CASE STUDY #22-109 Cardijn College Marcellin Campus Demolition and Civil





Date:	May – August 2023
Duration:	4 months
Value:	\$0.4M
Project Name:	Cardijn College Marcellin Campus Demolition and Civil
Project Address:	Mander Road Christie Downs
Project Scope:	Demolition and Civil Works

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We're thrilled with Kalkan's work on our project. Their professionalism, adaptability, and commitment to safety were outstanding. The results exceeded our expectations, and we highly recommend their services.

THE CLIENT

PROJECT OVERVIEW

The project involves demolishing existing welding bays and industrial machine rooms, including suspended slabs over voids exceeding 1.8 meters. Furthermore, it includes stripping out existing rooms, removing walls, ceilings, cladding, carpet, tiles, and vinyl. The existing asphalt courtyard will be demolished. Excavation work includes the construction of a 2-meter deep stormwater infrastructure and an underground stormwater detention tank, along with the preparation of a new raft slab within the courtyard between two buildings, which entails detailed excavation of footings.

SCOPE OF WORKS

Raft Slab Construction:

Kalkan excavated and prepared road base material to a tolerance of +0mm & -10mm for a new raft slab. We also executed the detailed footings excavation in a neatly manner.

Footing Contrusction:

Kalkan excavated footings in the areas where new structures were to be built.

Demolition:

Kalkan first demolished the existing welding bays, internal and external slabs, walls, and ceilings. Heavy machinery was used for the demolition, and safety and neighboring property disruption were taken into account.

Stormwater Construction:

Kalkan installed a new stormwater system, which included excavating and installing two 3 tonne x 2m deep concrete pits to collect and store rainwater. The stormwater line was also constructed to carry rainwater away from the site. The works also involved, excavation and installation of underground stormwater detention tank under a timber decking.

Ground Preparation:

Kalkan then trimmed and compacted the subgrades to meet AS3798 standards, excavated the ground for footings, and prepared pads for new raft slabs within the courtyard.

CHALLENGES AND SOLUTIONS:

Working in a live school with students present, noise, vibration, traffic control.

Working in a courtyard between 2 buildings.

Demolition of suspended slabs and beams over 1.8m voids had to be meticulous in machine, definitely the greatest challenge working in an enclosed room (with students next door) jack hammering and smashing our slabs and beams with extraction fans and CO2 monitors on a 'suspended' slab with 1.6T mini excavator.



CONCLUSION

The completion of this project by Kalkan represents a resounding success. Despite the challenges of working in a live school environment and conducting precise demolitions in enclosed spaces, our team's adaptability and commitment to safety prevailed. We executed the excavation, raft slab construction, and stormwater infrastructure installation with precision and in accordance with industry standards. This \$0.4 million project showcases Kalkan's unwavering dedication to excellence and our ability to overcome obstacles to deliver outstanding results.



Civil Engineering Demolition Land Division Underground Infrastructure

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