



Benefits Delivered

- ◆ Improvement on overall carbon footprint of the facility through the use of waste heat recovery technology to heat the building
- ◆ Efficient MEP systems ensuring longevity of operation for the client
- ◆ Smart intelligent controls allowing the client to track and log energy usage as well as regulate and monitor HVAC plant and systems



Refurbishment of local crematorium to improve the reflective gathering spaces in the chapel buildings

Description

- ◆ Penmount Crematorium is a large, publicly owned facility managed by Cornwall Council. The facility serves the south of Cornwall and is located on the outskirts of Truro. The main crematorium and chapel buildings have a seated capacity of 167 people
- ◆ In addition to the crematorium and chapel buildings, there are landscaped memorial gardens and a wildflower natural burial ground
- ◆ Cornwall council funded a refurbishment of the facility in 2014. This improved the services offered by expanding office space, creating a front of house reception area and client interview rooms
- ◆ The buildings carbon footprint was reduced through the introduction of high efficiency lighting, recovered heat exchange technology and intelligent control systems

Involvement

Mechanical services design duties involved:

- ◆ Space heating improvement through the use of gas fired high efficiency boiler plant and waste heat recovery technology
- ◆ Replacement heat emitters and associated pipework, designed to operate on compensated temperatures, reducing energy consumption
- ◆ Hot and cold water supplies to refurbished welfare facilities
- ◆ Ventilation system upgrades to ensure improved internal conditions and protection of building fabric
- ◆ New gas and water supplies to support the improved services installation
- ◆ Introduction of an intelligent automatic control system to regulate and monitor overall energy usage

Electrical services design duties involved:

- ◆ Improved lighting throughout ensuring compliance with recommended lighting levels
- ◆ Enhanced building protection through the introduction of an automatic fire detection and alarm system
- ◆ External ingress and egress improvement through introduction of external lighting
- ◆ Out of hours building and property protection through the use of automatic intruder detection and alarm systems
- ◆ Provision of small power and data outlets throughout to allow flexible use of space
- ◆ Disabled alarm provisions to ensure compliance with Approved document M