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UTILITIES REPORT SHD STAGE SUBMISSION AT BRIDGEGATE RESIDENTIAL DEVELOPMENT, RATHGORY & MULLADRILLEN, ARDEE, CO LOUTH

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1.0 INTRODUCTION

MANDE Consulting Ltd. (MandE) prepared this Utilities Report, on behalf of "The Ardee Partnership", for a proposed SHD development on a site located at Bridgegate, Rathgory & Mulladrillen, Drogheda Road, Ardee, County Louth.

The purpose of the report is to provide a utilities statement outlining the energy performance of the proposed development and identifying the services and renewable design strategy for the proposed development to demonstrate compliance with the Building Regulations.

2.0 DESCRIPTION OF THE DEVELOPMENT

The proposed development site extends to c. 13.03 ha at Bridgegate, Rathgory & Mulladrillen, Drogheda Road, Ardee, County Louth and adjoins Phases 1-3 at Bridgegate (under construction) on lands to the west, accessed from the N2 Drogheda Road. The proposals overlap the boundary of permitted development Reg. Ref.: 10174; ABP Ref: PL15.238053 (as amended) at the western boundary and will supersede granted development in this area which consists of 31 no. dwellings, crèche and community building and public open space.

The development will consist of:

- A) The construction of 272 no. residential units comprising a mix of 206 no. 2, 3 and 4 bedroom houses (all 2 storeys) including 50 no. 2-bedroom houses (Type 1), 145 no. 3-bedroom houses (Types 2, 3, 6) and 11 no. 4-bedroom houses (Types 4, 5) all with private open space and car parking, alongside 66 no. duplex units (all 3 storeys) including 17 no. 1-bedroom units (Types D5, D8), 24 no. 2-bedroom units (Types D1, D3, D6) and 25 no. 3-bedroom units (Types D2, D4, D7), all with private open space in the form of terrace at upper floor level and external garden space, with 499 sqm of communal open space serving Duplex Blocks A-B (48 no. units) (served by 2 no. bin and bike stores [each c. 51 sqm] adjacent) at Bridgegate Avenue, providing a total residential gross floor area of c. 28,168.9 sqm;
- B) A part 1, part 2 no. storey crèche (c. 484.1 sqm) and playground and a single storey community building (c. 165 sqm) located adjacent at a central community hub (with bin and bike store [c. 23 sqm]) accessed from Bridgegate Avenue served by car parking located on Bridgegate Green and Bridgegate Avenue;
- C) A landscaped Public Park located in the northern part of the site extending to c. 3.6 ha accessed from the community hub and between duplex Blocks B & C at Bridgegate Avenue, with 2 no. pedestrian links to permitted public park adjoining to the west and 1 no. pedestrian footpath extending to the northern perimeter at Hale Street, with a reservation for a future link road to lands to the east facilitated in the northern section of the park;
- D) Works to the Rathgory Tributary located to the south of Bridgegate Avenue comprising the realignment of the channel and regrading and reprofiling of land (as required), implementation of 2 no. vehicular crossings (including culverts and mammal passes) and the provision of a riparian corridor based around the open watercourse comprising landscaping and planting with safe access to the watercourse provided for maintenance purposes and 1 no. pedestrian and cyclist crossing;
- E) A series of landscaped public open spaces provided throughout the site with Public Open Space 01 (c. 1.05 ha) and Public Open Space 2 (c. 0.43 ha) located within the linear park (including riparian corridor) adjacent to the Rathgory Tributary with Public Open Space 03 (c. 0.29 ha) centrally located in the southern part of the site; open spaces will provide a mix of hard and soft landscaping, pedestrian and cycle access (cycle lanes provided at POS 1 and POS 2) and a range of activities including fitness spaces, kickabout area, amphitheatre and nature based play areas;

- F) Provision of shared surfaces, landscaped streetscapes including planting and landscaping at two neighbourhood streets in the southern part of the site, with roads provided to site boundaries to the east, south and west to facilitate possible future connections;
- G) All landscaping including planting to consolidate treelines and hedgerows forming existing site boundaries with agricultural lands to the east and Cherrybrook residential development to the west and all boundary treatments;
- H) Roads and access infrastructure taken from Bridgegate Avenue (permitted under Reg. Ref.: 10/174; ABP Ref: PL15.238053 [as amended]), the provision of a bus stop on the south side of Bridgegate Avenue adjacent to community hub and provision of cycle lanes at this location (continued through Public Open Space 01); a total of 480 no. car parking spaces (362 no. serving houses, 84 no. serving duplexes, 23 no. serving crèche and community building and 11 no. visitor and public open spaces), a total of 278 no. bicycle parking spaces (186 no. spaces serving duplexes [80 visitor spaces], 32 no. spaces at the community hub and 60 no. visitor spaces);
- Provision of 2 no. ESB substations, all associated drainage and services infrastructure (surface water, foul and water supply), public lighting, SUDS drainage and works to facilitate the development.



3.0 GAS NETWORK INFRASTRUCTURE

Natural Gas Supply

The proposed development site is greenfield and does not have a current connection into the local gas network. The proposed development currently has a live gas supply to the west of the site.

The gas supply infrastructure for the proposed development site will require an extension of the existing infrastructure currently in place and under construction for the permitted residential development to the west of the site. <u>supply infrastructure currently in place and under</u> <u>construction for the permitted residential development to the west of the site.</u>

Gas Networks Ireland have been contacted and an existing gas network map for the area surrounding the proposed development has been obtained and is attached.



Figure 3.1 – Natural Gas Network Local Extract Map

There is no known existing gas network infrastructure located in the area of the proposed residential development.

Subject to formal agreement with Gas Network Ireland it is envisaged that GNI will provide a service through the link road to the proposed residential development, the gas network services shall be designed within the proposed residential scheme in accordance with GNI requirements for residential developments.

A formal application to confirm the nature of the GNI supply shall be completed once the formal address for the residential development is agreed with LCC.



4.0 ESB NETWORK INFRASTRUCTURE

ESB Supply

The proposed development site is greenfield and does not have a current connection into the local ESB network. The proposed development has a live ESB Electrical network supply to the west of the site.

The power supply infrastructure for the proposed development site will require an extension of the existing power supply infrastructure currently in place and under construction for the permitted residential development to the west of the site.

ESB Networks have been contacted and an existing ESB network map for the area surrounding the proposed development has been obtained and shown below.

Figure 4.1 – ESB Networks Local Extract Map



We note there are existing ESB overground MV/LV line crossing though the northern area of the proposed site. This area of the site is a landscaped area, no residential development is proposed for this area as part of this application. There is no known existing ESB overground and underground infrastructure located in the area of the proposed residential development.

Subject to formal agreement with ESB it is envisaged that two outdoor ESB sub stations shall be provided to provide for the electrical requirement of the proposed residential development. The location of the ESB substations have been designed into the proposed residential scheme in accordance with ESB requirements for residential developments.

A formal application to confirm the nature of the ESB supply shall be completed once the formal address for the residential development is agreed with LCC.



5.0 EIR NETWORK INFRASTRUCTURE

EIR Supply

The proposed development site is greenfield and does not have a current connection into the local Eir network. The proposed development currently has a live EIR network supply to the west of the site.

The telecommunication infrastructure for the proposed development site will require an extension of the existing infrastructure currently in place and under construction for the permitted residential development to the west of the site.

Eir have been contacted and an existing Eir map for the area surrounding the proposed development has been obtained and is attached.



Figure 5.1 – Eir Network Local Extract Map

There is no known existing Eir infrastructure located in the proposed residential development.

Subject to formal agreement with EIR it is envisaged that EIR will provide a service through the link road to the proposed residential development, the EIR services shall be designed within the proposed residential scheme in accordance with EIR requirements for residential developments.

A formal application to confirm the nature of the EIR supply shall be completed once the formal address for the residential development is agreed with LCC.



6.0 VIRGIN MEDIA NETWORK INFRASTRUCTURE

Virgin Media Supply

The proposed development site is greenfield and does not have a current connection into the Virgin Media network. The proposed development site is greenfield and does not have a current connection into the local network. There is no local Virgin Media telecom network currently under construction in the local area.

Virgin Media have been contacted and they confirmed they are unable to provide a VM service to the proposed development or local area in the short to medium term..

There is no existing Virgin Media map for the area surrounding the proposed development.

7.0 SIRO NETWORK INFRASTRUCTURE

SIRO Supply

The proposed development site is greenfield and does not have a current connection into the SIRO network. <u>The proposed development site is greenfield and does not have a current</u> <u>connection into the local network</u>. There is no local SIRO <u>telecom network currently under</u> <u>construction</u> in the local area.

SIRO have been contacted and they confirmed they are unable to provide a SIRO service to the proposed development or local area in the short to medium term.

There is no existing SIRO map for the area surrounding the proposed development.