

Civils

Stansted Airport - Car Rental Facility

The ground conditions were poor and waterlogged on this site which was located at the bottom of a small valley on the Stansted Airport site. This necessitated significant ground improvement to allow the area to be used for the creation of four new car rental maintenance facilities and associated parking areas.

A large storm water attenuation system was installed to enable the car park drainage channels and the surrounding land drainage to be temporarily stored during times of peak rainfall and to then discharge slowly into the local drainage system without the risk of flooding occurring in the new car parks.

Cement/lime stabilisation was used to improve the soft clay ground conditions to provide a suitable base for the reinforced concrete raft foundations to each of the new car rental maintenance facilities, and to the car park sub-base.

The superstructures were formed using lightweight steel portal frames with masonry in-fill to the perimeter walls and profiled metal cladding to the roof and outer walls. Free standing steel canopies were introduced to cover each of the external petrol filling stations. Petrol tanker delivery areas/ filling points were provided for each facility.

