Our Ref: ABP-301908-18

PA Reg Ref:

Your Ref: Gannon Properties



Conroy Crowe Kelly Architects 65 Merrion Square Dublin 2

Date: 24th August 2018

Re: Greater Dublin Drainage Project consisting of a new wastewater treatment plant, sludge hub centre, orbital sewer, outfall pipeline and regional biosolids storage facility Townlands of Clonshagh, Dubber and Newtown, County Fingal and Dublin City

Dear Sir / Madam

An Bord Pleanála has received your recent submission in relation to the above mentioned proposed development and will take it into consideration in its determination of the matter. A receipt for the fee lodged is enclosed.

The Board will revert to you in due course with regard to the matter.

Please be advised that copies of all submissions / observations received in relation to the application will be made available for public inspection at the offices of Dublin City Council and Fingal County Council and at the offices of An Bord Pleanála when they have been processed by the Board.

More detailed information in relation to strategic infrastructure development can be viewed on the Board's website: www.pleanala.ie.

If you have any queries in the meantime please contact the undersigned officer of the Board. Please quote the above mentioned An Bord Pleanála reference number in any correspondence or telephone contact with the Board.

Yours faithfully,

Kieran Somers

Executive Officer Direct Line: 01-873 7107

Teil Glao Áitiúil Facs Láithreán Gréasáin Ríomhphost Tel LoCall Fax Website Email (01) 858 8100 1890 275 175 (01) 872 2684 www.pleanala.ie bord@pteanala.ie

64 Sráid Maoilbhride 64 Ma Baile Átha Cliath 1 D01 V902

64 Marlborough Street Dublin 1 D01 V902 Our Ref. 1431/pg

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65 MERRION SQUARE, DUBLIN 2

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The Secretary. An Bord Pleanála, 64 Marlborough Street, Dublin 1.



FAX 676 5715

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DESIGNERS

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17th August 2018

Observation in Respect of a Strategic Infrastructure Development Application

Re: Greater Dublin Drainage Project consisting of a new wastewater treatment plant, sludge hub centre, orbital sewer, outfall pipeline and regional biosolids storage facility.

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PHONE 661 3990

URBAN

Fingal County Council Ref:	SID/03/18
An Bord Pleanala Ref:	ABP-301908-18

Observer: Agent: Gannon Properties Conroy Crowe Kelly Architects 65 Merrion Square Dublin 2

Fee:

€50

Dear Sir/Madam.

On behalf of our client, Gannon Properties, we make this observation in respect of the the Strategic Infrastructure Development application for the Greater Dublin Drainage Project.

Please find enclosed a submission from Conroy Crowe Kelly Architects, an appended report prepared by Consulting Engineers Waterman Moylan and a cheque payable to An Bord Pleanala for 659,

We trust this is in order.

Yours faithfully,

Michael Crowe (Agent)

Conroy Crowe Kelly Architects & Urban Designers

AN BORD PLEANÁLA	
Received: 17/8/18	
Fee: <u>£.50.00</u>	
Receipt No:	

AN BORD PLEAMALA
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17 AUG 2018
PL 10G - CO 774 7-18

CONROY CROWE KELLY Architects & Urban Designers

Re: Greater Dublin Drainage Project consisting of a new wastewater treatment plant, sludge hub centre, orbital sewer, outfall pipeline and regional biosolids storage facility

ABP Reference: 301908-18

Fingal County Council Reference: SID/03/18

Observation made by Conroy Crowe Kelly Architects on behalf of Gannon **Properties.**

17th August 2018

1.0 **Gannon Properties & Belcamp**

Gannon Properties are the landowners of an 87 hectare (216 acre) development site at Belcamp, Dublin 17, adjacent to the proposed Wastewater Treatment Plant in Clonshaugh. The zoned Belcamp lands have a development capacity for over 3000 dwellings and associated mixed-uses. A masterplan layout for these lands has been prepared and a copy of this is attached for contextual reference.

Planning permission has been granted for Phase 1 of the Belcamp lands which comprises some 175 units at the eastern end of the holding (Ref. F15A/0609, PL06F.248052). Construction of these dwellings and the infrastructure required to serve them is planned to commence in 2018. The infrastructure includes the provision of new east-west access road(s) from the Malahide Road which is part of the internal spine road running through the Belcamp development and west across the OS zoned lands, eventually connecting with a future north-south distributor link road to the R139.

The need for a new WwTP in North Dublin is recognised and the provision of same is welcomed. We have followed the process of site selection and assessment since the first consultation stage in 2011. Submissions on behalf of Gannon Properties have been made at various stages, specifically with regard to the extent of the buffer zone generated by the odour-producing elements of the WwTP and the potential impact on the Belcamp lands.

This observation is made in respect of two issues:

(i) the nature of the access road from the R139, and

(ii) the extent of the buffer zone.

AN These items have a significant, permanent and potentially negative affect on the Belcamp development lands. LTR DATED 17 AUG 2018

2.0 Access Road to WwTP from the R139

The Applicant proposes a new left-in only access road from the R139 which comprises two carriageways to serve the WwTP and the adjacent GAA lands, separated by a central concrete median. A cross section of this road where it crosses the Mayne River has been submitted with the application drawing no. 32102902-2148 P01, which indicates that the one-way WwTP access road will be 5m wide and the two-way GAA

access road will be 6m wide. No detailed plan drawings for these roads, the junction with the R139 nor the connection into the GAA lands appear to have been submitted with the SID application.

In addition to the above works, the SID application seeks to divert the North Fringe Sewer from the R139 north to the WwTP, and proposes to locate this drain under the new access road.

It is noted that the proposed WwTP access road follows the line of a stated road objective of the Fingal County Development Plan 2017-2022 (Map Sheet 11 Fingal South) which is part of a wider network of new roads and realignments, specifically the R107 Malahide Road Realignment/Balgriffin Bypass and the East-West Distributor Road from Malahide Road to Stockhole Lane. These road proposals are informed by a detailed and extensive road layout prepared by consulting engineers Atkins for Fingal County Council, referred to as the 'Orange Route', and which indicates an 18.5m reservation for a 4-lane distributor road linking the R139 to the proposed east-west distributor road that will in future run along the southern boundary of the proposed WwTP.

This north-south link road is key in opening up the adjacent HT and RA lands for development. The Atkins Orange Route makes provision for spur roads to the HT lands in the west, and the RA lands in the east. It is a critical piece of road infrastructure in the orderly development of the Dublin North Fringe and Fingal South Fringe area.

It is considered that the construction of two separate carriageways serving only the WwTP and the GAA lands is shortsighted, and that future works to upgrade these roads and the culvert to the distributor road standard designed by Atkins will be disruptive, difficult and very costly. No provision for road widening nor for widening the culvert over the Mayne River has been made as part of this SID application by Irish Water.

It is suggested that the WwTP access road is designed with regard to the objectives of the Fingal County Development Plan and the Atkins Orange Route, and that this road is constructed as part of the development works for the WwTP.

Observation: That the access road from the R139 to the WwTP and the Mayne River culvert is designed and constructed to the distributor road standard proposed by the Atkins Orange Route and in accordance with the objectives of the Fingal County Development Plan.

3.0 Buffer Zone from the WwTP

The proposed WwTP is located to the north-west of lands under the control of our client, Gannon Properties, and abuts those lands at its south-east boundary. The Gannon lands, known as Belcamp, comprise 87ha and are zoned RA – *Residential Area*, OS – *Open Space*, and GB – *Greenbelt*. The OS zoning applies to the westernmost portion of the lands and along the south boundary, with the RA zoning to the east. The GB zoning comprises a small portion at the north-west.

The RA zoned lands have a carrying capacity of approx. 1800 dwellings, out of a total figure of 3200 for the overall Gannon lands, which includes lands south of the Mayne river within Dublin City Council area.

Map 9 of Fingal County Development Plan 2017-2023 identifies the RAzoned lands as LAP 9.B. Objective BALGRIFFIN/BELCAMP 5 of the development plan permits a limited quantum of development on the lands prior to the adoption of the LAP.

A total of 175 dwellings have been permitted (Reg. Ref.s *F15A/0609, FL06F.248052* and *F18A/0058*) to date, with a condition to apply for a further c.96 units as part of Phase 1 of the Belcamp development. Phases 2, 3 and 4 have been laid out in a masterplan, prepared and submitted to Fingal So Co, as context information during the planning process. A copy of this masterplan, drawing no. 1431 MP 20 is enclosed for reference.

Phase 4 of the Belcamp masterplan occupies the north-west portion of the RA zoned lands and proposes 450 dwellings over 22.7 ha, located between the OS lands to the west and the strategic north-south

infrastructure route (Atkins Orange Route) to the east. Phase 4 is subdivided by a proposed east-west route which forms the spine of the masterplan scheme running from the Malahide Road in the east to the HT zoned lands in the west. Phase 4 of the Belcamp development will present a strong urban edge along the west boundary of the RA zoning, overlooking the OS lands.

Objective WT11 of the development plan requires the establishment of a "*buffer zone around all wastewater treatment plants suitable to the size and operation of each plant. The buffer zone should not be less than 100m from the odour-producing units.*" The Alternative Site Assessment includes a 300m buffer from existing sensitive receptors, and we would contend that the RA zoning is an existing receptor in this instance.

The proposed WwTP site is located approx. 197m from the north-west corner of the Phase 4 lands. From the proposed layout drawing no.s *32102902-2138 P01* and *32102902-2139 P01*, submitted with the SID application, the nearest structure to the RA lands is approx. 262m away and is identified as a "Cake Storage and Loading Area". We would welcome confirmation that the buildings or structures located at the eastern section of the proposed WwTP, within a 300m radius of the RA zoned lands, are not odour producing to the extent that it would materially affect the development potential of our clients lands.

Any future revisions to the layout within the WwTP site, whether during or after the planning process, which would relocate odour producing facilities within the 300m buffer would, in our opinion, constitute a material change to the application.

It is noted that sports facilities and playing pitches are considered to be sensitive receptors for WwTP. In this regard, the impact on the OS zoned lands has not been established.

Observation: Ensure that the buffer zone from the odour producing elements of the WwTP do not impinge upon, negatively impact or effectively sterilise the zoned development lands at Belcamp. Confirmation of whether a 300m buffer or the 100m buffer described in the development plan applies would also be welcomed.

4.0 Summary

The proposed WwTP is an important piece of utilities infrastructure for North Dublin and Gannon Properties are fully supportive of its development. However, we question the proposal to construct a single lane access road on the line of a recognised road proposal objective. In the interests of orderly and sustainable planning, it is logical that this distributor road is constructed as part of the WwTP development. Furthermore, we question the nature and extent of the buffer zone and look for confirmation that it does not affect the considerable Gannon residential development at Belcamp.







Observations on Future Clonshaugh WWTP

On June 2018 Planning Submission to An Bord Pleanala ABP Reference 301908-18 / FCC Reference: SID/03/18

Date: 16 August 2018

Waterman Moylan Consulting Engineers Limited Block S, EastPoint Business park, Alfie Byrne Road, East Wall, Dublin D03 H3F4 www.waterman-moylan.ie





Client Name:	Gannon Homes
Document Reference:	14-185r.008
Project Number:	14-185

Quality Assurance - Approval Status

This document has been prepared and checked in accordance with Waterman Group's IMS (BS EN ISO 9001; 2008, BS EN ISO 14001; 2004 and BS OHSAS 18001;2007)

Issue	Date	Prepared by	Checked by	Approved by
1	16.08.2018	D Aiken	Fundand	Parla

Comments





Disclaimer

This report has been prepared by Waterman Moylan, with all reasonable skill, care and diligence within the terms of the Contract with the Client, incorporation of our General Terms and Condition of Business and taking account of the resources devoted to us by agreement with the Client.

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We disclaim any responsibility to the Client and others in respect of any matters outside the scope of the above.

This report is confidential to the Client and we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at its own risk.

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A. Drawings



1. Terms of Reference

1.1 Background

This report has been prepared in support of an observation by Conroy Crowe Kelly Architects to An Bord Pleanala on the proposed Clonshaugh Waste Water Treatment Plant (WWTP), adjacent to the Belcamp Lands off the R139 regional road, north Dublin. Waterman Moylan has been retained by Gannon Homes Limited, who are the owners of 87 hectares of land adjoining the proposed WWTP, known as the Belcamp Lands. These lands are zoned "Residential Area" in the current Fingal County Council and Dublin City Council Development plans, and a grant of planning permission has been received for the greater part of 269 residential units, inclusive of the restored fire damaged Belcamp Hall, as the first phase of these lands.

The observations in this report are made on the planning submission documents submitted to An Bord Pleanala and reproduced on the Irish Water website here:

https://www.gddapplication.ie/planning-documents/

The project is referred to as "Greater Dublin Drainage Project".

Observations on the planning documents are provided in section 2.

1.2 Scope

This report is limited to observations made on the access road to the WWTP from the R139 regional road and on details of the WWTP adjacent to its eastern boundary.

The WWTP site is located on drawing 14-185-SK119 included with this submission. The extent of Belcamp Lands in Gannon control is also indicated for context. Note where there is an overlap between the WWTP planning red line and the Belcamp Lands blue ownership line, this portion is being transferred to Irish Water by Gannon Homes Limited.

Excerpts from the planning submission documents are also reproduced in this report for context. Full drawings are included in the appendix, courtesy of the above website link.

2. Observations

2.1 Observation 1: R139 Access Road to WWTP

The Fingal County Council Development Plan 2017-2022, sheet 11, indicates a distributor road along the alignment also shown by Jacobs in their submission. Figure 1 below shows the grey dashed line as the future distributor road.

In about 2004, Dublin City Council and Fingal County Council commissioned Atkins to prepare preliminary route analysis and future road proposals for the area between the Malahide Road and the M1. The resulting preferred route was termed the "Orange Route", as shown in the Atkins layout provided in Appendix A. An excerpt from this drawing is provided in Figure 5 below.

The Atkins Orange Route has informed development plans since 2004, and the future routes are indicated with grey dashed lines, as per the development plan extract in Figure 1 below.

For the future proposed road from the R139 north to the WWTP lands, the Atkins Orange Route design indicates an 18.5m road reservation.



Figure 1: 2017-2022 FCC Development Plan, Sheet 11 excerpt

The subject proposal for roads access to the WWTP was submitted to the Bord by Jacobs, in drawing 32102902-2120-P01, as included in Appendix A and shown as an excerpt in figure 2 below.

The Engineering Design report by Jacobs included with the submission indicates the access road from the R139 is 5m wide and one-way, entering left only from the R139 to the WWTP Traffic circulates within the WWTP lands and exits on a one-way 5m road to Clonshaugh Road to the west, left out only. The junction of the R139 and the access road north to the WWTP is not shown in plan on the planning submission drawings by Jacobs. How this new access from the R139 interacts with the GAA lands access is not shown. An indication of the access road construction is shown in Jacobs drawing 32102902-2148, but is limited to the Mayne river crossing.

There is a very serious dearth of detail and design information for this proposed junction in the planning documents provided. Considering that the R139 is heavily trafficked, further design detail should have been provided for this area.



Figure 2: Jacobs drawing 2120, excerpt, showing south eastern corner of WWTP adjacent to the future east west distributor road.

Looking at the road in section, Jacobs drawing 32102902-2048-P01, a carriageway reservation of 5m is provided to access to the WWTP with a parallel 6m carriageway reservation to access the GAA lands also provided with a culvert to negotiate the Mayne River.



Figure 3: Jacobs drawing 2148, excerpt, showing access road cross section over the River Mayne.

Waterman Moylan have prepared drawing 14-185-S119 showing the WWTP in context of the Gannon Lands and regional road objectives. A full copy of this drawing is included in Appendix A.

Figure 4 below is an excerpt of drawing 14-185-S119. The access road to the WWTP links the R139 through third party lands to the Belcamp zoned lands over a distance of 340m. The access road then passes into Belcamp zoned lands for a further 260m before reaching the WWTP boundary.

It can be seen from Figure 2 that there is no provision for an access into the Belcamp lands from the proposed access road. The Atkins Orange route suggests an access point to the zoned Belcamp lands which is not provided for by the Jacobs proposal. Please refer to Figure 5. The reservation for the Atkins Orange route along the proposed access road is 18.5m, comprising 3no 3.5m carriageways, and 2m footway and 2m cycleway each side.

By not providing for a fully developed road from the R139 to the Belcamp Zoned lands, the development of these lands will be hampered by unnecessary costs and delays.

AN BORD PLEANÁLA TIME BY 17 AUG 2018



Figure 4: Excerpt from drawing 14-185-S119 by Waterman Moylan.



Figure 5: Excerpt from Atkins Orange Route showing links to development areas.

The Atkins Orange Route, an excerpt shown in Figure 5, indicates the road alignments and linkages to development areas from the distributor roads. Note that the link north south to the WWTP has links into development areas on both sides of the road midway between the R139 and the east west distributor road.

Conclusion:

The provision of the WWTP access road from the R139, as presented in the planning documents, without provision of footways or cycleways, presents a number of issues:

- 1. The design information for the R139 junction with the GAA and WWTP access roads is in deficit and has been left out of account in the planning submission.
- 2. As this access will be a one way in only road, the future construction of the fully designed distributor road will be made more difficult while maintaining WWTP maintenance traffic, which will be considerable.
- 2. By not providing for a fully designed distributor road at this stage, subsequent upgrade of the road will present further difficulties in the construction of the Mayne River Culvert, by having to widen it, and reconstruct wing walls, etc. The reservation of 18.5m for the future distributor is about 8m short of the width being provided over the River Mayne in the subject application. The culvert design should be amended to provide for a future 18.5m wide carriageway and should be designed for full road traffic loading.
- 3. By not providing a two-way access road to the zoned lands that lie within Gannon ownership, this will prejudice timely and orderly delivery of housing to zoned lands.
- 4. No link into the Gannon development lands is shown, although this is indicated in the Atkins orange route as shown in Figure 5. Links should be provided to future established development areas.
- 5. The access to the WWTP, while necessary, could be improved upon to help facilitate future development of the Belcamp lands, in such a manner that will benefit both stakeholders. To approach this vital link to development lands piecemeal will present unacceptable delays and costs to Gannon, should the upgrade be implemented at a later date.
- 6. Considering that other vital links to the Belcamp Lands in Gannon Ownership could take considerable time to agree with the various statutory bodies, the link from the R139 is a relatively straightforward one. It could and should be fully developed upon delivery of the WWTP to facilitate removal of infrastructure deficits that are delaying the development of the zoned lands.
- 7. The provision of a properly designed two-way access road in accordance with the Development Plan would removal a major constraint to the development of zoned lands to the east, and permit this much needed development to commence. The provision of a narrow one-way access as proposed, will be a missed opportunity.

17 AUG 2018

APPENDICES

A. Drawings

7 Observations on Future Clonshaugh WWTP Project Number: 14-185 Document Reference: 14-185r.008 20

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UK and Ireland Office Locations



9 Observations on Future Clonshaugh WWTP Project Number: 14-185 Document Reference: 14-185r.008

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