

14 Utilities

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14.1 Introduction

This chapter of the EIAR has been prepared by DBFL Consulting Engineers and OCSC Consulting Engineers.

This chapter of the EIAR comprises of an assessment of the likely impact of the proposed development on existing utility services in the vicinity of the site as well as identifying proposed mitigation measures to minimize any impacts.

The material assets considered in this chapter of the EIAR include Power, Gas and Telecommunications.

Note that Surface Water Drainage, Foul Drainage and Water Supply are addressed in Chapter 8 of this EIAR (Water).

In summary, the project comprises the development of 452 apartments, 10 houses, 6 bungalows, a café / restaurant, office space, concierge and central residential amenity space on a 2.14 Ha site (approx.).

The development shall be served via the existing vehicular access point from Old Bray Road. Associated site and infrastructure works include provision of surface water drainage, foul drainage and water supply connections.

14.2 Study Methodology

Assessment of the likely impact of the proposed development on existing material assets in the vicinity of the site included:

- Review of ESB Networks Utility Plans
- Review of Gas Networks Ireland Service Plans
- Review of Eir E-Maps
- Review of Virgin Media Maps

A GPR Utility Survey has also been carried out along Old Bray Road (Appendices 14.5,14.6, 14.7 14.8 and 14.9).

14.3 The Existing Receiving Environment (Baseline)

Power

An ESB Networks plan is included in Appendix 14.1 showing the location of existing electrical services in the vicinity of the site.

Existing LV / MV / 38 KV & Higher underground cable routes are shown along Old Bray Road (to the west of the site).

Existing MV / LV underground cable routes are also located to the north of the site (within the AIB property) and to the south of the site (Willow Grove).

Gas

Gas Networks Ireland plans are included in Appendix 14.2 showing the location of gas distribution pipes in the vicinity of the site.

An existing medium pressure distribution pipeline (125 PE 4bar) is shown running along the Old Bray Road (to the west of the site).

An existing medium pressure distribution pipeline (8 In ST 4bar) is shown running along the N11 (to the north and east of the site).

Telecoms

Eir and Virgin Media network plans are included in Appendix 14.3 and 14.4 showing the location of existing telecommunications infrastructure in the vicinity of the site.

Telecommunications infrastructure is located along Old Bray Road (to the west of the site) and to the south of the site (Willow Grove).

14.4 Characteristics of the Proposed Development

The current proposal provides for a Build to Rent development consisting:

- 468 residential units (452 apartments and 16 houses) as follow:
 - 41 no. studio apartment units,
 - 257 no. 1 bed apartment units,
 - 136 no. 2 bed apartment units;
 - 18 no. 3 bed apartment units;
 - 10 no. 3 bed semi-detached house units; and
 - 6 no. 1 bed bungalow units.
- A café / restaurant of c. 140 sq m; office space of 149 sq m; concierge of c. 149 sq m; and a residential tenant amenity space of c. 458 sq m is also proposed.
- 274 Car Parking Spaces (273 at basement level and 1 at surface level)
- 12 Motor Cycle Spaces
- 616 Bicycle Parking Spaces
- Public Open Space
- Vehicular Access
- Basement Areas
- Sub Stations and 3 Switch Rooms
- All Associated Site Development Works

Power

Power supply for the proposed development will be taken from the existing ESB Network located along Old Bray Road.

Gas

Gas supply for the proposed development (if required as part of the energy strategy) will be taken from the existing Gas Networks Ireland network located to the west of the site (along Old Bray Road).

Telecoms

The existing Eir or Virgin network located to the west of the site will be extended to service the proposed development.

14.5 Potential Impact of the Proposed Development

Construction Phase

There is potential interruption to ESB Networks, Gas Networks Ireland and Eir's Infrastructure while carrying out road works along Old Bray Road (formation of site access junction) and while carrying out works to provide service connections to the proposed development.

Operational Phase

On completion of the construction phase, there will be no further impact on electrical, gas or telecommunications supplies.

14.6 Potential Cumulative Impacts

Other developments in the vicinity of the site are likely to have similar impacts during the construction phase in relation to Material Assets - Utilities.

Should the construction phase of any other developments coincide with the development of site, potential cumulative impacts are not anticipated once similar mitigation measures are implemented.

14.7 Do Nothing Scenario

There are no predicted impacts should the proposed development not proceed.

14.8 Risks to Human Health

Risks to Human Health associated with works during the construction phase in the vicinity of existing utilities include:

- Work which puts persons at risk of burial under earthfall e.g. risk of injury to personnel from trench collapse.
- Contact with existing underground services e.g. gas leaks or electrocution.
- Works adjacent to live traffic and pedestrian cycle movements e.g. risk to public in terms of working on public road and footpath.
- Access and egress from the site and interface with site staff and / or the public e.g. Risk of slips, trips and falls.
- Work in confined spaces e.g. asphyxiation.
- Use of machinery and plant e.g. risk of injury to personnel and damage to plant and machinery due to improper use.

14.9 Mitigation Measures

Construction Phase

- Contractor to prepare Method Statement detailing proposals for works in the vicinity of existing utilities (method statement to be agreed with PSDP).
- Contractor to locate and record all services on site prior to commencement of excavations.
- A GPR utility survey (Appendices 14.5, 14.6, 14.7 14.8 and 14.9). has been carried out along Old Bray Road to confirm the location of power, gas and telecommunications infrastructure. This survey is to be supplemented with slit trench investigation as required by the contractor in advance of commencing works in the vicinity of the proposed site entrance.

- Connections to the existing power, gas and telecommunications networks will be coordinated with the relevant utility provider and carried out by approved contractors.
- Contractor to comply with HSA Code of Practice for Avoiding Danger from Underground Services.
- Contractor to obtain utility company network plans and arrange observation as required.
- Contractor/PSCS to implement safe systems of construction including but not limited to battering the sides of trench excavations and installation of trench shoring systems.
- Contractor to prepare and implement a Construction Traffic Management Plan that will be agreed with the Design Team and local authority and which will ensure the safety of the public during construction.
- Contractor must supervise vehicle movements to and from the site during construction in order to ensure that this traffic management plan is fully implemented. Plan to include deliveries to the site, staff parking, works outside the defined site such as utility connections.
- Public pedestrian routes to be established at site entrance as required.
- Contractor to prepare Method Statement for works in confined spaces, method statement to be agreed with PSDP. Contractor to comply with HAS Code of Practice for Working in Confined Spaces.
- All personnel using machinery/plant to have undergone training on the use of said machinery/plant. Ongoing site supervision to be undertaken to ensure all use of machinery/plant is in accordance with the training undertaken.

Operational Phase

On completion of the construction phase no further mitigation measures are proposed in relation to the electrical, gas and telecommunications infrastructure.

14.10 Predicted Impacts of the Proposed Development

Construction Phase

Implementation of measures outlined in Section 14.9.1 will ensure that the potential impacts of the proposed development on site services do not occur during the construction phase and that any residual impacts will be short term.

Operational Phase

Demand from the proposed development during the operational phase is not predicted to impact on the existing power, gas and telecoms network.

14.11 Monitoring

Construction Phase

No specific monitoring is proposed in relation to electrical, gas and telecommunications infrastructure.

Operational Phase

No specific monitoring is proposed in relation to electrical, gas and telecommunications infrastructure.

14.12 Reinstatement

Reinstatement of any excavations, trenches etc. relating to the provision of electrical, gas and telecommunications connections is to be carried out in accordance with the relevant utility provider's requirements.

14.13 Interactions

Land & Soils

Trench excavations to facilitate site service installation will result in exposure of subsoils to potential erosion and subsequent sediment generation. Mitigation measures are outlined in Chapter 7 Land & Soils (i.e. service trenches to be backfilled as soon as practicable to minimise potential erosion of subsoils).

14.14 Difficulties Encountered

No particular difficulties were encountered during preparation of this chapter. The analysis reported within this chapter is based upon publicly available information from ESB Networks, Gas Networks Ireland, Eir and Virgin Media.

14.15 References

ESB Networks Plan.

Gas Networks Ireland Network Plan.

Eir E Map.

Virgin Media Network Plan.

Murphy Surveys - GPR Survey (Appendices 14.5,14.6, 14.7 14.8 and 14.9).