

1 DESCRIPTION OF THE PROPOSED DEVELOPMENT

1.1 SUMMARY OF THE PROJECT

The proposed development is a 110kv substation that will form a new node on the Eirgrid transmission network in Co. Offaly. The proposed development is called the Kilcumber Bridge 110kv substation and will have a looped in/out 110kv grid connection to the existing Cushaling – Mount Lucas overhead 110kv line. The proposed 110kv substation is located opposite the BNM Edenderry Power plant.

The proposed facilities at the site will include the following:

- a 450m² substation control building;
- 2ha substation compound area;
- A 300m underground or overhead 110kv grid connection to the adjacent existing Cushaling – Mount Lucas overhead 110kv line; and
- Site entrance on the R401 regional road.

1.2 CHARACTERISTICS OF THE PROPOSED SITE

1.2.1 Site Location

The site is located at Kilcumber, Co. Offaly. The grid reference for the site is latitude 53.288475 longitude -7.0881021. See **Figure 1.1** below for location map. The proposed development is opposite the Edenderry power station and approximately 6km south of Edenderry. **Figure 1.2** below shows the proposed Kilcumber Bridge 110kv substation site relative to the Bord Na Mona, Edenderry Power Plant and the existing Eirgrid Cushaling 110kv substation.

1.2.2 Site Description

The site is currently an agricultural field and is in a rural location. It is accessed via the R401. To the northeast of the site there is the R401 and the Edenderry power station. The Figile River is approximately 70 meters to the east of the substation. The land to the south, west and north of the site is made up of agricultural fields and cutaway peatland.

1.2.3 Site Layout

The site area is approximately 3 ha. The site layout can be seen below in **Figure 1.2**.

1.2.4 Land Ownership

The land is currently in private ownership. Statkraft have option agreements to lease or buy the land in place. Statkraft are applying for planning permission and will build out the proposed Kilcumber Bridge 110kv substation project. Once the development is completed the ownership of the facility will transfer to Eirgrid who will operate and maintain the development.

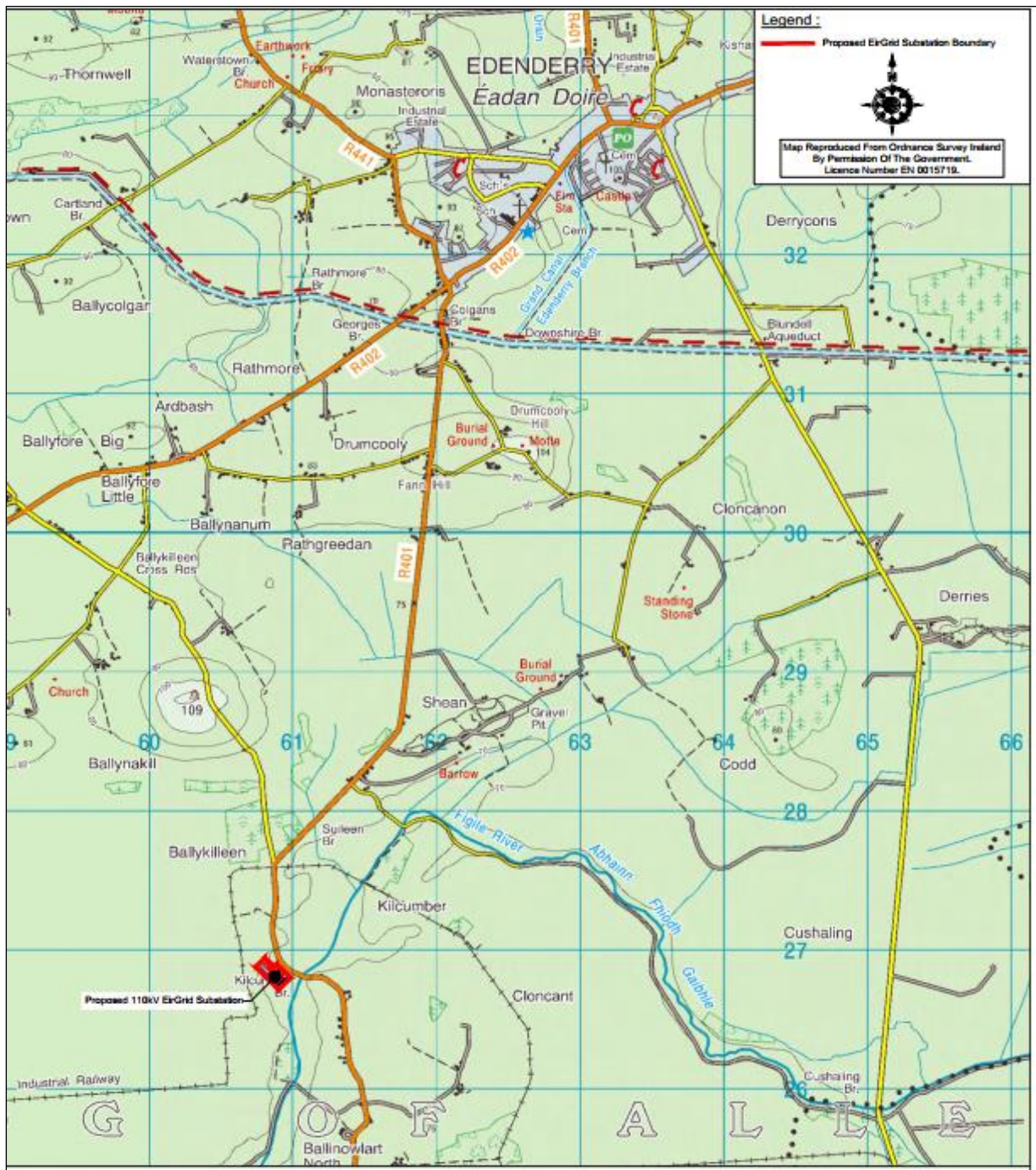


Figure 1.1 Proposed Kilcumber Bridge 110kv substation site location.

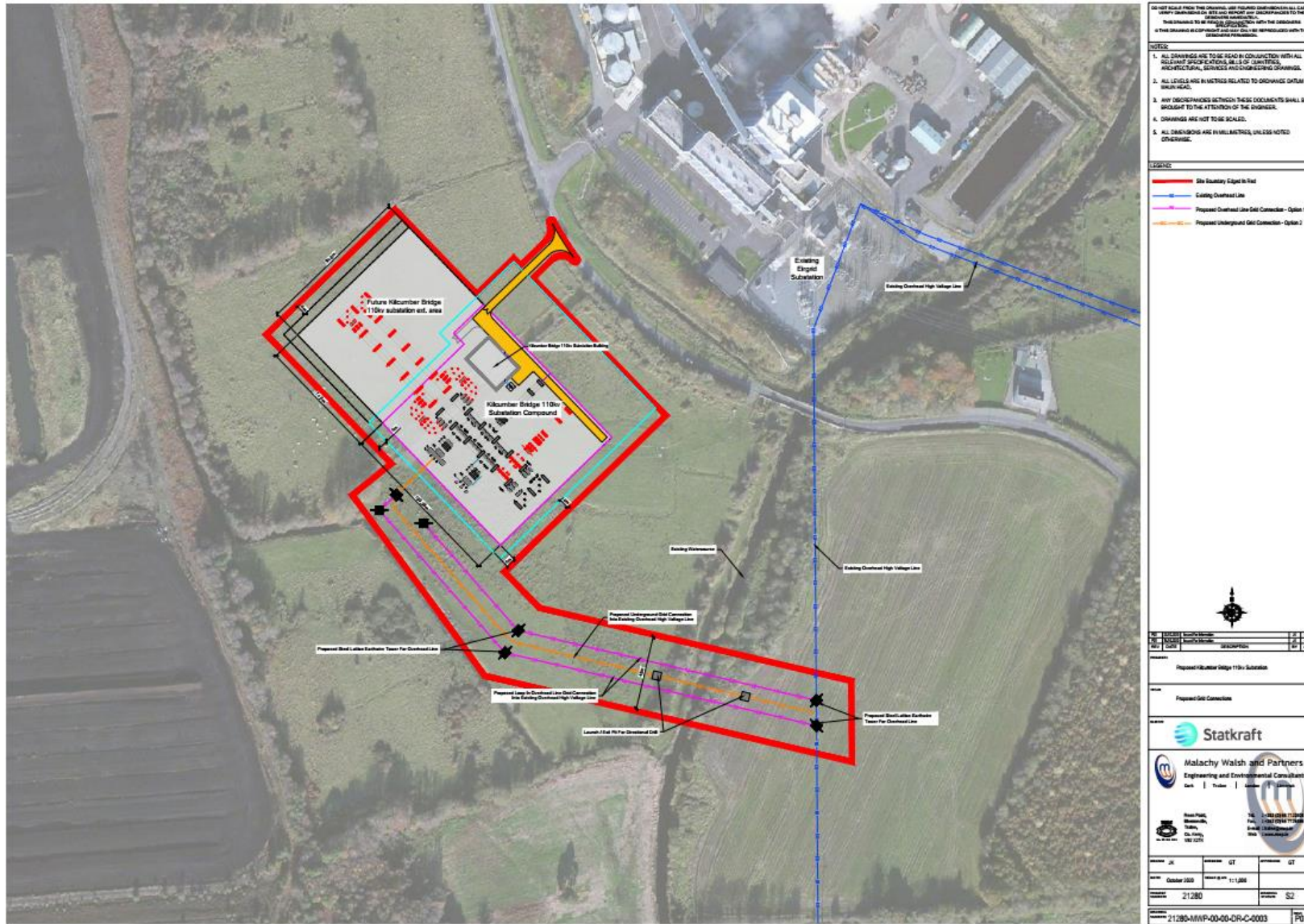


Figure 1.2. Site layout

1.2.5 Description of the Project

The approximately 2 ha site will be double fenced for security and safety. Inside the compound area the substation equipment will be laid out according to Eirgrid specifications with all safety clearances incorporated into the design. The compound will contain a single story 450m² substation control building. An internal compound road will provide access and four parking bays and a loading bay will be provided outside the control room. Access to the facility will be from the R401 which separates the proposed development from the existing Cushaling 110kv substation.

Two options for the grid connection will be assessed as part of the EIAR;

1. A 300m overhead 110kv line, looped in/out, from the proposed substation to the Cushaling – Mount Lucas 110kv overhead line; and
2. A 300m underground 110kv line, looped in/out, following the same route as above from the proposed substation to the Cushaling – Mount Lucas 110kv overhead line.

Space has been incorporated between the proposed development and the R401 to allow for the granted Cushaling Wind Farm substation compound and battery storage facility.

The existing Cushaling 110kv substation situated beside the Edenderry power station is at capacity. In order to facilitate the grid connection of the granted Cushaling Wind Farm (An Bord Pleanala References PL19.306924 and PL09.306748) and other potential future electricity generation projects, the capacity of the grid in the area needs to be increased. The proposed Kilcumber Bridge 110kv substation will provide future increased capacity for electricity generation projects in the area.

The Kilcumber Bridge 110kv substation is a proposed development that is considered strategic infrastructure development (SID) under the Planning and Development (Strategic Infrastructure) Act 2006. As such the planning application will go directly to An Bord Pleanala for consideration.

1.3 CONSTRUCTION PHASE OF THE PROJECT

Depending on the grid application process the project built is expected to start in 2022 or 2023. The proposed project will have a construction duration of 12 months, with an allowance of 2 months for commissioning and handover to Eirgrid. Prior to construction commencing consultation with Offaly County Council will take place to discuss and agree measures related to traffic management, waste management and diversions or road closure required to facilitate the works.

1.4 OPERATIONAL PHASE OF THE PROJECT

Once constructed and commissioned the proposed facility will become an Eirgrid asset and will provide additional capacity for future local energy generation projects in this area of the midlands. The facility will be owned, operated and maintained by Eirgrid. The facility will have electrical equipment including transformers, controller, bus bars which are typical of large substation facilities. The substation will operate in conjunction with the rest of the grid.