

Hillhead Primary School

The building explores the idea of making a new primary school in a conservation area in the west end of Glasgow. The issues surrounding the project are how do we build in the city where we have two distinctly different contexts; the 'urban' and the 'rural'. The nature of space and education are also critical.



PROJECT DESCRIPTION

Title
Hillhead Primary School

Submission No.
02

Authors/Creators
Ian Alexander / Henry McKeown

The building was commissioned by Glasgow City Council via a design competition. JM Architects won the competition against a range of high profile architectural practices.

The building was designed to have children from four existing primary schools in Glasgow's west end with a role of 530 pupils.

The site for the new building is on Gibson Street, a principal route through the west end and university area and also occupying a long thin territory inside Kelvingrove park, with the River Kelvin as a natural boundary.

The context and location of the building was both interesting and difficult.

The new Hillhead Primary School has been created to bring together 4 existing primary schools and 2 nursery schools in Hillhead in the West End of Glasgow. All of these schools were Victorian buildings on tight sites within constricted playgrounds and all had declining pupil numbers.



View of building from Gibson Street, of the 'urban box', 'civic square' and clock tower

PROJECT DESCRIPTION

The site of the new school is situated on a former gap site in Hillhead, a predominantly Victorian quarter of the city which is defined by three storey blond-sandstone tenements, the University of Glasgow and Kelvingrove Park. The southern end of the site extends into the edge of the park and is adjoined by the River Kelvin, providing a 'window' into the landscape and a contrast with the urban frontages to the north.

The design approach was to create a building that mediates between the territory of the park and the urbanity of the surrounding neighbourhood. Using the complex levels of the site, a new plinth was created to Gibson Street forming a datum beneath which the car parking and servicing can be contained. The plinth is topped with an 'urban box' accommodating the dining and games halls which are intended as having the dual purpose of serving the school and community. Set back from the building line this urban box creates an urban square with a civic clock tower. It acts as both a playground to the school but also a potential extension to the public realm for the local community, during the West End Festival for example when the space could be used as a venue for events.

The building is elevated in large panels of acid-etched precast concrete in response to the quality of the local blond-sandstone and this decision provides the building with a non-institutional presence. Boundary walls are finished onto the street in sandstone and gables and base courses are lined in a textured red brick which relates to the back lanes and mews of the Victorian surroundings. On the first floor there is a media library which is clad in translucent cast-glass which is a significant feature early morning and evening and a light filled interior during the day.

To the south of the site where the building addresses Kelvingrove Park, the scale and materiality of the building changes; this is the teaching wing and contains the classrooms. These rooms are defined by the concrete framed apertures and expansive glass windows which take in views of the park. Natural ventilation has been exploited with opening vertical hoppers and passive ventilation stacks which populate the roof and prompt air circulation within the building.



View of teaching wing , acid etched precast concrete panels & full window screens

PROJECT DESCRIPTION

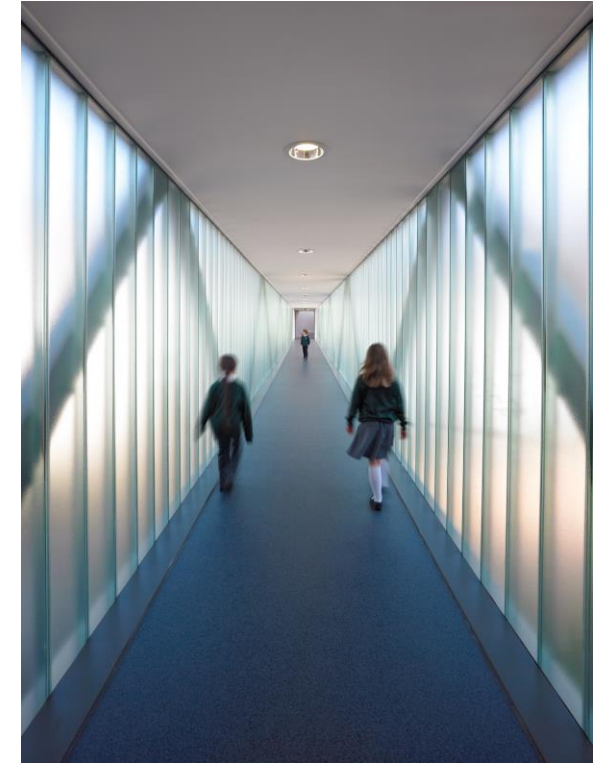
The teaching classrooms gather around a double height social area that is top lit and are arranged with regimented clarity which emphasises the beauty of the natural surroundings. This block is open to the context creating a learning environment that is very much part of the park landscape in which it sits.

Due to the slope in the site from Gibson Street to the Park, the upper level of the teaching block aligns with the ground floor of the community building onto Gibson Street. The link between the community building and teaching block is achieved by a translucent glass clad bridge link which glows in the early morning and evening and marks a transient journey between the two territories of the school.

The teaching block is covered with sedum which changes colour with the seasons and creates a harmonious link between the school and the park whilst providing environmental benefits.

The school was asked to facilitate the 'Curriculum for Excellence'. It does this with a solution which is uses the context to inform the design solution; a building dictated by the fundamental natural benefits of the site and providing an inherent sense of 'place'.

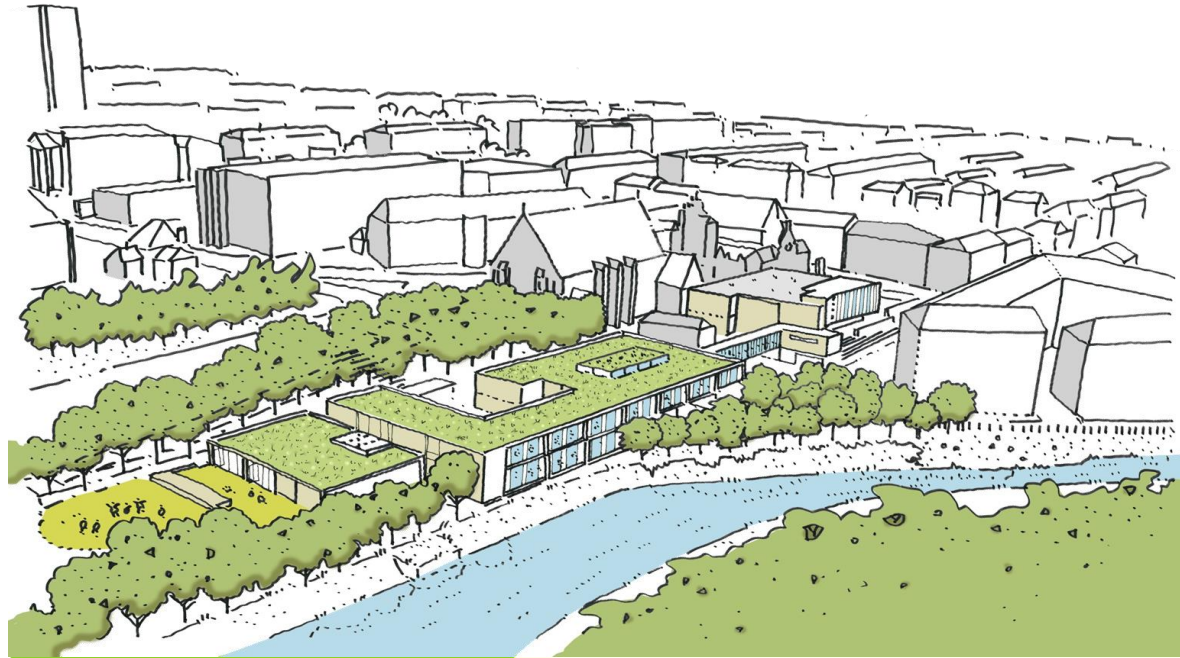
The school provides the client spaces in which to deliver the curriculum but moreover it enhances the children's everyday experience through the relationship they have with their community, the sights and sounds of the environment.



View of translucent glass clad link between community building and teaching block

RESEARCH QUESTIONS

1. How to create a design solution that was capable of adapting itself to two distinctly different contexts, the 'urban' and the 'rural'.
2. How to interpret the spirit of the curriculum for excellence to inform the design of a new kind of learning environment.



*Early sketch drawing of building in context,
in relation to the 'urban' & the 'rural'*

AIMS AND OBJECTIVES

How to create a design solution that was capable of adapting itself to two distinctly different contexts, the 'urban' and the 'rural'.

Architecture in the city is usually informed by many structural constraints. In Glasgow this is usually an adherence to the urban block form. The site for Hillhead Primary was unusual for a number of reasons. To the north the site was a gap site created by the collapse of a four storey tenement block, facing onto Gibson Street. Gibson Street is one the principle vehicular routes to and from the city and the university district. Urban scale and public frontage are important factors in the resolution of the building. To the south the site extends into the lush heavily wooded corner of Kelvingrove Park. To the east the river kelvin runs parallel to the site boundary. To the west is University Avenue, raised 13m, higher than the datum of the site. Each boundary presented individual issues and possibilities.

Reconciliation of the urban intervention with the idea of a school which would explore the idea of

new ways to learn gave the project a creative edge.

The competition process allowed for an important gestation period, allowing detailed analyses of both site and programme. The organisation of the building parts adhered closely to the ideas established at the competition stage by splitting the building into two main components; the public spaces of the school, and the learning spaces of the school. The public space sets up a new urban space on Gibson Street, using an elevated play area with the dining hall / gym / library all forward facing. A long link glazed umbilical bridge forms an existing link between public and learning.

The learning spaces are embedded in the woods and pushed hard up against the River Kelvin. The tail of the building is a small nursery school facing south out over a playing field. The resultant outcome is pleasing with a building that takes up a lot of linear space (ground scraper) so as not to overly impact in the park, and register an urban scale and materiality onto Gibson Street.



Teaching classrooms gather around a double height social area

AIMS AND OBJECTIVES

How did we interpret the spirit of Curriculum for Excellence to inform the spirit of a new kind of learning environment.

The curriculum for excellence is a Scottish Government policy aimed at establishing an ethos for learning independently ,collectively in a way that promotes confidence and a self motivated way of learning.

The architecture of the school attempts to harness this ethos in the manner of its planning of rooms spaces and circulation areas.

The outcome is a range of valuable environments each with their own particular characteristics to promote different moods and atmospheres- open :closed, closed :open. We rejected the standard configuration of space , electing to create learning spaces that fully embraced the unique context in which the school is set.

An 'agora space '-a big space with no name .This

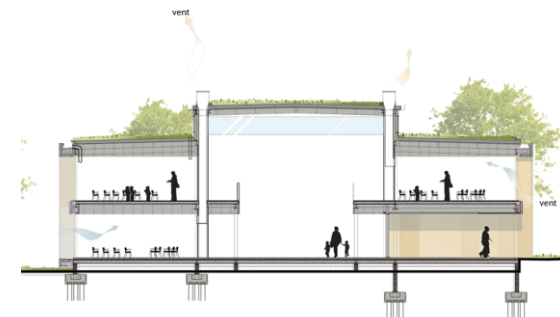
is an educational market space in the heart of the plan.

Routes through the building are planned so that there is always a physical sense of the outside. So walking through the building is always an adventure walking from the park to the urbanity of the public spaces of the building.

Amongst these spaces is a 29m long umbilical link; a fully glazed ramped bridge that connects the ' rural 'school to the ' urban' school.

The space of the building is not confined to the interior spaces. In fact the entire site and the park environment are arranged as learning grounds as well as playing spaces.

This is achieved by reconciling the site levels which are extreme ;the cross section between the river and Gilmourhill Hall and the long section from the park up to Gibson Street.



Elevation and section drawings of the scheme

AIMS AND OBJECTIVES

The design presents the pupils with a very open, light learning environment from which the context will always have an influence on learning 'by design'. Our view is that this fairly unique way of approaching school design should act as an intellectual and design standard and a benchmark for all our schools.

Given current procurement arrangements in education and the pressure on budgets, it remains, in the current climate, a challenge to create great learning environments.



View of the building from South of the site looking towards nursery building

CONTEXT

The context of this project is urban but it is an unusual site.

The site is bounded by Kelvin Way, Gibson Street , Kelvingrove Park, Otago Street and Gibson Street.

The dynamics of the site vary from park, to river, to street. As such the challenge is to create a positive relationship with each condition.

The site was formerly an Indian restaurant and then a gap site for almost 30 years .Towards the park a Parks Department Depot sat .This has been moved elsewhere.

In the centre of the site off West Bank Lane a small cottage which the council tried to buy but were unsuccessful .This factor plus the extreme change in level across the site meant that the footprint of the building required negotiating these elements.

A bridge link was deployed to resolve the change in level across the site and link the teaching and community block.

The neighbourhood is also a conservation area that forms part of the University campus. This would entail the study of materials and a massing that would feel appropriate to the local environment



Views of the teaching block and glazed link

RESEARCH METHODS

The office operates as a Studio culture which means projects are collectively developed in the context of the analysis of place, function, precedent and ideas.

Initially we visited the site and carried out a detailed historic /urban analysis of the place.

Surveys were undertaken of the site topography and ground conditions.

Detailed analysis of Ecology and wildlife habitat in the site, riverbank and park edge were commissioned.

A consultation exercise with many stakeholders including parents and local residents (48 individual groups) was undertaken over a period of 14 weeks.

A material analysis was undertaken for the façade construction set against aesthetic qualities, technical performance and cost.

A detailed analysis of the strategic layout of the briefed spaces set against the criteria of curriculum for excellence and adjacencies.



Elevations of the community building and teaching block

DISSEMINATION

Publications

The Architects Journal 2012, 9 February

The BBC podcast .

A10 magazine 2012, issue 43 Jan/Feb 2012

New School Buildings, Links Books Barcelona 2013

Exhibitions

Exhibited at the Scottish Parliament and Lighthouse
as part of the Doolan Awards Exhibition. 2011



*View of the teaching block and glazed
umbilical link connecting 'rural' to 'urban'*

ESTEEM INDICATORS

The project was selected by the Scottish government to launch the new Architecture policy on 24 6 2013.

It has also been illustrated in the Policy Consultation Book and Creating Places publication—a policy statement on architecture and place for Scotland.

It has been awarded the Grand Prix and education Awards by the Scottish design awards in 2012.

It has been published internationally.

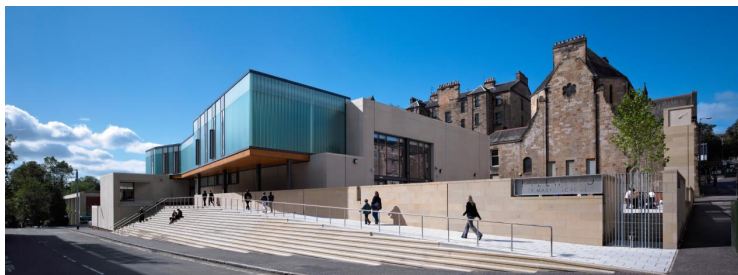
It was highly commended at the Doolan awards.

Regularly delegations from councils over the UK visit the school.



The space of the building is not confined to the interior, view of play area

PHOTOGRAPHIC MATRIX



DRAWINGS

