

## Festival Plaza

Adelaide, SA

Successfully delivered piling through a live, five-level basement carpark while maintaining public access and traffic flow.



### The project

At Festival Plaza in the heart of Adelaide, Keller was engaged to install 120MN mega-column piles for the city's first skyscraper. Our scope involved cased bored piling through an existing basement carpark, transforming a live structure into the foundation of a landmark development.

# The challenge

Piling through five levels of a live carpark, in close proximity to people, traffic, and a heritage-listed building, presented significant challenges. The existing slab required a reinforced temporary platform to safely support the piling rig and crane. The rig’s reach further complicated operations, requiring a tailored engineering approach in consultation with the rig’s manufacturer. High groundwater levels also demanded a comprehensive dewatering solution to manage water ingress during piling operations. Steel casings were delivered in 12-metre lengths and needed to be welded together before installation. Spoil removal also required a bespoke approach, as dump trucks couldn’t access the area.

# The solution

We collaborated with a specialist subcontractor to design custom guide frames, ensuring precise casing positioning. Working closely with the rig’s manufacturer, we safely extended the rig’s operational limits to achieve the required reach. To control groundwater, we welded a window in the casing to allow overflow water to be safely directed and pumped out. Spoil removal was managed by using an excavator to load bins, which were then lifted by crane and emptied into waiting dump trucks outside the structure. The project leveraged our proven capability from previous foundation and retention works on site. Continuous monitoring of surrounding structures and strict safety protocols safeguarded both the public and workforce throughout delivery.

# Project facts

## Owner(s)

Walker Corporation

## Keller business unit(s)

Keller Australia

## Main contractor(s)

Delta Group

## Solutions

Heavy foundations

## Markets

Commercial

## Techniques

Bored piles