

Airside Core Stabilisation Works

Client:
MAG

AGL Pavement Reinstatement Works

Project Overview & Scope

Gill Civil Engineering was appointed by MAG to stabilise and reinstate existing AGL pavement cores across its airport network, including critical aircraft wheel paths. Existing cores were over-cut, removed and reinstated with high early-strength concrete, achieving the required cure within approximately 90 minutes for safe return to aircraft trafficking. Each location was then re-cored to allow installation of new AGL fittings. The works required a rapid, durable and carefully controlled solution to minimise operational disruption while maintaining airfield safety and programme certainty.

Challenges and Execution

Operational constraints required a bespoke approach using pre-weighed, bagged materials prepared landside and transported airside for controlled pan-mixer batching, ensuring consistent mix quality. High early-strength concrete enabled curing within approximately 90 minutes, allowing up to six cores to be extracted, reinstated and cured within restricted six-hour working windows. Winter conditions and harsh open-airfield weather required careful control of mixing, placement and curing. Specialist equipment, pre-measured materials and detailed planning supported accurate finishing, with all works coordinated around live operations, permits and airside safety requirements.

Benefits and Outcomes

The project was delivered on schedule, with all reinstated cores achieving the required early strength and durability for demanding aircraft wheel path conditions. Pre-batched materials and controlled on-site mixing maintained consistent concrete performance despite challenging weather, allowing operational areas to reopen rapidly without disrupting flight schedules. Gill Civil's technical oversight ensured specification compliance throughout, providing a durable, fit-for-purpose solution for ongoing AGL realignment and upgrade works across Manchester Airport and East Midlands Airport.

