

Manchester Airport - Echo 9

Client:
Allied Infrastructure Management Limited

Full Depth Pavement Rehabilitation

Project Overview & Scope

The project involved the full rehabilitation of Taxiway Echo 9 at Manchester Airport, replacing approximately 29 bays affected by ASR-related damage. Works comprised the installation of 370mm-deep PQC pavement over a 150mm-deep lean mix sub-base. The scope also included reinforced concrete repairs to irregularly shaped bays and AGL bays. To minimise disruption to airport operations, all main construction activities were planned and delivered during night shifts, Monday to Friday.

Challenges and Execution

Working airside presented several challenges, including a limited night-time working window and the need to coordinate activities around live aircraft movements. The scope expanded during the works as additional defective bays were identified. Concrete was mixed and supplied directly from our on-site batcher due to overnight commercial batching restrictions. Induction sawcut were completed during daytime possessions between aircraft movements, while the team managed variable weather conditions ranging from heavy rain to very low temperatures.

Benefits and Outcomes

Despite the increasing scope and challenging working conditions, the project was completed one shift ahead of schedule. MAG selected a full-depth repair solution to provide longer-term rehabilitation rather than the proposed short-term approach of planing the surface layer and applying an asphalt overlay. GCEL maintained progress throughout the programme and completed the works ahead of the date, allowing the repaired taxiway area to return to airport operations earlier than scheduled.

