15.0 MATERIAL ASSETS – SITE SERVICES

15.1 Introduction

The Material Assets – Site Services Chapter of this EIAR has been prepared by Brendan Keogh (BA BAI PGradDip CEng MIEI) of DBFL Consulting Engineers. Brendan Keogh is a Chartered Professional Engineer with over 15 years experience in the design and construction of civil engineering projects. Projects have included works associated with the commercial, industrial, energy, residential and public infrastructure sectors.

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 minimise 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 10.0 (Water & Hydrology).

In summary, the proposed development ("the site") comprises of the demolition of all existing structures on site and construction of 590 No. residential dwellings (480 No. Build-to-Rent Apartments and 110 No. Build-to-Sell Duplexes) on a 6.05 Ha site.

The development will also consist of the provision of an ancillary amenity block within the central open space which comprises a gymnasium, lobby, kitchenette and lounge at ground floor level and lounge at first floor level in addition to a roof terrace (to serve the Build-to-Rent residents only); a two storey retail/café/restaurant building; a creche and a management suite.

The proposed development will also include the following associated engineering infrastructure:

- Upgrade of existing traffic signals on Scholarstown Road to facilitate the primary vehicle access to the site (including provision of formal signalised crossings for the benefit of both pedestrians and cyclists).
- Upgrading existing pedestrian and cycle facilities along Scholarstown Road.
- Provision of internal site roads including associated footpaths.
- Provision of surface water drainage, foul drainage and water supply infrastructure.

15.2 Methodology

Assessment of the likely impact of the proposed development on existing utility services in the vicinity of the site included a desktop review of the following information:

- ESB Networks Utility Plans (refer to Appendix 15.1)
- Gas Networks Ireland Service Plans (refer to Appendix 15.1)
- Eir E-Maps (refer to Appendix 15.1)

A GPR Utility Survey has also been carried out along Scholarstown Road (refer to Appendix 15.2).

15.3 Receiving Environment

15.3.1 Power

An ESB Networks plan is included in Appendix 15.1 showing the location of existing electrical services in the vicinity of the site.

An existing LV overhead line runs along the southern boundary of the site.

An existing MV/LV underground cable also runs along a portion of the southern boundary of the site (in the footpath / verge area adjacent to Scholarstown Road).

15.3.2 Gas

Gas Networks Ireland plans are included in Appendix 15.1 showing the location of gas distribution pipes in the vicinity of the site.

An existing distribution pipeline runs along the southern boundary of the site (in the footpath / verge area adjacent to Scholarstown Road).

A transmission heavy wall pipeline also runs along Scholarstown Road.

15.3.3 Telecoms

Eir network plans are included in Appendix 15.1 showing the location of telecommunications infrastructure in the vicinity of the site.

Telecommunications infrastructure is located along the R113 (Scholarstown Road) to the south of the site.

15.4 Characteristics of the Proposed Development

15.4.1 Power

Power supply for the proposed development will be taken from the existing ESB Network located along the site's southern boundary.

Existing LV overhead power lines located along the site's southern boundary may need to be relocated or undergrounded as part of the proposed development if required by the ESB.

15.4.2 Gas

Gas supply for the proposed development will be taken from the existing Gas Networks Ireland network located to the south of the site.

15.4.3 Telecoms

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

15.5 Potential Impact of the Proposed Development

15.5.1 Construction Phase

There is potential interruption to ESB's network, Gas Networks Ireland's infrastructure and Eir's infrastructure while carrying out road works along the Scholarstown Road (e.g. during formation of site access junction) and while carrying out works to provide service connections to the proposed development.

Similarly, relocation or undergrounding of the existing overhead ESB lines (if required) may lead to loss of connectivity to and / or interruption of supply from the electrical grid.

15.5.2 Operational Phase

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

15.5.3 'Do Nothing' Scenario

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

15.6 Ameliorative, Remedial or Reductive Measures

15.6.1 Construction Phase

Provision of connections to the existing electricity, gas and telecommunications networks are to be coordinated with the relevant utility provider and carried out by approved contractors.

A GPR utility survey has been carried out along Scholarstown Road to confirm the location of the power, gas and telecommunication infrastructure. This survey is to be supplemented with slit trench investigations as required by the contractor in advance of commencing works along Scholarstown Road.

15.6.2 Operational Phase

No mitigation measures are proposed in relation the site services described in this chapter.+

15.7 Predicted Impact of the Proposed Development

15.7.1 Construction Phase

Implementation of measures outlined in Section 15.6.1 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.

15.7.2 Operational Phase

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

15.7.3 'Do Nothing' Scenario

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

15.8 Monitoring

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

15.9 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.

15.10 Interactions and Potential Cumulative Impacts

15.10.1 Interactions

Soils and Geology

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 9 Land & Soils, Section 9.6.1 (i.e. service trenches to be backfilled as soon as practicable to minimise potential erosion of subsoils).

Archaeology

As archaeological remains have been identified within the site and the proposed development will require ground disturbance for installation of power, gas and telecommunication infrastructure, mitigation measures as outlined in EIAR Chapter 5 Archaeology (Section 5.18) should be implemented.

15.10.2 Potential Cumulative Impacts

Other development in the vicinity of the site are likely to have similar impacts during the construction phase in relation to Material Assets – Site Services.

Should the construction phase of the developments coincide with development of the site, potential cumulative impacts are not anticipated once similar ameliorative, remedial and reductive measures are implemented.