures proposed including the Dredging Management Plan and the CEMP and its constituent elements. I consider that with the implementation of this pollution

prevention mitigation, the construction and operation of the proposal will not adversely affect the integrity of Reefs in Rockabill to Dalkey Island SAC and no reasonable scientific doubt remains as to the absence of such effects.

14.4.60. In response to a number of observations which concerned night time dredging and the Park and Landscape Services Division of Dublin City Council's request that visual scanning should be set at sea state 2 for harbour porpoise, the applicant in their presentation by Richard Nairn at the oral hearing noted that as set out in Section 5.7.2 of the NIS, a Marine Mammal Management Plan is proposed adopting the NPWS (2014) Guidance to Manage the Risk to Marine Mammals from man-made sound sources in Irish waters. This guidance states that (s.4.2) that effective visual monitoring can be undertaken by MMO's in sea conditions of sea state 4 or less and that efficacy in the visual detection of marine mammal species improves considerably below sea state 3. Reference is also made to the Guidelines recommendation that dredging only commence in daylight hours if effective visual monitoring as performed and determined by the MMO has been achieved with the MMO having the power to advise on whether effective mitigation is achieving objectives or of operations should be postponed. It is also stated that the requirements of the Guidelines in terms of night time dredging will be adhered to. I consider that the applicant has provided a robust response to the matter raised which clearly outlines that the mitigation proposed will ensure dredging and disposal at sea will not adversely affect the integrity of the harbour porpoise community in the Rockabill to Dalkey Island SAC.

Conclusion

14.4.61. Therefore I consider it is reasonable to conclude that the proposed development would not adversely affect the integrity of the Rockabill to Dalkey Island SAC in view of its conservation objectives.

Lambay Island cSAC - (Site code: 000204)

14.4.62. The Stage 1 screening undertaken by the applicant has identified that the potential effects on the Grey Seal and Harbour Seal from underwater noise and disturbance effects could not be screened out and required further consideration. I concur with this conclusion. I will address the two species in turn.

Harbour Seal

14.4.63. As outlined in the NIS the conservation objectives for this Annex II species is to maintain the favourable conservation condition of the Harbour Seal population in this site which are defined by 5 SSCO attributes and targets. These are: access to suitable habitat; breeding behaviour; moulting behaviour; resting behaviour and disturbance. The NIS usefully outlines the targets for each and how they are measured and it is stated the conservation objectives supporting document for the site (2013) outlines the species behaviour within the site whereupon it is determined that in Ireland the species is more commonly found ashore in sheltered bays, inlets and enclosed estuaries. In terms of the species within this site it is stated that they occupy both aquatic habitats and intertidal shorelines that become exposed during the tidal cycle and are present throughout the year during the aspects of the life cycle which are outlined as follows: breeding (May to July approx.) and moulting (August to Sept approx.). The vulnerability of the species is considered to occur from disturbance during periods when they are ashore or in shallow waters which occurs immediately prior to and during the annual breeding season (predominately May to July). Pups are born on land usually on sheltered shorelines, islets, skerries or uninhabited islands and in many cases in established locations with these habitats critical the maintenance of the species. In terms of moulting it is described as an energetically demanding process with terrestrial or intertidal locations where seals can be found ashore are known as haul out sites.

Grey Seal

14.4.64. As outlined in the NIS the conservation objectives for this Annex II species is to maintain the favourable conservation condition of the Grey Seal population in this site which are defined by 5 SSCO attributes and targets. These are: access to suitable habitat; breeding behaviour; moulting behaviour; resting behaviour and disturbance. The NIS usefully outlines the targets for each and how they are measured and it is stated the Conservation objectives supporting document for the site (2013) states that the Grey Seal occupies both aquatic and terrestrial habitats in the site including intertidal shorelines and skerries that become exposed during the tidal cycle and are present throughout the year during the aspects of the life cycle which are outlined as follows: breeding (August to December approx.) and moulting (December to April approx.). The vulnerability of the species is considered to occur

from disturbance during periods when they are ashore which occurs immediately prior to and during the annual breeding season (predominately Aug-Dec). Pups are born on land usually on remote beaches, uninhabited islands or sheltered caves and in many cases in established locations with these habitats critical the maintenance of the species. In terms of moulting it is described as an energetically demanding process with terrestrial or intertidal locations where seals can be found ashore are known as haul out sites.

Marine Mammal Monitoring

14.4.65. The NIS outlines in considerable detail the monitoring undertaken of marine mammals as part of the ABR Project with seal sightlines detailed in Figure 5.1 which includes the Port Area out to the disposal site.

Underwater Noise

14.4.66. The existing noise environment within the Port area is detailed in what I consider is a very reasonable manner with the receiving environment during the construction period described as an enclosed section of a busy port with existing underwater noise levels in the area elevated in the presence of shipping traffic but attenuating quickly due to absorption on the seabed. It is stated that noise levels from construction in the port will be contained in the dredged channel close to the source and will propagate out to the wider bay area with shipping traffic resulting in localised increases. Noise levels within the Bay are provided including information gathered from measurements of underwater noise level in 2017 & 2018 as part of the ABR Project which provides very useful information for this assessment. It is detailed in Appendix 3 of the NIS. The NIS outlines how the targets in the conservation objectives are relevant to the proposed activities and operations. This is clearly outlined and is very useful for the Boards assessment purposes. I would concur with the applicant that as outlined there is no aspect of the proposal that could permanently exclude seals from part of their range with this cSAC particularly given the distance of the site from the proposed development site and disposal site. The NIS does note that a further consideration of Target 5 is required. Target 5 provides that ‘human activities should occur at levels that do not adversely affect the harbour or grey seal population at the site.

Potential Significant Effects

14.4.67. As outlined above, the potential significant effect which could not be screened out in respect of this site related to the potential for exposure to underwater noise at construction stage as it relates to Target 5. The elements of the construction considered are piling, dredging, disposal of material and impact on preferred prey species of the seal as a result of the activities. I am satisfied that all potential significant effects have been identified.

14.4.68. In relation to the potential effects arising from the piling proposed, it is noted that the potential injury zones for the mammals and fish species is limited to the navigation channel and the River Liffey (Table 5.1 outlines the noise impact zones). Given the narrow extent of the noise impact zones, piling proposed as part of the proposed development will not adversely affect the integrity of this site. In terms of dredging and disposal it is outlined that studies have confirmed that noise emitted from dredging operations does not significantly impact marine mammals at a range exceeding 200m but noise from the disposal operations may disturb seals at closer range. For the avoidance of any doubt it is proposed to provide mitigation measures to ensure target 5 shall not be imperilled in any way for the grey and harbour seal.

14.4.69. Mitigation is proposed by way of both a marine mammal management plan and a dredging Management Plan which are both included as appendices to the NIS and which I consider are satisfactory. A suite of further precautionary measures are proposed and I note that it is considered that following the implementation of same that dredging and disposal at sea activities will not adversely affect the integrity of the Harbour and Grey seals in Lambay Island cSAC.

14.4.70. I would also note that the NIS addresses the potential effect of shipping traffic on the qualifying interests. As outlined at section 5.1.1.6.3 the proposal would result in an increase in the average number of RoRo sailings per day from 13 in 2018 to 18 in 2040 and LoLo increased per week from 8.3 in 2018 to 11 in 2040. I would concur with the NIS that this is a modest increase in vessel numbers and shipping is one of the dominant existing background noise sources in Dublin Bay which it is anticipated will continue. Future shipping noise will not adversely affect the integrity of the cSAC.

14.4.71. In response to the Park and Landscape Services Division of Dublin City Council’s request that visual scanning should be set at sea state 3 for common (harbour) and grey seals, the applicant in their presentation by Richard Nairn at the

oral hearing note that the Planning Authority concur with the conclusions reached in the NIS and do not consider there is a reason to deviate from same. They continue however and state that as set out in Section 5.7.2 of the NIS, a marine Mammal Management Plan is proposed adopting the NPWS (2014) Guidance to Manage the Risk to Marine Mammals from man-made sound sources in Irish waters. This guidance (s.4.2) states that that effective visual monitoring can be undertaken by MMO's in sea conditions of sea state 4 or less and that efficacy in the visual detection of marine mammal species improves considerable below sea state 3. Reference is also made to the Guidelines recommendation that dredging only commence in daylight houses effective visual monitoring as performed and determined by the MMO has been achieved with the MMO having the power to advise on whether effective mitigation is achieving objectives or of operations should be postponed. I consider that the applicants have provided a robust response to the matter raised which clearly indicates that the mitigation proposed will ensure dredging and disposal at sea will not adversely affect the integrity of the common (harbour) and grey seal populations in the Lambay Island cSAC.

Conclusion

14.4.72. Therefore I consider it is reasonable to conclude that the proposed development would not adversely affect the integrity of the Lambay Island cSAC in view of its conservation objectives.

14.5. In-combination Effects

14.5.1. Article 6(3) of the Directive requires that Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. The NIS provides a very detailed consideration of in-combination effects at Section 4.4 of the document. It deals in the first instance with other developments within the project area of the proposed development and secondly with other plans or projects within the surrounding area. I consider that this is a very useful way of addressing the matter.

14.5.2. In relation to plans and projects within the proposed development area, that being the North Port itself, the document outlines all recently permitted projects within the area. By far the largest of these projects is the Alexandra Basin Redevelopment (ABR) which was permitted by the Board in 2015 and which is under construction. I would note that a comprehensive Appropriate Assessment was also undertaken as part of the ABR application process. Other projects include the internal road network project and proposals to terminal check in areas. They also include proposals to demolish existing buildings and provide new buildings and yards. Section 4 of this report provides an outline of the planning history within the project area. One of the observers has addressed the potential for accumulated effects from the ABR in respect particularly of dredging. However as noted elsewhere in this report, the dredging programme for the proposed development would not commence until the ABR dredging programme has been completed. I note the conclusion in the NIS that the possibility of adverse impacts either cumulatively or in-combination with the ABR project can be excluded beyond scientific doubt. The rationale for reaching this conclusion is outlined in detail. I consider that it has been appropriately determined that adverse effects upon the integrity of the relevant sites would not occur as a result of in-combination effects.

14.5.3. In relation to other projects, one project currently being assessed is the proposed post 2019-2021 maintenance dredging for which a dumping at sea licence has been sought from the EPA (Ref. S0004-02). A Stage 2 NIS was submitted in respect of same and it is noted, as is the case with the ABR project, that the proposed dredging and disposal in the subject application is not concurrent but is proposed following same. It is therefore concluded that the possibility of adverse impacts either cumulatively or in-combination with the Maintenance Dredging Campaign project can be excluded beyond scientific doubt. The same conclusion is reached for the other projects addressed and I consider that this is reasonable.

14.5.4. In relation to other plans and projects outside of the project area but within the surrounding area, projects addressed include the Dublin Inland port, North Lotts and Grand Canal Dock Planning Scheme, Poolbeg West SDZ, Ringsend WwTP Upgrade and Howth Yacht Club Marina Extension. I concur with the conclusion reached in the NIS that the possibility of adverse impacts either cumulatively or in-combination with these projects can be excluded beyond scientific doubt.

14.5.5. I note that in response to the concerns expressed by the Parks and Landscape Services Division of the Planning Authority that the impacts of the project with the Greater Dublin Area Cycle Network Plan had not been considered. While the Planning Authority's conclusion was that they did not consider there is a requirement to deviate from the NIS conclusions on the matter, the presentation to the oral hearing by Richard Nairn references the Cycle Network Plan. He stated that it has been subject to SEA and AA and notes the potential effects on a number of sites from the East Coast Trail (N5) with mitigation measures proposed. I would note that the applicant refers to page 156 of the NIS submitted (s.4.4.4) where potentially significant effects on the feature species of North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA as a result of the operation of Berth 53 in combination with the operation of the proposed Greenway along the northern boundary of the Port estate were identified. This greenway forms part of the Greater Dublin Area Cycle Network Plan. In order to address the potential effects, mitigation is proposed (s. 5.7.3) to prevent an adverse effect on the integrity of the sites. While addressed elsewhere in this assessment they are the cessation of work on Berth 53 during low spring tides and the use of gates to control movement of people in these areas during low spring tides. I concur with the applicant that this is the only location with the potential for a cumulative effect of any significance and in this regard I consider that the matter has been satisfactorily addressed.

14.5.6. I consider that the matter of in-combination effects has been comprehensively addressed in the NIS and at the oral hearing and that this AA can state that the proposed development will not have an adverse effect on any European site when considered in combination with other plans or projects.

14.6. **Mitigation Measures**

14.6.1. While I have addressed mitigation measures as they relate to each of the sites assessed above, for the Board's information I would note in particular Section 5.7 of the NIS which provides a summary of the mitigation measures proposed outlined in respect of measures for water quality, marine mammals and waterbird disturbance. It then addresses the effectiveness of the measures and their implementation. I would note that in particular Birdwatch Ireland in their observation express some concern regarding the implementation of mitigation measures particularly over a prolonged

period of construction as is proposed. I consider that the layout of the NIS provides a very useful tool for the implementation of the measures. I would also note that Table 5.9 outlines the Environmental Management Plans and Table 5.10 an outlines the Environmental Monitoring Programmes. I consider that the mitigation measures have been appropriately outlined and facilitate a comprehensive programme for implementation.

14.7. Conclusion on Stage 2 Appropriate Assessment

14.7.1. I consider it reasonable to conclude on the basis of the information on the file, which I consider is very comprehensive in order to carry out a Stage 2 Appropriate Assessment, that the proposed development, individually or in combination with other plans or projects would not adversely affect the integrity of the following European sites, in view of their Conservation Objectives.

- South Dublin Bay and River Tolka Estuary SPA (Site code: 4024)
- North Bull Island SPA (Site code: 4006)
- South Dublin Bay cSAC (Site code: 0210)
- North Dublin Bay cSAC (Site code: 0206)
- Rockabill to Dalkey Island cSAC (Site code: 3000)
- Lambay Island cSAC (Site code: 000204)

15.0 Recommendation

On the basis of the above assessment I recommend as follows:

Strategic Infrastructure Development Application under the S37E – 304888-19

Application for Approval for the proposed MP2 project which comprises a new Ro-Ro jetty (Berth 53) for ferries up to 240m in length including dredging at proposed Berth

53 and channel widening to a standard depth of -10.0m CD, reorientation of Berth 52 permitted under ABP Ref. PL29N PA0034; lengthening of an existing river berth (50A) to provide the Container Freight Terminal including the demolition of Eastern Breakwater Pier Head, the infilling of the basin east of Oil Berth 4 on the Eastern Oil Jetty, redevelopment of Oil Berth 3 to provide a future deepwater container berth for a Lo-Lo Container Freight Terminal changing the use of the berth from petroleum importation to container handling and the dredging of a berthing pocket to a standard depth of -13.0m CD at Oil Berth 3, consolidation of passenger terminal buildings, demolition of redundant structures and buildings, removal of connecting roads and reorganisation of access roads to increase the area of land for the transit storage of Ro-Ro freight units, provision of a Heritage zone to accommodate a public art installation of 20.4m in height including an elevated viewing platform, and all ancillary works including access roads and landscaping and all associated works.

APPROVE the above proposed development in accordance with the said documentation based on the following reasons and considerations and subject to the conditions set out below.

REASONS AND CONSIDERATIONS

In coming to its decision, the Board had regard to the following:

European legislation, including of particular relevance:

- Directive 2014/52/EU amending Directive 2011/92/EU (EIA Directive) on the assessment of the effects of certain public and private projects on the environment.
- Directive 92/43/EEC (Habitats Directive) and Directive 79/409/EEC as amended by 2009/147/EC (Birds Directives) which set the requirements for Conservation of Natural Habitats and of Wild Fauna and Flora throughout the European Union.
- Trans-European Transport Network (TEN-T) Regulations, 2013 and 2019 which address the development of a trans-European transport network within the European Union.

National and regional planning and related policy, including:

- The National Development Plan – Ireland 2040, which identifies major national infrastructure projects including investment at Ports including Dublin Port to create high quality international connectivity.

- The National Planning Framework – Ireland 2040, which states that the role of Tier 1 ports (Dublin Port Company) will be considered in tandem with long-term infrastructural requirements as part of the Regional Spatial and Economic Strategy and Metropolitan Area Strategic Plan processes through National Policy Objective 40.

- National Port Policy, 2013 which states that the Government endorses the core principles of the Dublin Port Masterplan and the continued commercial development of Dublin Port Company is a key strategic objective of national Ports Policy.

- The Regional Spatial and Economic Strategy for the Eastern and Midlands Regional Assembly (RSES) 2019-2031 which supports the role of Dublin Port as a Port of National Significance (Tier 1 Port) and its continued commercial development, including limited expansion and improved road access, including the Southern Port Access Route.

- The Greater Dublin Area Transport Strategy 2016-2035 which states that the safeguarding of landside access to the national gateways at Dublin Port and Dublin Airport should be considered as a priority strategic objective for all relevant agencies.

The local planning policy including:

- The provisions of the Dublin City Development Plan 2016-2022, which supports and recognises the important national and regional role of Dublin Port in the economic life of the city and region and seeks to facilitate port activities and development, having regard to the Dublin Port Masterplan 2012 - 2040.

The following matters:

(a) The evidence provided that additional and longer berths and capital dredging to facilitate same is required in Dublin Port in order to meet the projected growth

within the Region, facilitate the berthing of larger ships and future proof the use of infrastructure within the Port estate.

(b) The nature, scale and design of the proposed development including proposed Berth 53.

(c) The range of proposed mitigation measures set out in the submitted in the documentation lodged including the Environmental Impact Assessment Report, and Natura Impact Statement incorporating appropriate assessment screening.

(d) The submissions made in relation to the application including those submitted at the Oral Hearing; and

(e) The report and recommendation of the Inspector.

Appropriate Assessment: Stage 1

The Board agreed with and adopted the screening assessment and conclusions carried out in the Inspector's report that the only European sites in respect of which the proposed development has the potential to have a significant effect are South Dublin Bay and River Tolka Estuary SPA (004024), North Bull Island SPA (004006), North Dublin Bay SAC (000206), South Dublin Bay SAC (000210), Rockabill to Dalkey Island SAC (003000) and Lambay Island SAC (000204).

Appropriate Assessment: Stage 2:

The Board considered the Natura Impact Statement and associated documentation submitted with the application, the mitigation measures contained therein, the submissions and observations on file, the oral hearing submissions and the Inspector's assessment. The Board completed an appropriate assessment of the implications of the proposed development as part of the overall proposed upgrade project for the aforementioned European sites in view of the sites' conservation objectives. The Board considered that the information before it was adequate to allow the carrying out of an appropriate assessment. In completing the appropriate assessment, the Board considered, in particular, the following:

(a) the likely direct and indirect impacts arising from the development of the proposed development, both individually, when taken together and in

combination with other plans or projects,

(b) the mitigation measures, which are included as part of the current proposal, and

(c) the conservation objectives for the European sites.

In completing the appropriate assessment, the Board accepted and adopted the appropriate assessment carried out in the Inspector's report in respect of the potential effects of the proposed development on the aforementioned European sites, having regard to the sites' Conservation Objectives. In overall conclusion, the Board was satisfied that the proposed development, by itself or in combination with other plans or projects, would not adversely affect the integrity of the European Sites, in view of the sites' Conservation Objectives.

Environmental Impact Assessment:

The Board completed an environmental impact assessment of the proposed development, taking into account:

(a) The nature, scale and extent of the proposed development.

(b) The Environmental Impact Assessment Report and associated documentation submitted in support of the application.

(c) The submissions from the planning authority, the observers and prescribed bodies in the course of the application and the submissions of the applicant and observers during the oral hearing,

(e) The Inspector's report.

The Board agreed with the summary of the results of consultations and information gathered in the course of the EIA, and the examination of the information contained in the Environmental Impact Assessment Report and the associated documentation submitted by the applicant and the submissions made in the course of the application as set out in the Inspector's report. The Board was satisfied that the Inspector's report sets out how these various environmental issues were addressed in the examination and recommendation and are incorporated into the Board's decision.

Reasoned Conclusions on the Significant Effects:

The Board considered that the Environmental Impact Assessment Report, supported by the documentation submitted by the applicant, provided information which is reasonable and sufficient to allow the Board to reach a reasoned conclusion on the significant effects of the proposed development on the environment, taking into account current knowledge and methods of assessment. The Board is satisfied that the information contained in the Environmental Impact Assessment Report is up to date and complies with the provisions of EU Directive 2014/52/EU amending Directive 2011/92/EU**.** The Board considered that the main significant direct and indirect effects of the proposed development on the environment are those arising from the impacts listed below. A Construction Environmental Management Plan (CEMP) is the overarching general mitigation relevant to the project design and delivery for the construction stage. This CEMP includes all mitigation measures arising from the EIAR and is proposed to include any conditions specifies by the Foreshore or Dumping at Sea permits. In addition, this Plan is accompanied by a suite of plans including a Construction Traffic Management Plan, Invasive Alien species Management Plan, Construction Waste Management Plan, Dust and Odour Management Plan, Noise Management Plan, Marine Mammals Management Plan, Birds and Marine Ecology Management Plan, Water Quality Management Plan, Dredging Management Plan, Pollution Incident Response Plan are also proposed.

The main significant effects, both positive and negative are:

- Significant positive long-term impacts on **population and human health** including increased employment, additional growth facilitated by greater imports and exports facilitated by the increased berth lengths for longer vessels, additional tax and increased tourism opportunities and the redevelopment of brownfield lands.
- Significant negative permanent impact on **cultural heritage** from the demolition of the Pier Head of the Eastern Breakwater to facilitate the construction of Berth 50A which it is anticipated will expose elements of the 19th century breakwater currently buried. While it is not proposed to mitigate the actual loss, it is proposed to develop a 3D record of the existing structure, archaeological monitoring is proposed of all ground disturbances with the proviso to resolve fully any archaeological material and it is also proposed to create a public realm visitor experience at the new eastern limit at the end of the proposed Greenway that

includes the re-use of the granite blocks and related elements of the Eastern Breakwater Pier Head and the Breakwater Lighthouse and the former location of the pier head will be marked with inscribed commemorative text, to ensure that there is a permanent *in situ* record of its former presence.

- Direct and permanent impacts on **cultural heritage** from the proposed dredging of the previously un-dredged area to the south side of the channel leading which is considered an area of high archaeological potential and the recovery of shipping debris and/or shipwreck can be anticipated. Subject to mitigation including archaeological monitoring of all seabed disturbances, the potential to uncover and expose previously unrecorded archaeological material, and principally shipwreck, exists, and protocols are proposed to ensure that any new discoveries will be fully and properly resolved.
- Significant permanent impacts on **Avian biodiversity** in respect of the removal of several Black Guillemot nest sites in the quay walls and ro-ro ramps within OB3, OB4, Berths 50A & 52/53 directly affecting c.9 birds. This impact will be mitigated by way of the timing of the removal and the provision a number of custom made nest boxes within adjacent areas for displaced birds with this species having readily nested in such structures to date.
- Potential significant impacts on **biodiversity/coastal processes** from ship movements in the area of Berth 53 and the potential for scour of the neighbouring South Dublin Bay & River Tolka Estuary SPA impacting the long term stability of the dredged side slope at Berth 53 and potential effect on the bed levels and modifications of the position of the lowest astronomical tide across the winter foraging areas within the Tolka Estuary. With the provision of a wash protection structure to reduce scouring associated with manoeuvring vessels within the Berth 53 area, effectively reducing propeller and thruster jet velocities caused by manoeuvring ships with the predicted residual impact imperceptible.
- Significant negative temporary impacts on **avian biodiversity** during the construction and operations phases from disturbance to foraging on sand in shallow water to north of proposed Berth 53. Ceasing construction of this berth during low tide events during the construction stage and controlling access to this area of the greenway and heritage zone when operational during low tide to avoid

disturbance within this area by way of the provision of a controlled gate will ensure that there are no residual impacts.

- Moderate impacts on **marine biodiversity** arising from noise associated with piling, dredging and dumping during the construction phase with the implementation of mitigation measures and implementation of the NPWS Guidelines including the provision of a Marine Mammal Observer for works including piling, dredging and disposal, will not result in significant residual impacts.
- Permanent and slight negative effects on **Benthic biodiversity/Land** from the proposal to reclaim 2.18 ha of benthic soft sediment with the infilling of Oil Berth 4 which comprises habitat common to the Port with a permanent, slight positive impact to biodiversity from the removal of the Pier Head at the Eastern Breakwater resulting in a gain of 0.28 ha of subtidal soft benthos. A permanent, slight positive impact will arise from the proposal to place concrete mats on the sloping edges across a limited area of dredge areas to prevent slumping of sediment, which while resulting in the permanent loss of 1.9 ha of soft sediment benthos, will introduce an equivalent area of hard-benthos associated with the placement of the concrete mattresses. Negative, temporary to short-term, slight impacts from the dredging of 10.33 ha of soft sediment subtidal benthos with the habitat either plentiful within the area or rapidly recovering.
- Potential for short term negative impacts on **water quality** during the construction phase from increased suspended sediment levels due to the accidental release of sediment to the water column during demolition works, berth and associated construction works and capital dredging and sediment disposal operations. With mitigation measures to be employed during capital dredging and disposal operations including in particular the timing of such works the potential impact to receiving water environment will not have a significant residual impact.

The Board completed an environmental impact assessment in relation to the proposed development forming part of the overall proposed project and concluded that, subject to the implementation of the mitigation measures referred to above, including proposed monitoring as appropriate, and subject to compliance with the conditions set out below, the effects on the environment of the proposed

development, by itself and in combination with other development in the vicinity, would be acceptable. In doing so, the Board adopted the report and conclusions set out in the Inspector's report.

Overall Conclusion

The proposed development in the operational phase will give rise to impacts which are positive. It will facilitate the completion of a single unified Ro-Ro terminal and enhanced Lo-Lo facilities facilitating the removal of capacity constraints within Dublin Port, thereby enabling projected economic growth through increased capacity and improved Port infrastructure to facilitate larger vessels. Environmental impact assessment and appropriate assessment have been considered as set out in the sections above. It can therefore be concluded that the proposed development is in accordance with the proper planning and sustainable development of the area.

Proper Planning and Sustainable Development

The Board considered that, subject to compliance with the conditions set out below, the proposed development would assist in meeting the economic growth projected for Dublin Port within the Dublin Port Masterplan 2040, which is supported by National and Local planning policy, by consolidating and improving the existing Port lands facilitating the berthing of larger ships and future proofing the use of infrastructure within the Port estate enabling Dublin Port. The proposed development complies with EU Directives, national and local policy and would be acceptable in terms of biodiversity, noise, landscape, cultural heritage and traffic. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

CONDITIONS

(1) The proposed development shall be carried out and completed in accordance with the plans and particulars lodged with the application and the information contained in the Environmental Impact Assessment Report and the Natura Impact

Statement and the further details submitted at the oral hearing, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the relevant planning authority, the developer shall agree such details in writing with the relevant planning authority prior to commencement of development. In default of agreement, the matter shall be referred to An Bord Pleanála for determination and the proposed development shall be carried out and completed in accordance with the agreed particulars.
Reason: In the interest of clarity.

(2) The period during which the proposed development hereby permitted may be carried out shall be fifteen years from the date of this order.
Reason: Having regard to the nature and extent of the proposed development, the Board considered it appropriate to specify a period of validity of this permission in excess of five years.

(3) (a) All mitigation, environmental commitments and monitoring measures identified in the Environmental Impact Assessment Report (Chapter 19) shall be implemented in full as part of the proposed development, except as may be otherwise required to comply with the following conditions.
(b) All mitigation and environmental commitments identified in the Natura Impact Statement (Chapter 7) shall be implemented in full as part of the proposed development, except as may be otherwise required to comply with the following conditions.
Reason: In the interest of development control, public information and clarity.

(4) (a) Prior to commencement of development, the developer shall submit for the written agreement of the planning authority a comprehensive document containing all mitigation and monitoring measures set out in the Environmental Impact Assessment Report, the Natura Impact Statement and other plans, and including the

commitments given at the oral hearing. The document shall incorporate the monitoring and implementation proposals, as appropriate.
(b) Prior to the commencement of development a contract specific Construction and Environmental Management Plan (CEMP) shall be submitted to and agreed in writing with the planning authorities in respect of the proposed development. The CEMP shall detail and ensure Best Construction Practice and compliance with statutory obligations. This shall include a copy of the completed documents presented in Volume 3, Part 4 of the Environmental Impact Assessment Report as drafts (Appendix 19-1 to 19-12) and within the draft Construction Environmental Management Plan.
Reason: In the interest of development control, public information and clarity.

(5) (a) All works shall be undertaken under the supervision of a suitably-qualified Ecological Clerk of Works.
(b) Prior to the commencement of development details of the location, design and operation of the proposed bird gates on the Greenway and in the vicinity of the Heritage Zone.
(c) The developer shall make available a schedule of extreme low tides, timings of works in the vicinity of the proposed Unified Freight Terminal and Berths 52 and 53.
(d) Controls be put in place in advance of demolition of structures to prevent disturbance or injury to birds
Reason: In the interest of the amenities of the area and the protection and restoration of biodiversity.

(6) (a) Prior to commencement of development the developer shall prepare a Construction Traffic Management Strategy for the Dublin Tunnel for the duration of the works which shall be submitted to an agreed with the Planning Authority in consultation with Transport Infrastructure Ireland and the operators of Dublin Tunnel.
(b) Proposals for maintaining public roadways free from debris arising from the proposed development.

(c) The developer shall provide details of the timing of the closures of the accesses and traffic management measures from East Wall Road to the Planning Authority prior to any implementation of new measures within the area.
(d) Prior to the commencement of development all works proposed on the public road, shall be subject to written agreement and approval from the Environment and Transportation Department. Any alterations to the public roads including footpaths, public lighting and all materials shall be agreed in writing with the Roads Maintenance Division of Dublin City Council prior to commencement of development. Any works to the existing public road and the public realm shall be carried out at the applicant's expense at no cost to Dublin City Council and to the detailed requirements of the Environment and Transportation Department.
(e) The developer shall be obliged to comply with the requirements set out in the Code of Practice.
Reason: In the interest of traffic safety, to ensure the continued efficient operation of the port, and to protect the environment and the amenities of the area.

(7) The proposed development shall be operated and managed in accordance with a comprehensive Environmental Management System (EMS), a proposal for which shall be submitted by the developer to, and agreed in writing with, the planning authority prior to commencement of development. The annual audit report for the EMS shall be made publicly available in accordance with the requirements of the planning authority.
Reason: In order to safeguard local amenities and protect the environment.

(8) The developer shall ensure that over-spilling at the surface of the dredger is avoided for all dredging activities within the inner Liffey channel.
Reason: To minimise the levels of suspended sediment in the River Liffey from the dredging operation.

(9) (a) The construction noise levels arising from the proposed development shall not exceed the worst case predicted noise levels presented in Chapter 11 of Volume 2 (Part 2) of the environmental impact assessment report.
(b) A program of construction noise monitoring shall form part of the Construction and Environmental Management Plan and detailed proposals in this regard shall be submitted to and agreed with the planning authority prior to commencement of development
(c) All sound measurements shall be carried out in accordance with ISO Recommendations R 1996, “Assessment of Noise with Respect to Community Response” as amended by ISO Recommendations R 1996/1, 2 and 3, “Description and Measurement of Environmental Noise”, as appropriate.
Reason: In the interest of residential amenity.

(10) (a) All of the measures contained in the Guidance to Manage the Risk to Marine Mammals from Man-made Sound Sources in Irish Waters as published by the Department of Arts, Heritage and the Gaeltacht shall be fully implemented including a 1,000 metre exclusion zone for piling and a 500 metre exclusion zone for dredging.
(b) Monitoring shall be carried out through the construction and dredging phases and for a period of two years post completion of all works associated with the proposed development. The monitoring methodology, including proposals to maintain a public record, shall be agreed in writing with the planning authority prior to commencement of development.
(c) The developer shall make provisions to ensure proposals for an adequate number of suitably qualified marine mammal observers for the duration of piling and dredging in order to ensure satisfactory monitoring.
(d) The developer shall deploy a minimum of four hydrophones in Dublin Bay to assist in the detection of marine mammals within the 1,000 metre and 500 metre exclusion zones for piling and dredging, which shall be used in combination with all of the measures referred to in (a) to (c) above:

i. A minimum of two real time passive acoustic monitoring system (PAMs) shall be deployed in Dublin Bay at the approaches to Dublin Port to provide information on the presence of marine mammals.
ii. A minimum of two static acoustic monitoring systems (SAMs) shall be deployed at the dump site to the west of the Burford Bank and within Dublin Bay to provide information on the presence of marine mammals.
Reason: In the interest of wildlife protection and to broaden scientific knowledge in relation to ecology in Dublin Bay.

(11) The developer shall undertake monthly monitoring of seal haul out sites at the North Bull Island and adjacent areas before, during and after construction for a minimum of two years in line with international best practice. The proposed monitoring methodology, including proposals to maintain a public record, shall be agreed in writing with the planning authority prior to commencement of development. Monitoring for harbour and grey seals shall be further extended to include a survey of Dublin Bay within the zones of influence as defined in the environmental impact statement.
Reason: In the interest of wildlife protection and to broaden scientific knowledge in relation to ecology in Dublin Bay

(12) The developer shall institute a programme to monitor the movement of winter wetland birds in the adjacent European Sites at the South Dublin Bay and River Tolka Estuary Special Protection Area. This monitoring programme shall continue throughout the construction phase and for a period of two years after the completion of such works, with monthly surveys from October to March. The results of this monitoring programme shall be submitted to the planning authority at 12-monthly intervals to maintain a public record.
Reason: In the interest of wildlife protection and to broaden scientific knowledge in relation to ecology.

(13) The developer shall institute a programme to monitor the movement of Black Guillemots in the Liffey Channel. This monitoring programme shall continue throughout the construction phase and for a period of two years after the completion of such works. The results of this monitoring programme shall be submitted to the planning authority at 12-monthly intervals to maintain a public record.
Reason: In the interest of wildlife protection and to broaden scientific knowledge in relation to ecology

(14) The developer shall facilitate the preservation, recording and protection of archaeological materials or features that may exist within the site. The areas requiring testing are outlined in the environmental impact statement. In this regard, the developer shall –
(a) Geophysical anomalies documented in the Archaeo-geophysical Report included in the Environmental Impact Assessment Report (Appendix 14) should be subject to a dive survey. The dive survey should be carried out by a suitably qualified archaeologist and licensed under the National Monuments Acts 1930-2004.
(b) Notify the planning authority in writing at least four weeks prior to the commencement of any site operations, including hydrological and geotechnical investigations relating to the proposed development.
(c) Employ a suitably-qualified archaeologist who shall monitor all site investigations and other excavation works.
(d) Provide arrangements, acceptable to the planning authority, for the recording and for the removal of any archaeological material which the planning authority considers appropriate to remove.
In default of agreement on any of these requirements, the matter shall be referred to An Bord Pleanála for determination.
Reason: In order to conserve the underwater archaeological heritage of the site and to secure the preservation and protection of any remains that may exist within the site.

(15) The developer shall enter into water and waste water connection agreements with Irish Water, prior to commencement of development.
Reason: In the interest of public health.

(16) The applicant shall implement the community gain proposal set out in the Planning Report (Section 7.7 and Appendix C) prepared by RPS which was submitted with the application, including the financial commitments set out therein, which are considered a community gain in accordance with section 37 (G)(7)(d) of the Planning and Development Act 2000, as amended. In default of agreement on any of these commitments, the matter shall be referred to An Bord Pleanála for determination.
Reason: To offset the impacts on the local community in the construction phase and to maximise the long-term benefits of the proposed facilities to local residents.

(17) The developer shall pay to the planning authority a financial contribution in respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or intended to be provided by or on behalf of the authority in accordance with the terms of the Development Contribution Scheme made under section 48 of the Planning and Development Act 2000, as amended. The contribution shall be paid prior to commencement of development or in such phased payments as the planning authority may facilitate and shall be subject to any applicable indexation provisions of the Scheme at the time of payment. Details of the application of the terms of the Scheme shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to An Bord Pleanála to determine the proper application of the terms of the Scheme.
Reason: It is a requirement of the Planning and Development Act 2000, as amended, that a condition requiring a contribution in accordance with the Development Contribution Scheme made under section 48 of the Act be applied to the permission.

Una Crosse

Senior Planning Inspector

March 2020