

RECONFIGURING THE INSTITUTION

School Grounds

Craig Borum

Karl Daubmann

Olivia Hyde

Mireille Roddier

University of Michigan

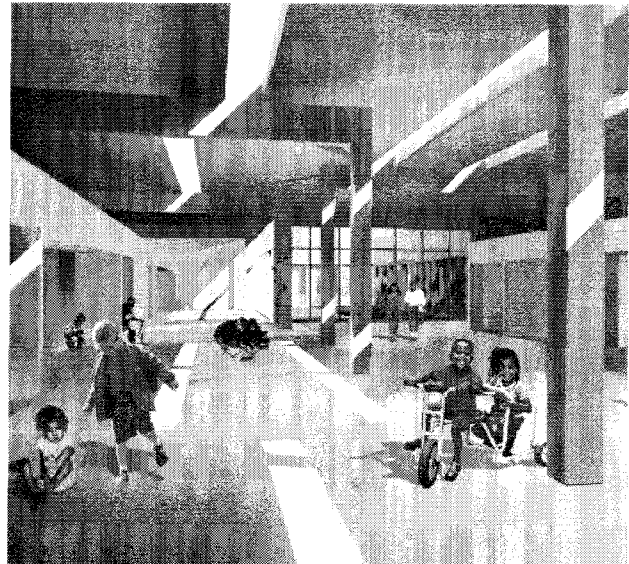
2002-2003 ACSA Faculty Design Award

The Midwestern landscape is the inspiration for this pre-Kindergarten through 8 school. This field strategy allows for a synthetic condition to occur in which three, autonomous schools (2 first - eighth grades and 1 pre-K and K) and shared facilities are seamlessly integrated into the existing urban fabric of south Chicago. The architecture simultaneously shelters indoor education and a framework for the landscape that is programmed to support multiple outdoor activities.

A prefabricated system of concrete columns and beams marches across the site and supports an insulated, pre-cast concrete roof. Large trusses that also aid in defining courtyard spaces support the structure in the opposite direction. The classrooms are clad with various materials that address the diversity of the education activities captured within the unifying building skin.

Taking an aggressive approach to ecological issues, the building has multiple layers of enclosure that respond to the seasons. The circulation spaces and assembly spaces are heated passively and are cooled with natural ventilation, permitting a stronger connection to the outside during favorable weather. This spatial buffer helps to insulate the classroom buildings reducing their heating and cooling loads. Each classroom is grouped with a courtyard to provide exterior access (emergency egress) and natural daylighting.

The landscape is an integral component of the physical and experiential concept of the school. Courtyards become autonomous elements through the use of distinct material palettes. These palettes display various degrees of sensory experience: sound, color, texture, and odor. Additionally, each of the landscapes illustrates a different temporal sequence that clearly identifies climatic changes throughout the season. The captured landscapes become an educational



resource and a way to tie the school back to its midwestern ecosystem.

The proposal was developed during a two-stage international design competition. The project was a finalist in the first phase and was developed further during phase 2.

ASSISTANTS (UNIVERSITY OF MICHIGAN FACULTY):

John Comazzi
Gretchen Wilkins

STUDENTS:

Kristen Dean
Carl Lorenz
Loren Meyer
Bryon Murdock

CONSULTANTS:

(environment + structure) Maurya McClintock - Ove Arup + Partners,
San Francisco
(landscape) Kevin Benham - University of Michigan
(air flow analysis) Jelena Srebric - Pennsylvania State University
(cost analysis) Jerrod Kowalewski

