

Project Profile Parafield Gardens R-7 School STEM Works



Client	Parafield Gardens R-7 School
Location	Adelaide, South Australia
Duration	February 2018 to August 2018
Contract	Lump Sum Construct Only
Cost	\$0.7 million

Project Overview

Parafield Gardens R7 School was granted funding by the State Government as part of the STEM schools' package which included \$250 million of upgrades across 139 schools across South Australia.

Scope of Work

McMahon Services delivered the Parafield R-7 School works that comprised of a multipurpose centre, complete with two new classrooms, a science, technology, engineering and mathematics (STEM) think tank room, a multi-media room, an undercover outdoor learning area and a refurbished teacher's office — the latter providing the school with an open STEM facility ideal for collaborative learning, problem solving and inquiry.

The new STEM facility is a large open space which includes two kitchenettes that can be utilised for breakfast club, food technology lessons or repurposed as science labs.

The scope of works included a complete refurbishment of the existing resource centre and associated outdoor learning area.

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Parafield Gardens R-7 School STEM Works | Page 1



McMahon Services stripped the existing building and installed new finishes throughout. Other works included asbestos removal, structural steel, paving, floor covering, paint, partitions, data and electrical upgrades, solar installation, mechanical upgrades, hydraulic upgrades and new joinery throughout.

A key design element for the building was the installation of a 6m wide bi-fold aluminium door. The door connects the outdoor and indoor learning environments and also offers large amounts of natural light.

McMahon Services delivered this project while managing a larger build at the neighbouring Parafield Gardens High School. This allowed McMahon Services to offer both schools a discounted onsite cost by managing both project from a combined compound area located in the high school.

Project Challenges

A key challenge was providing a safe access route for all site personnel and equipment leading from the high school compound area to the R7 library. This was achieved by removing the existing fixed perimeter fencing, installing 200m of temporary fencing along a laneway between the two sites and managing the traffic in accordance with the project site management plan.

Following a request by the client, the project delivery team were directed to refurbish two additional areas within the building while half way through our original contracted works. This included a new teacher's office and store room. A key challenge was to undertake these works while also completing trades works in other areas of the project. Our project delivery team were able to mobilise additional resources and deliver these works within our original construction program, allowing the school to reoccupy the building with no delay.

A key challenge was the installation of new power and data outlets within the building. The building had an existing plasterboard ceiling which concealed the original straw ceiling. As the plasterboard ceiling was previously installed on top hats, there was no cavity to conceal the new power and data cabling. The team worked closely with our project electrician to conceal a large quantity of conduits above the existing ductwork which avoided unsightly cabling.

Safety Performance

One safety challenge related to the installation of a 9m long structural steel beam within the resource centre. The beam needed to be installed above existing ductwork and would have been challenging to lift within a confined area. The project team worked closely with the steel fabricator and structural engineer to re-design the steel beam to incorporate a splice connection. In doing so the project team were able to position two smaller beams with a reduced weight and increased manoeuvrability.

No safety or environmental incidents occurred on site.

Indigenous Participation

McMahon Services engaged a site supervisor from Intract to manage onsite delivery of trades, subcontractors and suppliers, site inductions, work permits, general carpentry, supervision and management of job safety analysis and safe work method statements.





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Parafield Gardens R-7 School STEM Works | Page 2





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Parafield Gardens R-7 School STEM Works | Page 3