



FRANKHAM

# PowderMills Hotel



Frankham was appointed to deliver the full Mechanical, Electrical and Public Health (MEP) design for the multi-million-pound refurbishment of the PowderMills Hotel, a prestigious heritage site located in Battle, East Sussex.

The hotel has over 70 guest rooms distributed across three distinct buildings: the Cloisters, Pavilion, and Main House.

#### Our scope:

- **Mechanical Services:** New heating and cooling strategies sympathetic to the historic nature of the buildings, energy-efficient heating, ventilation, and air conditioning systems, and tailored hot/cold water distribution.
- **Electrical Services:** Complete electrical infrastructure redesign including small power, energy-efficient lighting, emergency lighting, fire alarm and data systems, coordinated to enhance guest comfort while meeting modern standards.
- **Public Health Services:** Drainage and domestic water services upgrades, designed to meet increased capacity requirements and futureproof the development.

The design will ensure full compliance with current Building Regulations, Chartered Institution of Building Services Engineers (CIBSE) guidance, and hotel operational standards, while working closely with heritage consultants and architects to preserve the historical character of the site.

#### Client

Trail Group

#### Sector

Hospitality

#### Services

Mechanical & Electrical  
Public Health

#### Duration

Nov 2024 - Aug 2025

## Challenges

A key challenge on this project was the tight programme. With main building works already underway at the time of our appointment, we were required to develop and finalise the MEP design in parallel with construction activities.

Upon inspection of the existing MEP services, several deficiencies were identified with the domestic water services and drainage. Examples included inconsistent pressure, with some outlets providing no water and uninsulated pipework, as well as non-compliant pipe gradients and connection layouts and grease traps missing in commercial kitchens.



## Solutions

This necessitated close collaboration with the MEP contractors, working in an agile and responsive manner to deliver coordinated designs in real time, aligned with the construction sequence.

### Domestic Water System Redesign

Frankham delivered a comprehensive redesign of the hotel's cold and hot water systems to address performance and compliance issues:

#### Cold Water Services

- A new central cold water storage tank and booster set were specified
- Category 5 protection was provided for external taps
- Pressure reducing valves were introduced

#### Hot Water Services

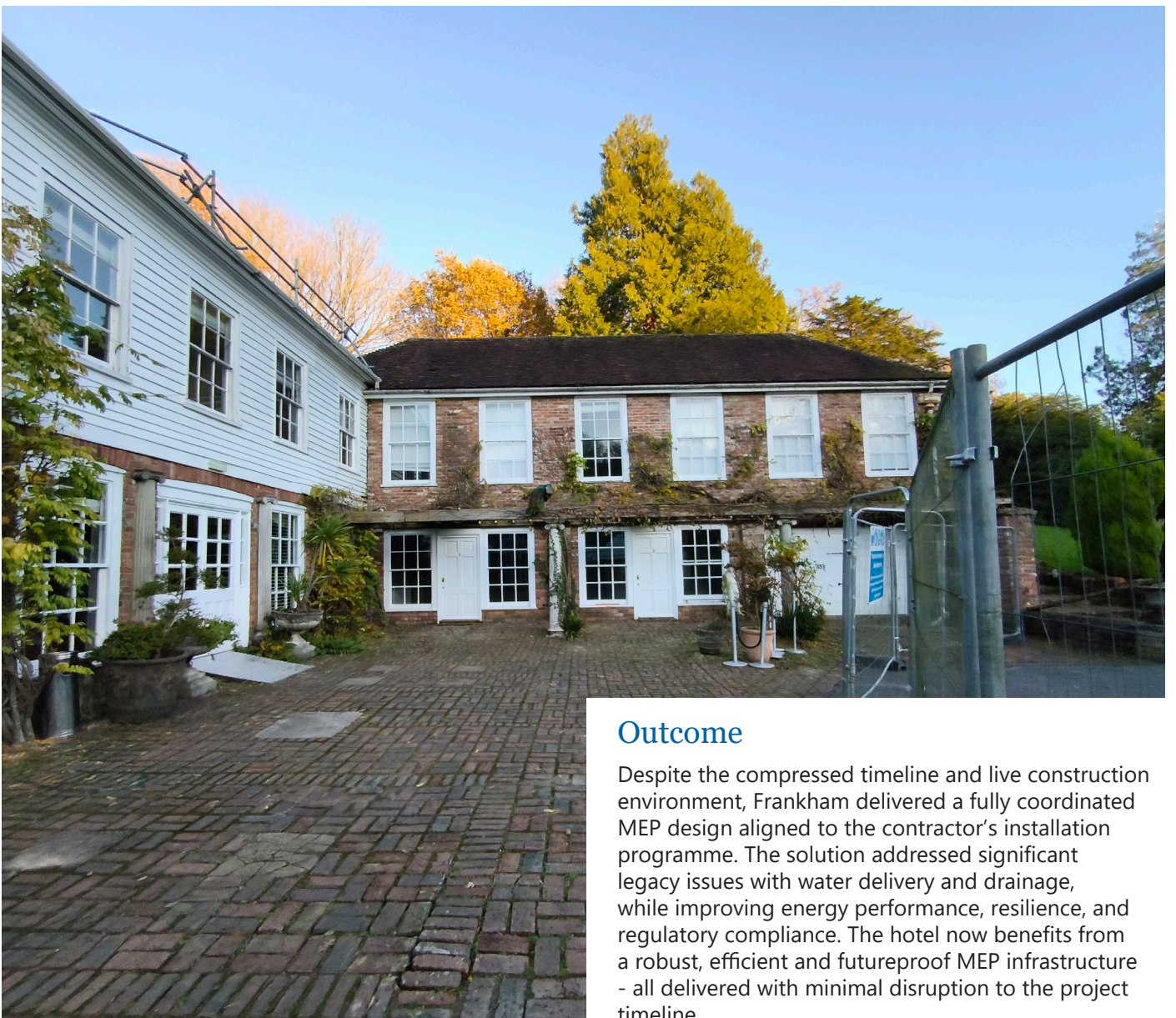
- All existing heaters and cylinders were removed
- A centralised semi-storage hot water system to support varying demands
- Full insulation of all pipework improved system efficiency and regulatory compliance

### Drainage Improvements

Key improvements were proposed:

- Introduction of grease traps in commercial kitchens
- Rerouting of external drainage to prevent grease solidification





## Outcome

Despite the compressed timeline and live construction environment, Frankham delivered a fully coordinated MEP design aligned to the contractor's installation programme. The solution addressed significant legacy issues with water delivery and drainage, while improving energy performance, resilience, and regulatory compliance. The hotel now benefits from a robust, efficient and futureproof MEP infrastructure - all delivered with minimal disruption to the project timeline.