

CASE STUDY

SDS

Water
Infrastructure
Systems

Edinburgh Airport

SDS installs Scotland's largest stormwater attenuation system.



Image kindly supplied by Edinburgh Airport.

→ SDS SYSTEMS

SDS GEOLight® stormwater storage tanks.

→ CLIENT

P.J. Careys (Contractors) Ltd.

→ END CUSTOMER

Edinburgh Airport (Global Infrastructure Partners).

→ PROJECT

Second phase of Airport's "Stands Development".

→ PURPOSE

To provide the infrastructure required to support the expansion of the Airport.

→ BRIEF TO SDS

To ensure the Airport's new aircraft stands are flood risk free.

→ TIMING

October to December 2018.

→ PROJECT BACKGROUND INFORMATION

The Edinburgh Airport Stands Development project will create 13 new aircraft stands as well as a new taxiway and an equipment area.

→ PROJECT OBJECTIVES

To effect the fast and efficient removal of surface water from the site and to ensure its safe dispersal to natural water receptors.

→ PROJECT REQUIREMENTS

To mitigate anticipated flooding issues as a consequence of the Airport's expansion and to minimise the Airport's impact on the environment, whilst satisfying the environmental demands of the West Edinburgh Strategic Design Framework (WESSDF).

→ SURFACE WATER SYSTEM REQUIREMENTS

Due to the remote location of these new stands, as well as future planned stand development work, passengers will be bused to and from the main terminal, once their aircraft have been safely parked. Consequently it is essential that these areas, which will be subject not just to aircraft and vehicle movements but also to foot traffic from passengers and Airport personnel, should drain quickly and effectively and remain entirely free from flooding.

Furthermore, the adopted solution should reflect the Council's guidance in terms of permeability and landscape provision, as set out in the "Edinburgh Design Guidance".

→ SDS PRODUCT FEATURES

SDS GEOLight® tanks with a combined gross storage capacity of 7,248m³.

→ ISSUES OVERCOME

One of the challenges that this project presented was the need to carry out construction works in a live environment, both airside and landside, with planes continuing to taxi, take off and land during construction works. This required close cooperation with Edinburgh Airport security, engineering, airfield operations and air traffic control.

It was also necessary to complete the installation within a particularly tight timeframe of just 8 weeks leading up to Christmas, during inclement winter weather and reduced natural daylight hours.



Allan Crozier, Senior Project Manager, P.J. Careys.

"Despite the very short timeframe in which to complete the installation of the drainage system, the unfavourable weather and the requirement to work under floodlight, we were able to rely upon SDS, once more, to get the job done in time and to the high standards we expect and which they consistently deliver."

