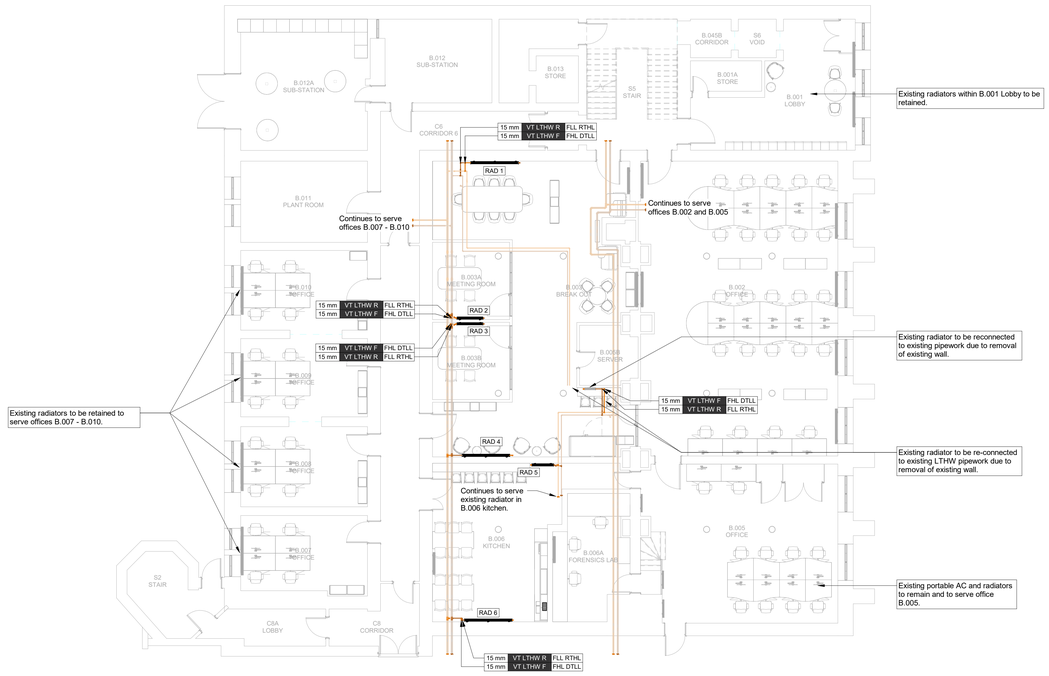
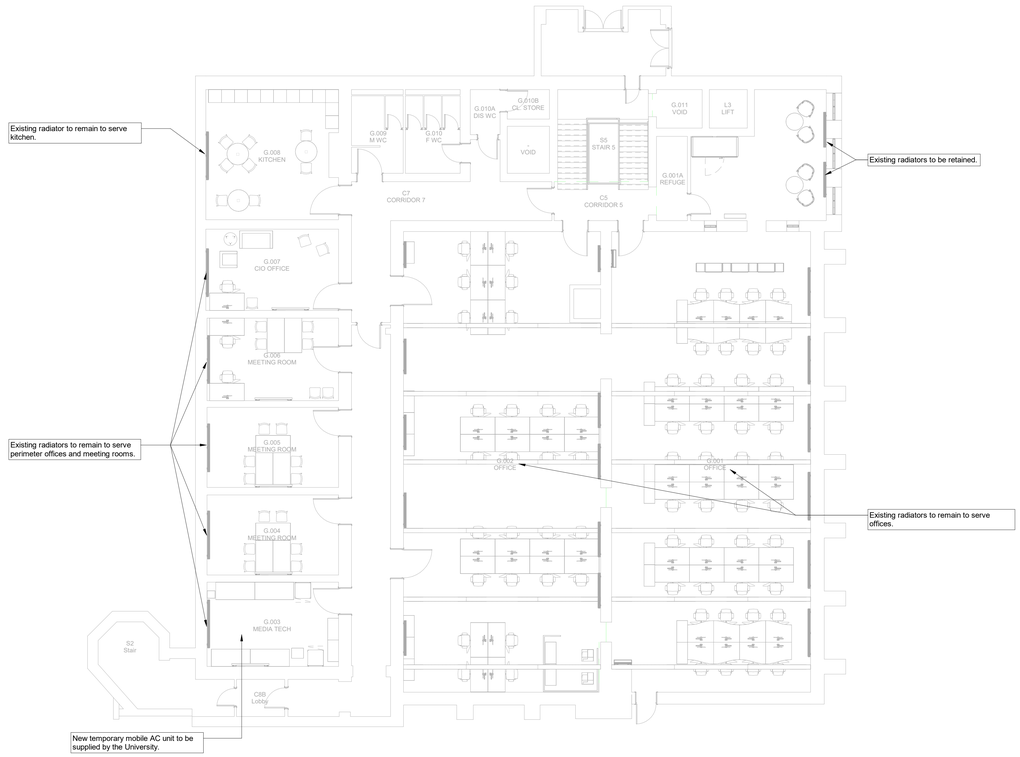
A0

This drawing shall not be scaled.
Work from the dimensions shown in the drawing or given in relevant specifications



1 Lower Ground Floor - Heating and Cooling
1 : 100



2 Lower Ground Floor Mezzanine - Heating and Cooling
1 : 100

CDM Regulations:

In addition to any information included in this drawing or the model from which it is derived, refer also to the project CDM Risk Register for information on residual risks.

General Notes:

- The drawing does not necessarily show all the information needed to interpret the design intent or the construction details.
- The drawing contains information from more than one source and must be read in conjunction with all relevant specifications.
- Any apparent drafting errors and differences between other drawings and specifications shall be brought to our attention.

Project Notes:

General Notes:

1. This drawing is to be read in conjunction with all relevant architectural, structural, mechanical, public health, and electrical engineers drawings and the associated specifications.
2. This drawing shows the design intent only and is subject to coordination by the Contractor and the preparation of installation detail drawing.
3. The contractor shall refer to the architect's drawings for details of fire compartementation. Fire stopping to be provided to all services as required to maintain fire compartmentation.
4. Refer to existing as-built layouts for further information of existing services.
5. Contractor to validate all existing services by invasive survey prior to tender and include for all necessary modifications to existing services as required to facilitate the works.
6. The contractor to fully comply with EPMs.
7. The contractor to be responsible for final coordination of all services.

Heating & Cooling Notes:

1. Contractor shall include for appropriate measures to alleviate the effects of thermal expansion.
2. Air vents shall be provided at all high points and drain off cocks shall be provided at all low points.
3. Pipework heating / cooling solution subject to contractor invasive surveys to confirm sufficient flow rates and actual F&R temperatures.

Legend:

- Existing Radiator
- New Radiator
- Existing Low Temperature Hot Water Flow Pipework
- Existing Low Temperature Hot Water Return Pipework
- New Low Temperature Hot Water Flow Pipework
- New Low Temperature Hot Water Return Pipework

Index	Description	Designed	Reviewed	Authorised	Date
T01	Tender Issue	JH	EJG	EJG	22/08/25
P01	Stage 4i Issue	JH	EJG	EJG	25/07/25

REVISIONS:

HOARE LEA

ARCHITECT:
Fairhurst Architects

CLIENT:
University of Manchester

PROJECT TITLE:
ITS & Computer Science

DRAWING TITLE:
Eddie Newcombe
LGF & LGF.M
Heating and Cooling Services Layout

Tender Issue

PERSON RESPONSIBLE		
Design: **JH**	Review: **EJG**	Authorising Issue: **EJG**
Project No: **04/06325**	Date: **25/07/25**	Scale @ A0: **1 : 100**

DRAWING NUMBER:	Status:	Rev:
0406325-HLE-EN-ZZ-DR-M-604001	S4	T01

© Hoare Lea LLP