DEMEX
Demolition | Excavation | Remediation

SURFERS ROYALE

MARCH 2022 - JULY 2022
CLIENT: PARITY PROPERTY
CONTRACT VALUE: $2.73 M

Surfers Royale was an iconic four star Gold Coast residential and holiday apartment block located on prime real estate overlooking the pristine beachfront at Surfers Paradise. The block was demolished to make way for a new highrise tower as a development by Parity Property, a privately owned property development business. DEMEX was engaged as principal contractor to undertake all demolition of the 15 storey building, including a soft strip, deconstruction, and removal of asbestos material removal.

PROJECT HIGHLIGHTS

- Principal contractor responsible for managing multiple subcontractors of up to 20-30 workers at any one time.
- Successful delivery of top down deconstruction method.
- Successfully managed project challenges, including traffic control, project manning during a resurgent COVID and flu outbreak, and hazmat removal.
- Detailed engineering for propping and scaffolding, including cantilevered scaffolding on one side of building.
- Zero health, safety, and environmental incidents and accommodated regular WorkSafe personnel onsite during project.
- Managed vibration from works and avoided disturbance to surrounding buildings and residents.
- Delivered on a busy Gold Coast thoroughfare with effective traffic management plan.
- Project delivered ahead of schedule.

PROJECT METHODOLOGY

A top down methodology was implemented at Surfers Royale; a first for the DEMEX teaAs a result of the exemplary work demonstrated on the project, DEMEX was able to maintain its good relationship with WorkSafe Queensland, and more importantly with the client.

Prior to commencing works, detailed engineering and demolition planning was undertaken by the team. The building's location on a busy Surfers Paradise thoroughfare, which runs parallel to the water, meant that every eventuality needed to be considered. Amongst the many considerations, planning accounted for vibration, dust, traffic management, and public interface to ensure compliance with all regulations and to minimise disturbance to local residents

Deconstruction commenced with a significant soft strip out, that included removal of all furnishings, fixtures, and fittings, and allowed good clean material to be obtained for disposal. The soft strip was quickly followed by hazardous material removal, including both A-class and B-class asbestos.

6,749
tonnes of concrete

212
tonnes of scrap steel & metals recycled

266
tonnes of soil remediated

- 2 x 50 tonne high reach excavator
- 1 x 30, 1 x 35, tonne excavators
- 1.6 mini excavator
- 5 and 8 tonne excavators
- 2 mini bobcats for internal works

100%
Local business

96%
waste recycled

On completion of all hazmat removal, demolition of the upper storeys (floors eight to fifteen) and lift shaft began. These initial demolition works were conducted using three mini excavators that were loaded onto the rooftop with a 220T mobile crane and worked down the building in accordance with the demolition plan. Stockpiled material from each floor was removed to avoid overloading suspended slabs. Scaffolders simultaneously removed scaffolding as each floor was completed. Material from the building was fed to smaller support excavators for further processing, allowing steel reinforcing and concrete to be separated, with the former disposed of at a scrap metal facility, and the concrete crushed onsite was sent to a local concrete recycling facility for further processing. Overall, the approach to waste management onsite resulted in recycling of approximately 80 percent of materials.

Once the building was demolished to level seven, two 50 tonne high reach excavators commenced work on the remainder of the structure.

While the original plan made allowance for a single high reach excavator, the project team calculated an accelerated delivery program using two high reach machines and this was approved by the client.

The revised approach resulted in a two week reduction in the overall program.

To ensure work was conducted safely at heights, scaffolding was erected on all elevations on the building's south, east, and west profiles. A cantilevered scaffold was erected on the building's north face, located on the Markwell Street cul-de-sac, a cost-saving measure taken to allow high reach access during demolition. Asbestos was a significant hazard on the project resulting in a significant hazmat remediation. All 45 units had class A asbestos and significant amounts of bonded material.

Asbestos was contained in the black putty used in all aluminium window frames. The project team was successful in identifying and removing all asbestos without any incident, a testament to their planning and professionalism.