



## POWERHOUSE PARRAMATTA FACTSHEET

### FLOODING

The site of Powerhouse Parramatta borders the Parramatta River, and is located within the Upper Parramatta River Catchment. This means the site experiences mainstream flooding from the Parramatta River and rainfall runoff during heavy rain events.

While the river foreshore and public spaces would be prone to flooding, there is no increased risk to public safety for people within the building in the event of a significant storm or flooding.

**This factsheet explores the risk and management of flooding on the project site.**

## **EXISTING SITE CONDITIONS**

The existing multi-storey car park sits within the floodplain of Parramatta River and is subjected to inundation of floodwaters during river flood events. This car park is accessible to the public.

The site also experiences flooding from the Parramatta CBD Catchment that joins Phillip Street and subsequently flows into Dirrabarri Lane to release flood water into the Parramatta River. This is known as 'overland' flooding.

## **PUBLIC SAFETY AND PROTECTION OF THE COLLECTION**

Flood risk has been a key consideration throughout the design development process, in line with Parramatta Council's Development Control Plan requirements for Parramatta CBD buildings.

Revised flood modelling and analysis confirms the Powerhouse Parramatta will be a safe building for people to visit and for the Collection to be exhibited.

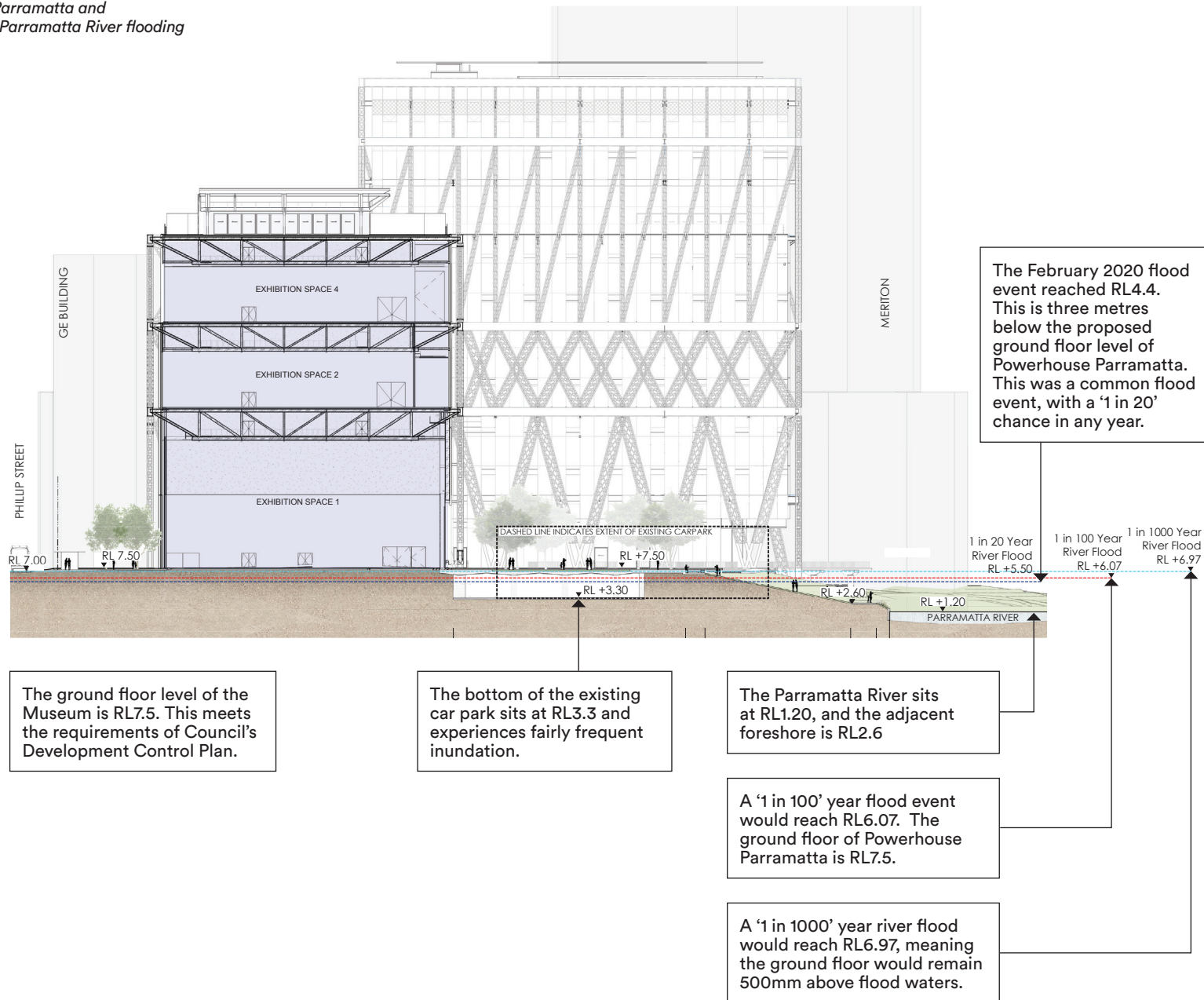
It is unlikely that flood waters would enter the ground floor of the Museum.

## **DESIGNING FOR FLOOD RESILIENCE**

Powerhouse Parramatta has been designed to withstand large and rare flood events.

Powerhouse Parramatta exceeds the City of Parramatta Council requirement to be above the '1 in 100 year' flood level. For example, even in a '1 in 1000' year river flood, the ground floor would remain 500mm (half a metre) above flood waters. The majority (80%) of exhibition spaces as well as the emergency power supplies are well above any possible flood levels.

Cross section of Powerhouse Parramatta and approximate flood levels from Parramatta River flooding



## RIVERFRONT SPACES

The riverfront includes an undercroft space which is part of the flood mitigation response. The space has been designed to mitigate impacts to the site, during infrequent times of river flooding by conveying flood waters similar to how the existing car park experiences inundation currently.

The undercroft does not form part of the Museum. It will be partially concealed with a sloped lawn which creates seamless transition between the Powerhouse Parramatta's outdoor terrace and the riverfront. It also allows the Civic Link to extend northward, providing direct access to the river.

The space will be secure and not open to the public. In future, there will be opportunities to use this area for programmed events, similar to events managed by City of Parramatta on the riverbank.



*The undercroft space will be partially concealed with a grassed embankment. The only public access will be during scheduled events.*

## FLOOD MANAGEMENT

As part of the flood resilience for the project, a flood management strategy will be developed and implemented when Powerhouse Parramatta is open and operating.

This will include a detailed emergency management plan which is a requirement for any building on the Parramatta River.

The plan will outline evacuation and emergency procedures in the event of a flood.

*Artist impression of  
Powerhouse Parramatta next to the river*

