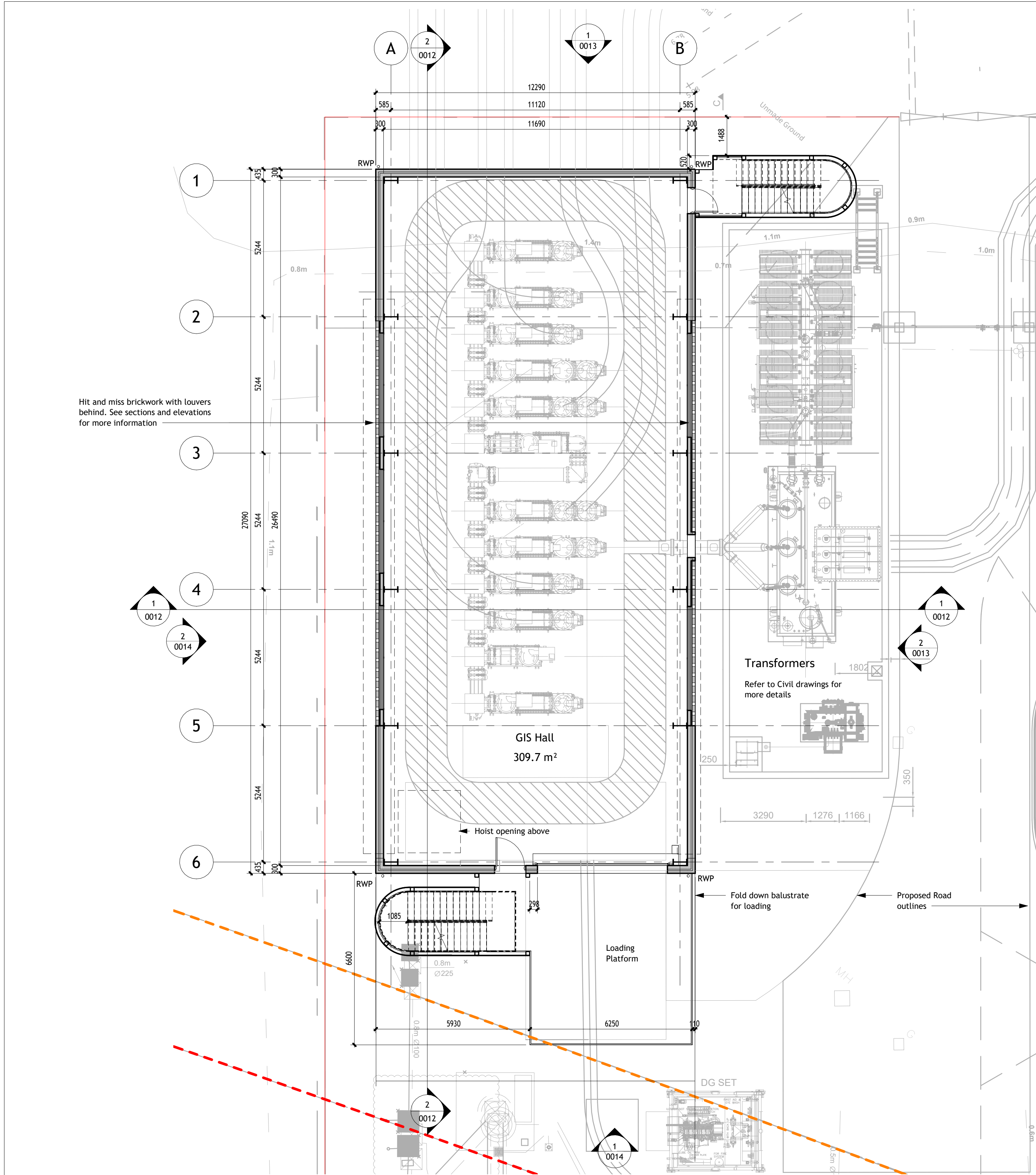
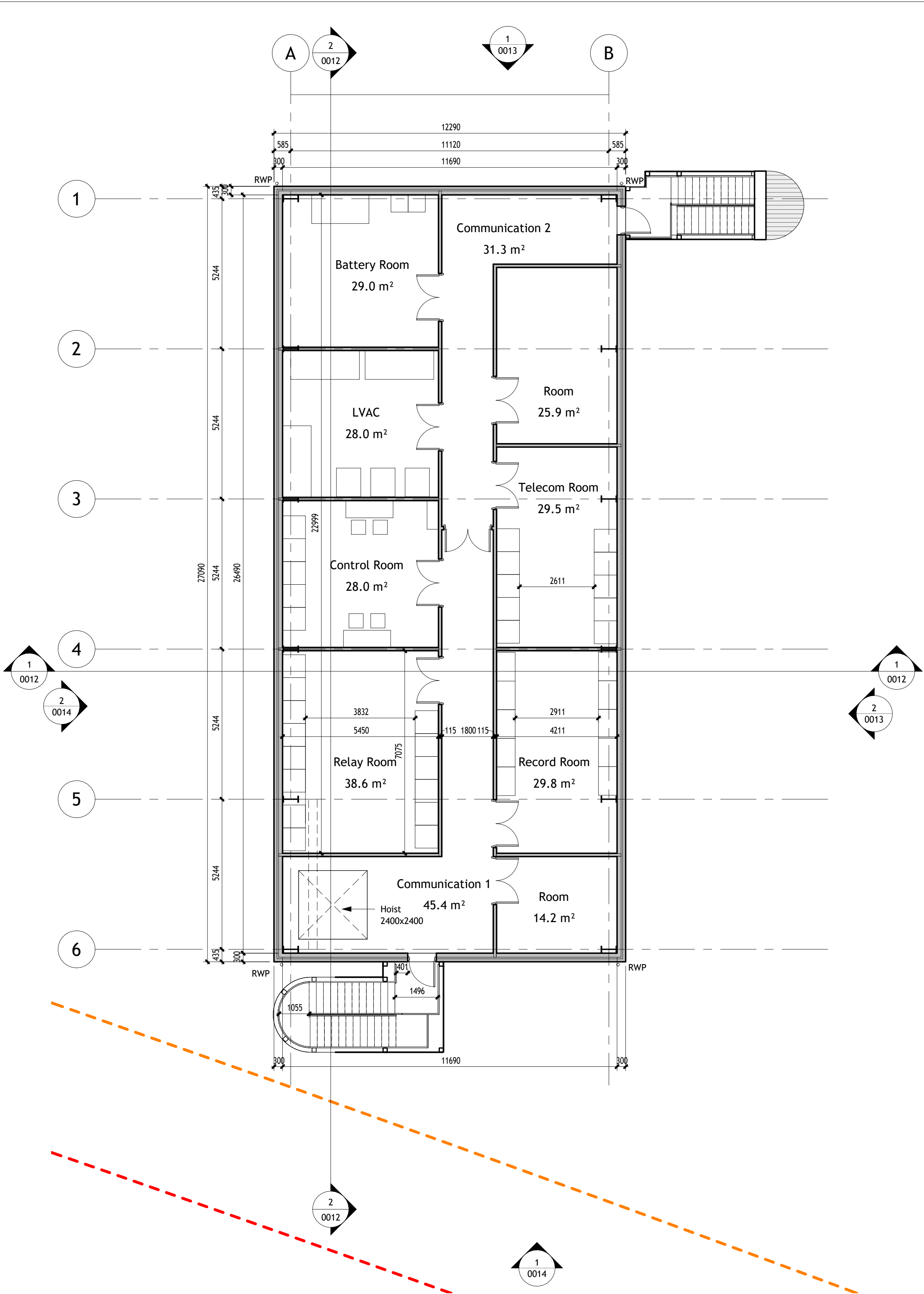




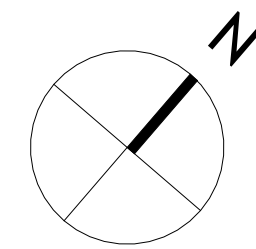
1 First Floor Level
1 : 100



2 Second Floor Level
1 : 100

NOTES

- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
- THIS DRAWING IS FOR DEVELOPMENT PURPOSES ONLY.
- FOR SPACEPROOF, THE PROPOSED SGT FOOTPRINT IS REFERRED FROM THE DRG. NO. AT-PC2300042 V2, MAKE: EFACEC.
- THE EXISTING SERVICES TO BE PROTECTED. WHERE THERE ARE CLASHES WITH THE NEW WORK SERVICES TO BE RELOCATED.
- GIS SWITCHGEAR LAYOUT IS BASED ON GE MAKE 132kV GIS SWITCHGEAR F35-41G MODULE. HOWEVER, GIS BUILDING SIZE CAN BE CHANGED BASED ON FINAL PROJECT SPECIFIC VENDOR DRAWINGS DURING DETAILED ENGINEERING STAGE.
- NER GA IS TO BE CONFIRMED BASED ON PROJECT SPECIFIC FINAL VENDOR DRAWINGS.
- LOCATION OF OHL SHOWN IS TENTATIVE AND WILL BE CONFIRMED AFTER SURVEY.
- DG SET LOCATION TO BE CONFIRMED.
- THE EXTERNAL STAIRWAY ENCLOSURES ARE INDICATIVE ONLY



LEGEND

- PROPOSED
- HIGH VOLTAGE
- FENCE

Jacobs
95 Bothwell St, Glasgow, G2 7HX
Tel: +44 (0)141 243 8000 Fax: +44(0)141 226 3109
www.jacobs.com

sse
Energy Solutions

IMPERIAL PARK
132 KV GIS SUBSTATION

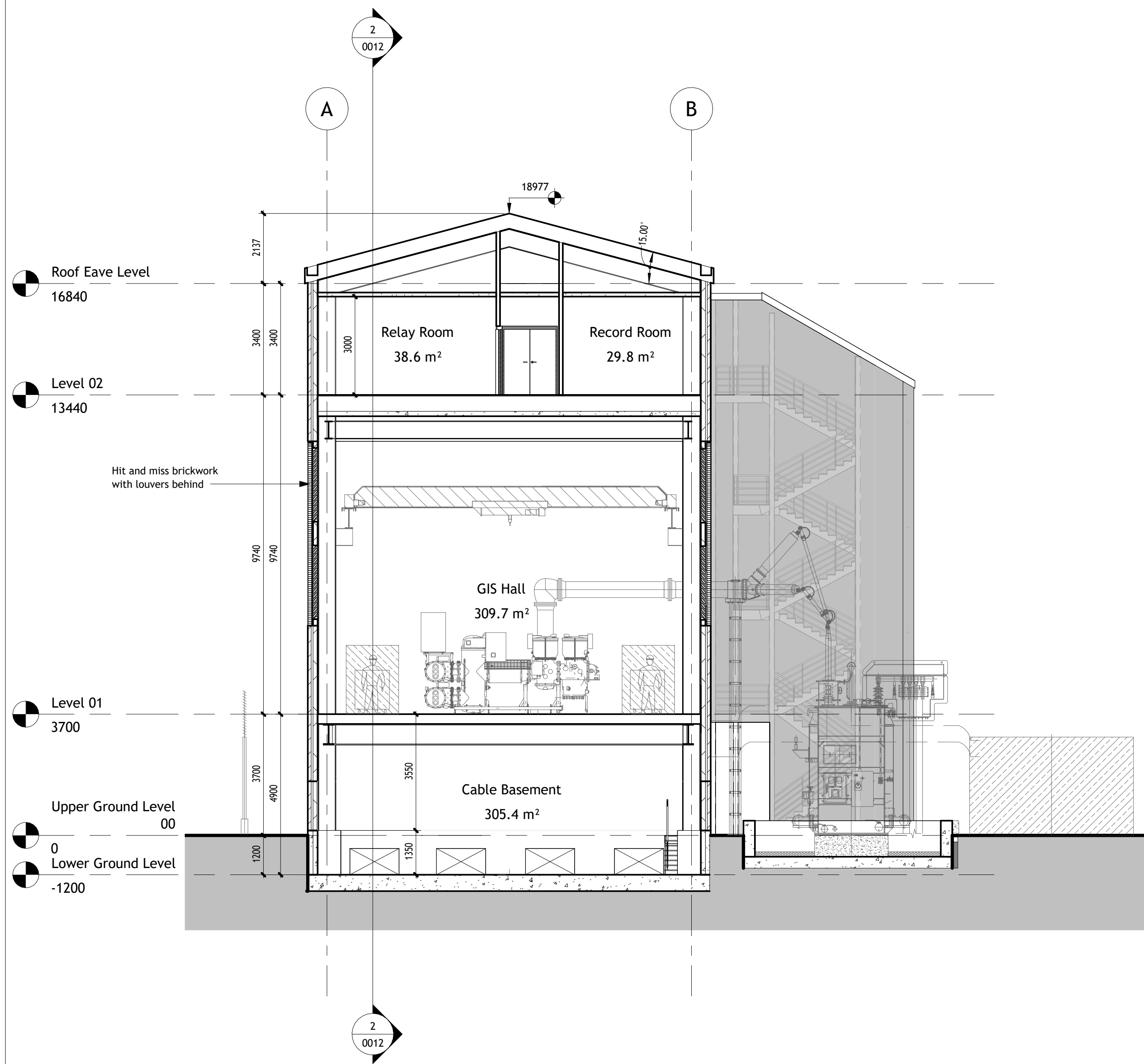
Drawing title
132kV GIS Building
First and Second Floor Plan

Drawing status	First Issue	Suitability	S2
Scale	As indicated @ A1	DO NOT SCALE	
Jacobs No.	B2494900	Rev	
Client No.	000006410	Rev	P01

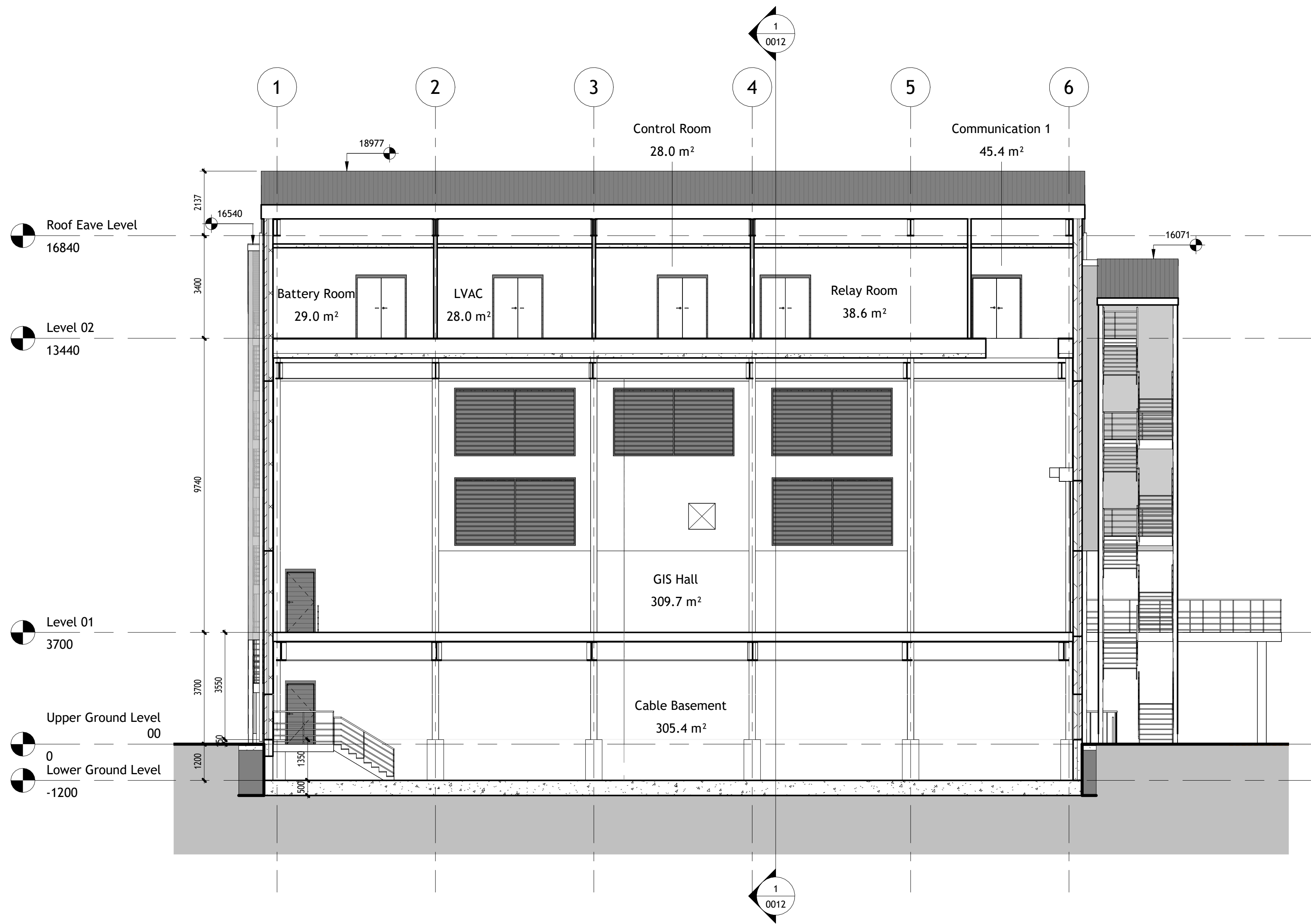
Drawing number
B2494900-JAC-ZZ-XX-DR-C-0010

Rev	Rev. Date	Purpose of revision	Orig	Check'd	Rev'd	Apprv'd
P01	15/05/2025	First Issue	AB	SS	KR	SA

© Copyright 2025 Jacobs UK Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of, Jacobs Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.



1 Section 1
1 : 100



2 Section 2
1 : 100

NOTES

- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
- THIS DRAWING IS FOR DEVELOPMENT PURPOSES ONLY.
- FOR SPACEPROOF, THE PROPOSED SGT FOOTPRINT IS REFERRED FROM THE DRG. NO. AT-PC2300042 V2, MAKE: EFACEC.
- THE EXISTING SERVICES TO BE PROTECTED. WHERE THERE ARE CLASHES WITH THE NEW WORK SERVICES TO BE RELOCATED.
- GIS SWITCHGEAR LAYOUT IS BASED ON GE MAKE 132kV GIS SWITCHGEAR F35-41G MODULE. HOWEVER, GIS BUILDING SIZE CAN BE CHANGED BASED ON FINAL PROJECT SPECIFIC VENDOR DRAWINGS DURING DETAILED ENGINEERING STAGE.
- NER GA IS TO BE CONFIRMED BASED ON PROJECT SPECIFIC FINAL VENDOR DRAWINGS.
- LOCATION OF OHL SHOWN IS TENTATIVE AND WILL BE CONFIRMED AFTER SURVEY.
- DG SET LOCATION TO BE CONFIRMED.
- THE EXTERNAL STAIRWAY ENCLOSURES ARE INDICATIVE ONLY
- TRANSFORMER DETAILS IN BUND OMITTED FOR CLARITY

Rev	Rev. Date	Purpose of revision	Orig	Check'd	Rev'd	Apprv'd
P01	15/05/2025	First Issue	AB	SS	KR	SA

© Copyright 2025 Jacobs UK Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

Jacobs
95 Bothwell St, Glasgow, G2 7HX
Tel:+44 (0)141 243 8000 Fax:+44(0)141 226 3109
www.jacobs.com



IMPERIAL PARK
132 KV GIS SUBSTATION

Drawing title

132kV GIS Building
Sections

Drawing status

First Issue

Suitability

S2

Scale

1 : 100 @ A1

DO NOT SCALE

Jacobs No.

B2494900

Rev

Client No.

000006410

P01

Drawing number

B2494900-JAC-ZZ-XX-DR-C-0012

Appendix E

Greenfield Runoff Rates

This is an estimation of the greenfield runoff rates that are used to meet normal best practice criteria in line with Environment Agency guidance “Rainfall runoff management for developments”, SC030219 (2013), the SuDS Manual C753 (CIRIA, 2015) and the non-statutory standards for SuDS (Defra, 2015). This information on greenfield runoff rates may be the basis for setting consents for the drainage of surface water runoff from sites.

Project details

Date	23/06/2025
Calculated by	JH
Reference	Imperial Park
Model version	2.0.1

Location

Site name	Imperial Park
Site location	Newport



Site easting	328536
Site northing	183644

Site details

Total site area (ha)	0.062	ha
----------------------	------------------------------------	----

Greenfield runoff

Method

Method	FEH statistical
--------	-----------------

FEH statistical

	<u>My value</u>		<u>Map value</u>
SAAR (mm)	1001	mm	977
BFIHOST	0.703		
QMed-QBar conversion	1.075	☐	1.075
QMed (l/s)	0.192		
QBar (FEH statistical) (l/s)	0.21		

Growth curve factors

	<u>My value</u>		<u>Map value</u>
Hydrological region	9	☐	9
1 year growth factor	0.88		
2 year growth factor	0.93		
10 year growth factor	1.42		
30 year growth factor	1.78		
100 year growth factor	2.18		
200 year growth factor	2.46		

Results

Method	FEH statistical	
Flow rate 1 year (l/s)	0.18	l/s
Flow rate 2 year (l/s)	0.19	l/s
Flow rate 10 years (l/s)	0.29	l/s
Flow rate 30 years (l/s)	0.37	l/s
Flow rate 100 years (l/s)	0.45	l/s
Flow rate 200 years (l/s)	0.51	l/s

Disclaimer

This report was produced using the Greenfield runoff rate estimation tool (2.0.1) developed by HR Wallingford and available at uksuds.com (<https://www.uksuds.com/>).

The use of this tool is subject to the UK SuDS terms and conditions and licence agreement, which can both be found at [uksuds.com/terms-conditions](https://www.uksuds.com/terms-conditions) (<https://www.uksuds.com/terms-conditions>). The outputs from this tool have been used to estimate Greenfield runoff rates. The use of these results is the responsibility of the users of this tool. No liability will be accepted by HR Wallingford, the Environment Agency, Centre for Ecology and Hydrology, Wallingford Hydrosolutions or any other organisation for the use of these data in the design or operational characteristics of any drainage scheme.

Appendix F

General Arrangement - Existing