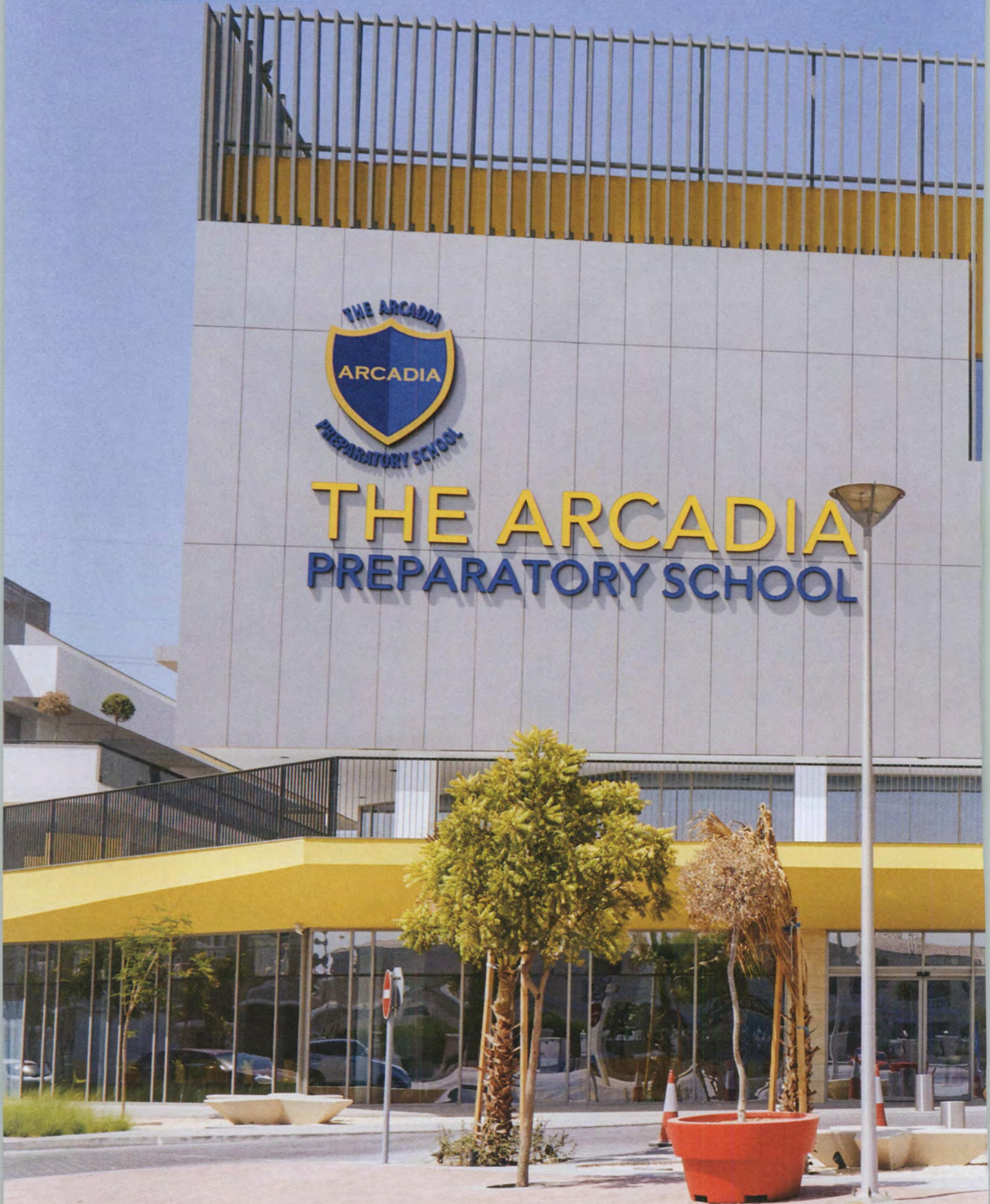




THE ARCADIA PREPARATORY SCHOOL



The Arcadia Preparatory School turns a typical school design on its head, with MEP in the basement and a football pitch on the roof. Nick Ames learns more

SCHOOL DESIGN

THE UPSIDE DOWN SCHOOL

A revolutionary approach was required by architects tasked with creating a school on a small plot of land in a residential area of Dubai. So, hitting upon an innovative way to make the most of the floor space available, they turned the building upside-down.

In Arcadia Preparatory School, by Godwin Austen Johnson (GAJ), the MEP is housed in the basement while on top of the structure sit a football pitch and swimming pool.

The school currently accommodates around 100 pupils but will eventually house up to 750 in the age range of three years up until 11.

Architect Jason Burnside says: "We had just a small plot to work with – around 6,000m². But we wanted to make the most of it."

So the design team put the plumbing, the electrics and all the other vital functions which make the school work at the base of the structure – having to drain a high water table to do so. The result is a compact educational facility which achieved both the design and practical aims of its client and operators.

The school's principal Graham Beale says he was clear in what he required from the design team. He explains: "What we wanted to reflect was three aspects which reflect the school and its philosophy: these are light, transparency and openness. In this, GAJ has succeeded with a design on a remarkably complex site. The team achieved what we originally envisaged."

Architect Raina Vegas said the GAJ team was fully aware of the challenges they were undertaking.

"What we wanted to do was ensure that our design matched the vision of the client," she said.

Natural rubber and hardwoods are principle flooring and surface materials to ensure minimal volatile organic compounds while bright colours ensure a vibrant ambience – although these are carefully used in order to prevent



↑ The design team from Godwin Austen Johnson.



↑ The running track, swimming pool, and other sports facilities are located on the roof.



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– Jason Burnside

overstimulation of children. Ceilings are acoustically treated and the building qualifies for LEED standard.

A performance space with a sprung floor can be used for sports, including cricket, football, tennis and basketball. It even boasts an electronic scoreboard. The room can also be converted to a theatre with retractable seating and a stage, while lighting can be controlled from a room overlooking the arena. Burnside says: “Again the intention was to get as much out of the space as possible.”

Classrooms look out onto activity areas which are in two courtyards. Again bright colours are used and there are themed play areas which include simple mechanisms to illustrate water flow and straightforward physics.

Classrooms include video screens and the school has media rooms and music facilities with a library also a focal point.

There is also a medical facility, a new requirement under UAE regulations



↑ Mohan Valrani.



↑ Classrooms look out onto activity areas in two courtyards.

which is permanently staffed by nurse Binee Mathew.

A major feature of the “upside-down school” are the sports facilities on the roof, overlooking the villas of Jumeirah Village Triangle.

The 20m learner swimming pool was created in situ with stairs leading up to a raised concrete podium which was hollowed out to allow for the water.

The running track is not a full 100m, as because of the age of the pupils who will be using it, the designers felt a shorter distance was appropriate.

“It’s for egg and spoon races, rather than 100m,” notes Beale.



↑ Graham Beale.

The football pitch at the very top of the four-storey structure is, again, not full sized – but it will have netting to prevent stray shots from raining down on residences and streets below.

Arcadia will also have a companion school on an adjacent plot of land which will be aimed at an older intake of children so its pupils will, in the up-coming years, have access to a wider range of sports facilities.

Businessman Mohan Valrani is the man behind the project as part of his drive to increase educational opportunities in the UAE. Arcadia is just one of the projects he has instigated.

Previously he was a founding member and a trustee of the Indian High School before being appointed honorary chairman in 2009.

Valrani says: “Education in all forms is a never ending investment we all need to consider regardless of our means or age.

“I told the GAJ team that I felt transparency was a vital part of schooling and I wanted the building to reflect that. But I said ‘on balance I’ll leave it to you’. So the credit goes to GAJ. The architects captured my thought process and vision, then turned it into a design.” 