

Heathrow T5

West London 2003



Client	BAA
Contractor	Laing O'Rourke
Consultant	Arup

During the build of T5 at Heathrow airport, a new perimeter vehicle access route had to be built. The Western perimeter road also needed access to the main entry point off the M25. This was achieved by dropping the perimeter road below the access road and forming Terminal 5 roundabout above.

The most suitable and aesthetic way of achieving the roundabout with the perimeter road below was to install a cut and cover tunnel with a Reinforced Earth precast arch system.

The arch itself comprised a standard twin section that met at the crown. The arch however represented a significant challenge in that its height of only 7.4m was relatively low compared to the span of 17.4m.

This was successfully achieved using only 350mm thick precast arch segments over its entire length of 130m. The portals to the tunnel were formed with oblique ends to match the steep slope sides.