

Note / Memo

HaskoningDHV UK Ltd.
Environment | Resilience | Renewables

To: Whom it may concern
From: JM
Date: 24 January 2025
Copy: AP
Our reference: PC3506-RHD-07-XX-ME-Z -0007
Classification: Project related
Checked by: EW

Subject: Spittal Battery Energy Storage System (BESS): Infrastructure Appearance

1 Purpose of this note

This note has been produced to outline the potential appearance of infrastructure within Field's proposed development of a battery energy storage system (BESS) at Spittal Mains Farm (the Proposed Development) allow for a more informed understanding of the appearance of the Proposed Development in the setting of the Scheduled Monument St Magnus' Church, Burial Ground and Hospital (SM5413). It should be read in conjunction with the detailed technical assessments and plans included with the application for consent under section 36 of the Electricity Act 1989 (ECU00005116) which set out the dimensions, locations and configuration of these elements.

The photomontage visualisations provided with the application have been produced in line with Landscape Institute guidance to meet accepted industry standards. Consequently, these visualisations have assumed a generic surface finish that does not seek to depict the effect of different surface treatments or colours. Similarly, it is not possible to accurately model and depict the appearance of the planting mix proposed in the application, and the appearance shown in the photomontage should be taken as illustrative.

These visualisations should be taken primarily as a guide to the scale and massing of the Proposed Development as there is opportunity for the use of appropriate surface finishes to reduce its visual prominence within the setting of St Magnus' Church. To this end, the applicant would be willing to explore the options for deciding appropriate finishes with the relevant stakeholders.

2 Project components

2.1 Battery Units, MV Skids and PCS

2.1.1 Containerised System

A containerised system has been depicted in the submitted photomontages as the 'worst case' option in terms of equipment height and massing. In this type of system, battery storage units would be housed within shipping style containers, and associated Medium Voltage (MV) equipment would be housed in separate MV skids which sit adjacent to the battery storage containers. Example images are included in **Figure 1**, **Figure 2** and **Figure 3** below. There is significant optionality in colour, meaning that the colour adopted could vary from the pale grey and dark green shown, should a different finish be considered more appropriate.



Figure 1 Typical containerised BESS unit (pale grey)



Figure 2 Typical containerised BESS units (right) and MV skids (left) in place (pale grey)



Figure 3: Typical containerised BESS units (dark green) and MV skids (white) in place

2.1.2 Cabineted System and PCS

The cabinet system is an alternative option where battery units would be contained within clusters of cabinets occupying a broadly equivalent area to that of the containerised system with associated Power Conversion Systems. An example of the cabinet system is shown in **Figure 4**. Again, there is significant optionality in colour meaning that the colour adopted could vary from the pale grey shown should a different finish be considered more appropriate.



Figure 4 Typical cabined BESS and PCS

2.2 Transformer and Switchgear

The switchgear would be in a treated metal finish with glass or ceramic insulators, while the transformer would be within a painted metal cabinet. An example of how the transformer and switchgear typically appear is shown in **Figure 5**.



Figure 5 Typical transformer and switchgear

2.3 Security Fencing

Security fencing is shown in the photomontages as galvanised metal; however, this could be painted to better reflect the character of the local landscape where a different finish would be more appropriate.

3 Summary

The purpose of this note is to demonstrate there is optionality in the potential appearance of infrastructure within the Proposed Development. Visualisations and photomontages provided are intended to show the general scale, massing, and layout of the Proposed Development, rather than an exact representation of the final appearance, which is not possible at this early stage given the varying technologies available on the market and the rapid development of these technologies. The applicant is willing to explore the options for deciding appropriate finishes with the relevant stakeholders.