



Energy for
generations

ESB Broadstone 110 kV/MV Substation

Presentation to An Coimisiún Pleanála

30th June 2026

Grangegorman, Dublin 7

Agenda

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- Discussion

Attendees:

Janette McDonald (ESB)

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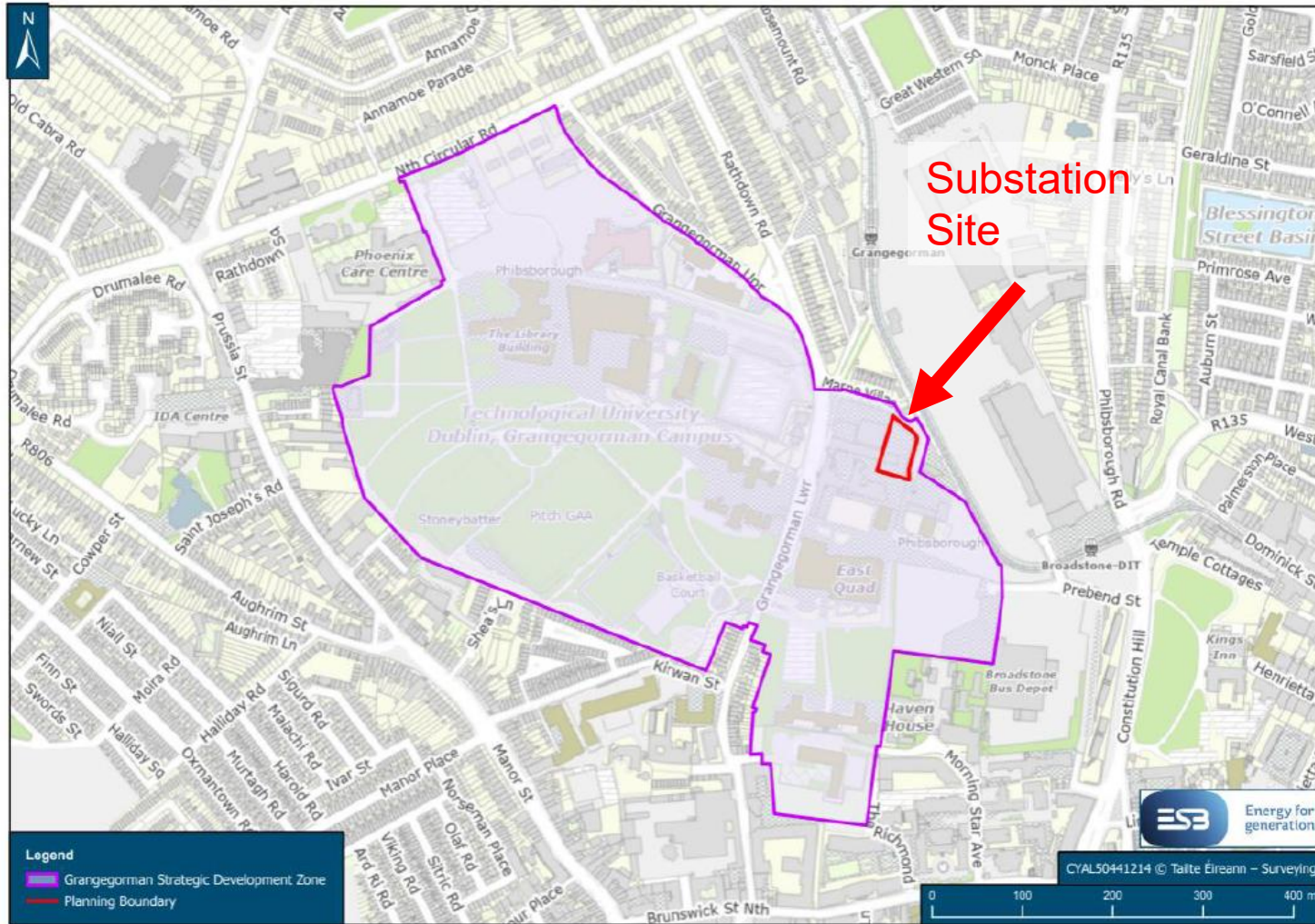
Heather McMeel (ESB)

Rob O'Toole (ESB)

Context – SID Screening Determination

- The ESB is seeking confirmation from An Coimisiún Pleanála (ACP) as to whether a proposed development constitutes Strategic Infrastructure Development (SID) in accordance with Section 182A of the Planning and Development Act, 2000 (as amended).
- The prospective applicant is the Electricity Supply Board (ESB)
- It is considered that the proposed development does not fall within the scope of Section 182A of the PDA.
- The new substation and associated underground cables will form part of the existing ESB Networks distribution system. It will not be a node on the national electricity transmission grid as operated by EirGrid in its capacity as the transmission system operator (TSO).
- Given this project will connect to the distribution network it is submitted that the proposed development does not meet the definition of electricity transmission under section 2(1) of the Electricity Regulation Act 1999.

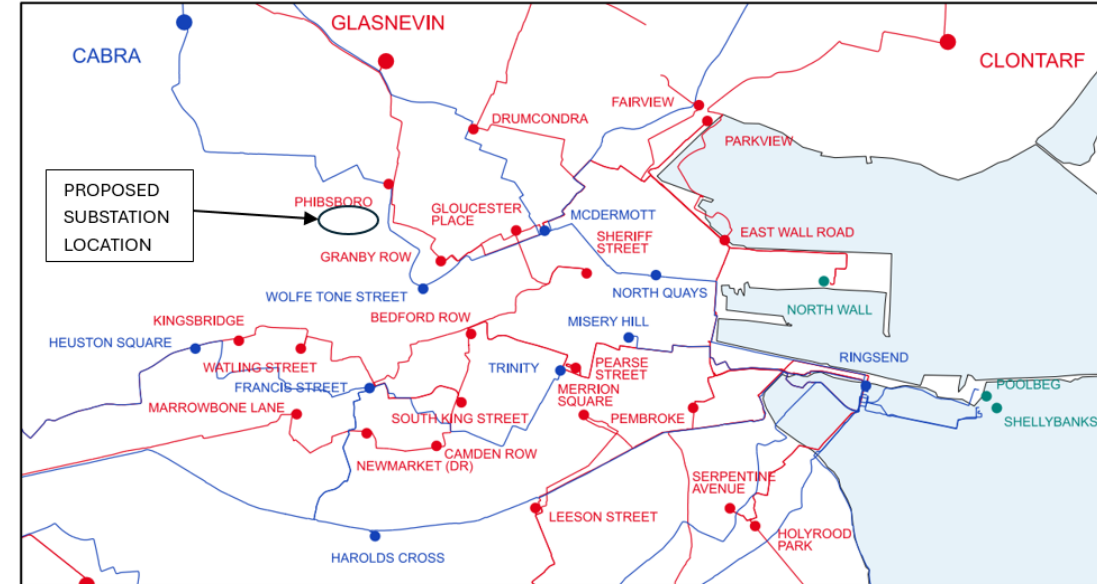
Proposed Development: Location



- The proposed development relates to a new **110 kV / MV GIS Substation** in the Grangegorman Campus, Dublin 7
- c.0.187 ha brownfield site located to the northeast of the TU Grangegorman Campus
- Bound to the east by the Luas Green line, to the North by a residential street, to the Southwest by a TUD storage building and a protected structure
- Grangegorman Strategic Development Zone / Strategic Development Regeneration Area

Proposed Development: Need

- Dublin City Central and North Inner City areas are currently served by three 110 kV substations – Cabra, McDermott and Wolfe Tone Street and eight 38 kV substations - Unidare, Whitehall, Drumcondra, Merville, Glasnevin, Phibsboro, Granby Row and Gloucester Place which form a 38 kV mesh network
- Wolfe Tone Street and the 38 kV mesh network are reaching capacity limits
- Following a network assessment, a new 110 kV / MV substation was identified as the preferred option to facilitate additional load demands on the network
- The proposed substation will improve continuity and security of supply to the North Dublin area by providing additional network capacity, reducing loads at the existing substations and providing increased connectivity between substations.

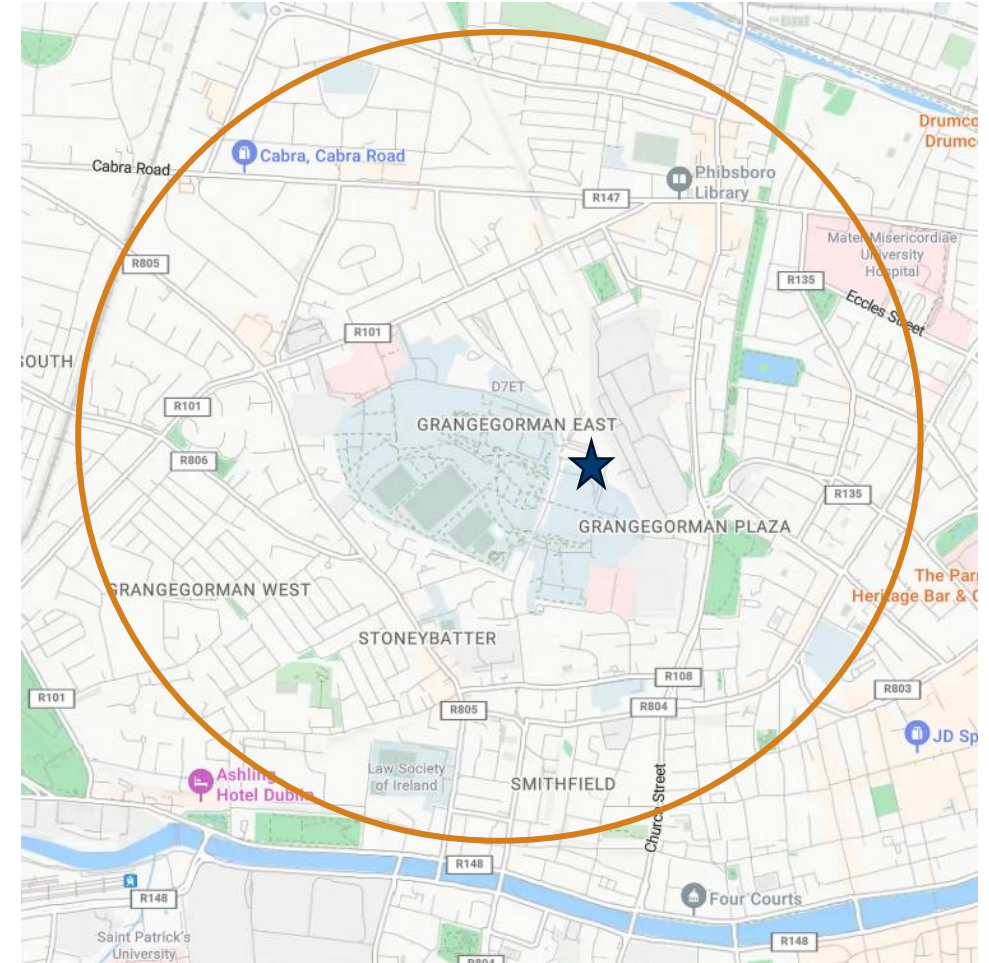


Proposed Development: Need

Following a site selection process of over 2 years and consultation with the GGDA, a preferred site has been chosen for the substation within the Grangegorman campus

The proposed substation will cater for:

- Offloading Phibsborough, Glasnevin, Kingsbridge and Watling Street 38 kV substations
- Further development of the Grangegorman Strategic Development Zone.
- Proposed customer 38 kV substation for Irish Rail located in Glasnevin as part of the DART+ electrification project.
- Increased load request for the upgrade of Broadstone Bus Depot to enable charging of Hybrid and Electric buses.
- Proposed mixed-use developments in Stoneybatter, Smithfield and surrounding area
- Electrification of heat and transport as per Government targets.

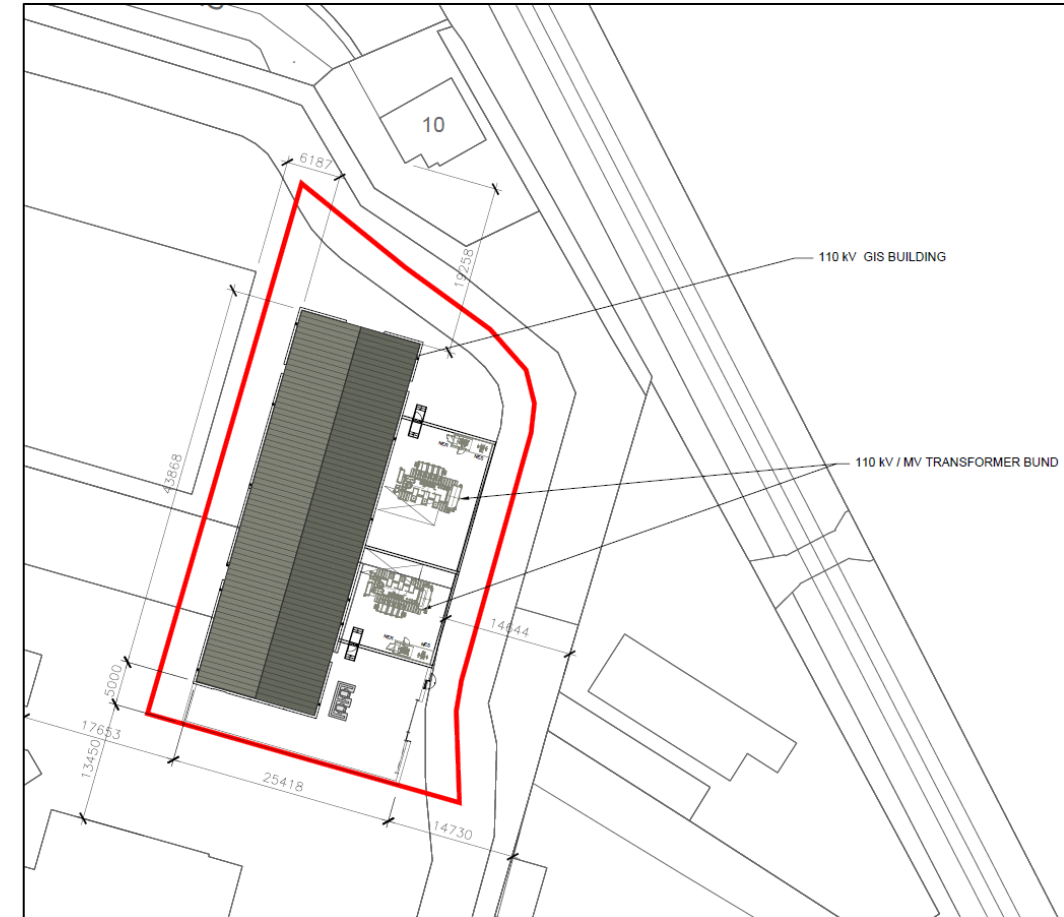


Proposed Development: Description

The exact layout of Broadstone 110 kV substation is TBC, however, it is likely to consist of the following elements amongst other electrical equipment;

- 110 kV GIS building (c. 44 x 14 x 13m high)
- 2 x 110 kV / MV transformers and associated fire walls (c. 6.1 m high)
- Associated electrical equipment and underground cabling

The substation would be primarily unoccupied and visited infrequently for maintenance. The expected lifespan for all the primary plant of the proposed development is in the region of 50 to 60 years but equipment can be refurbished or replaced to extend its lifespan. Infrastructure of this nature typically remains in situ as long as it is required.



Proposed Development: Description

The proposed development will require the demolition of the disused depot building which was identified for demolition in the SDZ planning scheme

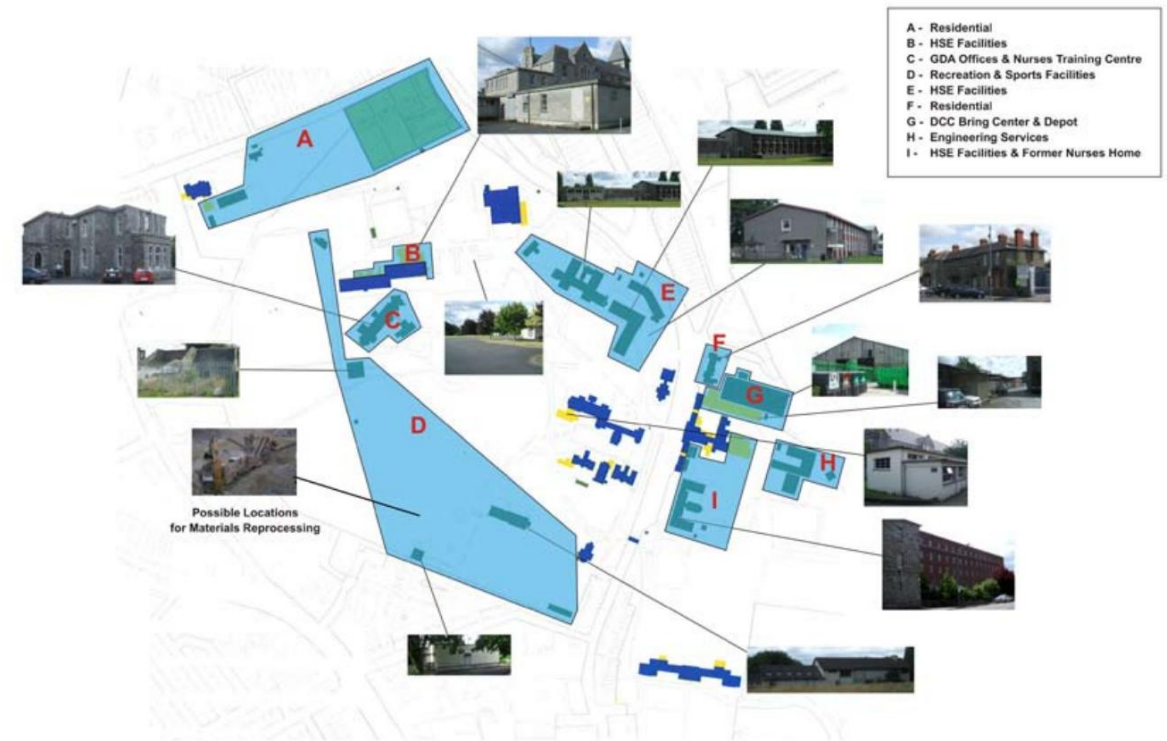


Figure 7.4: Structures to be demolished

Proposed Development: Example



Typical Urban 110 kV GIS Substation (built early 2010s)

- *Broadstone 110 kV substation will be larger than example due to electrical requirements
- *Building materiality will comply with Grangegorman SDZ requirements

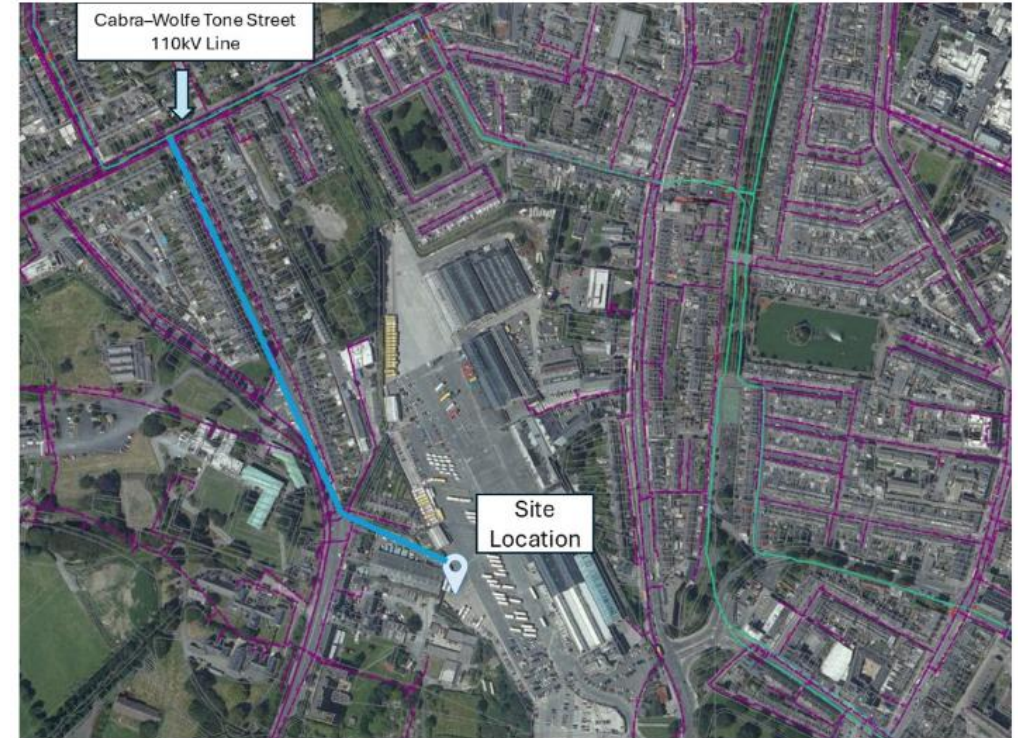
Proposed Grid Connection

It is proposed that the substation will loop into the existing Cabra – Wolf Tone Street 110 kV underground circuit which runs along the North Circular Road, approximately 0.55 km north of the proposed substation.

The grid connection will consist of 2 No. 110 kV underground circuits (UGC) installed within existing roads

The existing Cabra – Wolf Tone Street 110 kV UGC forms part of the Dublin 110 kV distribution grid and will be split into two circuits:

- Cabra – Broadstone 110 kV UGC
- Broadstone – WolfeTone Street 110 kV UGC



The grid connection works will be included in the SID application where they do not fall within the relevant planning exemptions and where they cannot be screened out for AA

National Planning Policy Context

Development of Ireland’s electricity grid and supporting infrastructure is a significant feature of national, regional, and local energy policies. The proposed development will facilitate a safe, secure and reliable supply of energy in Dublin City.

National Planning Framework	National Policy Objective 71: Support the development and upgrading of the national electricity grid infrastructure, including supporting the delivery of renewable electricity generating development.
Regional Spatial & Economic Strategy for the Eastern and Midland Region 2019-2031	Enabling Infrastructure RPO 5.1: Support continued collaboration between infrastructure providers, state agencies and local authorities in the metropolitan area to inform cross sectoral investment plans and capital spending plans to accelerate the development of strategic development areas and secure the best use of public lands in the Dublin Metropolitan Area. Energy Infrastructure RPO 10.20: Support and facilitate the development of enhanced electricity and gas supplies, and associated networks, to serve the existing and future needs of the Region and facilitate new transmission infrastructure projects that might be brought forward in the lifetime of this Strategy. This Includes the delivery of the necessary integration of transmission network requirements to facilitate linkages of renewable energy proposals to the electricity and gas transmission grid in a sustainable and timely manner subject to appropriate environmental assessment and the planning process.

Dublin City Development Plan 2022-2028

Development in Grangegorman/Broadstone must take into account the Grangegorman Planning Scheme (2012). Policies in the DCDP are supportive of the proposed development:

Dublin City Development Plan 2022-2028

Policy S149 Support for Energy Utilities To support the development of enhanced electricity gas supplies, and associated transmission and distribution networks, to serve the existing and future needs of the City, and to facilitate new transmission infrastructure projects and technologies including those to facilitate linkages of renewable energy proposals to the electricity and gas transmission grid that might be brought forward in the lifetime of this Plan. In this respect, the City Council will have regard to the 'Guiding Principles' for facilitating the provision of energy networks set out by the Eastern and Midland Regional Assembly Regional Spatial and Economic Strategy (2019-2031).

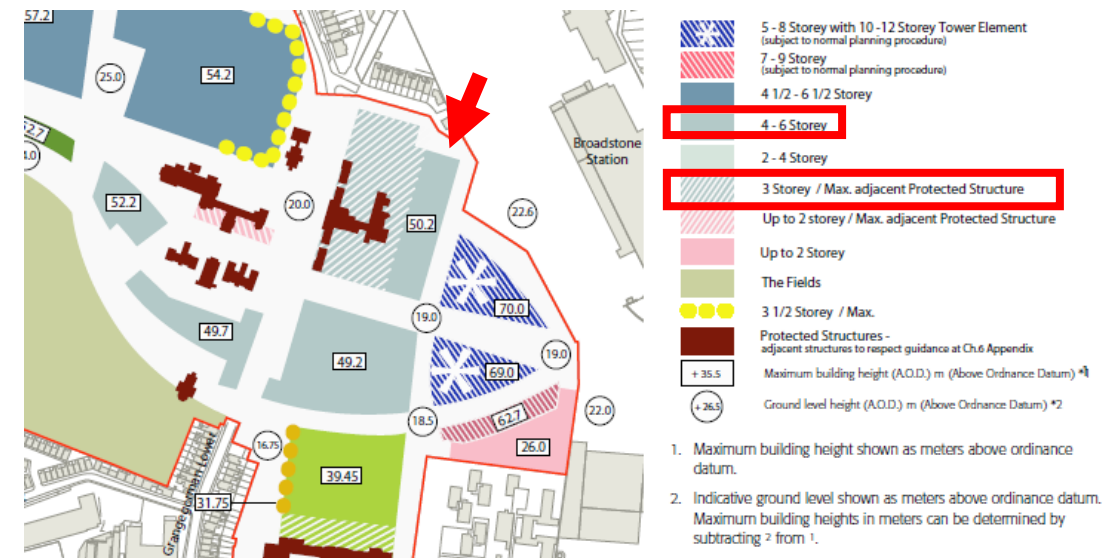
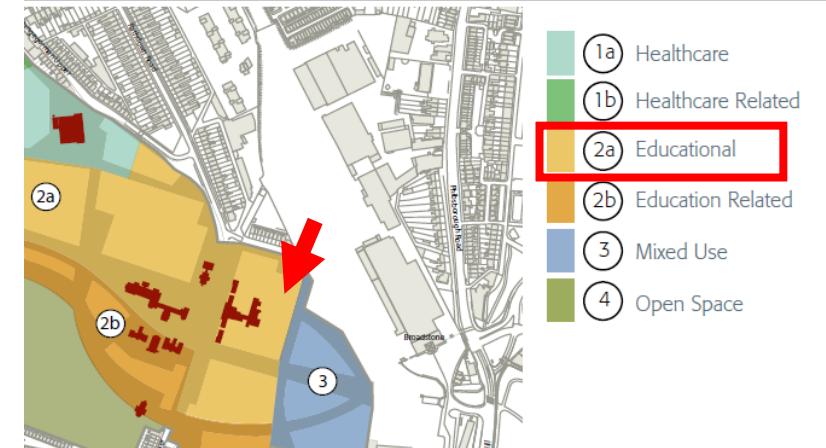
Policy S150 Undergrounding of Energy Utility Infrastructure To require that the location of local energy services such as electricity, telephone and television cables be underground wherever possible, and to promote the undergrounding of existing overhead cable and associated equipment, where appropriate, in the interests of visual amenity and facilitating compact urban development.

SDRA 01 provides overarching principles for the development of all SDRAs in Dublin. Some of the guiding principles included are in relation to architectural design, height, surface water management and flood risk.

Grangegorman SDZ Planning Scheme 2012

Chapter 4 of the Planning Scheme sets out the key structuring principles for development proposed within the SDZ.

- The site is zoned as **2a Educational** which states that services such as **energy supply infrastructure** will be considered acceptable.
- Section 4.7.2 states that campus power and utility buildings will be consolidated at a location within Zone 2a or 2b and other ancillary utility facilities will be accommodated throughout the Quarter as required.
- Development adjacent to Protected Structures will be subject to detailed design, which will be guided by the relevant sections of the Planning Scheme.
- A maximum of 3 storeys will be permitted directly adjacent to these Protected Structures. The proposed building height is c.13 m - equivalent to a 3-4-storey building.
- The proposed development will not impact on pedestrian and cycle routes, or access routes as identified within the scheme.



Planning Application

Next Steps: Strategic Infrastructure Development Screening has been submitted to ACP. It is the opinion of ESB that the development does not come within the provisions of S182A of the Act.

Planning application to be accompanied by:

- Planning and Environmental Report (PER)
- AA Screening
- CEMP
- Architectural Design Statement
- Archaeological/Cultural Heritage Impact Assessment
- Townscape & Visual Impact Assessment
- Noise Impact Assessment
- Flood Risk Assessment
- Engineering Services Report
- Drawing Pack

Discussion/ Questions



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