

COMMONWEALTH LAW COURTS



The underground rail loop runs below Latrobe Street and the tunnels of Flagstaff Station are immediately adjacent to the Latrobe Street frontage of the site. An important design structural criterion was to construct the foundation of the building so as to avoid significantly altering the existing stress conditions in the ground beside and above the tunnels. The Law Courts building abuts two sides of the Flagstaff Station booking hall and it was necessary to construct a 1500mm diameter bored pile, supporting a major column of the new building, through the machine room of the four escalators serving the underground station.

Location:
Melbourne CBD, Victoria

Client:
Attorney-General's Department /
Walter Construction Group

Architect:
Hassell Architects

Construction Cost:
\$108.4 million

The primary structure is entirely of cast-in-situ concrete floors, walls and columns. The floors are a banded slab system with the band beams cantilevering 3.0 metres out to the façade and 3.6m to the atrium space. The band beams were post-tensioned, mainly to control deflection of the perimeter cantilevers.

The seismic analysis and design was particularly complex because of the non-symmetry of the floor plan and the variation of the structure over the height of the building.

Where off-from finishes were required for external columns, white concrete and Class 1 formwork were specified. Polished precast concrete panels, both loadbearing and non-loadbearing, were used extensively in the external facade.

At each end of the atrium space, large windows up to 30 metres tall are framed in structural steel.

