



**GREATER DUBLIN DRAINAGE PROJECT:**

**PUBLIC CONSULTATION REPORT ON THE ISSUES TO BE  
CONSIDERED IN THE ENVIRONMENTAL IMPACT  
STATEMENT**

**DECEMBER 2013**

**RPS**

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# 1 INTRODUCTION

## 1.1 PROJECT BACKGROUND

The Greater Dublin Drainage initiative aims to provide strategic drainage infrastructure required for the Greater Dublin Area (GDA) to continue to develop. It is also required to protect the environment and ensure compliance with EU and national legislative requirements. The initiative involves the provision of a new wastewater treatment plant, a marine outfall and associated drainage network.

The Greater Dublin Drainage project is vital in order to facilitate employment, social progress and economic growth in the Greater Dublin Region, hand-in-hand with the improvement and protection of the environment. One of the key elements of infrastructure needed to facilitate jobs and other developments such as schools, hospitals and housing, is to increase the Greater Dublin Region's wastewater treatment capacity. From extensive examination over many years we know that we will not have enough drainage and wastewater treatment facilities by 2020 if we do not do something now. We cannot ignore our urgent need for more wastewater treatment capacity.

Greater Dublin Drainage has its origins in the key findings of the Greater Dublin Strategic Drainage Study (GSDSDS) Final Strategy Report, 2005. This study took a high level view of the wastewater drainage and treatment requirements of the Greater Dublin Area and its key findings were the subject of a Strategic Environmental Assessment (SEA), 2005. These documents were prepared on behalf of the seven local authorities that form the GDA to guide the future provision of wastewater infrastructure in the GDA. A key recommendation of the GSDSDS Final Strategy as amended by its SEA was for a single regional wastewater treatment plant to be located in North County Dublin with the treated effluent to be discharged to the marine environment of the Irish Sea.

The Greater Dublin Drainage project is being led by Fingal County Council, on behalf of Dublin City Council, Dún Laoghaire-Rathdown County Council, and South Dublin County Council, in partnership with Kildare and Meath County Councils. While Wicklow County Council is part of the GDA it is not intended that the Greater Dublin Drainage project will take and treat wastewater from Wicklow County Council.



Consultation is an essential element of the development of any infrastructure project and Greater Dublin Drainage is committed to ensuring that an accessible, meaningful, and accountable engagement process is undertaken with members of the public throughout the project's development. A number of non-statutory public consultation opportunities have occurred throughout the development of this project so far, as shown in Figure 1-1 and described in Section 1.2.

This report details the activities and feedback associated with the fourth phase of non-statutory public consultation that focused on issues to be considered in the Environmental Impact Statement (EIS), which took place following publication of the Alternative Sites Assessment and Route Selection (Phase 4): Preferred Sites and Routes Report, June 2013.

The Greater Dublin Drainage Project Team are grateful to the parties and persons who participated in providing submissions in writing, via the project information service or by attending one of the four open days held during this phase of consultation. These submissions will be considered in full by the Project Team.

For clarity and ease of reference, this public consultation is referred to as the ASA Phase 4 Consultation in the remainder of this report. This public consultation stage is marked as "K" on the Project Road Map in Figure 1-1.

Consultation will also take place following submittal of the planning application to An Bord Pleanála. This will provide an additional opportunity for interested stakeholders and members of the public to input to the proposed project. This consultation stage is marked as "o" on the Project Road Map in Figure 1-1.

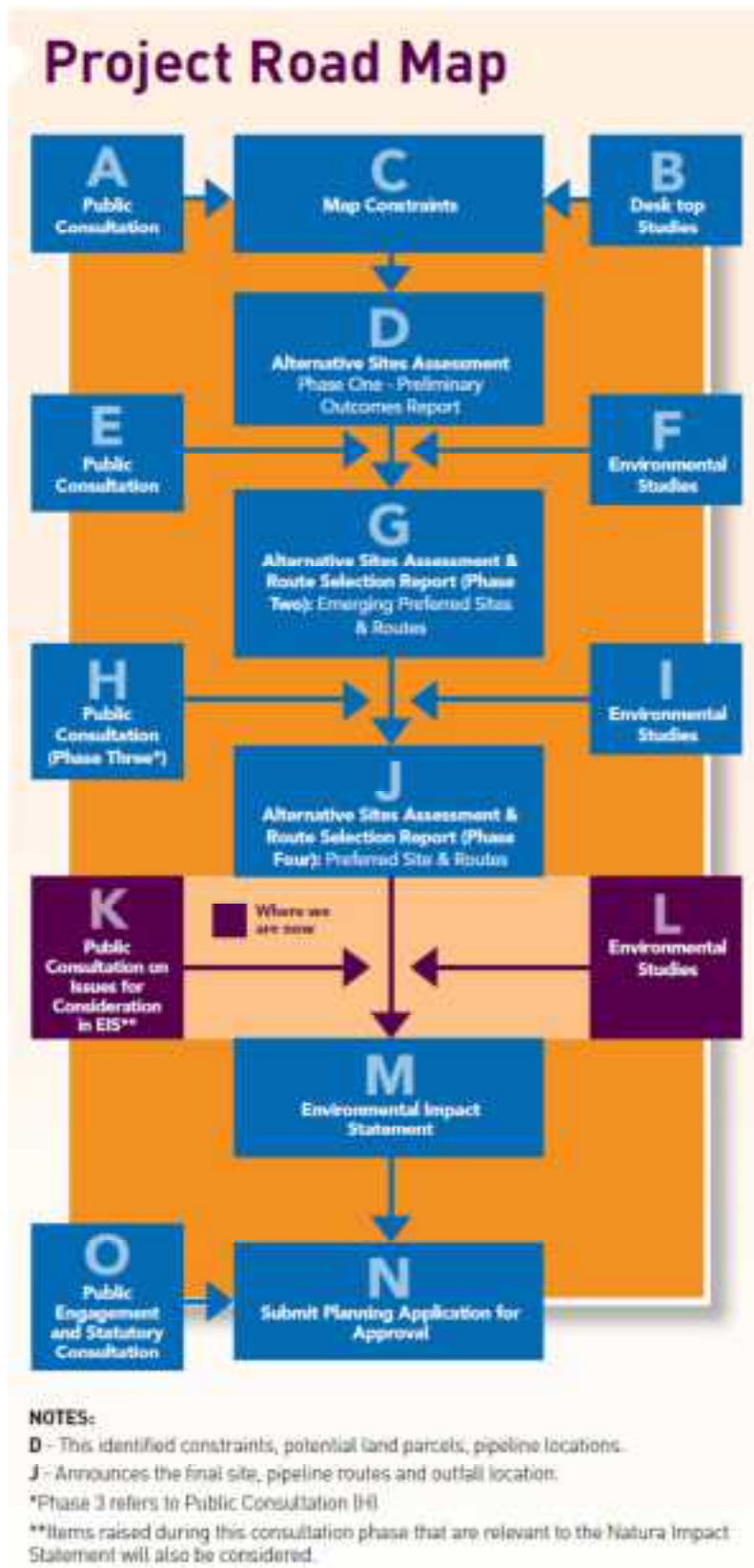


Figure 1-1 Project Road Map Published as part of ASA Phase 4 Consultation

## 1.2 PUBLIC PARTICIPATION TO DATE

In compliance with the Aarhus Convention<sup>1</sup>, public participation has been an integral part of this project since its commencement in 2011. Four phases of public consultation have been carried out to date as detailed below.

### 1.2.1 Public Consultation 1: Constraints Consultation (May - June 2011)



The first stage of public consultation on the Greater Dublin Drainage project took place over four weeks from 30<sup>th</sup> May 2011 to 24<sup>th</sup> June 2011. Members of the public were asked to participate by identifying any constraints<sup>2</sup> that exist within the broad study area. These constraints were considered in addition to previously identified features in the landscape that might make an area unsuitable as a location for the project.

**Figure 1-2: Study Area**

At the end of the four-week consultation period, all submissions were reviewed in their entirety by the Project Team in order to identify the key issues. The main issues that were identified included protected areas, visual impact, health, ecology and the environment amongst others. The full copy of the *Constraints Consultation Report* is available on the Greater Dublin Drainage website at <http://www.greaterdublindrainage.com/project-reports/>.

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<sup>1</sup> Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, usually known as the Aarhus Convention (UNECE 1998).

<sup>2</sup> Constraints are those features or designations (such as protected areas), in the landscape that might make an area unsuitable as a location for the project.

### 1.2.2 Public Consultation 2: Alternative Site Assessment Phase 1 Preliminary Screening (October - November 2011)



The second stage of public consultation took place over eight weeks from October 2011 to December 2011. This consultation provided the public with an opportunity to participate and provide feedback on nine specific locations identified for the plant, with associated pipeline corridors and two marine outfall locations. These nine locations were identified in the *Alternative Site Assessment Phase One - Preliminary*

*Screening Outcomes Report*, published in October 2011.

#### Figure 1-3: Nine land parcels

This stage of public consultation was a very important part of the development of the project, as it offered a second opportunity for early engagement with members of the public and interested groups and organisations. It also provided the opportunity for members of the public to participate and share their knowledge of the area and local information with the Project Team. It helped the Project Team to further refine a number of emerging preferred sites for the wastewater treatment plant (WwTP).

At the end of the eight-week consultation period, all submissions were reviewed in their entirety by the Project Team in order to identify the key issues. The main issues that were identified by stakeholders and were then considered by the Project Team as the project moved towards ASA Phase 2, included archaeology and cultural heritage, community impacts, health, construction impacts, ecology, need, odour, risk assessment, treatment levels and water quality, amongst others.

The full copy of the Public Consultation Report on 'Alternative Site Assessment Phase One: Preliminary Screening Outcomes Report October 2011' is available on the Greater Dublin Drainage website at <http://www.greaterdublindrainage.com/project-reports/>.

### 1.2.3 Public Consultation 3: Alternative Site Assessment Phase 2 Emerging Preferred Sites and Routes (May – July 2012)



The third stage of consultation took place over eight weeks from 14<sup>th</sup> May 2012 until 6<sup>th</sup> July 2012 following the publication of the *Alternative Sites Assessment and Route Selection (Phase Two) – Emerging Preferred Sites and Routes Report*.

This report identified Annsbrook, Clonshaugh (Clonshaugh)<sup>3</sup> and Newtowncorduff as the three emerging preferred site options. All feedback received during this consultation was reviewed and the relevant issues were used in the selection of a preferred site option.

Figure 1-4: Three emerging preferred site options

<sup>3</sup> This report refers to the area as 'Clonshaugh' which reflects how the Ordnance Survey of Ireland and Google Maps refer to the area. This is in reference to the original townland of Clonshaugh. However, the area is often locally referred to as 'Clonshaugh'.

Some of the main issues identified during this third phase of public consultation included agriculture and horticulture, community burden, consultation, ecology, hydrology, need, odour, proximity to sensitive receptors, risk, health, tourism and treatment, amongst others.

Summaries of issues and concerns expressed by the public were summarised and responded to in the consultation reports and technical reports which are accessible on the project website <http://www.greaterdublindrainage.com/project-reports/>.

## 2 ASA PHASE 4 PUBLIC CONSULTATION (JUNE - AUGUST 2013)

### 2.1 INTRODUCTION



In June 2013, The Greater Dublin Drainage (GDD) Project Team published a report, entitled *Alternative Sites Assessment and Route Selection (Phase Four) - Preferred Sites and Routes Report* and commenced the fourth stage of public consultation. This report identified that the preferred solution for the future development of wastewater treatment capacity in the Greater Dublin Area comprises a 26km pipeline, a wastewater treatment plant at Clonsagh (Clonshaugh) and an outfall pipe located 6km out to sea from Baldoye Bay. The report outlines the process carried out to identify the preferred site option (i.e. WwTP site, associated marine outfall, orbital sewers and outfall pipeline).

**Figure 1-5: Preferred Site Option**

The ASA Phase 4 process collectively assessed each component (i.e. WwTP site, associated marine outfall location, orbital sewers and outfall pipeline) of the three emerging preferred site options (Annsbrook,

Clonshagh and Newtowncorduff). The objective of this technical assessment was to identify the most and least favourable constraints in relation to the findings from ASA Phase 2, take consideration of submissions received during Public Consultation 3 and take consideration of findings of further investigative studies undertaken by over thirteen different experts across different disciplines during ASA Phase 4.

Following publication of this report, the fourth phase of public consultation commenced on 10<sup>th</sup> June 2013 and ran for eight weeks until 2<sup>nd</sup> August 2013. This consultation provided the opportunity for members of the public and interested stakeholders to participate and have their say on informing the application for planning approval for the Greater Dublin Drainage project. The consultation therefore focused on relevant issues to be included in the Environmental Impact Statement (EIS), which will be submitted as part of the planning approval documentation to An Bord Pleanála in 2014.

The purpose of this Consultation Report is to document stakeholder feedback from the fourth phase of public consultation and to assist the wider Project Team with the review and consideration of relevant issues raised by stakeholders. This feedback along with a technical and environmental assessment will feed into the EIS which will form part of the application for planning approval for the project.

## **2.2 TERMS OF REFERENCE FOR CONSULATION PHASE 4**

As part of the eight week public consultation (10<sup>th</sup> of June - 2<sup>nd</sup> August 2013), the Project Team asked stakeholders about the following:



1. Under the key elements listed below are there any issues that should be taken into consideration in preparing the Environmental Impact Statement (EIS) on the preferred site option?
2. How should these issues be addressed in the EIS?
3. How would you like to be communicated with as the project progresses towards planning approval?
4. Is there any other information you believe is relevant to the development of the preferred site option?

The key elements to be considered in the EIS are:

- Human Beings and Material Assets
- Flora and Fauna
- Soils
- Water
- Air, Odour, Climate
- Landscape and Visual Impact
- Noise and Vibration
- Traffic management and Access Routes
- Archaeological, Architectural and Cultural Heritage
- Construction Methodologies
- Planning Policy

### **2.3 CONSULTATION GUIDELINES**

The GDD project team aimed to ensure that all engagement with stakeholders:

- Was open and transparent
- Demonstrated what stage the project was at
- Ensured stakeholders were aware of the issues that were open for consultation during this phase as per the terms of reference, and
- Detailed how public participation would be facilitated and how stakeholder feedback would be managed and utilised.

## 2.4 COMMUNICATION ACTIVITIES

A range of communication activities were arranged and used to facilitate public participation throughout this phase of communications. Such activities are described in the following section.

### 2.4.1 Open Days

In order to provide all interested parties with an opportunity to obtain information about the project and meet with the Project Team, four open days were planned and held during this eight week consultation period, as detailed in Table 2-1.

**Table 2-1 Open Day Venues, Dates and Times**

Venue	Date and Time
County Hall, Swords	Wednesday, 26 <sup>th</sup> June 2013, 2.00pm to 8.00pm
County Hall, Swords	Saturday, 29 <sup>th</sup> June 2013, 11.00am to 4.00pm
County Hall, Swords	Wednesday, 3 <sup>rd</sup> July 2013, 2.00pm to 8.00pm
Hilton Dublin Airport Hotel, Northern Cross, Malahide Road, Dublin 17	Tuesday, 16 <sup>th</sup> July 2013, 3.00pm to 8.00pm

At each of the open days, members of the Project Team were available to engage with members of the public, listen to stakeholders' views and answer questions that arose. Project information was made available at each open day, such as the *Alternative Sites Assessment and Route Selection (Phase Four) -Preferred Sites and Routes Report*, project brochures, project factsheets, maps showing the preferred site option, large displays providing details of the preferred site option, information on public consultation, project timeline, project need, etc. Please refer to Appendices A, B and D for further detail.



**Figure 2-1 Public Consultation June and July 2013**

In addition to formal submissions received at the open days, the Project Team endeavoured to capture the views and feedback provided by stakeholders during these events as far as possible. A wide range of questions were asked by stakeholders at consultation events. The nature of these questions, while not formal submissions, also raised a number of additional issues that have been included in this report.

It is important to note that stakeholders can make submissions or provide feedback at any stage in the project. Submissions received outside of the periods of formal consultation are reviewed and considered, even if they are not included in a formal consultation report.

### 2.4.2 Information Service

In addition to the consultation phases discussed, the Greater Dublin Drainage team is committed to facilitating public participation throughout the project development. Since the project began in 2011, members of the public and interested stakeholders had and continue to have the opportunity to contact the Communications Team by phone, online or in writing, details of which are provided below.

- Lo-call phone line: 1890.44.55.67 (open Monday to Friday, 9:00 am - 1:00pm and 2:00pm - 5:00pm)
- Email service: [info@greaterdublindrainage.ie](mailto:info@greaterdublindrainage.ie)
- Postal service: Greater Dublin Drainage Project Manager, c/o RPS Group, West Pier Business Campus, Dún Laoghaire, Co. Dublin, Ireland

This information service is operated both within and outside times of formal consultation, since the project began in 2011 to date.

Interested parties were invited to participate in this phase of public consultation via the project information service by providing feedback or requesting information about the project. The service was also used to invite interested parties to attend one of the four open days, respond to any stakeholder queries and to arrange meetings for individuals, groups and elected representatives.

### 2.4.3 Stakeholder Meetings

Following the announcement of the preferred site option, 66 community groups in the area of the proposed site and outfall location were contacted in writing. These letters offered meetings with the Project Team at a date and time of their convenience and provided details of where the latest report could be accessed and details of the open days. Follow up emails and phone calls were also made by the Project Team offering meetings. Several groups attended the project open days as part of this phase of public consultation.

## **2.5 COMMUNICATION MATERIALS**

Printed public information materials were made available as part of this phase of consultation in order to ensure that all stakeholders were aware of the project and had access to project information.

### **2.5.1 Project Brochure**

A community update brochure was prepared for this phase of public consultation and included project information in both the English and Irish language. Copies of the brochure were available in Fingal County Council Offices in both Swords and Blanchardstown throughout the consultation phase and were made available at each open day. Copies of the brochure were also distributed to the North City Area Office, as well as Dublin City Council and Fingal County Council libraries and were available to download from the Greater Dublin Drainage website.

The brochure details information on:

- the preferred site option and how it was chosen,
- what is being consulted on,
- open day information,
- project contact details,
- how the project will progress,
- why the project is needed,
- a map of the preferred site option,
- the Project Road Map.

A copy of the brochure can be found in Appendix A.

### **2.5.2 Project Factsheets**

Project factsheets were developed by the Project Team and published as part of this consultation to provide information such as public consultation to date and the wastewater treatment process, following frequently asked questions from the public in these areas.

The first factsheet entitled 'Project Consultation' describes:

- the consultation process
- environmental studies undertaken to date (June 2013),
- how to get involved in this phase of public consultation,
- details of open days,
- a description of what is happening next,
- a definition of an Environmental Impact Statement,
- a Project Road Map,
- project contact details,
- key project facts, for example the number of stakeholders engaged with to date and how to join the Greater Dublin Drainage mailing list for future updates on the project.

The second factsheet entitled 'The Wastewater Treatment Process: How does it Work?' includes information on:

- wastewater and how it arises,
- why we need to treat it,
- the journey to the treatment plant, stages of treatment,
- a diagram of the treatment process,
- details of effluent and sludge management,
- information on other wastewater treatment plants with a focus on Shanganagh-Bray WwTP.
- Key project facts, for example the size of the proposed plant, the percentage of wastewater flow from Fingal currently being treated in Ringsend and email updates to subscribers.

These factsheets were available in Fingal County Council offices throughout the consultation period and were made available during open days. A copy of these factsheets can be found in Appendix B.

### **2.5.3 Posters**

Posters promoting the consultation were issued to key locations in Fingal and Dublin City. The first of these posters included information on:

- the preferred site option,

- the focus of public consultation,
- details of the open days in Swords,
- links to view the Alternative Sites Assessment and Route Selection (Phase 4): Preferred Sites and Routes Report,
- details of how to contact the Project Team or make a submission.

The second poster detailed information on:

- the open evening in the Hilton Dublin Airport Hotel,
- the preferred site option,
- information on where the reports are available and
- project contact details.

Posters were issued to public libraries, Community/Resident Associations within Fingal, the Planning Department in Fingal County Council's Civic Offices for display at their Public Counter and to Dublin City Council's North West Area Office for circulation to libraries within their administrative area. Posters were also put up in local community venues/shops as shown in Figure 2-2 and were available for download from both the Fingal and GDD website, as well as being circulated to all Elected Members for further dissemination. A copy of the poster can be found in Appendix C.



**Figure 2-2 Poster advertising Open Days in the Local Area**

#### **2.5.4 Open Day Displays**

A number of sets of large A0 size posters were displayed at each of the open days which provided details of the preferred site option; information on public consultation; project timeline; project need; protection of the environment and human health; economic growth, investment and social development; cost and visual impact; as well as aerial photographs and maps of the preferred site option. These displays can be seen in Appendix D.

### **2.6 PUBLICISING THE CONSULTATION**

The consultation was widely publicised in order to increase project awareness amongst the public and to facilitate an extensive public participation process. This was done through the media including:

- advertising,
- press releases,
- twitter,
- the Greater Dublin Drainage and Fingal County Council websites,
- national and local media coverage in print, broadcast and online.

#### **2.6.1 Advertising**

Advertisements were placed in local and national newspapers advising interested stakeholders of the consultation and listed opportunities for engagement. Table 2-2 indicates the publications and the dates of advertisement. A copy of the advertisement can be found in Appendix E.



**Table 2-2 Advertisements in Press**

<b>Newspaper</b>	<b>Date published</b>
Northside People	19 <sup>th</sup> June 2013
Blanchardstown/Castleknock/Swords/Malahide Gazettes	20 <sup>th</sup> June 2013
The Irish Times	24 <sup>th</sup> June 2013
Fingal Independent	25 <sup>th</sup> June 2013
Irish Independent	25 <sup>th</sup> June 2013
The Herald	26 <sup>th</sup> June 2013

### **2.6.2 Press Releases and Media Interviews**

A number of press releases were issued to the national and local media in order to raise awareness of the consultation process. A copy of these press releases can be found in Appendix F. In addition to issuing press releases, media were regularly briefed throughout the consultation. A number of interviews with members of the Project Team took place on national television and radio, including RTÉ TV News, Today with Pat Kenny on RTÉ Radio, The Last Word on Today FM and The Right Hook on Newstalk. Interviews were also organised for local and community radio stations including 98FM, FM104, Near FM and Dublin City FM.

### **2.6.3 Resultant Media Coverage**

43 print articles have been published about the project and the ASA Phase 4 Public Consultation between June and August 2013 as a result of the extensive public relations efforts to secure coverage during the consultation period. The details of the coverage can be found from Table 2-3 to Table 2-5.

Table 2-3 June Print Media Coverage

Date	Publication	Page	Title
04.06.13	Swords Fingal Independent	6	Sewage plant site set to be revealed
04.06.13	Fingal Independent	6	Sewage plant site set to be revealed
10.06.13	Irish Daily Star		Sewage plant site decision
10.06.13	Irish Examiner	4	Sewage plant announcement
10.06.13	Irish Independent	12	Site of new sewage treatment plant to be revealed
11.06.13	Swords Fingal Independent	3	Relief in Lusk but sympathy for Clonshaugh community
11.06.13	Swords Fingal Independent	1	Despair Heartache for farming family as Clonshaugh chosen as preferred site for monster sewage plant
11.06.13	Swords Fingal Independent	2	Local Farmer faces losing his livelihood as well as his home
11.06.13	Swords Fingal Independent	3	Decision will not be taken lying down
11.06.13	Swords Fingal Independent	2	Clonshaugh chosen for sewage facility
11.06.13	Fingal Independent	1	RELIEF
11.06.13	North County Leader	1	Sigh of relief for Lusk as Clonshaugh site chosen
11.06.13	Irish Examiner	7	Opponents to fight on after site chosen for super sewage plant
11.06.13	Irish Independent	21	Battle looms over €420m sewage plant
11.06.13	Irish Times	1	€500m plant a disaster for area, says TD
11.06.13	Irish Times	2	Community projects urged as compensation
11.06.13	Irish Times	2	Farming family fight against sewage plant
11.06.13	Irish Times	2	Reilly welcomes plant as concerns raise on capacity, cost and position
11.06.13	Irish Times	2	What makes a "preferred option" for a treatment plant?
11.06.13	Metro Herald	4	Dublin's second sewage plant to be in plane sight
12.06.13	Irish Times	5	Opposition mounts to

			treatment plant
12.06.13	Herald National Edition	15	We've done our bit in the name of progress
13.06.2013	Malahide Gazette	6	Site chosen for sewage plant draws controversy
13.06.2013	Swords Gazette	1	Site for sewage facility blasted
18.06.2013	Swords Fingal Independent	15	A 'cynical and unfair' decision
18.06.2013	Swords Fingal Independent	15	Grave concern over outfall
18.06.2013	Fingal Independent	15	Grave concern over outfall
18.06.2013	Swords Fingal Independent	14	Information days to be held
18.06.2013	Swords Fingal Independent	15	DAA raised safety concerns
19.06.2013	North County News	1,2	Monster Sewage Plant Almost Universally Condemned
19.06.2013	Northside People East	3	Campaign to oppose sewage plant begins
20.06.2013	The Herald	27	DAA fear bird threat at €500m sewage plant
20.06.2013	Swords Gazette	5	Plant a worry for Clonshaugh
20.06.2013	Malahide Gazette	3	Clonshaugh 'worried' over €500m facility

Table 2-4 July Print Media Coverage

Date	Publication	Page	Title
01.07.2013	Raheny Informer	1	Outrage as Northside sewage plan approved
16.07.2013	Swords Fingal Independent	4	Meeting to discuss sewage plant outfall
23.07.2013	Swords Fingal Independent	9	Meeting hears public opposed to outfall pipe
23.07.2013	Swords Fingal Independent	9	Portmarnock residents urged to sign letter of objection to project
23.07.13	Swords Fingal Independent	8	Landowners 'not going to help anyone destroy our community'
23.07.13	Swords Fingal Independent	8	Early August deadline for submissions

**Table 2-5 August Print Media Coverage**

Date	Publication	Page	Title
06.08.13	Fingal Independent	12	Over 10000 say no to Clonshaugh plant
06.08.13	Swords Fingal Independent	12	Over 10000 say no to Clonshaugh plant
06.08.13	Swords Fingal Independent		Project Team to look environmental impact

#### 2.6.4 Online Media Coverage

In addition to the information published on the project website (Section 2.6.5 below) a number of other websites, independent of the Project Team, published news from GDD press releases and other materials about the project and the ASA Phase 4 Consultation. The websites that posted information are listed in Table 2-6.

**Table 2-6 Online Media Coverage**

Online Coverage
<a href="http://www.aodhanoriordain.ie">www.aodhanoriordain.ie</a>
<a href="http://averilpower.ie">http://averilpower.ie</a>
<a href="http://www.belfasttelegraph.co.uk">www.belfasttelegraph.co.uk</a>
<a href="http://www.breakingnews.ie">www.breakingnews.ie</a>
<a href="http://www.claredaly.ie">www.claredaly.ie</a>
<a href="http://www.clontarf.ie">www.clontarf.ie</a>
<a href="http://www.dublinpeople.com">www.dublinpeople.com</a>
<a href="http://www.eandemanagement.com">www.eandemanagement.com</a>
<a href="http://www.fiannafail.ie">www.fiannafail.ie</a>
<a href="http://www.herald.ie">www.herald.ie</a>
<a href="http://www.independent.ie">www.independent.ie</a>
<a href="http://www.independent.ie/regionals/fingalindependent/">www.independent.ie/regionals/fingalindependent/</a>
<a href="http://www.irishexaminer.com">www.irishexaminer.com</a>
<a href="http://www.irishmirror.ie">www.irishmirror.ie</a>
<a href="http://www.irishtimes.com">www.irishtimes.com</a>
<a href="http://www.kilkennypeople.ie">www.kilkennypeople.ie</a>
<a href="http://www.luskwastewatch.com">www.luskwastewatch.com</a>
<a href="http://www.politics.ie">www.politics.ie</a>
<a href="http://www.thejournal.ie">www.thejournal.ie</a>

### 2.6.5 Website

A dedicated project website, which is updated regularly, can be found at [www.greaterdublindrainage.com](http://www.greaterdublindrainage.com). Information was made available on the website as part of the ASA Phase 4 Consultation, including the *Alternative Sites Assessment and Route Selection (Phase Four) -Preferred Sites and Routes Report* and associated maps.

The FAQ section of the website was updated periodically throughout the consultation period to reflect common queries raised by stakeholders, and a 'Project Facts' section was added where factsheets and displays from open days were made available. In addition to this, all relevant reports and documents including press releases (Appendix F), brochures (Appendix A) and posters (Appendix C) were available to download from the website. Contact details of the project are also provided as well as the opportunity to sign up to our electronic mailing list.

The Home Page of the Greater Dublin Drainage website can be seen in Figure 2-3. Approximately 3,200 visits by 2,285 unique visitors were made to the Greater Dublin Drainage website during the course of the eight week consultation.

The Fingal County County website, [www.fingalcoco.ie](http://www.fingalcoco.ie) was also used to promote the consultation.

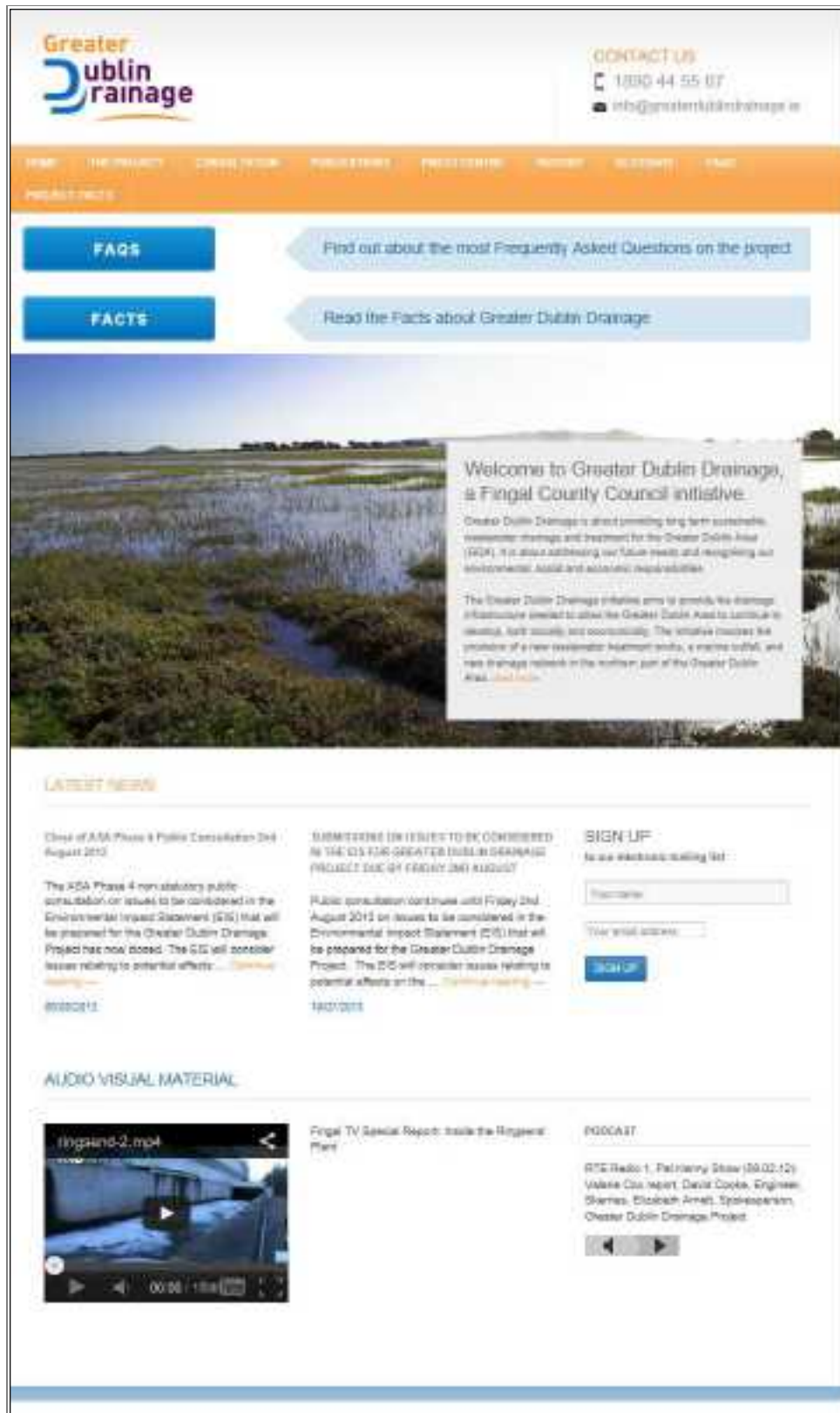


Figure 2-3 Home Page of Greater Dublin Drainage Website [www.greaterdublindrainage.com](http://www.greaterdublindrainage.com)

### 2.6.6 Twitter

Fingal County Council has a popular Twitter page with over 4,800 followers and this account has been used to promote the consultation on Greater Dublin Drainage. Nine "tweets" were issued by the Fingal Twitter account to promote the ASA Phase 4 Consultation in June and July 2013. The tweets can be seen in Figure 2-4.



 **FingalCountyCouncil** @Fingalcoco 1 Jul  
Reminder that the Greater Dublin Drainage Open Day is this Wed, County Hall, Swords, 2-6pm. More info here... [bit.ly/15bgBDU](http://bit.ly/15bgBDU)  
[Collapse](#)   ↩ Reply   ↻ Retweet   ★ Favorite   ⋮ More

---

**1**  
RETWEETS

 **FingalCountyCouncil** @Fingalcoco 2 Jul  
Correction: Greater Dublin Drainage Open Day tmro is 2-8pm, not 2-6pm as previously tweeted. More info here [bit.ly/15bgBDU](http://bit.ly/15bgBDU)  
[Collapse](#)   ↩ Reply   ↻ Retweet   ★ Favorite   ⋮ More

---

12:45 PM - 2 Jul 13 · Details

 **FingalCountyCouncil** @Fingalcoco 15 Jul  
REMINDER: Greater Dublin Drainage Info Meeting Tue 16 Jul from 3-8pm [bit.ly/1aH5K9Q](http://bit.ly/1aH5K9Q). Come along and meet the project team  
[Collapse](#)   ↩ Reply   ↻ Retweet   ★ Favorite   ⋮ More

---

**2**  
RETWEETS



 **FingalCountyCouncil** @Fingalcoco 16 Jul  
Greater Dublin Drainage open evening now until 8pm. Hilton Dublin Airport Hotel [pic.twitter.com/dKGTG3kr0e5](http://pic.twitter.com/dKGTG3kr0e5)  
[Hide photo](#)   ↩ Reply   ↻ Retweet   ★ Favorite   ⋮ More



**2**  
RETWEETS







Figure 2-4 Tweets to Promote ASA Phase 4 Consultation

### 2.6.7 Elected Representatives

Briefings were given throughout the consultation process to Elected Representatives in order to keep them up-to-date with the project's progress. This included briefing Fingal County Councillors at monthly Council Meetings and briefing the Dublin Regional Authority, which consists of a Board of 31 Elected Representatives nominated from the four Dublin local authorities.

TDs, Senators and MEPs were invited to an information briefing on 20<sup>th</sup> June in Buswell's Hotel, Dublin 2. Invitations were sent by post to approximately 100 members of the Oireachtas and European Parliament. Each letter was followed up by emails and phone calls to encourage attendance. Twenty-nine Elected Representatives confirmed their attendance for this event. Ten Elected Representatives attended, raising a range of issues which are included within Section 3 of this report. Following the briefing, correspondence was made with several attendees, providing additional information and responses to specific queries.

Seven email updates were also sent to Elected Representatives as follows:

- 4<sup>th</sup> June 2013: Preferred Site and Pipeline Route to be Announced for Proposed Greater Dublin Drainage Project;
- 10<sup>th</sup> June 2013: Preferred Option for Greater Dublin Drainage Project is Most Environmentally Beneficial and Technically Advantageous Solution;
- 28<sup>th</sup> June 2013: Greater Dublin Drainage Public Consultation;
- 3<sup>rd</sup> July 2013: Greater Dublin Drainage Public Consultation Third Open Day;
- 10<sup>th</sup> July 2013 Greater Dublin Drainage Open Evening in Hilton Dublin Airport Hotel, 16th July;
- 12<sup>th</sup> July 2013: Information Poster Available for Open Evening on 16th July;
- 19<sup>th</sup> July 2013: Submissions on Issues to be Considered in the EIS for Greater Dublin Drainage Project due by Friday 2<sup>nd</sup> August.

#### **2.6.8 Emails to Stakeholders**

Since the project commenced in April 2011, the project website has provided a facility whereby stakeholders have been able to subscribe to project updates. Six update emails were sent to approximately 1,200 members of the public and Elected Representatives throughout the consultation period as follows:

- 4<sup>th</sup> June 2013: Preferred Site and Pipeline Route to be Announced for Proposed Greater Dublin Drainage Project;
- 10<sup>th</sup> June 2013: Preferred Option for Greater Dublin Drainage Project is Most Environmentally Beneficial and Technically Advantageous Solution;
- 28<sup>th</sup> June 2013: Greater Dublin Drainage Public Consultation;
- 3<sup>rd</sup> July 2013: Greater Dublin Drainage Public Consultation Third Open Day;
- 10<sup>th</sup> July 2013 Greater Dublin Drainage Open Evening in Hilton Dublin Airport Hotel, 16th July;
- 19<sup>th</sup> July 2013: Submissions on Issues to be Considered in the EIS for Greater Dublin Drainage Project due by Friday 2<sup>nd</sup> August.

### 2.6.9 Fingal Newsletter

Updates on the project were included in both the Summer and Autumn editions of the "Fingal News". This is a quarterly newsletter produced by Fingal County Council that is distributed free of charge to over 90,000 homes throughout the county.

## 2.7 SUBMISSIONS RECEIVED

Table 2-7 details the amount of engagement that has occurred during the ASA Phase 4 Consultation.

**Table 2-7 Participation in ASA Phase 4 Public Consultation**

Method	Numbers
Emails	334
Letters (including templates <sup>Note 1</sup> )	8622 <sup>Note 2</sup>
Open Days (including notes taken by Project Team and written submissions handed in by stakeholders)	158
Petition Signatures <sup>Note 3</sup>	4329
Phone Calls	48

Note 1: reproduced similar letters

Note 2: Includes 3,695 template letters

Note 3: letter accompanied by a list of signatures

### 3 FEEDBACK

#### 3.1 INTRODUCTION

This section of the report details public participation in terms of feedback received during this public consultation period which is of relevance to the Environmental Impact Statement (EIS) stage of the project. Each and every submission received has been reviewed in its entirety.

All personal data of the individuals who made submissions is not documented in this report and is being held in accordance with the Data Protection Act, 2003.

This report will be reviewed by the GDD Project Team and responses to relevant issues raised will be assessed and addressed (as appropriate) within the Environmental Impact Statement (EIS) scheduled for publication in 2014. Many issues have been addressed in project publications, at events, meetings and in direct responses to stakeholder queries as part of this phase of public consultation.

The majority of feedback received relates to the potential impact of the proposed development on the surrounding environment, which is broadly covered by the following headline items:

**Table 3-1 Headline Items**

Headline Items	Headline Items
Agriculture, Agronomy and Horticulture	Leaks, Malfunction and Breakdown
Air, Odour, Climate	Material Assets
Airport	Need for One Large facility
Alternatives	Noise and Vibration
Aquatic Ecology and the Environment	Nuisance
Archaeology, Architecture and Cultural Heritage	Outfall
Catchment and Load Areas	Planning and Development
Community and Socio Economic Impacts	Proposed Development
Construction	Proximity to Sensitive Receptors
Consultation	Recreation and Amenity
Contract	Regulation, Monitoring and Liability
Cost and Financial Gain	Risk
Ecology and the Environment	Site Selection
Energy	Sludge Management
Flooding and Storm Events	Standards
Geology, Hydrogeology and Hydrology	Sustainability
Health & Safety	Tourism and Local Business
Human Health	Traffic and Transport
Landscape and Visual Impact	Water

The following sections detail stakeholder feedback; some of the issues raised are quoted directly from submissions; others are an amalgamation of similar issues raised in a number of submissions. All issues are reported alphabetically and no bias is implied by the order in which they are presented.

Project specific comments such as treatment levels, best practice, site size, building size and technology have been collated under the 'proposed development' heading. Some issues raised may be relevant to a number of headline items and may therefore be addressed under a number of headings.

The following sections detail the headline items as presented in Table 3-1.

### **3.2 AGRICULTURE, AGRONOMY AND HORTICULTURE**

It is proposed to locate part of the WwTP within agricultural land. As a result, agriculture, agronomy and horticulture were issues raised by many stakeholders. It was stated that the surrounding land is of "good quality, suitable for a wide range of farming enterprises with mature trees and hedgerows" all of which are invaluable to the greater environment, especially wildlife, and cited as being "certainly preferable to a sewage treatment plant". It was also stated that North County Dublin has always been well known for its "good quality soil especially for potato growing as well as general grazing".

Specific queries and concerns raised include:

- Concerns in relation to the stockpiling of topsoil, which is a live substance. Views were expressed that storage time and stockpile height should be considered in the EIS and topsoil should be moved periodically to keep it aerated.
- Concerns were raised in relation to the ability to access farm land, particularly whether overpasses would be provided for dairy cows.
- Concern that farm gate fresh produce is purchased by locals from farming hinterland around the proposed site and disruption would damage and destroy the good image of fresh local produce if the WwTP goes ahead.
- Queries were raised in relation to whether land can be taken from people subject to a CPO (Compulsory Purchase Order).

- Queries were raised in relation to the requirement for compensation if land is taken from people.
- Concerns were raised in relation to the impact on farms in the area.
- Concerns were raised that this will have a negative environmental impact on fields and destroy tilled fields.
- Views were raised that there is "too much loss of farming and agricultural lands".
- Concerns were raised in relation to the impact this project will have on a productive working farm and the viability of the business if one third of this farm is subject to a CPO.
- Views that the issuing of a CPO on landowners' lands is unfair.
- Concerns that having a WwTP in the area will destroy local agriculture.
- Concerns that the fields around Clonshagh will become unusable when the WwTP is built. Stakeholders expressed fears that farmers will no longer grow vegetables in the area, stating "who will buy them?", "I won't want sewage lettuce" and "bacteria falling on the leaves growing nearby can't be good".
- Concerns that "farmers will go bust".
- Concerns that farmland green belt areas will be destroyed. It is stated that "one of the last remaining green belts will be lost forever".
- Concern over the risk of seepage and the impact of pollution on the environment and local farm land.
- Concerns that the sewage plant will attract flies which may impact vegetables growing in the area.
- Reference to Teagasc forestry trials that are underway in the area and the fact that the proposed pipeline corridor is located through the National Centre for Research and Technical Development in the horticultural industry. It was stated that 'the pipeline will have the effect of terminating the long-term timber trial situated at the top of Emsworth field as it will not be possible to continue with it once it has been destroyed'. It was also a concern that 'if reinstatement of the land is not carried out to a high standard, it will render those particular field trials useless for future trial work'.
- Queries were raised in relation to which micro-organisms will be present in the solid matter spread on Irish farmland.

- Queries were raised in relation to how the use of human waste on farmland impacts on the food chain, as well as our good name abroad as a beef producer.
- Queries were raised as to who the agronomist is, what is his/her experience in this area and whether he/she is internationally renowned in the area of expertise that is required.
- It was felt that the project is 'disgraceful due to pollution from the plant which could affect our health and the livestock in the surrounding areas'.
- Concerns were raised that in the immediate area around the proposed plant, those owning farmland are deeply affected by the project. Concerns regarding the potential for other farmland around the plant to be adversely affected.

### **3.3 AIR, ODOUR, CLIMATE**

Air quality and odour were raised as primary concerns by the majority of stakeholders. These concerns were raised with reference to odour issues arising from some existing older facilities nationally and internationally. Most of the comments from stakeholders cited Ringsend as a prime example of a plant with odour problems. Residents in the vicinity of the proposed WwTP also expressed concern that they can detect odours from neighbouring factories which are not supposed to have odour emissions. Many stakeholders stated in their feedback that they do not accept odours will not occur or sought further information on measures to be taken to ensure odours will not occur.

Specific issues and concerns include:

#### **3.3.1 Air Quality**

- Affirmation was sought that the EIS will take full account of air quality issues, particularly the potential for odours arising from the WwTP.
- Queries were made in relation to which gases, toxins, chemicals, airborne pollutants, particles and micro-organisms will be discharged into the air.
- Concerns were raised that this plant and gases released from it will have serious impacts on air quality.

- Views were expressed that "air pollution is a certainty and detrimental to the health of the local community".
- Queries were raised in relation to whether the air quality is going to impact on peoples' health and safety and if it does, who they can complain to.
- A concern was raised that "windblown bacteria will rain on estates". Statements were made that the facility will be liable to legal challenges if people get sick.
- Queries were raised as to who will monitor hazards such as germs, bacteria and unseen airborne issues. It is suggested that surrounding districts should start monitoring the air purity now so that a comparison can be made in the future.
- Statements expressed their right to breathe fresh air.
- Concerns were raised in relation to air pollution caused by the plant and impacts on the local environment, regardless of the "buffer zone" surrounding the plant.
- Concerns were raised in relation to the provision of clean air during construction and operation.
- Concerns were raised that methane gas released will have a sickening smell which will impact residents.
- Queries were raised as to what research has been carried out on the effects of exhausted aircraft fuel from Dublin Airport and aircraft flying along the flight path overhead on local residents, wildlife and the environment.
- A request was made for a study to be carried out on the combined effects of biogas or other elements caused by the WwTP, exhausted aircraft fuel from the airport and overhead flight path; and exhausted vehicle fuel from the motor way (M1 and M50) on local residents, wildlife, WwTP and environment.
- Queries were raised as to whether there will be effects from exhausted vehicle fuel from the motorway (M1 and M50) on local residents, wildlife and the environment.
- Queries were raised as to whether research has been carried out on the effects of the biogas or other elements caused by the WwTP on local residents, wildlife and environment.
- A concern was raised in relation to the impact of emissions from the WwTP plant on aircraft on the flight path and the associated risk to the residential and business areas surrounding the WwTP.



- One stakeholder stated "Broadmeadow stinks, get that right before you consider putting something 20 times the size in another area".
- Concerns were raised that odours will arise given the size of the plant.
- Suggestions were made by some stakeholders to "put it in some Ministers area and let him/her put up with the smell".
- It was requested that the air quality section of the EIS would be expected to address the odour issue not only when the plant is functioning at full efficiency but also when mechanical or other failures occur. Back up facilities would need to be investigated.
- Queries were raised in relation to whether there will be a build-up of gas at the facility.
- One stakeholder queried whether 'the impact of global warming on the tides has been taken into consideration'.

### 3.3.2 Odour and Residents

- Concerns were raised that "the smell of sulphur and methane will be too much".
- Concerns were raised that residents will be impacted by odour given the proximity of the WwTP to residences; concerns raised that odour "will affect 25,000 people living locally" and one stakeholder states "there are 500 plus residential buildings within 0.5 - 1km of the Clonshaugh site boundary that will feel the effect of methane and odours".
- Concerns were raised that odours travel and one stakeholder maintains it is "ludicrous" to suggest that "homes in Clonshaugh, Riverside, Darndale, Moatview, Priorswood, Ard na Greine, Clare Hall and Belmayne will not smell".
- Statements were made that some residents moved to the area to "live on the edge of the country and get away from the city fumes and odours".
- Concerns were raised that children will be playing in "polluted, smelly, methane odour".
- Reservations were expressed regarding assurances provided in relation to odour management measures and the impact on the community, given the large scale of the facility and the potential for a change in wind direction.

- Concerns were raised in relation to residents' continued ability to enjoy the outdoors was questioned, given the proximity of the facility to residents and the potential for odours.
- Concerns were raised that people will not want to visit Clonshagh due to the smells.
- Concerns were raised that residents will have to rename their estate "Smell View".
- Concerns were raised in relation to odours that will occur from the WwTP when operating normally and when malfunctioning and the associated impacts on human beings in the area.
- Reference was made to residents' ability to smell coffee roasted from a nearby factory located at Northern Cross Malahide road, Dublin 17, more than 3 km away. Concerns were raised that the WwTP will be located closer to residents than this factory and the potential to smell stronger odours of sewage as a result.
- A request was made to carry out a study into the potential impact that odour has on residents, the number of residents it could affect and the impact the potential odour will have on 20 million people that use Dublin Airport annually.
- Queries were raised as to whether grants will be given to residents to install triple glazed windows to stop the smell, dust and ash entering their homes.
- Reference was also made to people being subjected to fumes emanating from local farms in the area already and queried if they were now expected to put up with odours from the proposed WwTP.
- Reference was made to odour emissions detected from nearby factories. Although some stakeholders considered them pleasant at times, fear was expressed by others in relation to odour emissions arising from the proposed WwTP which will be closer to residents.

### 3.3.3 Odour and Wind Direction

- Wind direction was raised as a concern by numerous stakeholders. Concern was raised that the wind direction is towards Limekiln and Connolly Hospital in Blanchardstown.
- The impact of changing wind direction on the dispersion of odour emissions was expressed as a concern by some stakeholders.
- Statements were made that wind can come from any direction and not just from the prevailing wind direction.

- Suggestions were made that prevailing winds towards the airport should be taken into account. It was suggested by stakeholders that the first thing tourists visiting Ireland will smell and see while visiting our beautiful county will be this WwTP.
- Specific concerns were raised in relation to the impact of wind direction and odours on the surrounding populations. A concern was raised that the prevailing south westerly wind would bring odours directly to certain residents.
- Suggestions were made that people residing in the areas of Clonshagh, Riverside, Cara Park, Priorswood, Darndale, Belcamp, Baskin Lane, Bonnybrook, Newtown and other areas downwind of the proposed plant could be affected by odour from the plant.
- Some residents living in Santry expressed concern that they are "in direct line for fumes, noise, trucks and airborne germs". This stakeholder queries whether they are "safe from all of these".
- It was suggested by a stakeholder that the pumping station must be downwind of Connolly Hospital in Blanchardstown, to minimise impact on patients and staff.

#### **3.3.4 Odour and Heat**

- Concerns were raised in relation to the ability to detect odours from Ringsend on sunny days.
- Queries were raised in relation to what adequate provisions will be put in place to ensure unbearable odours are not released into the atmosphere especially in hot weather i.e. during summer.

#### **3.3.5 Odours at Existing Plants, Pumping Stations and Outfalls**

- Reference was made to odour emission problems from WwTPs in Ringsend, Swords, Dundalk, the Hague, Birmingham, WwTP pumping stations and some outfall locations. Queries were raised as to why odours were detectable at these locations. Some stakeholders said they believe similar problems will arise at the proposed plant.
- In relation to the Ringsend facility, some stakeholders stated there are still problems with the facility and queried why odours were so strong and asked about the number of odour complaints made.

- Some stakeholders referenced, "more than €200 million extra had to be spent to correct problems of terrible odours and methane gas coming from the Ringsend plant" and stated "on this basis there is a serious risk for the residents in Clonshaugh". However, others acknowledged improvements have been made in recent years.
- A concern was raised that the Ringsend plant "is beside the sea and still smells".
- One stakeholder referred to recent reports published by the Environmental Protection Agency in relation to sludge management issues at Ringsend, to highlight the need to put specific plans in place to address odour issues and to apply best possible practice rather than minimum standards.
- Fears of smelling odours from the proposed plant in Clonshagh were expressed due to past experience of living in the Ringsend area. One stakeholder stated they "don't want their families to suffer the way they did from the terrible smells experienced at Ringsend".
- Suggestions were made that no matter what reports and statistics are produced to "prove" that there will be no odours there will inevitably be odours. The Ringsend plant was cited as a suitable example by stakeholders. It was stated "that despite the reassurances given to local residents, there was a terrible smell in the area for a very long time".
- Queries were raised as to whether there were odour complaints from residents surrounding other WwTPs.
- Concerns were raised that odour still occurs at the Edinburgh plant.
- Stakeholders said they had a lack of confidence in the ability to control odour and get it right at Clonshagh.
- Clarification was sought as to why there was an odour emanating at Carlingford and Dollymount Beach; it was suggested by stakeholders that this was attributed to existing outfalls.
- Reference was also made to the Swords WwTP and the residents' requirement to continually put up with foul odours from the facility, which reduces their quality of life.
- Reference was also made to the perception that the Swords WwTP has caused significant reductions in the value of homes and premises in the surrounding area of Swords.
- One stakeholder asked who designed the Swords facility.
- Concerns were raised in relation to odours from the WwTP negatively impacting the residential developments on Belcamp zoned lands. Reference was made to difficulties experienced at many treatment

plants, including the Swords and the Ringsend plants, and despite the high technology odour control measures implemented; problems relating to odours are a persistent issue.

### 3.3.6 Odour Guarantees

- Views were expressed that there should be a commitment to zero odour emissions.
- Clarification was sought on measures proposed to ensure there will be no odours. Stakeholders sought information on measures to be taken to ensure the WwTP would be 100% efficient in terms of odour.
- Clarification was sought in relation to what guarantees could be given to ensure odours like those at Ringsend do not occur.
- Queries were raised as to how residents can trust that odour problems that arose at Ringsend will not occur in Clonshagh.
- One stakeholder stated that Fingal County Council can't guarantee 100% clean air for children or that there won't be a bad effect in Skerries.
- Legal action was threatened by some stakeholders in the event that there is any impact on human health as a result of the WwTP.
- As a result of difficulties experienced at Ringsend there was a perception in stakeholder feedback that odour problems will occur and persist which will have a significant effect on local residents. It was requested by one stakeholder that specific scientific and engineering detail of the steps and investment being made to prevent odour problems and information concerning similar plants that operate effectively and without such problems in major European cities be provided. It was requested that such detail should involve a breakdown of the type of treatment anticipated at the plant in order to assess this risk and should be outlined in the EIS and included in planning conditions.

### 3.3.7 Odour Management Measures

- Further information was sought on proposals to enclose tanks and how gas will be treated and how success will be measured.
- Queries were raised as to how odours will be managed/controlled/treated.

- Suggestions were made that as "only secondary treatment" is proposed this "will cause odours and methane gas to be released".
- Queries were raised as to how odours will be monitored and whether a scale will be used.
- A concern was also expressed about odours from pumping stations due to sewage residing for long periods in these stations.
- Queries were raised as to what odour treatment will be in place at the pumping stations
- Some stakeholders expressed a lack of confidence in the ability to control odour.
- Queries were raised in relation to whether proposed odour treatment measures were the most modern way of treating odour internationally.
- Concerns were raised about potential initial problems at the plant and whether this will result in odours.
- Concerns were raised that odours will occur regardless of the odour suppression measures taken by the design.
- Concerns were raised that odour issues will arise if there is a plant failure or if something goes wrong with the equipment.

### **3.3.8 Odours and Tourism**

- One stakeholder stated that the plant must be designed and operated in such a way as to ensure that it has no adverse effect on the environment of the airport due to air quality or odours.
- Statements were made that it is critical to ensure no odours emanate from the plant and become detectable in surrounding areas.

Please see Section 3.37 for further details on Tourism.

### **3.3.9 Odours, Wastewater and Sludge**

- Queries and concerns were raised in relation to odours arising as a result of transporting sludge along the road network.
- One stakeholder queried whether wastewater coming from Meath would be treated for odours.
- Queries were raised as to whether there will be an odour from the treated effluent.

- Statements were made that odours do occur from raw sewage.
- One stakeholder stated that the first screening of the sewage and sludge would need to be transported by road, contributing to odour problems.

### 3.3.10 Odours and Plant DBO Contract

Some stakeholders raised the issue of a Design-Build-Operate or DBO contract in relation to odour as follows:

- Many stakeholders said they feel the ASA Phase 4 Report references odour considerations as a key consideration associated with the identification of the optimum technologies. Given the history of the Ringsend WwTP, there are major concerns within the community about how such an issue would be managed, particularly if operated by a private company under the commercial pressures of a DBO contract. Stakeholders cited fears that once operational, it will realistically be impossible to halt operation of a plant due to odour issues and specific plans for design of odour control measures and management of odour issues need to be considered in the Environmental Impact Statement.
- Some stakeholders stated that recent history has proven that DBO Contracts are a flawed model, citing the odour problems that occurred at Ringsend WwTP after its opening as an example of this. It was stated by stakeholders that delays and disputes arose due to the structure of the procurement; meanwhile the adjacent residents were left with the sickening odour problems.
- Some stakeholders believe there will be odours regardless of the odour suppression measures taken by the design. It is stated that "inadequate design maintenance and operation of the plant will give rise to increased odour problems".
- One stakeholder stated that regardless of where the WwTP is located a commitment should be made in the Environmental Impact Statement that the plant will be built to a zero odour emission standard with significant fines built into the operator's contract for any breaches of this standard.

### 3.3.11 Odours and Distribution Distance

- One stakeholder referred to the Fingal Development Plan 2011-2017, which states "The majority of our Wastewater Treatment Plants (WwTP) contain a number of elements which are exposed to the open air during the normal operation of the plant and additionally there are other elements which will be exposed to the air during regular maintenance which occurs on occasions throughout the year. The submission stated that sewage, by its nature, is odour producing and, notwithstanding the aims of Fingal County Council's Odour Control Policy, it is not possible to prevent all detectable odours from escaping beyond the WwTP boundary. Odours have been known to travel long distances and certainly up to 1km from the source and is dependent on the type of treatment system in place, the loading to the WwTP, the topography of the site and the meteorological conditions notably temperature and wind direction". - Page 137 Fingal Development Plan.
- It was stated that the above extract is written in the context of Wastewater Treatment Plants with a capacity of population equivalent (PE) of 30,000 and it is very disturbing that odours can travel up to 1km for a plant of this capacity. On this basis, the stakeholder stated that the distance odours can travel if a WwTP has a Capacity of 700,000 population equivalent (PE) is queried.

### 3.3.12 Climate and CO<sub>2</sub> Emissions

- Concerns were raised that the plant will impact on the climate.
- Requests were made that the Government's Green Public Procurement Policy in relation to lower carbon materials be taken into consideration in preparing the EIS.
- Requests were made that further guidance be issued by the OPW for the construction industry in relation to green procurement also to be taken into consideration. Suggestions were made that reference be made also to the SEAI and their CO<sub>2</sub> database which provides carbon footprints for some of the more commonly used construction materials.
- Reference was also made to one particular Minister's positive comments about the place of low carbon cements in the Government Green Procurement Policy for construction - <http://www.merrionstreet.ie/index.php/2013/02/minister-hayes-welcomes-opening-of-new-ecocem-plant/>.



- Suggestions were made that GGBS cement should be used to lower the carbon footprint in addition to the increased resistance it provides against chloride and sulphate attack.

### **3.4 AIRPORT**

A number of stakeholders raised concerns in relation to the proximity of the proposed WwTP site relative to Dublin Airport and flight paths.

Specific concerns and issues include:

#### **3.4.1 Proximity to Airport**

- Statements that the facility is located too close to Dublin Airport.
- One stakeholder suggested Fingal County Council and the DAA are "in cahoots" as the WwTP is located within the red zone of the airport which doesn't permit construction.
- One stakeholder refers to the Fingal Development Plan 2011-2017 regarding "safeguard the current and future operational, safety, and technical requirements of Dublin Airport and provide for its ongoing development within a sustainable development framework". In doing so it was argued by the stakeholder that the proposed development of a WwTP with a Capacity of 700,000 population equivalent (PE) will impact future expansion to Dublin Airport. It was stated that "it may not be obvious now, but building a WwTP so close to the largest airport in the country can only restrict the potential expansion of not only the airport itself but of the business it surrounds itself with".
- It is requested that research take place into how the proposed development will impact on Dublin Airport in particular on current and future operations, safety, technical requirements and ongoing development.
- Concerns were raised that the WwTP will impact the Airport Economic Zone.

### 3.4.2 Emissions from the WwTP

- Statements were made that potential emissions such as methane from the facility and its location at the edge of the flight path could impact aircraft landing or taking off and associated requests for this to be examined.
- Queries were raised in relation to whether environmental studies have been carried out in relation to the impact of methane from the WwTP combining with fuel drops from overhead aircraft. Concerns in this regard centred around the potential impact on human health and aircraft safety (please refer to Section 3.3.1 and Section 3.32 for further details).
- Queries were raised as to whether there are examples of a similar sized and successful operational WwTPs situated on the edge of a flight path of a very busy International Airport with the methane emitted posing no danger to the take-off and landing of aircraft.

### 3.4.3 Consultation with the DAA

- Queries were raised as to whether the Project Team met with and consulted with the Dublin Airport Authority (DAA).
- Queries were raised as to whether the DAA objected to the project.

### 3.4.4 Accidents

- Queries were raised as to whether there is an increased chance of an air traffic accident due to the proximity of the WwTP to the Airport.
- Given the proximity of the WwTP to the flight paths some stakeholders stated that there is a high risk of aircraft crashing into the WwTP and query whether this and the associated impacts have been considered.
- Statements were raised that the risk of an explosion at the WwTP and the potential impact on aircraft should be considered. The stakeholder stated that "the explosion aspect of the flight path, of any airplanes leaving Dublin Airport, should be considered as they would use prevailing winds to get the lift required for take-off".
- A concern was raised that gas leaks at the WwTP could bring down a plane landing in Dublin Airport.

- Queries were raised as to who will be responsible if there is a plane crash.

#### 3.4.5 Height of the WwTP

- Queries were raised in relation to the height of the WwTP and the effect on the flight path and aircraft traffic.

#### 3.4.6 Bird Strikes

- Numerous stakeholders have expressed concern in relation to the potential hazards the facility and outfall will have on aircraft through the attraction of flies which will in turn attract birds which may result in bird strikes and be a hazard to aircraft.
- Concerns were raised that seagulls will be attracted to the WwTP which will impact aircraft.
- Queries were raised as to whether birds will be attracted to the WwTP and whether there are bird strike concerns.
- Concerns were raised that birds will be attracted to the effluent discharged to the sea causing a danger to planes overhead.
- During the consultation it was noted that a certain amount of bird activity is an integral part of the natural environment, however :

"It is essential that the construction and operation of the wastewater treatment plant does not give rise to any increase in bird activity. The proximity of the site to Dublin Airport requires that all potential for attracting bird activity should be removed at the design stage, to avoid any necessity for mitigation measures at a later stage.

The design and operation of the plant must ensure that no attractants for scavenging birds, which would be a hazard to air safety, are introduced to the site and allowed to become accessible to birds. No effluents or other by-products, whether liquid or solid, of wastewater treatment should be permitted to be present in the open. This could occur due to any use of open tanks or filter beds, the treatment, storage, or reuse of sludge or any other process which may allow or increase the availability of food or grit sources for birds. No organic material should be allowed to be present in the open on the site.

The design and operation of the plant must ensure that any such material is processed and stored only in an enclosed environment. International guidance is clear that the introduction of any attractants for bird activity into the environs of an airport should be vigorously opposed. It is in this context that the design and operation of the plant must ensure that such attractants are not present”.

### **3.5 ALTERNATIVES**

Many of the submissions received questioned the site location alternatives considered for the WwTP and the pumping stations. The alternative of siting numerous smaller plants throughout the Region rather than siting one large facility at Clonshagh was also queried by numerous stakeholders as described further in Section 3.23.

Specific concerns and issues are described under the following sub-headings:

#### **3.5.1 Alternative Location**

- Suggestions were made to locate the proposed facility in an open or more rural area in North Dublin which is more agricultural, less densely populated and less developed. It is suggested that this would have a far less impact on people, property and the environment. It is recognised that this option would be more costly in terms of bringing the pipes further north but in the long run it is viewed by some that this would be a better option.
- One stakeholder recognised the need for a WwTP in the Greater Dublin Area, yet also stated “research has shown that wastewater treatment plants are harmful to the environment and to human health”. From an ethical viewpoint, planners have a responsibility to ensure that the detrimental impact of such a facility is minimised. It is suggested that this can best be achieved either by locating the plant in an area of lower population density or by developing multiple smaller facilities.
- Further information was sought for the rejection of alternatives solutions.

- It was suggested to build the WwTP on the site of the proposed detention centre at Thornton Hall as it would cost less and the prison should be located nearer to Dublin City and therefore closer to courts etc.
- Suggestion that all the people who claim the proposed WwTP won't smell should live in the area to prove their point.
- Suggestions that large regional infrastructure such as this should be located on land of poorer value and at least 5km away from densely populated areas.
- Opinions that there "must be a more suitable location that does not impact on the quality of life and our wonderful beaches in Portmarnock".
- Queries as to why the facility cannot be located in alternative more appropriate locations closer to the boundaries of Meath and Kildare where it may not have the same effect on people's day to day lives.
- Suggestions that there must be an alternative poorer, underused or unused land available which would be more suitable to locate the plant.
- Suggestions that the WwTP should be built close to the sea such as at Shanganagh, to reduce odour impacts.
- Request that information concerning similar plants that operate effectively and without problems in similar proximity to major European cities should be provided as evidence and for comparison. Suggestions that the WwTP should be located on Ireland's Eye or Lambay Island.
- It is suggested the WwTP should be located in greenbelt areas away from households, similar to areas where Greenstar and Keelings are located in Meath.
- Queries as to why three smaller areas were not selected from the three shortlisted sites.

### **3.5.2 Alternative Pumping Station Location and Pipeline Route**

- One stakeholder suggests relocating the pumping station and pipeline to a new site (not specified).
- Reference is made to the proposed point of interception/diversion of the 9C Sewer in Blanchardstown which lies north of the River Tolka and in the front grounds of the James Connolly Memorial Hospital (now known as Connolly Hospital). It is stated that:

"The Blanchardstown Regional Drainage Scheme (BRDS) Preliminary Engineering Report (PER) recommends the duplication of the existing route 9C Sewer. The proposed routing of this new 9C Sewer generally lies in the Tolka river valley and crosses through the front grounds of the hospital. As part of the duplication works the existing pipe bridge crossing the M50 was to be replaced by twin siphons, with drive shafts located in the front grounds of the hospital. GDD now proposes to intercept/divert the 9C Sewer at these proposed drive shafts. At this point, the ground level is 50.33m OD and the invert level of the 9C Sewer is 44.7mOD (where all levels are referred to OS Malin Head Datum)".

- It is suggested that many of the aforementioned issues raised could be ameliorated if interception of the existing 9C Sewer was to take place east or south of the M50 where the pumps and tanks would be away from patients, staff and community. The pipeline route to Clonshagh running parallel to the M50 would cross mainly public lands, be shorter, more direct and at a lower OD level thus reducing construction and running costs to commercial rate and property tax payers.
- One stakeholder queried the potential to coincide the proposed pipeline route and the existing east-west road alignment. It is stated:

"An east-west road alignment which is close to the current proposed sewer alignment..... It would obviously be better if these two alignments were to coincide. This might be achieved by adjusting either alignment but there are some limits as to how much the road alignment can be adjusted".

### **3.5.3 Alternative Treatment and design**

- It was suggested by one stakeholder that the sewage and other organic wastes could be anaerobically digested at a new tank location (east/south of the M50), providing heat and power to Connolly Hospital, fertiliser to farmers, thus further improving the economy and the environment. The liquid residue could be tertiary treated in a reed bed at very little extra cost and the clean water discharged to the River Tolka.

- Queries as to why reed beds will not be used to treat waste water. It is suggested that they are more sustainable and are used in other European countries such as France.
- One stakeholder stated he would like views on the wastewater treatment system in use in Singapore up until 2010. The stakeholder stated that:

"Wastewater pumping stations pumped water to six wastewater treatment plants. These pumping stations and plants are to be gradually decommissioned while a new system, the Deep Tunnel Sewerage System (DTSS), becomes operational.....The Changi Water Reclamation Plant, the heart of the first phase of the DTSS, was opened by Prime Minister Lee Hsien Loong in June 2010.....The first phase of the DTSS consists of a 48km long deep tunnel sewer that runs 20 to 55 metres below ground, channels used water to the Changi Water Reclamation Plant at the Eastern end of the island. The plant has a capacity of 176 million imperial gallons (800,000 m<sup>3</sup>) per day. Most of the treated used water is discharged into the sea through an outfall, while some of it is further purified into NEWater. The deep tunnel works entirely by gravity, eliminating the need for pumping stations, and thus the risks of used water overflows. At one-third the size of conventional plants, the Changi Water Reclamation Plant is designed to be compact. Centralisation of used water treatment at Changi also allows for economies of scale. In a second phase of the DTSS, the deep tunnel system is to be expanded to the entire island, with a second wastewater treatment plant at Tuas at the Western end of the island".

- Further information was sought in relation to the main alternatives studied and the main reasons for choosing the project design, taking into account environmental effects.
- It was suggested in stakeholder feedback that tertiary treatment is required.
- It was also suggested by stakeholders that the outfall pipe must be extended well beyond its proposed 6km length in order to maximise tidal flow and dilution. Feedback stated that given the scale of the plan and the buildings and infrastructure involved, extending the pipeline is the least expensive element given there is no land purchase involved and the equipment for construction of the tunnel will be in place anyhow; the topography of the seabed

and its depth and rock structure does not change significantly beyond the 6km proposed length other than to deepen marginally; any increased depth of release would dilute the contaminated water further.

- There was feedback that tertiary treatment and an outfall of 11.3km would effectively flush the detritus into the Irish Sea minimising landfall and a suggestion by a stakeholder that, in its current proposal, the pipe is simply not long enough.
- Query as to why there is no discussion in the ASA Phase 4 Report of water conservation measures to reduce load and save on the cost of water provision and other potential future developments in water treatment and usage.

#### **3.5.4 Project Alternatives**

- Views were put forward that "no adequate alternatives" to the current proposed scheme, together with the associated financial analysis have been made available. It is stated that "alternative site costings" appear to be utterly lacking.
- Suggestions that this proposal is ill-thought out and will negatively impact on community, tourism and the local environment, on this basis it is requested to find an alternative solution.
- Stakeholders objected to the project on numerous occasions. Many stated they object to the project until a more "equal, fair and intelligent alternative" is considered or found.
- Suggestions that there must be a better solution than to pump sewage off the coast of Malahide and into the Irish Sea.
- Suggestions were made that tourism and the local environment will be negatively impacted and requests that an alternative solution be found.
- Suggestions were submitted that alternative "natural ways" should be found to treat wastewater.
- Suggestions were made that Fingal County Council should get a Post graduate research student involved in the project.



### 3.6 AQUATIC ECOLOGY AND THE ENVIRONMENT

The potential impact the proposed WwTP may have on aquatic ecology, the fishing industry, the environment and beaches were issues raised on numerous occasions by stakeholders. The impact that a leak, malfunction or breakdown could have on aquatic ecology was also raised (Section 3.21 contains further details on this issue).

#### 3.6.1 Aquatic Ecology

- Concerns were raised in relation to the impact discharge from the outfall will have on marine life, marine farming, the fishing industry, shellfish, the sea bed, fish breeding grounds and beaches along the Fingal coast line.
- Queries were raised as to whether any studies of flora or fauna and shellfish have been carried out, given it is proposed to discharge treated effluent into the sea around Portmarnock which is a protected area.
- Queries were raised as to whether any studies have been carried out in relation to the potential damage to the seas surrounding Portmarnock.
- Concerns were raised that the proposed outfall pipe is too near a very sensitive marine area, it is not long enough and will impact aquatic ecology as a result.
- One stakeholder suggested the outflow pipe should be 12 miles further out to sea to save marine life.
- Comments were made that there is a high probability that the outfall area is likely to receive designation as a shellfish area in the next review which will give it the same protection as other locations.
- Concerns were raised that the southern outfall corridor is a busy fishing area and a request that a full re-assessment of the shellfish areas that could be impacted upon be carried out as part of the Environmental Impact Statement process.
- A concern was raised that should a malfunction occur and it is necessary to discharge "raw sewage" into the sea the result would be detrimental on the environment given the designated shellfish waters of the Dublin Coastline. Reference is made to malfunctions at Balbriggan occurring and raw sewage being discharged which is only a small plant.

- Requests were made that outfall sites previously excluded due to shellfish designation be reopened for consideration. It was suggested that the area chosen is of good quality and areas were previously excluded on the grounds of shellfish designation and shellfish harvesting taking place in these areas.
- Concerns were raised about the general disruption caused during construction and operation of the plant and its impact on the marine environment.
- Concerns were raised in relation to the level of treatment proposed (secondary treatment), the presence of nitrite in the discharge and the volume of discharge and the potential damage to shellfish ecosystems as a result.
- Statements were made that lower level crustaceans are nearly extinct surrounding the outfall at Shanganagh due to discharge from the outfall. It was stated that four macro-invertebrates have disappeared in the last number of years. Concern was expressed that similar will happen at the proposed outfall for the GDD Project.
- Queries were raised in relation to the quantity of oestrogen that will be discharged into the surrounding waters from the outfall and the impacts this will have on fish.
- Concerns were raised that eutrophication will lead to reduced water clarity and toxic water quality.
- Queries were raised in relation to which micro-organisms will be discharged into the sea and the rate of discharge.
- Queries were raised in relation to which chemicals will be discharged into the sea.
- Queries were raised in relation to what ecological impact discharging nitrogen rich material (BOD) will have on marine life.
- Queries were raised as to who is completing the studies regarding potential impacts on marine life and fisheries, what European/International input is involved in this study, what does it cover exactly and how were the areas for assessment scoped.
- A concern was raised that if anything went wrong the impact on the shellfish industry would be catastrophic and could pose a serious risk to human health.
- Queries were raised regarding whether the outfall will attract birds.
- One stakeholder referred to various publications in relation to the impact pollutants such as heavy metals, nitrogen and phosphorus can have on shellfish and estuarine ecosystems. It was stated that:

"Over one-third of shellfish waters cannot be harvested because of habitat degradation, pollutants, algal blooms, and pathogens. To a large extent, this degradation is caused by urban pollution (NOAA 1995b; NOAA 1990b; USEPA 1994b).

Heavy metals may bioaccumulate in estuarine wetlands, causing deformities, cancers, and death in aquatic animals and their terrestrial predators. Heavy metal ingestion by benthic organisms (including many shellfish) in estuarine wetlands occurs because the metals bind to the sediments or the suspended solids that such organisms feed on or settle on the substrate where such organisms live.

Urban and industrial stormwater, sludge, and wastewater treatment plant effluent, rich in nitrogen and phosphorus, can lead to algal blooms in estuaries. Algal blooms deplete dissolved oxygen, leading to mortality of benthic organisms. Some algae are toxic to aquatic life (Kennish 1992). Excess algae can shade underwater sea grasses (part of the coastal wetland ecosystem), preventing photosynthesis and resulting in sea grass death (Batiuk et al. 1992; USEPA 1994b). Because sea grass meadows reduce turbidity by stabilising sediments and provide critical food, refuge and habitat for a variety of organisms, including many commercially harvested fish, the death of these plants profoundly impairs the estuarine ecosystem (Dennison et al. 1993; USEPA 1994 b; Batiuk et al. 1992)".

- Some stakeholders said they believe the site has been chosen mainly because of the shorter outflow pipe, saving an estimated €80 million and have therefore requested that the EIS include extra measures to counteract the threat and pressures this outflow pipe will place on the bivalve and gastropod molluscs. It was stated "surely the protection of these shellfish waters is vital to improve and support shellfish life".
- Statements were raised that "engineering literature on waste treatment systems in the UK is paying increasing attention to the impact of synthetic chemicals and endocrine disrupting chemicals in wastewater marine outfalls" and "chemicals which disrupt the endocrine system of fish, birds and mammals are present in a massive range of chemicals which end up in the sewage system including dioxins, PCBs, heavy metals, inonylphenols and particularly ethinyl estradiol EE2" and the dissatisfaction that "there has been no consideration given to date" to the possible impact and cost benefit

impacts of the above effluents on the Portmarnock Baldoyle Bay marine and land region.

### **3.7 ARCHAEOLOGY, ARCHITECTURE AND CULTURAL HERITAGE**

Archaeology, architecture and cultural heritage were issues raised by some stakeholders.

Specific issues and concerns include:

- Statements that archaeology needs to be considered further.
- Archaeology concerns were raised in terms of pipe locations and the potential impacts on archaeology from use of open cut and tunnelling construction techniques
- Queries were raised in relation to what archaeological studies have been done.
- Statements were made that "archaeology assessments should be made of their whole proposed site. It will be too late when the diggers move in. Our heritage will be swept away by moved earth".
- Queries were raised as to whether there are any preserved/heritage sites along the pipeline route.
- Comments were made that the contractors should be on the lookout for archaeological findings during construction.
- A suggestion was made by a stakeholder to tap into local knowledge of stone drains existing under railways and the site's proximity to two historical sites and hotels.
- Queries were raised as to why the site is not further east given the close proximity of archaeological sites.
- One stakeholder made reference to the engineers report [ASA Phase 2 Report], and stated that this plant will have a profound negative impact on ecosystems in the area such as rivers and wildlife and also on important heritage sites, recorded protected structures (too many of which have already been destroyed in this area and surrounding area already), as well as Bronze Age sites and a "very significant amount of prehistoric and early medieval finds as recorded by the National Museum of Ireland".
- One stakeholder referred to archaeology, architecture and cultural heritage in the context of Lusk site options and stated:

"The historic village of Lusk is famous for its ancient tower, beautiful chapel and heritage houses. Its fields and hedgerows are home to protected species of fauna and flora, for example, there are bee-orchids growing in the field opposite the local shop in Chapel Farm. Lusk is home of the famous Black Raven Pipe Band and the village's history stretches back to 450 AD. Such history must be promoted by arts, crafts and cultural initiatives that bring Lusk to life by celebrating its heritage and future. One such initiative has been the restoration of the eighteenth-century Ardgillan Castle as a visitor centre and recreational parkland".

- One stakeholder said they hoped "archaeological ruins are found on this site and hopes that puts stop to your grand plans". Another stakeholder said they hope "ancient relics, heritage artefacts, ruins from historic times are found to put a stop to this unwise sewage development".

### **3.8 CATCHMENT AND LOAD AREAS**

Numerous submissions received expressed dissatisfaction with the proposal to treat wastewater generated in other areas at Clonshagh. It was queried why Fingal County Council will be treating wastewater generated in Meath and Kildare. A view held by numerous stakeholders was that each area should be treating their own wastewater.

However one stakeholder submission said they thought that the project was "a fantastic idea" on the basis that "Kildare has been taking wastewater from Dublin for years".

Specific issues and concerns include:

- Clarification was sought on the extent of the catchment area, wastewater acceptance proposals and how existing WwTPs fitted into that proposal.
- Queries were raised in relation to where most of the wastewater is coming from and whether it is proposed to treat wastewater other than that coming into the region at the moment.

- Queries were raised as to why Fingal are willing to accept wastewater from other areas. Views were made that each area should be treating their own waste.
- A concern was raised that the proposed WwTP will become another Ringsend.
- Concerns were raised that only a small percentage of wastewater from the North Dublin area will be treated in the WwTP even though it is located closest to North Dublin residents. It was viewed as "unfair" by most stakeholders.
- Queries were raised as to when the new WwTP will start treating wastewater from North Dublin.
- Strong feelings were expressed by some stakeholders that the WwTP shouldn't be in Clonshagh because it won't serve the people of Clonshagh. It was felt that locating a WwTP on the border of Dublin City Council was "just not fair" and stakeholders asked how Clonshagh will benefit.
- Some stakeholders said they believe that the WwTP will not treat any wastewater from North Dublin City Council area.
- Queries were raised as to whether the North Dublin City Council area will link into the plant on day one.
- Views were expressed that the WwTP should be located in central Fingal if it is to cater for Swords, Blanchardstown, Fingal and parts of Meath.
- Differing stakeholders queried whether the facility will be treating water from Skerries, Swords, the airport, Wicklow, South Dublin areas, Skerries and Kildare.
- Queries were raised in relation to the quantity of Fingal's wastewater to be treated at the proposed plant.
- Queries were raised in relation to the quantity of Kildare's wastewater to be treated in the future.
- Views were expressed that it makes no sense to pump wastewater from other counties to Clonshagh for treatment and discharge to Dublin Bay.
- Queries were raised as to whether the M50 will be used to transport waste to the WwTP.
- Queries were raised in relation to where wastewater is currently treated.
- Queries were raised as to whether wastewater is currently discharged to rivers.

- One stakeholder queried the rationale behind pumping wastewater from Clontarf uphill to Clonshagh; stating that sewage currently falls by gravity to the Clontarf road into the North Orbital Sewer for treatment and queried why it is proposed to pump this back uphill to Clonshagh and if this is the proposal it is queried why the North Orbital Sewer was built in the first place.
- Queries were raised as to why both storm water and sewage will be collected.
- Other queries raised were in relation to wastewater from Dublin Port Tunnel and whether it is discharged into the Nanakin River.
- Concerns were raised that piping "raw sewage" long distances is inviting problems.
- Views were expressed that the ownership of waste and treatment of such waste should be carried out in the areas where it is produced.

### 3.8.1 Other WwTPs

- Queries were raised as to whether other plants will be upgraded to their maximum capacity, when this will be done and what wastewater these plants will treat.
- Concerns were expressed that "sites in Kildare were already overloaded" and queries as to whether the proposed WwTP will be operational before other existing plants become overloaded.
- Queries were raised in relation to other existing WwTPs in North County Dublin, for example the Portrane facility, its capacity and why it can't treat wastewater for North County Dublin.
- Queries were raised in relation to when the existing WwTPs' capacity will be saturated.
- Queries were raised as to whether existing plants that are currently being upgraded will link to the new regional plant when it is up and running.
- Queries were raised regarding the implications for existing plants and whether any of these will be decommissioned.
- Queries were raised as to whether it is proposed to close local treatment plants in an effort to justify the WwTP at Clonshagh and turn existing fully functional WwTPs into pumping stations for example Ashbourne, Co. Meath.
- Interest was expressed in relation to the Shanganagh WwTP. Queries were raised in relation to the number of residents in close proximity

to the facility, whether there was much opposition to it, whether "there has been any follow up asking locals what they think of the wastewater treatment plant" in Shanganagh and "how do you know if they are satisfied with noise/smell levels." It was also queried why an additional facility is needed if Shanganagh was so good.

- Queries were also raised by stakeholders in relation to the Ringsend WwTP. It was questioned "why Ringsend was not capable of doing what was needed given its size".
- It was stated that "Ringsend was developed to expand so why is GDD taking away from Ringsend" and "will this new WwTP make Ringsend defunct".
- Queries were raised as to whether the new WwTP is a relief plant for Ringsend and is it planned to divert sewage from the Ringsend plant to the new WwTP in Clonshagh.
- It was also queried where wastewater is currently being treated if the Ringsend plant is at full capacity and it will be at least 7 years until GDD will be operational.
- Queries were raised as to why Meath can't treat their own waste. Stakeholders stated that they have built industry there so why can't they build a WwTP. Reference was also made to there being more available open space to locate a WwTP in Meath rather than in Clonshagh.
- Queries were raised as to why wastewater from Malahide will be diverted to the new WwTP from 2035 and the Swords Catchment from 2045.
- Queries were raised as to why the areas of Clonshagh, Malahide, Kinsealy, Portmarnock, will not feed into this proposed plant.
- Queries were raised as to why some leachate is pumped to Ringsend and not Swords at present and whether this will be directed to the new WwTP.
- Queries were raised in relation to what types of wastewater will be treated i.e. will agricultural and industrial wastewater be treated.

### **3.8.2 Treatment Capacity and Projected Loading**

- One stakeholder requested research be carried out into the existing and possible WwTP capacity that already exists throughout all counties in Ireland.



- It was also requested that research be carried out to calculate the amount of surface water wrongly directed to WwTPs and that national policy be set up to separate surface water from foul water at source.
- It is suggested that the majority of the sewer system in Fingal is a separate system and if such a system was implemented for the Dublin City area then the Ringsend plant would have sufficient capacity to cater for growing needs. It was suggested that currently up to 50% of flow through the Ringsend plant is stormwater and if stormwater and wastewater were separated out in areas such as Blanchardstown, this would improve the capacity at Ringsend.
- Concern was also expressed in relation to the fact that the "population scenarios extend to 2040, yet do not include an assessment of the potential impact of a change in government policy of decentralisation and regional development" and "are based on a limited approach that does not address the sustainability for the country, as a whole, of continued growth of the Greater Dublin region".
- Concerns that proceeding with population scenarios that assume only population growth runs the real risk of incurring significant unnecessary cost to the state at a time of limited availability of capital.
- It is suggested that the Environmental Impact Statement should address the impact of negative growth scenarios on the design and operation of the WwTP.

### **3.9 COMMUNITY AND SOCIO ECONOMIC IMPACTS**

#### **3.9.1 Overburdening**

'Unfairness' was stated in many of the submissions in relation to Clonshagh being "landed with such unwanted projects". Numerous stakeholders stated they "are tired of the council dumping things on them" and they "don't want this" project. A significant number of submissions objected to the project for community and socio economic reasons.

Specific issues and concerns include:

- One stakeholder refers to their current experience of "having to endure noise pollution" and "high octane fumes" from the airport and

the smells from the Cara Park halting site in addition to previous experience having worked and lived in the Sandymount area for 30 odd years. In relation to Ringsend, reference is made to "unpleasant odours", and witnessing "people at times having to cover their faces walking through Irishtown" in addition to plummeting property prices as a result.

- Reference to the IDAs determination in 2001, that Clonshagh/ Belcamp was the site of illegal dumping of toxic waste, creating a hazardous environment for its residents. It is felt that the neighbourhood has already been left exposed to a toxic environment and it is unthinkable that residents should tolerate being victimised yet again by the location of an environmentally damaging sewage plant.
- The impact on the quality of life has also been raised as a concern by numerous stakeholders. Many residents feel that "Clonshaugh has already been punished by business interests at the expense of the quality of life of its residents".
- Stakeholders frequently refer to "odours arising from existing food manufacturing plants" in the area and state they do not want a third one with "unpleasant odours added into the mix".
- Some stakeholders feel that "Clonshaugh has already fulfilled more than its social and environmental construction requirements by "agreeing" to the location of settlements and halting sites which other neighbourhoods wouldn't tolerate.
- Views that the area already has social problems and this plant will not help.
- Some stakeholders feel it is:
  - "Outrageous that community leaders in positions of making decisions on the designated area would consider and propose Clonshaugh as the area for sewage plant when the community has already been saddled with the flight path for Dublin airport without being saddled with a sewage plant".
- Reference has been made to the social problem endured by residential communities of Balgriffin and the Northern Fringe in the last number of years associated with intense development of the area, followed by stalled development, vacant units, unfinished housing estates and dereliction. It was stated that "the human impact of this stalled development has been very significant. Families who have bought into developments with the expectation of completed settlements within a short time frame have dealt with the pressures and problems of living in unfinished estates for a prolonged period. The last thing that

they need is the added worry and stress of a major waste water treatment plant in close proximity".

- It is also stated:

"Likewise the communities of Darndale, Belcamp and North Coolock have endured more than their fair share of social problems over the last number of decades. Since the disastrous surrender grant introduced by Dick Spring in the 1980's created havoc by encouraging many community leaders to move out of these neighbourhoods, the residents have struggled to cope with a number of problems including joy-riding, anti-social behaviour, criminality and drugs. Excellent work has been done by local residents in facing up to these problems and providing community based solutions. However the imposition of an unwanted waste water treatment plant at this time would be deeply unfair to these communities that have worked so hard to deal with very pressing social issues".

It is suggested that an alternative location away from large residential communities would be much more preferable and should be considered in the EIS to alleviate worry and stress the current proposal is causing people.

- Feelings that "Dublin City residents already have their fair share of sewerage treatment at Ringsend and it is ridiculous to advocate this site".
- Expressions that the community is very angry. It is felt that "there are enough developments in the area already" and they are concerned about how the project will impact on them.
- Some stakeholders see this as "another easy shot at an already struggling community".
- Statements that the area never gained substantially from the Celtic Tiger and some areas such as Cromcastle Flats and areas around the Northside shopping centre are still in need of regeneration and if complete would greatly benefit the area and have a positive effect on employment. This did not happen earlier due to lack of funding and there is a feeling of unfairness given funding can be found to support the WwTP which is viewed by some as having a negative effect on the area.
- Feelings of unjustness reflected by statements such as "the Northside doesn't get any amenities like the DART or LUAS, but is being burdened with a WwTP", "we are losing out so much in this area" and "who would want this on their doorstep".

- Statements that 'there is already a mosque, ESB and machinery movements in the area.'
- Query as to whether 'there was an element of racism involved given that(i) the travelling community are located across the road (ii) a new large Muslim development is very close?'
- It is an "unfair burden on Clonshaugh, Portmarnock and wider coastal communities to treat sewage from the whole Greater Dublin Area". One stakeholder stated "It's almost as if Fingal County Council has a death wish for Portmarnock, having already allowed for a new runway allowing a flight path directly over it".

### 3.9.2 Residents and the Community

- Analogies were made between the proposed WwTP and a nuclear bomb. One stakeholder stated "drop a nuclear boom on Clonshaugh and the effect will be the same as building a mega sewerage plant. Nobody will want to be next to or near the radiation or in our case, smells".
- Anger was expressed by some stakeholders. It is viewed that this is a Fingal Plant, to be built on Fingal lands which was decided upon by Fingal Councillors. However it is the Dublin county council tenants that will be affected.
- One stakeholder believes that chemicals discharged from the stacks will ruin their garden.
- Concerns that the amount of people affected by the location of the proposed facility in Clonshagh is greater than for the two other sites.
- One stakeholder commented "my child won't have a life because of this. How can you do this and sleep at night".
- Others are concerned that the proposed plant is too big, located too close to large residential areas and will seriously undermine the quality of life for residents in the area.
- Others state "Clonshaugh residents have worked hard over the years to cultivate a safe and comfortable neighbourhood and we are determined that it stays that way".
- Comments such as "it will affect everyone, from people getting off planes at the airport to the ordinary people hanging their washing on clothes lines" were frequently mentioned.

- Feelings that it is "most unfair" that residents of Dublin City Council "are going to be penalised by providing this for Kildare, Meath etc." are also documented.
- Concern that the proposed plant is too close to the travelling community.
- Noise impacts given the proximity of the WwTP to residents has also been raised as a concern.
- Most stakeholders feel the proximity of the proposed facility to a large number of residents "is unacceptable". It is stated:

"There are more than 2500 residential buildings within 0.5-1.0km of the Clonshaugh boundary site, including Clonshaugh, Priorswood, and Darndale housing estates as well as the Burnell Court apt development at the Northern Cross. Building a sewage treatment plant on the doorstep of these estates would be unacceptable.' It is also stated 'there are too many houses (thousands) within a mile or two' and 'there are many sports clubs in the area and the site is close to Beaumont hospital. All of these stand to be negatively affected by the plant".
- Feelings that this facility would have a very deep and negative impact for Clonshagh and the immediate surrounding areas of Priorswood, Belcamp, Darndale, Burnell, Coolock, Malahide Road and other surrounding areas including Belmayne, Clongriffin, Balgriffin, Clare Hall and the Northern Fringe. It is stated that "building the plant here would lead to an intolerable reduction in the residential amenity of thousands of householders in these and other neighbouring areas".
- Feeling of unfairness to site a "HUGE sewage facility" so close to a facility in Sutton. It is suggested that alternatives should be looked at.
- Some stakeholders stated that 'North Dublin is being targeted over the Southside.' 'This plant only needed so the south side can clean up/free up space for themselves - might be a Northside vs. Southside thing.'
- Feelings that everything is pushed on the north side, such as the halting site in the area.
- Feelings that "poor people have to put up with what rich people force" upon them such as the halting site and the proposed WwTP. It is suggested that the "sewage works should be in the rich area".
- Feelings that the residents are not being listened to and feelings of unfairness by some stakeholders. One stakeholder stated "Clonshaugh

was originally named Clonshaugh to distinguish it from Coolock and it is now proposed to locate a WwTP here". It was also stated that "Darndale was one of the most deprived areas in Europe".

- Concerns for children, grandchildren and future generations' safety.
- Information was provided that a number of opposition groups were forming, i.e. Portmarnock, Kinsealy, Clonshagh, etc.
- Queries as to whether the GAA grounds would be impacted.
- Concerns that children won't be able to play in the area if the plant is built for reasons such as traffic, safety and odours.
- Concerns in relation to the overall impact on the local community as a result of the potential for reduced bathing water quality, increased truck movements, odours and falling house prices in the affected areas too (each of these concerns are addressed under each relevant section).
- Some stakeholders state they "don't want to live directly across from a MONSTER sewerage plant, on a road with trucks and heavy vehicles. This changes my whole outlook on what I could have imagined our lives being".
- Some stakeholders state they are leaving the area before the plant is built.
- Statements that "Clonshaugh will become Irelands Chernobyl, to be kept as far away from as possible".
- Concerns that the current proposal is impacting relationships and causing potential conflicts between Dublin City Council and Fingal County Council.
- Views that this plan has not been researched thoroughly enough in terms of the impact on all the people living in the local area and the effect on their lives in the area.
- Queries and concerns in relation to the impact on the residents in Portmarnock.
- Concerns that this plant will result in nuisance, possible pollution, traffic chaos and environmental damage and "the people of Clonshaugh deserve to live without this".
- Concerns that the face of Clonshagh will be changed forever.
- One stakeholder also lodged a submission which detailed concerns and issues associated with siting the facility in Newtowncorduff.
- Fears that insects, flies, seagulls, microbes and bacteria will descend on Clonshagh and the area will become a nightmare.

- Suggestions that no "small community should live in the shadow of such a monster facility with the hanging threat of ecological damage a constant companion".
- Concern and anxiety was expressed amongst residents that the WwTP could result in contamination and/ or seepage into the River Mayne.

### 3.9.3 Industry and Business

Concerns that a WwTP located in Clonshagh would have far reaching economic implications for the area. Further details in this regard are detailed in Section 3.37.

Specific concerns and issues include:

- Some stakeholders are concerned that people will lose jobs because companies will pull out of the area as a result of this project. It is queried how these people are going to find new jobs.
- Concerns that the commercial impact of this WwTP in Clonshagh will be devastating for the surrounding communities resulting in the reduction of both the economic and residential potential of surrounding neighbourhoods.
- Concerns that industry will not set up and/or invest in an area where there are "smell" problems. Instead they will choose to locate somewhere else.
- Concerns that this development will possibly result in "a lost opportunity for employment for the area, which the community badly needs".
- Concerns that the WwTP will impact the local economy are reflected in statements such as "local business will incur a massive loss" and "local hotels, farmers and shopping centres will suffer the most".
- It was also raised as a concern that the size of the plant will impact the flight path of Dublin Airport, which will in turn impact the greater airport economic zone which provides up to 50,000 jobs, many of which are held by local people.
- Queries were raised as to whether there was an impact study carried out on employment and possible future industries coming into the area.
- Views were expressed that "the region is crying out for some positive developments such as hotels, state of the art shopping centres etc.,

given it is in such close proximity to Dublin Airport. The last thing this region needs is a sewage plant."

- Concerns were raised in relation to the impact pipeline construction will have on local business such as horse breeding and horse riding in the area as the pipeline will go through their lands.
- Concerns were raised that industry such as the pharma and hi-tech industry will be discouraged from locating to the area and as a result thousands of badly needed jobs will not be created in the area.
- Concerns were raised that the project will affect job opportunities linked to the hospitality and tourism sector, for example concerns were raised by stakeholders that visitors may no longer stay in Bewleys Hotel which will be within close proximity of the plant due to odours from the plant which will in turn impact jobs at Bewleys.
- Concerns were raised that locating the WwTP close to agricultural land will destroy the agricultural area and the small community of Cloghran which has a low electoral mandate.
- Views were expressed that the area clearly needs investment, but investment that will bring employment, community enhancement and services that will enhance the area, not investment that will make the general area less desirable.
- One stakeholder expressed dissatisfaction in relation to the failure of project reports to address the fisheries economy "the failure by the Jacobs Tobin reports to address the shellfish and general fisheries economy of Howth and environs is an incredible lacuna". It is also stated that "it seems clear that EU legislation cannot permit an outfall in the area proposed based on the historic shellfish fishery. Indeed Howth's economy and our annual Howth Seafood Festival is largely based on the historic excellence of shellfish in the waters of Baldoyle Bay".
- One stakeholder queried whether the IDA can give details on how they will progress employment in this area if the WwTP goes ahead. It is stated that more hotels were planned along this route however no hotel will want to be near this.
- Some submissions referred to the potential impact the proposed WwTP will have on livelihood and business. It is proposed to locate the WwTP primarily on agricultural land, currently used for vegetable growing. Some stakeholders have raised queries such as how certain landowners will be able to support their families when their



livelihood has been put in jeopardy by both the plant on one side of the road and the pipe laying on the other?

### 3.9.4 Community Gain

Some stakeholders are unhappy with the amount of infrastructure being put in the area, it is felt that residents are not protected by this and they are getting nothing in return.

Specific concerns and issues include:

- Views that there must be some form of appreciable community gain for the area if the project goes ahead and people must be made aware of the types of investment and improvements which will be made in the area. It was expressed that some of the communities in the greater area surrounding the plant are among the most disadvantaged communities in the country, for example, in the area of access to third level education.
- Suggestions that some of these communities have already taken more than their fair share of economic and social disadvantage and have had poor transport provision and community facilities compared to other areas across Dublin and Ireland.
- Queries were raised in relation to what community gain there will be as a result of this facility and when it will happen.
- Queries were raised as to what employment prospects the WwTP will bring to the area and what the potential for local work in the facility will be
- Queries were raised as to whether a certain percentage of workers will be local, similar to the Ballymun Regeneration Project initiative where it is thought that 15% of workers were local.
- Queries were raised in relation to the number of local people working in and running the Shanganagh plant.
- Suggestions were made that local unemployed workers be given whatever employment they might be suited to in the construction and operation of the plant.
- Queries were raised in relation to what the developmental potential of area will be and concerns in relation to the negative effects on employment in area.
- Views were expressed that "community gain should see beyond the construction phase".

- Views were expressed that community gain should include some physical activities for young people.
- It was suggested by one stakeholder that community gain proposals should include the ripping up of the road bridge/causeway from Clontarf to Bull Island and making a new steel and concrete bridge so that the tide can flow through it, as "this causeway smells and building a new bridge would be a community benefit for the area".
- Suggestions were made that the possibility of connecting people and areas adjacent to the plant such as Baskin which currently use septic tanks, into the main WwTP at no cost would be a local benefit. It was suggested that the EIS include environmental benefits of the development and include illustrations of areas currently discharging waste of a lower quality.
- It was suggested by a stakeholder that consideration should be given to 10 year waivers on both property and water charges from Dublin City Council and Fingal County Council to the nearest houses based on the disruption and distress caused by the planning of this plant. It was stated that while local people obviously would prefer not to see the plant in Clonshagh, in the event of the plant proceeding, there should at least be some benefit to residents within less than a kilometre of the plant perimeter.
- One stakeholder suggested that levels of compensation be paid proportionately to those affected as people living near the plant will bear the worst of this development (similar to the French Nuclear Power Plants). It is also stated that this should be in addition to any Local Dividends given to the community at large.
- Suggestions that the realignment of the Malahide Road would at the very least be a necessary prerequisite and precondition for such a project. It was stated that information from the Department of Environment, Community and Local Government suggests this would cost in the region of €50 million and it is felt that the realignment would be absolutely essential for safe access to the WwTP, the improved road structure would be of great assistance to local residents and it would help to complete the development of the Clare Hall Town Centre and residential district.
- Suggestions were made that community gain initiatives should include the provision of a new third level institution. It is stated that "the people of the North Fringe and the greater Swords area have been seeking a new third level institution for the South Fingal district".

- Suggestions were made that community gain initiatives should include the provision of a new regional hospital. It was stated "Given that Beaumont Hospital operates continually at 100% plus capacity, there is also a longstanding demand for a new regional general hospital in the North Fringe area".
- One stakeholder referred to their 'surprise' that the provision of a hospital and a third level institution was not considered during the recession, yet "the district is expected to take on the largest sewage plant ever planned in Ireland".

### 3.10 CONSTRUCTION

Construction related concerns and issues primarily centred around construction timelines, disturbance to the residents in terms of traffic, safety and noise. Concerns also centred around the impact to lands, access constraints and height restrictions associated with the proposed site.

Queries were raised as to:

- When construction on site will begin.
- Who the contractor will be.
- When construction on the pumping stations will commence.
- The duration of construction works.
- What impacts will result from construction.
- The average depth of excavation.
- What disturbance will result from construction works.
- Whether impacts caused during construction will be "restored" afterwards.
- Who will build the WwTP and when it will be built.
- The width of the wayleaves along the pipeline route.
- How the public can be reassured that issues arising during construction will be addressed. One stakeholder stated previous experience with the Dublin Port Tunnel (DPT) project has shown that it is important to have a person acting as "trouble shooter" to deal with public concerns raised during the construction phase and "not just an 1890 number".
- How land along the pipeline corridor will be impacted by construction including football pitches.

- How it is proposed to access lands required to carry out works along the pipeline route and the impacts of such.
- Whether livestock will need to be moved during construction of the pipeline.
- The timeline for laying pipes.
- Information was offered by the DAA in relation to height restrictions applicable to the site in terms of equipment, machinery and structures. It was stated that the site at Clonshagh lies beneath the obstacle limitation surfaces established in association with Runway 10/28 at Dublin Airport. Stakeholder feedback said that any permanent object or structure on the site must not exceed a maximum level of 91.6m above Ordnance Survey Ireland (OSI) datum. Temporary objects such as cranes used during construction of the plant should preferably also be limited to a maximum level of 91.6m above OSI datum. If any necessity arises to exceed this level on a temporary basis during construction, it will be necessary to consult both DAA and the IAA to ensure that the proposed objects will not affect aircraft operation.
- Concerns were raised in relation to disruption caused to local community and services during construction.
- Concerns were raised that the pipeline will sever a part of one landowner's field.
- Concerns were raised that it won't be possible to tunnel under houses.
- Information was offered for consideration from one stakeholder who stated that "building the south & north bull walls caused sand to move that created Portmarnock Spit".
- Concerns were raised in relation to construction traffic and associated disturbance.
- Concerns were raised in relation to waste management and the dumping of excavated material. It was reiterated that there is an international ban on dumping to sea.
- Positive statements received included "Should you propose to dump all waste materials on land and build a good quality treatment plant that performs to a high standard I wish you the very best of luck with the Project".
- Requests were made to use the very latest technologies and design applicable at that time of construction to minimise the impact of the plant on the locality.

- Concerns associated with the use of a design-build-operate (DBO) contract were raised. Reference was made to past experiences of the Ringsend facility which had odour problems and the length of time it took to rectify the matter. It was stated that this "highlighted the potential difficulties that could arise as a result of this type of contract" (please see Section 3.3 and Section 3.12 for further details).
- Concerns were raised in relation to disturbance to residents during construction and after.
- Concerns were raised that flora and fauna will be destroyed during construction.
- Concerns were raised that road will be dug up during construction to facilitate pipe laying.
- Concerns were raised in relation to traffic congestion caused during construction of the plant and pipeline.
- Concerns were raised in relation to noise from construction traffic. Please refer to Section 3.24 for further details. Concerns in relation to traffic delays resulting from construction works.
- Concerns were raised in relation to general disruption caused to normal life during construction works.
- One stakeholder stated that "the N32 will become a private road for the construction of the plant" and noted that more road accidents "could be expected".

### **3.11 CONSULTATION**

Numerous submissions raised consultation as a concern including lack of awareness of the project and not enough opportunity to consult.

Specific concerns and issues raised include:

- Queries were raised as to what consultation has been carried out to date.
- Queries were raised as to what can be done to stop this project.
- Queries were raised as to why a leaflet drop was not done.
- It was stated by a stakeholder that "not enough people know about the project".

- Dissatisfaction was expressed with the manner in which Fingal and Dublin City Council handled information relating to the project. It was stated that "the covert manner in which information is drip-fed is sinister to say the least".
- Queries were raised as to how public consultation is progressing.
- Queries were raised in relation to public consultation moving forward.
- One stakeholder stated that they felt the consultation was not active enough.
- Queries were raised as to what consultation was carried out with local community groups.
- Queries as to whether the impact of the project has been discussed with the people who fish in the Irish Sea.
- Some stakeholders expressed an interest in attending community group meetings if they were held. It was suggested that the Glin Centre may be an appropriate venue for such meetings.
- Queries were raised as to whether anyone is in favour of the project.
- A query was raised as to whether An Taisce and the EPA were consulted.
- A request was made to include the Irish Underwater Council (CFT) in future rounds of consultation given possible impacts that this project might have on scuba diving in the Dublin area during construction and operation of the treatment plant.
- Queries were raised as to how the public can be reassured that issues arising during construction will be addressed.
- Some stakeholders also expressed an interest in visiting the Bray-Shanganagh WwTP.
- Queries were raised as to whether there have been "any issues" with landowners and comments that "it is important to listen to landowners".
- A concern was raised that one landowner did not receive correspondence from FCC prior to the publication of the preferred route corridor despite the route traversing his lands.
- A query was raised as to why a letter was issued to one particular landowner requesting access to their lands if the pipeline route avoids their land.
- Suggestions were made that a "general email should be sent to all landowners before planning application" is lodged.

- Suggestions were made that additional consultation is required especially at around the outfall.
- It was suggested that peoples' houses should be identifiable on maps.
- Concerns were raised in relation to the advertisement of public consultation events. It was stated that "the consultation was not advertised on the Fingal website or in Fingal County Council offices".
- Many stakeholders requested to be kept up to date on project developments in the future through the project database.
- Suggestions were made that the public should be shown samples of the effluent to see what it looks like.
- Concerns were raised that the word "stormwater" and the word "sewage" are freely interchangeable which can be viewed as deception and lies.
- Concerns that public consultation was carried out without knowing what engineering is being proposed for the facility.
- Views were expressed that there has been little consideration given to the thoughts and opinions of the people of the country to date.
- One stakeholder queried whether it was possible to publish the names of people who made a submission in the consultation report.
- Requests were made to keep the public informed on project progress.
- A concern was made that the impacts the project will have on the area have not been "made known" to all residents affected.
- One stakeholder requested it be considered to "offer full and comprehensive web access to a database of all emails and communications regarding the project in order to assuage the community as to the integrity of the process"
- Some stakeholders queried the spelling of 'Clonshagh'. Many stakeholders spell it 'Clonshaugh'.
- Queries were raised as to whether consultation undertaken to date was statutory or non-statutory consultation.
- Statements were made that "nobody in Portmarnock was notified until last minute".
- One stakeholder stated that the "Fingal website is difficult to navigate".
- Reference was made to the project website which refers to Fingal County Council working on behalf of the four Dublin local authorities; however it was suggested that "this is a Fingal initiative working for Fingal and no one else".

- Queries as to why is there no land line number to contact the Project Team. It was one stakeholder's view that most people use mobiles and mobile packages these days only give free mobile and land line calls not 1890 calls. It was suggested that land line calls are free with most phone packages so it may be worth re-thinking the unreasonable burden of cost on the public to communicate with the Project Team.
- Statements that stakeholders "haven't been fully informed about the decision making process to select this site".
- Positive feedback was received from some stakeholders in relation to the information provided by the Project Team at the open day events and on the media.

### **3.11.1 Consultation with Dublin City Council Residents**

- One stakeholder expressed their feeling that there hasn't been any "meaningful consultation" carried out. Reference was made to a lack of consultation with the Dublin City Council residents.
- Feelings were expressed that Dublin City Council should have consulted residents.
- Feelings of anger were expressed by some stakeholders in the Dublin City Council area, stating the needs and fears of residents living in the DCC area, adjacent or in the general proximity of the proposed treatment plant, have not been considered mainly due to an imaginary line i.e. the division between administrative areas, however these people have similar needs and fears.
- There were numerous requests for further consultation to take place in the Dublin City Council area.
- Suggestions were made that consultation should take place at all stages with the local communities.
- Suggestions were made that mothers and fathers in the areas should be consulted to find out what their fears are and to guarantee them there will be no bad effects from the plant.
- Queries were raised as to why concerns of individuals living in a local authority area outside Fingal are less important than those living in Fingal?
- Requests were made that the views of the residents directly affected are listened to and acted upon.



- Reference was made to the "lack of awareness" amongst residents in relation to the proposed plant and the "shock and horror" expressed once informed. Reference was made to the lack of written communication from the authorities in this regard.
- It was requested by one stakeholder that a full investigation be undertaken as to why residents around the corner from the Hilton Hotel were not informed about the sewage plant or the open event in the Hilton Hotel on 16h July 2013.

### 3.11.2 Open Day Events

- Some stakeholders said they thought the consultation process "was flawed" and "misjudged" due to the location of the open day events which were held in Swords. It was expressed that these events should have been held in Clonshagh.
- One stakeholder expressed dissatisfaction with the time at which the open evening in the Hilton Hotel was held. It was suggested that the event should have taken place from 5pm to 10pm and not 3pm to 8pm to allow residents in the surrounding areas time to get home from work, carry out necessary activities and allow sufficient time to attend the meeting.
- Some stakeholders felt there should be an additional open day held on a Saturday.
- Queries were raised as to why the consultation evening was held at the Hilton Hotel. It was felt by some stakeholders that this venue was inaccessible for many. It was suggested that consultation should have been carried out at the civic centre beside the Northside Shopping Centre, Bewleys Hotel or within the Darndale Community Centre which are more accessible.
- It was suggested that additional consultation be carried out in the Civic Centre, Bunratty Road beside the Northside Shopping Centre. Reference was made to the ease of accessibility and large volume of people present at this venue. It was suggested that posters be put up there to explain the project as a lot of people don't know about the project and more only hear information that isn't from GDD.
- During the early stages of the Public Consultation phase, some stakeholders queried whether there were any plans to meet residents closer to the proposed site. It was suggested that it would be "advantageous to have some consultation events closer to the site".

(As a result of this one additional event at the Hilton Hotel, Northern Cross, Malahide Road was arranged).

- One stakeholder queried the timing of public consultation events. It was queried why public consultation dates were held so close together.
- Some stakeholders queried why they were asked to sign the sign in sheet at the open days.
- Concerns were raised that the map in the brochure was illegible.

### **3.11.3 Aarhus Convention**

Consultation in terms of compliance with the Aarhus Convention was referred to. It was stated that "most environmental projects are undertaken without relevant laws in place for Aarhus". Reference was made to the interconnector and wind farm projects. It was also stated that laws are needed that require projects to explain why alternatives are rejected in a technical manner. It was acknowledged that consultation was undertaken for the GDD project but the necessary laws are not in place.

### **3.11.4 Elected Representatives**

- Queries were raised as to whether councillors have been met.
- Queries were raised as to whether there will be a presentation to Fingal TDs informing them of the project status and whether TDs will be invited to the Shanganagh WwTP.
- It was queried by one stakeholder why politicians and councillors are opposed to the project.

### **3.11.5 Misinformation**

- A number of stakeholders raised concerns in relation to misinformation in circulation relating to the project which is causing real concerns amongst communities.
- Some stakeholders stated councillors and ministers were "putting out misinformation". Reference was made to a leaflet drop made by a political party which showed the outfall location which was thought to be misleading.

### 3.11.6 Objections

- Queries were raised as to whether the number of objections received can stop the project proceeding.
- Queries were raised in relation to time available to object to the project.
- Queries were raised as to whether Dublin Airport Authority objected to the project.
- Views were expressed that landowners will object to this project.
- Views were expressed that residents and businesses in the surrounding area will prevent this plant from being built.
- Suggestions were made that the decision to locate the WwTP in Clonshagh was "misguided given the decision was taken by only one local authority and not done on a cross jurisdiction basis, given that the waste will be coming from DCC and other surrounding areas and counties". Stakeholders stated that they felt the site had been chosen and "there was no going back".

### 3.12 CONTRACT

Concerns were raised in relation to the type of contract proposed with specific concerns noted in relation to the use of a Design-Build-Operate (DBO) contract as follows:

- The potential "pressure for cost savings on design and operation to ensure profit for the contractor leading a greater risk of discharge of untreated or inadequately treated water".
- The scope for delays, disputes and contract difficulties based on previous similar contracts.

Please also see Section 3.3.10 on Odour and DBO.

### 3.13 COST AND FINANCIAL GAIN

Many stakeholders queried whether a Cost Benefit Analysis (CBA) was completed, as well as querying the basis of the €80 million savings associated with the Clonshagh site option and how much financial gain Fingal County Council was getting in return.

Specific concerns and issues include:

#### 3.13.1 Cost Analysis

- Statements were made that "according to the NDFA any project over €20m needs an economic assessment".
- Queries were raised in relation to the cost of the project and whether this is NPV (net present value). Requests to see the figures behind decisions made.
- Requests were made to provide detailed cost analysis for the construction of the plant and advise the basis on which the Clonshagh site is 80m euro cheaper than the other options.
- Requests were made to provide cost analysis evidence to support the opinion that it is more economical to build one giant treatment plant than smaller plants treating local waste. Some have suggested that there is little evidence to support the cost savings of €80 million.
- Queries were raised as to why approximately ten locally placed small plants can't be built at a cost of €30m with a total cost of €300m instead of spending billions of euro on this large plant.
- Queries were raised as to whether a Cost Benefit Analysis was completed for the site selection process. It is suggested that a CBA should have been carried out and this is "essential especially in a time of public austerity". Shock was expressed by some that a CBA was not carried out on all potential sites before Clonshagh was chosen.
- Reference was made to the GDD technical reports in terms of the cost savings associated with locating the plant in Clonshagh (€80 million less than other potential sites) and it is stated that:

"This appears to be based solely on the cost of the pipeline, utilities and land acquisition. It does not take any account of broader social and economic costs, including issues such as the cost to local householders and businesses, the economic and environmental risks associated with a malfunction and the

impact that traffic disruption caused by the plant will have on the local economy".

- It was further stated that:

"The Government's own guidelines for cost benefit analyses make it very clear that a wide range of costs should be taken into account and that every proposal should be evaluated from the perspective of society as a whole and not just that of the proposing agency. A full cost benefit analysis of all of the potential sites - and of the option of several smaller local plants - should have been published with this report. The complete lack of such analysis calls the entire site selection process into question".
- It was suggested that the total cost of ownership should include pumping costs, maintenance cost, soil waste removal, capital infrastructure costs, water costs, gas cost, inflation on labour, energy and a net present value for each option.
- Suggestions were made by stakeholders that the cost analysis should consider international parallels.
- A desire was expressed to see a proper cost and environmental evaluation take place where experts are brought in to assist.
- Queries were raised as to how nine sites were refined down to one without full costings being carried out.
- It was viewed by some that the €80 million "savings" associated with the Clonshagh option would be wiped out if the negative costs to local households associated with having a sewage plant located nearby were factored in e.g. reduced property prices as a result. It is stated that:

"For example, if you take 8,000 households in Clonshaugh, North Coolock and the environs being negatively impacted at a cost of €10,000 each, this would equate to a negative cost of €80 million. It is possible that the negative costs to local households of having a sewage plant nearby would be much higher than €10,000 per household and therefore any potential savings would be wiped out if a cost/benefit analysis had been carried out"
- It was suggested that the "current economic basis of the plant is not credible".
- A number of stakeholders stated "the cheapest option doesn't mean it's the best". It is suggested that "a plant that is €80m cheaper

sends alarm bells. It raises the question if it is being done on the cheap".

- Queries were raised as to what the cost difference between secondary treatment and tertiary treatment is and has this been considered in the €80million cost savings.
- Views were expressed that a CBA should have been completed earlier taking the community and impacts on local businesses into account.
- Concerns and queries were raised as to whether the decision to locate one large plant in Clonshagh is based on cost only.
- A concern was made that the possible long term environmental cost (damage to the marine environment and the potential large scale clean up required) is being ignored.
- Requests were made to carry out research into the "cost, effectiveness and environmental impact of this scheme versus the cost, effectiveness and environmental impact of treating wastewater locally".
- One stakeholder stated he was told that "a financial analysis would only be prepared when the final site was chosen" and states this is the "complete opposite approach to capital expenditure proposals in the private sector".
- Queries were raised as to whether Clonshagh has been proven to be the most suitable from every point of view, where 'cost' does not equal just money.
- Statements that the "Minister for Public Expenditure and Reform gave a commitment 18 months ago to look into costs- this is now not being done -why?"
- Concern was expressed by one stakeholder in relation to the Minister for Public Expenditure and the Minister for the Environment in relation to their handling of the proposal for one large plant. It is stated that the Minister for Public Expenditure, , expressed scepticism about the desirability of having one huge plant in November 2011, when he told the Seanad:

"The issue of the Greater Dublin Drainage scheme has been raised on a number of occasions by colleagues of the Senator representing the constituencies directly affected. I am giving an undertaking now to the Senator that I will have it investigated. There is a propensity for engineers to have big schemes. They much prefer to build reservoirs than fix leaks. There is nothing sexy about fixing a hole but construction of a multi-million euro dam and piping water for miles is a big

event. I prefer to fix the leaks. I have given the Senator an undertaking that I will have the matter investigated”.

- It was also stated that “to date, the Minister has refused to confirm if he is now satisfied that the case for one large plant stacks up from a public expenditure point of view”. Additional reference is made in relation to attempts made to obtain information from the Minister on this matter. Reference is also made to the Minister for the Environment Community and Local Government where he stated “he had not seen any detailed costing for the project”. It is stated that:

“€18 million of taxpayers’ money has already been spent on this project and the estimated final bill could reach up to €1 billion after all relevant costs are considered. Yet the Minister for Public Expenditure still will not say if his initial scepticism about the project has been abated and the line Minister for the Environment seems happy to sign-off on it without seeing any details on the costs”.

- Suggestions were made that the policy “which calls for one monster sewage plant is flawed” and requests that the Greater Dublin Drainage Project, Fingal County Council and the Minister of Environment re-examine the entire project “in light of the current economic state of the country”. It is stated that “this project was conceived in 2005 at a time when this country had more wealth. The current economic climate is entirely difficult and I believe any commitment to costly projects should be re-examined in the current economic context”.
- Views were expressed that the “estimated cost for the entire Greater Dublin Drainage Project at €2.5 billion which includes the upgrading of existing pipelines and plants in the Greater Dublin Area” and the cost of the sewage plant itself which “is likely to cost in the region of €500 million is an incredible amount of money”. One stakeholder states that “at a cost of between €2.3 billion and €2.7 billion, the project will represent very poor value for money for the taxpayer”.
- Statements were made that:

“Up to €4 million will have been spent on the proposal before the EIS is submitted to An Bord Pleanála” and views that “it is critical that there is a rethink immediately so that the earlier planning disaster with regard to the National Children’s Hospital (at the Mater Hospital site) is not

replicated for Clonshaugh (especially given the unique outfall)".

- Suggestions were made that the project will cost in the region of €1 billion which is too expensive.
- Concerns were raised that the taxpayers as well as having to pay its way out of the mess the country is in is now going to be spending billions of euro on a facility dealing with neighbouring counties and their mess.
- Statements were made that  
"This proposal absolutely does not have the support of local residents who contribute enormously to the tax-take of this country every year. We have recently started to pay an extremely unfair and immoral property tax which is calculated more on the quality and location of our homes than on the size of them".
- Statements were made that there "could not be a positive NPV (net present value) for households and local communities and that constituents and taxpayers deserve to know the likely damage to householders and the environment of the North Fringe".
- Suggestions were made that it seems extraordinary that "just months before a planning submission is due to be made to An Bord Pleanála, the treatment process to be used in the plant and its costings seem to be complete mysteries".
- Concerns were raised that "no life time costs" and operational costs are presented for the project.
- Suggestions were made that the efficiency of machines needs to be considered in the cost analysis.
- One stakeholder referred to UK engineering literature and stated it is paying increasing attention to the impact of synthetic chemicals and endocrine disrupting chemicals in wastewater marine outfalls and "chemicals which disrupt the endocrine system of fish, birds and mammals are present in a massive range of chemicals which end up in the sewage system including dioxins, PCBs, heavy metals, inonylphenols and particularly ethinyl estradiol EE2" and the dissatisfaction that "there has been no consideration given to date to the possible impact and cost benefit impacts of the above effluents on the Portmarnock Baldoyle Bay marine and land region".
- Some stakeholders requested "a total stop to this before any further millions are wasted on a plant that will not achieve EC approval by the time it is built".



- Queries were raised as to how much it would have cost to eradicate odorous methane gas emissions at the Ringsend plant initially rather than correcting problems later.

### **3.13.2 Financial Gain**

- Statements were made that this is "a money making scheme" by Fingal County Council on the basis that Fingal County Council will receive money from other councils to treat their waste. It is queried as to what remuneration Fingal receive from each County Council to "sell its residents down the swanee".
- Queries were raised in relation to the "exact revenue Fingal will receive on an annual basis and any up-front payments they will receive from the other local authorities for taking their waste materials".
- Queries were raised as to whether "Fingal are doing this for revenue as they have lost the revenue from water and the bin collections and they now need money to pay their staff and keep their large underused offices in Swords".

### **3.13.3 Funding**

- Queries were raised in relation to where the money is coming from and who is funding the project.
- One stakeholder referred to the wish of people in Lusk to know where the money is coming from given there are householders needing assistance to rectify problems from pyrite used in the building of their houses.
- Queries were raised as to whether cost was an overriding factor in selecting Clonshagh.
- Queries were raised as to how confident you are that the estimated cost will be the actual cost.
- Concerns were raised that the project cost estimate will increase.
- Statements were made that the "government are being robbed" by large projects like this which in turn impacts taxpayers.
- Queries were raised as to how much has been spent on the project to date.

- Queries were raised as to whether the taxpayer is paying for this project.
- Concerns were raised that money will be wasted.
- Queries as to whether people will be paying for this project through water charges and the property tax.
- Views were expressed that the council should receive any profits made rather than a private company. That way at least the money will go back to the people.
- Concerns were raised that there is a risk if a Design Build Operate (DBO) Contract is progressed on the basis of load figures which are contractually set, that the State may suffer a financial penalty if the load targets are not met.
- Concerns were raised that the tax payers as well as having to "pay its way out of the mess the country is in is now going to be spending billions of euro on a facility dealing with neighbouring Counties and their mess".

### 3.14 ECOLOGY AND THE ENVIRONMENT

The potential impact of the proposed project on ecology and the environment were significant issues raised amongst stakeholders.

Specific concerns and issues include:

- Concerns were raised in relation to the impact on terrestrial ecology, protected areas and wildlife.
- Queries were raised in relation to the impact on the environment.
- Queries were raised as to whether five years of studies has been carried out as this is a requirement for the EIS.
- Queries were raised as to who will be carrying out the environmental studies.
- Queries were raised as to why Clonshagh is the most environmentally suitable site.
- Requests were made not to build the WwTP in Clonshagh in order to protect the surrounding environment.
- Queries were raised as to whether people can meet the ecologist or accompany them on studies to ensure studies are conducted correctly.

- Concerns were raised in relation to how the bog slip at Derrybrien occurred and why the ecologist did not foresee this. Queries as to whether the ecologist will be held responsible if they give inaccurate information.
- Queries were raised as to whether any bog land has been identified along the route.
- Statements were made that "the coastal area from Malahide to Howth is an area of great environmental importance and must be protected".
- Concerns were raised that this project will affect eco-systems, conservation areas and will result in an "environmental disaster".
- Concerns were raised in relation to the environmental impact associated with constructing the pipeline through Baldoyle estuary, Portmarnock Dunes and Velvet strand.
- Suggestions were made that NPWS (National Parks and Wildlife Service) will strongly oppose the pipeline line route.
- Reference was made to the NPWS objection to a small project to construct a footpath on the Coast Road and suggestions that NPWS will also object to this project based on the intrusive nature of the tunnelling under Baldoyle Estuary.
- Reference to the failure of Portmarnock to retain its blue flag after testing was carried out following some particularly bad flooding and queries how much greater the risk will be if the plant is discharging such huge quantities of effluent untreated i.e. if there was a flood or other unexpected stress on the plant.
- Concerns were raised that Dublin Bay will be impacted and statements that this needs to be protected.
- Views that this project is going to affect the beaches, sea, coastline and dunes in the area.
- Concerns were raised that there will be a continuous "threat of ecological damage" as a result of the facility.
- Concerns were raised in relation to the volume of wastewater to be treated at the WwTP. One stakeholder refers to the facility pumping "1,000 litres of sewage every second". Fear was expressed that this will have "serious implications for the local environment, for public safety, for nearby households and for local amenities".
- It was expressed by stakeholders that the WwTP will damage the "beautiful natural environment and in turn the value of homes and quality of life".

- One stakeholder referred to the ASA Phase 2 Report, and states "this plant will have a profound negative impact on ecosystems in the area such as rivers and wildlife". Reference is also made to the surrounding land which is of "good quality, suitable for a wide range of farming enterprises with mature trees and hedgerows". It is stated that the area is "invaluable to the greater environment, especially wildlife, and certainly preferable to a sewage treatment plant".
- It was stated that GDD reports refer to the southern outfall as a bad idea.
- One stakeholder queried "what has been done to contribute to a better environment, to the quality of life, to ensure the maintenance of the diversity of species and to maintain the reproductive capacity of the ecosystem as a basic resource for life".
- Requests were made for a list and description of the measures to be applied in order to avoid reduce and, if possible remedy significant adverse effects of this project.
- Queries were raised in relation what data is available in relation to the effects of the project on the environment.
- Concerns were raised that the pressure on the ecosystem, which is already under severe strain from erosion and the silting of the relevant sandbanks, would be further stressed.
- Queries were raised as to what impact will there be on the wider receiving environment.
- Views were expressed that "enough damage has been done to our planet without this project" followed by requests to "protect our beautiful coast; it needs conservation, not pollution".
- Concerns were raised that piping the outfall from the plant to the sea north of Ireland's Eye would pose a serious threat to the marine environment in Portmarnock, Baldoyle and Malahide which is of great environmental importance and must be protected.
- Views were expressed that "a comprehensive and accurate risk assessment must be carried out as part of the EIS to ascertain if the volumes of nutrients and phosphates will decimate the balance of the current eco system, both in the sea and in wetland estuarine areas. There are too many protected species at risk".
- Views were expressed that "each protected species should have an individual impact risk assessment report drawn up in relation to

potential threats to their health, ecosystem and food chain and the same should be drawn up for protected plant species".

- Views were expressed that this is an environmental disaster waiting to happen.
- Statements were made that "going through natural habitats does not make sense"
- One stakeholder referred to the environmental and ecological characteristics of Lusk.

#### **3.14.1 Outfall, Effluent and the Impact on Ecology and the Environment**

- Concerns were raised that the southern outfall location is more environmentally sensitive than the northern outfall location.
- Concerns were raised in relation to the proximity of the outfall location in relation to Portmarnock and the potential impacts on Portmarnock as a result.
- Concerns were raised based on past experience in other coastal regions where pollution occurred.
- Concerns were raised that discharging effluent to sea will result in pollution 'eutrophication' and impact water quality (see Section 3.39.1 on the quality of effluent released).
- Concerns were raised that the volume of effluent will negatively impact Dublin Bay. It was expressed by some that the "the sheer volume of effluent being pumped into an area already designated as sensitive is bound to be a problem".
- Concerns were raised that the outfall will impact beaches and coastlines of Portmarnock, Baldoyle, Sutton, Howth and Ireland's Eye.
- It was one stakeholder's opinion that "the proposed EIS for the Clonshaugh site faces an impossible task" as the "location is an impossible site on environmental grounds" given the location of the southern outfall. It is also stated that "the core coastal area of the Baldoyle and Portmarnock district is a polder and the Clonshaugh location and outfall pose a shocking threat to the Velvet Strand, Portmarnock, Baldoyle Bay, the Howth beach at Claremount and to Ireland's Eye and marine environs at Baldoyle Bay".

- Concerns were raised in relation to the impacts on the health of seals, fish, birds, mammals and shellfish as a result of construction and contaminants in the effluent.
- Statements were made that "in the last seven years many serious environmental problems have been caused due to raw sewage being discharged into the sea".
- Concerns were raised in relation to the location of the discharge point north of Ireland's Eye and the impact this will have on marine life, flora, fauna and beaches when it mixes with the outflow from the Ringsend WwTP released into Dublin Bay.
- One stakeholder raised concerns in relation to the impact of effluent and stormwater on wetlands. It is stated that:

"Wastewater treatment plant effluent and urban stormwater are a source of pollutants that continue to degrade wetlands (USEPA 1994b). The 'aging' of wetlands can occur when wetlands filter organic matter. 'Aging' is the saturation of the ecosystem by nutrients and heavy metals over time that results in the reduced effectiveness and degradation of the wetland (Mitsch and Gosselink 1986). Wastewater and stormwater can alter the ecology of a wetland ecosystem if high nutrient levels cause extended eutrophication and metals cause plant and aquatic organism toxicity (Ewel 1990). Iron and magnesium, in particular, may reach toxic concentrations, immobilize available phosphorous, and coat roots with iron oxide, preventing nutrient uptake".
- Concerns were raised in relation to the impact on SACs, SPAs and designated shellfish waters if raw sewage is discharged.
- Concerns were raised that the "council won't be able to keep the plant running without pumping raw sewage out into the ocean and the surrounding area will be ruined".
- Statements were made that "the idea of pumping poorly treated effluent into the shallow waters off Portmarnock and Ireland's Eye is a deadly gift to leave to future generations".
- Concerns were raised that "the value of Baldoyle and Malahide Estuaries and the consequences of wastewater carried by the tides into these environmentally fragile locations".
- Reference was made to WwTP effluent and stormwater and the potential impacts on wetlands, estuaries in terms of algal blooms and the long term impacts on the estuarine ecosystem. It is stated:

"It is a known fact that worldwide wastewater treatment plant effluent and stormwater are a source of pollutants that continue to degrade wetlands (USEPA 1994B). So how exactly does the wastewater effluent destroy wetlands? The effluent from such systems floods the delicate eco-systems with nutrients and heavy metals destroying their natural balance and effectiveness. When heavy metals Bio accumulate in wetlands they cause deformities cancers and deaths in aquatic animals.

Urban and industrial stormwater sludge and wastewater treatment plant effluent rich in Nitrogen and Phosphorous cause algal bloom in estuaries. Algal bloom depletes oxygen and some algae are toxic to aquatic life. Underwater grasses get shaded by algae and die. Sea grasses are important in an estuary system as they help reduce turbidity by stabilising sediments. These sediments provide critical food refuge and habitat for a variety of organisms needed for harvested fish and shellfish. The death of these plants profoundly impacts the estuarine ecosystem. Further along the line this pollution causes accelerated siltation in effect 'human induced' coastal erosion".

- It was expressed by some that the reason the pipeline will be located through Baldoyle is based on cost. Anger was expressed that this option is being pursued to save "a few euro at the expense of long term environmental health".

### **3.14.2 Flora and Fauna**

- Concerns were raised in relation to the impact on rare plants .
- Queries were raised as to who will be responsible if "toxic fumes" impact plant life.
- Views were expressed that the Estuary suffers enough from bad planning practices and inadequate overflows. It is also viewed by some that Portmarnock has "already been sabotaged by bad planning practices e.g. the Golf links has destroyed natural flora & fauna".

For further information see Section 3.14.5 on Protected Areas.

### 3.14.3 Wildlife, Birds, Bats

- Submissions were made citing fear that the impacts of this project on wildlife have not been fully thought through. Concerns were raised in relation to the impact on wildlife such as badgers, hares, buzzards, wild pheasants, bats, hunting birds, bird sanctuaries, marine life, aquatic flora/fauna and other animals as a result of the project. It is stated that "we need to protect wildlife".
- Concerns were raised that piping sewage through Portmarnock and Malahide estuaries will impact if not kill wildlife which inhabit the area such as Brent Geese, ducks, swans and herons amongst others.
- One stakeholder provided information in relation to the presence of bats on their property located at Limekiln and queries as to whether this has been considered.
- Queries were raised as to whether birdlife has been considered.
- Concerns were raised in relation to the impact on rare animals.
- Concerns were raised that this project will impact the Puffins on Irelands Eye, whose numbers are already dwindling.
- Concerns were raised that the Bird sanctuary in Dollymount will be affected.
- Concerns were raised that birds won't drink the water if it is not clean.
- One stakeholder stated that the Project Team is "more concerned with birds and bats than with people".

### 3.14.4 Eels

Reference is made to the presence of the European eel which is on the highly endangered list of species.

### 3.14.5 Protected Areas

- Statements were made that Special Areas of Conservation (SACs) and Special Protected Areas (SPAs) "fall within the danger zone of the proposed plant and outfall".



- Concerns were raised in relation to the effect that tunnelling under Baldoyle Bay (SAC, SPA, pNHA, WFDRPA, Ramsar, SNR) will have on the ecosystem and the groundwater system.
- Statements were made that "the southern outfall will end and discharge effluent at the Rockabill to Dalkey Island, this is a Special Area of Conservation, and so should not be put there".
- Reference was made to Baldoyle Bay by numerous stakeholders. It is stated that it is an area
  - "protected by EU law as it is considered to be one of immense environmental sensitivity and importance. The inner parts of the bay are protected as a Special Area of Conservation, while the wetlands support several habitats that are covered by the EU Habitats Directive".
- It was stated that "locating the outfall pipe as proposed will cause considerable disruption and damage to a very sensitive marine environment".
- One stakeholder provided a description of the biodiversity present at Baldoyle Bay, Ireland's Eye and North Bull Island that supports a range of flora and fauna as follows:
  - "Baldoyle Bay: The sand and mud flats provide a home to tubeworm, gastropods and crustaceans, as well as a variety of wetland flora. The Bay is of high ornithological importance for wintering waterfowl, providing good quality feeding areas and roost sites for an excellent diversity of waterfowl species. It supports an internationally important population of Pale-bellied Brent Geese and nationally important populations of a further seven species (Great Crested Grebe, Shelduck, Pintail, Ringed Plover, Golden Plover, Grey Plover and bar-tailed Godwit) (See Site Synopsis, Baldoyle Bay SPA. [www.npws.ie/protectedsites/specialprotectionareaspa/baldoylebayspa/](http://www.npws.ie/protectedsites/specialprotectionareaspa/baldoylebayspa/))".
  - "Ireland's Eye: This island supports cliff maritime flora and is of national importance for breeding seabirds, including Fulmar, Comorant, Shag, Lesser Black-backed Gull, Kittiwake, Guillemot and Razorbill (See Site Synopsis, Ireland's Eye SPA. [www.npws.ie/protectedsites/specialprotectionareaspa/irelands\\_eyespa/](http://www.npws.ie/protectedsites/specialprotectionareaspa/irelands_eyespa/))".
  - "North Bull Island: The North Bull Island SPA (which includes the south side of the Sutton isthmus) is of

international importance for waterfowl on the basis that it regularly supports in excess of 20,000 waterfowl and is the top site in the country for the Light-bellied Brent Goose. The intertidal lagoons on the land-side of the island provide the main feeding ground for the wintering waterfowl, with a rich quantity of macro-invertebrate fauna (including lugworm, ragworm, mussels and other bivalves, gastropods and crustaceans) (See Site Synopsis, North Bull Island SPA. [www.npws.ie/protectedsites/specialprotectionareaspa/northbullislandspa/](http://www.npws.ie/protectedsites/specialprotectionareaspa/northbullislandspa/))".

- Reference was made to the importance of SPAs and the impact that damage or disturbance of these areas can have on species. It is stated that

"Areas are designated as SPAs in order to ensure the survival and reproduction of a protected species by prohibiting activities that have the potential, whether directly or indirectly, to cause damage or disturbance to that species (See e.g. Regulations 3 and 4, and Schedule 4, of the European Communities (Conservation of Wild Birds (Baldoyle Bay Special Protection Area 004016) Regulations 2010 (S.I. No. 275 of 2010)). This reflects the fact that the presence of a protected species in a habitat will be due to a number of factors, and the interference with one small feature of a habitat can adversely affect that species. The presence of wild birds, in internationally significant numbers, in the SPAs is due to the presence of a food source (invertebrates and certain flora) and places for nesting (e.g. grasses). These factors, in turn, are dependent on local environmental conditions (such as the cleanliness of the sea water) being maintained".

- Statements were made that it is vitally important that the development will not affect the integrity of the Natura 2000 sites. Reference is made to the outfall pipeline crossing Baldoyle Bay SAC or SPA. Reference is also made to a proposed sewage plant in the mid 1990s at Baldoyle and it is stated that

"It is vital to remember that a proposed sewage treatment plant was turned down following a damming engineering and economic appraisal which clearly showed appalling potential damage to Baldoyle Bay and its environs. In the early 1980s the Endcamp proposal for the Baldoyle racecourse lands was turned down on advice from the then Fingal Engineers because

of the concern of sewage disposal into Baldoyle estuary together with the very low lying nature of the land and the very sandy nature of the soil in the Baldoyle area. The Jacobs Tobin phase 4 report notes that the southern outfall at Clonshagh is therefore considered less favourable under ecological criteria than the northern outfall. In other words, the outfall from the sites in Lusk and Swords would be much less damaging".

- One stakeholder raised the issue that:

"Greater Dublin Drainage has stated that the Clonshaugh site has less ecological value compared to the other two site options. However the sewerage outfall will lie off the coast of Baldoyle and Portmarnock. This area is a European Conservation Area and the flora, fauna, soil, water and coastline would be adversely impacted by its development".
- One stakeholder listed conservation sites and protected natural sites on the whole east coast, namely:
  - Site Name: Baldoyle Bay SAC (000199)
  - Site Name: Howth Head SAC (000202)
  - Site Name: Lambay Island SAC (000204)
  - Site Name: Malahide Estuary SAC (000205)
  - Site Name: North Dublin Bay SAC (000206)
  - Site Name: Rogerstown Estuary SAC (000208)
  - Site Name: Ireland's Eye SAC (002193)
  - Site Name: Rockabill to Dalkey Island (003000)
  - Site Name: North Bull Island SPA (004006)
  - Site Name: Rockabill SPA (004014)
  - Site Name: Rogerstown Estuary SPA (004015)
  - Site Name: Baldoyle Bay SPA (004016) (also RAMSAR)
  - Site Name: Malahide Estuary SPA (004025)
  - Site Name: Lambay Island SPA (004069)
  - Site Name: Howth Head Coast SPA (004113)
  - Site Name: Ireland's Eye SPA (004117)
  - Site Name: Skerries Islands SPA (004122)
- Reference was made to these sites being the homes of protected species of plants, animals, fish and shellfish and it was stated that it is an ecosystem on a knife edge:

"The slightest change to water quality will instigate a ripple effect, which will work its way from the tiniest micro-organism on the food chain such as plankton, a major food source for birds, crustaceans and fish, to Howth's

seals that can be seen in and around Ireland's Eye near the outfall point".

- Statements were made that the outfall from the sites at Lusk would be much less damaging to the environment.

### 3.15 ENERGY

Some queries were raised in relation to the efficiency of the WwTP.

Specific concerns and issues include:

- Queries were raised as to whether the WwTP will be self-sufficient.
- Queries were raised as to whether biogas will be used to power the plant.
- Queries were raised as to how the pumps will be powered.
- Suggestions were made that the cost of energy associated with pumping wastewater along the proposed pipeline could be reduced if a lower level and more direct route were to be taken.
- Requests were made that "the logic of the carbon footprint associated with pumping sewerage from Kildare and Meath be explained".
- Requests were made that anaerobic digestion is included in any treatment of municipal sewage in the Dublin Area. It is stated:

"Biogas, the methane fuel created in the anaerobic fermentation process, has an important place in the national transition to a post carbon future economy and the substitution of biogas derived from human and animal wastes for imported natural gas is a critical step on the way to a post-carbon economy. Biogas is a cost effective, environmentally friendly fuel source which has a stable production profile and is suitable for heating, cooking and transport. It is vital that any assessment of options in relation to the processing of municipal sewage include energy recovery from the waste. Whilst it is beyond the responsibility of the DoECLG to consider national energy issues, it is within the requirement of the sustainable planning requirements of the Greater Dublin area. Failure to fully address the recovery of energy from municipal waste will negate the findings of any study recommending a processing system for such waste. Unfortunately, no indication of any understanding of the energy potential of municipal sewage has

appeared in any of the documents so far produced. It is not too late to address this glaring omission".

- Requests were made that a study be carried out into the sustainability of this development including if sustainable measures were not considered due to its somewhat urban location and proximity to Dublin Airport. It is stated that:

"Wastewater treatment in larger facilities involves anaerobic digestion where, in the absence of oxygen, bacteria digest residual solids and create methane gas as a by-product. This gas can be converted to significant amounts of energy and with minimal processing can be used as a substitute for natural gas. Given the size of the proposed plant, has appropriate research been carried out into using the biogas and what end-use application would make economic sense. Has any research taken place in other areas of Sustainable Energy and in particular the use of wind turbines to power this facility".

- Queries were raised as to whether the plant will have its own generator. If left without electricity this would be extremely dangerous.

### **3.16 FLOODING AND STORM EVENTS**

Concerns were raised in relation to the impact of large rainfall, storm events, lightning and flooding were noted by several stakeholders, especially in relation to the associated risk of malfunction and breakdown. Further concerns were raised regarding leaks, malfunction and breakdown are detailed in Section 3.21.

Specific queries and concerns raised include:

- Requests were made to provide backup to show the flooding is not a problem.
- Reference was made to floods in July 2013. Statements were made that the area is known for flooding and resulting queries as to whether there are guarantees that it won't happen here.
- Concerns were raised that flooding has the potential to cause huge environment damage.

- Queries were raised as to who is responsible if impacts result from floods.
- Requests were made to ensure the flow in the River Mayne is not interfered with. Reference is made to this river being prone to flooding in the past. Reference is also made to the flood relief scheme in place at present.
- Queries were raised as to whether there will be an impact of climate change and rainfall patterns.
- Queries were raised as to whether studies have been carried out on the impact of extreme weather conditions such as flooding.
- Reference was made to historic flooding of rivers south of the planned site and queries as to whether Fingal County Council have taken the risk of future flooding into account along with the possible leakage of toxins into the local water table.
- Statements were made that Fingal County Council have categorised Baldoyle Estuary as being in a high risk flood plain. Suggestions that this leaves the area open to a potential catastrophe in the event of high tides as forecast in Fingal County Council's own Engineering Report by a Dalkey based Engineering Company. It is stated that this report has forbidden any further development in the Baldoyle Sutton area unless built 2 metres above ground level as they consider the potential for flooding to be too great.
- Concerns were raised that a plant failure may result in houses in the immediate area being flooded and householders won't be able to get insurance as a result.
- Concerns were raised about use of a combined system and the potential for heavy rain to flood the pipes.
- Reference was made to road floods occurring since Dublin Port Tunnel opened.
- Concerns were raised in relation to the proximity of flood plains located west of the pumping station.
- Concerns were raised that the site is planned for one of the last green belts in Clonshagh and if built on this could result in a risk of flooding to the local houses.

### **3.17 GEOLOGY, HYDROGEOLOGY AND HYDROLOGY**

- Queries were raised as to whether a hydraulic analysis was carried out on a computer.

- Queries were raised in relation to the cost of hydraulic testing.
- Concerns were raised in relation to potential impacts to soils if the plant, tanks or pipes leak.
- Concerns were raised that wastewater will flow into rivers when the plant is at full capacity.
- Concerns were raised that underground rivers could be affected. Suggestions that landowners should be consulted in relation to the locations of these.
- Queries were raised as to whether the River Liffey can take extra effluent.
- Statements were made that a detailed field study of the tides (NOT a desktop exercise) must be carried out as part of the EIS. It is stated that:

“In the event of heavy rain flow such as has been experienced in the past number of years in Ireland, raw sewage would be pumped into the waters off Portmarnock, Howth and Malahide, seriously contaminating the waters. Waters which, according to tidal charts, move up and down the coast in the ebb and flow bringing waste in towards Portmarnock Strand and then out towards Howth”.

- Statements were made that “another factor to take into consideration is the freshwater to salt water dilution. 146 million litres a day is a huge amount for the sea in this particular area, to just assimilate”. Requests were made to see as part of the EIS, a visual comparison chart drawn up which illustrates the daily volumes of effluent discharged on a map in comparison to the strand as it was stated that:

“Freshwater floats in seawater as will the suspended solids, waves then carry in the effluent to shore. Past public health disasters such as chemical and oil spills always show the substances reaching shore. This is bound to happen with effluent too”.

### **3.18 HEALTH & SAFETY**

Health and safety concerns were raised on numerous occasions and are generally covered under the various relevant headings within this report. In general stakeholders were concerned with the potential health and safety

risks associated with the construction of the WwTP and Operation of the WwTP. Stakeholders aired their views in relation to the requirement "to make the facility as safe as possible". Others objected to construction of "this monstrosity" on the basis of "health and safety risks". One stakeholder is seeking guarantees in relation to the safety of the plant.

One stakeholder queried how any impact of the proposed plant could be judged until the plant is up and running.

### **3.19 HUMAN HEALTH**

Concerns in relation to the potential impacts on human health were raised in numerous submissions. Concerns primarily focused on the impact of odorous air, effluent, potential contaminants present in both of these media and the impact of this on human health. Many submissions cited health concerns as reasons for objecting to the WwTP.

Specific concerns and issues include:

- Reassurance was sought by residents in close proximity to the site in relation to their safety from health issues.
- Concerns were raised that the WwTP will result in a health risk to 25,000 residents if something goes wrong.
- Concern were raised that the WwTP is a health hazard to humans and animals.
- Concerns were raised that the WwTP will cause "health problems for generations to come".
- Suggestions were made that if the plant breaks down, 40 trucks will be bringing and unloading sewage every day, raising health concerns.
- Concerns were raised in relation to the death of numerous young parents from cancer in the past and thoughts of whether this was connected to emissions released from various factories in the area which have since closed down.
- Concerns were raised that people in the George Wilson flats and surrounding area of Ringsend had eye and health complaints as a result of emissions from the Ringsend WwTP in the past and queries as to whether there will be similar impacts on the people in Clonshagh.



- Suggestions that people have died in the area due to overhead power lines and there was a concern that this project will also impact people's health.
- Suggestions were made that "the sheer size and flow capacity of the proposed plant, combined with its minimum treatment of wastewater is guaranteed to have a severe impact on public health".
- Concerns were raised in relation to the presence of "sewage gas" in covered tanks. It is feared that if this got into the water it would cause children to be sick or cause cancer.
- Concerns were raised that if toxins are released from the plant this could lead to cancer.
- Concerns were raised that if pipes leak, they could "poison the ground and rivers" which may cause health issues.
- Suggestions were made that Beaumont Hospital won't be able to cope with all people affected by the WwTP.
- Statements were made that:
  - "The look and feel of the area where you live is very important to your general health as was found in recent studies. Erecting this monstrosity on one's door step cannot have a profound effect on one's general health and life style. It will result in negative attitude in one's conscience and subconscious mind and will no doubt filter down in a most negative way through the entire family structure".
- Concerns were raised that pregnancy issues may arise as a result of emissions from the plant.
- Concerns were raised in relation to the impact on "young kids with special needs".
- Concerns were raised that flies will carry diseases to the surrounding area.
- Statements were made that the health and wellbeing of future children should be the first consideration.
- Concerns were raised that no evaluation of the threat to public health has been completed.
- Concerns were raised that no cost analysis on health has been completed.
- Concerns were raised that the WwTP will attract rats and flies which may impact human health.
- Feelings were expressed that the "plant cannot but have a profound effect on peoples general health and lifestyle".

### 3.19.1 Air Emissions

- Concerns were raised in relation to odours and gas/fumes from the plant and the impact on health "I don't want to be ill due to bad water when finished".
- Concerns were raised that emissions will cause breathing difficulties.
- Concerns were raised that micro-organisms/ bacteria will be carried from the WwTP in the wind to the surrounding area, which will impact health. Suggestions that if this occurs, legal action will be taken.
- Concerns were raised in relation to children's health. Concerns that children will get sick from breathing in odorous air.
- Concerns were raised that children and future generations won't go outside to play due to odorous air and will become obese as a result.
- Queries were raised as to what impact the discharged treated air will have on residents, particularly those with respiratory conditions.
- Queries were raised as to what affect this plant will have on children's health (including asthmatics) on a day-to-day basis and in the long term. Requests were made to provide reports to back up responses or advise if it is purely an opinion.
- Concerns were raised that the health impact of people living so close to the WwTP has not been completed. Concern that a risk analysis has not been done on the impact of odour on the health of local people.
- Concerns were raised that the emissions will cause a health risk to people using sport fields and the local Clonshaugh Park.
- Queries were raised as to who people can complain to if air quality affects their health.

### 3.19.2 Wastewater

Concerns were often raised that the sea water will be impacted which in turn will impact human health as follows:

- Concerns were raised in relation to the presence of pathogens and viruses in wastewater and the impact on health. One stakeholder states:

"Testing water for just faecal coliforms (as current sampling procedures do) does not take into account pathogens and

viruses, so there is no way to quantify the threat of outbreak in public bathers who will most certainly be exposed to said pathogens. The sheer number of locations that sewage will be diverted from (4 counties), makes it impossible to track the source of an outbreak, while at the same time promoting the spread of pathogens/ viruses over a wider area, instead of a localised area as would be the case with smaller plants treating local waste. This issue cannot be ignored during the drawing up of the EIS".

- It was also stated that:

"Just because current sampling methods cannot identify pathogens/ viruses present in the water, does not mean that this very real health treat should be ignored, some form of testing and eradication for pathogens/ viruses needs to be put in place and should be addressed in the EIS".
- Concerns were raised in relation to chemicals, toxins and heavy metals present in wastewater and the impact on daily recreational water users and the general public.
- One stakeholder referred to "the consultants' load assessment report on the GDD website" and stated:

"An approximation of 16% of waste water will have come from heavy industry or commercial facilities. This, in addition to everyday domestic chemicals which enter the sewage chain, will result in an accumulation of hard metals/ chemical agents and toxins in water that cannot be treated by a secondary treatment system. All of the above can cause various serious external and internal illnesses to bathers exposed to high concentrations. In the past, County Councils have taken up to 30 hours to realise that raw sewage had been pumped from a facility due to heavy rainfall or a facility breakdown. This means, there would be no warning to daily bathers, kayakers, and other recreational clubs, who use the amenities along this coastal section. If any of these contaminates were to reach the food chain, further outbreaks of illness may occur in the general public indirectly".
- Concerns were raised in relation to human health as a result of waves crashing to shore particularly in winter which can encroach on public roads and spaces during high tides which may carry raw sewage, effluent or residue from the plant. It was recommended by stakeholders that as part of the EIS a report on marine inundation

levels with respect to the costal shorelines from Asgard Beach, Howth, to Malahide Estuary mouth, be drawn up.

- Concerns were raised in relation to the potential presence of coliforms in the discharged effluent and the impact on health. One stakeholder states:

"the proposed treatment plant does not eradicate all Coli and will not remove Human pathogens/ Viruses found in faecal matter. According to a report by the New Zealand government; Results from international studies now available point overwhelmingly to an association between illness risk to recreational water users and the concentration of suitable faecal indicators (as reviewed by Prüss 1998). They show that careful studies are needed to reveal the relationship, particularly because many of the illnesses concerned are mild and no records are kept of their occurrence (i.e. they are not 'notifiable'). [More severe illnesses (e.g. typhoid) do occur among swimmers at grossly polluted beaches (e.g. in Egypt, El-Sharkawi & Hassan 1979; Cabelli 1983a).] Furthermore, these illnesses include both gastrointestinal and respiratory categories (when sought, respiratory illness effects have often been found; e.g. Fattal et al 1986; Corbett et al 1993; Fleisher, Kay, Salmon et al 1996; McBride, Salmond et al 1998). [Ear, nose, throat and skin symptoms are also found, often being attributed to bather-to-bather transmission, rather than to micro-organisms of faecal origin]".

- Concerns were raised that children and other swimmers will catch something by swimming in the water.
- Suggestions were made that "the size of the plant at 700,000 PE is too big and if something happens then it will forever affect the beaches on the Northside which will never recover so thousands of visitors will be affected by health issues".

### **3.19.3 Sludge**

Concerns were raised in relation to the presence of pathogens and viruses in sludge used for agricultural use. One stakeholder states "a separate report needs to be drawn up on sludge that is dried for agricultural use and this sludge may also carry pathogens and viruses".

Please also see Section 3.34 on Sludge Management.

### 3.20 LANDSCAPE AND VISUAL IMPACT

Some submissions recognised that the buildings that make up a wastewater treatment plant are modest and generally low risk in scale. Many other stakeholders were concerned that the plant would be visually obtrusive due to its proposed size. However, it was often felt that a high quality and well-considered landscape scheme would mitigate against this.

Specific issues in relation to this included:

- Suggestions were made that ground contouring (banks, mounds), dense planting and a significant tree bank along the southern and eastern boundary of the proposed site would screen the WwTP site from local lands.
- Suggestions were made that large specimen trees such as Holm oak, Eucalyptus and Pine would give a significant year-round presence and potentially help alleviate any perception of bad odours.
- Requests were made that the EIS addresses and emphasises the importance of large-scale landscaping, and not just settle for a suburban-type solution of grass with a single tree-line.
- Queries were raised as to what the proposed height of the plant would be.
- Concerns were raised that the land is higher at the proposed site and this would result in the plant looking much higher at eye level.
- Queries were raised in relation to the height of the chimney stacks.
- Requests were made for a photomontage of what the plant would look like.
- Many stakeholders raised concerns that the proposed plant would take away from what little greenery was left in the area.
- Statements were made that the proposal for the plant is "aesthetically flawed."
- Concerns were raised that the visual impact will be detrimental to local business.
- Concerns were raised in relation to the visual impact from Bewleys Hotel.
- Concerns were raised regarding the visual impact from the air and the resulting impact on tourism.
- Concerns were raised regarding visual impact from zoned lands.
- Concerns were raised regarding visual impact from the current and future road network.

- Concerns were raised regarding the impact on the cultural landscape.
- Statements were made that the proposed plant is out of character with the area.
- Statements were made that the proposed plant would be an "eyesore" and a "blot on the landscape."
- Fears were expressed that the natural beauty of the landscape will be ruined.
- Concerns were raised that the plant will become an unwelcome focal point in the area.
- Concerns were raised that the Clonshagh area is not being visually enhanced but is becoming "a barren wasteland for others to use."
- Concerns were raised that local farms, the hospitality industry and businesses will suffer as a result of the visual impact of the proposed plant.
- Statements were made that the loss of greenbelts will ruin the area for children.
- Fears were expressed that views from local residences will be destroyed. Reference was made to the impact of this on property devaluation.
- Statements were made that Fingal County Council do not care about visual impact.
- Concerns were raised regarding the visual impact that will be caused during the construction phase and the impact of this to visitors in Bewleys Hotel.
- Concerns were raised that the area will no longer be of interest to those interested in flora and fauna.
- Statements were made that a wastewater treatment plant cannot be "beautified."
- Queries were raised regarding the proposed landscaping surrounding the plant. Queries were raised as to whether the proposed plant will be landscaped similar to that in Shanganagh WwTP.
- Requests were made for enhanced and high quality landscape mitigation measures.
- Strong feelings were stated by some stakeholders that no matter what steps are taken to try to reduce the visual impact, the size of the proposed plant will visually dominate the surrounding area.

### 3.21 LEAKS, MALFUNCTION AND BREAKDOWN

Many stakeholders raised concerns regarding the potential for a leak, malfunction or breakdown at the proposed wastewater treatment plant. Concerns were expressed by many that the risk of such an event occurring is greater given the large size of the WwTP. In this preference for a number of smaller plants was often stated (as described further in Section 3.23). Please refer to Section 3.32 for details of other risk-related issues as raised by stakeholders.

Specific issues raised regarding leaks, malfunction and breakdown include:

- Suggestions were made that the risk of accidents is profound due to the size of the plant.
- Questions were raised regarding the probability of a leak occurring.
- Concerns were raised regarding leakages along the pipeline corridor.
- Concerns were raised regarding the risk of the pumping stations breaking down.
- Concerns were raised that the outfall pipe will be tunnelled in an area of known seismic activity.
- Concerns were raised that poor construction of the plant will lead to breakdowns.
- Concerns were raised regarding the failure of stormwater systems.
- Concerns were raised regarding the failure of pumping systems.
- Statements were made that it is crucial that any WwTP built by the Greater Dublin Drainage Project includes an elaborate and effective stormwater system.
- Statements were made that the ASA Phase 4 Report makes limited reference to the need to take cognisance of climate change in the design of stormwater storage facilities on the site of the plan and upstream.
- Suggestions were made that much more detailed plans and guidelines need to be outlined for the provision of a properly functioning stormwater network so that the WwTP would not be overwhelmed in the event of a large amount of rainfall.
- Concerns were raised that there will only be a small percentage of storage compared to the size of the plant.
- Concerns were raised that there will be an overflow of raw sewage if a greater volume of storm water occurs than the tanks are designed to manage.

- Requests were made that the EIS consider the risk of control failure leading to the emission of hazardous gases from the proposed plant and the impact that this would have on the health of the local community, wildlife and flora.
- Concerns were raised that if the existing sewage network to Ringsend is disconnected then at times of flooding, electricity failure or pump breakdowns, sewage could be discharged over the grounds of Connolly Hospital in Blanchardstown.
- Concerns were raised that systems can and do fail, despite adhering to EU safety regulations.
- Concerns were raised that from time to time, technology will fail.
- It was noted by stakeholders that machinery often breaks down, with some stakeholders stating that a malfunction will "definitely" happen.
- Concerns were raised that the longer the plant is in operation, the bigger the fear of an industrial accident.
- Stakeholders stated that "no one will be held responsible when systems fail".

### **3.21.1 Potential Impact due to a Leak, Malfunction or Breakdown**

A number of queries were raised as to the potential impact a leak, malfunction or breakdown will have on human beings and the surrounding WwTP and outfall locations.

Specific concerns and issues include:

- Queries were raised as to what the consequences are if the plant fails.
- Concerns were raised regarding pollution in the event of plant failure.
- Concerns were raised that chemicals used in the treatment process will be leaked into the surrounding environment.
- Concerns were raised regarding the clean-up costs associated with any accident that might occur.
- Concerns were raised of the potential damaging international media coverage that would result following any accident.
- Concerns were raised that an accident would do lasting damage to the reputation of tourism, local marine tourism and fishing business.



- Concerns were raised regarding the impact on the local economy as a result of an accident.
- Concerns were raised of the contamination effect that a malfunction would have on drinking water in the area.
- Concerns were raised regarding discharges of effluent or untreated sewage to water courses for example, the Santry River.
- Fears were expressed that leaks will enter the soil and spread diseases.
- Concerns were raised that local farmland would be polluted due to seepage from the plant.
- Concerns were raised on the impact that a system failure could have on the ecological system should animals/ birds/ fish or their breeding grounds be contaminated.
- Concerns were raised regarding the number of people who would be seriously affected due to a malfunction at the plant including local communities, farms, sports clubs and businesses.
- Concerns were raised regarding the issue of a leak as the site of the proposed plant slopes down towards the local population.
- Queries were raised as to whether wastewater from Ringsend can be directed to the new plant if it breaks down.
- Concerns were raised that chemicals from an illegal landfill on the land of the proposed site will leak across to the closest residential area.

### **3.21.2 Human Beings**

- Concerns were raised regarding the size of the plant and its proximity to a densely populated area and the associated consequences if systems fail.
- Queries were raised as to how local people will be affected if there is a failure in the proposed plant.
- Concerns were raised regarding the impact of a leak on the local community.
- Concerns were raised regarding the risk of potential health impacts for thousands of local residents if something goes wrong.

### 3.21.3 Outfall and Effluent

- Statements were made that the outfall is located in the worst spot in Ireland should there be any major spillage accident.
- Requests were made for studies to be carried out on the potential impact at the coast should untreated sewage be pumped into the sea due to any failure at the plant.
- Concerns were raised regarding the impact along Dublin's coastline due to the amount of effluent to be pumped per minute 6km off Baldoyle Bay.
- Concerns were raised that an SAC and SPA will be impacted by the discharge of raw sewage following any malfunction at the plant.
- Suggestions were made that the coastlines of Malahide, Howth and Portmarnock are at risk of major pollution, even if only a small accident occurs.
- Concerns were raised that seas and beaches in North Dublin will be impacted and lose Blue Flag status if systems fail.
- Concerns were raised regarding the impact on shellfish waters should the plant fail and discharged inadequately treated water into the sea.

### 3.21.4 Air Quality

- Queries were raised as to whether there will be a risk of odour if the plant breaks down.
- Concerns were raised regarding the release of noxious fumes and odours including leaking of methane gas.
- Concerns were raised regarding discharges of effluent or untreated sewage to the water table.

### 3.21.5 Reported Failings in Other WwTPs

Failings of other wastewater treatment plants were raised by several stakeholders, with strong impressions that if failings occur in wastewater treatment plants internationally, then they will occur in Ireland as part of this project.

Reference to national and international wastewater treatment plant failures as noted by stakeholders include:

- Superstorm Sandy, New York, 2012 - Reports that 11 billion litres of sewage from plants along the East Coast of the United States spilled into streams and canals.
- Harlem North River WwTP, New York, 2011 - Reported fire took place causing 200m gallons of raw sewage to flow into the Hudson River.
- A facility in Saltend, east of Hull in the UK where a malfunction reduced the capacity of the plant to treat all incoming flows, resulting in odours in the town of Hedon in July 2013; despite a £3.5 million odour control unit being installed in 2011.
- Seafield WwTP, Edinburgh, 2007 - Reports that a pump failed causing millions of litres of raw sewage to flow into the Firth of Forth.
- Further reports of odour issues affecting the local community in Seafield WwTP, Edinburgh.
- Southeast Sewage Treatment Plant, San Francisco - Reported explosion that released an unidentified gas, causing concerns for respiratory impacts.
- WwTP in Balbriggan - Reports of a malfunction that pumped raw sewage into the sea for 26 hours before anyone noticed, resulting in an E. coli outbreak.
- Queries were raised as to whether any malfunctions have occurred to date in Ringsend WwTP.
- Suggestions were made that the system has proven faulty in Ringsend WwTP.
- Reference was made to leaks at Water World and the National Aquatic Centre.
- The EPA Appropriate Management Performance Report was referenced as highlighting various issues regarding failures of other plants.
- Queries were raised as to whether there have been leaks elsewhere in Europe.
- Suggestions were made that failures of wastewater treatment plants are not often publicised.
- Queries were raised as to how long it has taken leaks elsewhere to be rectified.
- Reference was made to a breakdown in Swords WwTP two years ago where they had to wait for spare parts before fixing the odour issues.
- Many stakeholders think that many serious environmental problems have been caused in Ireland in the past due to raw sewage being discharged into the sea.
- Reference was also made to failures in other industries.

### 3.21.6 Procedures for Dealing with the Risk of Malfunction

Queries were raised as to what plans and procedures will be put in place to deal with a possible leak, malfunction or breakdown as follows:

- Suggestions were made that the design of the plant should incorporate sufficient redundancy and fail safe measures to ensure that an accident does not occur.
- Queries were raised as to what back-up/standby systems will be in place in case of a systems failure/malfunction.
- Queries were raised as to what stand-by is available in case of a malfunction.
- Queries were made as to what safe guards and guarantees will be in place over and above international standard to ensure the Wastewater Treatment Plant does not fail.
- Questions were raised as to whether a risk management plan will be published of actions that will be taken in the event of a malfunction.
- Questions were raised regarding where the sewage will go if there is a breakdown.
- A strong feeling was expressed that it is impossible to know whether there will be a design failure.
- Requests were made for a bond of 250 Million Euro to be held in the event of a wastewater treatment plant failure.
- Requests were made for a bond of 125 Million Euro to be held in the event of any mismanagement of the wastewater treatment plant that results in impacts on the direct local environment, wildlife and residents.
- Requests were made that the EIS address the worst case scenarios, procedures and potential impacts of the proposed plant on the environment in the event of a breakdown.

### 3.22 MATERIAL ASSETS

A large number of submissions raised the issue of property devaluation in areas around the plant, pipeline route and outfall as follows:

- Concerns were raised that property prices surrounding the outfall will fall due to reduced bathing water quality, increased truck movements, flies, visual impacts and odour.
- Statements were made that properties in areas surrounding the outfall are not cheap and this project will negatively affect their value.
- Suggestions were made that no one would move close to such a large plant and therefore the project will diminish the value of local houses.
- Concerns were raised that newly built housing estates such as that north of the proposed site will be affected.
- Concerns were raised that the devaluation of properties as a result of the project is unfair to families who have invested their time and money in the community through house purchases, investment in local businesses, farms and the hospitality trade.
- Concerns were raised that many people are in negative equity and the development of a wastewater treatment plant in the area will not help property market value recovery.
- Concerns were raised that people have invested their life savings into their homes, which will now be affected.
- Suggestions were made that the project is costing millions when there are householders needing assistance to rectify problems from pyrite used in the building of their houses.
- Suggestions were made that people who invested in peak-price properties are being slammed with both pyrite-rebuilding costs and the possibility of a wastewater treatment plant, possibly causing them to lose the will to live.
- Concerns were raised that the project will further devalue properties which have already substantially decreased due to the current economic climate.
- Suggestions were made that Fingal County Council are further devaluing houses which already have Dublin Airport and ESB nearby.
- Concerns were raised that the project will harm a housing market that is already undervalued.
- Statements were made that if someone in the area were to put their house up for sale tomorrow, no one would buy it.

- Feelings were expressed by stakeholders that the government are charging property tax when these homes will not be worth that amount anymore.
- Concerns were raised that houses were valued for property tax before the preferred site option was announced, and are now worth less due to this project. Queries as to whether the property tax valuation made on 1<sup>st</sup> May 2013 can be revised to include the potential change in property valuation since the preferred site was announced on 10<sup>th</sup> June 2013.
- Suggestions were made that despite the announcement on the preferred site option being made on the 10<sup>th</sup> June 2013, that the decision to locate the plant in Clonshagh was made before the 1<sup>st</sup> May and should have been released then due to the impact on property tax.
- Concerns were raised that local residents already have 'for sale' signs up.
- Queries were raised as to whether house insurance will go down due to this project. Reference was made here to increased house insurances when the post code of Raheny was changed to Dublin 17.
- Requests were made that consideration is given to siting the plant in an area of less population density in order to protect the value of homes.
- Queries were raised as to whether Fingal County Council will make up the loss to residents when they sell their homes.
- A lack of faith in Fingal County Council was stated by stakeholders due to a "feeling that they do not realise the impact that this proposal will have on property values".

Concerns for other material assets as listed by stakeholders included:

- Fears that the pumping station will impact on Connolly Hospital in Blanchardstown;
- Concerns that investment in local businesses will decrease;
- Concerns that local farms will be impacted.

### 3.23 NEED FOR ONE LARGE FACILITY

While some stakeholders recognised the need for a new WwTP and welcomed the Greater Dublin Drainage project's work in progressing development, most submissions raised concerns regarding the requirement for the project.

Specific concerns and issues include:

- Queries as to where the idea for developing one large plant originated from.
- Queries as to why there is a need for a plant of this size.
- Statements that population projections cannot be predicted so far in advance.
- Suggestions were made that current population growth is not sufficient to require this plant.
- Concerns that the rate of emigration in Ireland will reduce the need for such a large plant.
- Concerns that the proposal represents over-development and is too ambitious.
- Queries were raised as to why there will be a need for an additional 700,000 PE.
- Queries were raised as to why there is not enough capacity within the existing facilities.
- Suggestions were made that current wastewater treatment plants such as Swords and Ringsend are not being upgraded, which would reduce the need for such a large new plant.
- Concerns were raised that the project is compensating for a discrepancy in the system.
- Queries were raised as to whether the concept of having just one site option is included in the Fingal Development Plan.
- Statements were made that the impact of water charges and the associated reduced wastage have not been taken into consideration in determining the need for this plant
- Concerns were raised that the development of such a large plant is not sensible in this economic climate.
- Concerns were raised that were raised such a large plant is not needed at the moment and smaller plants should be introduced on a phased basis in line with demand.

### 3.23.1 Numerous Smaller Plants

Many stakeholders had concerns about the proposed size of the wastewater treatment plant (see Section 3.28) and felt that numerous smaller plants would be preferable. Specific suggestions and concerns in this regard include:

- Concerns that a cost benefit analysis of the proposal for a number of smaller plants has not been done.
- Statements that cost should not be an argument for not giving proper consideration to the possible solution of developing a number of smaller plants.
- Statements that €80 million euro as a cost for smaller plants is pittance compared to the money paid in bailing out the banks.
- Suggestions were made that cost is the only reason for developing one large plant over several smaller ones.
- Suggestions that Fingal County Council are not looking into a number of smaller plants as this will create more protests in each area.
- Suggestions were made that each area should have small plants that treat their own waste, thus sharing the responsibility.
- Statements that there is enough land in Kildare, Wicklow, Meath, Mulhuddart and Blanchardstown to treat their own waste.
- Statements that a number of smaller plants would make more sense from a social and economic point of view.
- Statements that a number of smaller plants is more environmentally sustainable.
- Statements that smaller plants would better suit our green, environmentally aware country.
- Statements that multiple smaller plants would be much more acceptable to local people.
- Statements that smaller scale plants reduce the risk of large scale environmental damage.
- Suggestions were made that a number of smaller plants would be less trouble in the future.
- Queries that if small plants such as Donabate are working so well, why are more of these not introduced?
- Concerns that one large plant is not suitable for any area in Dublin.
- Concerns that one large plant is unfair on local communities that will be greatly impacted.



- Concerns that having one large plant in one location pits people against each other as the people of Rush and Lusk are happy now that the plant will be in Clonshagh.
- Concerns that one large plant will result in long pipelines of untreated sewage across the region.
- Concerns that one large plant is contrary to best international practice which has moved away from this. Concern that this is not in line with best practice and that we are lagging behind Europe in this regard.
- Concerns that large plants have not been successful internationally, for example leaks in Scotland.
- Queries as to what is the best practice in relation to one large plant versus multiple smaller plants.
- Requests that the EIS assesses the difficulties associated with multiple smaller plants.
- Concerns that studies have not been carried out into the viability of developing several smaller plants.
- Requests that international experts are brought in to give independent views on the viability of developing smaller plants.
- Requests that an independent study of similar plants in Europe be carried out, backed up by scientific evidence.
- Queries as to why multiple plants cannot discharge to one outfall.
- Suggestions were made that smaller treatment plants do not have to discharge into rivers but could discharge into pipes that would join up and discharge into the sea. Pumping treated effluent through this pipe network as opposed to raw untreated material would be less prone to blockages.
- Suggestions were made that three smaller plants be built on the three emerging preferred site options identified by Greater Dublin Drainage as Annsbrook, Clonshagh and Newtowncorduff.
- Statements that developing smaller plants on a needs basis will ensure firmer control over finances.

### 3.24 NOISE AND VIBRATION

Many submissions detail concerns regarding potential noise and vibration impacts that could result from a new wastewater treatment plant and pipe network during construction and operation.

Specific concerns and issues include:

- Concerns regarding construction noise of plant and pipelines, especially at night.
- Concerns regarding noise pollution and vibrations due to the operation of the plant.
- Queries as to the level of noise that will be generated by the plant.
- Concerns that the plant will have the same level of noise as wind turbines.
- Concerns regarding noise pollution resulting from increased traffic.
- Fears that birds will be attracted to the plant which will lead to noise pollution.
- Concerns regarding the noise from trucks at night.
- Requests for information as to what studies have been done regarding noise pollution due to additional traffic.
- Strong feelings that local residents are already suffering from overhead noise of planes travelling to and from Dublin Airport, as well as noise from motorways (M50 and M1) and Clonshaugh Industrial Estate on a constant basis.
- Statements that the Gardaí will have to be called due to noise from the plant on a 24 hour basis.
- Queries in relation to the impact of noise on zoned lands.
- Queries regarding the noise limits that will be set for the plant.
- Information on measures to be taken to ensure the WwTP would be 100% efficient in terms of odour and noise treatment was sought.
- Concerns regarding noise from the pumping station at Blanchardstown and the impact this will have on patients and staff at the nearby hospital and hospice.
- Concerns regarding the impact that noise and vibration will have on horses, especially on foaling mares.
- Concerns regarding noise and vibration of the ground under which the outfall pipe will be drilled and the impact this will have on protected species, especially birds where any disturbance will affect breeding, nesting, feeding, stress levels etc.

- Concerns that noise disruption will impact on the quality of life of local people.
- Queries as to whether Fingal County Council will ensure people will be able to sleep during the construction phase.
- Questions regarding the impact that noise disruption will have on the physical and mental health of local people.
- Concerns that people who work nights will not be able to sleep during the day due to the noise of the plant.
- Statements that there is no such thing as a silent wastewater treatment plant.

### **3.25 NUISANCE**

Concerns in relation to nuisances were raised on numerous occasions. Concerns focused primarily on the potential for the WwTP and outfall to attract rats and flies.

- One stakeholder refers to existing vermin problems at backwall in Clonshagh and expressed fear that the WwTP will make this problem even worse.
- It was also suggested that the facility will attract millions of flies which will "affect all north side beaches and all the people living from Drogheda to Dublin Bay and beyond".
- Reference was also made to peoples' experience of being "plagued with blue bottle flies when the Recycling plant was in Clonshaugh" and it is queried "what it will be like from this monstrosity".

### **3.26 OUTFALL**

This section details concerns raised by stakeholders regarding the location and extent of the proposed outfall. Concerns regarding the impact the outfall may have on the environment, ecology, aquatic ecology and water quality are detailed in relevant sections of this report.

### 3.26.1 Location of Proposed Outfall

- Concerns were raised that the ASA Phase 4 Report states that the southern outfall location is considered to have a significant ecological value and is therefore considered more ecologically sensitive in comparison to the landfall area of the northern outfall location.
- Requests were made for reopening consideration of outfall sites previously excluded due to shellfish designation in view of the quality of the waters around the proposed outfall area.
- Concerns were raised that the southern outfall was only chosen due to cost-saving measures.
- Queries were raised as to why other outfall locations were not considered following submissions from the previous phase of consultation which raised concerns that foul water could be carried into and concentrated in, the stretch of water between Howth, Baldoyle/Portmarnock, Ireland's Eye and Lambay and could also be carried around the Howth Peninsula towards Sutton Creek.
- Concern was raised that the outfall location is too close to the outfall from Ringsend and that a greater separation between two large WWTs is required.
- Concerns were raised that the outfall is located under one of the finest beaches in Ireland, close to residential areas, close to scenic areas.
- Concerns were raised that the outfall crosses an SAC.
- Concerns were raised that the outfall ends at Rockabill to Dalkey Island which is a Special Area of Conservation.
- Concerns were raised that the discharge point of the marine outfall is directly in the path of a current in Howth Yacht Club's sailing waters which, at flood tide, runs from Howth as far north as Lambay Island, and at ebb tide flows south from Lambay and around the Nose of Howth.
- Concerns were raised that there is an inland flow system at play and that five years of information on the tidal regime is required.
- Requests were made that divers be consulted in the selection procedure for the position of the outfall as the positioning of the outfall in proximity to a dive site would have adverse impacts on the sport
- Queries were made as to what studies were done at the outfall location.

- Concerns were raised that results of hydrodynamic modelling at the outfall have not been made available to the public.
- Queries were made as to whether consideration was given to a change in sea current every 11 years at the outfall location.
- Requests were made that more accurate local tidal influences are taken into account.
- Concerns were raised that a large amount of effluent will be passing through a small area.
- Concerns were raised that the outfall is 6km away from Baldoyle Bay but is not 6km from Howth or Ireland's Eye.
- Statements were made that the northern outfall should have been chosen due to the stronger tides.

### **3.26.2      Extent of Proposed Pipeline**

Many stakeholders raised concerns as to the extent of the pipeline.

Specific Concerns and issues include:

- Concerns that the pipeline is too short as the government will not spend any more money to extend it further.
- Requests were made for the consideration of the viability of extending the discharge pipe a greater distance eastwards.
- Requests were made for the consideration of the viability of extending the discharge pipe further out into deeper water, beyond Lambay Island.
- Requests were made for the consideration of the viability of extending the discharge pipe by 2-3 km beyond Ireland's Eye to reduce the impact in the event of controlled discharges of partially treated waste being necessary due to extreme weather or flooding.
- Requests were made that the pipeline be extended 12 miles further out to sea to save marine life.
- Queries were made as to why the Southern Outfall extends further out to deeper waters than the Northern outfall considering depth is the main criteria for the initial dilution of treated sewage.
- Concerns were made that 6 km from shore is untenable considering the outflow will be operational 24/7.
- Suggestions that if a 6km pipe is to be constructed, then the outfall should only be operational at peak tidal flow times, namely three

hours either side of mid tide with cessation of flow reduced massively at high and low tide when water movement is static.

- Queries were made as to international best practice regarding the extent of the pipeline.
- Queries were made as to the distance from the discharge point needed to reach normal conditions.
- Queries were made as to whether the discharge will be released as a point load.
- Queries were made as to whether the outflow is a radius or elbow pipe.
- Concerns were made that there is no information regarding the depth of the tunnelling under Baldoyle Bay.

### 3.26.3 Location of Outfall

Specific Concerns and issues include:

- Concerns were raised that strong tides will bring the effluent in to beaches in Portmarnock, Malahide, Howth, Baldoyle and others on the north city ring as litter often washes up on these beaches originating from within Dublin Bay and beyond.
- Concerns were raised that tidal movements at the proposed outfall location is subject to eddie currents on both a rising and falling tide which would effectively pull the waste along the coast on an ongoing basis week after week.
- Concerns were raised that the untreated or partially treated wastewater will be released from the outfall during commissioning.
- Concerns were raised regarding the build-up of sediment from deposits of suspended solids at the outfall.
- Requests were made for a study based on field information to be carried out regarding how the placement of the outfall pipe will affect the topography of its immediate area on the seabed. Reference was made here to the building of the Bull Wall and the creation of Bull Island and a mudflat area via sediment build up/ deposits to the north of the wall.
- Concerns were raised regarding the proximity of rivers to the outfall.
- Queries were raised as to whether Howth is still pumping out raw sewage.

- Queries were raised as to the impact at the outfall associated with Ringsend wastewater treatment plant.
- Concerns were raised that Baldoyle Estuary will not be protected.

### 3.27 PLANNING AND DEVELOPMENT

This section details issues raised by stakeholders regarding the planning process, the potential impact of the project on future developments and concerns regarding zoning around the proposed plant, pipeline route and outfall location.

A number of submissions made reference to the planning process in general as follows:

- A lack of trust in the planning process was expressed due to a number of bad planning decisions made by the government and local authorities in the last decade.
- A lack of faith in the project planners was expressed with one stakeholder querying whether "they gave any thought to the unfortunate young people who bought homes in Clongriffin full of hope and now find they live in a wasteland in every sense of the word, abandoned by the very people who should be putting their needs first".
- A lack of trust in the planners when they say "no impact on existing residents". Requests were made from some stakeholders to have that in writing.
- Statements were made that poor planning has already negatively affected many householders in the area especially in relation to the lack of adherence to fire safety regulations at Priory Hall and pyrite affected homes across the region.
- Concerns were raised that the government are imposing this facility on residents as a result of very bad planning and urban sprawl in the Greater Dublin Area.
- Concerns were raised that Fingal County Council have allowed development to happen to date without due concern to waste, roads, fixed line transport and proper infrastructure.
- Concerns were raised that placing the outfall 6km out from Baldoyle Bay represents bad planning.
- Statements were made that the project is "ill thought out."

### 3.27.1 Future Development

While some submissions welcomed and supported the GDD project as a significant infrastructural investment and an enabler of economic growth in the Fingal area, concerns were also raised by many stakeholders as to the impact that the proposed wastewater treatment plant will have on future development in the area. Specific concerns and queries include:

- Concerns were made that Local Area Plans will be undermined.
- Concerns were made that the government has not honoured the National Spatial Strategy 2002/ 2020.
- Concerns were raised that the plant will destroy the economic potential of the South Fringe as an area of national importance arising from its close proximity to the airport and major roads (M50 and M1) as stated in the Fingal Development Plan 2011-2017.
- Concerns were raised that future and present plans were not recognised in the ASA Phase 4 Report and that there is a lack of adherence to the planning vision for the area.
- Concerns were raised regarding impact on the Metro North and Metro West Projects, the future development of Dublin Airport and the North Fringe of the city, the long-term plans for the historic wider Belcamp College area and plans for the Fingal Business Park as a high tech industrial park.
- It is thought that the proposed siting of this 100 acre plant within 300m of human residential occupation must be seen as contrary to the proposed planning and development of the area.
- Queries were raised relating to the long-term commercial plans for the proposed facility.
- One stakeholder stated "building a community is not just about economics it is about people and their surrounds. Building a super sewerage plant within walking distance of local community is not good long term planning".

### 3.27.2 Planning Approval

Specific statements and concerns in relation to the planning application process include:

- Queries as to whether the project already has planning approval.
- The belief was expressed that the plant will not achieve EU approval.



- Statements that the proposed plant was previously defeated in Donabate and will not be accepted in Clonshagh.
- Concerns that development in this area was previously halted by the discovery of hospital waste that was inappropriately disposed of.
- Statements that a proposed sewage treatment plant at Baldoyle was turned down in the mid 1990s following a damning engineering and economic appraisal showing potential damage to Baldoyle Bay and its environs.
- A statement was made that a proposal for the Baldoyle Racecourse lands was turned down in the early 1980s on advice from the then Fingal Engineers because of the concern of sewage disposal into Baldoyle Estuary together with the very low lying nature of the land and the very sandy nature of the soil in the Baldoyle area.
- Concerns that the future plans and intentions of Irish Water are unclear, therefore the priority that Irish Water will give to the development of Greater Dublin Drainage is unknown.
- Queries as to whether the project is applicable for exemptions under planning.
- Statements that difficulties anticipated in the planning application will mainly be NIMBYISM.
- Queries relating to the CPO process, wayleaves and compensation for landowners.
- Queries as to when the planning application will be made.
- Queries as to what will happen if planning approval is not given.
- Queries as to who will carry out the EIS.
- Queries as to who has the final say on the project.

### 3.27.3 Zoning

Specific statements and concerns regarding zoning include:

- Queries as to whether zoning can be changed.
- Concerns that the area is a green belt zone or "Green Lung" under the Fingal Development Plan 2011-2017, which keeps a "strong regional spatial and green space role" between Fingal and Dublin City and involves retaining land in agricultural use.
- Concerns that the mixed use of the area will be destroyed.
- Concerns that the plant will impact on the development of zoned employment lands.

- Concerns that the proximity to industrial zoned lands will discourage potential high-tech businesses from locating in the area as they are typically placed in clean and neat garden/rural type business parks.
- Concerns that the neighbouring lands are zoned as residential lands.
- Statements that the area from Clonshagh to Baldoyle Bay and Portmarnock should be subject to a Strategic Development Zone (SDZ) under the Planning and Development Act 2000.
- Statements that there is a need for the coordination of land uses in the area.
- Concerns that the 300m buffer zone will effectively sterilise large areas of important land banks for which Local Area Plans and masterplans have been adopted or are in preparation.
- Concerns that the 300m buffer zone is excessive considering the Fingal County Development Plan 2011-2017 cites a buffer zone of 100m in relation to existing WwTPs.
- Concerns that the impact of buffer zones on future development has not been considered.
- Requests for a study into how the proposed development will be carried out while still ensuring coordination of land uses and environmental improvements in the area, bearing in mind the fundamental consideration for future development in the area is safeguarding the current and future operational, safety, technical and development requirements of Dublin Airport.
- Statements that Fingal placed strict limitations on proposed developments near Baldoyle Estuary as this is a low-lying high risk flood plain.
- The Institute of Engineers of Ireland stated in an article in October 2005 that no new development in flood plains should occur as many wastewater outflows were unacceptable in terms of spill numbers and volume.
- Requests were made that the WwTP, or at least the noxious elements of the WwTP, are located further to the west and away from the zoned lands and sensitive receptors.

### **3.28 PROPOSED DEVELOPMENT**

#### **3.28.1 Project Title, Timeline and Scope**

Several submissions questioned the title of the project "Greater Dublin Drainage" for the following reasons:

- It does not say North Dublin.
- It inadequately describes the scope and nature of activity.
- It should be called "Sewerage Treatment Plant for up to Seven Local Authorities."

Reference was also made to the timeline and scope of the project. Specific issues and concerns include:

- Queries as to whether the process can be done any faster as it is very prolonged.
- Queries regarding the project timeline and what the next phase will be.
- Queries as to when the plant will be built and operational.
- Queries as to how far in the future the project is planning to cater for.
- Concerns that the project is planning too far ahead, that 10-15 years is more reasonable than 20-30 years.
- Concerns that population cannot be predicted beyond 2040 and therefore the project cannot plan further than this.
- Concerns that there is no way of knowing how new plants like the one in Shanganagh will perform in ten years' time; there is no precedence set.
- Concerns as to the size of the study area.
- Queries regarding how the scope of this project compares to other countries.

#### **3.28.2 Proposed Plant**

A large number of stakeholders raised queries and comments regarding the size and capacity of the proposed plant as follows:

- Concerns that the plant is much too large for one area to cope with and would be "a burden."
- Fears that the plant would be three to four times the size of Croke Park.
- Statements that the proposed plant is "oversized", "a monstrosity", "gigantic", "massive", and "enormous."
- Queries regarding the proposed dimensions of the plant and whether drawings or models are available on the width, length and height.
- Concerns that the height of the plant would pose a danger to aircraft in poor visibility with reference made to the Ballymun Towers in this regard.
- Queries as to the area of the site.
- Fears that the large structural footprint of the site will impinge on every aspect of life in the surrounding areas in both the long and short term.
- Queries as to the capacity of the plant.
- Queries as to the need for such a large plant.
- Concerns that the plant will progressively get bigger as Dublin expands and will eventually cater for all seven local authorities in the GDA.
- Queries as to whether there is a maximum size that the plant will be.
- Concerns that the proposed plant will be bigger than Ringsend WwTP.
- Queries regarding whether there is a plant of similar size in Ireland or internationally at the moment.
- Comparisons were made with the wastewater treatment plant in Ringsend, in terms of both the capacity and the physical size of the site.
- Concerns that the proposed plant will be increased to two levels similar to that in Ringsend.
- Concerns that the plant will be significantly larger than the plants in the area such as Swords and Portrane.
- Concerns that the proposed figures for the year 2040 of 700,000 PE and 4,400 tonnes of BOD per day do not add up (EPA calculations 60g of BOD = 1PE and 1PE is = 200 litres of effluent flow, this means that 4400 tonne of BOD is = 733,333.00PE or 146 million litres to be processed and discharged daily).
- Specific aspects of the plant were also discussed in several submissions, with specific queries and concerns including:

- o Queries as to whether tanks will be underground or above ground with covers only.
- o Queries as to the number of gas flumes involved.
- o Queries regarding the biogas and how this is used.
- o Queries as to what the percentage mix of stormwater and sewage that will be treated.
- o Queries as to the percentage of industrial wastewater entering the plant.
- o Concerns that industrial wastewater and waste products will be hazardous to the people of Clonshagh, Portmarnock and Baldoyle.
- o Queries regarding how often the waste will come through to the plant.
- o Queries as to whether houses currently on septic tanks will be added to the system.
- Several submissions also mentioned the operation of the proposed plant as follows:
  - o Queries relating to the operation of the plant and who will run it.
  - o Queries as to whether the plant will be operated privately.
  - o Queries relating to the number of people needed to man the plant.
  - o Queries regarding whether the plant will be staffed on a 24 hour basis.
  - o Queries as to how the council will maintain the plant.
  - o Concerns that the impact of the plant will not be known until it is up and running.

### **3.28.3 Pipeline Route**

A number of stakeholders raised specific queries and concerns regarding the pipeline route including the following:

- Suggestions that separation of wastewater streams at the source is important to consider, especially regarding phosphorous.
- Queries relating to the access points to the sewer.
- Queries as to the exact pipeline route and why there is a kink in the route east of the site at Clonshagh.
- Queries as to whether CPO's will be necessary along the pipeline route.
- Queries relating to landowners allowing access along pipeline route.

- Queries as to why wastewater is being pumped as opposed to using a gravity feed.
- Queries as to whether the pipe will go under Belcamp College and whether this land is owned by Dublin City Council.
- Queries as to whether the pipeline will go close to the Abby Well Housing Estate in Kinsealy.
- Queries regarding whether the pipe will go under the golf course at Portmarnock.
- Queries as to whether the pipes will carry surface water.
- Queries relating to whether the pipeline will go through fields or along boundaries.
- Queries relating to whether the pipes will be placed underground or overground.
- Queries regarding whether tunnelling will be carried out from Clonshagh to the sea.
- Queries as to the size of the tunnel.
- Queries as to how deep the pipe will be laid.
- Queries as to the size of the pipe diameter.
- Concerns that the pipe is very large.
- Queries as to what the pipeline will be made from.
- Queries regarding whether only new piping will be used.
- Concerns that the pipes and pumping station will go septic.
- Queries relating to the Stockhole Lane Pipeline and the tender that is out on this.

#### **3.28.4 Pumping Stations**

The proposed pumping stations were mentioned in several submissions as follows:

- Queries relating to the exact location of the two pumping stations.
- Queries as to the size of the pumping stations.
- Concerns that four large sewage tanks (25m in diameter and 16m deep) will be placed underground at Blanchardstown, adjacent to a park (at the rear of the old Horology building on Mill Road), housing estates and Connolly Hospital.
- Concerns that debris will have to be cleared from the pumping station at Blanchardstown on a regular basis.

- Queries regarding the relationship with Greater Dublin Drainage and the Blanchardstown Regional Drainage Scheme.
- Concerns that the pumping station at Baldoyle will impact on proposals to put in ponds at the end of the park.

### 3.28.5 Treatment Level

Several members of the public had queries in relation to the wastewater treatment process, with many submissions noting concerns as to the level of treatment planned for the Greater Dublin Drainage project as follows:

- Queries as to why tertiary treatment is not proposed for the project, especially since Baldoyle Bay is an ecologically sensitive area. This was stated as being a "key flaw" in the project's plans.
- Concerns that the ASA Phase 4 Report did not include any discussion on tertiary treatment despite it being included within Objective WT05 of the Fingal Development Plan.
- Concerns that tertiary treatment is being ruled out solely due to cost.
- Concerns that effluent from the plant will be dangerous if not subject to tertiary treatment.
- Statements that treating waste to the minimum standard shows contempt for the people of Ireland and implies that the people of Clonshagh are like a "sub-standard species".
- Concerns that nitrates and phosphates will be an issue if tertiary treatment is not being carried out.
- Statements that tertiary treatment as a minimum requirement is taught to school students.
- Statements that tertiary treatment will future proof the proposed plant.
- Statements that other EU states treat wastewater to at least tertiary standard, but usually more.
- Concerns that secondary level treatment is short term thinking, given that EU water quality regulations are becoming stricter each year. An analogy was made by one stakeholder in this regard, comparing secondary level treatment to building the M50 with two lanes and a toll bridge, when three lanes and no toll bridge was the required minimum

- Suggestions that secondary treatment is inadequate in this highly technological and scientific age and will be out-of-date by the time construction is completed.
- Concerns that Greater Dublin Drainage are implementing outdated methods of wastewater treatment.
- Concerns that 25 mg/L BOD and 35 mg/L suspended solids is the minimum standards possible and that the Greater Dublin Drainage project should lead the way and get rid of all BOD and suspended solids.
- Queries as to whether an aerobic or anaerobic process will be used. One stakeholder commented that anaerobic systems are typical in neighbouring EU jurisdictions.
- Concerns that Activated Sludge Plant Systems are problematic in that they can malfunction frequently.
- Queries as to whether Integrated Fixed Film Activated Sludge Processes (IFAS) will be considered as reported in the environmental literature to be a better system than Activated Sludge Plant Systems.
- Queries as to whether Upward-flow Anaerobic Sludge Blanket (UASB) or Expanded Granular Sludge Bed (EGSB) will be considered.
- Queries as to whether batch treatment will be carried out.
- Queries as to whether willow treatment (or smaller plants with willow treatment) will be considered.
- Queries as to whether UV or chemical treatment will be installed.
- Queries as to whether microfiltration of the effluent will be used. This is currently used in Singapore where the water is brought to a standard for industrial and domestic use.

### **3.28.6 Technology**

A number of submissions raised concerns regarding the technology that will be used at the proposed plant with specific queries as follows:

- Queries as to whether the plant will be designed to the best international standards.
- Statements that the most up-to-date, proven technology must be used.
- Queries as to what the technology will be based on.
- Concerns that the wastewater treatment process is based on a process from the 1800s.
- Concerns that the technology proposed will be obsolete in 30 years.



- Queries regarding the level of computerisation that will be installed and whether the plant will be fully automated.
- Requests for all the relevant technical information in relation to the project, in particular the wastewater treatment technology to be used.
- Concerns that despite the ASA Phase 4 Report referencing future proofing as a key consideration associated with the identification of optimum technologies, the project is not planning to treat wastewater to a higher standard because there is no legislative requirement to do so.
- Concerns that the plant should already be designed as the Project Team have chosen the type and size of facility and the site requirements. It was therefore stated that there is no reason for not having a full set of plans and specifications in place already.

### **3.29 PROXIMITY TO SENSITIVE RECEPTORS**

The proximity to sensitive receptors was raised in many submissions. Many stakeholders felt that the proposed WwTP will be located too close to residents, industry, hotels, amenities and the airport.

Specific issues and concerns raised include:

- Some stakeholders commented that they "can't see the sense in locating a WwTP so close to a densely populated area". Many queried why this is proposed for such a location.
- Suggestions that the WwTP should be "moved further north where there would be far less homeowners and businesses affected because the area is far less densely populated".
- Suggestions that the plant should be located in the middle of a field away from everyone or placed on some of Fingal's "huge tracts of land that are not adjacent to housing".
- It was also suggested that the plant should be located on "lands of poorer value".
- Queries in relation to the distance the other two sites were from residents and industry.
- Queries in relation to the number of houses surrounding each site. Stakeholders were querying the number of houses within 100m, 200m etc. of each site.

- Some stakeholders suggest Fingal should locate this sewage plant in its own back yard - not in the backyard of Dublin City Council residents which will not be served or be a beneficiary of its "services".
- One submission refers to Section 6.5.8 of the ASA Phase 2 Report, which mentions dwellings within a certain distance of the site and prevailing winds. In doing so it was stated that the following local playing fields are all within one mile of the site as the crow flies:
  - Belcamp Park- Priorswood FC (adults and juveniles); St. Columbans school boys; Parnells GAA (adults and juveniles); Vianney Boys Football Club; Sporting Metro Football Club; Clonshaugh sports and social football clubs (adults); Urban Celtic Football Club (adults); Whitehall Colmchille GAA (juveniles); Newtown Celtic Football Club (adults); St. Francis Moatview Football Club (juveniles); Oscar Traynor Road Woodlawn (schoolboys); Kilmore Celtic (ladies and men's adult teams); Glin Road/Priorswood (school boys).
- The proximity of the pumping station in Blanchardstown to Connolly Hospital and the adjacent St. Francis Hospice was also raised by numerous stakeholders. There were concerns that the "annoyance and disruption to the patients and their families in the hospital and the hospice during the construction and operational phase will be considerable".
- The proximity of the WwTP and pumping station to densely populated communities, schools, the airport and town centre was also raised as a concern.
- One stakeholder commented that she was not looking forward to her wedding because the plant is to be built beside the hotel. She stated "it's a disgrace there's is plenty of fields along the M50 and M1 nowhere near anything and it should be there".
- It is suggested the WwTP should be located in greenbelt areas away from households, similar to areas where Greenstar and Keelings are located in Meath.
- Views that the separation distances of 300m and 500m to receptors are inadequate for such a huge plant.

### 3.30 RECREATION AND AMENITY

Many stakeholders were concerned regarding the impact that the Greater Dublin Drainage Project may have on recreation and amenities that are used by locals and tourists alike. Stakeholders raised specific concerns in this regard which included:

- A concern about the impact on aesthetics and beauty of coastal areas which are an amenity to the whole of Dublin.
- Statements that the Fingal coastline is characterised by a series of shallow bays between headlands with a variety of inlets, islands, harbours and beaches, being described in the Fingal Development Plan as the single most important natural resource in the County.
- Concerns that 23 hectares of the small amount of green belt area that currently exists in the Clonshagh area will be taken away.
- Many stakeholders expressed concerns regarding the water quality and Blue Flag status of beaches such as Portmarnock, Malahide, Howth, Sutton, Skerries, Portrane, Donabate, Dollymount, Velvet Strand, Burrow Road Beach, Claremont Beach, Sutton Creek and Red Rock.
- Concerns that the sand dunes in Portmarnock will be destroyed.
- Statements that Burrow Beach has been denied a Blue Flag over the years because of the high faecal content of the water, especially after storms.
- Impact on Baldoyle Estuary.
- The biodiversity of the area as an amenity and an educational resource.
- Impact on playing surfaces for local sporting grounds.
- A perceived risk will stop parents from letting their children play sport in the area, whether this risk is actual or not, the perceived risk will have the same effect.
- Concerns regarding the sustainability of local sports clubs in the area surrounding the proposed plant.
- Local sports clubs will have to consider relocation.
- Impact on local sports clubs ability to expand.
- Impact on summer projects and community groups due to the fumes and methane gas from the plant.
- Impact on local equestrian centre.
- Concerns that children's playgrounds will be impacted by poor air quality.

- Concerns that there will be a loss of safe green space for children to play in.
- Impact on parks such as Priorswood Park and Clonsaugh Park.
- If the beaches are damaged this will affect walking and hiking, swimming, horse riding, cycling, kite-surfing, canoeing and kayaking as well as bird watchers.
- Sutton Tidy Towns have information on their website ([www.suttontidytowns.ie](http://www.suttontidytowns.ie)) regarding walks and other amenities in the Sutton area which should be taken into consideration.
- Those engaging in water sports will be deterred from the area.
- Impact on open water swimming clubs that use bathing waters at Low Rock in Malahide and High Rock in Portmarnock every day.
- Concerns that parents will no longer allow their children to swim in the sea due to a risk of pollution.
- Impact on sailing and boating activities including local regattas, national sailing championships and other international world championship events, especially around Howth and Ireland's Eye
- Impact on diving waters.
- Impact on fishing, especially going left of Portmarnock beach and the fishing colonies in Howth
- Impact on world class golf courses along the bay (including Royal Dublin and the Links at Portmarnock).

### **3.31 REGULATION, MONITORING AND LIABILITY**

Some submissions raised queries as to the monitoring of the plant and discharge as follows:

- Queries as to whether there will be monitoring stations and who will control them.
- Queries regarding the frequency of monitoring, for example monthly or quarterly.
- Queries as to whether the plant will be operated to the same high standard as Shanganagh Wastewater Treatment Plant.
- Concerns that odour limits will not be at a high enough standard.
- Queries as to how the concentration limits at the outfall are calculated and how they can be reflected into such a unique marine environment.

- Queries as to whether the discharge will be monitored from the plant or the outfall.
- Query regarding what happens if emissions limits are exceeded.
- Queries regarding whether the operation of the proposed plant will adhere to EU guidelines
- Concerns that EU Directives are not transposed into Irish law correctly.
- Concerns that penalties are not sufficient to ensure compliance with regulations.
- Concerns that penalties are of no use to the people who live nearby if regulations are breached.
- Lack of confidence in monitoring and liability for other projects for example an incident in a fish farm in Galway where pesticides were being used. The EPA mandate stated that some pesticides are allowed.
- Lack of confidence in the independence of bodies such as the EPA.
- Queries as to whether Ireland will be fined if the plan does not go ahead.

### 3.32 RISK

The risk of a leak, malfunction and breakdown was raised by many stakeholders as described in Section 3.21 in addition to the risk of flooding as described in Section 3.16.

Other risks noted as being of concern to stakeholders include the following:

- injury or loss of life.
- a gas leakage.
- a fire.
- natural disasters including earthquakes, lightning strikes and storm events.
- human error.
- chemical discharge coming from the hospital.
- any gases released from plant, e.g. methane gas.
- methane gas combining with fuel droplets from airplanes.
- accidental release at the outfall will combine with the risk already existing in the Irish Sea from the Sellafield Plant.
- industrial accident.

- electricity failure.
- IT failure.
- a plane crash.
- traffic accident due to increased trucks.
- bird strikes due to proximity of Dublin Airport (see Section 3.4.6).
- Risk associated with larger plants was also cited as a concern in addition to the risk posed to the travelling community as the nearest neighbours to the proposed plant.

Queries were raised as to what the potential for an accident is for a plant of this nature and how an emergency will be handled, as "accidents do happen". Specific queries and concerns included:

- Concerns that no risk assessment has been done.
- Queries as to whether a risk assessment has been made available.
- Queries as to whether back up pipes will be installed in case of a risk.

### **3.33 SITE SELECTION**

#### **3.33.1 Site Selection Process**

While some stakeholders recognised that the selection process has been "thorough, impartial and independent", others raised concerns regarding the site selection process for the following reasons:

- Political reasons were often stated as an issue in the site selection process.
- Many stakeholders felt that it was a "sneaky" and "underhanded" decision to choose a location on the border with Dublin City Council.
- Some stakeholders enquired whether the preferred site option was chosen due to its proximity to Dublin City Council so that there will be less political fallout or electoral consequences.
- .
- Concerns that the area was targeted for selection as it is 'an area of poorer socio economic status'.

- Concerns that the preferred site option was chosen in the area that had the least resistance and was least protested against in previous public consultation phases.
- Suggestions that the site was chosen as there are no elected members living in the area.
- Concerns that the process was solely based on cost.
- Concerns that no cost benefit analysis was carried out as part of the selection process.
- Concerns that ecology has higher precedence over human beings in choosing a site.
- Concerns that not enough analysis has been carried out on the preferred site option to make this decision.
- Queries as to why the north side of the city was singled out.
- Queries as to why this particular piece of land was chosen and not the lands beside it.
- Enquiries as to whether the preferred site option was chosen as the pipeline route is the shortest.
- Enquiries as to whether the preferred site option was chosen as the pipeline route crosses the fewest number of watercourses.
- Enquiries as to whether the preferred site option was chosen as there are no planning policy constraints.
- Disbelief that the decision was made based on the shortest pipelines, given the scale of the project.
- Statements that experts in other areas do not agree that the best site was chosen.
- A lack of trust with local authorities and the government in making a responsible decision.
- A perception that consultants employed by Fingal County Council are engaged in a process of justification of the site rather than a genuine independent evaluation.
- They believe there has been no review of the other options.

### **3.33.2 Environmental Studies**

The studies carried out as part of the site selection process were questioned in several submissions. It was suggested that people are suspicious that environmental studies have not been completed as there is a perception that studies for Bray and Portmarnock have shown identical species lists. Specific queries and concerns included:

- Queries as to what independent consultants carried out the studies.
- Queries as to the qualifications of these experts.
- Concerns that there was no transparency on these experts.
- Queries as to whether any European level or international input was involved in the studies.
- Queries as to whether there is funding for independent assessments on the project.
- Statements that volunteers from the local community should be offered the opportunity to accompany consultants conducting field studies and tidal studies.
- Statements that a full and comprehensive web access to a database of all emails and communications regarding the project should be made available in order to alleviate fears that environmental studies have not been carried out.

### **3.33.3 Clonshagh as the Preferred Site Option**

While some stakeholders agreed with the preferred site option for various reasons including its industrial zoning and proximity to load centres, concerns were raised as to the location of the proposed wastewater treatment plant in Clonshagh including:

- It was stated that the area is growing and developing with long standing plans to encourage industry to the area.
- Concerns that the plant will not facilitate the area it is placed in.
- Queries as to what the main advantage of this site is compared to other sites.
- Statements that Clonshagh is a more densely populated area than Annsbrook and Newtowncorduff.
- Concerns that if a particular Minister 'didn't think it was suitable for Lusk that it shouldn't be suitable for the people of Clonshagh.'
- Concerns were also raised in relation to the proximity of the facility to the following receptors:
  - o to densely populated area.
  - o to a largely residential area.
  - o to Dublin City Council area.
  - o to playing fields and sports clubs.
  - o to local amenities.
  - o to hotels.



- o to schools.
- o to playgrounds.
- o to businesses.
- o to Dublin Airport.
- o to manufacturing facilities.
- o to agricultural lands.

to Travelling Community.

Please also see Section 3.29.

Suggestions regarding the site location included:

- Moving the site further away from the houses.
- Putting the plant in the middle of a field away from everyone.
- Using some of Fingal's "huge tracts of land that are not adjacent to housing".
- Designing the site to be in parallel with the field.
- Putting the plant on lands of poorer value.
- Putting the plant at Swords estuary, in Fingal's district.
- Putting the plant in a remote part of the coastline where it will not cause damage to nature reserves, sealife, environment, etc.

#### **3.33.4 Pipeline Route and Pumping Stations**

A number of concerns were raised as to the location of pumping stations and the proposed pipeline route as follows:

- Queries as to whether there was scope for amending the pipeline route.
- Concerns that the pipeline will impact on all lands which it traverses in both the construction and operational phases.
- Concerns that a 40m wide strip of land will be required for construction.
- Concerns that a 20m wide strip will be permanently unavailable for development.
- Statements that the proposed pipeline route is not ideal because of the great number of bends which increases the flow friction.
- Concerns as to the large number of private lands that the route will cross.

- Concerns regarding the proximity of the pumping station to houses and the hospital in Blanchardstown.
- Suggestions that the pumping station at Blanchardstown should be located on the other side of the motorway in open land.

### **3.33.5 Outfall Location**

The location of the outfall was raised in a large number of submissions. Stakeholders asked for an alternative site for the outfall to be considered, stating that is unacceptable under any circumstances. Please see Section 3.26 for further details.

### **3.33.6 Other Site Options**

Queries were raised as to the two other site options of Annsbrook and Newtowncorduff (as identified in the ASA Phase 2 Report, May 2012) in addition to the previous nine land parcels (as identified in the ASA Phase 1 Report, Oct 2011).

Specific queries and concerns were as follows:

- Queries as to why Annsbrook and Newtowncorduff were not chosen as the preferred option.
- Concerns that Annsbrook and Newtowncorduff were not chosen as the local people made enough complaints.
- Queries as to whether Annsbrook and Newtowncorduff are still viable options.
- Queries regarding whether Annsbrook and Newtowncorduff are ranked in terms of a second and third choice.
- Queries as to why other sites were not chosen such as Cloghran, Ratoath, Ashbourne and Portrane.
- Queries as to why three smaller areas were not selected from the three shortlisted sites.

### **3.33.7 Previous Studies Undertaken**

Previous studies, both related and non-related to Greater Dublin Drainage were mentioned by a number of stakeholders as follows:

- Queries as to when the original study was done to make this study viable.
- Queries as to whether the feasibility study was determined by the 2005 Greater Dublin Strategic Drainage Study (GSDSDS).
- Concerns that the GSDSDS was written at a time when "industry was booming".
- Queries as to whether the GSDSDS has been reviewed in the current context.
- Statements that the Greater Dublin Drainage ASA Phase 2 Report is flawed as it confuses 'sewage treatment plant' and 'wastewater' as it uses words such as 'sludge' and 'septic tanks'.
- Statements that the Greater Dublin Drainage ASA Phase 2 Report makes the point that there is an "overabundance of residential and commercial property near the Clonshagh site which should disqualify the site from consideration".
- Queries as to why the negative engineering appraisal of Baldoyle for the site of a wastewater treatment plant in the mid 1990s is being ignored.

### **3.34 SLUDGE MANAGEMENT**

A number of questions arose regarding the solid matter that results from the wastewater treatment process (sludge), including disposal, reuse and transport. Specific queries and concerns are detailed in the following sections.

#### **3.34.1 Sludge Disposal and Reuse**

A number of questions arose regarding sludge and how it is disposed of. Many stakeholders suggested that sludge be reused in agriculture or as a fuel as it is a valuable resource, with the following points being raised:

- Ireland should set a trend to lead the way in reusing sludge.
- The resultant product will be useful to the north county as the greatest market garden area in Ireland.
- Phosphorous is currently being imported into the country.
- There is a concern over the loss of Nitrogen in soils.
- Fertiliser is increasing in cost.
- The solid matter should be used as a fuel.
- Pilot studies have been carried out in Germany on the reuse of sludge.
- The current lack of recording and accountability for the management and disposal of sludge must be addressed in the EIS.

### **3.34.2 Sludge Hub Centre**

A number of submissions asked questions about the proposed Sludge Hub Centre for treating other wastewater sludges arising in Fingal including:

- Will the facility take septic tank waste?
- Will the facility take slurry from farms?
- How will solid waste be brought to the facility?
- Are noise and odour controls the same for the treatment plant and the proposed sludge hub centre?

### **3.34.3 Screened Material**

The preliminary pre-treatment stage of the wastewater treatment process screens large solids from the sewage. Queries and concerns were raised in this regard as follows:

- Queries as to where this screened material goes to.
- Concerns regarding the transport of this material which will lead to odour problems.
- Concerns that additional landfills will be needed in Fingal to deal with this material.

### 3.34.4 Transport of Sludge

A number of submissions raised queries as to how sludge generated by the wastewater treatment process will be transported. This included queries as to how the sludge gets from the plant to the trucks as well as concerns regarding the number of trucks that will be bringing in raw sewage to the proposed plant and bringing out treated sludge. Queries also arose as to whether sludge could be transported without attracting flies. Please see Section 3.38 for further information.

### 3.35 STANDARDS

The relevance of the European Standards post 2020 or post 2040 when the plant will be up and running was questioned by several stakeholders. It was stated by one individual that when the standards change as they have done in the past, we will find ourselves in a catch up situation like we did in Ringsend. It was suggested by stakeholders that we should be leaders in the field of wastewater treatment rather than following the minimum European standards and tertiary treatment was often mentioned in this regard.

The following standards, regulations, plans and policies were listed by stakeholders to be taken into account in developing the Environmental Impact Statement for the Greater Dublin Drainage Project:

- **Strategic Infrastructure Development Act**
- **Water Services Act**
- **Waste Management Act**
- **SEA Directive (2001/42/EC)** - Under the SEA Directive the plan requires an SEA. The plan must take into account protection of the environment and the integration of the plan into the sustainable planning of the country as a whole
- **Kyoto Protocol** - Objectives seek to alleviate the impacts of climate change and reduce global emissions of Green House Gases (GHGs). The development plan has regard to the objectives and targets of Kyoto and aim to reduce GHG emissions from the management of residential and commercial development. Harnessing energy from natural resources could be considered to reduce overall GHG emissions.

- **Energy End-Use Efficiency and Energy Services Directive (2006/32/EC)**  
- Aims to make the end use of energy more economic and efficient.
- **The European Landscape Convention (Florence 2000)** - Aims to promote landscape protection, management and planning and to organise European cooperation on landscape issues.
- **EU Directive 96/62/EC (Air Quality Directive)** - Objective to improve air quality by controlling the level of certain pollutants and monitoring their concentrations.
- **EU Water Framework Directive (2000/60/EC)** - Aimed at improving the water environment, requiring member governments to take a holistic approach to managing their waters. Member states must aim to achieve good status in all waters by 2015 and must ensure that status does not deteriorate in any waters.
- **European Environment and Health Action Plan (2004 - 2010)** - Designed to give the EU the scientifically grounded information needed to help member states reduce the adverse health impacts of certain environmental factors and to endorse better cooperation between actors in the environment, health and research fields.
- **EU Groundwater Directive 2006/118/EC** - Developed in response to Article 17 of the Water Framework Directive.
- **EU Floods Directive 2007/60/** - Aim is to reduce and manage the risk that floods pose to human health, the environment, cultural heritage and economic activity
- **EU Directive 2002/49/EC** - To define a common approach intended to avoid, prevent or reduce, on a prioritised basis, the harmful effects, including annoyance, due to exposure to environmental noise.
- **Environmental Liability Directive 2004/35/CE** - Establishes a framework for environmental liability based on the "polluter pays" principle with a view to preventing and remedying environmental damage.
- **Directive 2009/147/EC of the European Parliament and of The Council on the Conservation of Wild Birds** - Amended EU Birds Directive 79/409/EEC; related to the conservation of all species of naturally occurring birds in the wild state in the European territory of the Member States. It covers the protection, management and control of these species and lays down rules for their exploitation; it applies to birds, their eggs, nests and habitats. Sites designated as Special Protection Areas (SPAs).
- **Convention of Biological Diversity** - 3 main objectives: (i) The conservation of biological diversity, (ii) the sustainable use of the components of biological diversity, and (iii) the fair and equitable

sharing of the benefits arising out of the utilisation of genetic resources.

- **EU Drinking Water Directive 98/83/EC** - Objective to protect the health of consumers in the EU and to make sure the water is wholesome and clean.
- **EU Urban Waste Water Treatment Directive (91/271/EEC)** - Aimed at protecting the environment from the adverse effects of urban wastewater discharges and discharges from certain industrial sectors.
- **Soil Framework Directive (proposed)** - Member states to adopt a systematic approach to identifying and combating soil degradation.
- **EU Drinking Water Directive 98/83/EC** - To protect the health of the consumers in the European Union and to make sure the water is wholesome and clean.
- **Bathing Water Directive 2006/7/EC** - Repeals Bathing Water Directive 76/160/EEC on 31st December 2014.
- **91/271/EEC as amended by Directive 98/15/EEC Urban Wastewater Treatment** - To protect the environment from the adverse effects of discharges of urban wastewater by the provision of wastewater collecting systems and treatment plants for urban centre.
- **European Commission White Paper on Adapting to climate change: Towards a European Framework for Action (COM (2009) 147)** - Sets out a framework to reduce the EU's vulnerability to the impact of climate change.
- **European Environmental Agency "10 Message" Publications** - A Series of publications released by the European Environment Agency (EEA) which provide a short assessment of European Biodiversity and associated climate change impacts on a range of ecosystems.
- **EU Air Quality Directive 2008** - Sets binding standards for Air Particles.
- **Directive on Ambient Air Quality and Cleaner Air for Europe (Directive 2008/50/EC)** - Provides standards for fine particle PM2.5 pollution in the European Union.
- **Pesticides Framework Directive (proposed)** - To control the storage, use and disposal of pesticides to minimise risk to health and environment from their usage and to include measures which relate to soil management strategies in land use planning.
- **European Convention on the Protection of the Archaeological Heritage** - The European Convention on the Protection of the Archaeological Heritage was drawn up in Valletta in 1992 and entered into force in 1995. Ireland signed the Convention in 1997. Replacing an earlier

Convention that was agreed in 1969, its scope was extended to address damage to archaeological assets resultant from construction projects.

- **Granada Convention for the Protection of the Architectural Heritage of Europe** - Ratified by Ireland in 1997, the 1985 Convention for the Protection of the Architectural Heritage of Europe is intended to reinforce and promote policies for the conservation and enhancement of Europe's heritage. Covering monuments, groups of buildings and sites of importance, the Convention requires a national inventory of architectural heritage be developed. Legal protection measures must be established, with a system of formal authorisation being required for works affecting protected sites and structures.
- **National Level Water Services Act 2007 (As amended)** - Focuses on management of water in the pipe as opposed to river water quality etc.
- **National Climate Change Strategy 2007 - 2012** - Sets out measures for Ireland's reduction in emissions
- **National Development Plan 2007 - 2013** - €184 million infrastructural investment plan to build a prosperous country for Ireland's Population.
- **Actions for Biodiversity 2011-2016 Ireland's National Biodiversity Plan** - Objective to promote the conservation and sustainable use of biodiversity.
- **National Energy Efficiency Action Plan 2009 - 2020** - Sets out the government's actions to achieve 20% energy efficiency saving.
- **Sustainable Residential Development in Urban Areas - Guidelines for Planning Authorities 2009** - Objective to produce high quality sustainable development which includes the integration of schools, community facilities, employment, transport and amenities in a timely and cost effective manner.
- **Urban Design Manual - A Best Practice Approach** - Companion document on best practice implementation of Sustainable Residential Development in Urban Areas.
- **The Planning System and Flood Risk Management - Guidelines for Planning Authorities 2009** - Aims to integrate flood risk management into the planning process.
- **Preventing and Recycling Waste: Delivering Change (2002)** - Aims to achieve an integrated approach to waste management based on the internationally accepted hierarchy of options with waste prevention favoured.



- **Framework and Principles for the Protection of the Archaeological Heritage (1999)** -Outlines the State's general principles in relation to the management and protection of archaeological heritage.
- **European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 S.I. 435 of 2004 (as amended by S.I. No. 200 of 2011) and Planning and Development (Strategic Environmental Assessment) Regulations 2004 S.I. 436 of 2004 (as amended by S.I. No. 201 of 2011)** - Transposes EU Directive 2001/42/EC into Irish Law.
- **European Communities (Birds and Natural Habitats ) Regulations 2011 (S.I No. 477 of 2011)** - These Regulations consolidate the European Communities (Natural Habitats) Regulations 1997 to 2005 and the European Communities (Birds and Natural Habitats) (Control of Recreational Activities) Regulations 2010, as well as addressing transposition failures identified in the CJEU judgements.
- **Architectural Heritage Protection Guidelines for Planning Authorities (2004)** - Practical Guide for planning authorities to deal with the provisions of Part IV of the Planning and Development Act.
- **Wildlife Act 1976** - To provide for the protection of flora and fauna, to conserve a representative sample of important ecosystems, to provide for the development and protection of game resources and to regulate their exploitation, and to provide the services necessary to accomplish such aims.
- **2000 (Amendment) Act** - To give statutory protection to NHAs, geological and geomorphological sites, enhance the conservation of species and habitats, enhance hunting controls, inclusion of most species for protection, regulation of commercial shoot operators, ensure compliance with international agreements, increase fine levels for contravention of Wildlife Acts, strengthen the provisions relating to the cutting of hedgerows, strengthen the protective regime for SACs and to give statutory recognition to the Minister's responsibilities in regard to promoting the conservation of biological diversity.
- **Wildlife (Amendment) Act 2000** - Transposes EU Habitats Directive 92/43/EEC into Irish law.
- **Flora Protection Order , 1999 S.I, No. 94 of 1999 and The European Communities (Birds and Natural Habitats) Regulations 2011 (SI477 of 2011)** -Primary legislation aimed at protecting rare and endangered plant species in Ireland.

- **European Communities (Drinking Water) (No.2) Regulations 2007 S.I. 278 of 2007** -Transposes EU Water Framework Directive (2000/60/EC) and EU Drinking Water Directive 98/83/EC into Irish Law.
- **European Communities (Water Policy) Regulations 2009 S.I. 272 of 2009** - Gives effect to the measures needed to achieve the environmental objectives established for the bodies of surface water by Directive 2006/60/EC.
- **Environmental Objectives (Surface Waters) Regulations 2009 S.I No. 272 of 2009** - Institutes a wide-ranging set of standards for Irish surface waters.
- **Bathing Water Quality Regulations, 2008 S.I. 79 of 2008** - Transposes EU Bathing Water Directive 2006/7/EC into Irish Law.
- **Waste Water Discharge (Authorisation) Regulations, 2007 (S.I. No. 684 of 2007)** - Regulations governing the licensing and certification/authorisation process of sewage systems owned, managed and operated by Water Service Authorities.
- **European Communities Environmental Objectives (Groundwater) Regulations, 2010 (S.I. 9 of 2010)** - These regulations establish environmental objectives to be achieved in groundwater bodies, groundwater quality standards and threshold values for the classification of groundwater and the protection of groundwater against pollution and deterioration in groundwater quality.
- **Urban Wastewater Treatment (Amendment) Regulations 2010 S.I. 48 of 2010)** - Gives effect to Directive 2000/60/EC and to Directive 91/271/EEC.
- **European Communities (Water Policy) Regulations 2003 S.I. 722 of 2003** - Transposes the Water Framework Directive into Irish Law.
- **European Communities Quality of Shellfish Waters (Amendment) Regulation 2009 S.I. 55 of 2009 & Malahide Shellfish Waters Pollution Reduction Programme for Programmes as per SI No. 268 of 2006** - To give effect to in the State to Directive 79/923/EEC of 30th October 1979 on the quality required of shellfish waters.
- **European Communities (Assessment and Management of Flood Risk) Regulations 2010 S.I. 122 of 2010** - Transposes EU Floods Directive 2007/60/EC into Irish Law.
- **Environmental Noise Regulations 2006 S.I. 140 of 2006** - Transposes EU Directive 2002/49/EC into Irish Law.
- **Ambient Air Quality and Assessment and Management Regulations, 1999 S.I. 33 of 1999** - Transposes EU Directive 96/62/EC (Air Quality Directive) into Irish Law.

- **National Renewable Energy Action Plan (NREAP)** - The National Renewable Energy Action Plan (NREAP) sets out the Government's strategic approach and concrete measures to deliver on Ireland's 16% target under Directive 2009/28/EC.
- **Regional Level Retail Strategy for the Greater Dublin Area (GDA) 2008 - 2016** - Aims to set out a co-ordinated, sustainable approach to the assessment and provision of retail within the Greater Dublin Area.
- **Greater Dublin Strategic Drainage Study** - Identifies the policies, strategies and projects for developing a sustainable drainage system for the Greater Dublin Region; Identifies the need for the North Dublin Wastewater Treatment Plan and the Orbital Sewer, improvements in the drainage capacity and the need to upgrade existing treatment plants to their ultimate capacity.
- **Dublin Coastal Flooding Protection Project** - Aims to address and assess the risk from tidal flooding around the coastline.
- **Eastern River Basin District Management Plan 2009 - 2015 and Associated Programmes of Measures** - Describes the actions that are proposed to ensure the necessary protection of waters in the Eastern River Basin District.
- **Catchment-Wide Flood Risk Assessments** - Requirement of the EU Floods Directive.
- **Water Supply Project Dublin Region** - Study determining a new major water source to meet projected demand in the long term.
- **Regional Planning Guidelines for the Greater Dublin Area (2010 - 2022)** - Aims to direct the future growth of the Greater Dublin Area over the medium to long term involving sustainable planning and through the protection of environmentally sensitive or important locations.
- **Waste Management Plan for the Dublin Region (2005 -2010)** - Provides a framework for minimising waste, encouraging recycling and ensuring the avoidance of environmental pollution. Policy also includes diversion from landfill in accordance with targets set out in the European Union Landfill Directive.
- **DTO Strategy 2000 - 2016 A Platform for Change** - Integrated, multi-modal transportation strategy for the Greater Dublin Area.
- **2030 Vision- Greater Dublin Area Draft Transport Strategy (2011-2030)** -To identify areas of accessibility within the Dublin Region and the most appropriate locations for intensification of development.

- **County Wide Level Fingal Development Plan (2011-2017)** - The Development Plan sets out the spatial framework for the county within the context of National and regional plans.
- **Fingal Heritage Plan (2011-2017)** - Highlights diversity and variety of Fingal's heritage and its value to the whole community. The Plan sets out a series of actions to be undertaken over a five year period to the end of 2010. These actions aimed to raise heritage awareness, to provide baseline information and to manage our heritage more effectively.
- **Fingal Biodiversity Action Plan (2010-2015)** - The Fingal Biodiversity Action Plan puts forward an ambitious programme of a 100 actions to protect the sites, habitats, plants and animals that can be found in the County.
- **Fingal Litter Plan (2012-2015)** - The primary purpose of this Plan is to describe the activities and resources which will be put in place by Fingal County Council for the management of litter over the period 2012 to 2015.
- **Fingal Sludge Management Plan (2002)** - Makes proposals for dealing with sludge arising in Fingal from a number of sources including Agriculture, Industry, Water Treatment and Wastewater Treatment.
- **Dublin Agglomeration Noise Action Plan relating to the Assessment and Management of Environmental Noise (2008 - 2013)** - For the Dublin Agglomeration distinct noise maps have been produced for all roads, and all railway lines including the Luas (light rail) for all four local authorities in the Agglomeration. These maps cover the long term average periods for night time (Lnight) and 24 hours (Lden).

### 3.36 SUSTAINABILITY

Sustainability was defined by one stakeholder as "dealing with matters locally". It was argued therefore that despite Dublin City Council and Fingal County Council having sustainable policies in place, pumping waste from a number of counties and treating this in one large wastewater treatment plant is not sustainable.

The sustainability of the proposed project was also questioned by stakeholders in relation to:

- The urban location of the proposed plant.
- The proximity of the proposed plant to Dublin Airport.
- The long-term design, maintenance and operation of the plant.

Further research into the sustainability of the development was requested by one member of the public, with another stakeholder suggesting reed beds as a sustainable alternative to the project.

### **3.37 TOURISM AND LOCAL BUSINESS**

A number of concerns were raised regarding the impact that the proposed wastewater treatment plant may have on the tourism industry and local businesses (which were noted as already being vulnerable) as follows:

- Concerns that locating the plant so close to Dublin Airport will impact the number of visitors coming to Ireland as a wastewater treatment plant will be the first and last thing they will see and smell, and will replace the green fields that are usually seen.
- Impact of negative publicity on the reputation of local tourism.
- Concerns that we will not be able to promote local tourism in a positive light if such a plant is built.
- Impact on hotels in the area.
- Impact on the wedding market for local hotels.
- Impact on future plans for hotels to come to the area.
- Impact on the resulting income that tourism brings to the area.
- Reputation of fishing and marine businesses.
- Howth economy is dependent upon the perception of the quality of its local shellfish.
- Concerns that areas such as Balcaddan Bay, which many restaurants pride themselves on taking their crustaceans and shellfish from, will lose their reputation.
- Impact on areas such as Portmarnock, Sutton, Howth and Malahide as a resort.
- Impact on local shopping centres.

### 3.38 TRAFFIC AND TRANSPORT

Increased traffic in the area surrounding the proposed plant was a concern for many stakeholders. The current road network in the area was described as being at over-capacity and there was a concern that a new wastewater treatment plant would place further pressure on an already overburdened traffic route. Roads around the proposed plant were often described as "narrow roads that are predominantly rural in nature".

Issues regarding specific roads included:

- The N32 is the main link road from North Dublin to the M1 and the M50. This was described as being a narrow road that already has a high volume of traffic with a backlog of cars at certain times of day.
- The Clonshaugh Road is used by many learner drivers in the area.
- Feedback that roads around Bewley's Hotel are very congested; there is not enough room on the road for the hotel bus.
- Concerns for traffic implications on motorways such as the M50 and M1.
- Feedback that local housing estates are a through-road for M50 traffic.
- Roads around the proposed plant provide an alternative commuter route to the N32 and M50 for people commuting from Malahide, Old Kinsealy, Portmarnock, Howth, Baldoyle etc. These roads take traffic away from the already congested Malahide Road and Northern Cross Junction.
- Feedback that traffic will be backed up as far as the Chapel Road - Malahide Road junction.
- Concerns about traffic on minor roads such as Baskin Lane.
- Some residents felt that Fingal roads should be used for the purpose of building and operating the plant, rather than those in the Dublin City Council area.
- Traffic concerns were also noted around the pumping station in Blanchardstown and the impact this would have on the hospital.

#### 3.38.1 Impact of Increased Traffic

The impact of the increased traffic as noted by several stakeholders included:

- Damage to the local environment.
- Noise pollution.
- Impact of noise on young families.
- Inability to sleep if truck movements occur at night.
- Diminished quality of life.
- Inability to get to work on time.
- Impact on schools and playgrounds along these roads.
- Impact on local community.
- Impact on other communities such as Santry Village that will become a "rat race for trucks".
- Local communities will be cut off from local road networks.
- Associated danger and risk of accidents.
- Disruption associated with accidents.

### 3.38.2 HGV's

The ASA Phase 4 Report was criticised by stakeholders for not addressing in any significant way the impact that the proposed plant would have on traffic in the area. Many queries were raised regarding the Heavy Goods Vehicles (HGVs) associated with the plant. Specifically, questions were raised regarding the following:

- How many trucks will enter and exit on a daily basis?
- What is the quantity of truck movements per day for the skimmed material?
- What route will the trucks take?
- What hours will the trucks operate?
- Will there be truck movements at night? This should not be an option.
- Will there be trucks on a 24/7 basis?

The content of these HGVs was also a concern as follows:

- Fears that trucks will be bringing raw sewage to the plant when it opens.
- Fears that they will be bringing waste from private residential septic tanks.
- Statements that the first screening of the sewage and sludge would need to be transported by road.
- These trucks could carry residue from the treatment process.

- Trucks will be bringing out dried sludge.
- Odour problems associated with these trucks.

### **3.38.3 Construction Traffic and Site Access**

Questions were raised as to the level of traffic to both maintain the plant as well as to construct the plant. Traffic congestion was raised as a major issue in the construction of the plant. This was specifically in relation to digging up the roads to bring pipes across from West Dublin, Meath and Kildare (recent pipe laying work along the Malahide Road was noted as causing huge traffic delays for several months, greatly inconveniencing local residents and motorists).

Questions and concerns were raised as to the roads that would be used for construction and access. These included:

- What roads will the construction traffic take?
- Where is the access road?
- Where will the main entrance to the site be?
- Feedback that construction traffic should not be allowed to use minor roads such as Baskin Lane or Clonshaugh Road which were not built for such purposes.
- Feedback that the entrance to the plant could not happen because there is no road structure to carry it.
- The ASA Phase 2 Report states that the entrance would be from Stockhole Lane, when in fact it is actually Clonshaugh Road; Clonshaugh Road is also unsuitable to take the construction traffic.
- Feedback that the proposed entrance is directly opposite two dwellings on a busy section of the road.
- Feedback that the proposed entrance will impact on existing dwellings along the Clonshaugh Road and the entrance to Bewleys Hotel.
- Feedback that the road on the left of the site would have to be upgraded to accommodate trucks.

### **3.38.4 Transport Developments**

Questions were raised by many stakeholders regarding the future development of infrastructure surrounding the proposed plant, as the existing transport infrastructure was deemed inappropriate to cater for a large plant. The



impact that the proposed plant would have on current proposals was also queried.

Some stakeholders felt that GDD did not take into consideration future road plans for the area. It was stated that planning was occurring in isolation and that the following proposals should be taken into consideration:

- North-south link road parallel to the Malahide Road (R107) crossing the N32 and passing through Belcamp. This would also serve the construction of the ESB substation.
- East-West Distributor Road from Balgriffin to Clonshaugh Road that is proposed as a dual carriageway to the north of and parallel to the N32.
- Intersection for these north-south and east-west link roads within Belcamp.
- Planned infrastructure strategy to serve the Dublin North Fringe and the Fingal South Fringe area as a whole that will provide excellent vehicular links to the wider national road network.
- Realignment of the R107 Malahide Road.
- Upgrade of the N32 National Primary Road.

It was suggested therefore that an access point to the proposed plant could be taken from either the proposed east-west distributor road or from the north-south link road. This was proposed as a solution for minimising the negative impacts on the suggested access point on the Clonshaugh Road. The M50 extension was also suggested as an alternative access point.

Other studies that were suggested to be considered by the Project Team included extensive transportation modelling of the future traffic conditions in the North Fringe area following full development of Belcamp, Belmayne and Clongriffin, as carried out by Atkins Consulting Engineers (appointed by Fingal County Council and Dublin City Council).

### 3.39 WATER

The potential impact of effluent discharged at the outfall location was a concern raised in many submissions. The following section details specific concerns and issues raised in relation to effluent quality and potential impacts on coastal waters, bathing waters, groundwater and drinking water and surface waters. Please note that further information may also be present in Section 3.6.

#### 3.39.1 Quality of Effluent Released

Concerns were raised by stakeholders in relation to the treated water (effluent) released from the proposed plant being dirty. It was noted that water quality in Ireland is generally good and compares very favourably with other European Member States. Specific concerns of the release of effluent therefore included:

Concerns regarding nitrates and phosphates being released into the sea (eutrophication) were raised which stimulate algal growth (both benthic macro algae and microscopic phytoplankton) in receiving waters. Effects of such algae was described as de-oxygenating the water and killing fish, as well as causing diarrhoeotic shellfish poisoning as recorded in the Irish Sea in 1997.

A number of specific queries were raised regarding the quality and content of the effluent released from the plant such as:

- What is the expected pH level of the treated water?
- Will oestrogen be released into our waters? How will this be monitored and controlled?
- What is the limit on suspended solids in the effluent?
- What is the chemical composition of the effluent?
- How toxic is the discharge? Will it be to a certain standard?
- What micro-organisms will be contained in the effluent?
- Could you drink the treated water?
- What does the discharged water look like?
- Will the effluent always be clean water 24/7?

### 3.39.2 Reuse of Effluent

The potential reuse of the treated water from the proposed plant in general industry or agriculture was raised as described in Objective WT04 of the Fingal Development Plan. The benefits of this were described by stakeholders as:

- Reducing the amount of effluent entering the sea.
- Decreasing the pollution sent to sensitive environments.
- Using reclaimed water for non-potable uses saves potable water for drinking. This is becoming increasingly important as fresh water supplies become limited from distribution costs, increased population demands, or climate change reducing sources.
- Reused water sometimes contains higher levels of nutrients such as nitrogen, phosphorus and oxygen which may help fertilise garden and agricultural plants when used for irrigation
- Benefits to Fingal's horticulture industry.
- Enhancing wetlands, which will benefit the wildlife depending on that eco-system (for example, The San Jose/Santa Clara Water Pollution Control Plant instituted a water recycling program to protect the San Francisco Bay area's natural salt water marshes).

Reference was made here to international practice as follows:

- Los Angeles County's sanitation districts have provided treated wastewater for landscape irrigation in parks and golf courses since 1929.
- San Francisco's Golden Gate Park was the first reclaimed water facility in California in 1932.
- The Irvine Ranch Water District (IRWD) was the first water district in California to receive an unrestricted use permit from the state for its recycled water; such a permit means that water can be used for any purpose except drinking. IRWD maintains one of the largest recycled water systems in the nation with more than 400 miles serving more than 4,500 metered connections.
- In locations throughout the world such as the Orange County Water District, Singapore and Poland, water is given more advanced treatments and is used indirectly for drinking.

### **3.39.3 Coastal Water Quality**

Following concerns as noted above in relation to the quality of the effluent leaving the plant, many stakeholders raised concerns regarding the impact that this effluent would have on the quality of the coastal waters in Baldoyle, Portmarnock and Dublin Bay in general. Pollution of receiving waters was often stated within objections to the proposed plant. Reference was made to Ringsend Wastewater Treatment Plant and whether this plant has had a negative impact on water quality in Dublin Bay.

Specific concerns in this regard were recorded as:

- Increased turbidity in the receiving water and the hazard this would cause to divers.
- Impact of water quality on fish.
- Concerns of damage to the water quality off Ireland's Eye and in protected areas.

### **3.39.4 Bathing Water Quality**

Dublin bathing waters were highlighted by a number of stakeholders as being an important amenity for many people. Members of the public were concerned as to whether they would be able to continue to use these waters for swimming as a result of the proposed wastewater treatment plant. Health concerns were also raised regarding the possibility of adults and children becoming ill from swimming in "untreated waste" as "you can't swim in the sea and not end up swallowing some water".

### **3.39.5 Ground Water**

The impact that the proposed plant would have on ground water was a concern to a number of stakeholders. The main cause of concern for this was the risk of leaks from tanks and pipes.

### **3.39.6 Drinking Water**

A number of concerns were raised regarding whether the proposed plant would impact on drinking water in the area. Such concerns included:

- Water pressure in the area surrounding the plant. This was deemed to be low in the area already.
- Sewage getting into the low pressure AC water main.
- Water shortages.
- Fears of becoming ill due to bad water.
- Pollution of drinking water supply in the event of an accident.
- Not being told of any leaks into Dublin City's drinking water to offset any potential legal cases
- Calls for tertiary treatment were often raised as described in Section 3.28.5, with several members of the public stating that it should be treated to drinking quality standard.

### **3.39.7 Rivers**

Protection of local rivers such as the River Tolka at the pumping station location as well as the Cuckoo Stream and River Mayne in Clonshagh was raised by some stakeholders.

## **4 NEXT STEPS**

All relevant issues raised during the public consultation process and outlined in this report will be considered by the Project Team in preparing the Environmental Impact Statement (EIS). A response report will be contained within the appendices of the EIS.

Further consultation will be undertaken by An Bord Pleanála as part of the assessment process following lodgment of the planning application to An Bord Pleanála in 2014. This will provide an additional opportunity for interested stakeholders and members of the public to participate and to provide input to the project.



## **APPENDIX A**

### **Project Brochure**



## Have your say on informing the application for planning approval for the Greater Dublin Drainage project

The report 'Alternative Sites Assessment and Route Selection Report (Phase 4): Final Preferred Site and Routes' has been published and is available at [www.greaterdublindrainage.com](http://www.greaterdublindrainage.com). This report identifies that the preferred solution for the future development of wastewater treatment capacity in the wider Dublin region comprises a 26km pipeline, a wastewater treatment plant at Clonshagh and an outfall pipe located 6km out to sea from Baldoyle.

This preferred "site option" will be subject to a full Environmental Impact Statement and Natura Impact Statement over the coming months.

The Project Team would now like to invite the public to input into issues to be considered in the Environmental Impact Statement (EIS) that will be prepared for the project relating to potential effects on the environment that may occur as a result of the project. Human beings, landscape, visual impact, traffic management and access, effects on air and water quality are examples of relevant topics that people may have specific information or views on that should be considered.

It is important that you inform the project team during an 8-week public consultation from 10th June until 2nd August 2013. Any such relevant feedback will inform the documentation prepared for the planning application.

As part of the public consultation, Open Days are being held in Fingal County Council, Swords on 26th and 29th June and on 3rd July – see details on page 4.

The purpose of this information brochure is to

- ▶ **Update** you on the project development
- ▶ Provide you with **background information** on the project
- ▶ **Invite** you to participate in the next round of public consultation on issues for consideration in the Environmental Impact Statement that will be prepared for the preferred site option

The term "site option" refers to the proposed regional Wastewater Treatment Plant (WwTP), pipelines and marine outfall location into the Irish Sea.

## How was the Preferred Site Option chosen?

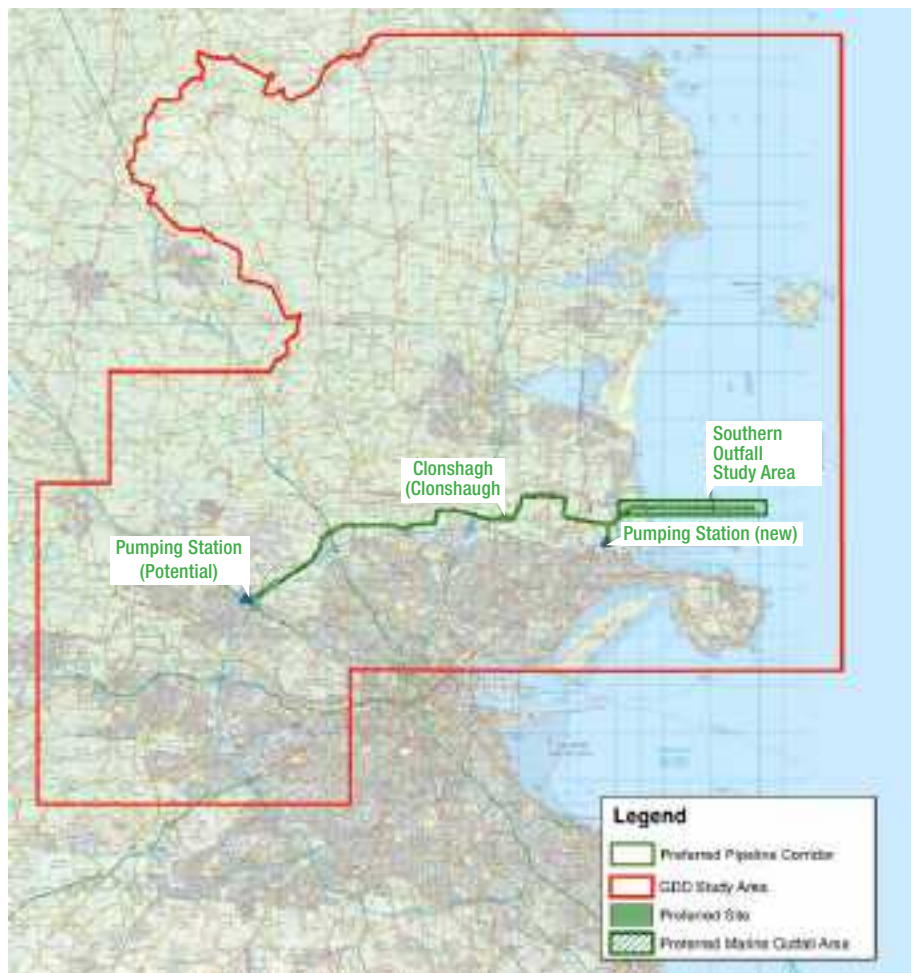
Over 13 different experts across a variety of disciplines studied the three shortlisted site options, Annsbrook, Clonshagh and Newtowncorduff, and reached the conclusion that Clonshagh is the most environmentally beneficial and technically advantageous solution and it is also the best value for money.

There are a number of reasons why the Clonshagh site option is better from an environmental, technical and cost perspective:

- **The Clonshagh site has less ecological value compared to the other two site options;**
- **The WwTP can be designed such that there is no impact on archaeology;**
- **This option can be designed, constructed and operated to ensure that it will not adversely affect the integrity of any Natura 2000 sites;**
- **Tunnelling of the southern outfall poses less technical difficulty compared to the northern outfall option;**
- **The southern outfall allows for better dilution and mixing of the discharge; and**
- **The total length of pipeline required is significantly shorter than that required for the other options. Therefore there will be less ecological impact, fewer watercourse crossings, lower number of existing and proposed infrastructural crossings, less potential to disrupt the landscape structure and lower energy requirements.**

In addition to the many technical and environmental benefits, the estimated overall cost during the lifetime of the project for this preferred site option is over €80 million less than other options studied.

Map of preferred site option (Clonshagh)



Until planning approval is obtained for this preferred site option, Annsbrook and Newtowncorduff will continue to be possible site options for the project should Clonshagh be deemed unsuitable at any future stage.



## What is the Preferred Site Option?

The preferred site option comprises a treatment plant located at Clonshagh with a southern marine outfall location. This site is located primarily in the townland of Clonshagh, Fingal. It lies approximately 2.5km east of Dublin Airport with the residential areas of Belcamp and Darndale being located some 0.8km to the south. The proposed site has a total area of approximately 23ha.

The site is located in open agricultural land, primarily in tillage, vegetables and grassland. The Cuckoo Stream (a tributary of the Mayne River) and the Mayne River run north and south of the site respectively. The northern site boundary is approximately 50m from the Cuckoo Stream and the southern site boundary is approximately 400m from the Mayne River. The site can be accessed from the Clonshaugh Road located west of the site. However, an alternative access to the site from the R139, located south of the site will be considered during the EIS.

Wastewater will be collected from surrounding load centres and transported to the WwTP at Clonshagh by orbital sewers totalling some c.18km in length. Treated wastewater from a WwTP located on this site will be transported through a pipeline for discharge c.6km out to sea from Baldoyle and approximately 1km north-east of Ireland's Eye.

At the coastline, the outfall pipeline crosses under estuary habitats of the Baldoyle Bay SAC/ SPA. The pipeline then crosses under Portmarnock Spit (Portmarnock Golf Club) before re-entering and crossing under the Baldoyle Bay SAC. The pipeline terminates within the Rockabill to Dalkey Island cSAC.

## What is being consulted on?

Fingal County Council would like to hear your views on the following:

- Under the key elements listed below are there any issues that should be taken into consideration in preparing the Environmental Impact Statement (EIS) on the preferred site option?
- How should these issues be addressed in the EIS?
- How would you like to be communicated with as the project progresses towards planning approval?
- Is there any other information you believe is relevant to the development of the preferred site option?

The key elements to be considered in the EIS are:

- **Human Beings and Material Assets**
- **Flora and Fauna**
- **Soils**
- **Water**
- **Air, Odour, Climate**
- **Landscape and Visual Impact**
- **Noise and Vibration**
- **Traffic management and Access routes**
- **Archaeological, Architectural and Cultural heritage**
- **Construction Methodologies**
- **Planning Policy**



## Public Consultation - How can I get involved?

Public consultation will take place from 10th June until 2nd August 2013. All relevant feedback received will be reviewed and considered by the Project Team and will be reported on within a consultation report, the consultation chapter of the Environmental Impact Statement (EIS) and associated appendices.

### Open Days

You are welcome to attend any of our three Open Days to be held in Swords. The Project Team will be available to answer your questions and listen to your views on what should be considered in the preparation of the Environmental Impact Statement.

In order to ensure stakeholder feedback is considered in advance of the project moving forward, **all feedback for this consultation should be received by 5:00pm on Friday 2nd August 2013.**



**Wednesday 26th June from 2:00pm to 8:00pm** in Fingal County Hall, Main Street, Swords



**Saturday 29th June from 11:00am to 4:00pm** in Fingal County Hall, Main Street, Swords



**Wednesday 3rd July from 2:00pm to 8:00pm** in Fingal County Hall, Main Street, Swords

In order to ensure stakeholder feedback is considered in advance of the project moving forward, **all feedback for this consultation should be received by 5:00pm on Friday 2nd August 2013.**

**For further information or to make a submission, please:**

**Email:**  
[info@greaterdublindrainage.ie](mailto:info@greaterdublindrainage.ie)

**Lo-call telephone:** 1890 44 55 67

**Write:**  
Greater Dublin Drainage Project Manager,  
c/o RPS Group, West Pier Business Campus,  
Dún Laoghaire, Co. Dublin, Ireland

**Visit:**  
[www.greaterdublindrainage.com](http://www.greaterdublindrainage.com)



## What happens next?

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The Project Team will undertake and prepare an Environmental Impact Statement (EIS) and Natura Impact Statement (NIS) for the preferred site option, which will be submitted as part of the planning approval documentation to An Bord Pleanála. The Board is the competent authority that will assess and determine the outcome of the planning application.

Detailed engineering and environmental studies will be carried out for the EIS which will lead to the preparation and compilation of the EIS and NIS for the Project. Input from the public and stakeholders in relation to items such as traffic management, access points, landscaping, effects on air and water quality will also be considered and inform these studies.

Fingal County Council intends to submit an application for planning approval to An Bord Pleanála in early 2014. As part of the planning process, the Board will carry out statutory consultation which will provide the public with the opportunity to have their say. The Project Team will also continue on-going engagement with the public during the planning process. Following receipt of planning approval, the preparation of a Design, Build, Operate contract will begin with a view to start construction in 2017 at the earliest.

This, the fourth round of public consultation will take place from **10th June until 2nd August 2013**. This round of public consultation will provide you with the opportunity to submit your views on items to be considered in the Environmental Impact Statement. Items raised during this consultation phase that are relevant to the Natura Impact Statement will also be considered.

An **Environmental Impact Statement (EIS)** is a report that contains detailed analysis of the impacts of a project on the existing environment and includes sufficient information to allow a decision to be made on whether consent should be given to the project.

A **Natura Impact Statement (NIS)** is a report that contains an examination of the possible impacts of a project on Natura 2000 sites that allow a decision to be made on whether consent should be given to the project. Natura 2000 sites comprise Special Areas of Conservation and Special Protection Areas classified under the Birds Directive and the Habitats Directive.



## Why is the project needed?

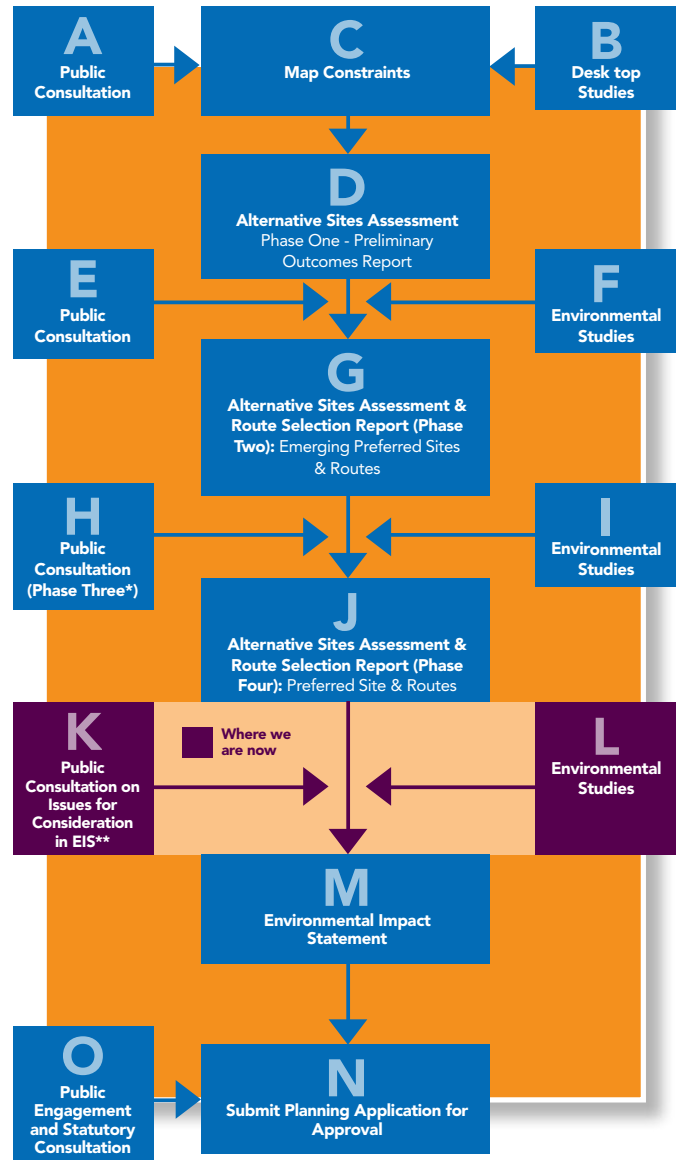
The Greater Dublin Drainage project is vital in order to facilitate employment, social progress and economic growth in the wider Dublin Region, hand-in-hand with the improvement and protection of the environment.

One of the key elements of infrastructure needed to facilitate jobs and other developments like schools, hospitals and housing, is to increase the wider Dublin region's wastewater treatment capacity. From extensive examination over many years we know that we will not have enough drainage and wastewater treatment facilities by 2020 if we do not do something now so the Greater Dublin Drainage project is needed. We cannot ignore our urgent need for more wastewater treatment capacity. Doing nothing is not an option.



The project is also necessary to meet the Water Framework Directive (WFD) requirements and the related EU Directives and National Regulations related to water quality.

## Project Road Map



**NOTES:**

**D** - This identified constraints, potential land parcels, pipeline locations.

**J** - Announces the final site, pipeline routes and outfall location.

\*Phase 3 refers to Public Consultation (H)

\*\*Items raised during this consultation phase that are relevant to the Natura Impact Statement will also be considered.

# Tuairisc Chun Dáta

Eagrán 3: Meitheamh 2013

## Cuir do tuairimí in iúl maidir le hiarratas ar chead pleanála do thionscadal Draenála Mhórchéantar Bhaile Átha Cliath

Foilsíodh an tuarascáil 'Alternative Sites Assessment and Route Selection Report (Phase 4): Final Preferred Site and Routes' agus tá sé ar fáil ag [www.greaterdublindrainage.com](http://www.greaterdublindrainage.com). Sa tuarascáil seo leagtar amach an réiteach tosaíochta d'fhorbairt na hacmhainneachta cóireála fuíolluisce i mhórchéantar Bhaile Átha Cliath. Tá sé i gceist píblíne d'fhad 26km a sholáthar, chomh maith le hionad cóireála fuíolluisce ag Cluain Seach agus píobán sceite a bheidh suite 6km amuigh ón gcósta ag Baile Dúill.

Beidh gá Ráiteas Tionchair Timpeallachta agus Ráiteas Tionchair Natura a sholáthar sular féidir dul ar aghaidh leis an "suíomh tosaíochta" seo.

Is mian le Foireann an Tionscadail cuireadh a thabhairt don phobal a dtuairimí a chur in iúl maidir leis na saincheistanna a bhreithneofar sa Ráiteas Tionchair Timpeallachta (RTT) a ullmhófar don tionscadal seo. I measc na dtopaicí a bhreithneofar beidh tionchar an tionscadail ar an duine daonna, ar an tírdhreach, ar an radharc, ar bhainistiú agus rochtain tráchta, ar an aer agus ar cháilíocht an uisce.

Tá sé tábhachtach go gcuirfeá do thuairimí in iúl d'fhoireann an tionscadail le linn an chomhairliúcháin poiblí 8 seachtaine ó 10 Meitheamh go dtí 2 Lúnasa 2013. Beidh aon aiseolas mar seo ina bhonn eolais don doiciméadú a ullmhófar don iarratas ar chead pleanála.

Mar chuid den chomhairliúchán poiblí, tá Laethanta Oscailte á reáchtáil in oifigí Chomhairle Contae Fhine Gall, Sord ar 26 agus 29 Meitheamh agus ar 3 Iúil – féach na sonraí ar leathanach 4.

Cuireadh an bróisiúr eolais seo ar fáil chun:

- ▶ **Eolas** chun dáta a thabhairt duit faoi fhorbairt an tionscadail
- ▶ **Eolas cúlra** a chur ar fáil duit faoin tionscadal
- ▶ **Cuireadh** a thabhairt duit páirt a ghlacadh sa chéad bhabhta eile den chomhairliúchán poiblí ar na saincheistanna a bhreithneofar sa Ráiteas Tionchair Timpeallachta a ullmhófar don suíomh tosaíochta

Tagraíonn an téarma "suíomh tosaíochta" don Ionad Cóireála Fuíolluisce (ICFU) atá beartaithe, maille leis na píblínte agus an suíomh sceite isteach i Muir Éireann.

## Conas a roghnaíodh an Suíomh Tosaíochta?

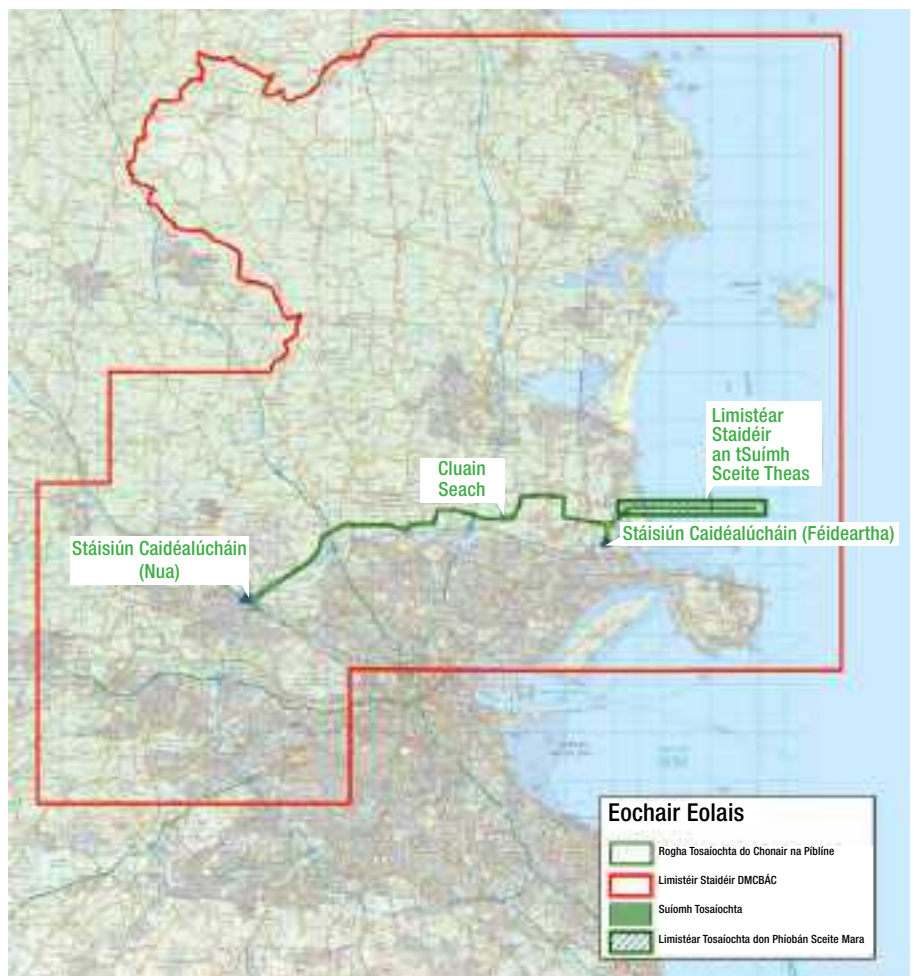
Rinne breis is 13 shaineolaí ó dhisciplíní éagsúla staidéar ar thrí cinn de shuíomhanna tosaíochta ar éirigh leo an gearrliosta a bhaint amach - Sruthán Anna, Cluain Seach agus An Baile Nua. Tar éis an staidéir sin bheartaigh siad gurb é Cluain Seach an suíomh is oiriúnaí ó thaobh an chomhshaoil de agus go bhfuil sé ina réiteach buntáisteach ón taobh teicniúil de. Ní hé amháin sin ach tá luach níos fearr ar airgead ag baint leis freisin.

Tá roinnt cúiseanna a bhfuil Cluain Seach ina shuíomh tosaíochta ó thaobh an chomhshaoil, cúrsaí teicniúla agus an chostais de:

- Tá níos lú luacha éiceolaíochta ag baint le Cluain Seach ná an dá shuíomh eile;
- Féadfar an ICFU a dhearadh sa chaoi is nach mbeidh aon tionchar aige ar sheandálaíocht;
- Féadfar an rogha seo a dhearadh, a thógáil agus a fheidmiú chun a chinntiú nach mbeidh tionchar neamhfhabhrach aige ar shláine na suíomhanna Natura 2000;
- An tollánú sa phiobán sceite theas beidh níos lú deacrachta ag baint leis ná le phiobán sceite ar an taobh thuaidh;
- Leis an phiobán sceite theas déanfar caolú agus meascadh níos fearr ar an ábhar a dhoirtfead; agus
- Tá fad iomlán na píblíne is gá i bhfad níos giorra ná an fad a mbeadh gá leis don dá rogha eile. Mar sin ní bheidh an tionchar éiceolaíochta céanna aige, níos bheidh an líon céanna trasbhealaí sruthchúrsa ann, ní bheidh an líon céanna trasbhealaí reatha agus beartaithe ann agus beidh an cur isteach is lú agus is féidir ar struchtúr an tírdhreacha agus na riachtanais is lú fuinnimh i gceist leis.

Anuas ar na sochair iomadúla theicniúla agus chomhshaoil, is ionann costas measta iomlán an tionscadail sa suíomh tosaíochta agus breis is €80

### Léarscáil den Rogha Tosaíochta



milliún, costas atá níos ísle ná na roghanna eile.

Go dtí go bhfaighfead cead don suíomh tosaíochta seo, beidh Sruthán Anna agus an Baile Nua ina roghanna féideartha i gcónaí don tionscadal i gcás go gcinneadh nach bhfuil Cluain Seach oiriúnach tráth éigin amach anseo.





## Cad atá i gceist leis an Suíomh Tosaíochta?

San áireamh sa rogha don suíomh tosaíochta tá ionad cóireála ag Cluain Seach agus suíomh theas don phíobán sceite. Tá an suíomh seo suite d'fhormhór i mbaile fearainn Chluain Seach, Fine Gall. Tá sé tuairim is 2.5km soir ó Aerfort Bhaile Átha Cliath agus tá limistéir chónaitheacha Belcamp agus Darndale tuairim is 0.8km ó dheas uaidh. Tá achar de isteach is amach le 23ha ag an suíomh beartaithe.

Tá an suíomh suite ar thalamh oscailte talmhaíochta a úsáidtear don churaíocht, d'fhás glasraí agus d'fhéaraigh den chuid is mó. Sreabhann Sruth na Cuaiche (craobh-abhainn den Mhaighean) agus an Mhaighean feadh thaobh thuaidh agus theas an tsuímh faoi seach. Tá teorainn thuaidh an tsuímh tuairim is 50m ó Shruth na Cuaiche agus tá teorainn theas an tsuímh tuairim is 400m ó Abhainn na Maighne. Féadtar rochtain a fháil ar an suíomh ó Bhóthar Chluain Seach atá suite thiar ón suíomh. Cibé scéal é, breithneofar rogha eile don rochtain ón R139, ó dheas ón suíomh le linn an RTT.

Baileofar fuíolluisce ó ionaid ualaigh máguaird agus iomprófar iad chuig an ICFU ag Cluain Seach trí shéaraigh fhithiseacha dar fhad c18km. Déanfar fuíolluisce cóireáilte ón suíomh a iompar trí phíblíne le go sceithfead é c.6km amuigh ón gcósta ó Bhaile Dúill agus tuairim is 1km soir ó thuaidh ó Inis Mac Neasáin.

Ar líne an chósta, trasnaíonn an píobán sceite gnáthóga inbhir LCS agus LCoS Bhá Bhaile Dúill. Ansin trasnaíonn an píblíne faoi Chlub Gailf Phort Mearnóg sula dtrasnaíonn sé arís faoi LCS Bhá Bhaile Dúill. Críochnaíonn an píblíne laistigh de LCS Chloch Dábhiolla go hOileán Dheilginse.

## Cad is ábhar don chomhairliúcháin?

Ba mhaith le Comhairle Contae Fhine Gall do tuairimí a fháil maidir leo seo a leanas:

- Faoin gceannteideal thíos 'príomhghnéithe' tá liosta de shaincheistanna ar chóir iad a chur san áireamh agus Ráiteas Tionchair Timpeallachta (RTT) á ullmhú maidir leis an suíomh tosaíochta?
- Conas is cóir dul i ngleic leis na saincheistanna seo sa RTT?
- Conas ba mhaith leat eolas a fháil de réir mar a rachaidh an tionscadal ar aghaidh i dtreo bhaint amach chead pleanála an iarratais?
- An bhfuil aon eolas eile i do thuairim atá iomchuí d'fhorbairt na rogha don suíomh tosaíochta?

## Seo thíos liosta de na príomhghnéithe le breithniú sa RTT:

- Daoine Daonna agus Sócmhainní Ábhartha
- Flóra agus Fána
- Ithreacha
- Uisce
- Aer, Boladh, Aeráid
- Tírdhreach agus Tionchar ar an Radharc
- Torann agus Tonnchrith
- Bainistiú tráchta agus Bealaí Rochtana
- Oidhreacht Seandálaíochta, Ailtireachta agus Chultúrtha
- Modheolaíochtaí Tógála
- Beartas Pleanála



## Comhairliúchán Poiblí – Conas is féidir liomsa páirt a ghlacadh?

Reáchtálfar an comhairliúchán poiblí ó 10 Meitheamh go dtí 2 Lúnasa 2013. Déanfaidh Foireann an Tionscadail athbhreithniú ar gach aiseolas ábhartha agus tuairisceofar air sin i dtuarascáil comhairliúcháin, sa chaibidil chomhairliúcháin faoin Ráiteas Tionchair Timpeallachta (RTT) agus sna hagusíní bainteacha.

### Laethanta Oscailte

Tá fáilte romhat freastal ar aon cheann de thrí cinn de Laethanta Oscailte a reáchtálfar i Sord. Beidh Foireann an Tionscadail ar fáil i gcónaí chun do cheisteanna a fhreagairt agus chun éisteacht le do thuairimí maidir le céard ba chóir a bhreithniú san ullmhúchán don Ráiteas Tionchair Timpeallachta.

Chun a chinntiú go mbreithneofar aiseolas na bpáirtithe leasmhara sula mbogfaidh an tionscadal ar aghaidh, **beidh gá gach aiseolas faoin gcomhairliúchán seo a bheith faighte faoi 5:00pm ar an Aoine 2 Lúnasa 2013.**



**Dé Céadaoin 26 Meitheamh**  
ó 2:00pm go 8:00pm i Halla Contae Fhine Gall,  
An tSráid Mhór, Sord



**Dé Sathairn 29 Meitheamh**  
ó 11:00am go 4:00pm  
i Halla Contae Fhine Gall,  
An tSráid Mhór, Sord



**Dé Céadaoin 3 Iúil**  
ó 2:00pm go 8:00pm  
i Halla Contae Fhine Gall,  
An tSráid Mhór, Sord

**Le haghaidh tuilleadh eolais nó chun aighneacht a dhéanamh seo a leanas na sonraí teagmhála:**

**R-phost:**

[info@greaterdublindrainage.ie](mailto:info@greaterdublindrainage.ie)

**íosghlao:** 1890 44 55 67

**Scríobh chugainn:**

Bainisteoir Thionscadal  
Draenála Mhórcheantar  
Bhaile Átha Cliath,

c/o RPS Group, Campas Gnó na  
Cé Thiar, Dún Laoghaire,  
Co. Bhaile Átha Cliath, Éire

**Téigh chuig:**

[www.greaterdublindrainage.com](http://www.greaterdublindrainage.com)



## Cad é an chead chéim eile?

Reáchtálfaidh agus ullmhóidh Foireann an Tionscadail **Ráiteas Tionchair Timpeallachta (RTT)** agus **Ráiteas Tionchair Natura (RTN)** don suíomh tosaíochta, agus cuirfear seo faoi bhráid An Bhoird Pleanála mar chuid den doiciméadú a bhaineann leis an gcead pleanála. Is é an Bord an t-údarás inniúil agus déanfaidh measúnú agus cinneadh maidir le toradh an iarratais pleanála.

Déanfar staidéir shonracha innealtóireachta agus chomhshaoil don RTT agus ag eascairt uathusan ullmhófar agus tiomsófar RTT agus RTN don Tionscadal. Cuirfear san áireamh sna staidéir sin an t-ionchur a thiocfaidh ón bpobal agus ó pháirtithe leasmhara faoi bhainistiú tráchta, pointí rochtana, trídhreachtú agus tionchar ar an aer agus ar cháilíocht an uisce.

Tá sé beartaithe ag Comhairle Contae Fhine Gall iarratas do chead pleanála a chur faoi bhráid An Bhoird Pleanála go luath sa bhliain 2014. Mar chuid den phróiseas pleanála, reáchtálfaidh an Bord comhairliúchán reachtúil leis an bpobal agus beidh an deis acu a dtuairimí a chur in iúl. Leanfaidh Foireann an Tionscadail leis an rannpháirtíocht leanúnach leis an bpobal le linn an phróisis pleanála. Tar éis chead pleanála a fháil, tosófar ar Dhearadh, Tógáil agus Feidhmiú an chonartha ag féachaint le tús a chur leis an tógáil sa bhliain 2017 ar a luaithe.

Reáchtálfar an babhta seo (an ceathrú babhta) de chomhairliúchán poiblí ó **10 Meitheamh go dtí 2 Lúnasa 2013**. Sa bhabhta seo de chomhairliúchán poiblí beidh an deis agat do thuairimí a chur in iúl le go mbreithneofar iad sa **Ráiteas Tionchair Timpeallachta**. Breithneofar freisin nithe a thiocfaidh chun solais le linn an chomhairliúcháin agus atá bainteach leis an **Ráiteas Tionchair Natura**.

Is éard atá sa **Ráiteas Tionchair Timpeallachta (RTT)** ná tuarascáil ina bhfuil anailís shonrach ar thionchair tionscadail ar an timpeallacht reatha agus tá sé i gceist leis dóthain eolais a sholáthar ionas go mbeifear in ann cinneadh a dhéanamh cibé acu ar chóir tionscadal ar leith a cheadú nó nár chóir.

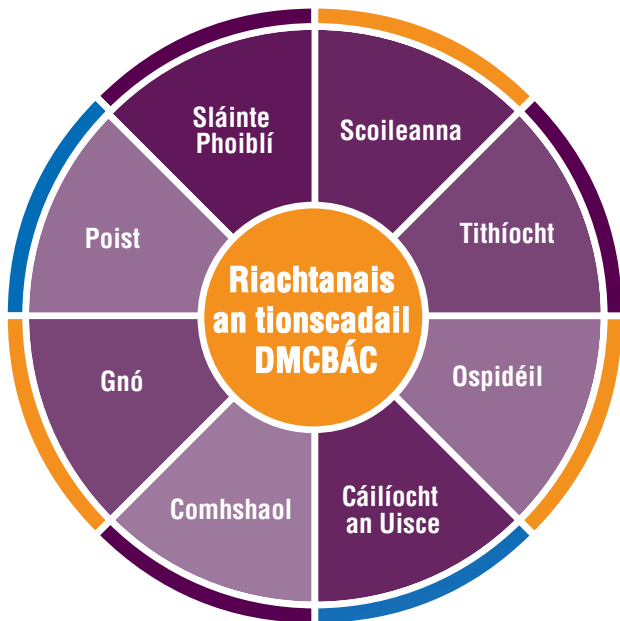
Is éard atá i **Ráiteas Tionchair Natura (RTN)** ná tuarascáil ina bhfuil scrúdú déanta ar an tionchar a d'fhéadfadh a bheith ag tionscadal ar shuíomhanna Natura 2000. Cuidíonn seo cinneadh a dhéanamh cibé acu ar chóir tionscadal ar leith a cheadú nó nár chóir. Áirítear i measc suíomhanna Natura 2000 Limistéir faoi Chaomhnú Speisialta agus Limistéir faoi Chosaint Speisialta agus tá siadsan rangaithe faoin Treoir maidir le hÉin agus an Treoir maidir le Gnáthóga.



## Cé fáth a bhfuil gá leis an tionscadal?

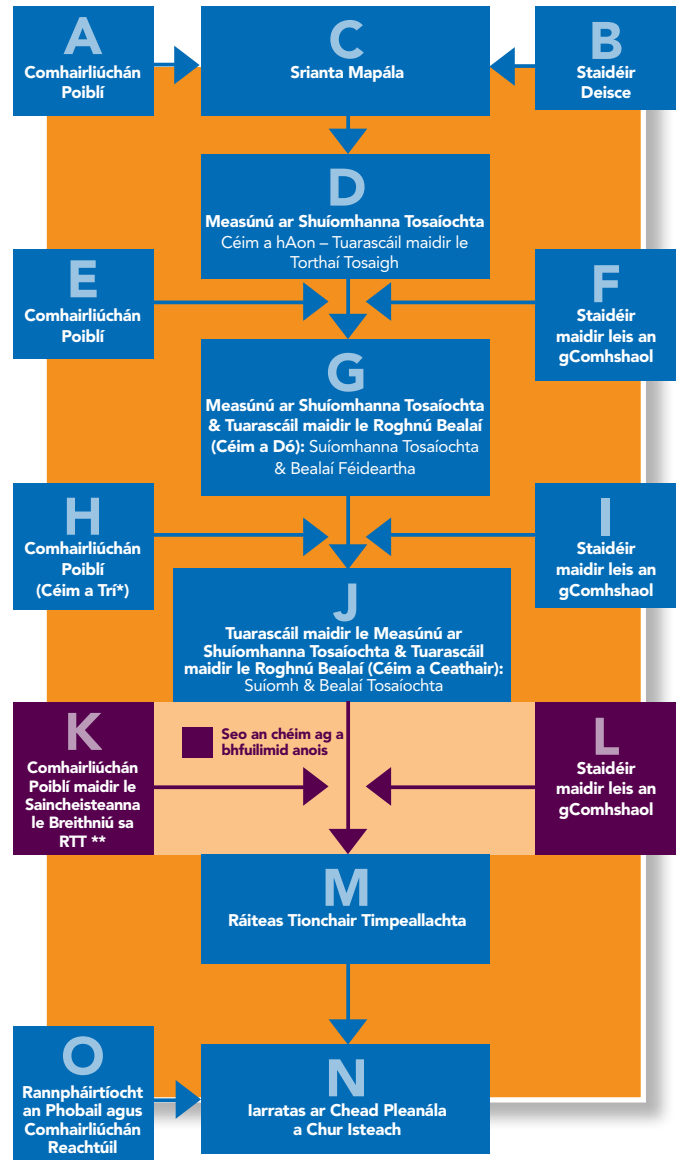
Tá tionscadal Draenála Mhórcheantar Bhaile Átha Cliath ríthábhachtach d'fhonn tacú le fostaíocht, dul chun cinn sóisialta agus fás eacnamaíochta i mór-réigiún Bhaile Átha Cliath, agus tá gá leis freisin chun feabhas a chur ar an gcomhshaol agus chun é a chosaint.

Ar na croíghnéithe bonneagair a bhfuil gá leo chun tacú le poist agus le forbairtí eile amhail scoileanna, ospidéal agus tithíocht, tá cur le hacmhainneacht cóireála fuíolluisce mhórcheantar Bhaile Átha Cliath. Trí scrúdú fairsing a dhéanamh le roinnt blianta anuas tá fhios againn nach mbeidh dóthain áiseanna cóireála fuíolluisce againn faoin mbliain 2020 mura bhfeidhmimid anois agus mar sin tá gá le tionscadal Draenála Mhórcheantar Bhaile Átha Cliath. Ní féidir linn neamhaird a dhéanamh den ghá atá le hacmhainneacht cóireála fuíolluisce. Níl de rogha againn bheith éighníomhach.



Tá gá leis an tionscadal freisin chun cloí le ceanglais na Creat-treorach Uisce(CTU) agus leis an Treoracha bainteacha ón AE agus le Rialacháin Náisiúnta a bhaineann le cáilíocht uisce.

## Treochlár an Tionscadail



### NÓTAÍ EOLAIS:

**D** - Sa chéim seo sainithníodh srianta, dáileachtaí féideartha talún agus suíomhanna do píblíne.

**J** - Fógairt ar an rogha dheiridh maidir le suíomh, bealaí na píblíne agus suíomh an phiobáin sceite.

\* Tagraíonn Céim 3 don Chomhairliúchán Poiblí (H)

\*\* Breithneofar freisin nithe a thiocfaidh chun solais le linn na céime comhairliúcháin atá ábhartha don Ráiteas Tionchair Natura

## **APPENDIX B**

### **Project Factsheets**

# Greater Dublin Drainage Project



## Project Consultation

June 2013

The Greater Dublin Drainage initiative aims to provide the drainage infrastructure needed to allow the Greater Dublin Area to continue to develop. It is also required to protect the environment and ensure compliance with EU and national legislative requirements.

Studies have identified that the best solution for the future development of wastewater treatment capacity in the Greater Dublin Area comprises a 26km pipeline, a wastewater treatment plant at Clonshagh and an outfall pipe located 6km out to sea from Baldoyle Bay.

Consultation is an essential element of the development of any infrastructure project. Fingal County Council is committed to ensuring that an accessible, meaningful, and accountable engagement process is undertaken with members of the public and we welcome your submissions and comments at any stage.

# Consultation to Date

## Constraints Phase

**Consultation 1:** Public consultation took place over four weeks in June 2011. Members of the public were asked to identify any constraints that exist within the broad study area. These constraints were considered in addition to previously identified features in the landscape that might make an area unsuitable as a location for the project and included protected areas, visual impact, ecology and the environment.

## Site and Route Selection Phase

**Consultation 2:** The second public consultation took place over eight weeks from October to December 2011. This consultation provided the public with an opportunity to provide feedback on nine specific locations identified for the plant, with associated pipeline corridors and two marine outfall locations. All relevant issues from this consultation phase were used in determining which location is more appropriate.

**Consultation 3:** The third consultation took place over eight weeks from May to July 2012 following the announcement of three emerging preferred site options at Annsbrook, Clonshagh and Newtowncorduff. All feedback received during this consultation was reviewed and the relevant issues were used in the selection of a preferred site option.

Summaries of issues and concerns expressed by the public were summarised and responded to in the consultation reports and technical reports which are accessible on the project website [www.greaterdublindrainage.com/project-reports](http://www.greaterdublindrainage.com/project-reports).

In addition to the above consultation phases, Fingal County Council is committed to ongoing engagement with the public throughout the project development. Members of the public and interested stakeholders can contact the Communications Team by phone, online or in writing. Contact details provided overleaf.

The Irish Otter,  
courtesy of npws.ie



## Environmental Studies To Date

Environmental studies were undertaken in the Fingal area including ornithological, terrestrial, freshwater and marine surveys. The purpose of these surveys was to clearly identify and recognise the existing environment within the three emerging preferred site options of Annsbrook, Clonshagh and Newtowncorduff. By determining the existing environment, it was possible to assess any potential impacts the project may have on the environment.

An example of these studies included searching for the presence of bats and otters at each of the three preferred site options and along the pipeline corridors. Details of the completed studies can be found in the Appendices of the 'Alternative Sites Assessment and Route Selection Report (Phase 4): Final Preferred Site and Routes' on [www.greaterdublindrainage.com](http://www.greaterdublindrainage.com)

Common pipistrelle bat,  
courtesy of npws.ie







## Have Your Say

The fourth stage of public consultation focuses on opinions on items to be considered in the preparation of the Environmental Impact Statement (EIS). This will take place over eight weeks from 10th June until 2nd August 2013. All relevant feedback received will be reviewed and considered by the Project Team and will be reported on within a separate consultation report which will form part of the consultation chapter of the EIS and associated appendices.

Key elements to be considered in the EIS include: human beings, landscape, visual impact, traffic management and access, effects on air and water quality. People may have specific information or views on items which should be considered under the above headings and Fingal County Council welcome and actively encourage your views on such items.

You can join our mailing list by visiting us at [www.greaterdublindrainage.com](http://www.greaterdublindrainage.com)

## Open Days

You are welcome to attend any of our three Open Days to be held in Swords. The Project Team will be available to answer your questions and listen to your views on what should be considered under the appropriate headings in the preparation of the Environmental Impact Statement.



**Wednesday 26th June from 2:00pm to 8:00pm** in Fingal County Hall, Main Street, Swords



**Saturday 29th June from 11:00am to 4:00pm** in Fingal County Hall, Main Street, Swords



**Wednesday 3rd July from 2:00pm to 8:00pm** in Fingal County Hall, Main Street, Swords

In order to ensure stakeholder feedback is considered in advance of the project moving forward, **all feedback for this consultation should be received by 5:00pm on Friday 2nd August 2013.**

## What is happening next?

The Project Team will undertake and prepare an **Environmental Impact Statement** (EIS) and **Natura Impact Statement** (NIS) for the preferred site option, which will be submitted as part of the planning approval documentation to An Bord Pleanála. The Board is the competent authority that will assess and determine the outcome of the planning application.

### **Environmental Impact Statement**

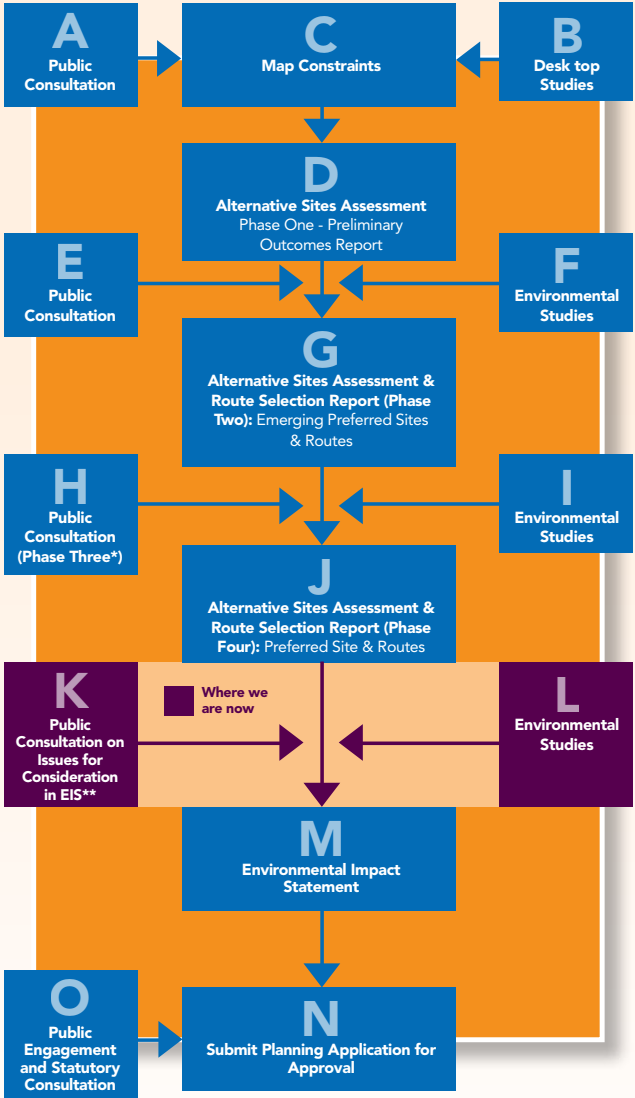
Detailed engineering and environmental studies will be carried out for the EIS which will lead to the preparation and compilation of the EIS and NIS for the Project. Input from the public and stakeholders in relation to items such as traffic management, access points, landscaping, effects on air and water quality will also be considered and inform these studies.

### **Submission to An Bord Pleanála**

Fingal County Council intends to submit an application for planning approval to An Bord Pleanála in early 2014. As part of the planning process, the Board will carry out statutory consultation which will provide the public with the opportunity to have their say. The Project Team will also continue ongoing engagement with the public during the planning process.

Over 15,000 members of the public have made contact with the Project Team so far

# Project Road Map



**NOTES:**

**D** - This identified constraints, potential land parcels, pipeline locations.

**J** - Announces the final site, pipeline routes and outfall location.

\*Phase 3 refers to Public Consultation (H)

\*\*Items raised during this consultation phase that are relevant to the Natura Impact Statement will also be considered.

## The Aarhus Convention

The consultation process for the Greater Dublin Drainage project complies with the requirements set out in the Aarhus Convention

We have received more than 17,000 pieces of correspondence from stakeholders on the project to date

## Contact us:

For more information visit our website at [www.greaterdublindrainage.com](http://www.greaterdublindrainage.com)

You can also contact us directly:

### Online

Email us at [info@GreaterDublinDrainage.ie](mailto:info@GreaterDublinDrainage.ie)

### By phone

Call us on **1890.44.55.67** (Monday-Friday, 9:00a.m. - 1.00p.m. and 2:00p.m. - 5:00p.m.)

### In writing

Greater Dublin Drainage, c/o RPS Group, West Pier Business Campus, Dun Laoghaire, Co. Dublin, Ireland.

# Greater Dublin Drainage Project



## The Wastewater Treatment Process: How Does it Work?

June 2013

The Greater Dublin Drainage initiative aims to provide the drainage infrastructure needed to allow the Greater Dublin Area to continue to develop. It is required to protect the environment and to ensure compliance with EU and national legislative requirements.

Studies have identified that the best solution for the future development of wastewater treatment capacity in the Greater Dublin region comprises a 26km pipeline, a wastewater treatment plant at Clonshagh and an outfall pipe located 6km out to sea from Baldoyle Bay.

## How wastewater and drainage arises

Wastewater is any water whose quality has been adversely affected by human activity or industry. It is liquid waste discharged by domestic residences, commercial properties, industry, or agriculture as well as storm water that enters the wastewater sewer network from our streets and roads

We all create wastewater through simple everyday activities like showering, washing clothes and dishes, cooking and using the toilet.

## Why do we need to treat wastewater?

Wastewater can contain a wide range of contaminants. Some of these contaminants can be broken down easily in the environment but others are not so easily degraded.

The drainage system transports this wastewater to a plant for treatment before it is discharged as treated effluent into our rivers or seas.

Untreated wastewater poses a threat to public health and the environment and that is why treatment is required. All wastewater is ultimately discharged back into the aquatic environment and, if the treatment is inadequate, the receiving waters may be polluted.

Furthermore, proper wastewater treatment systems are essential for sustaining modern livelihoods and facilitating development. Not only householders but also businesses, industries, schools and hospitals, for example, rely on a robust wastewater treatment system to maintain daily activities.



## Journey to the treatment plant

Wastewater is transported from homes and businesses to a wastewater treatment plant through an underground drainage network. The Greater Dublin Drainage project therefore also involves the provision of approximately 26km of underground pipeline which will transport wastewater collected from the surrounding load centres to the WwTP at Clonshagh and transport treated wastewater from the WwTP before being discharged approximately 6km out to sea from Baldoyle Bay.

## The treatment process

Wastewater treatment is the process of removing contaminants, including physical, chemical and biological contaminants from wastewater. Treatment is carried out in order to produce an environmentally safe liquid waste stream that is suitable for disposal.

## Stages of treatment

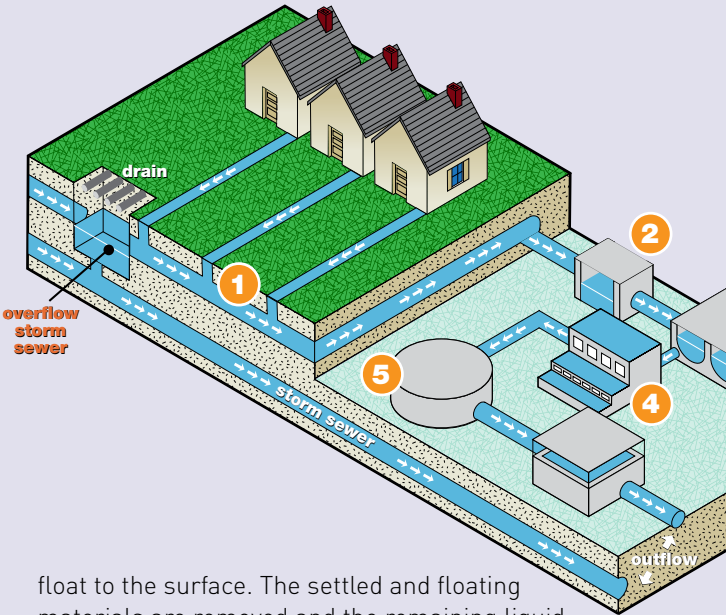
**There are three main phases of treatment undertaken in Wastewater Treatment Plants:**

**Preliminary treatment (Pre-treatment)** consists of putting the raw sewage through mechanically raked screens to break up the sewage and remove large solids, oily scums and floating material. Following this the grit, sand or gravel particles and heavy solids are allowed to settle before being removed.

**Primary treatment** consists of temporarily holding the pre-treated sewage in a tank where heavy solids can settle to the bottom while oil, grease, and lighter solids



One large Regional WwTP will have less impact on the environment than many smaller plants discharging into local rivers and streams.



float to the surface. The settled and floating materials are removed and the remaining liquid may be discharged or subjected to further secondary treatment.

**Secondary treatment** is a biological treatment phase where dissolved and suspended biological matter is removed by the action of water-borne micro-organisms in a managed environment such as aeration tanks. The secondary treated wastewater is suitable to discharge to receiving waters in the majority of circumstances.

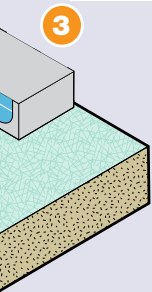
In certain circumstances, due to the sensitivity of the receiving environment a further treatment stage may be required. This fourth stage is commonly referred to as **'tertiary'** treatment.

Approximately 70% of the wastewater flow from Fingal is currently being treated at Ringsend WwTP.

## Urban Wastewater Management

### Wastewater treatment process

- |   |                              |
|---|------------------------------|
| <b>Step 1:</b> sewerage system          | <b>Preliminary treatment</b> |
| <b>Step 2:</b> grit chamber             |                              |
| <b>Step 3:</b> primary treatment        |                              |
| <b>Step 4:</b> aeration tanks           | <b>Secondary treatment</b>   |
| <b>Step 5:</b> secondary treatment tank |                              |



This illustration shows the layout of a typical treatment works. Ideally, wastewater treatment in a municipal treatment works involves three main stages: Preliminary, primary and secondary treatment. There are two products from the treatment process; sludge and liquid effluents. The process of wastewater treatment removes physical, chemical and biological contaminants, producing an environmentally safe fluid waste stream or sludge that is suitable for disposal or reuse.

Modern wastewater treatment plants are operated to strict odour and noise controls. Such controls will be detailed in the Environmental Impact Statement (EIS) prepared for the Greater Dublin Drainage project and will be implemented during the construction, commissioning and operational phases of the plant.

In addition, appropriate separation distances between the wastewater treatment plant and sensitive receptors such as residences, schools and nursing homes will be ensured. For the purposes of identifying an appropriate site for the wastewater treatment plant as part of the Greater Dublin Drainage project, a minimum distance of 300 metres was established from existing sensitive receptors.

## Treated Wastewater

Treated wastewater from the Greater Dublin Drainage project will be discharged to the Irish Sea. It will be treated to standards necessary to meet the requirements of National and European legislation such as the Water Framework Directive, Bathing Water Quality regulations and Urban Wastewater regulations.

Studies are also underway on marine life and fisheries as part of the Environmental Impact Statement (EIS) to identify any potential impacts at the outfall location. During normal operational conditions there will be no impacts on beaches or marine life.



We send regular updates on the project to approximately 700 people by email.

## Sludge Management

The Sludge Management Plan (SMP) for the Fingal Region was reviewed in 2013. The Fingal SMP was completed in 2002 and considered how to manage all types of non-hazardous sludge arising in Fingal, including sludge from the wastewater treatment plants which were existing or planned in Fingal at that time. Fingal's SMP was reviewed in the current context, including consideration of the proposal for a new Regional Wastewater Treatment Plant as part of the Greater Dublin Drainage project.

The review of the SMP concluded that the preferred option to manage wastewater treatment sludges in Fingal is to locate the Sludge Hub Centre at the site of the proposed Regional Wastewater Treatment Plant.



## Other Wastewater Treatment Plants (WwTPs)

It was recommended by the Greater Dublin Strategic Drainage Study (GDSDS), 2005 that all existing wastewater treatment plants within the region be upgraded to their ultimate capacity. Recently completed upgrades include Shanganagh, Portrane and Barnageeragh. The Swords plant is currently being upgraded. The treatment plants at Ringsend, Leixlip and Osberstown are due to be upgraded in the near future. Available land and receiving water constraints at Dublin's existing plants limits their expansion potential and, as a result, a new regional plant is required.

### **Shanganagh-Bray Wastewater Treatment Plant:**

The most modern wastewater treatment plant in Ireland is the Shanganagh-Bray WwTP, Co. Dublin, which opened in January 2013. This plant has a design capacity of 186,000 Population Equivalent (PE) and occupies a site area of approximately 3.25 hectares.

All units within this WwTP are covered and strict odour and noise controls exist at the boundary of the site. The area around the plant is landscaped and used by the local community for walking, playing pitches and a community garden.

By 2040, the proposed Regional WwTP will deal with approximately one third of the volume being treated at the expanded Ringsend plant.

The proposed Regional WwTP at Clonshagh will require a site area of approximately 23 hectares.

**There are currently 4 wastewater treatment plants greater than 1,000 PE in the Fingal County Council study area:**

- Barnageeragh
- Swords
- Portrane
- Malahide

## Contact us:

For more information visit our website at [www.greaterdublindrainage.com](http://www.greaterdublindrainage.com)

You can also contact us directly:

**Online** Email us at [info@GreaterDublinDrainage.ie](mailto:info@GreaterDublinDrainage.ie)

**By phone** Call us on **1890.44.55.67** (Monday-Friday, 9:00a.m. - 1.00p.m. and 2:00p.m. - 5:00p.m.)

**In writing** Greater Dublin Drainage, c/o RPS Group, West Pier Business Campus, Dun Laoghaire, Co. Dublin, Ireland.

## **APPENDIX C**

### **Project Posters**

# update

## Public Consultation and Open Days for Greater Dublin Drainage on the Environmental Impact Statement for the Preferred Site, Orbital Sewer and Marine Outfall Option

Fingal County Council has announced the preferred solution for the Greater Dublin Drainage project, consisting of 26km of pipeline, a wastewater treatment plant at Clonshagh, and an outfall pipe located 6km out to sea from Baldoyle Bay.



Public consultation on items to be considered for the Environmental Impact Statement for this option is now underway.

Members of the public are invited to come along to the scheduled Open Days at Fingal County Hall, Main Street, Swords Co. Dublin on:

Dublin on:

**Wednesday 26th June from 2pm - 8pm**

**Saturday 29th June from 11am - 4pm**

**Wednesday 3rd July from 2pm - 8pm**

### The report 'Alternative Sites Assessment and Routes Selection Report (Phase 4): Preferred Sites and Routes Report' is available:

- Free download from [www.greaterdublindrainage.ie/project-reports/](http://www.greaterdublindrainage.ie/project-reports/)
- View printed copies at Fingal County Council offices at Swords and Blanchardstown, Fingal Public Libraries, or Dublin City Council North Central Head Office in Coolock
- Purchase the report (with appendices on CD) for €150

## For further information or to make a submission, please:

**Email:** [info@greaterdublindrainage.ie](mailto:info@greaterdublindrainage.ie)

**Lo-call telephone:** 1890 44 55 67

**Write:** Greater Dublin Drainage Project Manager, c/o RPS Group, West Pier Business Campus, Dún Laoghaire, Co. Dublin, Ireland

**Visit:** [www.greaterdublindrainage.com](http://www.greaterdublindrainage.com)

# Open Evening 16th July



## Public Consultation and Open Evening for Greater Dublin Drainage on the Environmental Impact Statement for the Preferred Site, Orbital Sewer and Marine Outfall Option

Fingal County Council has announced the preferred solution for the Greater Dublin Drainage project, consisting of 26km of pipeline, a wastewater treatment plant at Clonshagh (Clonshaugh), and an outfall pipe located 6km out to sea from Baldoyle Bay. To view the Report and maps view [www.greaterdublindrainage.com/project-reports](http://www.greaterdublindrainage.com/project-reports).

Come along to an open evening on **Tuesday 16th July 2013**

**from 3pm to 8pm**

in the Hilton Dublin Airport Hotel, Northern Cross, Malahide Road, Dublin 17.



Meet the **project team**

Have your **questions answered**

Provide your **feedback** on issues to be considered in the Environmental Impact Statement (EIS).

**For further information or to make a submission, please:**

**Email:** [info@greaterdublindrainage.ie](mailto:info@greaterdublindrainage.ie)

**Lo-call telephone:** 1890 44 55 67

**Write:** Greater Dublin Drainage Project Manager, c/o RPS Group, West Pier Business Campus, Dún Laoghaire, Co. Dublin, Ireland

**Visit:** [www.greaterdublindrainage.com](http://www.greaterdublindrainage.com)

See [www.greaterdublindrainage.com](http://www.greaterdublindrainage.com) for further information



## **APPENDIX D**

### **Open Day Displays**

## Have your say on informing the application for planning approval for the Greater Dublin Drainage project

The report 'Alternative Sites Assessment and Route Selection Report (Phase 4): Final Preferred Site and Routes' has been published and is available at [www.greaterdublindrainage.com](http://www.greaterdublindrainage.com). This report identifies that the preferred solution for the future development of wastewater treatment capacity in the wider Dublin region comprises a 26km pipeline, a wastewater treatment plant at Clonshagh and an outfall pipe located 6km out to sea from Baldoyle Bay.

This preferred "site option" will be subject to a full Environmental Impact Statement and Natura Impact Statement over the coming months.

The Project Team would now like to invite the public to input into issues to be considered in the Environmental Impact Statement (EIS) that will be prepared for the project relating to potential effects on the environment that may occur as a result of the project. Human beings, landscape, visual impact, traffic management and access, effects on air and water quality are examples of relevant topics that people may have specific information or views on that should be considered.

It is important that you inform the project team during an 8-week public consultation from 10th June until 2nd August 2013. Any such relevant feedback will inform the documentation prepared for the planning application.

As part of the public consultation, Open Days are being held in Fingal County Council, Swords on 26th and 29th June and on 3rd July – see details on page 4.

The purpose of this information brochure is to

- ▶ **Update** you on the project development
- ▶ Provide you with **background information** on the project
- ▶ **Invite** you to participate in the next round of public consultation on issues for consideration in the Environmental Impact Statement that will be prepared for the preferred site option

The term "site option" refers to the proposed regional Wastewater Treatment Plant (WwTP), pipelines and marine outfall location into the Irish Sea.

## How was the Preferred Site Option chosen?

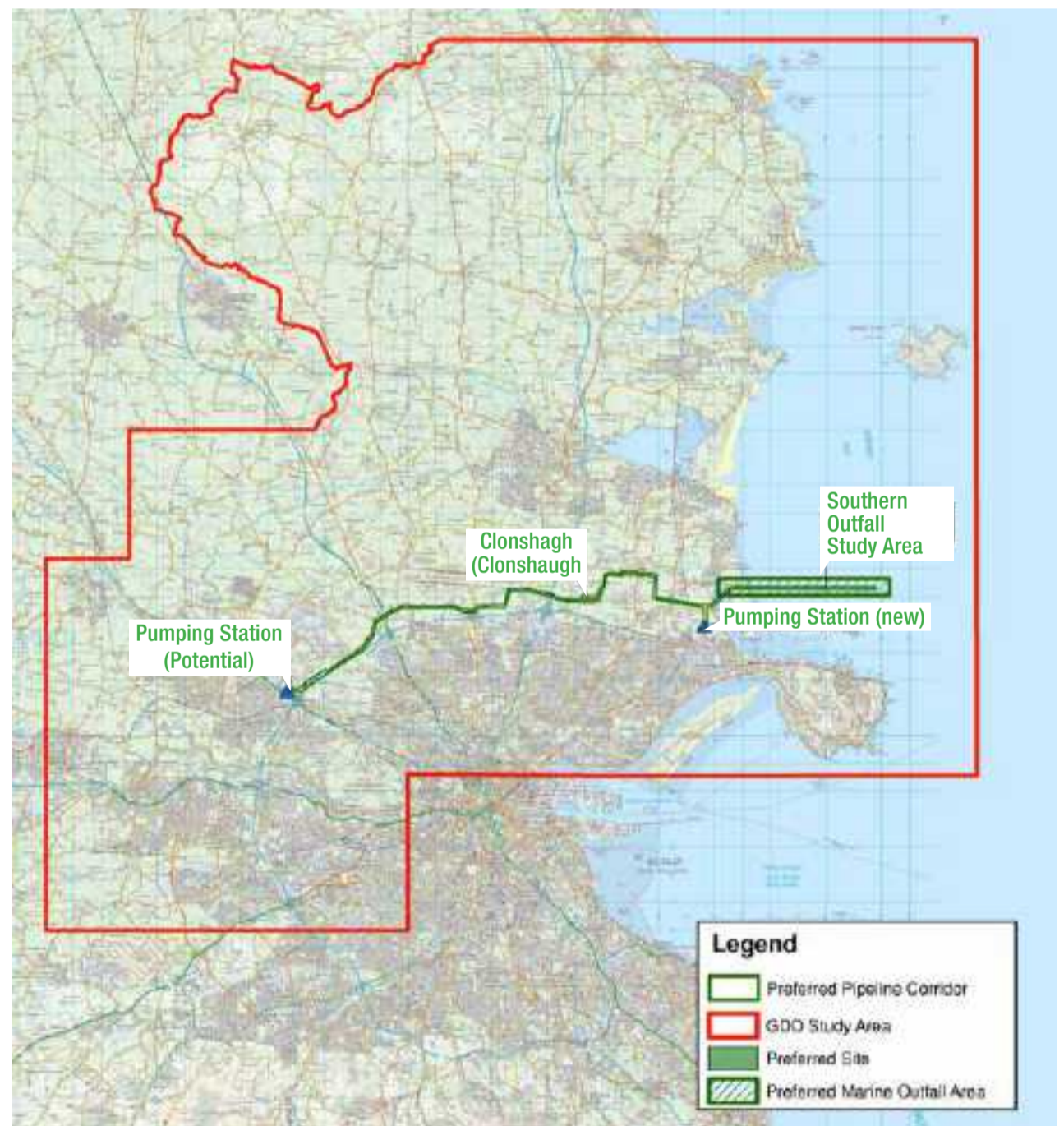
Over 13 different experts across a variety of disciplines studied the three shortlisted site options, Annsbrook, Clonshagh and Newtowncorduff, and reached the conclusion that Clonshagh is the most environmentally beneficial and technically advantageous solution and it is also the best value for money.

There are a number of reasons why the Clonshagh site option is better from an environmental, technical and cost perspective:

- **The Clonshagh site has less ecological value compared to the other two site options;**
- **The WwTP can be designed such that there is no impact on archaeology;**
- **This option can be designed, constructed and operated to ensure that it will not adversely affect the integrity of any Natura 2000 sites;**
- **Tunnelling of the southern outfall poses less technical difficulty compared to the northern outfall option;**
- **The southern outfall allows for better dilution and mixing of the discharge; and**
- **The total length of pipeline required is significantly shorter than that required for the other options. Therefore there will be less ecological impact, fewer watercourse crossings, lower number of existing and proposed infrastructural crossings, less potential to disrupt the landscape structure and lower energy requirements.**

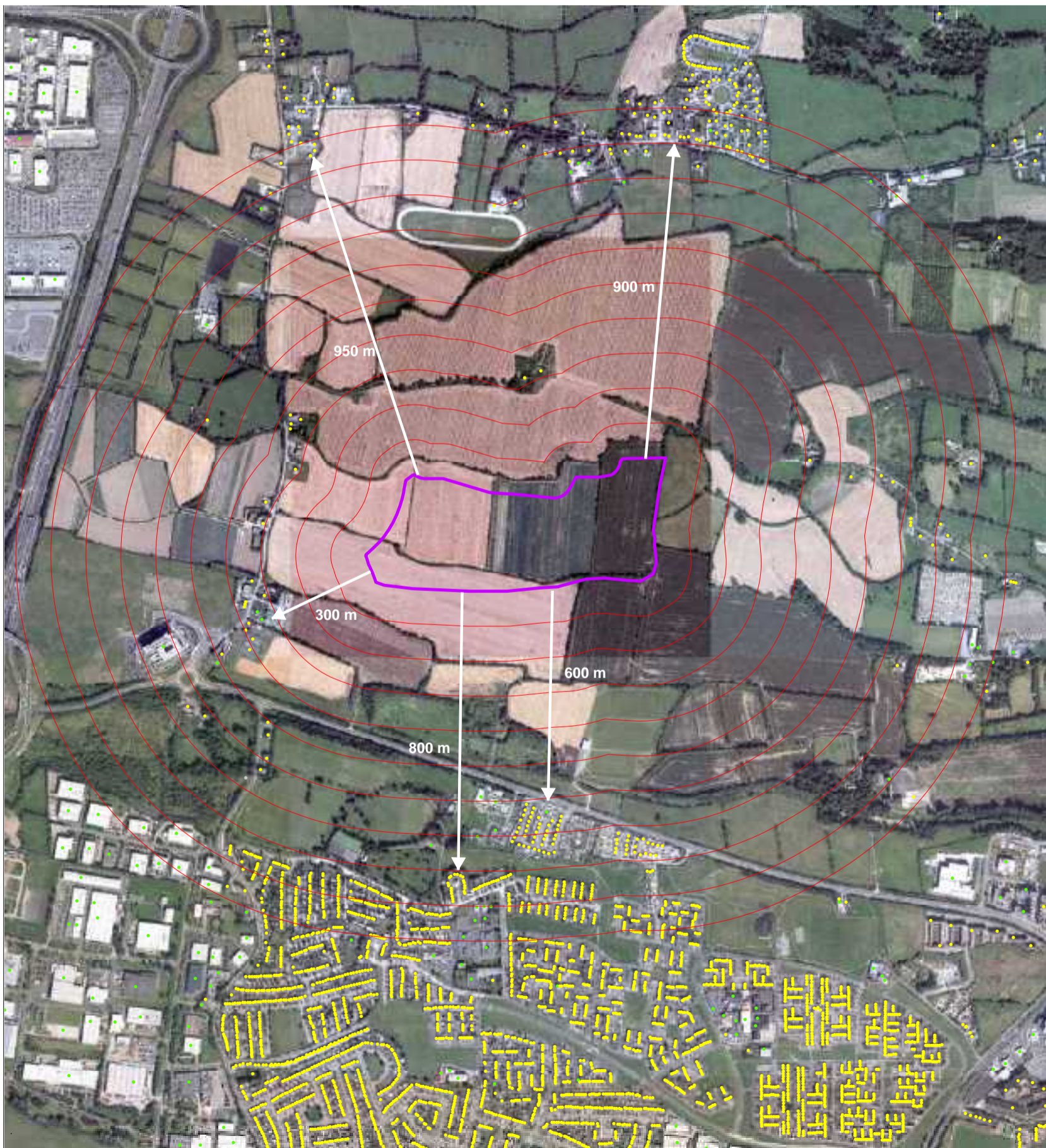
In addition to the many technical and environmental benefits, the estimated overall cost during the lifetime of the project for this preferred site option is over €80 million less than other options studied.

Map of preferred site option (Clonshagh)



Until planning approval is obtained for this preferred site option, Annsbrook and Newtowncorduff will continue to be possible site options for the project should Clonshagh be deemed unsuitable at any future stage.

## Map of preferred site option (Clonshagh)





## What is the Preferred Site Option?

The preferred site option comprises a treatment plant located at Clonshagh with a southern marine outfall location. This site is located primarily in the townland of Clonshagh, Fingal. It lies approximately 2.5km east of Dublin Airport with the residential areas of Belcamp and Darndale being located some 0.8km to the south. The proposed site has a total area of approximately 23ha.

The site is located in open agricultural land, primarily in tillage, vegetables and grassland. The Cuckoo Stream (a tributary of the Mayne River) and the Mayne River run north and south of the site respectively. The northern site boundary is approximately 50m from the Cuckoo Stream and the southern site boundary is approximately 400m from the Mayne River. The site can be accessed from the Clonshaugh Road located west of the site. However, an alternative access to the site from the R139, located south of the site will be considered during the EIS.

Wastewater will be collected from surrounding load centres and transported to the WwTP at Clonshagh by orbital sewers totalling some c.18km in length. Treated wastewater from a WwTP located on this site will be transported through a pipeline for discharge c.6km out to sea from Baldoyle and approximately 1km north-east of Ireland's Eye.

At the coastline, the outfall pipeline crosses under estuary habitats of the Baldoyle Bay SAC/ SPA. The pipeline then crosses under Portmarnock Spit (Portmarnock Golf Club) before re-entering and crossing under the Baldoyle Bay SAC. The pipeline terminates within the Rockabill to Dalkey Island cSAC.

## What is being consulted on?

Fingal County Council would like to hear your views on the following:

- Under the key elements listed below are there any issues that should be taken into consideration in preparing the Environmental Impact Statement (EIS) on the preferred site option?
- How should these issues be addressed in the EIS?
- How would you like to be communicated with as the project progresses towards planning approval?
- Is there any other information you believe is relevant to the development of the preferred site option?

The key elements to be considered in the EIS are:

- **Human Beings and Material Assets**
- **Flora and Fauna**
- **Soils**
- **Water**
- **Air, Odour, Climate**
- **Landscape and Visual Impact**
- **Noise and Vibration**
- **Traffic management and Access routes**
- **Archaeological, Architectural and Cultural heritage**
- **Construction Methodologies**
- **Planning Policy**



## Public Consultation - How can I get involved?

Public consultation will take place from 10th June until 2nd August 2013. All relevant feedback received will be reviewed and considered by the Project Team and will be reported on within a consultation report, the consultation chapter of the Environmental Impact Statement (EIS) and associated appendices.

### Open Days

You are welcome to attend any of our three Open Days to be held in Swords. The Project Team will be available to answer your questions and listen to your views on what should be considered in the preparation of the Environmental Impact Statement.

In order to ensure stakeholder feedback is considered in advance of the project moving forward, **all feedback for this consultation should be received by 5:00pm on Friday 2nd August 2013.**



**Wednesday 26th June from 2:00pm to 8:00pm** in Fingal County Hall, Main Street, Swords



**Saturday 29th June from 11:00am to 4:00pm** in Fingal County Hall, Main Street, Swords



**Wednesday 3rd July from 2:00pm to 8:00pm** in Fingal County Hall, Main Street, Swords

In order to ensure stakeholder feedback is considered in advance of the project moving forward, **all feedback for this consultation should be received by 5:00pm on Friday 2nd August 2013.**

**For further information or to make a submission, please:**

**Email:**  
info@greaterdublindrainage.ie

**Lo-call telephone:** 1890 44 55 67

**Write:**  
Greater Dublin Drainage Project Manager,  
c/o RPS Group, West Pier Business Campus,  
Dún Laoghaire, Co. Dublin, Ireland

**Visit:**  
www.greaterdublindrainage.com



## What happens next?

The Project Team will undertake and prepare an Environmental Impact Statement (EIS) and Natura Impact Statement (NIS) for the preferred site option, which will be submitted as part of the planning approval documentation to An Bord Pleanála. The Board is the competent authority that will assess and determine the outcome of the planning application.

Detailed engineering and environmental studies will be carried out for the EIS which will lead to the preparation and compilation of the EIS and NIS for the Project. Input from the public and stakeholders in relation to items such as traffic management, access points, landscaping, effects on air and water quality will also be considered and inform these studies.

Fingal County Council intends to submit an application for planning approval to An Bord Pleanála in early 2014. As part of the planning process, the Board will carry out statutory consultation which will provide the public with the opportunity to have their say. The Project Team will also continue on-going engagement with the public during the planning process. Following receipt of planning approval, the preparation of a Design, Build, Operate contract will begin with a view to start construction in 2017 at the earliest.

This, the fourth round of public consultation will take place from **10th June until 2nd August 2013**. This round of public consultation will provide you with the opportunity to submit your views on items to be considered in the Environmental Impact Statement. Items raised during this consultation phase that are relevant to the Natura Impact Statement will also be considered.

An **Environmental Impact Statement (EIS)** is a report that contains detailed analysis of the impacts of a project on the existing environment and includes sufficient information to allow a decision to be made on whether consent should be given to the project.

A **Natura Impact Statement (NIS)** is a report that contains an examination of the possible impacts of a project on Natura 2000 sites that allow a decision to be made on whether consent should be given to the project. Natura 2000 sites comprise Special Areas of Conservation and Special Protection Areas classified under the Birds Directive and the Habitats Directive.



## Why is the project needed?

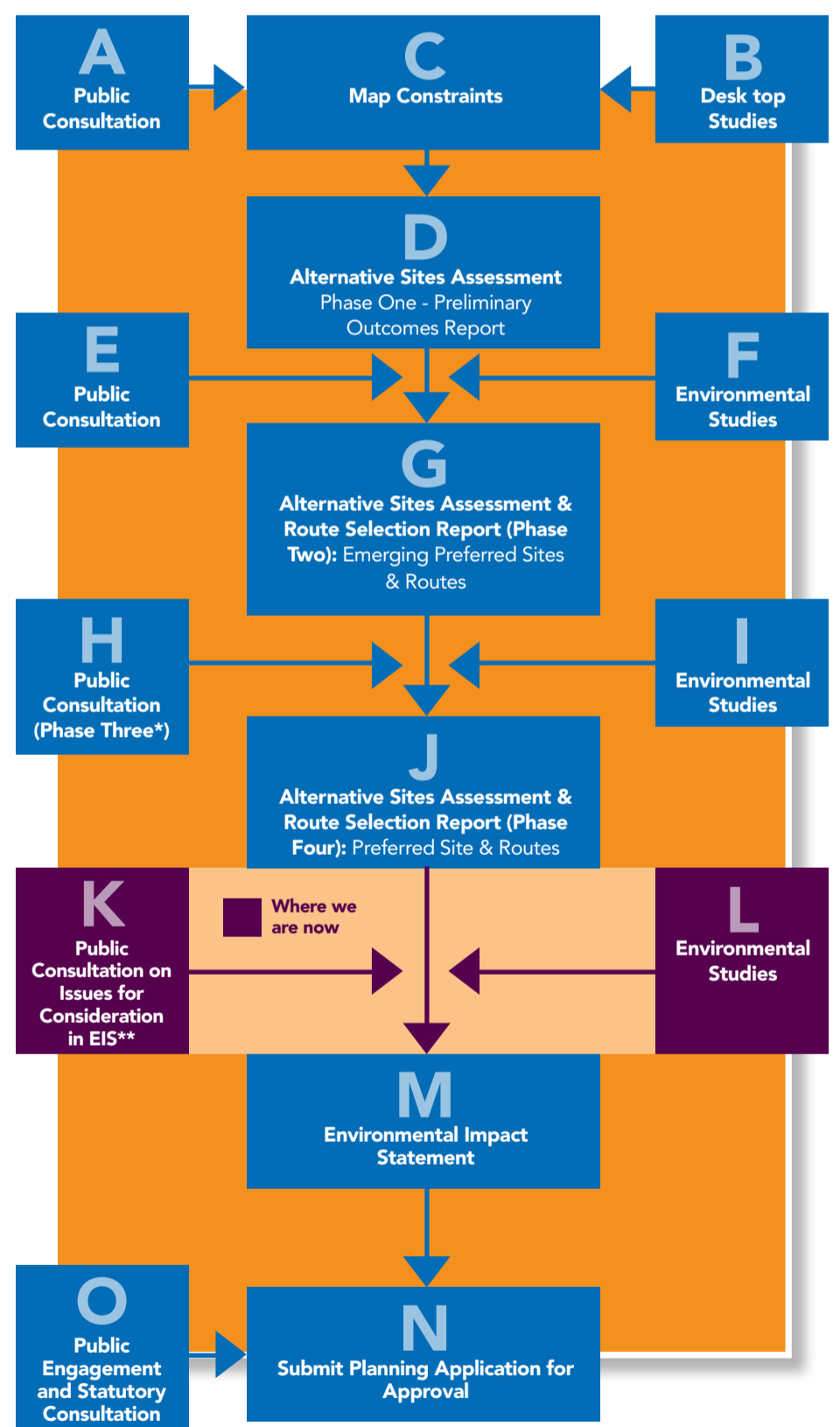
The Greater Dublin Drainage project is vital in order to facilitate employment, social progress and economic growth in the wider Dublin Region, hand-in-hand with the improvement and protection of the environment.

One of the key elements of infrastructure needed to facilitate jobs and other developments like schools, hospitals and housing, is to increase the wider Dublin region's wastewater treatment capacity. From extensive examination over many years we know that we will not have enough drainage and wastewater treatment facilities by 2020 if we do not do something now so the Greater Dublin Drainage project is needed. We cannot ignore our urgent need for more wastewater treatment capacity. Doing nothing is not an option.



The project is also necessary to meet the Water Framework Directive (WFD) requirements and the related EU Directives and National Regulations related to water quality.

## Project Road Map



### NOTES:

**D** - This identified constraints, potential land parcels, pipeline locations.

**J** - Announces the final site, pipeline routes and outfall location.

\*Phase 3 refers to Public Consultation (H)

\*\*Items raised during this consultation phase that are relevant to the Natura Impact Statement will also be considered.



## What is drainage and wastewater?

Wastewater is any water whose quality has been adversely affected by human activity or industry. It is liquid waste discharged by domestic residences, commercial properties, industry, or agriculture as well as storm water that enters the wastewater sewer network from our streets and roads.

We all create wastewater through simple everyday activities like showering, washing clothes and dishes, cooking and using the toilet.

### Why do we need to treat wastewater?

Wastewater can contain a wide range of contaminants. Some of these contaminants can be broken down easily in the environment but others are not so easily degraded.

The drainage system transports this wastewater to a plant for treatment before it is discharged as treated effluent into our rivers or seas.

Untreated wastewater poses a threat to public health and the environment. All wastewater is ultimately discharged back into the aquatic environment and, if the treatment is inadequate, the receiving waters may be polluted.

Furthermore, proper wastewater treatment systems are essential for sustaining modern livelihoods and facilitating development. Not only householders but also businesses, industries, schools and hospitals, for example, rely on a robust wastewater treatment system to maintain daily activities.

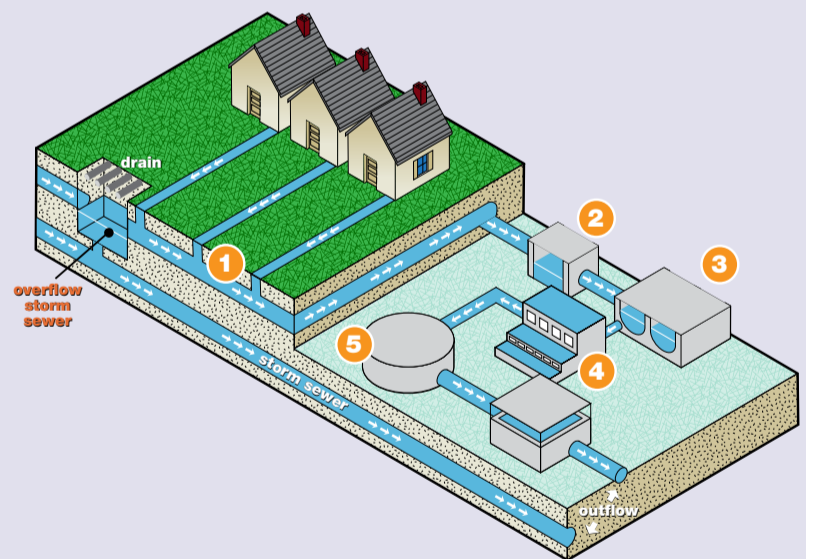
### The treatment process

Wastewater treatment is the process of removing contaminants, including physical, chemical and biological contaminants from wastewater. Treatment is carried out in order to produce an environmentally safe liquid waste stream that is suitable for disposal.

#### Stages of treatment

- Preliminary treatment (Pre-treatment) consists of putting the raw sewage through mechanically raked screens to break up the sewage and remove large solids, oily scums and floating material. Following this the grit, sand or gravel particles and heavy solids are allowed to settle before being removed.
- Primary treatment consists of temporarily holding the pre-treated sewage in a tank where heavy solids can settle to the bottom while oil, grease, and lighter solids float to the surface. The settled and floating materials are removed and the remaining liquid may be discharged or subjected to further secondary treatment.
- Secondary treatment is a 'biological' treatment phase where dissolved and suspended biological matter is removed by the action of water-borne micro-organisms in a managed environment such as aeration tanks. The secondary treated wastewater is suitable to discharge to receiving waters in the majority of circumstances.

In certain circumstances, due to the sensitivity of the receiving environment a further treatment stage may be required. This fourth stage is commonly referred to as 'tertiary' treatment.



#### Urban Wastewater Management

##### Waste water treatment process

Step 1: sewerage system	Preliminary treatment
Step 2: grit chamber	
Step 3: primary treatment	
Step 4: aeration tanks	Secondary treatment
Step 5: secondary treatment tank	

This illustration shows the layout of a typical treatment works. Ideally, wastewater treatment in a municipal treatment works involves three main stages: Preliminary, primary and secondary treatment. There are two products from the treatment process; sludge and liquid effluents. The process of wastewater treatment removes physical, chemical and biological contaminants, producing an environmentally safe fluid waste stream or sludge that is suitable for disposal or reuse.

Greater Dublin Drainage

# Facts



## The Greater Dublin Drainage Project will:

- ▶ Protect the environment and human health.
- ▶ Enable economic growth and investment in Fingal and other parts of Dublin.
- ▶ Enable social development by serving and providing for schools, hospitals, and other community and recreational uses in Fingal and the rest of Dublin.
- ▶ Treat the majority of the wastewater generated in the Fingal area, together with wastewater from the northern parts of Dublin City, south Meath and parts of east Kildare when their existing plants reach their ultimate capacity.

Call: 1890-44 55 67

# Facts



- ▶ The Project is still at pre-planning stage; it is intended to submit an application for planning approval to An Bord Pleanála in early 2014.
- ▶ The proposed treatment plant is required to treat the wastewater we all produce on a daily basis through every day activities including showering and bathing, washing clothes, dish washing, cooking and using the toilet.
- ▶ At €420 million the Clonshagh (Clonshaugh) option is €80 million less than the other options considered, as well as being the best technical and environmental solution.

The 23 hectare site will accommodate a range of structures between 3 and 15 metres high, surrounded by extensive landscaping (trees, shrubs and grass) which will minimise any visual impact.

# Facts

## What about the environment?

- ▶ Every measure is being taken to ensure that there are no adverse impacts on any aspect of the environment in developing the Project. The conditions of the planning approval and EPA licence will ensure that this is the case.
- ▶ No untreated wastewater will be discharged from the proposed plant; wastewater will undergo the necessary treatment to meet the conditions of the EPA licence prior to being discharged 6km out to sea from Baldoyle Bay.
- ▶ The level to which the wastewater will be treated will ensure the water quality standards required by strict EU and national legislation can be achieved. These include:
  - EU Water Framework Directive,
  - Bathing Water Quality Regulations and
  - Urban Wastewater Treatment Regulations.

This will safeguard the quality of the marine environment.

# Facts

## Why not build multiple smaller wastewater treatment plants (WwTPs)?

- ▶ Development of a single regional plant is the preferred option from an environmental, technical and economic perspective.
- ▶ If numerous smaller inland WwTPs were developed, the discharge from these plants would be released to adjacent watercourses (rivers and streams), most of which are small and have insufficient dilution capacity to cater for the load and flow of such discharges.
- ▶ Rivers in Dublin are already under pressure and experience lower flow in dry periods which reduces their ability to absorb treated wastewater.
- ▶ There would be greater constraints and a higher number of communities impacted by building several wastewater treatment plants in a highly urbanised landscape, compared to the requirements for one regional plant.

## **APPENDIX E**

### **Advertisements**

## Public Consultation and Open Days for Greater Dublin Drainage on the Environmental Impact Statement for the Preferred Site, Orbital Sewer and Marine Outfall Option



Fingal County Council has announced the preferred solution for the Greater Dublin Drainage project, consisting of 26km of pipeline, a wastewater treatment plant at Clonshagh, and an outfall pipe located 6km out to sea from Baldoyle.

Public consultation on items to be considered for the Environmental Impact Statement for this option is now underway.

Members of the public are invited to come along to the scheduled Open Days at Fingal County Hall, Main Street, Swords Co. Dublin on:

- Wednesday 26th June from 2pm - 8pm
- Saturday 29th June from 11am - 4pm
- Wednesday 3rd July from 2pm - 8pm

The report 'Alternative Sites Assessment and Routes Selection Report (Phase 4) : Preferred Sites and Routes Report' is available:

- Free download from [www.greaterdublindrainage.ie/project-reports/](http://www.greaterdublindrainage.ie/project-reports/)
- View printed copies at Fingal County Council offices at Swords and Blanchardstown, Fingal Public Libraries, or Dublin City Council North Central Head Office in Coolock
- Purchase the report (with appendices on CD) for €150

Submissions on items to be considered in the EIS must be made by **5pm on Friday 2nd August 2013** to

- Email: [info@greaterdublindrainage.ie](mailto:info@greaterdublindrainage.ie)
- In writing to: Greater Dublin Drainage Project Manager, c/o RPS Group, West Pier Business Campus, Dun Laoghaire, Co. Dublin.
- Telephone: lo-call 1890 44 55 67

See [www.greaterdublindrainage.com](http://www.greaterdublindrainage.com) for further information.

## **APPENDIX F**

### **Press Releases**



**PREFERRED SITE AND PIPELINE ROUTE TO BE ANNOUNCED FOR PROPOSED  
GREATER DUBLIN DRAINAGE PROJECT.**

4<sup>th</sup> June 2013: Fingal County Council intends to publish a report on '*The Alternative Sites Assessment and Routes Selection Report Phase 4: Preferred Sites and Routes Report*' for the Greater Dublin Drainage Project at the next Fingal County Council meeting, on Monday 10<sup>th</sup> June. The report will detail the process used to appraise the three shortlisted site options (Annsbrook, Clonshagh and Newtowncorduff) and identify the emerging preferred site option for the development.

The report will be available for download free of charge from [www.greaterdublindrainage.ie/project-reports/](http://www.greaterdublindrainage.ie/project-reports/) and will be on view at Fingal Co Council headquarters and at local libraries.

The Project Team will be available at Open Days in June and July to discuss the report, answer questions and hear people's feedback on what they want to see considered in the Environmental Impact Assessment.

People can keep in touch with the project by email [info@greaterdublindrainage.ie](mailto:info@greaterdublindrainage.ie), by Lo-Call 1890 44 55 67 or the website, [www.greaterdublindrainage.ie](http://www.greaterdublindrainage.ie).

ENDS

NEWS RELEASE

**PREFERRED OPTION FOR GREATER DUBLIN DRAINAGE PROJECT IS MOST ENVIRONMENTALLY BENEFICIAL AND TECHNICALLY ADVANTAGEOUS SOLUTION**

Monday, 10<sup>th</sup> June 2013: Greater Dublin Drainage has published the report '*Alternative Sites Assessment and Routes Selection Report Phase 4: Preferred Sites and Routes Report*' which identifies that the best solution for the future development of wastewater treatment capacity in the wider Dublin region comprises a 26km orbital sewer, a wastewater treatment plant at Clonshagh and an outfall pipe located 6km out to sea from Baldoyle.

Presenting the report to the Elected Members of Fingal County Council today the Project Team said that this preferred site option will be subject to further technical examination and more detailed studies over the coming months. The full Report is available to view and download for free at [www.greaterdublindrainage.com](http://www.greaterdublindrainage.com). It will also be on view in Fingal County Council offices in Swords and Blanchardstown, in Fingal public libraries and at Dublin City Council's North Central Head Office in Coolock. The Report (without appendices) can be purchased for €150.

"The Greater Dublin Drainage project is vital in order to facilitate employment, social progress and economic growth in the wider Dublin Region, hand-in-hand with the improvement and protection of our environment," said Peter O'Reilly, Project Engineer, Fingal County Council. "Wastewater treatment capacity is one of the key elements of infrastructure needed to facilitate jobs and other developments like schools, hospitals and housing in the wider Dublin region and our current capacity will run out in 2020."

"Over 13 different experts across different disciplines studied the three shortlisted sites, Clonshagh, Annsbrook and Newtowncorduff, and we reached the conclusion that Clonshagh is the most environmentally beneficial and technically advantageous solution and it is the best value for money too," said Peter O'Reilly.

The Clonshagh option is better ecologically and environmentally. Tunnelling of the preferred outfall is technically easier and the outfall location has a greater depth of water to facilitate greater initial dilution of treated wastewater discharges in the sea than the northern outfall; it has the shortest pipeline and therefore a shorter construction time; and it is closest to the existing areas where wastewater is drawn from and so will be more flexible in serving schools, hospitals, houses and industry immediately as well as enabling additional capacity. In addition to the many technical and environmental benefits, the estimated overall cost during the lifetime of the project for this preferred site option is over €80 million less than other options studied.

Fingal County Council is delivering Greater Dublin Drainage on behalf of the wider Dublin Region. It intends to submit an application for planning approval to An Bord Pleanála in early 2014 and at that stage the Board will undertake statutory public consultation.

In advance of that, the Project Team is preparing an Environmental Impact Statement (EIS) and is holding public consultation over the next eight weeks to seek feedback on what should be considered in the EIS. Open days are being held in Fingal County Council, County Hall, Swords on 26<sup>th</sup> and 29<sup>th</sup> June and on 3<sup>rd</sup> July.

For more information people can contact the project team at [info@greaterdublindrainage.ie](mailto:info@greaterdublindrainage.ie) or by Lo-call telephone 1890 44 55 67.

Ends.

#### **Notes to Editors**

Fingal County Council commenced Greater Dublin Drainage in 2011. Following initial studies it identified nine land parcels which, following extensive technical studies and public consultation, were narrowed down to three possible site options. Until planning approval is obtained for this preferred site option, Annsbrook and Newtowncorduff will continue to be possible options for the project should Clonshagh be deemed unsuitable at any future stage.

## **GREATER DUBLIN DRAINAGE OPEN EVENING IN HILTON DUBLIN AIRPORT HOTEL, 16th JULY**

Wednesday 10<sup>th</sup> July 2013: The Greater Dublin Drainage Project is to hold an open evening on Tuesday 16th July 2013 from 3pm to 8pm in the Hilton Dublin Airport Hotel, Northern Cross, Malahide Road, Dublin 17 where people can come along to meet the project team, have their queries answered and provide feedback on issues to be considered in the Environmental Impact Statement (EIS) that will be prepared for the project relating to potential effects on the environment that may occur as a result of the project. Human beings, landscape, visual impact, traffic management and access, effects on air and water quality are examples of relevant topics that people may have specific information or views on that should be considered. It is intended to submit the application for planning approval for the project to An Bord Pleanála in early 2014.

“We have held three successful open days in County Hall, Swords in recent weeks and in response to local people’s requests we are holding an event in the Clonshagh area, to meet more people, outline the facts of the project and reassure them about what is being proposed because there is a lot of misinformation out there that we need to clarify,” says Peter O’Reilly, Project Engineer.

“The Greater Dublin Drainage Project is needed to facilitate employment, social progress and economic growth for Dublin, while improving and protecting the environment for all. It is at the early planning stages and we hope to make an application for planning approval to An Bord Pleanála in early 2014 for their consideration,” says Peter O’Reilly.

The Clonshagh option is the best solution from a technical, environmental and cost perspective; at approximately €420 million it is approximately €80 million less than the other options considered.

“The majority (70%) of Fingal’s wastewater currently goes to the wastewater treatment plant at Ringsend but we know from extensive studies that we will not have enough drainage and wastewater treatment capacity to cater for future growth in the Greater Dublin Area if we do not build an additional regional treatment plant,” says Peter O’Reilly.

### **Greater Dublin Drainage Project – FACTS**

- Information on Greater Dublin Drainage can be found on the Project's website [www.greaterdublindrainage.com](http://www.greaterdublindrainage.com). This includes reports, maps, brochures and factsheets on the project.
- The Greater Dublin Drainage plant will treat the majority of the wastewater generated in the Fingal area, together with the wastewater from the northern parts of Dublin City, south Meath and eventually from the east Kildare area currently served by Leixlip and Osberstown treatment plants once they have reached their ultimate capacity.
- No untreated wastewater will be discharged from the proposed WwTP. The wastewater brought to the proposed plant at Clonshagh will undergo the necessary treatment to meet the conditions of the EPA licence prior to being discharged 6km out to sea from Baldoyle Bay. The level of treatment applied will ensure water quality standards in compliance with strict EU and national legislative requirements can be achieved including the EU Water Framework Directive, Bathing Water Quality Regulations and Urban Wastewater Treatment Regulations. This will safeguard water quality and the quality of the marine environment. Every measure will be taken to ensure that there are no adverse impacts on any aspect of the environment in developing the Greater Dublin Drainage Project and the conditions of the planning approval and EPA licence, if awarded, will ensure that this is the case throughout all stages of project development and operation.
- Development of a single regional plant is the preferred option from an environmental, technical and economic perspective. If numerous smaller inland WwTPs were developed, the discharge from these plants would be released to adjacent watercourses. Most of which are small and have insufficient dilution capacity to cater for the load and flow of such discharges. Rivers in Dublin are already under pressure and experience lower flow in dry periods which reduces the ability of the watercourse to dilute the treated wastewater.

Public consultation continues until Friday 2nd August 2013 during which time people can advise the project team on issues to be considered in the Environmental Impact Statement (EIS) that will be prepared for the project relating to potential effects on the environment that may occur as a result of the project.

Anybody who would like to find any information on the project can visit the Greater Dublin Drainage website at [www.greaterdublindrainage.com](http://www.greaterdublindrainage.com) or can contact the Project Team through our lo-call phone line 1890-445567 or email [info@greaterdublindrainage.ie](mailto:info@greaterdublindrainage.ie).

## **SUBMISSIONS ON ISSUES TO BE CONSIDERED IN THE EIS**

### **FOR GREATER DUBLIN DRAINAGE PROJECT DUE BY FRIDAY 2<sup>ND</sup> AUGUST**

Thursday 18<sup>th</sup> July 2013: Public consultation continues until Friday 2<sup>nd</sup> August 2013 on issues to be considered in the Environmental Impact Statement (EIS) that will be prepared for the Greater Dublin Drainage Project. The EIS will consider issues relating to potential effects on the environment that may occur as a result of the project. Human beings, landscape, visual impact, traffic management and access, effects on air and water quality are examples of relevant topics that people may have specific information or views on that should be considered.

It is intended to submit the application for planning approval for the project to An Bord Pleanála in early 2014 and the EIS will form part of the planning application documentation. It is a requirement for the project that all relevant EU and Irish legislation will be complied with. In addition, the project will require an effluent discharge license from the EPA. Following receipt of planning approval, the preparation of a Design, Build, Operate contract could begin with a view to start construction in 2017 at the earliest.

“We have engaged with hundreds of members of the public since our fourth round of public consultation commenced on 10<sup>th</sup> June. The open days held in June and July were a valuable opportunity to clarify a lot of misinformation that is circulating,” says Peter O’Reilly, Project Engineer. “The project is still at the pre planning stage. This consultation is part of the non-statutory phase and its purpose is to inform the EIS which is being prepared as part of the application for planning approval, that will be submitted to An Bord Pleanála in early 2014.”

In order to ensure stakeholder feedback is considered in advance of the project moving forward, all feedback for this consultation should be sent, to arrive by 5pm on 2<sup>nd</sup> August 2013 by email to [info@greaterdublindrainage.ie](mailto:info@greaterdublindrainage.ie) or in writing to Greater Dublin Drainage Project Manager, c/o RPS Group, West Pier Business Campus, Dun Laoghaire, Co. Dublin, Ireland.

“We are continually updating the project website, [www.greaterdublindrainage.com](http://www.greaterdublindrainage.com), so if people want to know the facts about the project that’s where they’ll find accurate information, along with all of the reports and studies undertaken to date.”

- The proposed wastewater treatment plant will be designed, built and operated to the highest technological standards and international best practice and this will include a rigorous maintenance regime; it will have built-in maintenance capacity, which can be utilized should any malfunction occur at the plant. A plant the size we are proposing would also have a back-up power generator in place in case of power failure. Furthermore, storm tanks will be located on the site and within the system in the upstream catchments during times of significant storms or should any incident occur.

- Every measure is being taken to ensure that there are no adverse impacts on any aspect of the environment in developing the Project. The conditions of the planning approval and EPA licence, if awarded, will ensure that this is the case. **No untreated wastewater will be discharged from the proposed plant; wastewater will undergo the necessary treatment to meet the conditions of the EPA licence prior to being discharged** 6km out to sea from Baldoyle Bay. The level to which the **wastewater will be treated** will ensure the water quality standards required by strict EU and national legislation can be achieved. These include the **EU Water Framework Directive, Bathing Water Quality Regulations and Urban Wastewater Treatment Regulations**. This will safeguard the quality of the marine environment.
- Odour and noise limits at the boundary of the site will be set in the planning conditions and these will have to be achieved. **Modern wastewater treatment plants are designed to minimise the risk of odour emissions; they are covered and have extensive odour, emissions and noise controls in place** and this will be the case with the Greater Dublin Drainage Project. Odours will be collected via pipes and treated to achieve European odour guideline values and to avoid impact on the surrounding area.
- The 23 hectare site will accommodate a range of structures between 3 and 15 metres (10-50 feet) high, surrounded by extensive landscaping (trees, shrubs and grass) which will minimise any visual impact. The perimeter of the site identified for the proposed wastewater treatment plant (WwTP) is at least 300 metres from the nearest existing neighbouring house or other sensitive receptor such as schools, nursing homes, etc.
- One large regional plant will have a lesser impact on the environment than a number of smaller plants discharging to ground/surface waters across the Greater Dublin Area (GDA). There would also be greater constraints and a higher number of communities impacted by building several wastewater treatment plants in a highly urbanised landscape, compared to the requirements for one regional plant. Furthermore, future jobs and new industries are dependent on a new Regional WwTP working in conjunction with Ringsend and all the other WwTPs in the Region.
- The drainage system in the Greater Dublin Area is an integrated regional system. The majority **(70%) of Fingal's wastewater currently goes to the wastewater treatment plant at Ringsend** but we know from extensive studies that we will not have enough drainage and wastewater treatment capacity to cater for future growth in the Greater Dublin Area if we do not build an additional regional treatment plant. The proposed plant **will treat the majority of the wastewater generated in the Fingal area**, together with the wastewater from the northern parts of Dublin City, south Meath and eventually from the east Kildare area currently served by Leixlip and Osberstown treatment plants once they have reached their ultimate capacity.

Ends.