

Appendix XV

COMAH (Seveso 2022 Site Screening) Report –
prepared by AWN Consulting Ltd.

**COMAH SCREENING
ASSESSMENT OF
PROPOSED 110 kV
SUBSTATION AT GREAT
ISLAND, CO. WEXFORD**

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EXECUTIVE SUMMARY

AWN Consulting Ltd. were instructed by Entrust Ltd. on behalf of Kilmannock Battery Storage Ltd. to complete a COMAH land use planning assessment of a proposed 110 kV substation installation at Great Island, Kilmokea, Co. Wexford. The proposed development is within the consultation distance of the SSE Energy Great Island Power Station that is notified to the Health and Safety Authority as a lower tier COMAH establishment.

The proposed 110 kV substation development is immediately adjacent to a proposed 30MW BESS installation and 38 kV substation that is the subject of Wexford County Council planning application reference 2023-1294 and partially shares an ESB wayleave with the proposed 30MW BESS/38 kV substation development

COMAH Screening of Proposed 110 kV Substation Development

Substations are electrical installations and do not involve the storage, handling or processing of dangerous substances named in Appendix 1 to the COMAH Regulations 2015 or the categories of dangerous substances listed in Appendix 1. It is concluded that the proposed 110 kV substation development is not a type of development to which the provisions of the COMAH Regulations 2015 apply.

At operational stage the proposed development will be an unmanned site with operations controlled remotely.

The proposed development does not fall within the types of development for which the Central Competent Authority (the HSA) shall provide technical in response to a notice sent by a planning authority (under Part 11 of the Planning and development Regulations 2001) requesting technical advice on the effects of a proposed development on the risk or consequence of a major accident (transport route, location of public use or residential area in the vicinity of establishments). The proposed development will not be the source of or increase the risk or consequence of a major accident.

Cumulative COMAH Screening of Proposed 30 MW BESS Plant / 38 kV Substation and Proposed 110 kV Substation Developments

Large scale BESS units are not currently regarded by the HSA under COMAH Regulations 2015.

Substations are electrical installations and do not involve the storage, handling or processing of dangerous substances named in Part 2 of Appendix 1 to the COMAH Regulations 2015 or the categories of dangerous substances listed in Part 1 of Appendix 1. It is concluded that the proposed substation developments are not of a type to which the provisions of the COMAH Regulations 2015 apply.

It is concluded that the cumulative development is not a type of development to which the provisions of the COMAH Regulations 2015 apply.

The cumulative development includes the installation of a 30 MW BESS Plant, a 38 kV electrical substation and a 110 kV substation. At operational stage the cumulative proposed development will be an unmanned site with operations controlled remotely. The proposed development does not fall within the types of development listed above (transport route, location of public use or residential area in the vicinity of establishments) and will not be the source of or increase the risk or consequence of a major accident.

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1.0 INTRODUCTION

AWN Consulting Ltd. were instructed by Entrust Ltd. on behalf of Kilmannock Battery Storage Ltd. to complete a COMAH land use planning assessment of a proposed 110 kV substation installation at Great Island, Kilmokea, Co. Wexford. The proposed development is within the consultation distance of the SSE Energy Great Island Power Station that is notified to the Health and Safety Authority as a lower tier COMAH establishment. The proposed development is immediately adjacent to a proposed 30MW BESS installation and 38 kV substation that is the subject of Wexford County Council planning application reference 2023-1294 and partially shares an ESB wayleave with the proposed 30MW BESS/38 kV substation development.

This report contains the following:

- Background;
- Description of proposed development and site location;
- COMAH status and land use planning assessment;
- Conclusions.

2.0 BACKGROUND

Regulation 24(2) of the Chemicals Act (Control of Major Accident Hazards Involving Dangerous Substances) Regulations 2015 (S.I. 209 of 2015) relates to the provision of technical advice by the Central Competent Authority (the Health and Safety Authority in Ireland) to planning authorities on the effects of a proposed development on the risk or consequences of a major accident in relation to the following types of developments within the consultation distance of notified COMAH establishments:

- (a) the siting and development of new establishments;
- (b) modifications to establishments of the type described in Regulation 12(1);
- (c) **new developments including transport routes, locations of public use and residential areas in the vicinity of establishments, where the siting, modifications or developments may be the source of, or increase the risk or consequences of, a major accident.**

The consultation distance is defined in the COMAH Regulations 2015 as a distance or area relating to an establishment, within which there are potentially significant consequences for human health or the environment from a major accident at the establishment, including potentially significant consequences for developments such as residential areas, buildings and areas of public use, recreational areas and major transport route.

3.0 DESCRIPTION OF PROPOSED DEVELOPMENT AND SITE LOCATION

The proposed development comprises a 110 kV substation on lands in the townland of Great Island, Kilmokea, Co. Wexford. The proposed development is immediately adjacent to a proposed 30MW BESS installation and 38 kV substation that is the subject of Wexford County Council planning application reference 2023-1294 and partially shares an ESB wayleave with the proposed 30MW BESS/38 kV substation development.

The proposed 110 kV substation development is located within the consultation distance surrounding SSE Generation Ltd. Great Island Power Station which is notified to the HSA as a lower tier COMAH establishment.

The development description is provided as follows:

Construction of an electrical infrastructure installation and associated underground grid connection (UGC) on lands within the townland of Great Island measuring approximately 2.58Ha./25812 square metres in overall area. The installation would consist of a 110kV tail-fed substation and underground grid connection measuring approximately 838m in overall length. The 110kV substation would consist of a 110kV transformer; house transformer; disconnect, individual current and voltage transformers, combined current/voltage transformer, surge arrestors; circuit breakers and cable sealing end; a blastwall measuring 8.00m in overall height; 4no. lightning masts measuring 18.00m in overall height; palisade fencing measuring 2.60m in overall height; pole-mounted security cameras and lamp posts. An Eirgrid substation building with an overall footprint of approximately 180.00sqm and overall height of 4.20m would be located at the western end of the substation area. An IPP substation with an overall footprint of 132sqm and height of overall 4.20m would be located at the eastern end. The typical UGC installation would consist of standard ESB ducting details of the following 1no. trench (0.82m wide; 1.31m deep) measuring approximately 838m in overall length to carry 3no. 160mm power ducts and 2no. communication ducts and an ECC duct, connecting the proposed substation to an existing 110kV Eirgrid substation at Great Island. The typical trefoil trench will need to be adapted to a flat formation to accommodate for any service crossings encountered along the route. A typical width of trench for a flat formation trench would be approx 1.60m with varying depths. A temporary construction compound would be constructed within the site boundary for construction phase of the development, after which it would be removed.

It is noted that at operational stage the proposed development will be an unmanned site with operations controlled remotely.

Figure 3-1 illustrates the site location and planning application boundary.

Figure 3-2 illustrates the proposed site layout plan.

Figure 3-3 illustrates the location of the proposed development in relation to SSE Great Island Power Station notified establishment. The establishment boundary and consultation distance are shown ([Environmental Sensitivity Mapping \(geohive.ie\)](#)).

It can be seen from Figure 3-3 that the footprint of the majority of the proposed 110 kV substation development lies within the consultation distance of SSE Great Island Power Station.

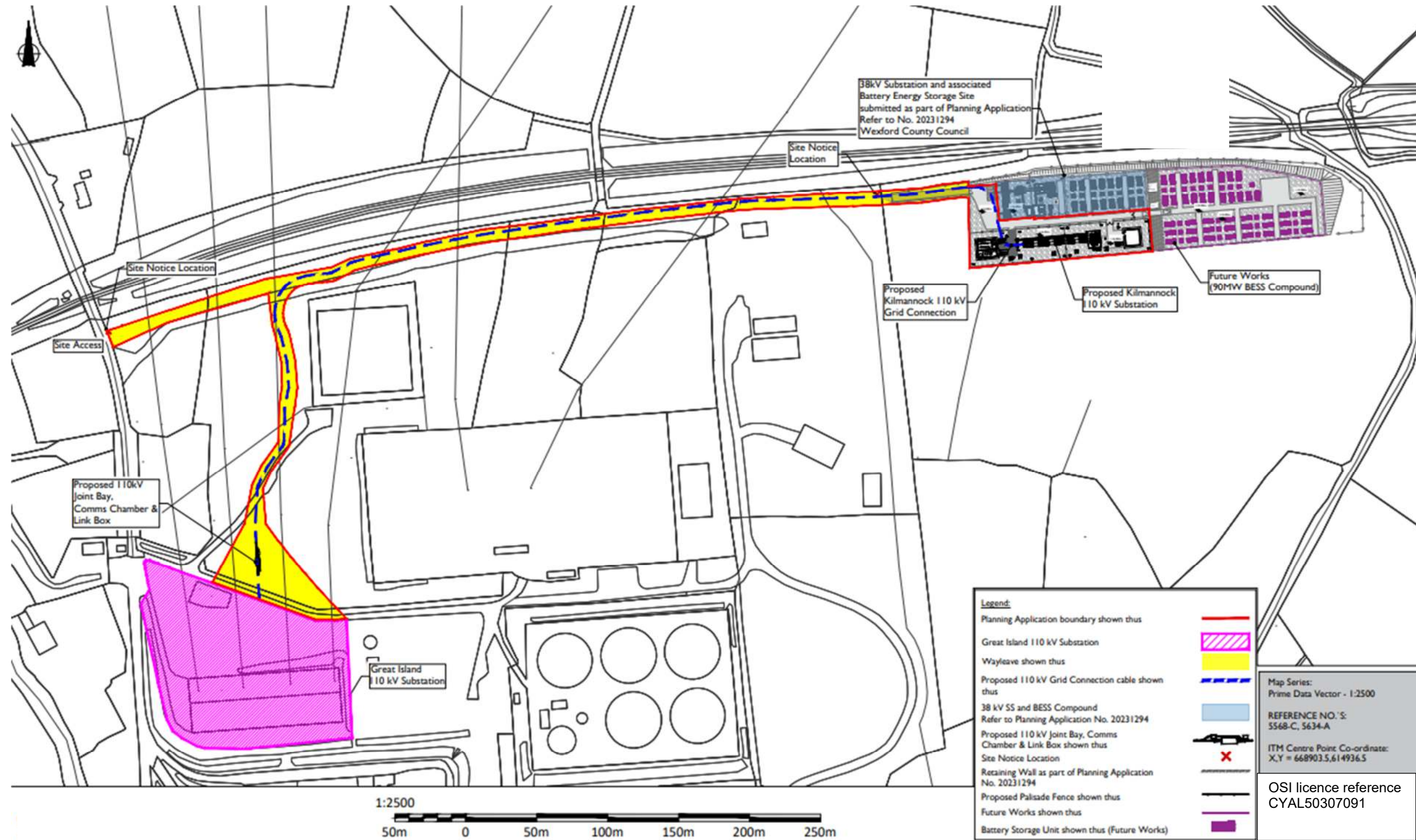


Figure 3-1 Proposed Site Location (From TLI Group Drawing Ref. 05951-DR-604 28.11.2023)

	Description
CSE	CABLE SEALING END
SA	SURGE ARRESTER
DL/DE	LINE DISCONNECT
DT/DE	TRANSFORMER DISCONNECT
VT	VOLTAGE TRANSFORMER
CT	CURRENT TRANSFORMER
CB	CIRCUIT BREAKER
PI	POST INSULATOR
LM	LIGHTING MAST
LP	LAMP POST
SP	SCADA POLE
IK	INTERFACE KIOSK
NER	NEUTRAL EARTHING RESISTOR
BW	BLAST WALL
HT	HOUSE TRANSFORMER
NER	NEUTRAL EARTHING RESISTOR
SC	STORAGE CONTAINER
BD	BLOCK DUCT
C2	C2 CHAMBER

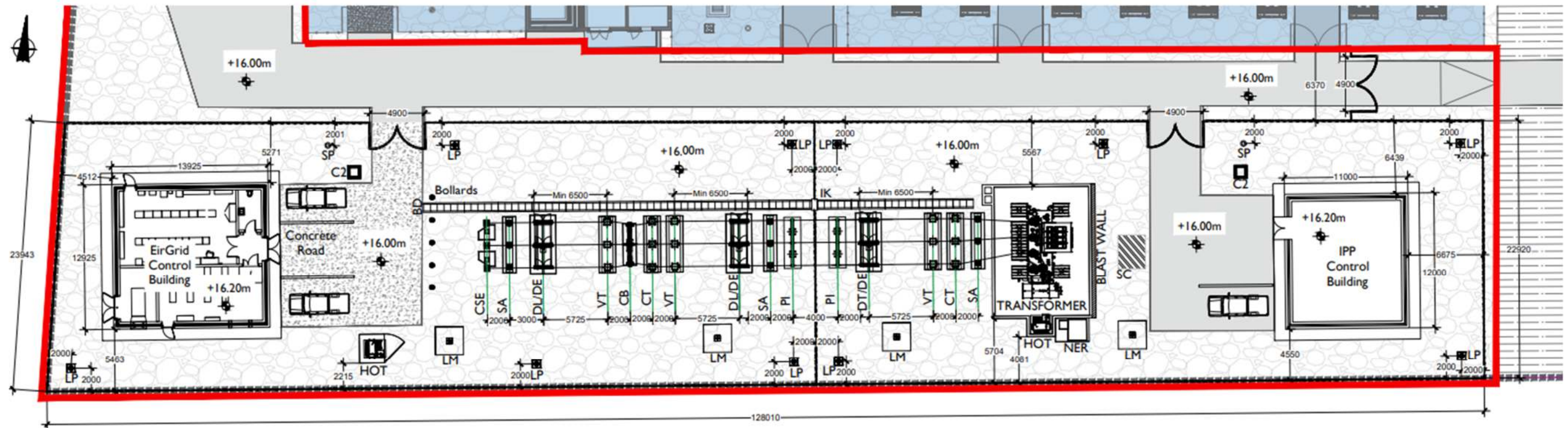


Figure 3-2 Proposed Substation Compound Layout Plan (From TLI Group Drawing Ref. 05951-DR-701 28.11.2023)

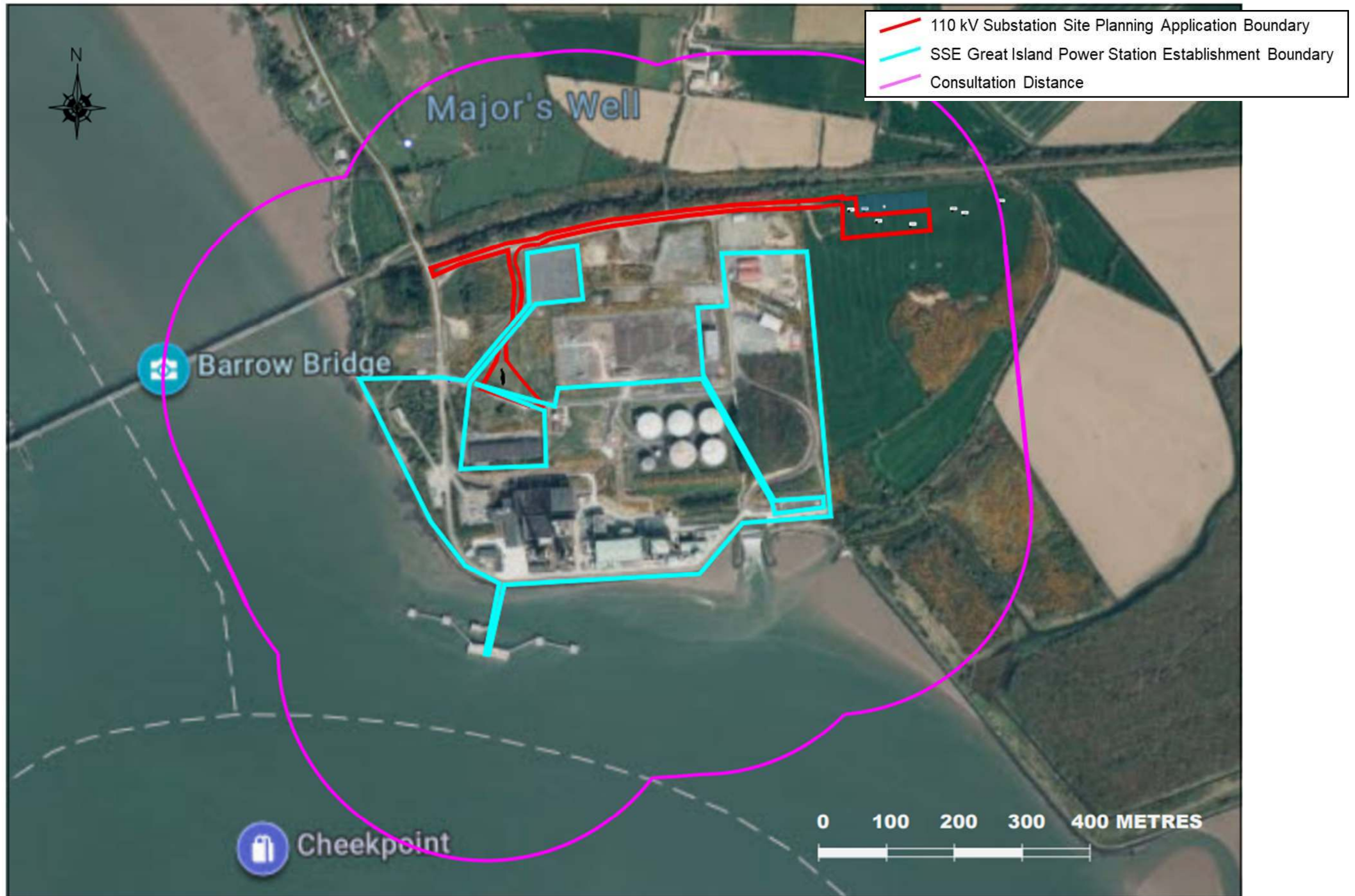


Figure 3-3 Location of Proposed Development in Relation to SSE Great Island Power Station Establishment Boundary and Consultation Distance

4.0 COMAH STATUS AND LAND USE PLANNING ASSESSMENT

COMAH Status

Substations are electrical installations and do not involve the storage, handling or processing of dangerous substances named in Part 2 of Appendix 1 to the COMAH Regulations 2015 or the categories of dangerous substances listed in Part 1 of Appendix 1. It is concluded that the proposed development is not a type of development to which the provisions of the COMAH Regulations 2015 apply.

COMAH Land Use Planning Assessment

Regulation 24(2) of the Chemicals Act (Control of Major Accident Hazards Involving Dangerous Substances) Regulations 2015 (S.I. 209 of 2015) relates to the provision of technical advice by the Central Competent Authority (the Health and Safety Authority in Ireland) to planning authorities (under Part 11 of the Planning and Development Regulations 2001) on the effects of a proposed development on the risk or consequences of a major accident in relation to the following types of developments within the consultation distance of notified COMAH establishments:

- (a) the siting and development of new establishments;
- (b) modifications to establishments of the type described in Regulation 12(1);
- (c) **new developments including transport routes, locations of public use and residential areas in the vicinity of establishments, where the siting, modifications or developments may be the source of, or increase the risk or consequences of, a major accident.**

The proposal relates to the installation of a 110 kV substation as detailed in Section 3.0 herein. At operational stage the proposed development will be an unmanned site with operations controlled remotely. The proposed development does not fall within the types of development listed above (transport route, location of public use or residential area in the vicinity of establishments) and will not be the source of or increase the risk or consequence of a major accident.

5.0 CONSIDERATION OF CUMULATIVE 30 MW BESS, 38 KV SUBSTATION AND 110 KV SUBSTATION DEVELOPMENTS

The description for the proposed 110 kV Substation development is provided in Section 3.0 herein.

The description and proposed site layout plan for the proposed 30 MW BESS and 38 kV substation development (Wexford County Council planning application reference 2023-1294) are provided in **Appendix A** herein.

Figure 5-1 illustrates the boundary of the proposed 110 kV Substation development that is the subject of this planning application as well as the proposed 30 MW BESS and 38 kV Substation development that is the subject of Wexford County Council planning application reference 2023-1294. These developments partially share an ESB wayleave.

COMAH Status of Cumulative Development

Large scale BESS units are not currently regarded by the HSA under COMAH Regulations 2015.

Substations are electrical installations and do not involve the storage, handling or processing of dangerous substances named in Appendix 1 to the COMAH Regulations 2015 or the categories of dangerous substances listed in Appendix 1. It is concluded that the proposed development is not a type of development to which the provisions of the COMAH Regulations 2015 apply.

It is concluded that the cumulative development is not a type of development to which the provisions of the COMAH Regulations 2015 apply.

COMAH Land Use Planning Assessment of Cumulative Development

Regulation 24(2) of the Chemicals Act (Control of Major Accident Hazards Involving Dangerous Substances) Regulations 2015 (S.I. 209 of 2015) relates to the provision of technical advice by the Central Competent Authority (the Health and Safety Authority in Ireland) to planning authorities (under Part 11 of the Planning and development Regulations 2001) on the effects of a proposed development on the risk or consequences of a major accident in relation to the following types of developments within the consultation distance of notified COMAH establishments:

- (a) the siting and development of new establishments;
- (b) modifications to establishments of the type described in Regulation 12(1);
- (c) **new developments including transport routes, locations of public use and residential areas in the vicinity of establishments, where the siting, modifications or developments may be the source of, or increase the risk or consequences of, a major accident.**

The cumulative development includes the installation of a 30 MW BESS Plant, a 38 kV electrical substation and a 110 kV substation. At operational stage the cumulative proposed development will be an unmanned site with operations controlled remotely. The proposed development does not fall within the types of development listed above (transport route, location of public use or residential area in the vicinity of establishments) and will not be the source of or increase the risk or consequence of a major accident.

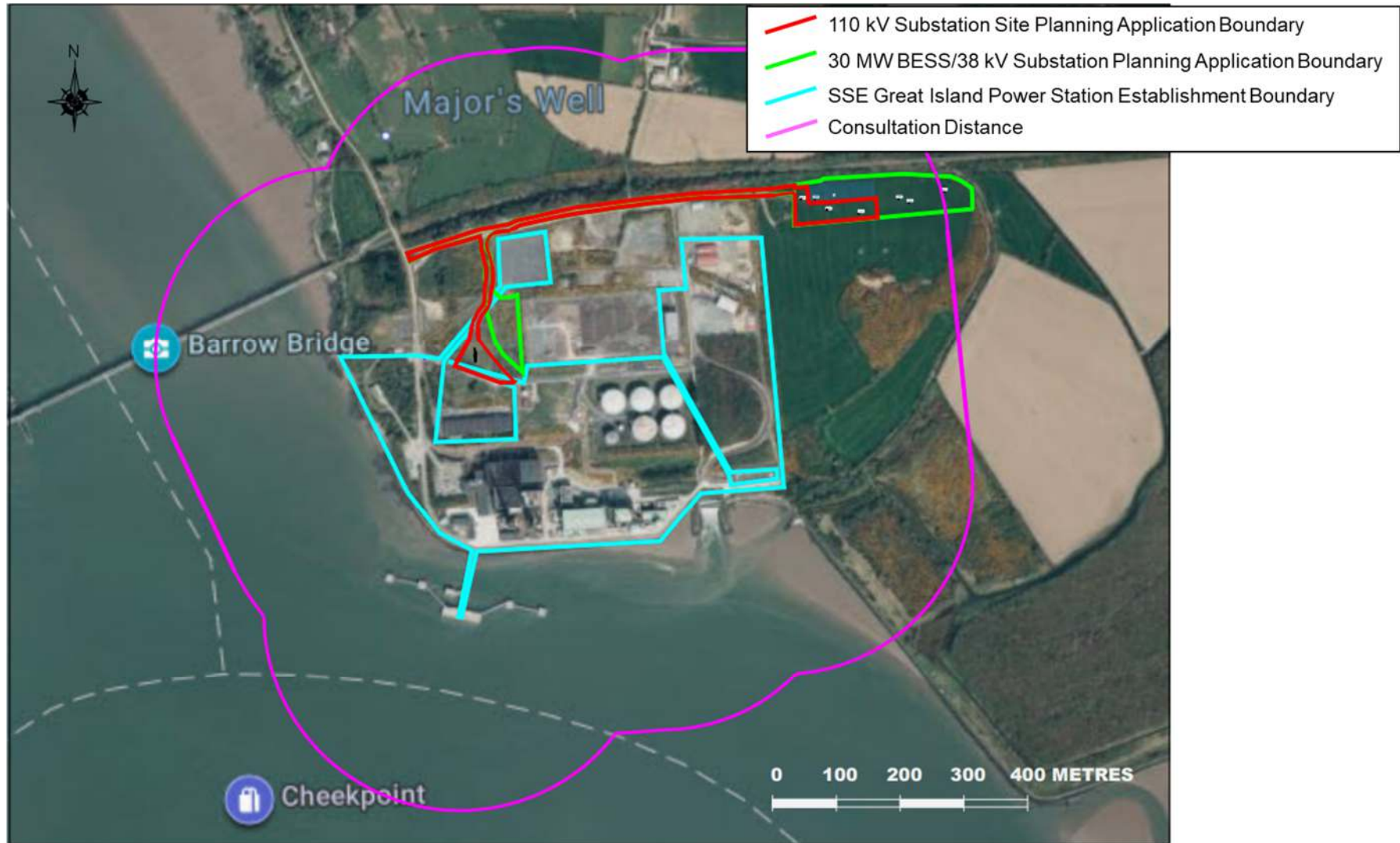


Figure 5-1 Location of Proposed 110 kV Substation Development and Proposed 30 MW BESS/38 kV Substation Development in Relation to SSE Great Island Power Station Establishment Boundary and Consultation Distance

6.0 CONCLUSION

It is proposed to install a 110 kV substation on lands in the townland of Great Island, Kilmokea, Co. Wexford. The proposed development is located within the consultation distance surrounding SSE Generation Ltd. Great Island Power Station which is notified to the HSA as a lower tier COMAH establishment. The proposed development is immediately adjacent to a proposed 30MW BESS installation and 38 kV substation that is the subject of Wexford County Council planning application reference 2023-1294 and partially shares an ESB wayleave with the proposed 30MW BESS/38 kV substation development

COMAH Screening of Proposed 110 kV Substation Development

Substations are electrical installations and do not involve the storage, handling or processing of dangerous substances named in Appendix 1 to the COMAH Regulations 2015 or the categories of dangerous substances listed in Appendix 1. It is concluded that the proposed 110 kV substation development is not a type of development to which the provisions of the COMAH Regulations 2015 apply.

At operational stage the proposed development will be an unmanned site with operations controlled remotely.

The proposed development does not fall within the types of development for which the Central Competent Authority (the HSA) shall provide technical in response to a notice sent by a planning authority (under Part 11 of the Planning and development Regulations 2001) requesting technical advice on the effects of a proposed development on the risk or consequence of a major accident (transport route, location of public use or residential area in the vicinity of establishments). The proposed development will not be the source of or increase the risk or consequence of a major accident.

Cumulative COMAH Screening of Proposed 30 MW BESS Plant / 38 kV Substation and Proposed 110 kV Substation Developments

Large scale BESS units are not currently regarded by the HSA under COMAH Regulations 2015.

Substations are electrical installations and do not involve the storage, handling or processing of dangerous substances named in Part 2 of Appendix 1 to the COMAH Regulations 2015 or the categories of dangerous substances listed in Part 1 of Appendix 1. It is concluded that the proposed substation developments are not of a type to which the provisions of the COMAH Regulations 2015 apply.

It is concluded that the cumulative development is not a type of development to which the provisions of the COMAH Regulations 2015 apply.

The cumulative development includes the installation of a 30 MW BESS Plant, a 38 kV electrical substation and a 110 kV substation. At operational stage the cumulative proposed development will be an unmanned site with operations controlled remotely. The proposed development does not fall within the types of development listed above (transport route, location of public use or residential area in the vicinity of establishments) and will not be the source of or increase the risk or consequence of a major accident.

7.0 REFERENCES

Health and Safety Authority (HSA) (2023) Guidance on Technical Land-Use Planning Advice, for planning authorities and COMAH establishment operators (version 2)

Online: [guidance_on_technical_land_use_planning_feb23.pdf \(hsa.ie\)](https://www.hsa.ie/guidance_on_technical_land_use_planning_feb23.pdf)

S.I. No. 209/2015 - Chemicals Act (Control of Major Accident Hazards Involving Dangerous Substances) Regulations 2015.

Online: <https://www.irishstatutebook.ie/eli/2015/si/209/made/en/print>

APPENDIX A

DESCRIPTION OF 30 MW BESS AND 38 KV SUBSTATION DEVELOPMENT AND SITE LAYOUT PLAN

The proposed development comprises a 30MW BESS installation and 38 kV substation on lands in the townland of Great Island, Co. Wexford.

The development description is provided as follows:

Construction of an electrical infrastructure installation and associated underground grid connection (UGC) on lands within the townland of Great Island measuring approximately 2.6Ha. in overall area. The installation will consist of a Battery Energy Storage System (BESS), a 38kV substation and associated ancillary development. The BESS would comprise 16no. individual battery storage units on concrete foundations, each measuring 2.60m in overall height, 2.4m in width and 6.00m in overall length with heating, ventilation and air-conditioning (HVAC) units.; The 38kV substation would consist of a 38 kV transformer; diesel generator, house transformer; disconnect, individual current and voltage transformers, combined current/voltage transformer, surge arrestors; circuit breakers; cable sealing end, and substation building with an overall footprint of 66.00sqm; a blastwall measuring 8.00m in overall height; 2no. lightning masts measuring 18.00m in overall height; palisade fencing measuring 3.00m in overall height; pole-mounted security cameras and lamp posts. The typical UGC installation would consist of standard ESB ducting details of the following 1no. trench (0.6m wide; 1.22m deep) measuring approximately 724m in overall length to carry 3no. 110mm power ducts and 2no. communication ducts, connecting the proposed substation to an existing 38kV ESB substation at Campile. The typical trefoil trench will need to be adapted to a flat formation to accommodate for any service crossings encountered along the route. A typical width of trench for a flat formation trench would be approx 1.15m with vary depths. Ancillary development consists of a 6.00m wide access road off an existing road to the Greenlink substation; levelling of site to create 2 No. platforms at +16.00m and +12.00m ASL; retaining wall to facilitate reduction of site levels along southern and south-western boundaries; an earthen bund on the north and eastern boundaries; and all other associated works, including landscaping proposals. A temporary construction compound would be constructed within the site boundary for construction phase of the development, after which it would be removed.



Figure A1 Proposed 30 MW BESS and 38kV Substation Site Layout Plan (From TLI Group Drawing Ref. 09551-DR-302 Rev. P2 29.09.2023)

END OF REPORT