2015 Exhibition of School Planning and Architecture

The Elizabeth Blackburn School of Sciences

Category: New Construction

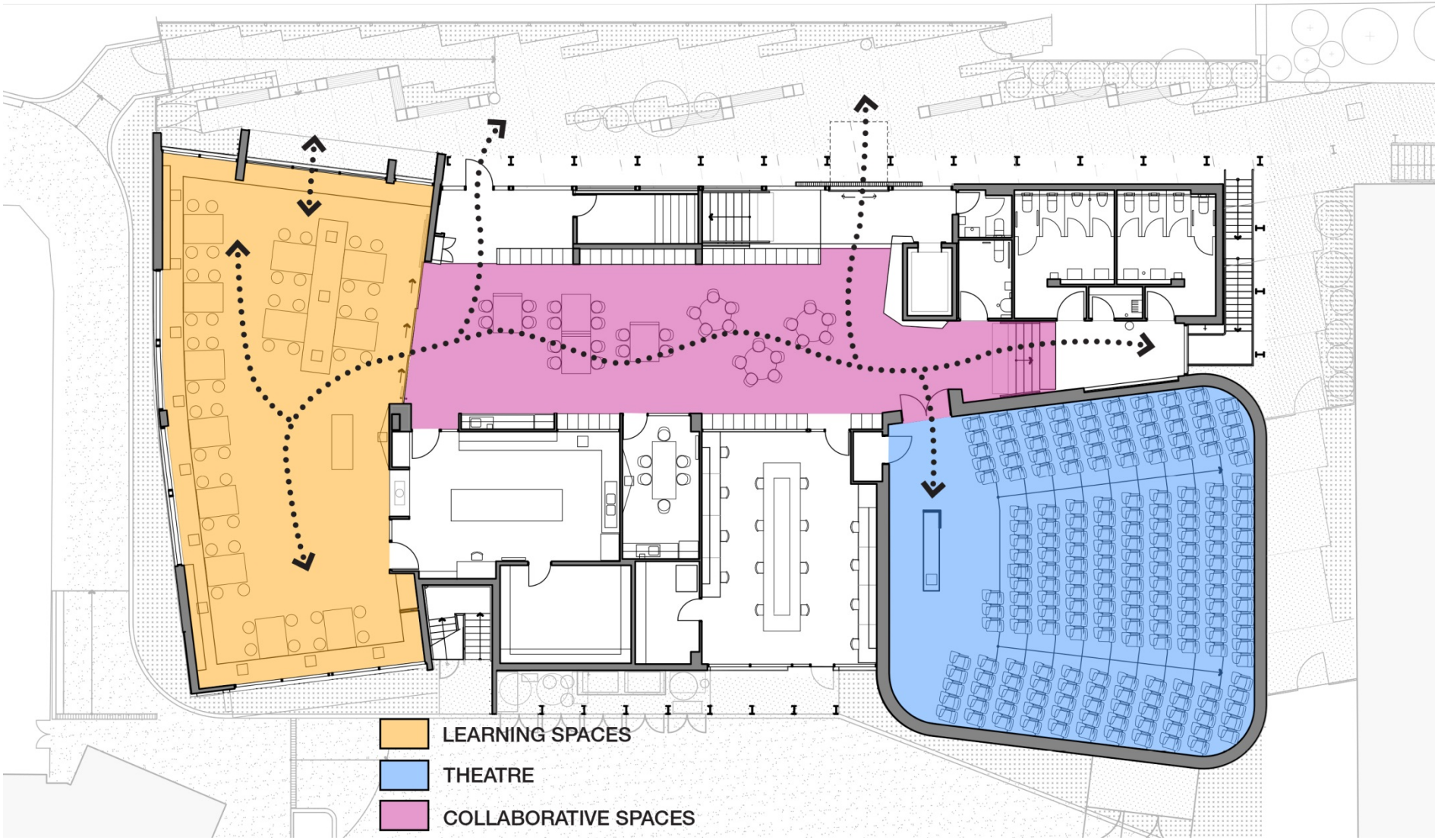
Parkville

Victoria, Australia

The Elizabeth Blackburn School of Sciences

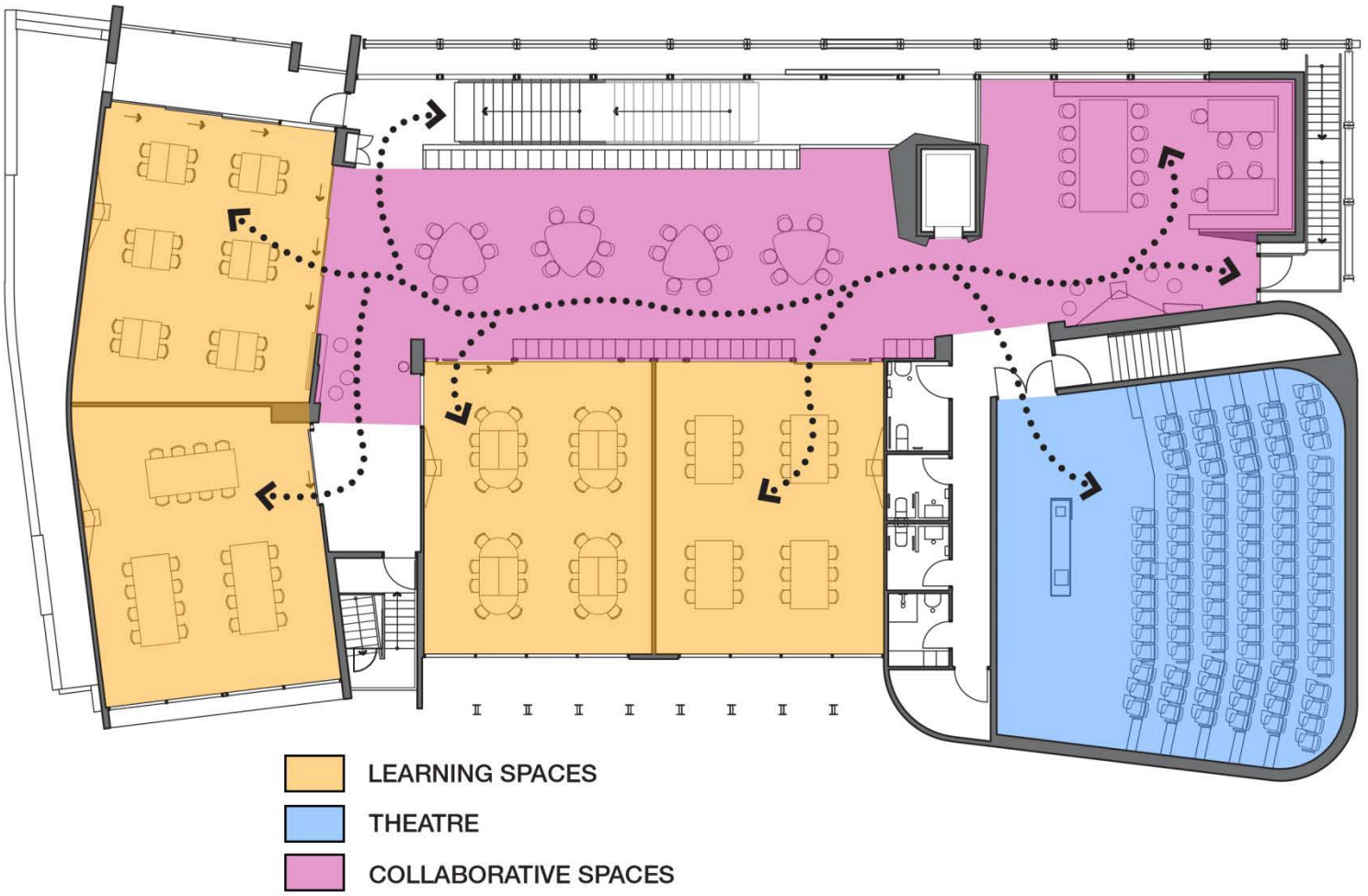
The Elizabeth Blackburn School of Sciences

Main Diagram – Ground Floor



The Elizabeth Blackburn School of Sciences

Main Diagram – Ground Floor



Front Facade & Heritage Wall

Community Environment: The site is located on the fringe of the Melbourne CBD and is in close proximity to heritage listed buildings in Parkville, therefore great consideration was given to the buildings façade to ensure acceptance from the greater community and harmony between the building and its surrounds.The facility was designed to respond to the heritage listed University High School, Northern Market Reserve Wall and Parkville Heritage Precinct and is a physical reflection of the links between University High School, Bio21 Institute and the University of Melbourne.

Main Stairway

Community Environment: The Elizabeth Blackburn School of Sciences is a result of a collaborative partnership between The University High School (UHS), Bio21 Institute, DEECD and The University of Melbourne (UoM). Being a purpose built facility, it brings together some of the brightest young minds, scientists and science educators in one of the premier biomedical and science precincts.

Science Laboratory

Learning Environment: Through extensive analysis of UHS's timetabling and curriculum it was found that individual labs for biology, chemistry and physics were not required. As a result the facility features an experimental learning laboratory accommodating the three disciplines which encourages student exploration and peer driven learning. The clean, professional aesthetic within the lab supports collaborative student investigation in a tertiary style environment.

Lecture Theatre

Learning Environment: Lecture theatres enable the equivalent of four to eight classes to come together in cohorts of 100 or 200 students for demonstrations and presentations, dramatically reducing the teachers didactic teaching time and increasing the amount of teacher and student interaction. Class spaces shape a tertiary-style learning environment; and break-out and collaborative spaces provide a relaxed and informal setting for peer driven, individual learning and encourage group discussions

Collaborative Learning Space

Physical Environment: The facility captures the advantage of the site's northerly aspect through a void space that connects the ground and first floors to ensure communal spaces are awash with natural light. Exterior shading system and louves to internal walls allow for passive ventilation and controlled seasonal shading. Minimal additional artificial heating and cooling is required throughout the building due to the integration of a direct geothermal energy system.

Outdoor Learning Space

Physical Environment: Set at ground level, the experimental learning laboratory features generous sections of glazing to allow passive surveillance externally and reveal the purpose of the school within. The physical environment was designed to capture a sense of learning excellence anchored in the sciences.

Collaborative Space

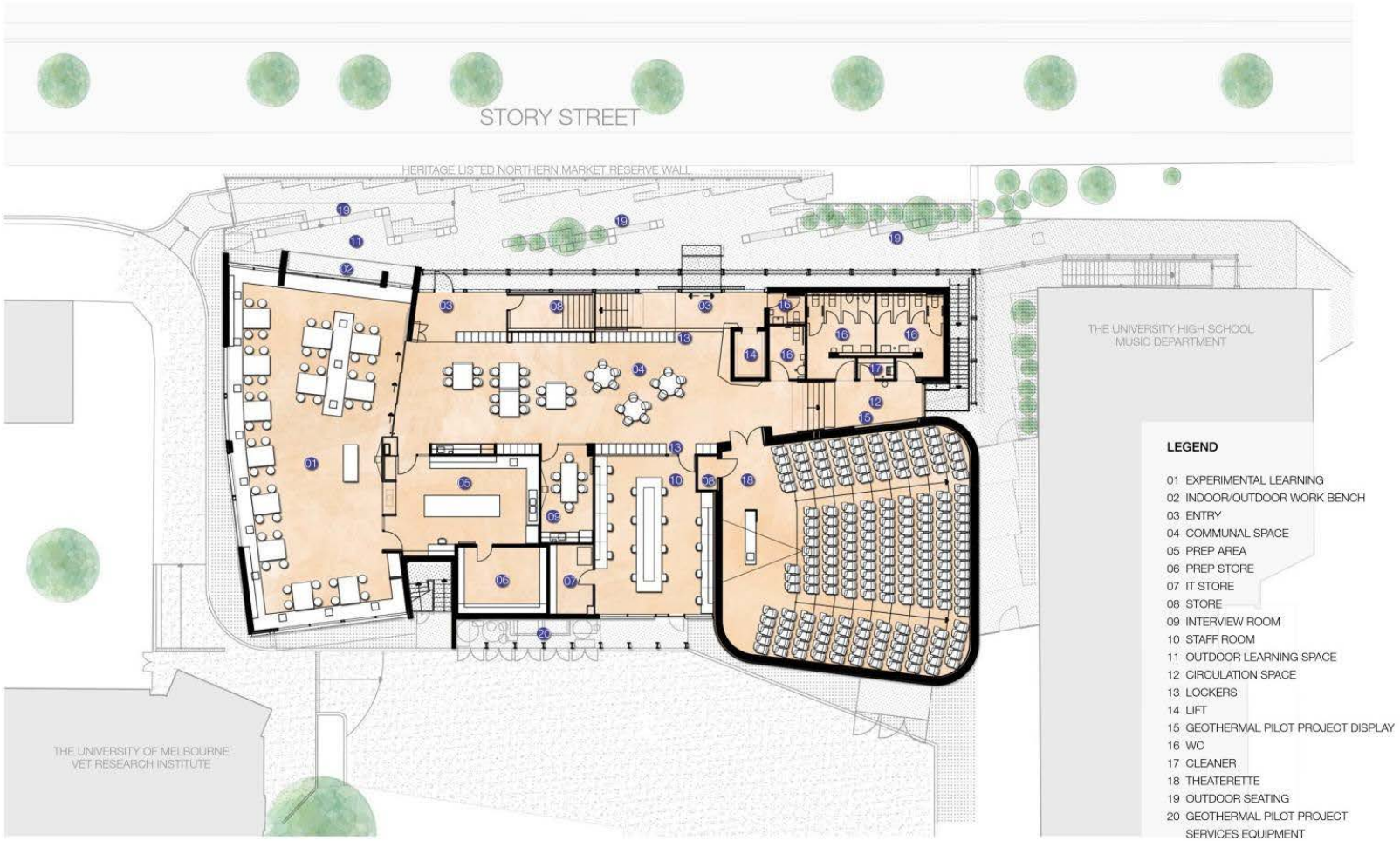
Planning Process: Our team worked collaboratively with the project stake holders from the initiation of the project through to occupation to ensure the facility reflected the vision, requirements and values of all parties, from the built aesthetic and planning of the learning spaces, to the furniture selection and joinery detailing.

Exterior Façade

Planning Process: A key element of the success of this project was establishing strong working relationships with all stakeholders from the outset, allowing us to ensure that heritage requirements were met, the geothermal energy system was well integrated in the program, and the learning spaces really captured and supported the School's pedagogical vision.

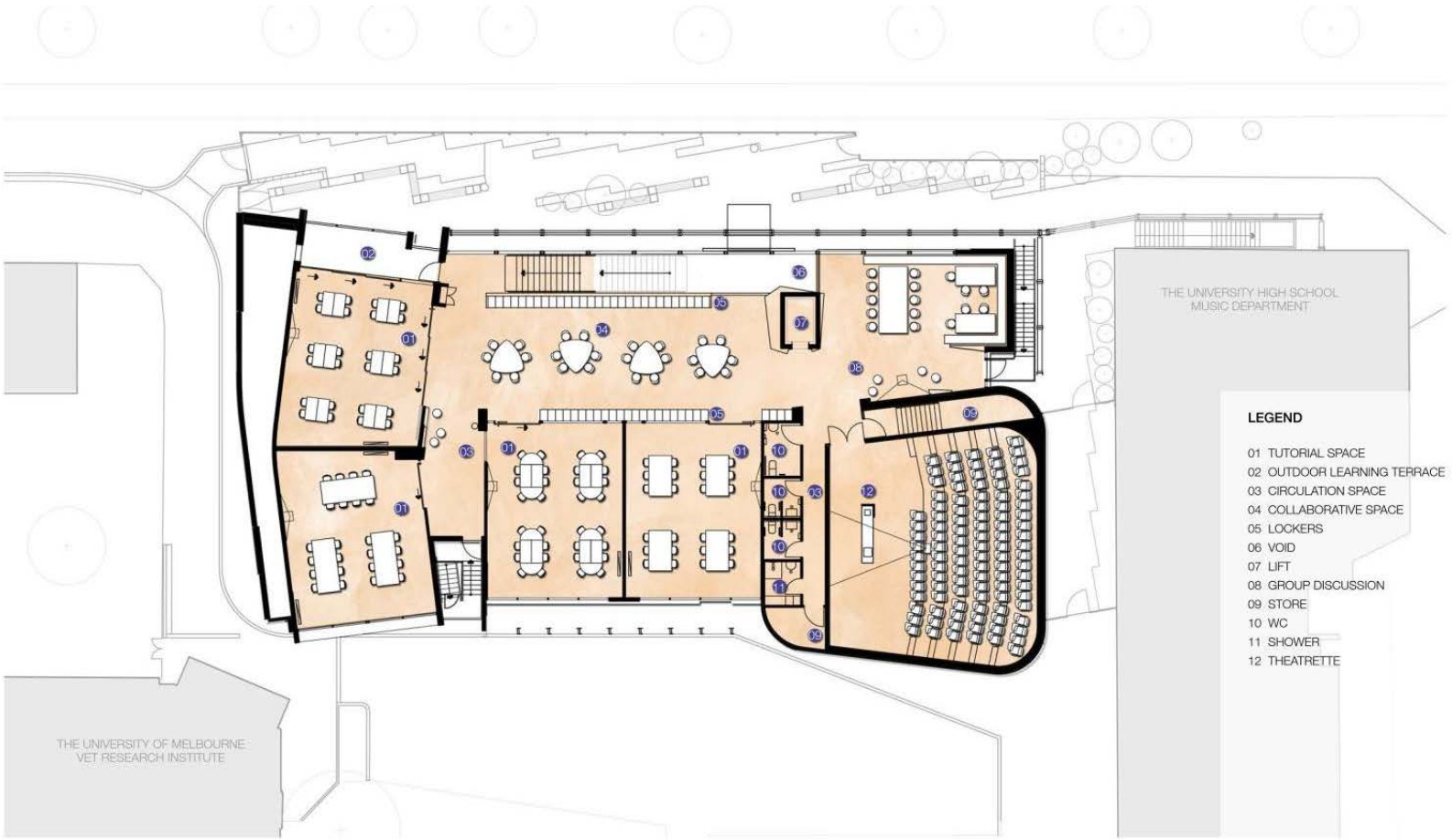
Floor Plan

Ground Floor Plan



Floor Plan

First Floor Plan



Exhibition of School Planning and Architecture Project Data

Submitting Firm :	Clarke Hopkins Clarke Architects
Project Role	Architect
Project Contact	Wayne Stephens
Title	Partner
Address	115 Sackville Street
City, State or Province, Country	Collingwood, Victoria, Australia
Phone	+61 3 9419 4340

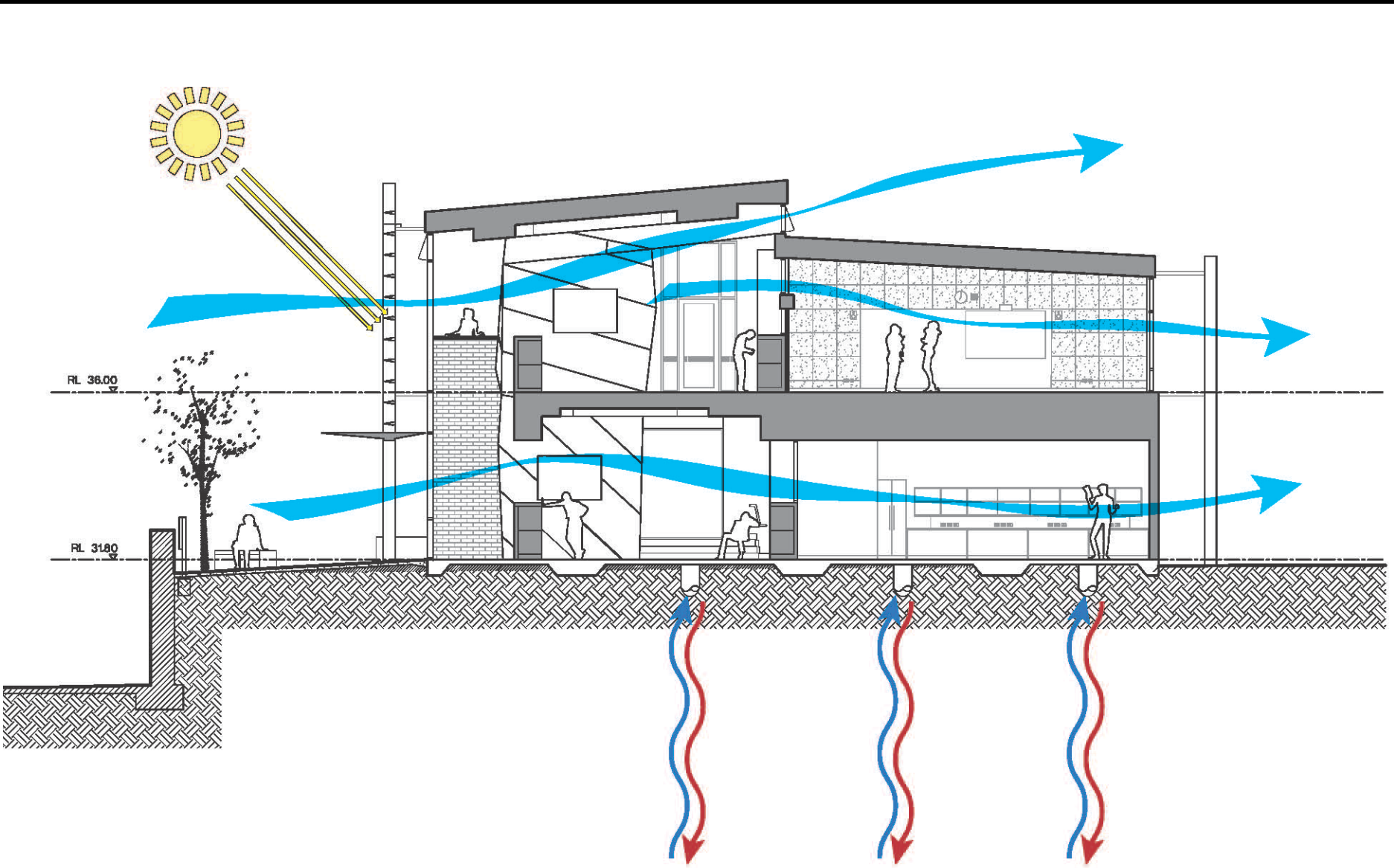
Construction Firm:	2Construct
Project Role	Builder
Project Contact	Peter Rahiley
Title	Director
Address	36 Carpenter Street
City, State or Province, Country	Brighton, Victoria, Australia
Phone	+61 3 9519 0333

Exhibition of School Planning and Architecture Project Details

Project Name	Elizabeth Blackburn School of Sciences
City	Melbourne
State	Victoria
District Name	NA
Supt/President	NA
Occupancy Date	February 2014
Grades Housed	11 & 12
Capacity(Students)	200
Site Size (acres)	.25 acre
Gross Area (sq. ft.)	4620 sq.ft
Per Occupant(pupil)	23.1 sq.ft (gross)
gross/net please indicate	
Design and Build?	Yes
If yes, Total Cost:	AUD$7,500,00.00
Includes:	Building, fittings, fixtures, landscaping, furniture, consultants fees, geothermal heat exchange pilot project
If no,	
Site Development:	
Building Construction:	
Fixed Equipment:	
Other:	
Total:	AUD$7,500,000.00

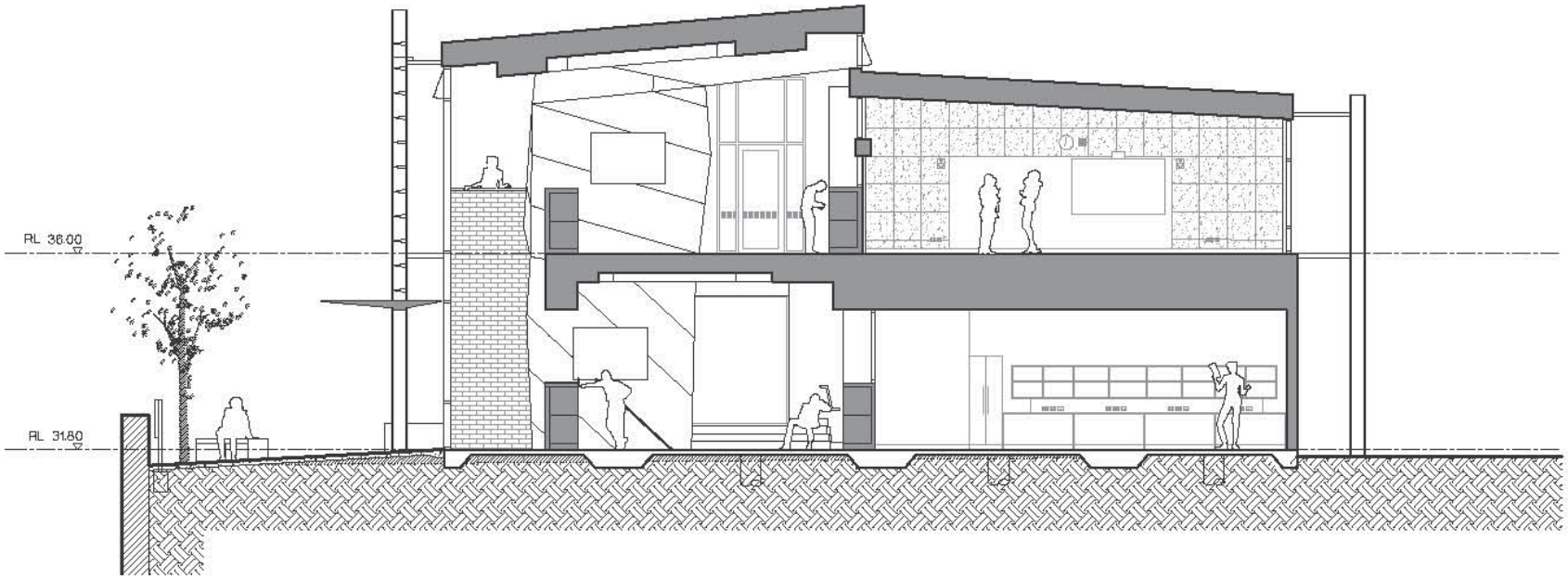
Supporting Images

ESD Diagram



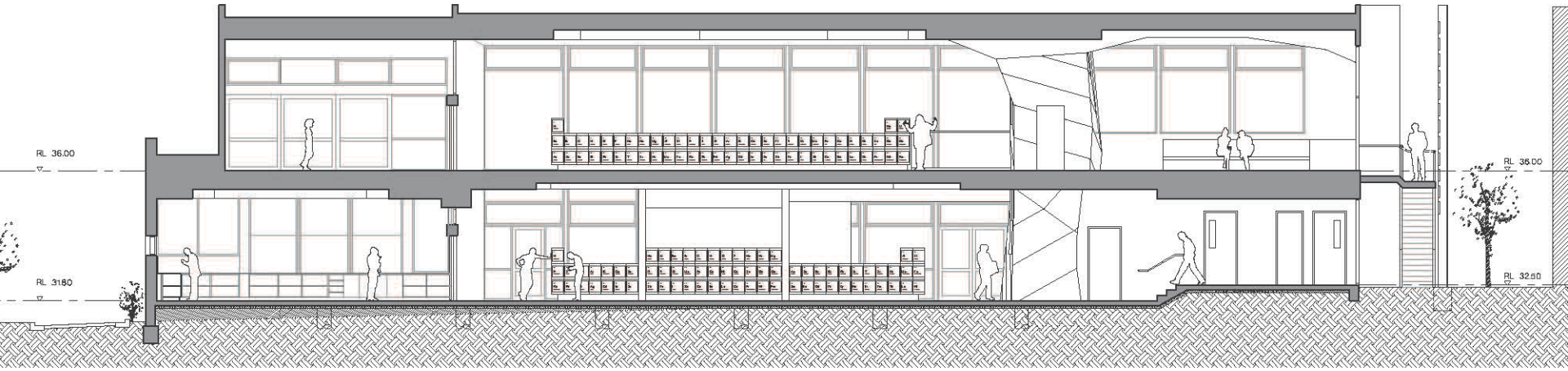
Supporting Images

North-South Section



Supporting Images

East-West Section – Through Collaborative Spaces



Supporting Images

East-West Section – Through Theatre Spaces