

Greater Dublin Drainage Project Addendum

**Environmental Impact Assessment Report Addendum:
Volume 3A Part B of 6**

**Appendix A13.5 – Responses to Traffic and Transport Questions at
the 2019 Oral Hearing**

Uisce Éireann

October 2023

An Bord Pleanála Oral Hearing

Irish Water

Greater Dublin Drainage

Response to Inspector's Questions

**Response to Traffic Interaction between the GDD and RBSF
components of the Proposed Project**

Tom Cannon

GDD Oral Hearing
Response to Traffic Interaction between the GDD and RBSF components of the Proposed Project

Interactions between GDD and RBSF Components of the Proposed Project – Traffic

Introduction

1 On Day 2 of the hearing, (21st March 2019), a question was posed by the ABP Inspector as to the traffic interactions between the GDD and RBSF components of the Proposed Project.

2 I set out below my response to this matter.

Interaction during the Operation of the RBSF and Construction the GDD Orbital Sewer Route

3 During the construction the GDD Orbital Sewer Route component of the Proposed Project, there is one section of pipeline construction whereby traffic generated by the construction of the pipeline is concurrent with the Operation of the RBSF (building 1). The location is the construction of a 1200m section of pipeline accessed via Access Point AP4 along the R135. The concurrent traffic will impact two junctions, namely:

- R135 Signalised Junction; and
- N2 Northbound Slip Road (Priority) Junction.

Operation of RBSF (building 1)

4 If granted permission the RBSF component of the Proposed Project will be operational on a phased basis as referenced in Section 4.13.1 of Volume 2 Part A of the EIAR:

- Operation of one storage building from 2021
- Construction of the second storage building in 2024.

5 Table 13-4 of Volume 4 Part A of the EIAR includes the Daily HGV traffic estimated to be generated during operation of the RBSF (building 1):

- 30 HGV arrivals and 30 HGV departures per day, which equates to 4 HGV arrivals and 4 HGV departures per hour.

GDD Orbital Sewer Route

6 Subject to a grant of permission, the construction of the GDD Orbital Sewer Route component of the Proposed Project will commence from Q2 of 2022. Therefore, there will be construction activity associated with approximately 1200m section of pipeline where access is gained via Access Point AP4 (along the R135). The construction period for this section of pipeline will be of short duration and likely to be in the order of 9 to 10 weeks.

7 In terms of construction traffic for the orbital sewer, it is envisaged that the construction haulage activity associated with Access Point AP4 4 is 5 HGV Arrivals (or 12 equivalent PCUs) and 5 HGV Departures (or 12 equivalent PCUs) per hour, excluding the AM and PM peak hours; (Table 13.4 of Volume 3 Part A of the EIAR).

Traffic Interactions during the Operation of the RBSF (building 1) and Construction of the GDD Orbital Sewer Route

8 Therefore, the combined HGV movements due to operation of the RBSF (building 1) plus construction of the GDD Orbital Sewer Route at Access Point 4 will be a total of 9 HGV arrivals (or 21 equivalent PCUs) per hour and 9 HGV departures (or 21 equivalent PCUs) per hour.

GDD Oral Hearing

Response to Traffic Interaction between the GDD and RBSF components of the Proposed Project

Assessment

- 9 The traffic assessment presented in Chapter 13 of Volume 4 Part A of the EIAR considered the traffic generation associated with:
- Operation of RBSF (building 1); and
 - Construction of the RBSF (building 2).
- 10 Table 13-4 of Volume 4 Part A of the EIAR includes the Daily HGV and Light Vehicles estimated to be generated if Phase 2 RBSF is constructed in 2024:
- 25 HGV arrivals and 25 HGV departures per day, which equates to 4 HGV arrivals and 4HGV departures per hour.
- 11 As the construction works for the AP4 section of GDD Orbital Sewer Route will be constructed before the start of construction of RBSF building 2 starts construction, there will be no further combined traffic impacts, i.e. no combined impacts between the Operation of RBSF (building 1), Construction of RBSF (building 2) and construction of the AP4 section of GDD Orbital Sewer Route.
- 12 As the section of GDD Orbital Sewer Route component will generate comparable HGV movements as the construction of the RBSF (Building 2), it was not necessary to assess the specific interaction of Operation of RBSF (building 1) and construction works for the AP4 section of GDD Orbital Sewer Route
- 13 As presented in Tables 13-10 (2024 AM Peak) and 13-11 (2024 PM Peak) of Volume 4 Part A of the EIAR, both the R135 Signalised Junction and the N2 Northbound Slip Road (Priority) Junction will operate within capacity.

Interaction during Operation of the GDD WwTP and the RBSF

- 14 The assessments undertaken in Chapter 13 of Volume 4 Part A of the EIAR take account of the HGV traffic hauling biosolids from the GDD WwTP, as well as from the Ringsend WwTP, into and out from the RBSF.

Page left intentionally blank

An Bord Pleanála Oral Hearing

Irish Water

Greater Dublin Drainage

**Response to Roads Issues Raised on behalf of Gannon
Properties and Response to Roads and Traffic Issues Raised
by Sabrina Joyce Kemper**

Tom Cannon

(27th March 2019)

GDD Oral Hearing
Response to Roads Issues Raised on behalf of Gannon Properties and Response to Roads and Traffic Issues Raised by Sabrina Joyce Kemper



Figure 1 Extract from Planning Drawing 32102902-2120 showing proposed WwTP access Road on the line of the indicative North-South Link Road provided by Fingal County Council

- 6 It is proposed that the western kerb line of the proposed access road be fixed along the kerb line of the outline North-South Link Road and construct a 5.0m wide carriageway to the east side, with a 2.0m wide footway to the west side of the kerb line. By following the line of the western kerb line, the construction of the proposed WwTP access road will not prejudice the FCC objective of the future North-South Link Road. If the North-South Link Road is developed over time, the proposed access road being fixed to the western kerb line, will ensure that the WwTP access can be maintained whilst road construction work to the east side of the access road can take place to construct the road cross section that will be determined by FCC as their plans for the area develop.
- 7 The design of the proposed WwTP access road is such that it will not prejudice the future link road. Road construction as shown on planning drawing 32102902-2205 shows a typical road construction comprising 250mm thick of bound materials (surface, binder and base layers) on a road foundation of 150mm thick layer of granular Clause 804 material on 180mm thick granular capping material. Should permission be granted for the development, the exact road design detail will be agree with Fingal County Council and Dublin City Council.
- 8 Temporary Traffic Management arrangements will be put in place during any future construction to provide for the North-South Link Road. These traffic management measures, providing a carriageway width of 3.3m

GDD Oral Hearing

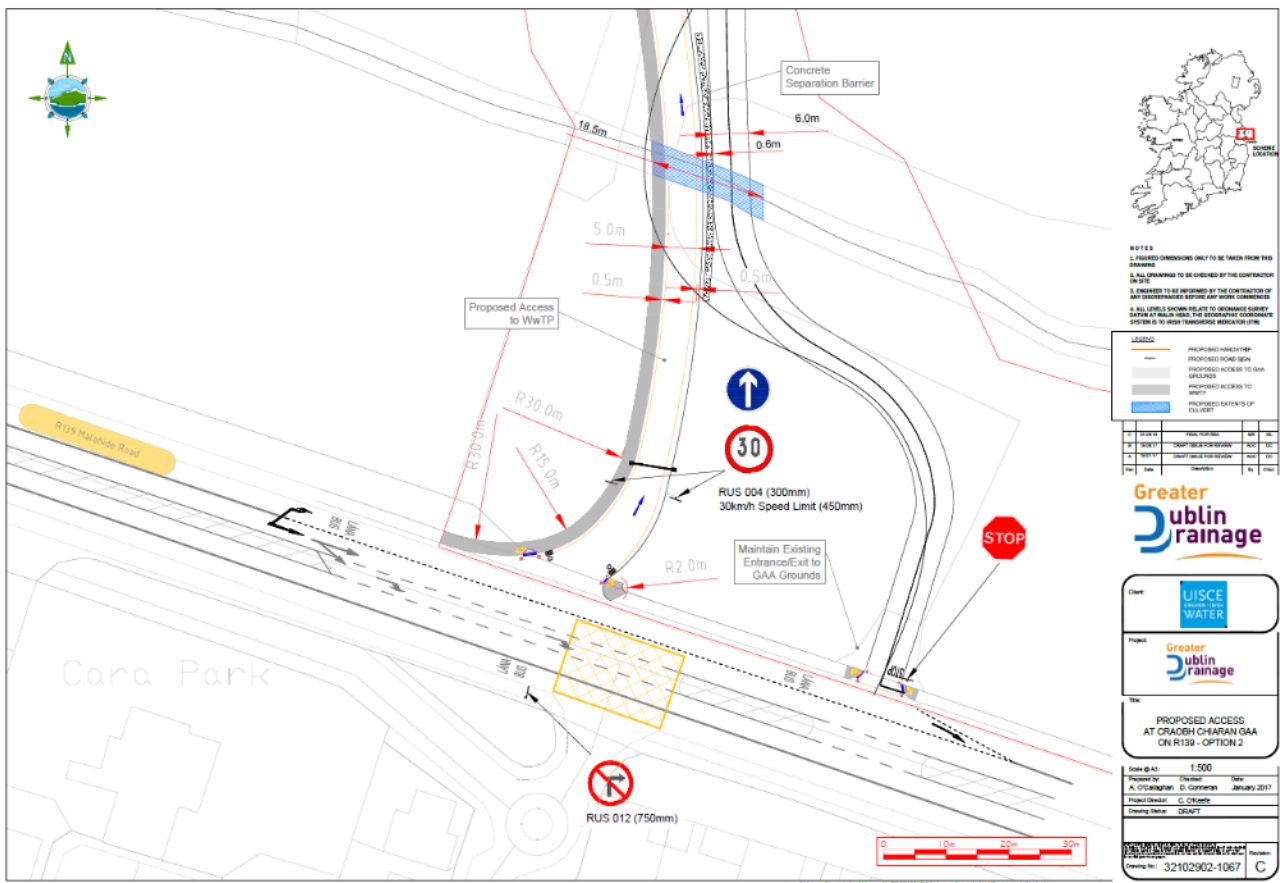
Response to Roads Issues Raised on behalf of Gannon Properties and Response to Roads and Traffic Issues Raised by Sabrina Joyce Kemper

to 3.5m¹ will ensure access to the WwTP can be maintained with minimal impact from construction whilst at the same time allow the road widening works to extend from the eastern pavement edge of the WwTP access road.

- 9 It is acknowledged that any future junction works with the R139 will require temporary Traffic Management Measures to ensure access to the WwTP can be maintained at all times.
- 10 The proposed WwTP access road, constructed by the applicant, will therefore form part of any future North-South Link that may be advanced for future zoned lands.

Mayne River Culvert

- 11 The observer has stated the applicant be conditioned to construct the Mayne River Culvert to the distributor road standard.
- 12 I can confirm that the application for the Proposed Development includes the construction of the Mayne River Culvert to facilitate both the proposed one-way WwTP Access Road and the adjacent Craobh Chiaráin GAA club access road proposals. This is shown as the blue hatched area on drawing 32102902-1067 included with Appendix 2 - Appendix A Part 2 of the Construction Environmental Management Plan.



¹ In accordance with Temporary Traffic Management Operations Guidance - Level 1 Roads Urban and Low Speed Roads; soon to be adopted by DTTAS

GDD Oral Hearing
Response to Roads Issues Raised on behalf of Gannon Properties and Response to Roads and Traffic Issues Raised by Sabrina Joyce Kemper

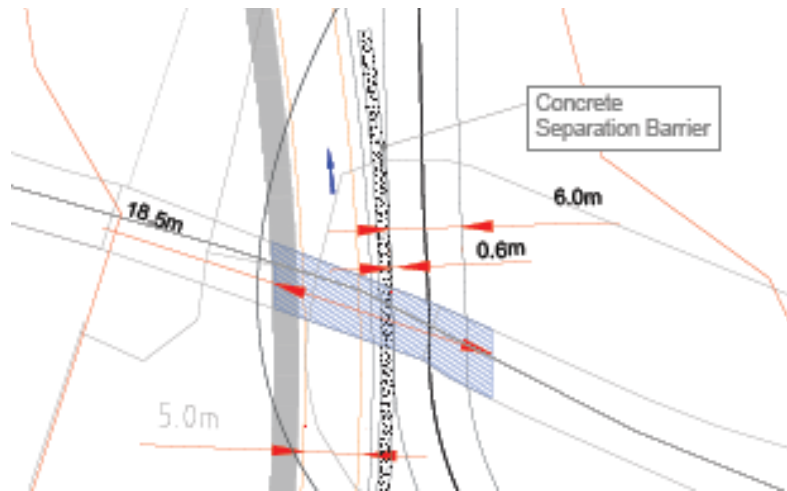
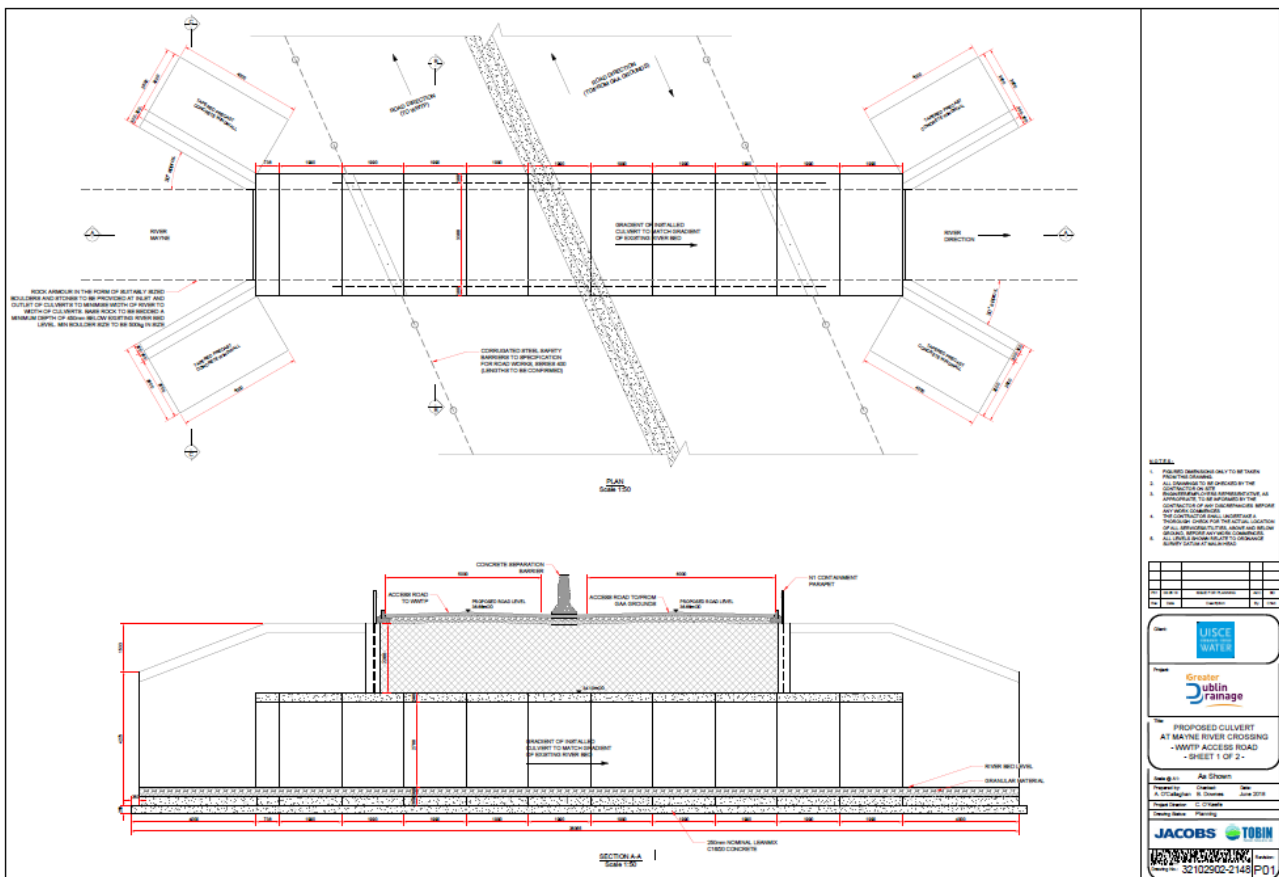


Figure 2 Extract from drawing 32102902-1067 showing extent of culvert.



- 13 The length of the proposed Mayne River culvert shown on Planning Drawing 32102902-2148 will also facilitate the indicative cross section of the FCC future North South Link Road (i.e. 17.5m wide back of footway to back of footway, comprising 2m footway, 1.5m on road cycle lane, 3.5m northbound traffic lane, 3.5m reserve / turning lane, 3.5m southbound traffic lane, 1.5m cycle lane and 2.0m footway).
- 14 It is acknowledged that as the future North-South Link Road cross section is indicative, the future road width may be subject to change as the development plan is advanced. Should a wider future road cross section be required, the culvert can be widened by removing the eastern headwall and extending the culvert units the necessary additional width.

GDD Oral Hearing
Response to Roads Issues Raised on behalf of Gannon Properties and Response to Roads and Traffic Issues Raised by Sabrina Joyce Kemper

Response to Roads and Traffic Issues Raised by Sabrina Joyce Kemper

- 15 On Day 5 of the hearing, (27th March 2019), a submission was made by Sabrina Joyce Kemper and raised issues around access to Compound 10 along the Golf Links Road

I set out below my response to this matter.

Response

- 16 The EIAR assessed the capacity of Junction 9, the R106 and the Golf Links Priority Junction, presented in Table 13.12 of Chapter 13 Volume 3 Part A of the EIAR; the junction was demonstrated to be operating well within capacity during peak construction.
- 17 Ms Joyce Kemper referenced Figure 4 in her statement, which was an extract of the Trip Generation for the construction phase of the Proposed Project, referenced in Table 13.2 of Chapter 13 Volume 3 Part A of the EIAR. It should be noted that Table 13.2 presents the traffic movements for various elements of the Proposed Project. The element of the Proposed Project associated with Compound 10 is the Subsea (section of proposed outfall pipeline route (marine section)).
- 18 The section of the Golf Links Road to be used as a haul route is presented on Figure 13.2 (Sheet 3) in Volume 5 Part A of the EIAR. The length of golf links road to be used as a haul route is approximately 1km.
- 19 The first 300 metres of the road has a carriageway width in excess of 6m and will be suitable for the passing of 2-way lorry movements. A footway is also present on the northeast side of the carriageway and the raised bund and walking track is on the south side of the road.
- 20 The next 250 metres of the road has a carriageway width in excess of 5m in width. This width is suitable for a lorry and a car to safely pass.
- 21 The remaining 450 metres has a carriageway width of less than 4.8m and will require temporary traffic management measures to be put in place during the construction period to ensure the safety of all road users.
- 22 The low HGV numbers to be generated at this compound 10, at a maximum of 2 HGV movements per hour (1 HGV arrival and 1 HGV departure) [EIAR Table 13.4], can be easily managed by temporary traffic control systems that will be put in place as part of the temporary traffic management system.
- 23 The majority of HGVs, delivering pipes and removing spoil, will occur over the winter months and therefore will not clash with the summer holiday traffic.
- 24 These temporary traffic management measures will include parking restrictions along the length of the golf links road and a STOP / GO system to be in place along the narrow section of road at a time when a lorry will need to gain access or exit the compound.
- 25 It should also be noted that although there is no footway along the Golf Links Road, the track at the top of the bund is regularly used by pedestrians and dog walkers.
- 26 Access into Site Compound 10 will be developed at the construction stage within the red line boundary and an access radius suitable to facilitate the safe turning movement in and out by HGV traffic will be provided.
- 27 As confirmed in by Brief of Evidence on Day 2 of the Hearing, Irish Water will undertake pre-construction and post-construction visual pavement surveys on the haul routes. Where the surveys conclude that damage on the roadway is attributable to the construction of the Proposed Project, Irish Water will fund the appropriate

GDD Oral Hearing
Response to Roads Issues Raised on behalf of Gannon Properties and Response to Roads and Traffic
Issues Raised by Sabrina Joyce Kemper

reinstatement works to bring the road back to pre-construction condition; details for which will be agreed with the Roads Authority.

- 28 In conclusion, the traffic numbers to be generated by the works at Compound 10 are low and with the mitigation measures that will be included and implement with the Construction Traffic Management Plan, as specified in section 13.11.1 of Volume 3 Part A of the EIAR, will ensure that any construction traffic impacts on Vulnerable Road Users and traffic flows are minimised.