# An Bord Pleanála



# **Inspector's Report**

Development:	Alterations under S146B to the approved Cork Lower Harbour Sewerage Scheme including the provision of new pumping station, alterations in pipeline routes and relocation of proposed marine crossing at Cork Lower Harbour.
Planning Authority:	Cork County Council
Applicant:	Irish Water
Type of Application:	Request under the provision of S.146B.
Objectors:	(i) Titanic Experience Cobh, (ii) Department of Food and the Marine, (iii) Commission for Railway Regulations, (iv) Working Group for Enhanced Urban Environment of Cobh, (v) Stephen O'Driscoll and Others, (vi) Inland Fisheries Ireland, (vii) Margaret McAuliffe and Others, (viii) Transport Infrastructure Ireland, (ix) Southern Regional Authority, (x)

Cobh and Harbour Chamber, (xi) Cobh Tourism, (xii) Cobh Tidy Towns, (xiii) Cork Dockyard Holdings Limited, (xiv) Cobh Playground Fundraising Committee, (xv) Department of Arts, Heritage, Regional, Rural and Gaeltacht, (xvi) Health Service Executive.

Date of Site Inspection:	9 <sup>th</sup> /10 <sup>th</sup> /11 <sup>th</sup> January, 2017.
Date of Hearing:	11 <sup>th</sup> January, 2017.
Inspector:	Paul Caprani.

#### 1. INTRODUCTION

04.YM0003 relates to a request under the provisions of Section 146B for alterations to the approved Cork Lower Harbour Sewerage Scheme incorporating new pumping stations and changes to the pipeline routes including the relocation of the marine pipeline from Carrigaloe to Passage West to a point further south within Cork Lower Harbour between Rushbrooke and Monkstown. The request under Section 146B was accompanied by a separate application to compulsory acquire lands, wayleaves and rights of way under Reg. Ref. CH3297. Both applications should be considered in conjunction.

## 2. BACKGROUND TO THE CORK LOWER HARBOUR MAIN DRAINAGE SCHEME

#### 2.1 Reg. Ref. YA 0005

In March, 2008 Cork County Council applied to An Bord Pleanála for approval for the Cork Lower Harbour Main Drainage Scheme. The scheme included the construction of a new wastewater treatment plant in the townland of Shanbally to the west of Ringaskiddy. The proposed wastewater treatment plant seeks to cater for the urban areas of Cobh, Passage West, Monkstown, Ringaskiddy, Crosshaven and Carrigaline. The original proposal comprised of the provision of approximately 57 kilometres of new and upgraded sewers and where possible replacing the combined sewerage system with a separate system for storm water and sewage. The upgraded network includes a number of new and upgraded pumping stations and associated rising mains. Collected sewage will be pumped to the proposed wastewater treatment system in Shanbally where it will be treated to secondary standard and discharged via an existing IDA outfall off the Dognose Bank.

This application was accompanied by an EIS which examined the potential environmental impacts which could arise from the proposed wastewater treatment plant, the upgrading of existing wastewater collection system and the construction of a new marine pipeline crossing from Carrigaloe in Cobh to Glenbrook in Monkstown. The Board considered the entirety in the application involving the wastewater treatment plant and the collection system under Case Ref. No. 04. YA0005. In its decision dated June 2009, the Board concluded that the proposal would not have significant effects on the environment and approved the scheme subject to 6 conditions. The conditions related to the following:

- All mitigation measures set out in the EIS accompanying the application shall be implemented in full.
- The establishment of a liaison committee to disseminate information on the planning and construction work would be established in conjunction with Cork County Council (the initiators of the scheme prior to the establishment of Irish Water).
- The setting of emission levels in respect of treated effluent to be discharged.
- Emission limits in respect of odour levels.
- A condition in respect of archaeological monitoring.
- The requirement of consultation with the South Western Regional Fisheries Board in relation to the crossing of all watercourses including the marine pipeline crossing across the lower River Lee.

#### 2.2 Reg. Ref. YM 0001

Prior to the commencement of the scheme, consultants were appointed to review the detailed design processes as part of the implementation. A number of technical improvements were identified, which if implemented, would have a lesser adverse impact on the community. On foot of this conclusion a new request was made for alterations to the approved scheme and was submitted to An Bord Pleanála under the provisions of Section 146B (Reg. Ref. 04. YM 0001). Alterations sought under PL04.YM 0001 included:

- Changes to the number of pumping stations to be provided as part of the overall scheme at Passage West, Monkstown and Ringaskiddy.
- Various alterations to the route of pipelines associated with the scheme.
- The upgrading of existing pumping stations and the provision of a new attenuation tank at Carrigaline.

The Board determined that the physical changes sought would constitute material alterations to the terms of the permitted development and as such the public and prescribed bodies were notified accordingly. The alterations were considered to be not likely to have a significant impact on the environment and were approved by the Board in 2015.

## 3. SITE LOCATION AND DESCRIPTION

3.1 The Lower Cork Harbour area comprises of the estuary area where the River Lee flows into Cork Harbour. The River Lee flows eastwards through Cork City towards Dunkettle and south of Little Island. The channel then narrows between the Passage West/Glenbrook/Monkstown Peninsula on its western side and Great Island on its eastern side. The town of Cobh is located along the south-western coastline of Great Island. The channel then broadens out into the Lower Cork Harbour Estuary. The harbour is bounded to the south by Shanbally and Ringaskiddy, to the north-west by Monkstown and to the north by Cobh. Whitegate and the Whitegate Oil Refinery is located further southwest. The harbour flows southwards beyond Roches Point and into the South Irish Sea. The area surrounding the Cork Lower Harbour is relatively developed with the villages of Passage West, Glenbrook and Monkstown on the western side of the channel opposite Great Island and the town of Cobh on the eastern side of the channel. Other towns surrounding the Lower Cork Harbour include Carrigaline, Crosshaven and Whitegate. Within the Lower Cork Harbour the islands of Haulbowline which is Ireland's premier naval base, and Spike Island, a former State prison are located.

- 3.2 In terms of the existing sewage network, the Lower Cork Harbour area is generally deemed to be obsolete and consists mainly of combined sewers serving the above population centres around the perimeter of the harbour. Nearly all the wastewater enters the harbour untreated. There is an existing wastewater treatment plant to serve the North Cobh rural area, however this treatment plant provides primary treatment (settlement) only. Currently there are approximately 31 outfalls discharging untreated sewage into the Cork Lower Harbour. These outfalls are located at Passage West, Glenbrook, Monkstown, Shanbally, Ringaskiddy and no less than 19 separate outfalls serving the Cobh urban area (see picture display board submitted at the Oral Hearing in respect of CH3297 indicating the location of the outfalls).
- 3.3 Prior to providing a more detailed description of the individual sites which are the subject of the Section 146B application, it is proposed to briefly outline the nature of the proposed alterations sought under the current Section 146B application.

# 4. PROPOSED ALTERATIONS UNDER THE CURRENT SECTION 146B REQUEST

- 4.1 The alterations sought under the current request include:
  - (a) The relocation of the Carrigaloe major pumping station to the Cork Dockyard at Rushbrooke. This alteration will also involve the relocation of the marine pipeline route to a more southerly location traversing the Lower Cork Harbour. This alteration was predicated on a detailed design

assessment contained in a preliminary report which highlighted a number of complexities at detailed design stage. These complexities included:

- There is insufficient land on either side of the proposed crossing points at Carrigaloe/Passage West to accommodate construction compounds required to enable the tunnel crossing to be construction.
- By moving the estuary crossing to a location to Cork Dockyard, it removes the necessity to convey flows northwards along the east side of the estuary along the R624. The R624 is a very important regional route connecting Cobh to the N25 (Cork/Waterford Road) and also providing access to the cross ferry service at Passage West to Glenbrook / Monkstown.
- Irish Rail have also changed their requirements for any under track rail crossings from a minimum of 2 metres depth to a clearance of 4.5 metres depth. The requirement of an additional depth in the trenches for the gravity sewer present renewed difficulties for the feasibility of the proposal. It is therefore estimated that the works required to transport effluent flows northwards along the R624 would have resulted in the road closure for a period of 23 weeks (at a minimum).
- The removal of the estuary crossing location to a point further south at Cobh Dockyard would also remove the necessity to convey flows southwards for a distance of approximately 1.3 kilometres in the opposite direction on the western side of the estuary along the R610. This would have required the closure of this important Regional Route (through Monkstown and beyond) for a period of approximately 5 weeks.
- The new proposed estuary crossing will be located at a wider part of the channel and this will facilitate the incorporation of horizontal directional drilling (HDD) within the bedrock between Cork Dockyard and Monkstown. It is stated that horizontal directional drilling

technology has become more technologically advanced since the original application was submitted to the Board back in 2008. The use of HDD in lieu of a full tunnel solution or dredging option will result in a reduced impact on the environment in terms of disturbing the benthic ecology of the estuary and will also reduce the volume of spoil material etc.

- The new crossing point spans a length of approximately 850 metres. Evidence presented at the Oral Hearing in respect of CH3297 indicates that the HDD technique is required to incorporate a relatively shallow radius, in that it is not possible to incorporate a very pronounced concave profile in the tunnelling. As a result, if the HDD technique was to be employed at the narrower channel crossing at Carrigaloe, it would be necessary to step back the entrance points of the tunnel on either side of the estuary in order to get the appropriate shallow profile to accommodate the HDD. This in itself would involve sinking deep shafts into higher ground further back from the shoreline. This in turn would prove to be very expensive, technically challenging, and is likely to give rise to greater amenity problems during the construction phase for the surrounding area. The incorporation of the new HDD technique has, according to the information contained on file, a more modest environmental impact. For the above reasons the original crossing point at Carrigaloe is less attractive in construction terms.
- (b) The HDD tunnel will exit at a green area off Glen Road in Monkstown on the western side of the channel. This green area which currently accommodates a playground and an area of public open space will be used in the short-term as a construction compound for the launching of the HDD tunnel across the channel. It is stated that the green area at Glen Road would be reinstated to its original/improved condition on the completion of the project. A new interception manhole will intercept the pipeline at Marine Villas on the R610 and the effluent will then flow southwards towards the Coast Road pumping station. The temporary use of the green area off Glen Road will also involve the temporary

road closure of the Glen Road (L2474). It is stated however that local access along this road will be maintained. The temporary use of the Glen Road Public Amenity Area as a construction compound is required in order to facilitate a launch area for the proposed horizontal direction drilling.

- (c) It is proposed to replace the Carrigaloe major pumping station adjacent to the R624 with a minor pumping station. The major pumping station is no longer required at this location because the proposed marine crossing is to be relocated approximately 1.7 kilometres to the south at Cork Dockyard in Rushbrooke. A minor pumping station will still be required at this location in order to convey flows from north-west Cobh to the new proposed crossing point at Cork Dockyard.
- (d) The construction of a new sewer and package pumping station in the Rushbrooke Hotel car park adjacent to the R624 between Carrigaloe and Cork Dockyard. These works will also involve the decommissioning of the existing biocycle unit at the Rushbrooke Hotel car park. The proposed local gravity sewer, pumping station and rising main is required to connect a number of properties along the R624 to the public network. Under the original proposal it was not proposed to connect these properties to the drainage scheme.
- (e) The decommissioning of Riverside pumping station. This pumping station will be by-passed as a result of the new network configuration.
- (f) The decommissioning of Chandlers Rest pumping station. As this pumping station will be by-passed as a result of the new network configuration, it will be decommissioned.
- (g) The replacement of the large diameter gravity sewer originally proposed along the R624 with a smaller diameter rising main flowing in the opposite direction from Carrigaloe to the proposed pumping

station at Cork Dockyard. The relocation of the crossing point to Cork Dockyard means that a large diameter gravity sewer originally proposed along the R624 and High Road is no longer required. A smaller diameter rising main from Carrigaloe pumping station to the proposed crossing will now be required.

- (h) The slight relocation of the Dock Cottages pumping station from a location at the foreshore to a location in the green area to the northwest of the existing Dock Cottages. The slight relocation of this pumping station was considered appropriate to avoid construction within the foreshore so as to reduce the environmental impact. The relocation to the green area also offers less complex civil engineering issues during the construction.
- (i) The decommission of the Estuary Walk pumping station. As this pumping station is currently being by-passed, the station is now redundant and will be decommissioned.
- (J) The decommissioning of Pebble Beach pumping station as the gravity sewer intercepts the flows to the existing pumping station it will be made redundant and be decommissioned.
- (K) The provision of a new rising main from the station car park of Cobh Railway Station to the Dockyard pumping station. Due to the revised estuary crossing point, the rising main from station car park is to be reconfigured to convey flows to Whitepoint by gravity to the Dockyard pumping station. Previously these flows would have been conveyed along the R624.
- (L) The provision of an additional length of gravity sewer required to convey the flows from the rising mains discharge point to the dockyard pumping station. Due to the revised estuary crossing point a new gravity pipeline will be constructed to transfer flows from the

Rushbrooke gravity sewer and pump flows from the proposed Carrigaloe Dock Cottages and Rushbrooke pumping stations together with the Old Town Hall and station car park pumping stations to the proposed Dockyard pumping station. Previously these flows would have been conveyed along the R624 to the pumping station at Carrigaloe in a large diameter gravity sewer.

- (M) The construction of a new combined sewer outfall chamber at the dockyard pumping station. A new combined sewer outfall chamber is required as part of the Dockyard pumping station operational requirements.
- Proposed new estuary crossing pumping station and the Dockyard pumping station to convey flows across the estuary.
- (o) The relocation of the Lower Road Pumping Station and the Whitepoint Pumping Station to the Station Car Park Pumping Station. These changes were made as a result of feedback from the local community. Due to the close proximity of the Whitepoint pumping station and the station car park pumping station, it was deemed technically feasible to combine these into one pumping station.
- (p) The route of the rising main from Old Town Hall will be reconfigured and extended. The need to transfer flows to the alternative crossing point necessitates the rearrangement of the network and this results in the alteration of the route of the rising main from Old Town Hall in East Cobh. This in turn has resulted in the relocation of the Old Town Hall pumping station from the foreshore in the centre of Cobh Town to the car park adjacent to the Old Town Hall at Kings Quay.
- Proposed diversions of foul flows at Sandymount, Spy Hill, Cathedral
   Place and Pearce Square. As a result of detailed engineering design
   processes, it was considered that it was not necessary for pipe

upgrades along Sandymount, Cathedral Place, Harbour Hill and Pearce Square.

- (s) The decommissioning of Lynch's Quay pumping station. Lynch's Quay pumping station is no longer required as flows will be diverted by gravity to the new pumping station at Old Town Hall.
- (t) The construction of a new gravity pipeline along the R613 at Coolmore Cross (south of Shanbally). Following on public consultation a small diameter sewer is proposed to pick up effluent from the properties along Church Road in the vicinity of Coolmore Cross to the Shanbally wastewater treatment plant in the vicinity.

## 5.0 Detailed Description of the Lands to be Affected as a Result of the Proposed Alterations

4.2 A short site description of the main areas which are to accommodate the proposed alterations under the current application are described in more detail below.

#### Cork Dockyard Area

The Cork Dockyard Area is to accommodate a proposed new major pumping station and is also designated as the reception site for the HDD tunnel at the new proposed Marine Crossing. It is located to the west of Cobh Town Centre and on the western side of the R624 and the Cork to Cobh Railway Line. The dockyard area comprises of lands totalling approximately 17.8 hectares and it accommodates a variety of port-related activity. The existing on-site infrastructure facilities within the dockland site include workshops, engineering services, manufacturing sheds as well as two portside cranes and a deepwater quay area, dry dock facilities and roll-on/roll-off facilities. Currently the dockland area is also being used for the assembly and export of large dock-side cranes. The area where the proposed pumping station is to be located is within hardstanding vacant lands to the south-east of the main

dockyard facilities. These lands are currently not of any economic use (although according to the submission from Cork Dockyard Holdings the lands are earmarked as an area for future crane assembly or storage area renewable off-shore energy infrastructure – see details of submission below). It is proposed to acquire approximately 0.13 hectares within the hardstanding area to accommodate the pumping station.

#### Proposed Marine Crossing

It is proposed to utilise an existing area of public open space adjacent to the Glenbrook Road in Monkstown on the west side of the channel in order to accommodate a temporary launch pad for the proposed horizontal directional drilling tunnel. The proposed tunnel is to be located in the underlying bedrock below the estuary floor. In terms of the geology of the underlying bedrock, the eastern side of the crossing is flaser-bedded sandstone and mudstone. On the west side the underlying bedrock comprises of sandstone with some mudstone and siltstone.

In terms of the HDD bore alignment and profile, details of the actual drill alignment and profile, including the drill entry angle, vertical and horizontal curve radii and the drill exit configuration, are normally established as part of the contractor's design. Therefore, exact details are not available at present. Assuming the installation is entirely within the bedrock, it is then estimated that a maximum installation elevation of minus 37 metres below ground level is required. This coincides with the lowest interface with the rock in the centre of the river. It is stated however that his may be increased to -50 metres OD if the most fractured bedrock is to be avoided.

The launch area adjacent to Glenbrook currently comprises of a linear strip of public open space which accommodates a playground and basketball courts. This site would be temporarily closed, and upon completion of the works, the green area, basketball courts and playground shall be returned to an equal or improved state. A small stream, the Glenbrook Stream runs along the northern boundary of the public open space. Housing is located in the wider area surrounding the public open space.

#### Description of the Site to Accommodate the Carrigaloe Minor Pumping Station

This site is situated on lands on the western side of the R624 adjacent to the shoreline. The lands are currently vacant and probably previously accommodated buildings. The site is located adjacent to a narrow shoreline consisting of gravel and rock. The Glenbrook/Carrigaline ferry slipway is located approximately 175 metres to the north of the site. Derelict buildings and small boats in drydock are located along the shoreline to the south. The R624 runs along the eastern boundary of the site. A mesh wire fence separates the site from the roadway.

#### Rushbrooke Hotel Site

The Rushbrooke Hotel is located approximately 2 kilometres to the south of the proposed Carrigaloe minor pumping station. As in the case of the Carrigaloe minor pumping station the Rushbrooke pumping station is located on the western side of the R624 adjacent to the shoreline. The Rushbrooke Hotel is now closed and is in a derelict condition. Three apartment blocks have been located in the immediate south of the hotel. The vast majority of these units are unoccupied. To the south of these units is a surface car park with direct access onto the R624. It is proposed to locate the Rushbrooke pumping station within this car park.

#### Dock Cottages Pumping Station

The Dock Cottages pumping station is located approximately 300 metres further south of the Rushbrooke Hotel site and c.750 metres north of the main pumping station within Cork Dockyard. The proposed pumping station is located within a green area to the rear of a cluster of approximately 18 small cottages located on the shore side of the R624. The green area occupies approximately 620 square metres. It is bounded to the north by the shoreline and to the south and east by the rear gardens of the existing cottages. The open space is currently used for amenity purposes.

#### Station Car Park Pumping Station

The Station car parking pumping station is located within the car park of Cobh Railway Station approximately 500 metres to the west of the station terminal. The car park is located to the south of the railway line. The site comprises of a surface car park adjacent to a small play area and footbridge which traverses the railway line. The Whitepoint Moorings Apartment block is located further west, approximately 80 metres from the proposed pumping station.

#### Old Town Hall Pumping Station

The Old Town Hall pumping station is to be located in a small surface car park further eastwards along the southern coast of Cobh, near Cobh town centre between Kings Quay and Lynch's Quay. The lands in question are located at the seafront and are currently vacant and used as a surface car park associated with an adjacent Chinese restaurant. A railing runs along the northern boundary of the site and a small ESB substation is located adjacent to the northern boundary. The plot of land amounts to approximately 465 square metres. There are two protected structures within the vicinity of Old Town Hall pumping station, mooring bollards and cast iron piers with cast iron railings and gates. The information contained on file states that following consultation with Cork County Council's architectural conservation officer, permission has been obtained to temporarily remove both structures for the duration of the works subject to the preparation and implementation of a method statement by an appropriate specialist for the removal of the cast iron piers.

#### 5. DETAILS SUBMITTED

The request was lodged directly to the Board under the provisions of Section 146B on 29<sup>th</sup> September, 2016. The application was accompanied by the following reports:

- A Planning Report prepared by AOS Planning which outlines the alterations proposed, the national planning context as it relates to the proposed development and a summary of conclusions contained in other reports submitted with the application.
- Drawings including site location drawings and pump station drawings. These drawings are contained in an A1 booklet prepared by Nicholas O'Dwyer, Consulting Engineers.
- A separate folder entitled 'Volume 1: Environmental Reports'. This folder contains the following reports:
  - An environmental assessment review which details in tabulated form, a description of all the proposed changes envisaged under the application. The reasons why the changes are being implemented and the overall impact assessment arising from the changes.
  - Separate Appropriate Assessment Stage 1 Screening Reports for:

The Carrigaloe Pumping Station. The Rushbrooke Hotel Pumping Station. The Dock Cottages Pumping Station. The Dockyard Pumping Station. The Station Car Park Pumping Station. The Old Town Hall Pumping Station. An Appropriate Assessment Stage 1 Screening for the collection network. An Appropriate Assessment Screening Report for the outfall upgrade and repair works.

A Natura Impact Statement for the Estuary Crossing.

Section 11 of Volume 1 also includes a Cultural Heritage Assessment Report for the alterations and minor changes proposed. The Cultural Heritage Reports includes an assessment for the outfall works at Cobh and the proposed new Estuary Crossing.

A separate volume – Volume 2 contains specific reports on the following:

- A Routing Report, which describes the decision making process for the final detailed design on the routing of pipelines at pumping station locations for the project in Cobh including the proposed estuary crossing. The report also details how the design has evolved making use of advances in construction technology. Appendix 1 of the routing report also contains a Site Selection Report which sets out the methodology that was employed in arriving at the preferred sites for the new estuary crossing and proposed new pumping stations (see accompanying report on 04 CH3297 for details in the methodology employed in arriving at the preferred sites/ route.
- A Local Liaison Report: which sets out details of the liaison which took place with the community and local residents affected by the proposal. Irish Water hosted a number of open evenings, held information events, met with residents and businesses and local groups to discuss the proposals.
- A separate report was prepared in respect of the *Feasibility of the Estuary Crossing.* It details the site geology, the installation method options, the environmental risk and mitigation and the constructability of the proposed crossing. It concludes that dredging the crossing is less desirable than trenchless methods from an environmental perspective due to the inevitable impact on the marine foreshore environments. Of the potential

trenchless methods, only horizontal directional drilling (HDD) and conventional tunnelling are considered to be technically viable for the alignment under consideration. Horizontal directional drilling was considered to be the most appropriate construction technique.

- A detailed *Noise Impact Assessment* of horizontal directional drilling technique was prepared by AWN Consulting. Calculations undertaken have indicated that unmitigated drilling works would give rise to noise levels significantly in excess of the adopted limits for evening and nighttime. Therefore, a detailed programme of mitigation has been set out to reduce the level of noise from the proposed works. This will significantly reduce levels of noise and meet the limits set out in the EIS for the scheme. The mitigation measures are set out in Section 6 of the report and include: Restriction of operational hours for construction activities, selection of low noise plant, handling of drill strings, installation of noise barriers and specific vibration mitigation.
- The final report contained in Volume 2 relates to a traffic and transportation assessment of local access onto Pebble Beach adjacent to the Cork Dockyard. It concludes that road safety will not be significantly impacted upon by vehicle trips generated by the development of the proposed pumping station and the interaction of road users at the railway overbridge does not pose a significant safety risk. It recommends that additional warning signage could be provided in consultation with the Planning Authority.

#### 6. AN BORD PLEANÁLA'S ASSESSMENT

An initial report was prepared by myself as to whether or not the alterations proposed under the current application constituted material alterations. Arising from this assessment it was concluded that the proposed alterations and modifications were material and the Board proceeded to seek submissions on the alterations sought and whether or not they would be likely to have a significant effect on the environment. The Board notified the following prescribed bodies in respect of the alterations sought.

- Cork County Council.
- Cork City Council.
- Minister for Housing, Planning, Community and Local Government.
- Ministers for Arts, Heritage, Regional, Rural and Gaeltacht Affairs (Development Applications Units).
- Minister for Communications, Climate Change and Environment.
- Minister for Transport, Tourism and Sport.
- Minister for Agriculture, Food and the Marine.
- Transport Infrastructure Ireland.
- The National Transport Authority.
- The Arts Council.
- Failte Ireland.
- An Taisce.
- Heritage Council.
- Inland Fisheries Ireland.
- larnrod Eireann.
- CIE.
- Commission for Railway Regulation.
- The Environmental Protection Agency.
- The Health and Safety Authority.
- The Health Service Executive.
- The Southern Regional Assembly.

Irish Water also submitted two copies of the required notice as published in the Irish Examiner and the Irish Independent on 9<sup>th</sup> October, 2016. Also enclosed were two copies of the notices which were issued to each prescribed body. Third parties that made submissions in respect of the original application under YA0005 were also notified of the proposed alterations under the current application.

# 7. OBSERVATIONS SUBMITTED IN RESPECT OF THE PROPOSED ALTERATIONS

A total of 15 observations were received. These are summarised below:

#### Submission from the Titanic Experience

This submission expresses overall support for the proposed alterations. However, concerns are expressed during the construction works in terms of potential impact on businesses in Cobh. In particular, the Board are requested to take note of the following:

- Works should be carried out on the main road outside the tourist season (April to September). Construction should be permitted from 8 a.m. to 8 p.m. so as to ensure speedy completion of the works.
- Contractors should work in a co-ordinated manner and ESB/Telecom wires should be relocated underground when excavation works are being carried out for pipework associated with the scheme.
- A condition should be attached to any approval that ensures that a design be agreed and planning permission be obtained for a town streetscape/public realm improvement to be carried out as part of the works.

- There needs to a programme of works agreed for the overall project in terms of work times and location of work compounds etc.
- There needs to be clear liaison structures with a clear allocation of roads and responsibilities.

#### Submission from the Department of Agriculture, Food and the Marine

This submission states that the aquaculture and foreshore management division have no comment/observations to make.

#### Commission for Railway Regulation

- larnrod Eireann should be consulted to ensure that risks associated with railway trespass are not increased at the vicinity of the development either during the works or when the works are completed.
- All construction works affecting the railway should be undertaken in consultation with larnrod Eireann. Particular care should be taken with works near the railway boundary that may increase loading on cuttings, affect stability of embankments or change the water table or drainage regime.
- If permission is granted, those undertaking the works should consult with larnrod Eireann regarding road/rail interfaces on access routes which may have increased flow or abnormal loads during the construction phase.

# Submission from Working Group for an Enhanced Urban Environment for Cobh

• This organisation seeks to gain an improved urban environment as a result of the proposed works to be undertaken. There are unsightly cables and poles particularly along East Beach, West Beach and Midleton Street.

The removal of this unsightly infrastructure is important, as tourisms is the main industry in Cobh. The digging of trenches offers a greater opportunity for the relocation of unsightly cables and poles.

- Disruption which could impact on businesses should also be minimised.
- The proposal also offers great opportunity to improve disability access and access for wheelchair users.

#### Submission from Stephen O'Driscoll and Others

This submission supports the proposal because it replaces septic tanks for a number of dwellings adjacent to the R624. The connection to the main drainage scheme will enhance properties and will encourage new builds in the area. The replacement of septic tanks will have positive environmental impacts on water quality and meet the various EU Directives.

#### Submission from Margaret McAuliffe and Others

This submission also supports the proposal for a new pumping station at the Rushbrooke Hotel and the new pumping station at the Dock Cottages which will enable the cottages along the western section of the R624 to avail of mains sewer. The proposal will stop the direct discharge of sewage into the river with the consequential odour and amenity problems arising from same.

#### Submission from Transport Infrastructure Ireland

Transport Infrastructure Ireland recommends that actions with regard to road improvements and transport mitigation measures be co-ordinated and implemented in full along the N28. Transport Infrastructure Ireland states that CPO and EIS documentation for the proposed M28 upgrade should be submitted to An Bord Pleanála shortly.

#### Submission from Southern Regional Assembly

- This submission makes reference to various policy statements and policy objectives contained in the South-West Regional Planning Guidelines 2010-2022, particularly as they relate to water and wastewater infrastructure. It is stated that the proposal to promote improved water and environmental quality for the Cork Harbour is consistent with Chapter 6 of the said Guidelines.
- Any relocation of the pumping station should have due regard to local amenities. The submission notes conclusions in the Environmental Assessment Review and the Habitats Directive Assessment submitted with the application. In conclusion it is considered that the proposed amendments are consistent with the South-West Regional Planning Guidelines.

#### Submission from Cobh and Harbour Chamber

This submission seeks to ensure that a plan is in place to minimise disruption and inconvenience to businesses and the general public during the undertaking of works. To this end the following is recommended:

- The appointment of a designated liaison officer between Irish Water and Cobh Harbour Chamber.
- Public access to businesses will be maintained throughout the period under which the works are to be undertaken.
- A detailed traffic management plan for Cobh Town Centre shall be agreed as part of the proposal.
- No town centre works shall be carried out during the tourist season (March 1<sup>st</sup> to September 30<sup>th</sup>).

• Irish Water is urged to co-ordinate with utility providers to ensure the burying of cables where appropriate in Cobh Town Centre.

#### Submission from Cobh Tourism

- Again this submission is supportive of the proposal. The works to be undertaken are described as "once in a lifetime opportunity" which can facilitate streetscape enhancement in Cobh town centre particularly through the potential to place services underground. It is acknowledged that the design has significantly reduced the amount of open excavations necessary. Nevertheless, it is essential that disruption is minimised and works be confined to off-peak tourist times.
- In this regard a project community liaison person must be appointed for the duration of the project.
- Penalty clauses should be considered where timelines are not met or where there are poor quality finishes.
- Works within Cobh town centre and on the R624 should be restricted from October to March.
- The project should be viewed as a flagship project for co-ordination and consultation between utility providers.
- Work must be co-ordinated to ensure minimum distraction.
- The proposal represents a great opportunity to improve the public realm of the town of Cobh.
- An innovative community gain condition should be attached to this initiative.

 The submission also contains a separate document by the Cobh Development Strategy Group showing the streetscape deficit in Cobh and setting out objectives for future streetscape enhancement.

#### Submission from Cobh Tidy Towns

- Cobh is a gold medal winning town in the National Tidy Towns
   Competition. This proposal will contribute positively to the town. However,
   the proposal provides great opportunities to enhance the streetscape
   through the further removal of wirescape and poles as part of the
   proposed ducting of pipes to be carried out.
- Detailed timelines for the works to be carried out should be included in any grant of permission.
- There is a need for a co-ordinated approach for the works to be undertaken. Under the provision of "community gain" a contribution could be made to Cobh Tidy Towns by way of condition. This would reflect positively on Irish Water.

#### Submission from Cobh Dockyard

- It is argued that the proposal will have significant impact on the lands at Cork Dockyard in Rushbrooke which covers an area of approximately 17.8 hectares and is a major strategic industrial site within Cork Harbour.
- It is stated that Cork Dockyard is the only zoned industrial site in Cobh.
   The objectors would be seriously affected on a permanent and temporary basis as a result of the proposed pumping station.
- The existing dockyard has an array of port related facilities and is a key
  piece of strategic infrastructure within the city. There is scope for further
  development to include for off-shore/marine energy port related activities
  at this location. The Cork Dockyard site was identified as one of only three
  "Category A Ports" in the county for this type of off-shore energy activity.

- The objector is currently piloting a project involving the assembly and transportation of fully erected cranes and the expansion of this project is earmarked for this location. The only suitable site for the cranes assembly coincides with where the proposed pumping station is to be located.
- In conclusion it is considered that the proposal will have a very significant permanent and irreversible impact on the objector's business.

#### Submission from Cobh Playground Fundraising Committee

- The Board are requested to oppose a condition to conduct drainage works and provide a pumping station adjacent to the existing playground at "five Foot way Whitepoint" at the railway station car park. Cobh has been deprived of playground facilities for many years. The Committee are seeking to construct a new playground at this location. The Committee are seeking that a condition be attached in the form of a financial community gain and a portion of land be allotted for the playground.
- Section 2 of the submission notes that the works to be undertaken could generally disrupt the amenity associated with the playground. Playground construction may have to be postponed until the drainage works are concluded. This could pose a major problem to the Committee when seeking grant aid. It is requested that these points be taken into consideration when assessing the project.

# Submission from the Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs

 The report submitted by the Department argues that the Heritage Assessment Report is incomplete as it did not incorporate a full underwater archaeological impact assessment. It lacks detail as to the nature and extent of the full potential impact of the outfall and the decommissioning works on the foreshore/inter-tidal and sub-tidal areas.

- There is no reference to retain underwater cultural heritage in the areas affected.
- The Wreck Inventory of Ireland database does not appear to have been consulted. No reference is made to any other underwater surveys in the area that might have been carried out.
- It is suggested that an update of the cultural heritage assessment to include a detailed underwater archaeological impact assessment as well as normal archaeological monitoring should be required by way of condition.
- With regard to the impact on European sites, the submission states that assuming the proposed mitigation measures are put in place, the Department has no reason to doubt the veracity of the conclusions that the proposed estuary crossing will not impact on any European sites in the area. The key concerns relate to the escape of bentonite fluid arising from the drilling to be undertaken and it is recommended that immediate post drilling monitoring is carried out by an independent surveyor including a photographic survey on the benthos of the estuary along the zone of the proposed pipeline route. Results should be made available on the applicant's website.

#### Submission from the Health Service Executive

The Health Service Executive made the following comments in respect of the proposed alterations.

 In relation to public consultation it is advised that meaningful and continual public consultation takes place to ensure that the local community are kept up to date with the changes that are now being proposed.

- In terms of noise and vibration, it is recommended that additional predictive noise monitoring be carried out at the new locations of the project, taking into account the noise sensitive locations for both daytime and night-time hours. It is noted that a detailed noise assessment of the proposed HDD works associated with the estuary crossing has been undertaken. It is recommended that continual and regular noise and vibration monitoring be carried out during the drilling phase.
- It is recommended that regular air quality monitoring be carried out during the construction and operational phase of the proposed development particularly of dust and the impacts of traffic on the air quality of Cobh Town, Rushbrooke and Dock Cottages area. It is recommended that dust abatement measures are fully implemented during the construction phase of the pump stations. It is noted that hydrocarbon odour was recorded at one of the boreholes during the Cork Dockyard excavations. The impacts of ground gases that may occur from construction and drilling should be considered.
- In terms of the marine pipeline crossing, any works should take into account the acknowledged complex fractured geology which could make drilling very challenging. As part of the construction environmental management plan further drilling should be undertaken by a suitably qualified environmental consultant. All adverse risks associated with the drilling (oil/fuel spillage) etc. should be fully considered. Contingency measures should be put in place for any possible fuel spillage.
- In terms of environmental health issues, the impact of construction work on food premises within Cobh Town should be considered. The construction works could result in the displacement/movement of the rodent population. It is recommended that adequate pest control procedures be put in place as part of the construction environmental management plan. A dust minimisation plan should also be put in place. Disruption to utilities should be avoided during business hours. The

impact of construction activities on waste collection should also be considered.

 The traffic management plan does not examine the traffic impact associated with construction works of pipelines within Cobh Town and surrounding areas. It is recommended that a construction traffic management plan should be put in place to include any temporary road closures due to construction work. Mitigation measures should be put in place to minimise these impacts.

#### 8. IRISH WATER'S RESPONSE TO THE SUBMISIONS RECEIVED

A response was received from Irish Water on February 7<sup>th</sup> 2016. It is briefly outlined below:

#### Cork Dockyard Holdings

- An Environmental Assessment Review was submitted which demonstrates that the proposal will not have a significant effect on the environment.
- The Site Selection Report which included an analytical hierarchy process methodology identified the Dockyard Site as the most suitable site for the pumping station and marine crossing. The location of the pumping station will have a minimal impact on the working of the Dockyard and will not restrict future crane assembly at this location. The provision of a marine pipeline beneath the Dockyard area will have no impact on load rates above the pipeline from a geotechnical point of view.

#### <u>DAHRRGA</u>

- In relation to archaeology, it is stated that mitigation and monitoring measures as proposed by the Department will be undertaken.
- Likewise, in relation to nature conservation it is stated that mitigation and monitoring measures as proposed by the Department will be undertaken. Monitoring results will be published on the CLHMD website.

#### <u>HSE</u>

- Details of the liaison with the local community regarding the project is set out in the response.
- In relation to noise impact it is stated that the EIS submitted with the original application considered noise and vibration impacts and set out detailed mitigation measures for both construction and operation phases. In terms of the new marine crossing, this has also been the subject of a detailed noise assessment and the impact has been found to be acceptable subject to mitigation.
- In terms of air quality, again the EIS submitted with the original application assessed the implications on air quality arising from the application and these were deemed to be acceptable. The proposed alterations will not increase the potential impact of the proposal in terms of air quality.
- In terms of ground gases, it is stated that the Crossing Feasibility Report indicated that because of the nature of the man-made reclaimed land that ground gases can reasonable be anticipated but can be managed through normal site safety procedures.
- It is considered that the proposed alterations will have no additional adverse impacts in terms of environmental health over and above that associated with the original proposal. Pest control procedures will be put in place as part of the contract documents.
- Any planned utility interruptions will, where possible be scheduled outside business hours.
- Detailed traffic management plans will be put in place during the laying of utilities and will be incorporated into the contract documents and the CEMP. The public will be notified of lane closures and traffic diversions etc.

#### Cobh Tourism

- The routing report states that construction will be planned to avoid construction works on main roads in Cobh town centre during the tourist season. It is requested that a minimum construction period of 6 months for the town centre should be permitted. It is suggested that works on the R624 should be permitted throughout the year.
- Irish Water confirms that coordination will occur with the utility providers including Cork Co. Co. where possible to relocate utilities underground. It is pointed out however that Irish water can only

carryout the functions assigned to it which relates to the provision of water services only.

• Irish Water has also liaised with Cork Co. Co. in improving the streetscape and public realm in Cobh as a result of undertaking the work.

#### Southern Regional Assembly

• The potential impact on amenity has been assessed in locating the pumping stations. Details are contained in the Site Selection Report.

#### Cobh Playground Fundraising

- If playground works are completed within 2017 as envisaged, there will be no overlap between construction works in the case of both projects. Where there is overlap construction activities can occur side by side. The proposed works will in no way necessitate the digging up of the playground.
- Any noise pollution will be monitored.
- Traffic management measures will be put in place to ensure that loss of parking within the car park during construction works will be minimised.

<u>Cobh Development Strategy Group; Cobh Tidy Towns; Cork Harbour and</u> <u>Chamber; Cobh Development Strategy Group; Working Group for an</u> <u>Enhanced Environment of Cobh; Titanic Experience</u>

• As previously indicated in the response, Irish Water will liaise with various bodies to ensure that disruption of the tourist season is minimised and improvements in urban design and the public realm are incorporated where possible.

#### Stephen O Driscoll and Others and Margaret Mc Auliffe and Others

• These submissions are testament to the fact that Irish Water has engaged in meaningful liaison with the local community as required under condition 2 of the parent permission.

<u>TII</u>

• The works to be undertaken have no direct impact on the improvements envisaged for the N28 and M28.

#### Commission for Railway Regulation

• Adherence to guidance and the requirements of the CRR will be adhered to during the construction phase.

#### 9. PLANNING POLICY PROVISION

#### 9.1 Regional Planning Guidelines for the South West Region

Chapter 5 of the Guidelines relate to Transport and Infrastructure Strategy. Section 5.6.7 of these Guidelines state that "Cork Lower Harbour Scheme has been identified as a key requirement in terms of the growth of the gateway in areas of the harbour. In particular, the metropolitan towns of Carrigaline, Ringaskiddy, Cobh, Passage West and Monkstown will benefit from this treatment works."

#### 9.2 Cork County Development Plan 2014-2020

Section 11.2.7 of the Development Plan notes the requirements to upgrade wastewater treatment plants in order to facilitate population targets and protect the environmental amenity of Cork Harbour.

Chapter 11 (page 172) of the Cork County Development Plan outlines water infrastructure Objectives.

- *Objective WS2-1* prioritises the provision of water services infrastructure in the gateway, hubs and main towns in all settlements where services are not meeting current needs or are interfering with the Council's ability to meet requirements under the Water Framework Directive or where lack of infrastructure is having negative impacts on Natura 2000 sites. The County Development Plan recognises that due to these shortfalls in infrastructure provision, development in the county, may only proceed where appropriate wastewater treatment is available which meets the requirements of environmental legislation including the Water Framework Directive and the requirements of the Habitats Directive. The Council is required to ensure

that any additional development permitted does not result in an increase in untreated discharges.

Table 15.2 of the Development Plan sets out Critical Infrastructure Priorities for the County. "The Cork Lower Harbour Sewage Scheme" is listed as a short-term priority in terms of critical infrastructure.

#### 8.3 Cobh Development Plan 2013-2019

Section 2.3.29 of the plan sets out core policies in respect of WWT. It notes that at present effluent from the Cobh Town Council area discharges untreated to Cork Harbour via 12 outfall points around the town, as the town does not have any waste water treatment facility. The discharge of untreated effluent into Cork Harbour is of significant concern as the Harbour is a Protected Area under the South West River Basin District Plan (SWRBDP) and it contains Natura 2000 sites and a Nutrient Sensitive Area. There are also designated Shellfish Waters at Rostellan North, Rostellan South and Cork Great Island North Channel. The South West River Basin District Plan 2010 identifies Cork Harbour as having 'moderate' water quality status and includes an objective to restore it to good status by 2021. The necessary improvement in water quality required to meet the objectives of the SWRBD Plan is dependent on the delivery of adequate wastewater facilities to meet the needs of existing and planned development.

Section 3.3.4 specifically relates to employment. It notes "that the only industrial lands available are at the dockyard at Rushbrooke. This is a unique and specialised facility with deep water access, graving dock and dry docks used for repair and maintenance of local, national and international vessels. The dockyard also includes large scale manufacturing halls, workshops and marine facilities."

Section 3.3.6 notes that "As part of the wider strategy of promoting Cork Harbour as an international energy hub, the site may have the potential in relation to off-shore /marine energy developments e.g. in the manufacture / repair of plant associated with such development.". The plan further states that it recognises the specialised and strategic nature of the facilities available at the Cork Dockyard and seeks to retain these facilities on site and promote the continued development of the sites as a Dockyard and for complementary marine related activity and industrial development which relies on the unique facilities available on site.

Objective EDT-03 states that it is an objective to recognise the specialised and strategic nature of the facilities available at the Rushbrooke Dockyard and to seek to retain these facilities on site and promote the continued development of the site as a Dockyard and for marine related industrial development.

The Cobh Town Development Plan identifies the project as a specific development plan objective (Objective INF-01) (page 73). This objective states that "*it is an objective of the plan to prioritise the provision of water services infrastructure to complement the overall strategy for economic and population growth in the town. In particular, it is an objective to encourage and facilitate the early implementation of the Cork Lower Harbour Sewage Scheme*".

Pending the delivery of the Lower Harbour Scheme, the Town Council may also consider allowing development on the basis of a temporary on-site treatment facility where it is feasible and otherwise appropriate.

In terms of zoning the Board will note that the Cork Dockyard site is zoned "industrial".

The plans aim is "To retain and develop the site as a dockyard in view of the strategic and specialised nature of its infrastructure and to facilitate the development of complementary marine related industrial uses. Part of the site is also considered suitable for the provisions of a park and ride facility to serve

Rushbrooke Train Station. Development of the site shall be contingent on the availability of appropriate and sustainable wastewater treatment facilities".

Section 2.3.29 states the following in relation to wastewater treatment.

"At present effluent from Cobh Town Council area discharges untreated to Cork Harbour by 12 outfall points around the town as the town does not have any wastewater treatment facility. The discharge of untreated effluent into Cork Harbour is a significant concern as the harbour is a protected area under the South-West River Basin District Plan and contains Natura 2000 sites at nutrient sensitive areas. There are also designated shellfish waters at Rostellan North, Rostellan South and Cork Great Island North Channel. The South-West River Basin District Plan identifies Cork Harbour as having "moderate" water quality status and includes an objective to restore it to good status by 2021. The necessary improvement in water quality will require to meet the objectives of the South-West River Basin District Plan is dependent on the delivery of adequate wastewater facilities to meet the needs of existing and planned development.

Economy and employment policy EDT-03 relates to Rushbrooke Dockyard. It states, *"It is an objective to recognise the specialised and strategic nature of the facilities available at the Rushbrooke Dockyard and to seek to retain these facilities and promote the continued development of the site as a dockyard for marine related industrial development."* 

Section 3.4.1 notes that Rushbrooke Dockyard is a strategic industrial site. The Town Council acknowledges the unique nature of the site and seeks to protect its function for marine related uses. Due to its location adjacent to Rushbrooke Railway Station it is considered that there is also potential to provide park and ride facilities on this site.

In relation to tourism Section 3.5.2 notes that planned public realm upgrades in the town centre and the development of the waterfront can instil confidence for investors and act as a catalyst for further positive interventions within the town.

Section 4.10 of the Plan relates to the public realm. Objective No. TCW-19 states that it is an objective of the Council to protect and enhance the character of architectural conservation areas, designated in this plan, as part of any public realm improvements or public infrastructure schemes. Such schemes shall:

- (a) Ensure the protection of where necessary the reuse of historic street furniture such as kerbing, paving, lamps and plaques etc.
- (b) A new development, used materials appropriate to the character of the architectural conservation area and promote high quality urban design.

TCW-20 states it is an objective of the Council to protect and enhance the quality of public open spaces such as parks and squares within Cobh."

#### 10. PLANNING ASSESSMENT

In my planning assessment I shall have regard to the following issues:

- Compliance with National and Local Policy.
- Whether or not the proposed alterations would be likely to have a significant effect on the environment.
- Considerations on Submissions Received.
- Appropriate Assessment

#### 9.1 Compliance with National and Local Policy

The Cork County Development Plan is not prescriptive in terms of setting out specific detailed objectives in terms of the provision of pumping stations or the
location of marine crossings associated with the Cork Lower Harbour Main Drainage Scheme.

Nevertheless, Section 11.2.7 of the Development Plan notes the requirements to upgrade wastewater treatment plants in order to facilitate population targets and protect the environmental amenity of Cork Harbour.

Furthermore, Chapter 11 (page 172) of the Cork County Development Plan outlines water infrastructure Objectives. Objective WS2-1 prioritises the provision of water services infrastructure in the gateway, hubs and main towns in all settlements where services are not meeting current needs or are interfering with the Council's ability to meet requirements under the Water Framework Directive or where lack of infrastructure is having negative impacts on Natura 2000 sites. The County Development Plan recognises that due to these shortfalls in infrastructure provision, development in the county, may only proceed where appropriate wastewater treatment is available which meets the requirements of environmental legislation including the Water Framework Directive and the requirements of the Habitats Directive. The Council is required to ensure that any additional development permitted does not result in an increase in untreated discharges.

Table 15.2 of the Development Plan sets out Critical Infrastructure Priorities for the county. The Cork Lower Harbour Sewage Scheme is listed as a short-term priority in terms of critical infrastructure.

The Regional Planning Guidelines for the South-West Region state that "Cork Lower Harbour Scheme has been identified as a key requirement in terms of the growth of the gateway in areas of the harbour. In particular, the metropolitan towns of Carrigaline, Ringaskiddy, Cobh, Passage West and Monkstown will benefit from this treatment works" (see Section 5.6.7).

The Cobh Town Development Plan identifies the project as a specific development plan objective (Objective INF-01) (page 73). This objective

states that "it is an objective of the plan to prioritise the provision of water services infrastructure to complement the overall strategy for economic and population growth in the town. In particular, it is an objective to encourage and facilitate the early implementation of the Cork Lower Harbour Sewage Scheme".

Pending the delivery of the Lower Harbour Scheme, the Town Council may also consider allowing development on the basis of a temporary on-site treatment facility where it is feasible and otherwise appropriate.

In terms of zoning the Board will note that the Cork Dockyard site is zoned "industrial". Public type utilities such as pumping stations could be considered an appropriate land use on such zoned lands.

It is acknowledged that the Cobh Development Plan has a major policy objective to retain and develop the site as a dockyard in view of the strategic and specialised nature of its infrastructure and to facilitate the development of complementary marine related industrial uses. However, the plan also notes that the development of the site shall be contingent on the availability of appropriate and sustainable wastewater treatment facilities. Furthermore, I consider (see below) that the provision of a pumping station at Cork Dockyard would be compatible with the expansion of marine related and industrial activities at the Dockyard in that there will be sufficient residual lands left at the Dockyard facility to facilitate the co-location of both the Dockyard activities and the pumping station.

It is also apparent having regard to the fact that the overall proposal seeks to improve the treatment of effluent being discharged into the Lower Cork Harbour that the overall scheme including the variations proposed before the Board fully complies with the various European Directives and national regulations in relation to water quality, wastewater treatment and general protection of the environment. The proposal in my view also fully complies with the Irish Water Strategic Services Plan in that it supports the three key aims of:

- Providing effective management of wastewater,
- Protecting and enhancing the environment, and
- Supporting social and economic growth.

Having regard to the policy statements contained in the above documentation, I am satisfied that the proposed alterations to the permitted development is supported by the various planning policy documents and European Directives all of which in general terms seek to provide for a more effective management of wastewater and specifically at local level, seek to implement the Cork Lower Harbour Main Drainage Project.

# 9.2 Whether or not the Proposal would be likely to have a significant effect on the Environment

Notwithstanding the submissions made in respect of the current S146B, I remain of the view that the proposed alterations are unlikely to have a significant effect on the environment. As referred to in my original report dated 12<sup>th</sup> October, 2016 which is contained on file, I note that the parent approval under Reg. Ref. 04.YA0005 was accompanied by an EIS. The EIS assessed the impact of the proposed development on the environment. This assessment not only included the wastewater treatment plant but also the construction of the various pumping stations and pipelines as part of the proposed expanded network. The Board concluded in respect of this EIS that the proposed development would not have a significant effect on the receiving environment. It is also clear from paragraph 2.11 of the EIS that it was envisaged that some degree of latitude and flexibility in determining the location of the pumping stations and pipework and any subsequent changes would be subject of an environmental review in order to assess the potential environmental impact. In this instance the applicant has carried out an environmental report in respect of every modification proposed and this is summarised in a 14-page Table in Section 1 of Volume 1 of the

documentation submitted with the current request. This environmental assessment review sets out:

- A description of the proposed changes.
- The reason as to why the proposed changes were being invoked.
- The overall anticipated environmental impact arising from the change.

The impacts are described and evaluated in this tabulated report and the report reasonably in my view concludes that the proposed changes are not significant, represent an acceptable environmental impact and in some cases a lesser environmental impact as a result of the proposed alterations.

It should also be noted that none of the submissions received on foot of the proposed alterations explicitly state that these alterations will result in a significant or unacceptable environmental impact.

The proposed alterations, which are material in nature, are nonetheless relatively modest in nature and relate to a series of alterations to the sewer pipe network and the relocation, reconfiguration and decommissioning of pumping stations within the network. None of the proposed alterations in themselves will trigger a requirement for a new EIS and this in itself suggests that the proposed alterations would not have a significant impact on the environment particularly having regard to the EIA already completed by the Board.

The proposed alterations in the marine crossing, while a significant alteration, has been the subject of detailed investigative surveys and these included:

- A site selection report justifying the rationale for an alternative estuary crossing.
- An estuary crossing feasibility report.
- An estuary crossing noise assessment report.
- A Natura Impact Statement assessing and evaluating any potential impacts of the proposed estuary crossing on Natura 2000 sites.

The above documents have adequately demonstrated in my view that the proposed new crossing location will, if anything, result in a lesser environmental impact than the original crossing point. The original crossing point between Carrigaloe and Passage West involved dredging a trench in the channel bed in order to facilitate the proposed pipe. This cut and cover operation would have given rise to significant disturbance in benthic communities on the channel floor, would have resulted in significant plumes of suspended solids being carried into the estuary area and would have severely hampered shipping activity within the channel. The horizontal directional drilling technique which after robust and comprehensive evaluation, was deemed to be the preferred technique, will involve the placing of the entire pipeline within the underlying bedrock. This will ensure that each of the above potential adverse impacts will be eliminated. Rather than having a significant impact on the environment therefore it is more likely that the environmental impact will be greatly reduced as a result of the alternative technology employed at the new preferred crossing point.

As referred to above there is no identifiable conflict between the proposed alteration and the planning policy context as it relates to the development or the area in which the development is located.

The applicant's conclusion in respect of the impact of the alterations on European sites in the vicinity, namely that the proposed alternatives will have no significant effects nor will it impact on the integrity of any European sites in the vicinity, is a reasonable conclusion in my view (see separate section on appropriate assessment below).

Finally, the proposed works associated with the overall project will result in a vastly enhanced system of wastewater treatment for the Lower Cork Harbour which in itself will be beneficial for the water quality within the harbour. This must be deemed as a positive environmental impact arising from the development.

Arising from the points set out above, and further below it is my conclusion that the proposed alterations would not be likely to have a significant effect on the environment. As such I do not consider that the provisions of S146C would apply in this instance.

# 9.3 Considerations on Submissions Received.

# Objection of Cork Dockyard Holdings Ltd.

The main concerns set out in the submission by Cork Dockyard is commercial in nature. The Dockyard submission does not question the need for the overall drainage project, nor does it challenge the proposal from a technical view point. It argues that the Dockyard is strategically poised to provide key strategic port services including crane assembly, manufacturing, bulk product handling and a dry dock facility. It also has the potential to become a premier site for the off shore / marine energy development. Reference is made to the fact that Cork Dockyard was designated as one of only three 'Category A' ports in the recently published '*Review of Irish Ports Offshore Capability in Relation to Requirements for the Marine Renewable Energy Industry*'. The issues raised in the objection are evaluated in more detail below.

- The area of the Dockyard site where the proposed pumping station is to be located is currently unused vacant lands. It appears from the analysis presented by Irish Water that the subject site is ideally located for the provision of a pumping station both in terms of its location west of the R624 and Cobh Town and also its location for a reception area for the HDD tunnel. The existing land use is also conducive to locating a pumping station at this location. Currently the main commercial activity is located in the northern area of the Dockyard. This is the area where the Liebherr crane assembly is taking place and dry dock repairs are currently being undertaken. The proposed pumping station, much of which will be located below ground will have no impact on the dry dock repair facility. With regard to the issue of the further expansion of the Liebherr Crane assembly area, there is in my view ample scope to provide a crane

assembly area in the dock-side area adjacent to the pumping station. The pumping station is set back c.80 m from the dock-side area. The existing Liebherr cranes take up a similarly sized area at the existing dock-side. Furthermore, there is scope for additional storage /assembly to the northwest and rear of the pumping station once works have been completed. The geo-technical evidence provided at the related CPO hearing by Mr Cummins, which is a matter of public record, clearly indicates that the wayleave area to the on the Dockyard site will in no way compromise the ability to assemble and store cranes on the wayleave. The HDD tunnel will be within the bedrock and will be c.45 m below the crane assembly area and the pipes integrity would in no way be affected by the activities directly above ground.

There can be no doubt that the proposed pumping station will limit the scope to which assembly and storage activities can take place on these lands. It will not in my view however completely sterilise the lands for future commercial activity as suggested by the objectors. The vacant lands to the east and south of the storage sheds amount to c. 3 ha. The pumping station will occupy a footprint of approximately 0.13 ha. The pumping station is not centrally located within these vacant lands. More importantly it is set back a considerable distance from the dock-side area which is a key consideration in terms of crane assembly and export or any off-shore marine energy activities.

 With regard to the pumping station's location within the Dockyard, evidence presented at the related CPO hearing on behalf of Cork Dockyard stated that moving the pumping station to the north-eastern portion of the site would result in the pumping station being in close proximity to the bulk storage sheds. Cork Dockyard Holdings have indicated to the Board at the CPO Hearing, that it would be undesirable to locate the pumping station in such close proximity to the storage sheds on the ground that these sheds will be storing Dairygold foodstuff. Therefore, appropriate buffer zones should be incorporated. With regard to locating the pumping station to the rear of the site, Irish Water had due and appropriate cognisance to the residential dwellings to the north of the site. It is appropriate in my view that a 50 m buffer zone be maintained between the pumping station and the residential dwelling. Such a buffer distances are recommended in the EPA Guidance document entitled '*Treatment Systems for Small Business Communities Leisure Centres and Hotels*'. Thus it is appropriate in my view that similar distances be employed in the case of pumping stations, in the absence of specific guidelines for such facilities, particularly to protect residents from potentially adverse impacts from odour or noise.

With regard to the strategic importance of the dockyard to facilitate marine off-shore energy enterprises, Cork Dockyard rightly point out that it is only one of 3 designated Category A ports in the country. The Board will note that along with Dublin, Shannon-Foynes is also designated as a Category A port for marine off -shore energy enterprises. The latter port is also located within Munster. To some extent, the presence of Shannon-Foynes in such close proximity to Cork undermines the objector's arguments that the Cork Dockyard is critically important on a national and strategic level to accommodate marine off -shore energy enterprises.

Arising from the above assessment I consider that the provision of a pumping station within the confines of Cork Dockyard has many strategic advantages in terms of implementing the Cork Lower Harbour Main Drainage Scheme and would not result in the total sterilisation of lands within this part of the Dockyard area. While it may somewhat restrict the expansion of commercial activities on this vacant lands, I consider that the lands are sufficiently plentiful to accommodate the expansion of Dockyard enterprises while accommodating a new pumping station. Furthermore, any inconvenience commercial or otherwise, caused by the provision of a pumping station at this location must be balanced against the greater common good, and importance in terms of providing properly treated effluent into the Lower Cork Harbour and the health, environmental and amenity benefits arising from same.

## Archaeological Impacts

The submission from the Department of Arts, Heritage and the Gaeltacht expressed a number of concerns regarding Cultural Heritage Assessment. Chief among the concerns were:

- There is no reference to retain underwater cultural heritage in the areas affected.
- The Wreck Inventory of Ireland database does not appear to have been consulted. No reference is made to any other underwater surveys in the area that might have been carried out.
- Any assessment should have included a detailed underwater archaeological impact assessment as well as normal archaeological monitoring should be required by way of condition.

The Board will note from the documentation contained on file, that the marine crossing is to take place within the underlying bedrock as such in will not disturb the underwater archaeology. The decommissioned outfalls will remain in-situ and will not result in any disturbance. As the proposed development will not result in any disturbance of the sea bed, the marine cultural heritage will not be affected and therefore detailed underwater surveys would not be necessary. Notwithstanding this Irish Water have stated in the response that mitigation and monitoring measures as proposed by the Department will be undertaken.

# Community Liaison

The HSE submission, as well as a number of other local community organisations highlight the importance of continued local liaison with groups throughout the implementation period. The applicant in the response sets out details of the local liaison which has taken place so far and details of the consultation, including presentations, local information nights and meetings with residents. These are set out in the Local Liaison Report submitted with the S146B request. The fact that a number of residents groups have written in to support the proposed alterations are testament to the fact that meaningful consultation has taken place. In accordance with condition No.2 of the parent permission Irish Water state that a full-time Community Relations Officer has been appointed. It is evident in my view that the views of the community were taken into consideration in the design of the scheme. Irish water has indicated that this will continue to be the case during the implementation of the scheme. I am satisfied therefore that the proper and meaningful public consultation has taken place during the course of the design and procedures are in place to ensure that this continues during the implementation phase.

## Potential Noise Impacts

The HSE submission recommends that additional predictive noise monitoring be carried out within Cobh town centre due to the high density of dwellings in the vicinity. I do not consider that additional predictive noise surveys be undertaken prior to the commencement of works. It is clear that the original EIS submitted carried out predictive noise modelling for all works to be undertaken as part of the project. The noise limits were deemed to be acceptable subject to mitigation measures in the original proposal. While the proposed alterations in this instance will involve works at different locations to the original scheme, the activities and construction works will be the same or at least similar in nature and will be the subject of the same mitigation measures to reduce the noise impact. I therefore consider it to be unnecessary an inappropriate to require further predictive noise level surveys prior to the commencement of these works.

With regard to noise and vibration impacts, the applicant produced a Noise Assessment Report for the proposed estuary crossing which also includes predictive vibration analysis. The report includes a programme of mitigation to reduce noise and vibration. The works will be the subject of close monitoring. Any HSE concerns should be therefore allayed.

## Proposed Estuary Crossing

The proposed crossing will be the subject of a detailed Construction Management Plan overseen by a qualified environmental consultant. It will also be the subject of detailed monitoring including monitoring for fuel and oil leakage during construction as suggested in the HSE submission.

# Air Quality

I do not consider it necessary to carry out any additional air quality studies on foot of the alterations proposed. The original proposal granted permission by the Board was assessed in terms of impact on air quality and the impact was deemed to be acceptable. The alterations proposed in this instance will have a similar impact in terms of traffic generation and dust. The mitigation measures as set out under the original proposal will be required to be employed. These measures are set out in p.8 of Irish Water's response to the submissions.

Specifically, in relation to the issue of ground gases, the Estuary Crossing Feasibility Report noted that during the borehole investigations benzene and hydrocarbon odours were detected. The report further noted that the pathway to receptor linkages were low to medium and as such did not represent a significant environmental threat. Appropriate measures for waste containment and disposal will be put in place during any excavation works to be carried out.

# Environmental Health

The proposed alterations include adjustments to the location of the pumping stations and pipe alignments. In terms of environmental health and rodent / pest control, the same issues will arise as those under the original application. It is stated in the response that adequate pest control procedures, including hiring specialists in the area of pest control, will be put in place throughout the construction period.

# Utility Interruptions

A number of submissions expressed concerns in relation to the possible disruption of services / utilities (both accidental and planned) when

undertaking the construction works. Irish Water state that a comprehensive programme of surveying and investigation works have been carried out to inform the detailed design. The contractor appointed to carry out the works will be required to undertake further advanced investigations in order to minimise disruptions. While some interruptions are inevitable efforts will be made to keep them to a minimum and may, where possible and appropriate be scheduled to periods outside normal business hours.

## Reduction of Wirescape and Improvements in the Public Realm

Many of the submissions see the proposed works to be undertaken as an opportunity to relocated services underground and to carry out enhancements and improvements to civic spaces, street furniture and paving within the Cobh Area. In response to this Irish Water have indicated that it will endeavour to co-ordinate its efforts with other utility providers where possible. It rightly points out however that it can only carry out functions assigned to it under the legislation and it cannot carry out works that are not directly related to the provision of water services. It is stated however that it will work closely with the local authority to ensure that works are co-ordinated in a manner which could benefit the public realm.

## Works Outside the Tourist Season

A number of submissions, particularly those associated with business and tourism in the area, requested that major works, particularly those within the Town would be confined to periods outside the main tourism season (March to September). Irish Water have indicated that the construction will be planned to avoid construction works on main roads in Cobh Town centre inside the main tourist season (May to September). Works on the R624 will continue throughout the year, but measures will be put in place to ensure that traffic flows will be maintained on this route. The Board will also note that the alterations proposed will ensure that the potential disruption will be greatly reduced when compared with the works envisaged along the R624 (and the R610) under the original scheme. I am satisfied based on the

information submitted that measure will be put in place to ensure that the impact on the tourism will be minimised.

# Traffic Management

A number of observations requested that appropriate plans be put in place to ensure that traffic is not unduly disrupted as a result of the works to be undertaken particularly during the tourist season in Cobh Town. A traffic impact analysis was carried out as part of the original EIS. As a mitigation measure it proposes that a traffic management plan be implemented to ensure that control of materials, plant and labour to and from the sites during the construction phase be implemented in order to minimise the disruption to other road users and local residents. The traffic management plan will be incorporated in to the CEMP. A temporary traffic management designer will also be employed to design and implement temporary traffic arrangements for the duration of the works. Public road users will also be notified of road closures, traffic diversions etc. Some level of traffic inconvenience and disruption will be inevitable as a result of the project. I am however satisfied that measure will be put in place to minimise the disruption.

# Impact on the 'Five Foot Way' Playground

The proposed works to be carried out at the station car park pumping station are physically separated from the existing playground. While it might be preferable to segregate the construction periods, Irish Water have indicated that works could proceed concurrently. The Board should also keep in mind that it appears that neither funding or planning permission has been secured for the playground extension at present. Finally, in terms of prioritising works, I would strongly recommend that the Board prioritise the Cork Lower Harbour Drainage Scheme and the associated infrastructure, including the proposed Pumping Station at the Station Car Park above the expansion of an individual playground facility. While such facilities are important for the community and the amenity of the area, the environmental cost of continued poor water quality within the Lower Harbour Area, and financial cost in terms of incurring penalties from Europe for the breaching of the UWWT Directive, should in my opinion outweigh any considerations regarding the expansion of an individual playground.

#### **Community Gain Contributions**

A number of submissions suggested that the Board could consider a condition requiring Irish Water to contribute towards a community gain fund for the general disruption which would be caused on foot of the works to be undertaken. I would argue against the attachment of such a condition on a number of grounds.

Firstly, I note that no such condition was attached to the parent permission and what is proposed in this instance is alterations to the parent permission. These alternations should not and would not in themselves attract a financial contribution for community gain purposes.

Secondly, the works to be undertaken would be of major benefit for the community in terms of improving water quality within the Lower Harbour area. This will have positive consequential impacts for bathing, sailing and other water sports which are undertaken in the Lower Harbour area. The infrastructure will also eliminate the use of septic tanks and on-site proprietary wastewater treatment systems with potential risks to groundwater. It will also address the amenity issues associated with odour. The works undertaken, subject to consultation and agreement with other utility stakeholders, could result in significant improvements to civic spaces and the public realm with the removal of wirescape and improvements in paving, street furniture and hard and soft landscaping. I consider therefore that there will be significant community benefit arising from the implementation of the project and as such additional community gain by away of a financial contribution is not warranted or justified in this instance.

# Other Issues

I note the submission from the TII and also note that the works to be undertaken as part of the S146B request will in no way impact on the N28/M28 proposed upgrade.

I also note the requirements of the Commission for Railway Regulation and note the applicant intend to consult with Irish Rail and abide by any of the safety requirements necessary. Irish Water will also adhere to any of the guidance documents in respect on working on close proximity to railway lines.

# **10.0** Appropriate Assessment

Volume 1 of the Environmental Report submitted with the S146B application includes appropriate assessment screening for all the alterations proposed under the current application together with an NIS for the proposed marine pipeline crossing. In the section below I will consider the the AA screening undertaken as part of the S146B request and will also evaluate the NIS undertaken in respect of the marine crossing.

## 10.1 Carrigaloe Pumping Station

<u>Location:</u> Western side of Great Island adjacent to R624, to the south of Ferry Island Crossing, opposite Passage West.

<u>Site:</u> Narrow shoreline consisting of gravel and rock with very little exposed mud.

<u>Works to be undertaken</u>: Construction of a new pumping station, storm tank, construction of a CSO chamber, screens and associated pipework.

# Nearest Natura 2000 Sites:

**Great Island SAC (Site Code 001058)** c. 2 km to the north. The qualifying interests associated with this SAC are:

(i) Mudflats and Sandflats not covered by seawater at low tide

#### (ii) Atlantic Salt Meadows.

**Cork Harbour SPA (Site Code 004030)** c.1.9 km to the north west and south west. The features of interest include:

-	The little Grebe	- Teal Pintail
-	Great Crested Grebe	- Shoveler
-	Cormorant	- Red Breasted Merganser
-	Grey heron	- Oystercatcher
-	Shelduck	- Golden Plover
-	Widgeon	- Grey Plover
-	Lapwing	- Dunlin
-	Black Tailed Godwit	- Curlew
-	Redshank	- Black-headed Gull
-	Common Gull	- Common Gull
-	Lesser Black Backed Gull	- Common Tern

- Wetland and Water Birds

Conservation Objectives associated with the Qualifying Interest/ Features of Interest:

(i) To avoid the deterioration of the habitats of the qualifying species of special conservation interest and

(ii) To ensure that the qualifying species and species of conservation interest are maintained in the long-term.

## Potential Adverse Impacts:

*Construction Phase:* The possible and potential adverse impacts which could arise during the construction phase include:

(i) The potential for works to disturb wintering / breeding birds in the vicinity of the site.

(ii) Aquatic pollution arising from spills on site.

**Operation Phase:** 

(i) Possible pollution effects due to the operation of the CSO in the case of heavy rainfall or a power outage.

# Anticipated Likely Effects

It is not considered likely that the works to be undertaken will give rise to significant effects on the qualifying interests/ features of interest associated with either of the Natura 2000 sites during either the construction or operational phases on the grounds that:

(i) The works are sufficiently removed from the European Sites in question.

(ii) The Lower Cork Harbour Area is a relatively built-up area and is host to a variety of urban / industrial land uses including Cork Dockyard to the south. Therefore, birds frequenting the Lower Harbour Area would be accustomed to noise and urban related activity and therefore are unlikely to be duly disturbed by the construction work to be undertaken.

(iii) The construction works, which are most likely to have the greatest potential for disturbance, will be temporary and relatively short-term in nature.

(iv) Specifically, in relation to the Great Island Channel SAC, the works at Carrigaloe pumping station are geographically removed and are downstream of the SAC. This will ensure that any potential spillages arising from the works in question will have no impact on the habitats which form the qualifying interests of the SAC.

(v) In terms of the operational phase, this phase will generally have either a neutral or slightly positive impact on the Natura 2000 sites in the vicinity due to the improved water quality in the Lower Harbour Area. When discharge from the CSO pipe occurs, the effluent concentration in the discharge will be heavily diluted and the diluted effluent will discharge into high volumes of receiving waters within the lower reaches of the River Lee which will in turn, aid dilution. The adverse impact arising from the operational phase can therefore be anticipated as not significant.

#### In-combination Effects

All works to be carried out as a result of the proposed S146B alteration have been screened for appropriate assessment. No works as part of the entire project will take place within a Natura 2000 Site. As no significant effects are anticipated as a result of the entirety of works to be undertaken, as such it is considered that no in-combination effects will arise.

## In-Direct Effects

It is possible that any accidental spillage as a result of construction works to be undertaken could pollute waters in the Lower Cork Harbour area and in doing so could possibly affect the feeding grounds of birds in the Lower Harbour area. However normal site management and control measure will be implemented as part of the construction works which include the mitigation measures contained in the original EIS. These measures are a condition of the Boards original approval and integral to the development. The potential for adverse in direct effects are negligible.

# Conclusions in Relation to AA Screening Carrigaloe Pumping Station

I consider the conclusions reached by the applicants to be objective and reasonable, and that the conclusions of the screening report undertaken by the applicant, namely that the Carrigaloe pumping station is unlikely to give rise to significant effects on Natura 2000 sites in the area is reasonable.

It is reasonable therefore to conclude that on the basis of the information on the file, which I consider adequate in order to issue a screening determination, that the proposed development, individually or in combination with other plans or projects would not be likely to have a significant effect on European Site No. 00158 or 004030 or any other European site, in view of the site's Conservation Objectives, and a Stage 2 Appropriate Assessment (and submission of a NIS) is not therefore required.'

#### 10.2 Rushbrooke Hotel Pumping Station

*Location:* Western side of Great Island adjacent to R624, c. 2 km south of the Carrigaloe pumping station and 500m north of cork Dock Yard.

<u>Site:</u> Surface car-park to the south of a block of apartments and c. 15m from the foreshore.

<u>Works to be undertaken</u>: Construction of a new pumping station (Ø 1.5m x 3m), construction of a flow meter chamber, construction of a CSO chamber, screens and associated pipework, decommissioning of an existing biocycle unit.

#### Nearest Natura 2000 Sites:

**Great Island SAC (Site Code 001058)** c. 2.8 km to the north. The qualifying interests associated with this SAC are:

- (i) Mudflats and Sandflats not covered by seawater at low tide
- (ii) Atlantic Salt Meadows.

**Cork Harbour SPA (Site Code 004030)** c.1.4 km to the south west. The features of interest include:

- The little Grebe Teal
- Great Crested Grebe
- Cormorant
- Grey heron
- Shelduck
- Widgeon
- Lapwing
- Black Tailed Godwit
- Redshank
- Common Gull
- Lesser Black Backed Gull
- Wetland and Water Birds

- Teal Pintail
- Shoveler
- Red Breasted Merganser
- Oystercatcher
- Golden Plover
- Grey Plover
- Dunlin
- Curlew
- Black-headed Gull
- Common Gull
- Common Tern

Conservation Objectives associated with the Qualifying Interest/ Features of Interest:

(i) To avoid the deterioration of the habitats of the qualifying species of special conservation interest and

(ii) To ensure that the qualifying species and species of conservation interest are maintained in the long-term.

# Potential Adverse Impacts:

*Construction Phase:* The possible and potential adverse impacts which could arise during the construction phase include:

(iii) The potential for works to disturb wintering / breeding birds in the vicinity of the site.

(iv) Aquatic pollution arising from spills on site.

# Operation Phase:

(ii) Possible pollution effects due to the operation of the CSO in the case of heavy rainfall or a power outage.

# Anticipated Likely Effects

It is not considered likely that the works to be undertaken will give rise to likely significant effects on the qualifying interests associated with either of the Natura 2000 sites during either the construction or operational phases on the grounds that:

(i) The works are sufficiently removed from the European Sites in question.

(ii) The Lower Cork Harbour Area is a relatively built-up area and is host to a variety of urban / industrial land uses including Cork Dockyard to the south. Therefore, birds frequenting the Lower Harbour Area would be accustomed to noise and urban related activity. The construction impacts are therefore unlikely to have significant effects. (iii) The construction works, which are most likely to have the greatest potential for disturbance, will be temporary and relatively short-term in nature.

(iv) Measures will be put in place to ensure best practice in terms of pollution control during construction works.

(v) Specifically, in relation to the Great Island Channel SAC, the works at the Rushbrooke pumping station are geographically removed and are downstream of the SAC. Any potential spillages that could arise from the construction activities will not impact on the SAC in question. This will ensure that the works in question will have no impact on the habitats which form the qualifying interests of the SAC.

(vi) In terms of the operational phase, this phase will generally have either a neutral or slightly positive impact on the Natura 2000 sites in the vicinity due to the improved water quality in the Lower Harbour Area. When discharge from the CSO pipe occurs the effluent concentration in the discharge will be heavily diluted and the diluted effluent will discharge into high volumes of receiving waters within the lower reaches of the River Lee which will in turn aid dilution. The adverse impact arising from the operational phase can therefore be anticipated as not significant.

## In-combination Effects

All works to be carried out as a result of the proposed S146B alteration have been screened for appropriate assessment. No works as part of the entire project will take place within a Natura 2000 Site. As no significant effects are anticipated as a result of the entirety of works to be undertaken, therefore it is considered that no in-combination effects will arise.

# In-Direct Effects

It is possible that any accidental spillage as a result of construction works to be undertaken could pollute waters in the Lower Cork Harbour area and in doing so could possibly affect the feeding grounds of birds in the Lower Harbour area. However normal site management and control measure will be implemented which include the mitigation measures contained in the original EIS. These measures are a condition of the Boards original approval. The potential for adverse in direct effects are therefore negligible.

# Conclusions in Relation to AA Screening Rushbrooke Hotel Pumping Station

I consider the conclusions reached by the applicant to be objective and reasonable and that the conclusions of the screening report undertaken by the applicant, namely that the Rushbrooke Hotel pumping station is unlikely to give rise to significant effects on Natura 2000 sites is reasonable. It is reasonable to conclude that on the basis of the information on the file, which I consider adequate in order to issue a screening determination, that the proposed development, individually or in combination with other plans or projects would not be likely to have a significant effect on European Site No. 00158 or 004030 or any other European site, in view of the site's Conservation Objectives, and a Stage 2 Appropriate Assessment (and submission of a NIS) is not therefore required.'

# 10.3 Dock Cottages Pumping Station

*Location:* Western side of Great Island adjacent to R624, to the immediate north of Cork Dockyard at Rushbrooke.

<u>Site:</u> Grassed Area of open space to the rear of Dock Cottages.

<u>Works to be undertaken</u>: Construction of a new pumping station (Ø1.5m x 3m), construction of a flow meter chamber, construction of a CSO chamber, screens and associated pipework.

# Nearest Natura 2000 Sites:

**Great Island SAC (Site Code 001058)** c. 3 km to the north. The qualifying interests associated with this SAC are

- (i) Mudflats and Sandflats not covered by seawater at low tide
- (ii) Atlantic Salt Meadows.

**Cork Harbour SPA (Site Code 004030)** c.1 km to the south west. The features of interest include:

- The little Grebe -
- Great Crested Grebe
- Cormorant
- Grey heron
- Shelduck
- Widgeon
- Lapwing
- Black Tailed Godwit
- Redshank
- Common Gull
- Lesser Black Backed Gull
- Wetland and Water Birds

- Teal Pintail
- Shoveler
- Red Breasted Merganser
- Oystercatcher
- Golden Plover
- Grey Plover
- Dunlin
- Curlew
- Black-headed Gull
- Common Gull
- Common Tern

Conservation Objectives associated with the Qualifying Interest/ Features of Interest:

(i) To avoid the deterioration of the habitats of the qualifying species of special conservation interest and

(iii) To ensure that the qualifying species and species of conservation interest are maintained in the long-term.

## Potential Adverse Impacts:

*Construction Phase:* The possible and potential adverse impacts which could arise during the construction phase include

(i) The potential for works to disturb wintering / breeding birds in the vicinity of the site.

(ii) Aquatic pollution arising from spills on site.

# **Operation Phase:**

(i) Possible pollution effects due to the operation of the CSO in the case of heavy rainfall or a power outage.

# Anticipated Likely Effects

It is not considered likely that the works to be undertaken will give rise to likely significant effects on the qualifying interests associated with either of the Natura 2000 sites during either the construction or operational phases on the grounds that:

(i) The works are sufficiently removed from the European Sites in question.

(ii) The Lower Cork Harbour Area is a relatively built-up area and is host to a variety of urban / industrial land uses including Cork Dockyard to the south. Therefore, birds frequenting the Lower Harbour Area would be accustomed to noise and urban related activity. Construction activity is unlikely to result in significant bird disturbance.

(iii) The construction works, which are most likely to have the greatest potential for disturbance, will be temporary and relatively short-term in nature.

(iv) Measures will be put in place to ensure best practice in terms of pollution control during construction works.

(v) Specifically, in relation to the Great Island Channel SAC, the works at Dock Cottages pumping station are geographically removed and are downstream of the SAC. This will ensure that the works in question will have no impact on the habitats which form the qualifying interests of the SAC.

(vi) In terms of the operational phase, this phase will generally have either a neutral or slightly positive impact on the Natura 2000 sites in the vicinity due to the improved water quality in the Lower Harbour Area. When discharge from the CSO pipe occurs the effluent concentration in the discharge will be heavily diluted and the diluted effluent will discharge into high volumes of receiving waters within the lower reaches of the River Lee which will in turn aid dilution. The adverse impact arising from the operational phase can therefore be anticipated as not significant.

#### In-combination Effects

All works to be carried out as a result of the proposed S146B alteration have been screened for appropriate assessment. No works as part of the entire project will take place within a Natura 2000 Site. As no significant effects are anticipated as a result of the entirety of works to be undertaken, it is reasonable to conclude that no in-combination effects will arise.

## In-Direct Effects

It is possible that any accidental spillage as a result of construction works to be undertaken could pollute waters in the Lower Cork Harbour area and in doing so could possibly affect the feeding grounds of birds in the Lower Harbour area. However normal site management and control measure will be implemented which include the mitigation measures contained in the original EIS. These measures are a condition of the Boards original approval and are integral to the development. The potential for adverse in direct effects are negligible.

Conclusions in Relation to AA Screening Dock Cottages Pumping Station I consider the conclusions reached by the applicant to be objective and reasonable and that the conclusions of the screening report undertaken by the applicant, namely that the Dock Cottages pumping station is unlikely to give rise to significant effects on Natura 2000 sites is reasonable.

It is therefore reasonable to conclude that on the basis of the information on the file, which I consider adequate in order to issue a screening determination, that the proposed development, individually or in combination with other plans or projects would not be likely to have a significant effect on European Site No. 00158 or 004030 or any other European site, in view of the site's Conservation Objectives, and a Stage 2 Appropriate Assessment (and submission of a NIS) is not therefore required.'

## 10.4 Cork Dockyard Pumping Station

<u>Location:</u> South-eastern part of existing dockyard at Rushbrooke at Great Island adjacent to R624 at the north-western environs of Cobh.

<u>Site:</u> Area of hardstanding approximately 80m back from dockside area, currently comprising of vacant reclaimed land which is unused at present.

<u>Works to be undertaken</u>: Construction of a new major pumping station below ground structure (18m x 25m x 8m deep), containing well wet well pumps, storm tank and pumps odour control units, air handling units, chemical dosing tanks etc., construction of an above ground structure (18m x 25m x 3.5m) with a 1.1 m high steel rail around the roof, construction of a flow meter chamber, construction of a CSO chamber, screens and associated pipework.

## Nearest Natura 2000 Sites:

**Great Island SAC (Site Code 001058)** c. 3.8 km to the north. The qualifying interests associated with this SAC are

- (i) Mudflats and Sandflats not covered by seawater at low tide
- (ii) Atlantic Salt Meadows.

**Cork Harbour SPA (Site Code 004030)** c.1 km to the south west. The features of interest include:

- The little Grebe
- Great Crested Grebe
- Cormorant
- Grey heron
- Shelduck
- Widgeon
- Lapwing

- Teal Pintail
- Shoveler
- Red Breasted Merganser
- Oystercatcher
- Golden Plover
- Grey Plover
- Dunlin

- Black Tailed Godwit
- Redshank
- Common Gull
- Lesser Black Backed Gull
- Wetland and Water Birds
- Conservation Objectives associated with the Qualifying Interest/ Features of Interest:

(i) To avoid the deterioration of the habitats of the qualifying species of special conservation interest and

(ii) To ensure that the qualifying species and species of conservation interest are maintained in the long-term.

# Potential Adverse Impacts:

*Construction Phase:* The possible and potential adverse impacts which could arise during the construction phase include

(i) The potential for works to disturb wintering / breeding birds in the vicinity of the site.

(ii) Aquatic pollution arising from spills on site.

# **Operation Phase:**

(i) Possible pollution effects due to the operation of the CSO in the case of heavy rainfall or a power outage.

# Anticipated Likely Effects

It is not considered likely that the works to be undertaken will give rise to likely significant effects on the qualifying interests associated with either of the Natura 2000 sites during either the construction or operational phases on the grounds that:

(i) The works are sufficiently removed from the European Sites in question.

(ii) The Lower Cork Harbour Area is a relatively built-up area and is host to a variety of urban / industrial land uses including Cork Dockyard to the

- Curlew
- Black-headed Gull
- Common Gull
- Common Tern

adjacent. Therefore, birds frequenting the Lower Harbour Area would be accustomed to noise and urban related activity.

(iii) The construction works, which are most likely to have the greatest potential for disturbance, will be temporary and relatively short-term in nature.

(iv) Measures will be put in place to ensure best practice in terms of pollution control during construction works.

(v) Specifically, in relation to the Great Island Channel SAC, the works at Dockyard pumping station are geographically removed and are downstream of the SAC. This will ensure that the works in question will have no impact on the habitats which form the qualifying interests of the SAC.

(vi) In terms of the operational phase, this phase will generally have either a neutral or slightly positive impact on the Natura 2000 sites in the vicinity due to the improved water quality in the Lower Harbour Area. When discharge from the CSO pipe occurs the effluent concentration in the discharge will be heavily diluted and the diluted effluent will discharge into high volumes of receiving waters within the lower reaches of the River Lee which will in turn aid dilution. The adverse impact arising from the operational phase can therefore be anticipated as not significant.

# In-combination Effects

All works to be carried out as a result of the proposed S146B alteration have been screened for appropriate assessment. No works as part of the entire project will take place within a Natura 2000 Site. As no significant effects are anticipated as a result of the entirety of works to be undertaken, it is reasonable to conclude therefore that no in-combination effects will arise.

# In-Direct Effects

It is possible that any accidental spillage as a result of construction works to be undertaken could pollute waters in the Lower Cork Harbour area and in doing so could possibly affect the feeding grounds of birds in the Lower Harbour area. However normal site management and control measure will be implemented which include the mitigation measures contained in the original EIS. These measures are a condition of the Boards original approval. The potential for adverse in direct effects are negligible.

# Conclusions in Relation to AA Screening on Cork Dockyard Pumping Station

I consider the conclusions reached by the applicant to be objective and reasonable and that the conclusions of the screening report undertaken by the applicant, namely that the Cork Dockyard pumping station is unlikely to give rise to significant effects on Natura 2000 sites is reasonable.

It is reasonable to conclude that on the basis of the information on the file, which I consider adequate in order to issue a screening determination, that the proposed development, individually or in combination with other plans or projects would not be likely to have a significant effect on European Site No. 00158 or 004030 or any other European site, in view of the site's Conservation Objectives, and a Stage 2 Appropriate Assessment (and submission of a NIS) is not therefore required.'

# 10.5 Station Car-Park Pumping Station

*Location:* Area of surface Car Park located to the east of the Cobh Rail Terminus

Site: Area of hardstanding currently used for commuter car parking

<u>Works to be undertaken</u>: Construction of a new pumping station (2m x 3m x 7m deep), construction of a flow meter chamber, construction of a CSO chamber, screens and associated pipework.

# Nearest Natura 2000 Sites:

**Great Island SAC (Site Code 001058)** c. 3.8 km to the north. The qualifying interests associated with this SAC are

- (i) Mudflats and Sandflats not covered by seawater at low tide
- (ii) Atlantic Salt Meadows.

**Cork Harbour SPA (Site Code 004030)** c.2 km to the south west. The features of interest include:

-	The little Grebe	- Teal Pintail
-	Great Crested Grebe	- Shoveler
-	Cormorant	- Red Breasted Merganser
-	Grey heron	- Oystercatcher
-	Shelduck	- Golden Plover
-	Widgeon	- Grey Plover
-	Lapwing	- Dunlin
-	Black Tailed Godwit	- Curlew
-	Redshank	- Black-headed Gull
-	Common Gull	- Common Gull
-	Lesser Black Backed Gull	- Common Tern
-	Wetland and Water Birds	

Conservation Objectives associated with the Qualifying Interest/ Features of Interest:

(i) To avoid the deterioration of the habitats of the qualifying species of special conservation interest and

(ii) To ensure that the qualifying species and species of conservation interest are maintained in the long-term.

## Potential Adverse Impacts:

*Construction Phase:* The possible and potential adverse impacts which could arise during the construction phase include

(i) The potential for works to disturb wintering / breeding birds in the vicinity of the site.

(ii) Aquatic pollution arising from spills on site.

## **Operation Phase:**

(i) Possible pollution effects due to the operation of the CSO in the case of heavy rainfall or a power outage.

#### Anticipated Likely Effects

It is not considered likely that the works to be undertaken will give rise to likely significant effects on the qualifying interests associated with either of the Natura 2000 sites during either the construction or operational phases on the grounds that:

(i) The works are sufficiently removed from the European Sites in question.

(ii) The Lower Cork Harbour Area is a relatively built-up area and is host to a variety of urban / industrial land uses including Cork Dockyard to the north-west. Therefore, birds frequenting the Lower Harbour Area would be accustomed to noise and urban related activity.

(iii) The construction works, which are most likely to have the greatest potential for disturbance, will be temporary and relatively short-term in nature.

(iv) Measures will be put in place to ensure best practice in terms of pollution control during construction works.

(v) Specifically, in relation to the Great Island Channel SAC, the works at car park pumping station are geographically removed and are downstream of the SAC. This will ensure that the works in question will have no impact on the habitats which form the qualifying interests of the SAC.

(vi) In terms of the operational phase, this phase will generally have either a neutral or slightly positive impact on the Natura 2000 sites in the vicinity due to the improved water quality in the Lower Harbour Area. When discharge from the CSO pipe occurs, the effluent concentration in the discharge will be heavily diluted and the diluted effluent will discharge into high volumes of receiving waters within the lower reaches of the River Lee which will in turn aid dilution. The adverse impact arising from the operational phase can therefore be anticipated as not significant.

#### In-combination Effects

All works to be carried out as a result of the proposed S146B alteration have been screened for appropriate assessment. No works as part of the entire project will take place within a Natura 2000 Site. As no significant effects are anticipated as a result of the entirety of works to be undertaken, it is reasonable to conclude that no in-combination effects will arise.

## In-Direct Effects

It is possible that any accidental spillage as a result of construction works to be undertaken could pollute waters in the Lower Cork Harbour area and in doing so could possibly affect the feeding grounds of birds in the Lower Harbour area. However normal site management and control measure will be implemented which include the mitigation measures contained in the original EIS. These measures are a condition of the Boards original approval. The potential for adverse in direct effects are negligible.

*Conclusions in Relation to AA Screening Station Car Park Pumping Station* I consider the conclusions reached by the applicant to be objective and reasonable and that the conclusions of the screening report undertaken by the applicant, namely that the Station Car Park pumping station is unlikely to give rise to significant effects on Natura 2000 sites is reasonable. It is reasonable to conclude that on the basis of the information on the file, which I consider adequate in order to issue a screening determination, that the proposed development, individually or in combination with other plans or projects would not be likely to have a significant effect on European Site No. 00158 or 004030 or any other European site, in view of the site's Conservation Objectives, and a Stage 2 Appropriate Assessment (and submission of a NIS) is not therefore required.'

#### 10.6 **Old Town Hall Pumping Station**

Location: Lands adjacent to the shoreline to the immediate east of Cobh Town Centre

<u>Site:</u> Area of hardstanding currently used as a surface car park.

Works to be undertaken: Construction of a new pumping station below ground (28m x 6m x 8m deep), storm tank and pumps odour control units, chemical dosing kiosks etc., construction of an above ground control room and ESB substation (9.7m x 4m, x 3m) construction of a flow meter chamber, construction of a CSO chamber, screens and associated pipework.

#### Nearest Natura 2000 Sites:

Great Island SAC (Site Code 001058) c. 3 km to the north. The qualifying interests associated with this SAC are

- (i) Mudflats and Sandflats not covered by seawater at low tide
- (ii) Atlantic Salt Meadows.

Cork Harbour SPA (Site Code 004030) c.2.8 km to the south west. The features of interest include:

- The little Grebe
- Great Crested Grebe
- Cormorant
- Grey heron -
- Shelduck
- Widgeon
- Lapwing -
- Black Tailed Godwit
- Redshank
- Common Gull

- Teal Pintail
- Shoveler
  - Red Breasted Merganser
  - Oystercatcher
  - Golden Plover
  - Grey Plover
  - Dunlin
  - Curlew
  - Black-headed Gull
  - Common Gull

- Lesser Black Backed Gull -

- Common Tern

- Wetland and Water Birds

Conservation Objectives associated with the Qualifying Interest/ Features of Interest:

(i) To avoid the deterioration of the habitats of the qualifying species of special conservation interest and

(ii) To ensure that the qualifying species and species of conservation interest are maintained in the long-term.

# Potential Adverse Impacts:

*Construction Phase:* The possible and potential adverse impacts which could arise during the construction phase include:

- The potential for works to disturb wintering / breeding birds in the vicinity of the site.

- Aquatic pollution arising from spills on site.

# Operation Phase:

- Possible pollution effects due to the operation of the CSO in the case of heavy rainfall or a power outage.

# Anticipated Likely Effects

It is not considered likely that the works to be undertaken will give rise to likely significant effects on the qualifying interests associated with either of the Natura 2000 sites during either the construction or operational phases on the grounds that:

(i) The works are sufficiently removed from the European Sites in question.

(ii) The Lower Cork Harbour Area is a relatively built-up area and is host to a variety of urban / industrial land uses including Cork Dockyard to the west. Therefore, birds frequenting the Lower Harbour Area would be accustomed to noise and urban related activity. (iii) The construction works, which are most likely to have the greatest potential for disturbance, will be temporary and relatively short-term in nature.

(iv) Measures will be put in place to ensure best practice in terms of pollution control during construction works.

(v) Specifically, in relation to the Great Island Channel SAC, the works at the station car park pumping station are geographically removed and are downstream of the SAC. This will ensure that the works in question will have no impact on the habitats which form the qualifying interests of the SAC.

(vi) In terms of the operational phase, this phase will generally have a positive impact on the Natura 2000 sites in the vicinity due to the improved water quality in the Lower Harbour Area. Untreated effluent which is continuously released along the Cobh shoreline will be diverted to Shanbally WWTP for treatment. When discharge from the CSO pipe occurs, the effluent concentration in the discharge will be heavily diluted and the diluted effluent will discharge into high volumes of receiving waters within the lower reaches of the River Lee which will in turn aid dilution. The adverse impact arising from the operational phase can therefore be anticipated as not significant.

## In-combination Effects

All works to be carried out as a result of the proposed S146B alteration have been screened for appropriate assessment. No works as part of the entire project will take place within a Natura 2000 Site. As no significant effects are anticipated as a result of the entirety of works to be undertaken, no in-combination effects will arise.

## In-Direct Effects

It is possible that any accidental spillage as a result of construction works to be undertaken could pollute waters in the Lower Cork Harbour area and in doing so could possibly affect the feeding grounds of birds in the Lower Harbour area. However normal site management and control measure will be implemented which include the mitigation measures contained in the original EIS. These measures are a condition of the Boards original approval. The potential for adverse in direct effects are negligible.

Conclusions in Relation to AA Screening Old Town Hall Pumping Station I consider the conclusions reached by the applicant to be objective and reasonable and that the conclusions of the screening report undertaken by the applicant, namely that the Old Town pumping station is unlikely to give rise to significant effects on Natura 2000 sites is reasonable.

It is therefore reasonable to conclude that on the basis of the information on the file, which I consider adequate in order to issue a screening determination, that the proposed development, individually or in combination with other plans or projects would not be likely to have a significant effect on European Site No. 00158 or 004030 or any other European site, in view of the site's Conservation Objectives, and a Stage 2 Appropriate Assessment (and submission of a NIS) is not therefore required.'

## 10.7 Cobh Collection Network

*Location:* Pipe collection network within Cobh urban area

<u>Works to be undertaken</u>: Replacement and upgrading of pipe collection network to reduce infiltration and reduce the volume of storm water in the system.

## Nearest Natura 2000 Sites:

**Great Island SAC (Site Code 001058)** c. 2 km to the north (at closest point). The qualifying interests associated with this SAC are:

- (i) Mudflats and Sandflats not covered by seawater at low tide
- (ii) Atlantic Salt Meadows.

Cork Harbour SPA (Site Code 004030) c 400m at closest to the south west. The features of interest include:

- The little Grebe - Teal Pintail Great Crested Grebe
- Cormorant
- Grey heron -
- Shelduck
- Widgeon
- Lapwing -
- Black Tailed Godwit
- Redshank
- Common Gull
- Lesser Black Backed Gull
- Wetland and Water Birds

- Shoveler
  - Red Breasted Merganser
  - Oystercatcher
  - Golden Plover
  - Grey Plover
  - Dunlin
  - Curlew
  - Black-headed Gull
  - Common Gull
  - Common Tern

Conservation Objectives associated with the Qualifying Interest/ Features of Interest:

To avoid the deterioration of the habitats of the qualifying species of special conservation interest and

To ensure that the qualifying species and species of conservation interest are maintained in the long-term.

## Potential Adverse Impacts:

Construction Phase: The possible and potential adverse impacts which could arise during the construction phase include:

The potential for works to disturb wintering / breeding birds in the vicinity of the site.

Aquatic pollution arising from spills on site.

# **Operation Phase:**

Possible pollution effects due to the operation of the CSO in the case of heavy rainfall or a power outage.

# Anticipated Likely Effects

It is not considered likely that the works to be undertaken will give rise to likely significant impacts on the qualifying interests associated with either of the Natura 2000 sites during either the construction or operational phases on the grounds that:

(i) The works are sufficiently removed from the European Sites in question.

(ii) The Lower Cork Harbour Area is a relatively built-up area and is host to a variety of urban / industrial land uses including Cork Dockyard to the west. Therefore, birds frequenting the Lower Harbour Area would be accustomed to noise and urban related activity.

(iii) The construction works, which are most likely to have the greatest potential for disturbance, will be temporary and relatively short-term in nature.

(iv) Measures will be put in place to ensure best practice in terms of pollution control during construction works.

(v) Specifically, in relation to the Great Island Channel SAC, the works at Cobh are geographically removed and are downstream of the SAC. This will ensure that the works in question will have no impact on the habitats which form the qualifying interests of the SAC.

(vi) In terms of the operational phase, this phase will generally have a positive impact on the Natura 2000 sites in the vicinity due to the improved water quality in the Lower Harbour Area. Untreated effluent which is continuously released along the Cobh shoreline will be diverted to Shanbally WWTP for treatment. When discharge from the CSO pipe occurs, the effluent concentration in the discharge will be heavily diluted and the diluted effluent will discharge into high volumes of receiving waters within the lower reaches of the River Lee which will in turn aid dilution. The adverse impact arising from the operational phase can therefore be anticipated as not significant.

#### In-combination Effects

All works to be carried out as a result of the proposed S146B alteration have been screened for appropriate assessment. No works as part of the entire project will take place within a Natura 2000 Site. As no significant effects are anticipated as a result of the entirety of works to be undertaken, no in-combination effects will arise.

## In-Direct Effects

It is possible that any accidental spillage as a result of construction works to be undertaken could pollute waters in the Lower Cork Harbour area and in doing so could possibly affect the feeding grounds of birds in the Lower Harbour area. However normal site management and control measure will be implemented which include the mitigation measures contained in the original EIS. These measures are a condition of the Boards original approval. The potential for adverse in direct effects are negligible.

Conclusions in Relation to AA Screening on Cobh Pipeline Network I consider the conclusions reached by the applicant to be objective and reasonable and that the conclusions of the screening report undertaken by the applicant, namely that the improved Cobh collection network is unlikely to give rise to significant effects on Natura 2000.

It is therefore reasonable to conclude that on the basis of the information on the file, which I consider adequate in order to issue a screening determination, that the proposed development, individually or in combination with other plans or projects would not be likely to have a significant effect on European Site No. 00158 or 004030 or any other European site, in view of the site's Conservation Objectives, and a Stage 2 Appropriate Assessment (and submission of a NIS) on any of the elements of the proposal listed above is not therefore required. The project that has the benefit of permission together with the elements that have been assessed in this S146B request would not affect the integrity of any of the European Sites in question. The potential impacts on the of the above works also have to be assessed in combination with the works proposed for which an NIS has been prepared, namely the marine crossing and this is undertaken below.

# 10.8 Marine Pipeline Estuary Crossing

The Marine pipeline crossing between the proposed new pumping station at Cork Dockyard and the Sand Quay was the subject of a full Natura Impact Statement on the grounds that the Stage 1 screening exercise undertaken concluded that, based on the precautionary principle, the potential for oil/fuel spillages and inadvertent returns of bentonite during the borehole construction into the aquatic environment necessitated a Stage 2 appropriate assessment.

# Description of the Works to be Undertaken:

The project will involve the crossing of the estuary between Rushbrooke and Monkstown by means of Horizontal Directional Drilling (HDD). It is proposed to drill from the launch site at Cork Dockyard to Monkstown within the bedrock of the estuary. The pipe string will be attached to the drill head and then will be pulled back through the drill bore. An interception manhole will be placed on the Monkstown side and effluent will be conveyed by gravity to the Monkstown pumping station. None of the works undertaken are to take place within a Natura 2000 site.

## Nearest Natura 2000 Sites:

**Great Island SAC (Site Code 001058)** c. 3.8 km to the north (at closest point). The qualifying interests associated with this SAC are:

- (iii) Mudflats and Sandflats not covered by seawater at low tide
- (iv) Atlantic Salt Meadows.

Cork Harbour SPA (Site Code 004030) c 700m at closest to the south west. The features of interest include:

- The little Grebe - Teal Pintail Great Crested Grebe
- Cormorant
- Grey heron -
- Shelduck
- Widgeon
- Lapwing -
- Black Tailed Godwit
- Redshank
- Common Gull
- Lesser Black Backed Gull
- Wetland and Water Birds

- Shoveler
  - Red Breasted Merganser
  - Oystercatcher
  - Golden Plover
  - Grey Plover
  - Dunlin
  - Curlew
  - Black-headed Gull
  - Common Gull
  - Common Tern

Conservation Objectives associated with the Qualifying Interest/ Features of Interest:

To avoid the deterioration of the habitats of the qualifying species of special conservation interest and

To ensure that the qualifying species and species of conservation interest are maintained in the long-term.

## Potential Adverse Impacts:

Construction Phase: The possible and potential adverse impacts which could arise during the construction phase include:

The potential for works to disturb wintering / breeding birds in the vicinity of the site. Bird surveys carried out in December 2015 indicate that the number of waders and winter fowl in the area of the proposed works are low.

- Disturbance to breeding species. \_
- Potential surface run-off from the HDD launch and reception sites.

- Water quality impacts from drilling activities, through bentonite clay returns during the drilling process or fuel spillages from the rig operations. These substances are toxic to fish when released in large quantities and could also adversely affect bird populations in the area. Bentonite clay release in sufficient quantities in the aquatic environment can result in oxygen depletion and the suffocation of marine life.

# **Operation Phase:**

- Possible pollution effects due pipeline rupture.

# Anticipated Likely Effects

It is not considered likely that the works to be undertaken will give rise to likely significant effects on the qualifying interests associated with either of the Natura 2000 sites during either the construction or operational phases on the grounds that:

- i. The works to be undertaken are sufficiently removed from the European Sites in question.
- ii. The works are to take place within the bedrock, thereby separating the works from the benthic and aquatic environment above ground.
- iii. There is no evidence that the site in which the pipeline is to be located, is important for feeding waders at low tide. Therefore, the impact is likely to be low on this species type.
- iv. The Lower Cork Harbour Area is a relatively built-up area and is host to a variety of urban / industrial land uses including Cork Dockyard to the west. Therefore, birds frequenting the Lower Harbour Area would be accustomed to noise and urban related activity.
- v. The construction works, which are most likely to have the greatest potential for disturbance, will be temporary and relatively short-term in nature.
- vi. Measures will be put in place to ensure best practice in terms of pollution control during construction works. A large number of mitigation

measures are proposed to minimise the potential effects from pipeline construction these include:

a. - Implementing all the measures set out in the 2008 EIS.

 b. – The development of a Construction Environmental Management Plan (CEMP).

c. – The employment of a suitably qualified ecology to oversee works undertaken.

d. – All method Statements prepared by the contrast will be submitted to the NPWS.

e. – Detailed monitoring and checklist will be prepared.

f. – All rig drill positioning and pipeline pull areas will be engineered so that the fall is away from the receiving waters.

g. – Drilling fluids will be returned for cleaning and reuse.

h. - Spent drilling fluids will be retained in a bunded area.

i. - Emergency response plans will be prepared and implemented.

j. – Fuelling and lubrication equipment will not be placed within 10m of receiving waters.

k. Any spillage and contaminated soil will be immediately removed from the site.

I. – Pipeline design and location deep within the bedrock will mitigate against inadvertent bentonite returns during the drilling process.

m. - Bentonite will be continuously monitored by the systems operator.

vii. In terms of the operational phase the pipe will be located within the bedrock and as such will be separated from the benthic and marine environment above. As such the pipe does not represent a risk to the during the operational phase. The adverse impact arising from the operational phase can therefore be anticipated as not significant.

# In-combination Effects

All works to be carried out as a result of the proposed S146B alteration have been screened for appropriate assessment. No works as part of the entire project will take place within a Natura 2000 Site. As no significant effects are anticipated as a result of the entirety of works to be undertaken, no in-combination effects will arise.

# In-Direct Effects

It is possible that any accidental spillage as a result of construction works on the pipeline to be undertaken could pollute waters in the Lower Cork Harbour area and in doing so could possibly affect the feeding grounds of birds in the Lower Harbour area. However normal site management and control measure (including the mitigation measures set out in a – m above) will be implemented which include the mitigation measures contained in the original EIS. These measures are a condition of the Boards original approval. The potential for adverse in direct effects are negligible.

# Overall Conclusions in Respect of Appropriate Assessment for the Marine Pipeline Crossing

I consider it reasonable to conclude on the basis of the information on the file, which I consider adequate in order to carry out a Stage 2 Appropriate Assessment, that the proposed development, individually or in combination with other plans or projects including the projects elements as part of this request which were subject to AA screening above, would not adversely affect the integrity of the European sites in particular site code 001058 and 004030, or any other European sites, in view of the site's Conservation Objectives.

# RECOMMENDATION

9.1 I recommend that the Board makes the proposed alteration to the terms of the approval granted under 04. YA0005 in the manner and for the reasons and considerations set out below.

**PROPOSED ALTERATION:** Alteration to Cork Lower Harbour Sewerage Scheme comprising:

- (a) The relocation of the Carrigaloe major pumping station to the Cork Dockyard at Rushbrooke.
- (b) The relocation of the marine pipeline route to a more southerly location traversing the Lower Cork Harbour from Cork Dockyard to Monkstown.
- (c) The replacement of the Carrigaloe major pumping station adjacent to the R624 with a minor pumping station.
- (d) The relocation of the West Beach pumping Station to the Old Town Hall
- (e) Changes to the number and location of minor pumping stations including:
  - a. Addition of 1 minor pumping station at the former Rushbrooke Hotel
  - Addition of 1 minor pumping station to replace the proposed major pumping station at Carrigaloe
  - c. The amalgamation of 2 pumping stations into one at Station Car Park
  - d. A slight relocation of the proposed pumping station at Dock Cottages
- (f) Alterations to the routing of some of the sewage pipelines within Cobh Town Centre.
- (g) The decommissioning of 5 no. pumping stations and a bio-cycle unit and the North Cobh WWTP.

**WHEREAS** the Board made a decision to grant permission for the parent scheme under Reg. Ref. 04 YA0005, subject to conditions, for the above-mentioned development by order dated the 24<sup>th</sup> day of June, 2009,

**AND WHEREAS** the Board has received a request to alter the terms of the development, the subject of the permission,

**AND WHEREAS** the Board considered that the proposed alterations would result in a material alteration to the terms of the development, the subject of the permission,

**AND WHEREAS** having regard to the nature of the issues involved, the Board decided to invoke the provisions of section 146B(8)(a) of the Planning and Development Act, 2000, as amended, to invite submissions or observations in relation to the matter from members of the public,

AND WHEREAS having considered all of the submissions/observations and documents on file, and the Inspector's report the Board, considered that the making of the proposed alterations would not be likely to have significant effects on any European Site or on the environment and specifically in the case of the proposed Marine Pipeline crossing for which an NIS was prepared, the proposed development will not adversely affect the integrity of European Sites (specifically site code 001058 or site code 004030), or any other European Site in view of the sites conservation objectives.

**NOW THEREFORE** in accordance with section 146B(3)(a) of the Planning and Development Act, 2000, as amended, the Board hereby alters the above-mentioned decision so that the permitted development shall be otherwise altered in accordance with the plans and particulars received by An Bord Pleanála on the 29<sup>th</sup> day of September, 2016.

# **REASONS AND CONSIDERATIONS**

In coming to its decision in relation to the proposed alteration, the Board had regard to the following:

- (a) the nature of the development applied for under PL 04. YA0005, which was accompanied by an environmental impact statement,
- (b) the purpose of the development permitted under PL 04. YA0005, which was principally to serve the Cork lower harbour area,
- (c) the nature and limited extent of the alterations sought,

- (d) the environmental impact assessment already undertaken by the Board in respect of the development under PL 04. YA0005, whereby the Board concluded that the development would be acceptable,
- (e) The detailed reports submitted with the current application under Section 146B including the Environmental Assessment Review
- (f) The Appropriate Assessment Screening Reports and the Natura Impact Statement submitted for the proposed Marine Pipeline Crossing,
- (g) the submissions on file, including the submissions received in response to the Board's request, and the reports of the Inspector, and
- (g) the screening for appropriate assessment for the alterations sought and the and the appropriate assessment for the marine crossing carried out by the Inspector, the conclusions of which the Board concurred with.
- (h) The permitted scheme already approved by the Board under Reg Ref PL04 YM0001

It is considered that the making of the proposed alterations would be in accordance with the wastewater management policies of the State and its obligations under European legislation, and that the proposed alterations would not be likely to have significant effects on the environment or on any European site. The proposed alterations would, therefore, be in accordance with the proper planning and sustainable development of the area.

Paul Caprani, Senior Planning Inspector. 15<sup>th</sup> February, 2017.