



WACOL LOGISTICS HUB

MAR 2021 - AUG 2022
LOGOS PROPERTY GROUP
\$14.2 M

DEMEX was engaged by Logos Property Group to undertake the Wacol Logistics Hub project, commencing significant demolition and civil works as principal contractor in March 2021. Spanning an area more than 18 hectares, the project site is located in the outer western reaches of Brisbane. The site was covered predominantly in hardstand storage areas and had several smaller buildings scattered across it. Additionally, a small concrete batching plant owned by a separate company and located on the eastern boundary of the site, remained operational for the duration of the project. DEMEX's scope of works included demolition of all above ground structures, removal of hazardous materials from site, and civil works.

PROJECT METHODOLOGY

Through competitive tender process, DEMEX was awarded demolition of the project. Based on performance, safety management and a collaborative process, DEMEX was awarded the bulk earthworks and trunk stormwater works. Collaboration with the client, DEMEX assisted in derisking the project by:

- Delivering separable portions of the project to allow building to commence and continue progressively while other onsite works were undertaken.
- Securing over 300,000m³ of imported specified (tunnel boring) material.

- Addressing subgrade improvements, including management of moisture/rainfall, which was challenging given the extreme weather events of late 2021 and Q1 of 2022 including a major flood event.

PROJECT HIGHLIGHTS

- Principal contractor responsible for all site works.
- Successful delivery of decommissioning services and demolition of existing manufacturing facility (32,000 GFA and 160,000m² concrete hardstand).
- Bulk earthworks included sediment and erosion control, as well as significant subgrade improvement works.
- Import of 300,000m³ of virgin tunnel boring material (TBM), placement, compaction, and creation of building pads.
- Bulk earthworks for internal road network to high tolerances.
- Undertook trunk stormwater works, including installation of stormwater treatment devices.
- 70 percent of site development completed with recycled materials and 99 percent of materials from site were recycled.





CONCRETE RECYCLED	70,000 TONNES
SCRAP STEEL RECYCLED	1,200 TONNES
TIMBER RECYCLED	50 TONNES
STEEL AND CONCRETE RECYCLED	100%
ALL PROJECT MATERIALS RECYCLES	99%

Plant and equipment were brought in to demolish the structures on site. During this process materials were sorted into construction and demolition (C&D) waste, timbers, steel, concrete, and hazardous materials. Once structures were removed to slab level, excavators broke up the concrete and stripped steel. All concrete from stages 1 and 2 was processed at site and then recycled back into the site for subgrade improvement.

While the project site was flat, its location in a swampland with the potential to be impacted by flooding meant the required build-up of 1.8 metres would be significant if issues around concrete breakage were to be avoided in future. This had occurred previously and was due in large part to the ground on which the site was built. To address the wet and permeable ground conditions, the project team undertook extensive soft spot remediation, ultimately totaling 22,400m².

In terms of innovation, the fortuitous alignment of the project with the Brisbane tunnel projects made it possible to secure virgin tunnel boring material and immediately repurpose it without the need for it to be stockpiled elsewhere. The TBM was comprised of fines ranging from 2 mm to 150 mm, a composition that is excellent for bridging the natural ground conditions, which were very wet and unstable on the project site. From natural ground to finished bulk earthworks level, the ground was raised 1.8 metres, completing works in 300 mm increments to allow for required compaction.

The team's recycling efforts on this project were outstanding. Over 70 percent of the site's development was completed using recycled materials, and 99 percent of all materials from the site were recycled, including 70,000 tonnes of concrete, 1,200 tonnes of steel, and approximately 50 tonnes of timber.