

**Defining an Edge: A Wall for the Street**

by

John P. Moench

Thesis submitted to the Faculty of the  
Virginia Polytechnic Institute and State University  
in partial fulfillment of the requirements for the degree of

**MASTER OF ARCHITECTURE**

in

Architecture and Urban Studies

APPROVED:

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Dennis J. Kilper, Chairman

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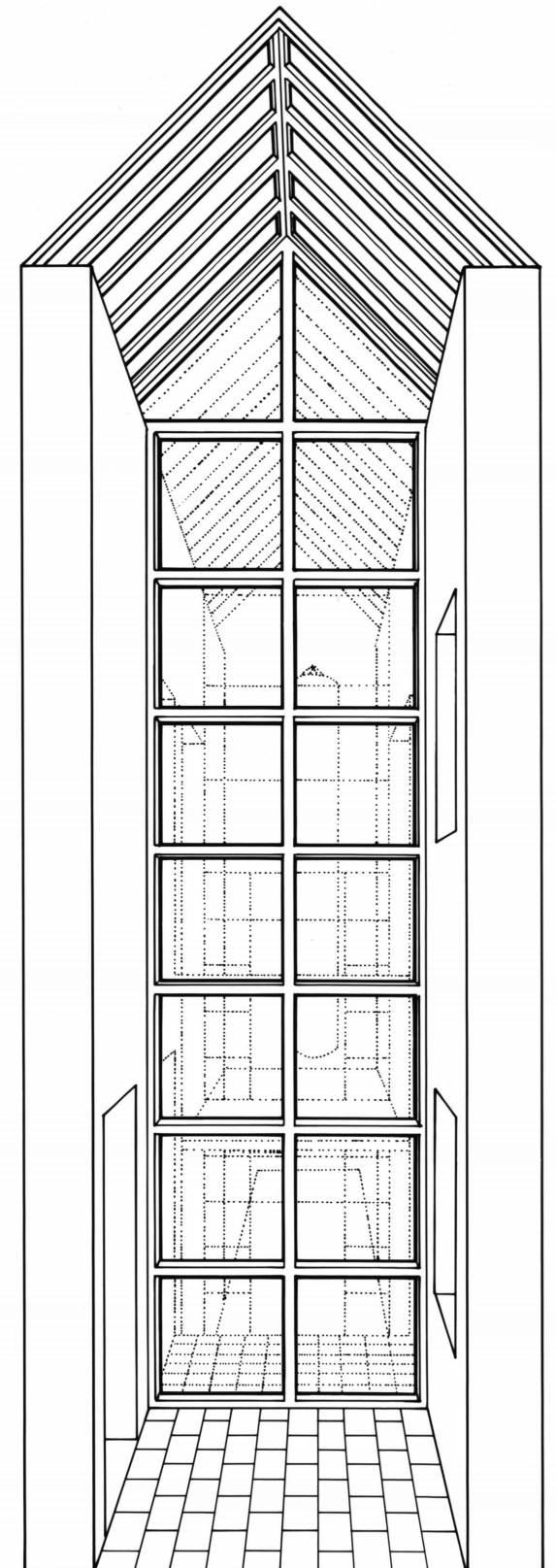
Wolfgang Schueller

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Donald P. Sunshine

March, 1989

Blacksburg, Virginia



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(ABSTRACT)

The thesis of this project focuses on the defining of an edge of the university; thereby denoting a limit as to how far the university can extend. The wall is proposed to define that edge. The tower is a result of a visual dialogue between the wall and the light well that cuts through it.

## **Dedication**

This thesis is dedicated to the  
memory of my father  
my sternest  
disciplinarian and most ardent  
admirer.

## **Acknowledgements**

I would like to thank those who assisted me in this endeavor: my family who offered their love, encouragement, and support; my friends who helped me keep the task from becoming overwhelming; my committee members for their insight and guidance.

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## **Defining an Edge: A Proposal**

The intent of this thesis is twofold: first, to establish an edge to the university and second, to provide an introspective dwelling for the individual within that edge. Definition of that edge is the result of the construction of a masonry wall that would serve as a limit or boundary thereby establishing an edge that the university presently lacks.

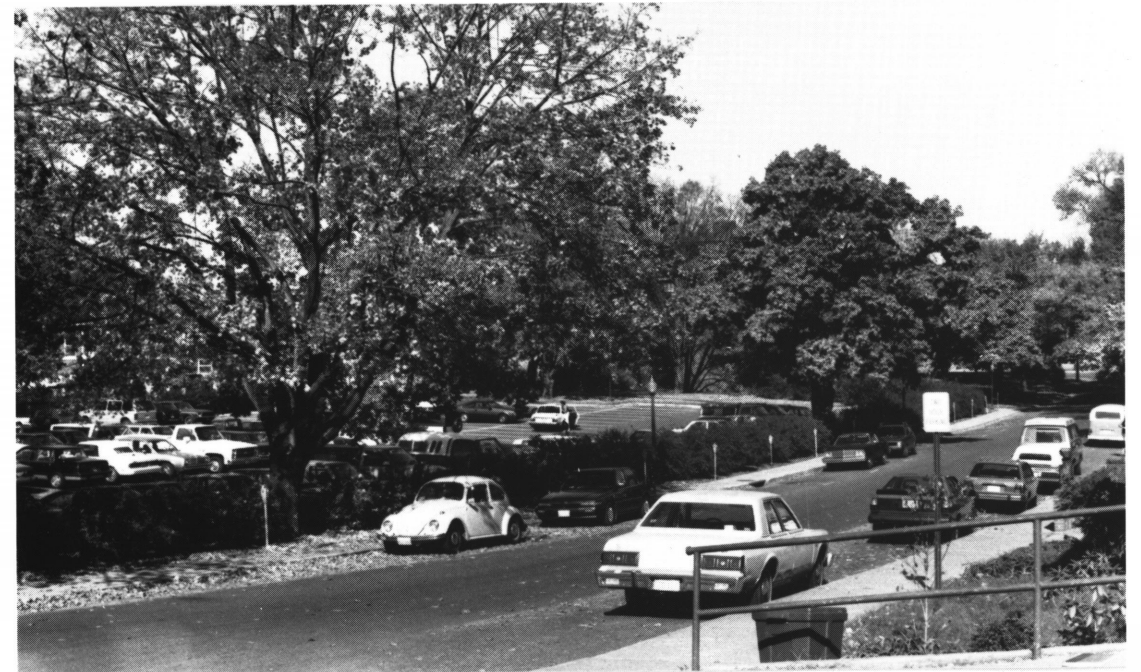
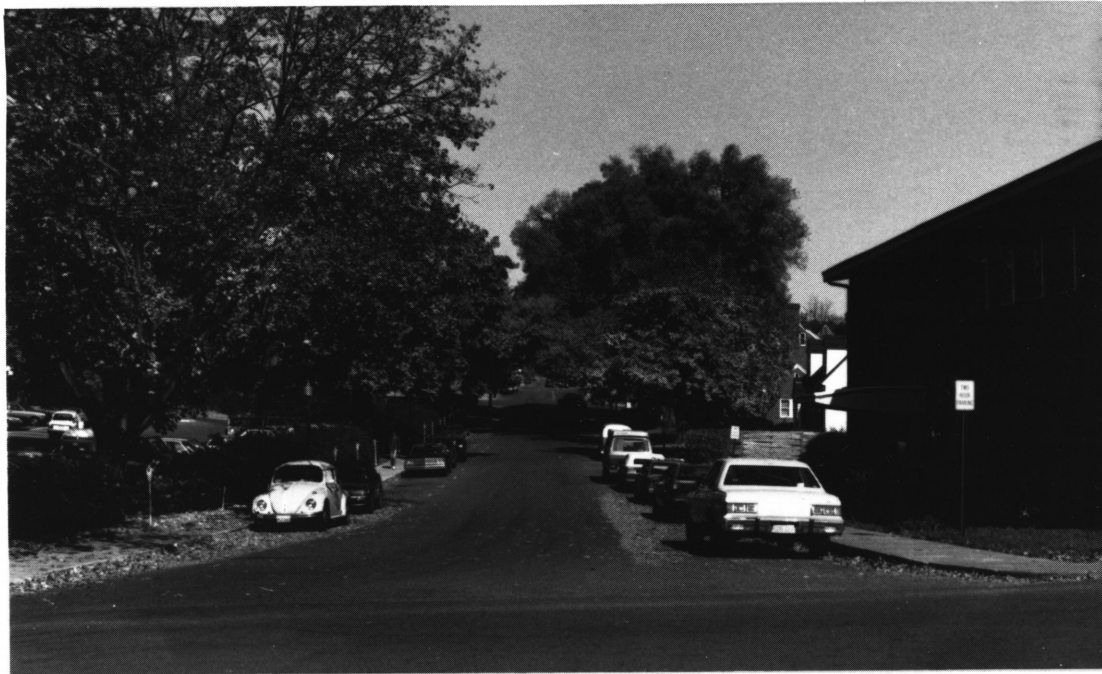
The site is located on the corner of Roanoke and Otey Streets on the southeastern edge of the Virginia Polytechnic Institute and State University located in the town of Blacksburg. Presently the site is used as a parking lot to service several academic and support buildings on and around campus. The university no longer stops at the street but rather spills out into, and across it, claiming part of the residential neighborhood as its own. The wall would serve as a transitional element that would structure the site by responding to the order of the university and the order of the town.

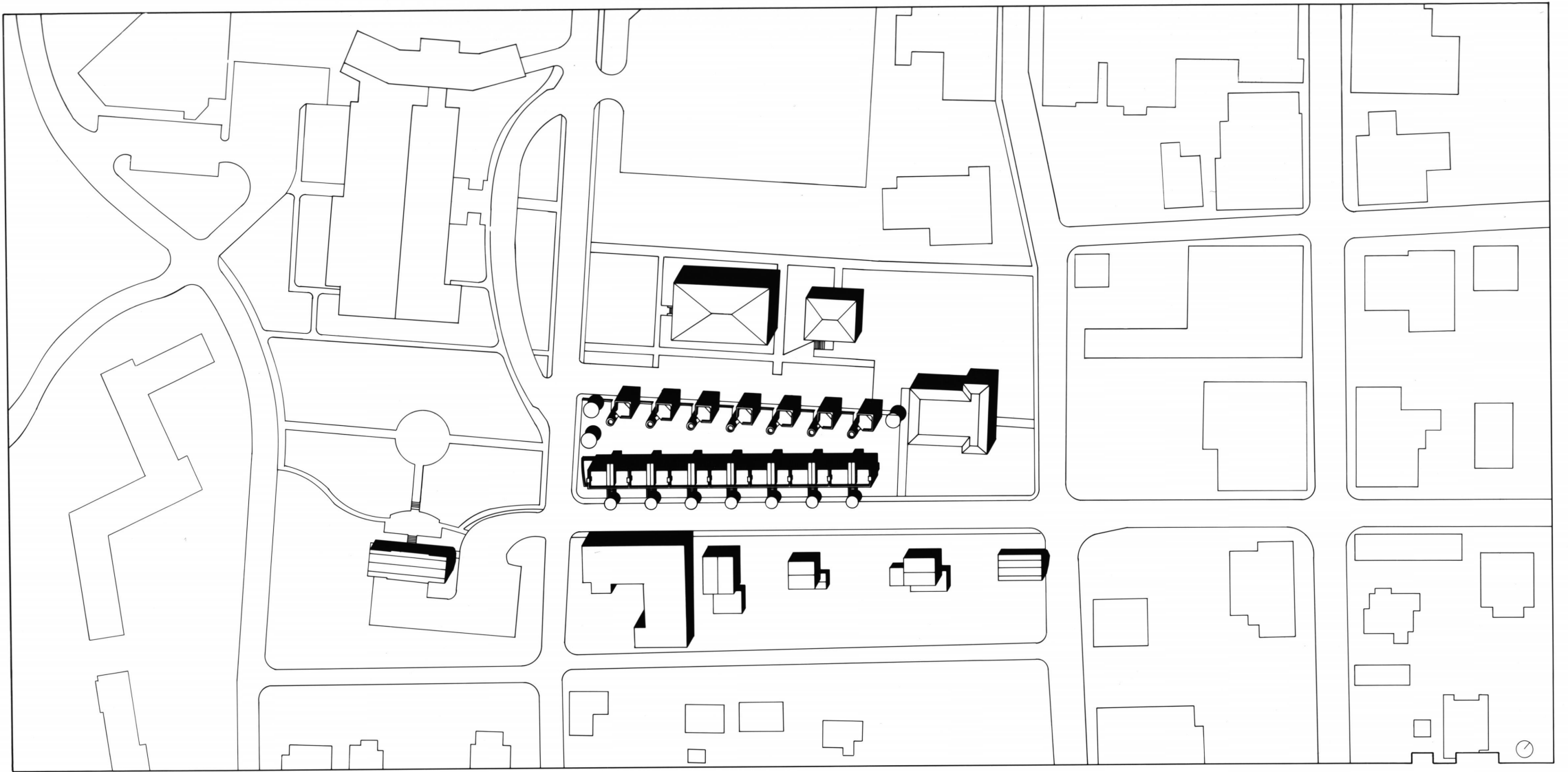


SITE PLAN: Prior to Proposal



SITE PLAN: With Proposal

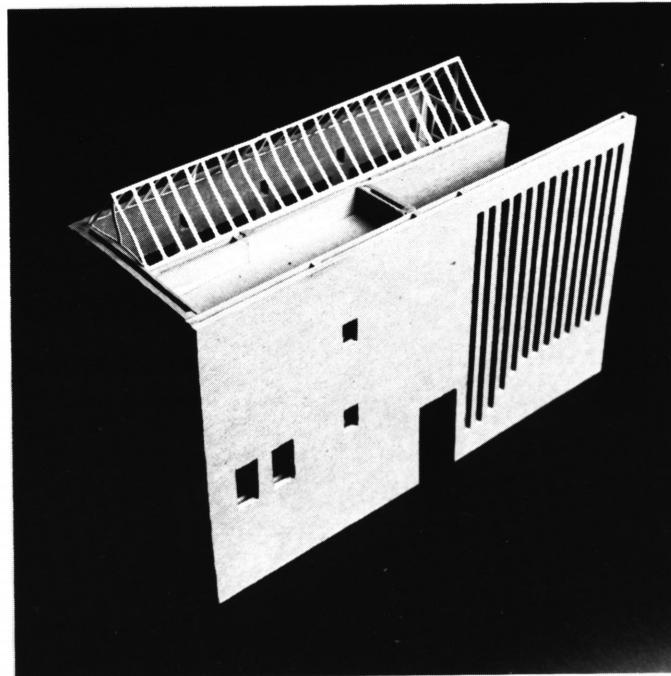
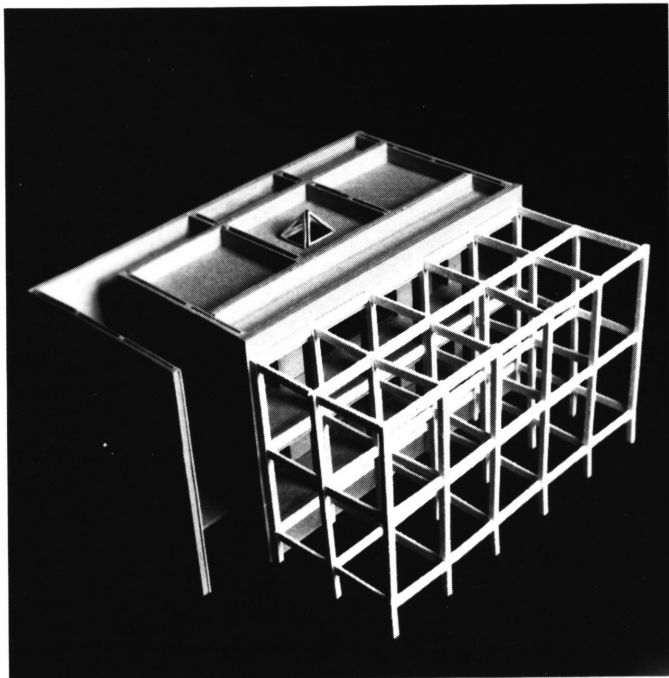
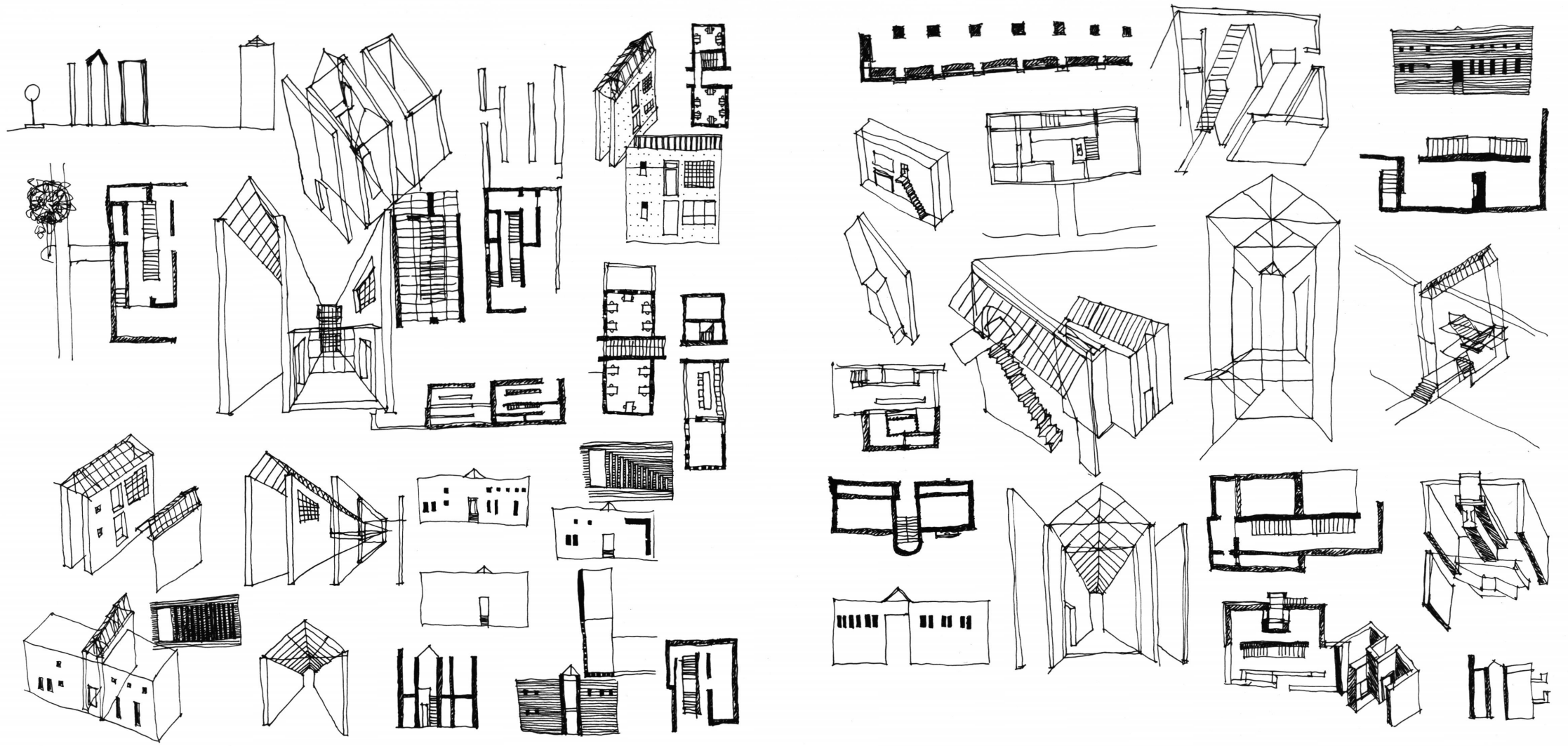




SITE PLAN



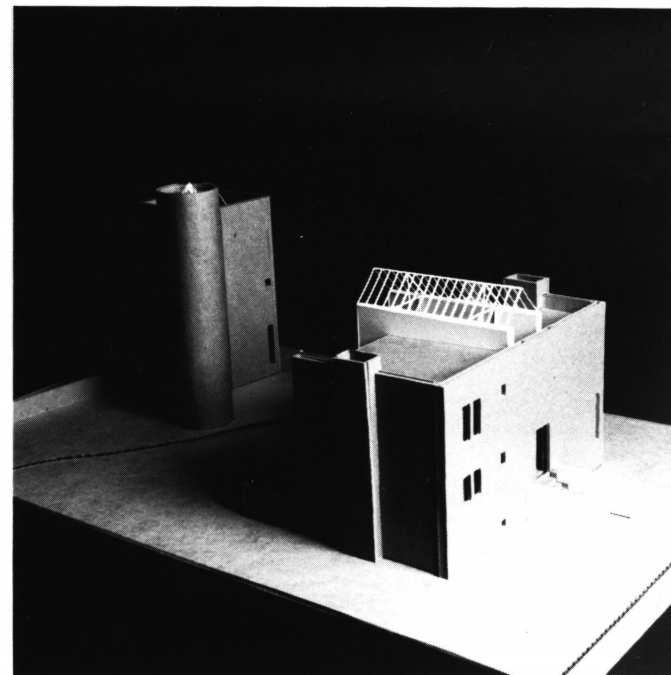
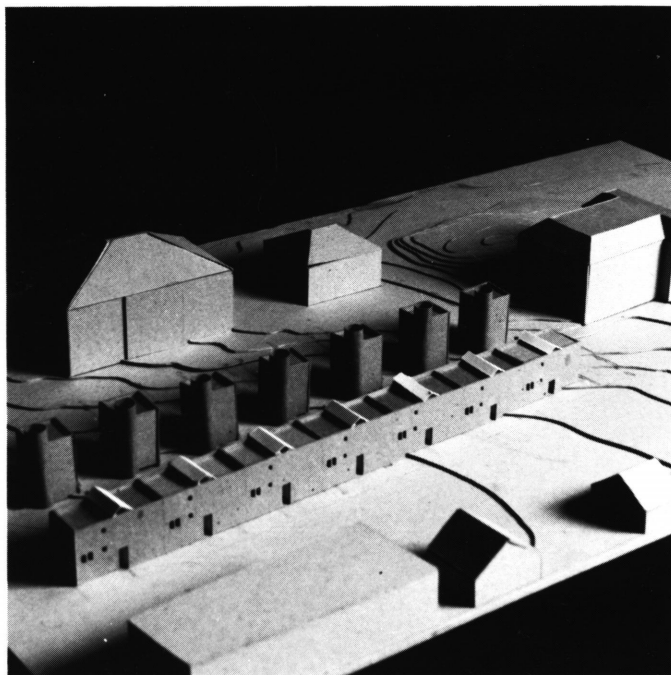
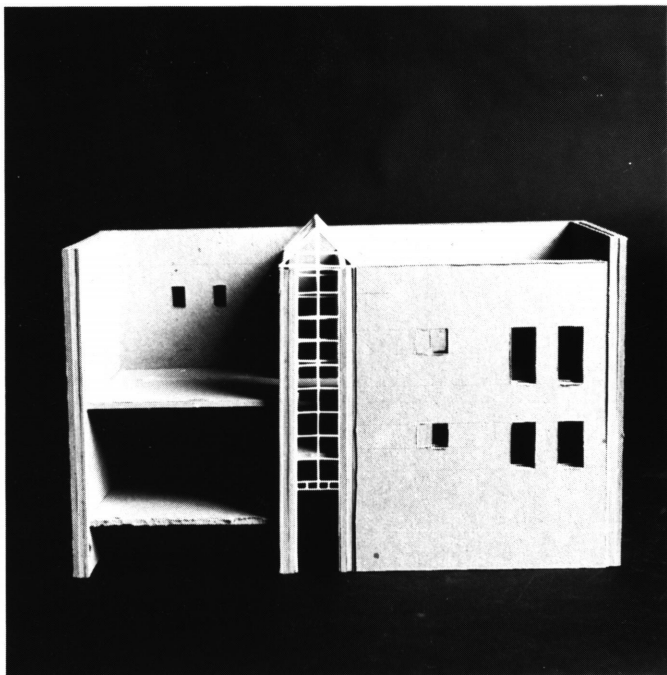
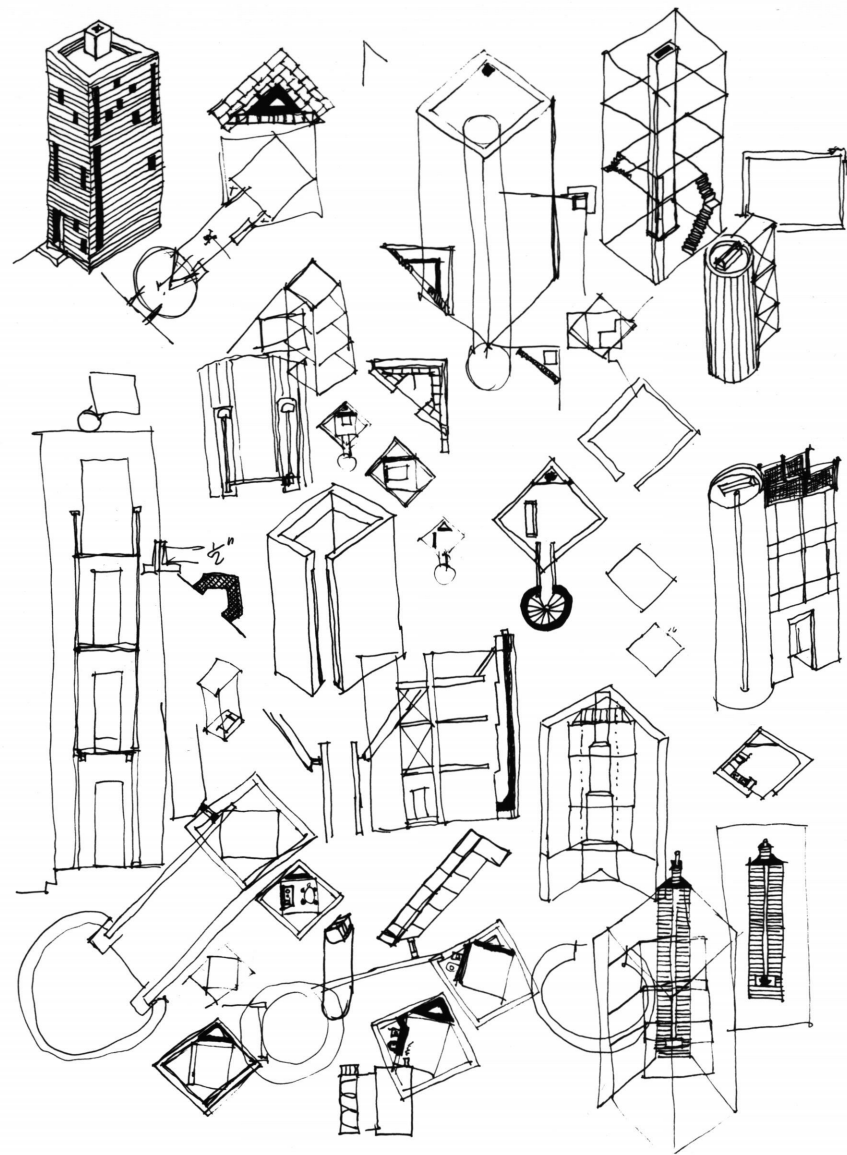
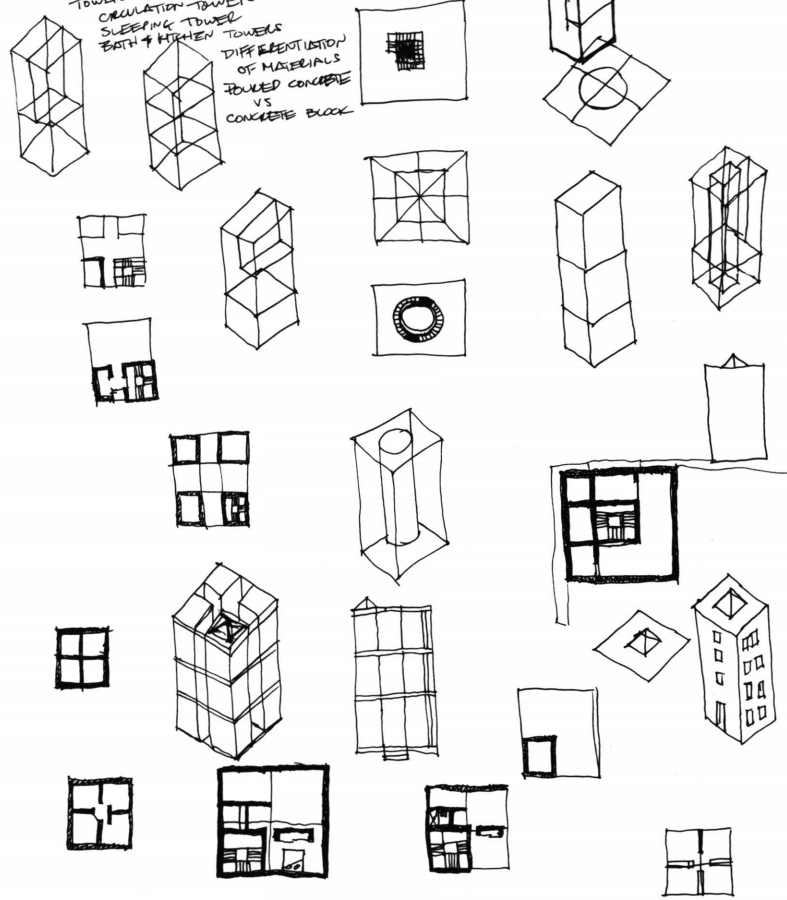




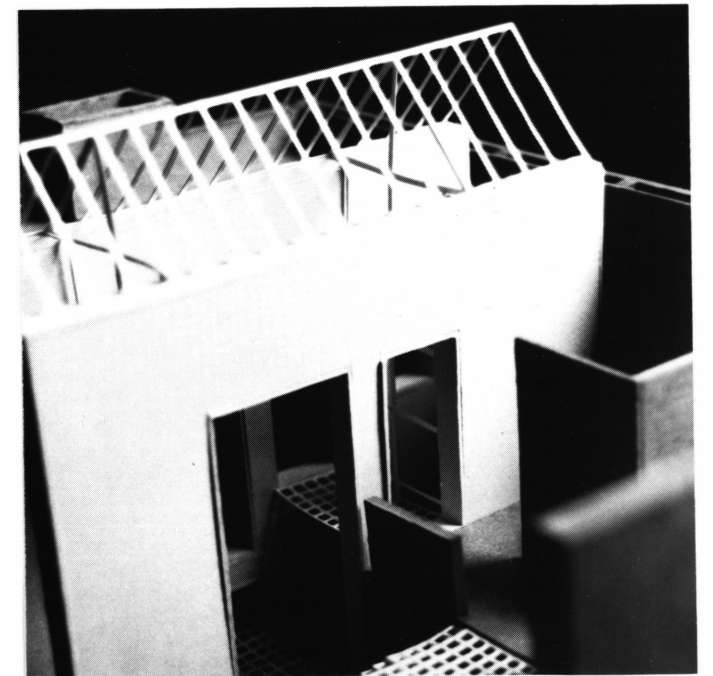
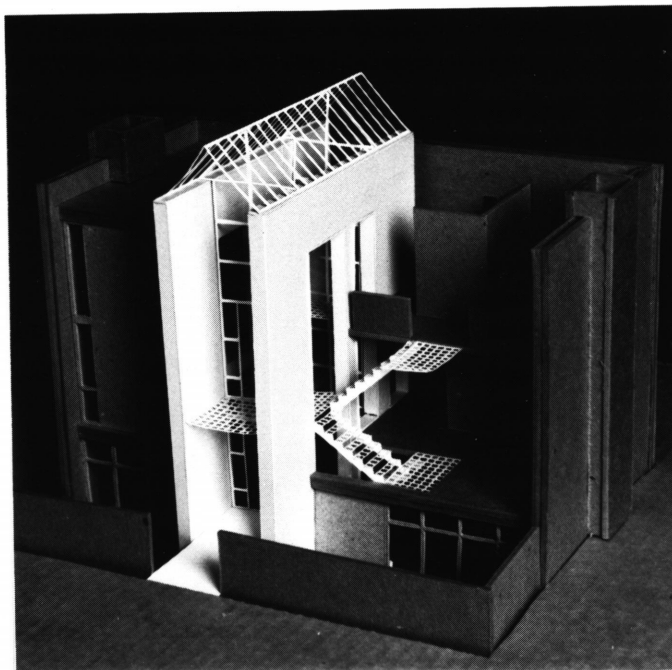
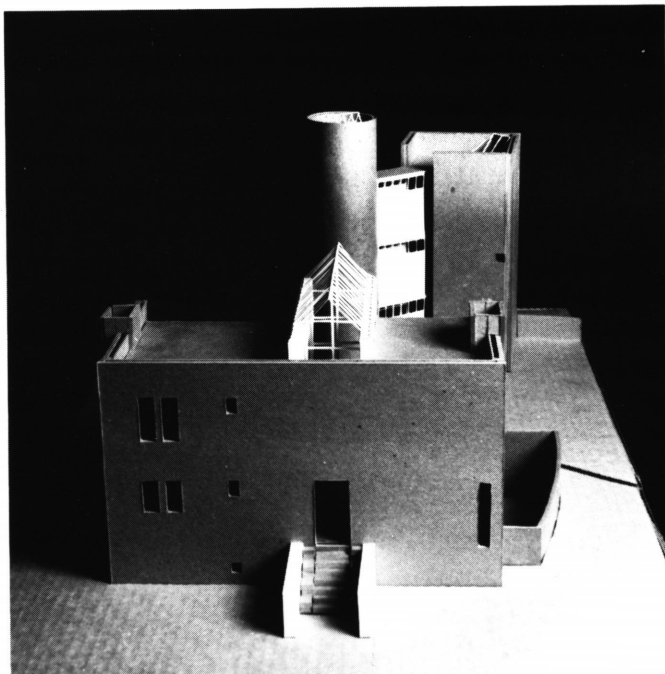
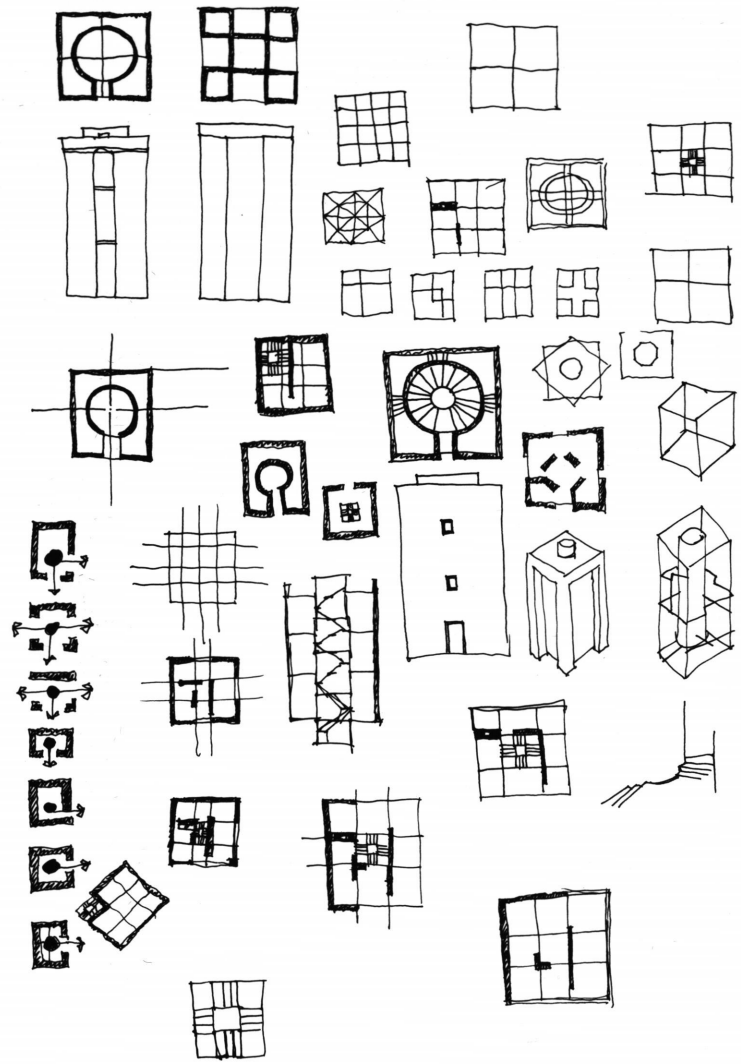
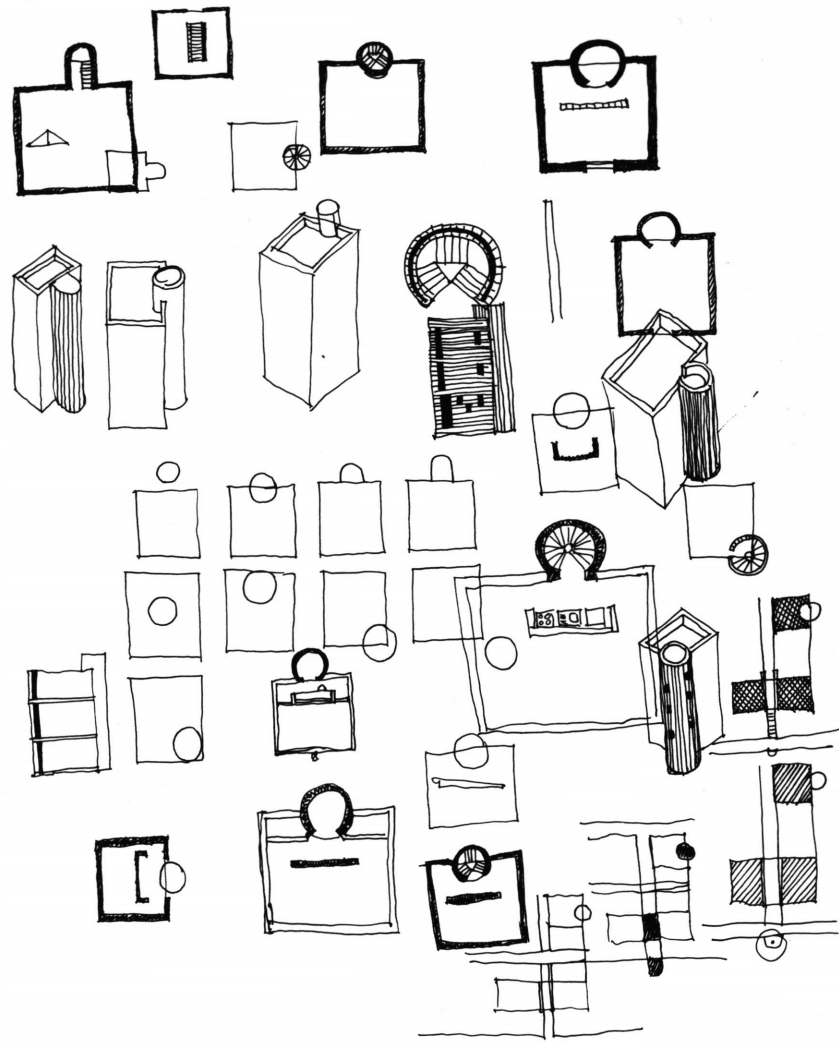
TOWER ZONES CORE, ENTRY, KITCHEN, LIVING, SLEEPING  
PROPORTION TOWER HEIGHT TO WIDTH CRITICAL

WALLS WITHIN & TOWER  
CIRCULATION TOWER  
SLEEPING TOWER  
BATH & KITCHEN TOWERS

DIFFERENTIATION  
OF MATERIALS  
POURED CONCRETE  
VS  
CONCRETE BLOCK



TOWER



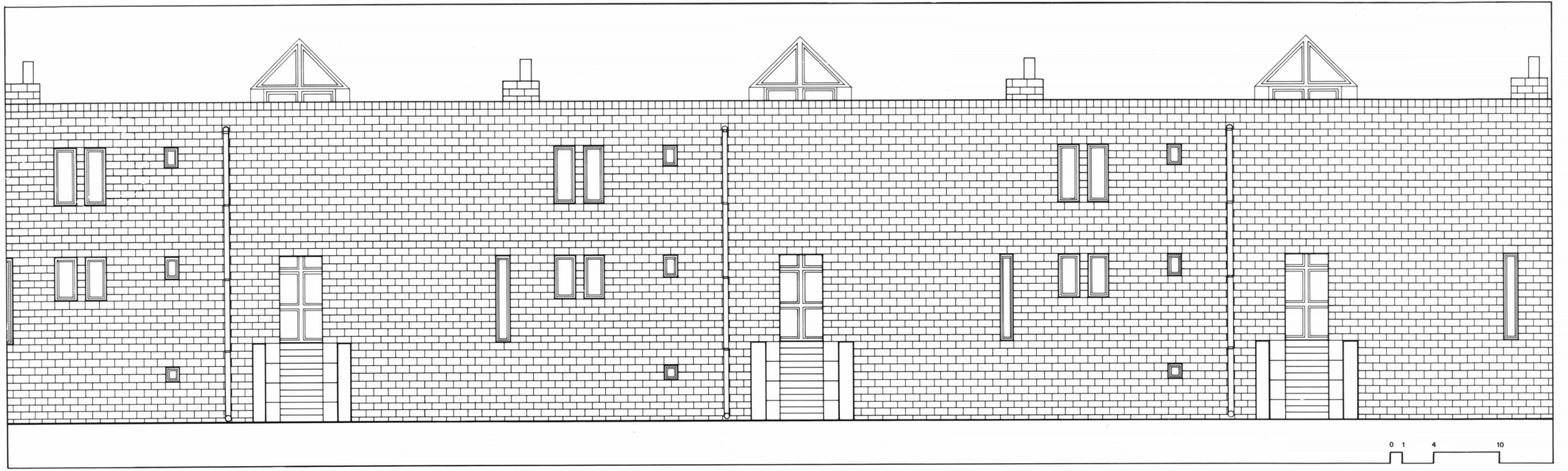
## **The Wall**

The masonry wall serves two purposes: primarily it defines a limit-- an edge-- to the university and secondly the wall is a response to the need for visiting faculty housing at the university. The masonry wall that faces the street is protective. It bounds the dwelling on three sides and bears the weight of the floors above. The rear wall is an infill wall of oak which separates it from the structural walls of the units.

The masonry wall is made of a running bond of concrete block interrupted by places for windows and entries into the units. The windows are vertical slits that allow light to enter. The entries lead to transitional spaces made of two parallel concrete walls running perpendicular to the street. These spaces are composed of two areas: an exterior foyer and a light well. The foyer allows access into the unit. The light well is a visual connector between the wall and the tower. This well also divides each of the seven units while simultaneously acting as an organizer of the plan. It is the primary light source allowing the dwelling to focus inward.

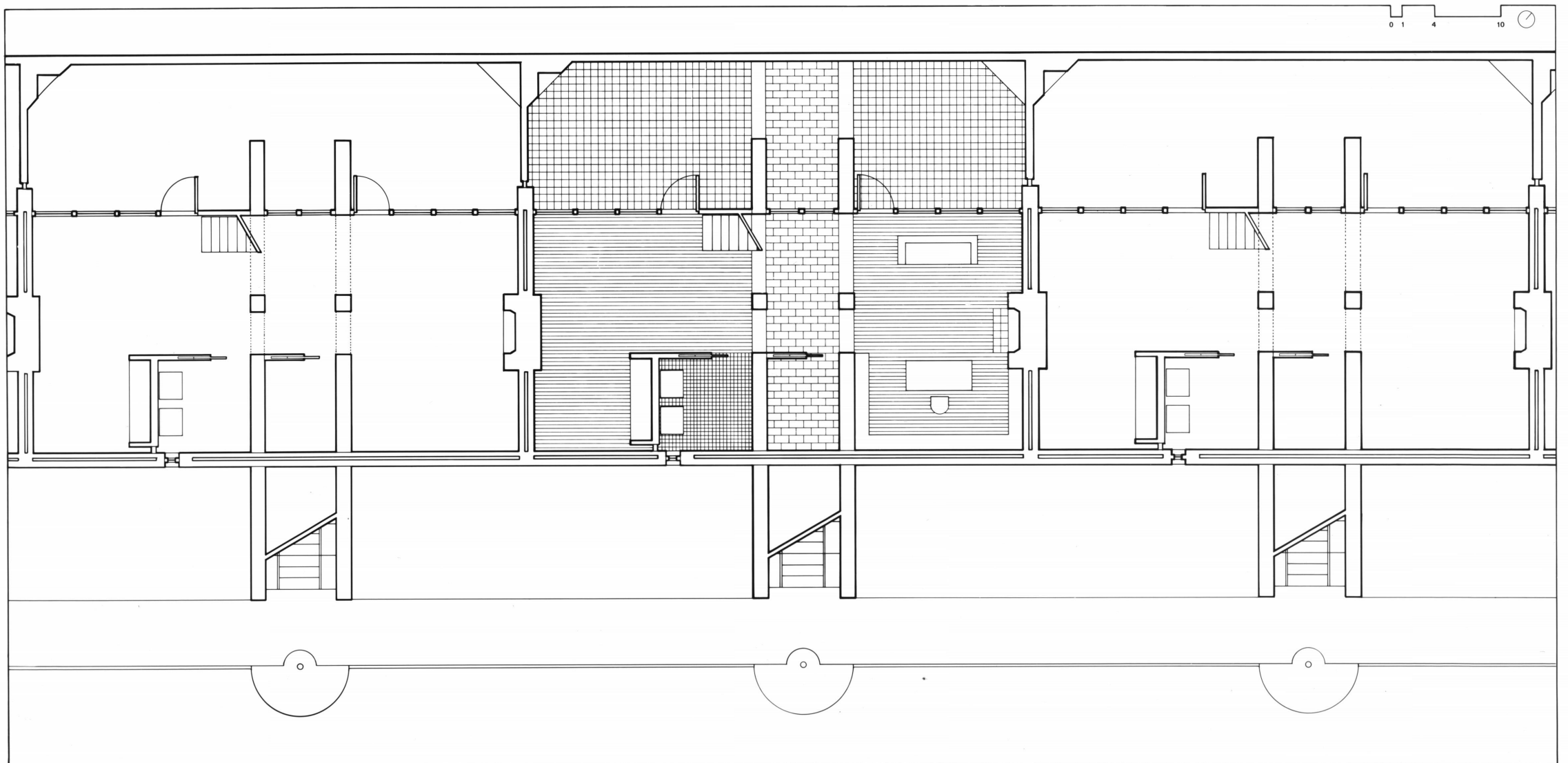
Circulation through the house from room to room and level to level is across the axis made by the light well. Materials in the light well are differentiated to reinforce the idea of movement across this visual axis. This axis is interrupted by the lawn and terminated by the tower situated at the boundary of the site.

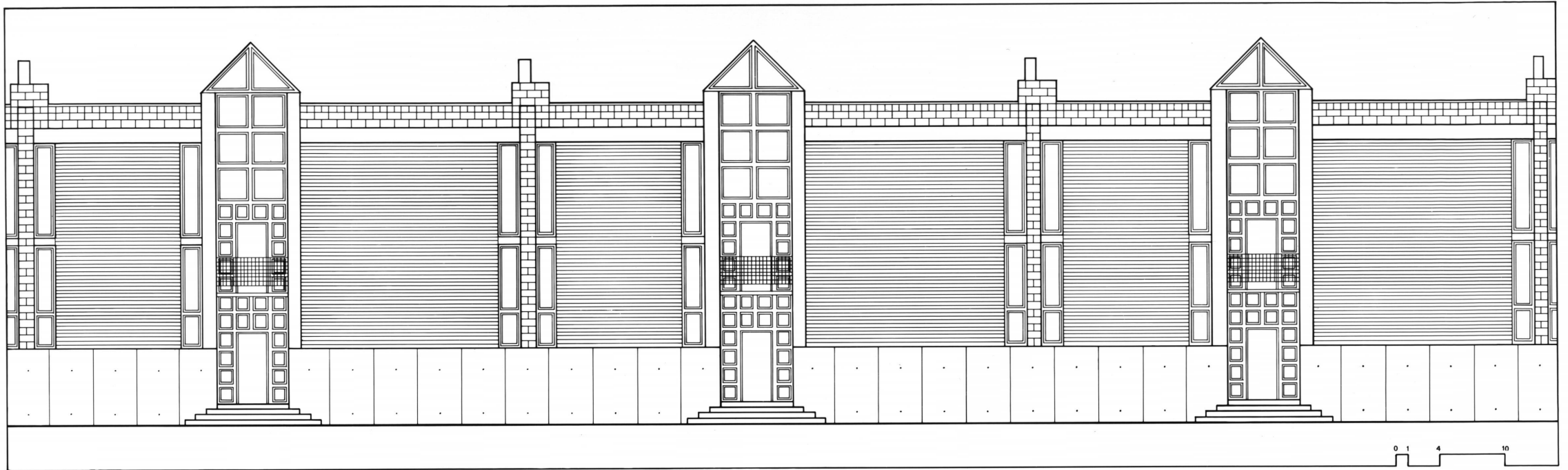
*You employ stone, wood and concrete, and with these materials, you build houses and palaces; that is construction. Ingenuity is at work.-Le Corbusier.*



STREET ELEVATION

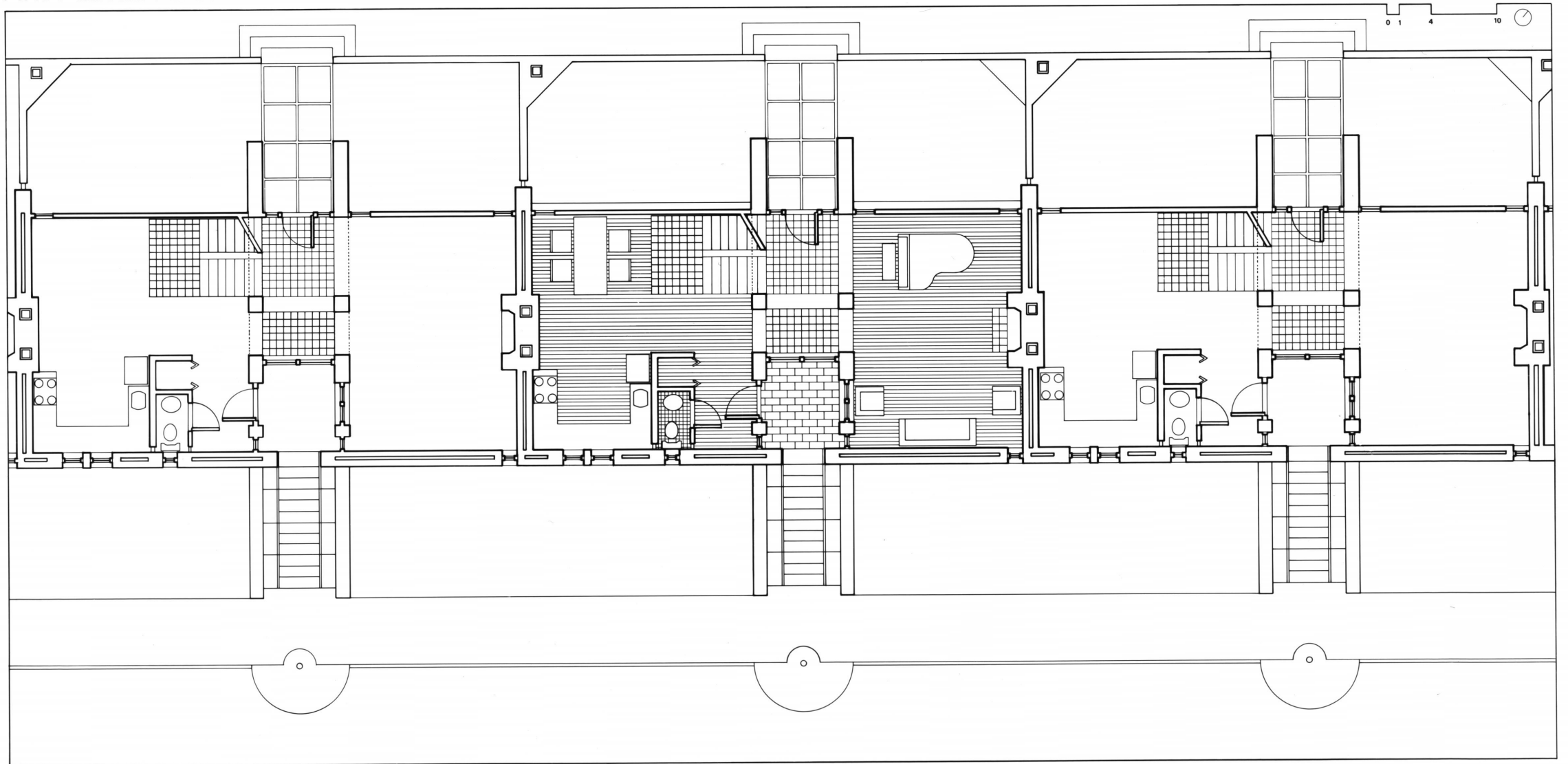
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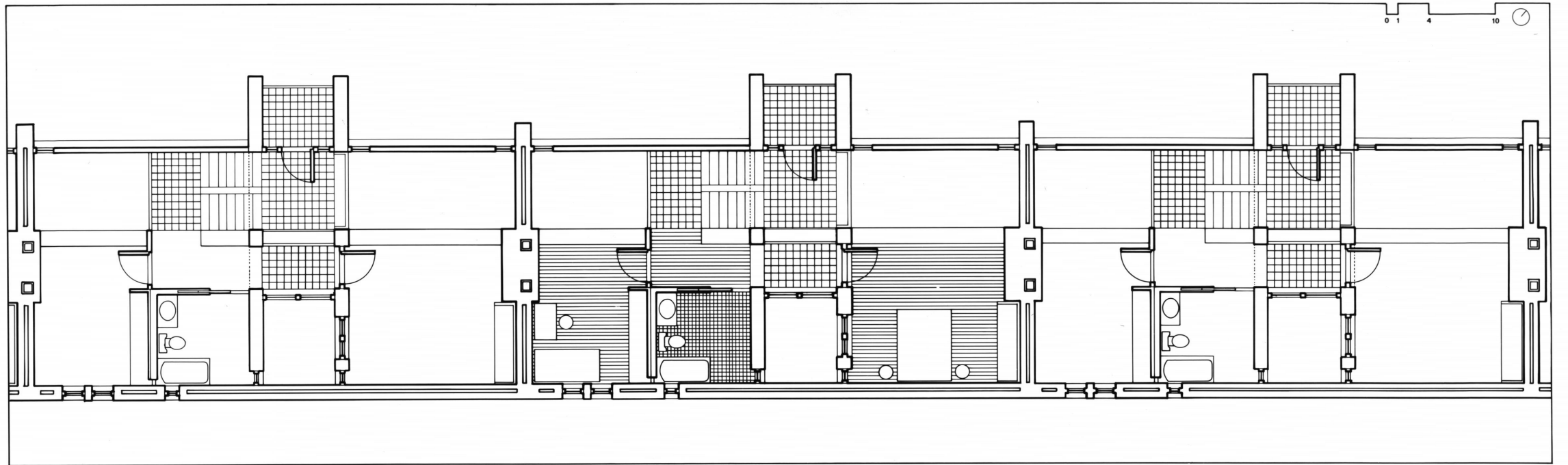




REAR ELEVATION

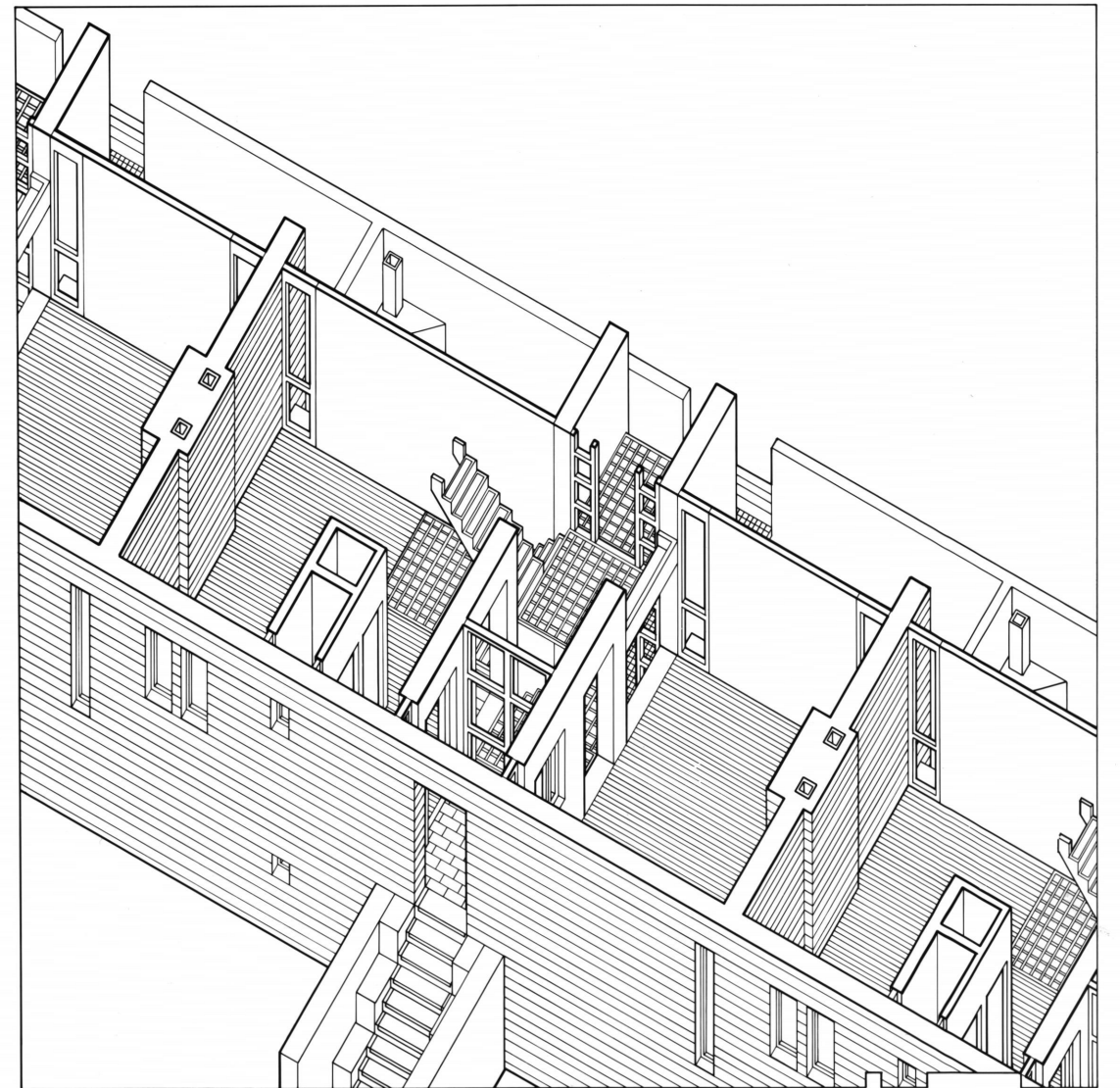
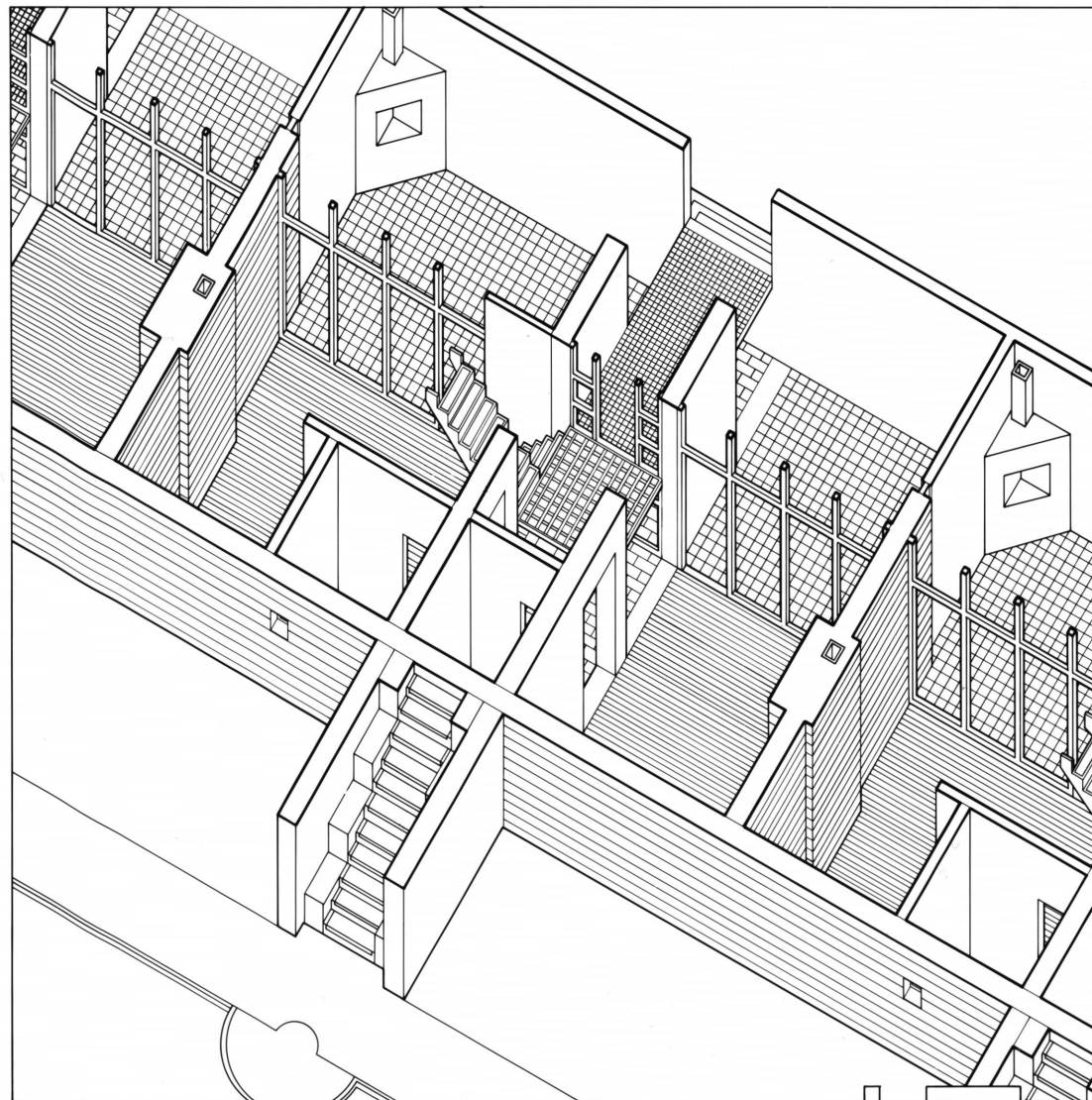
FIRST LEVEL PLAN

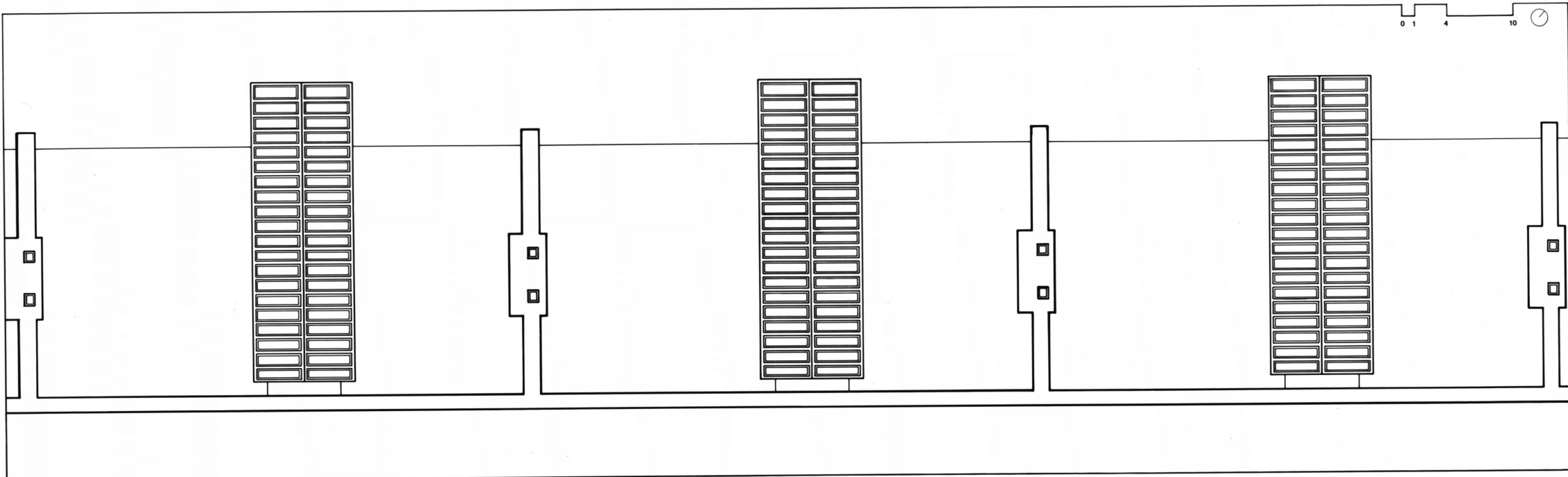




SECOND LEVEL PLAN

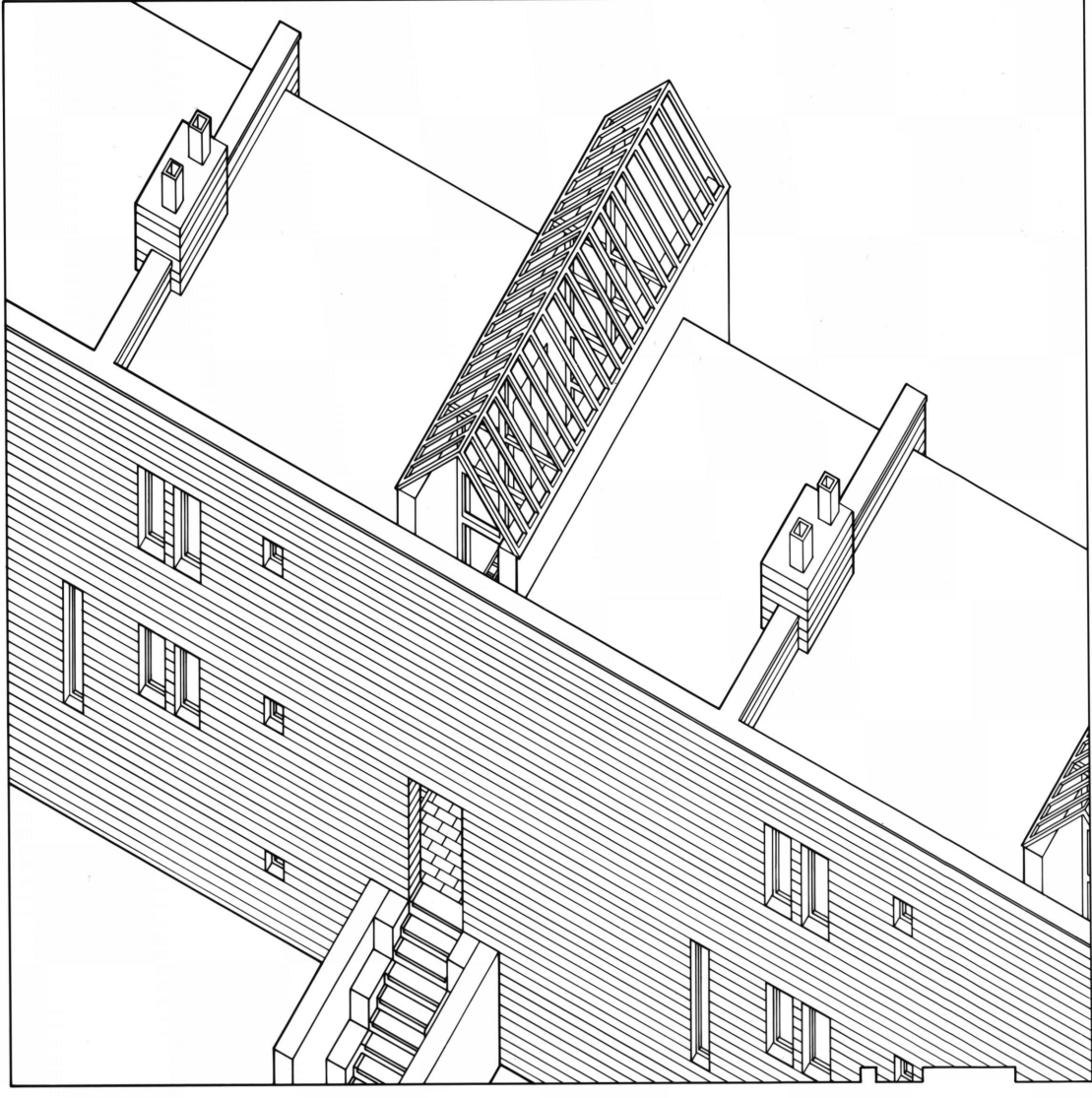
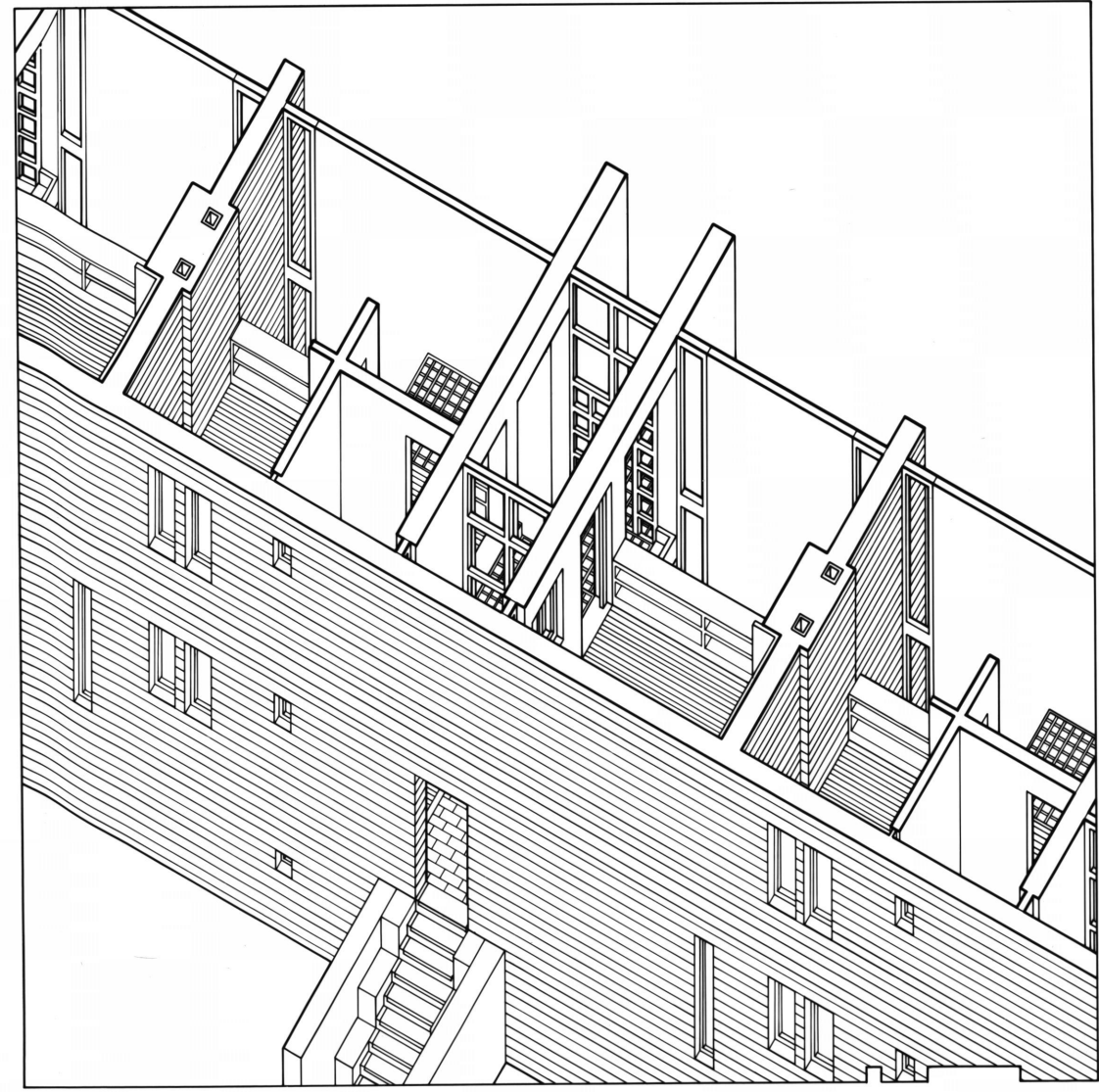
AXONOMETRIC





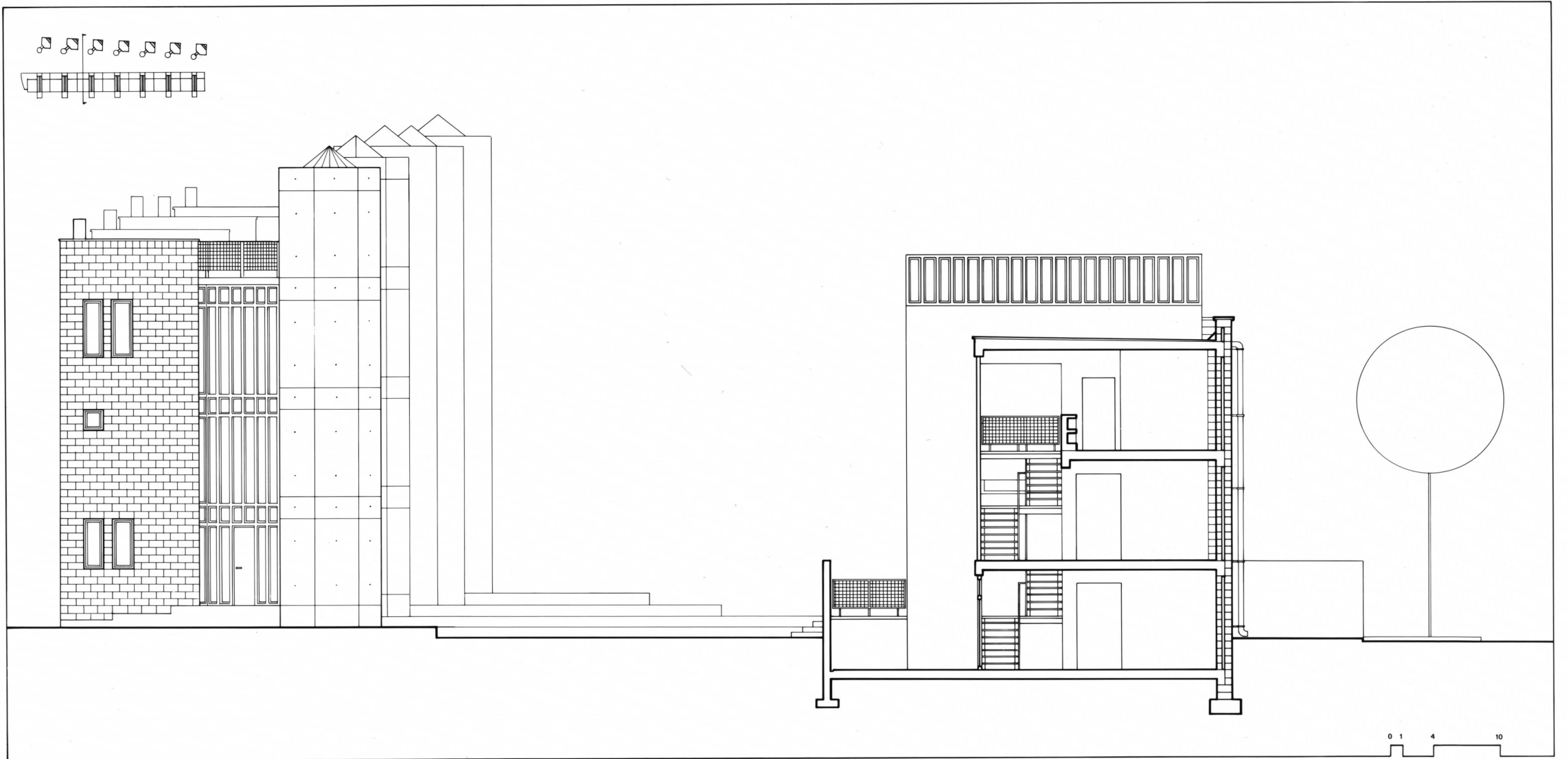
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ROOF LEVEL PLAN  
AXONOMETRIC

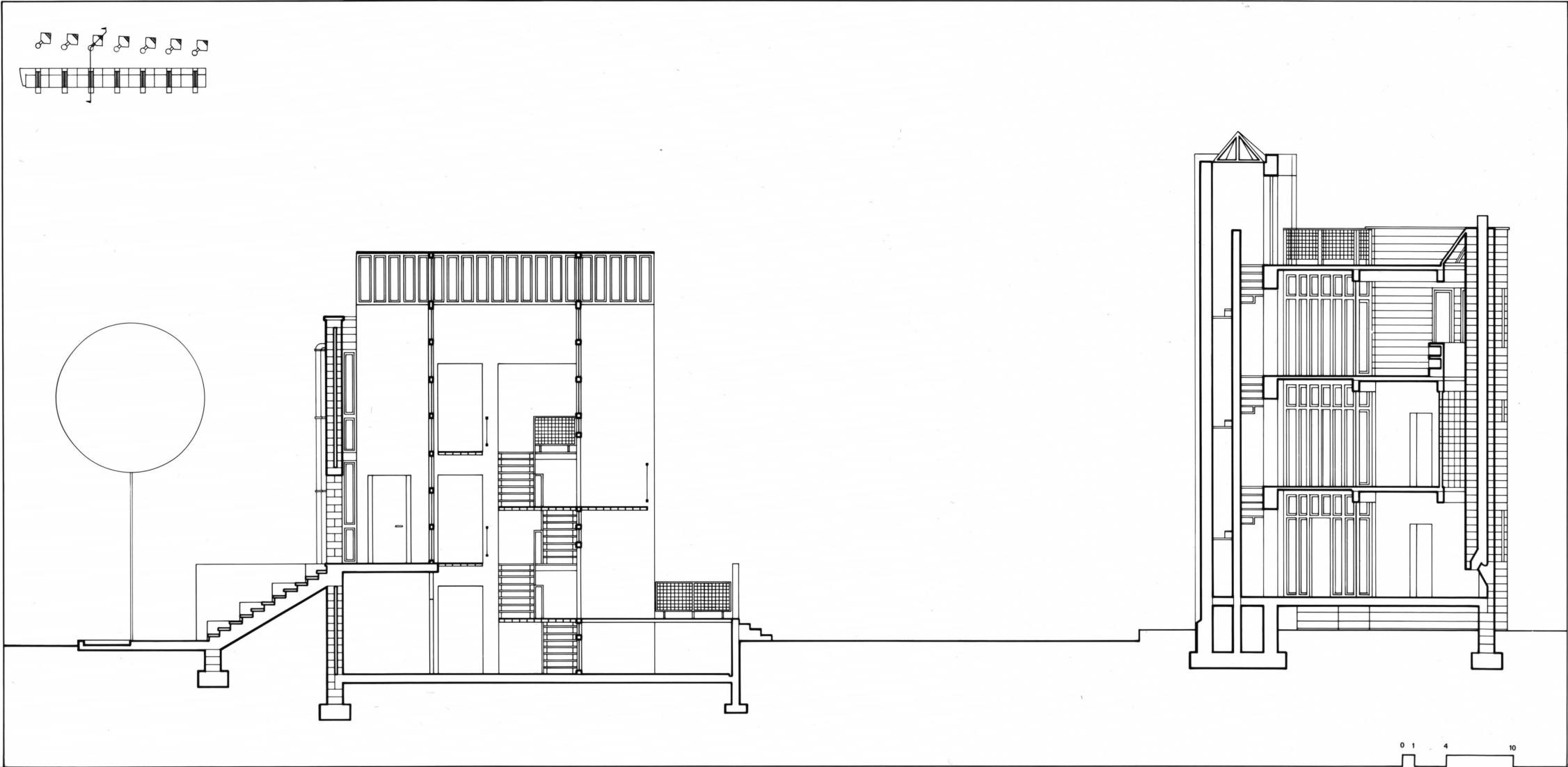




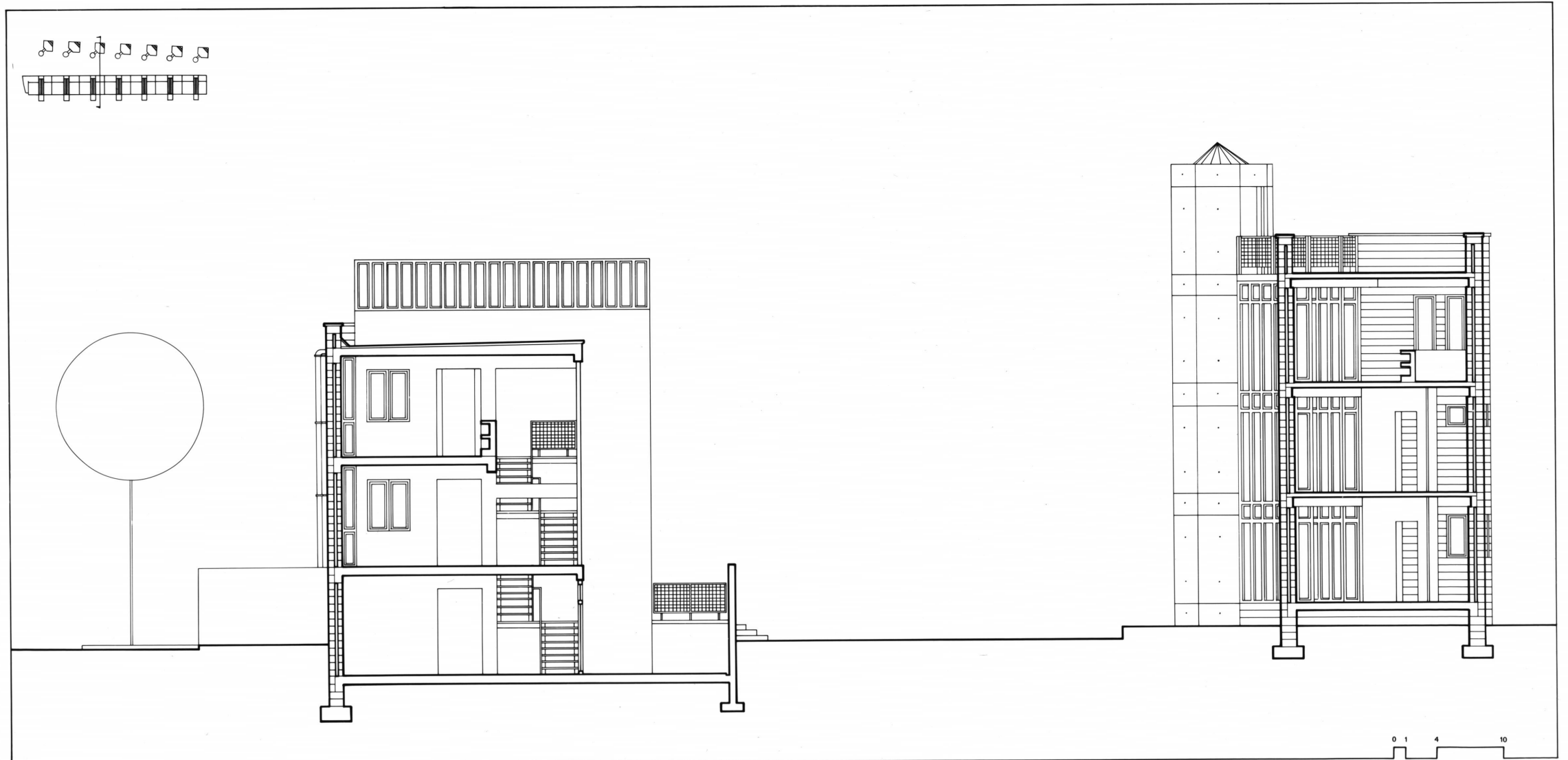
SECTION A-A



SECTION B-B



SECTION C-C

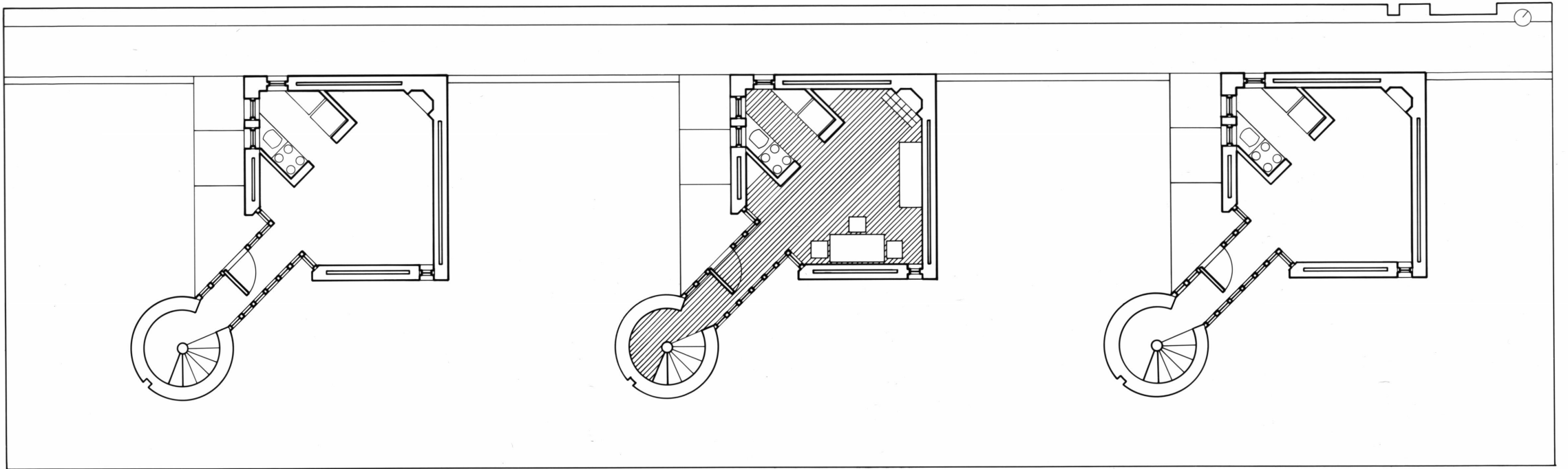


## **The Tower**

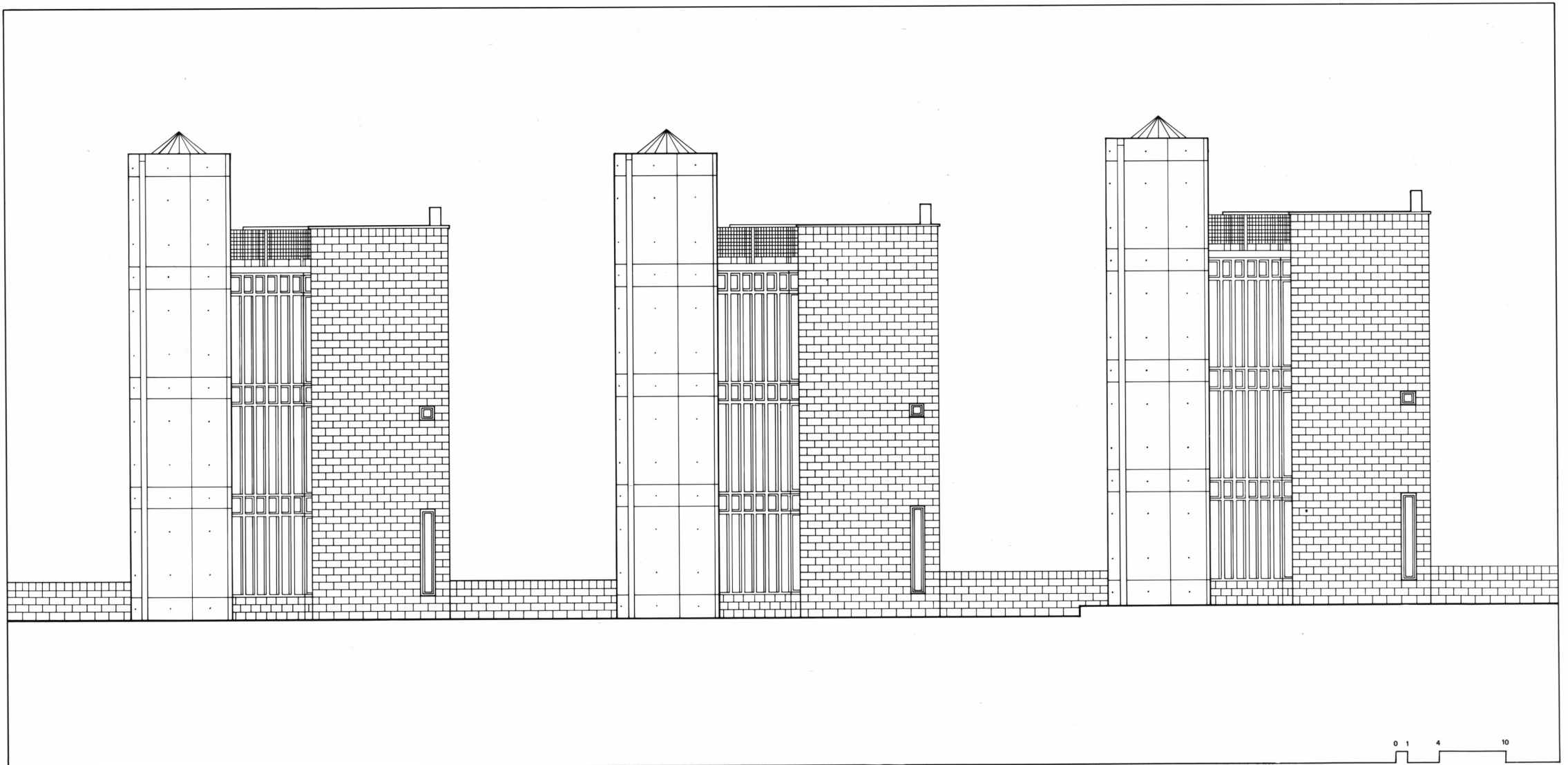
The tower is a response to the need for a terminus of the axis that is generated by the intersection of the wall and the light well. The cylindrical stair tower is a separate element pulled away from the house, serving as an end point from which the student apartment can spring.

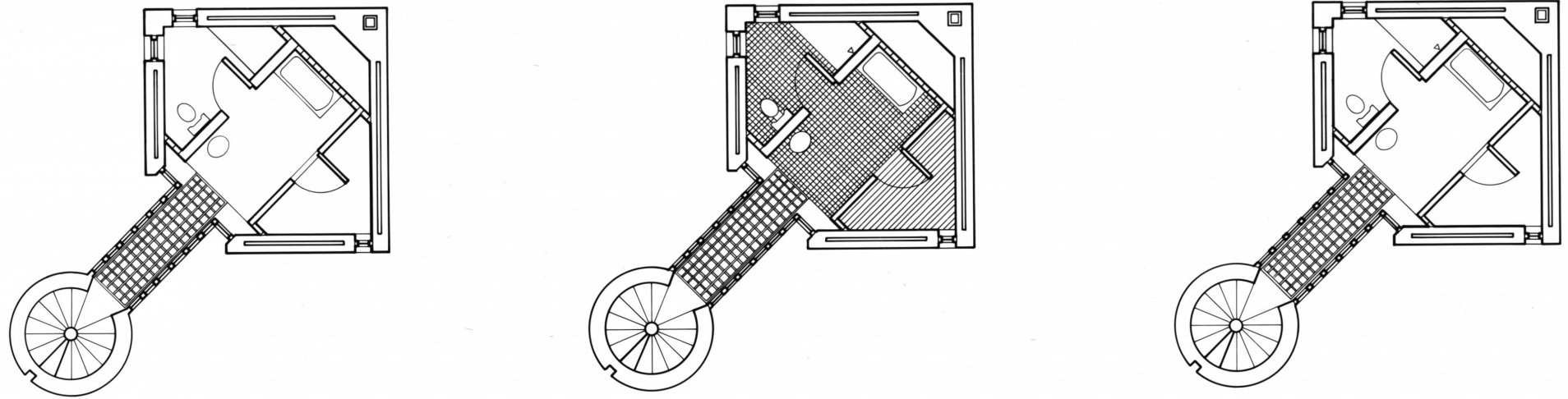
The tower and living quarters are accessible through a steel and glass curtain wall that serves as an entry and provides circulation within the dwelling. The stair tower permits a cyclic movement through the unit that is pierced by the linear movement across the steel and glass bridges that span from landing to landing. Thus vertical and horizontal movement are linked by the joint between the elements of the house.

*All material in nature, the mountains and the streams and the air and we are made of light which has been spent, and this crumpled mass called material casts a shadow, and the shadow belongs to the light. -Louis I. Kahn.*



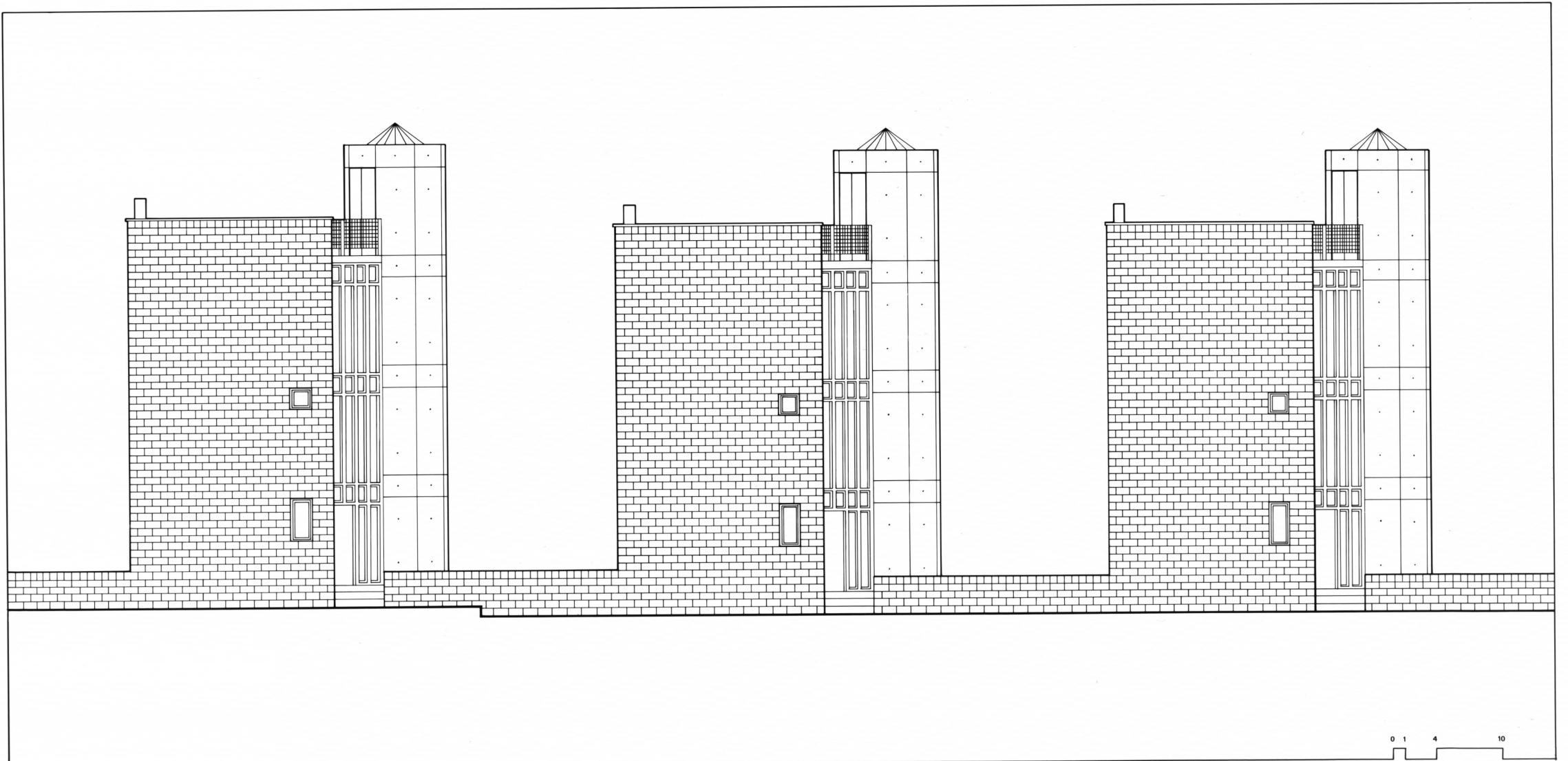
FIRST LEVEL PLAN  
STREET ELEVATION

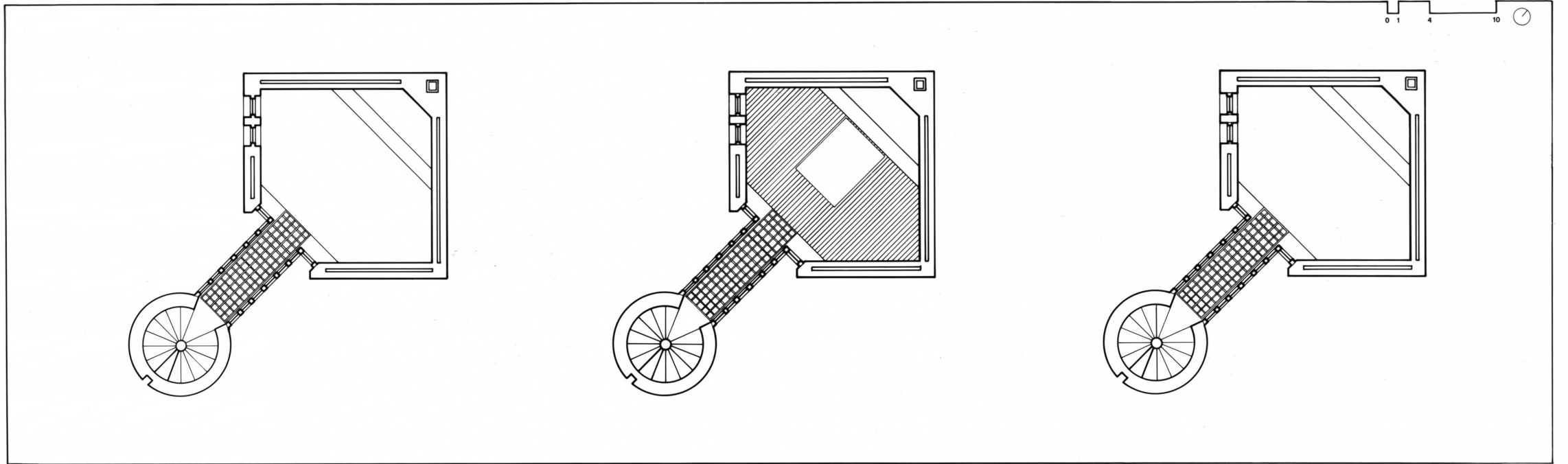




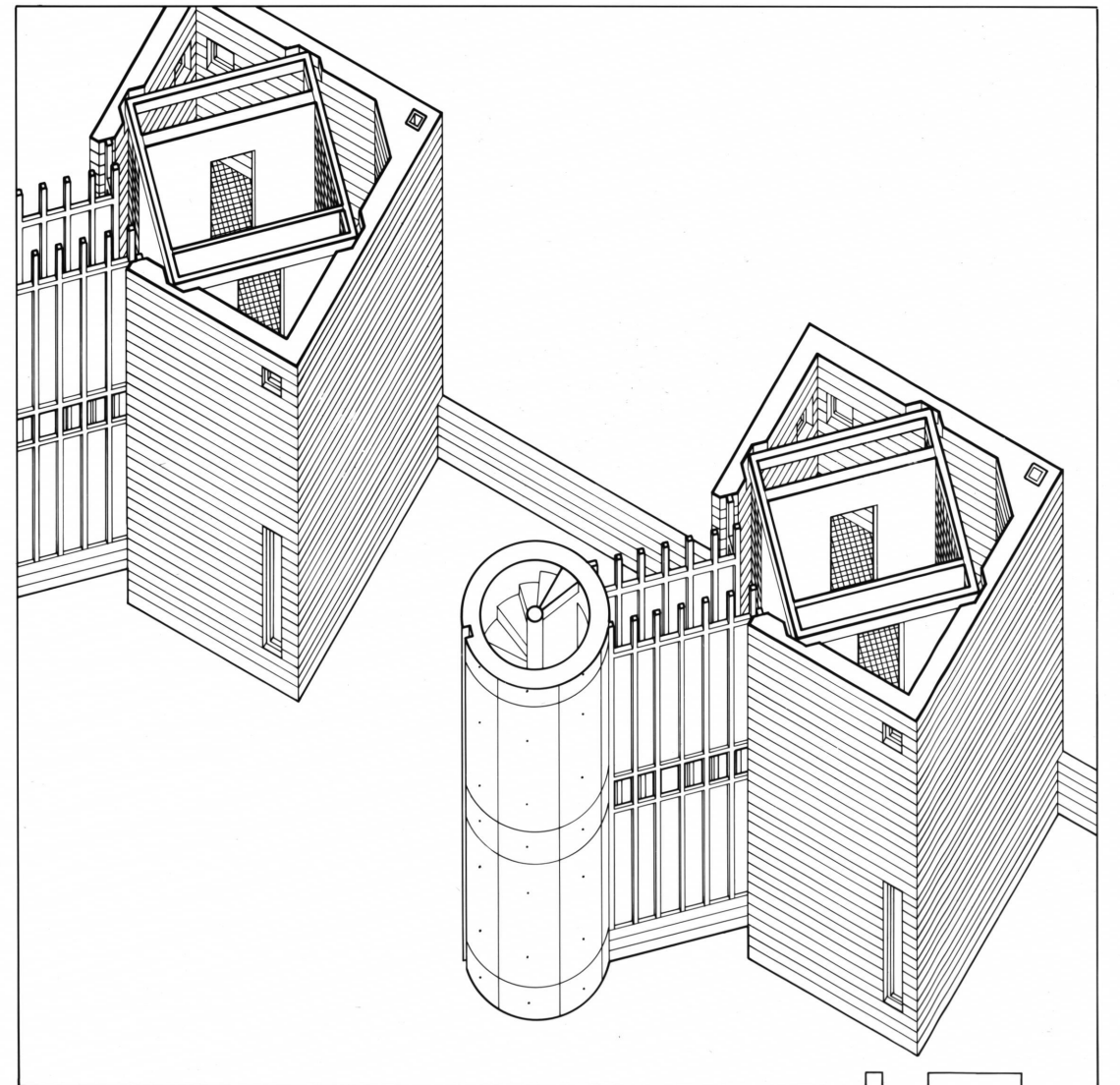
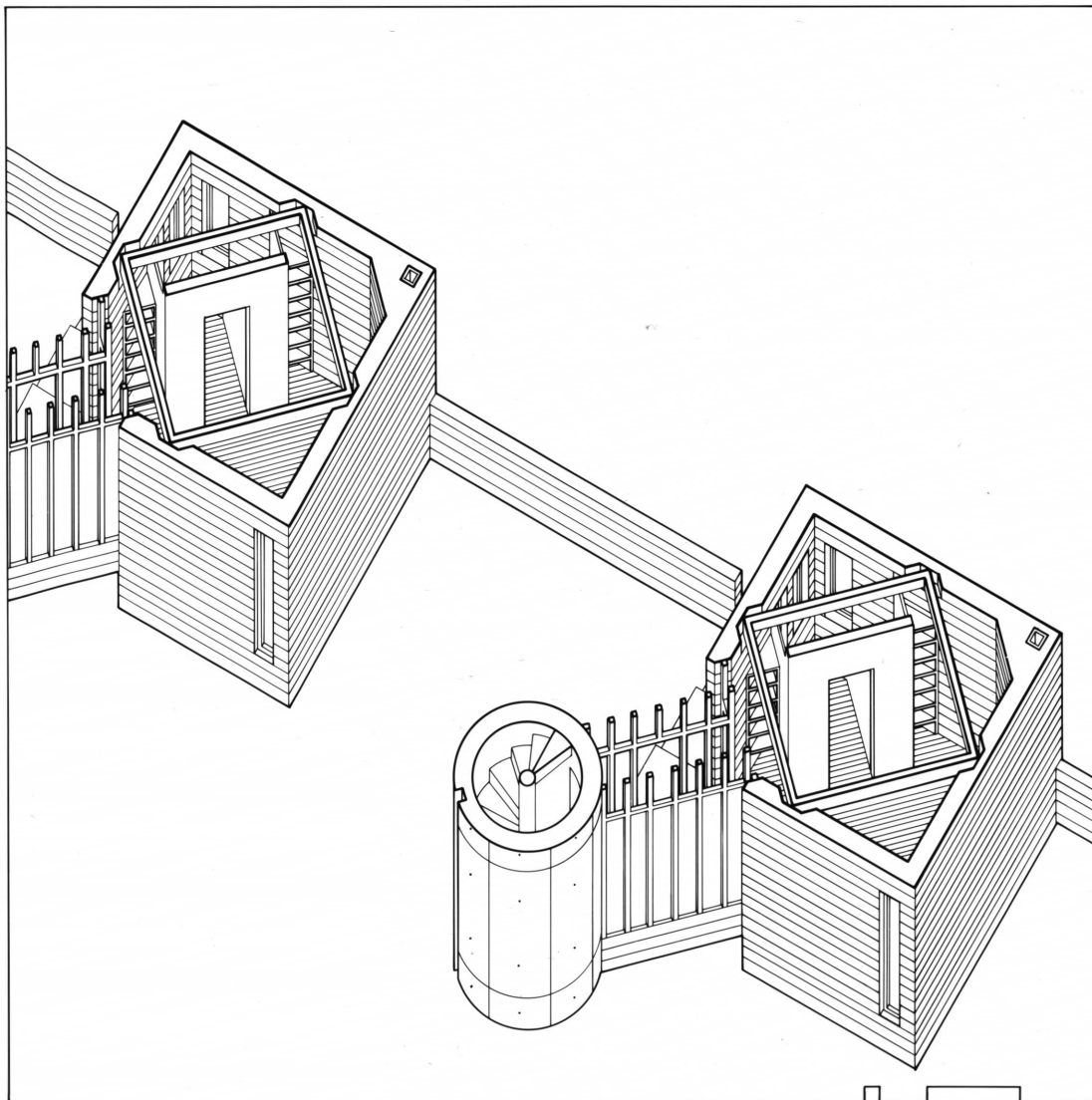
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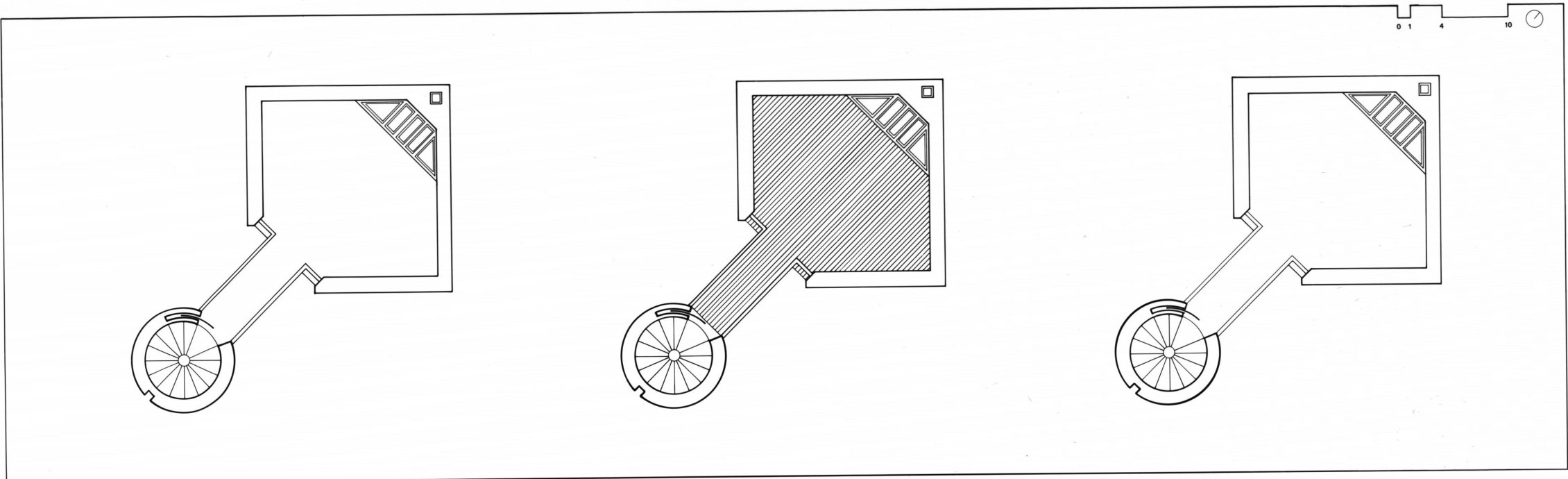
REAR ELEVATION





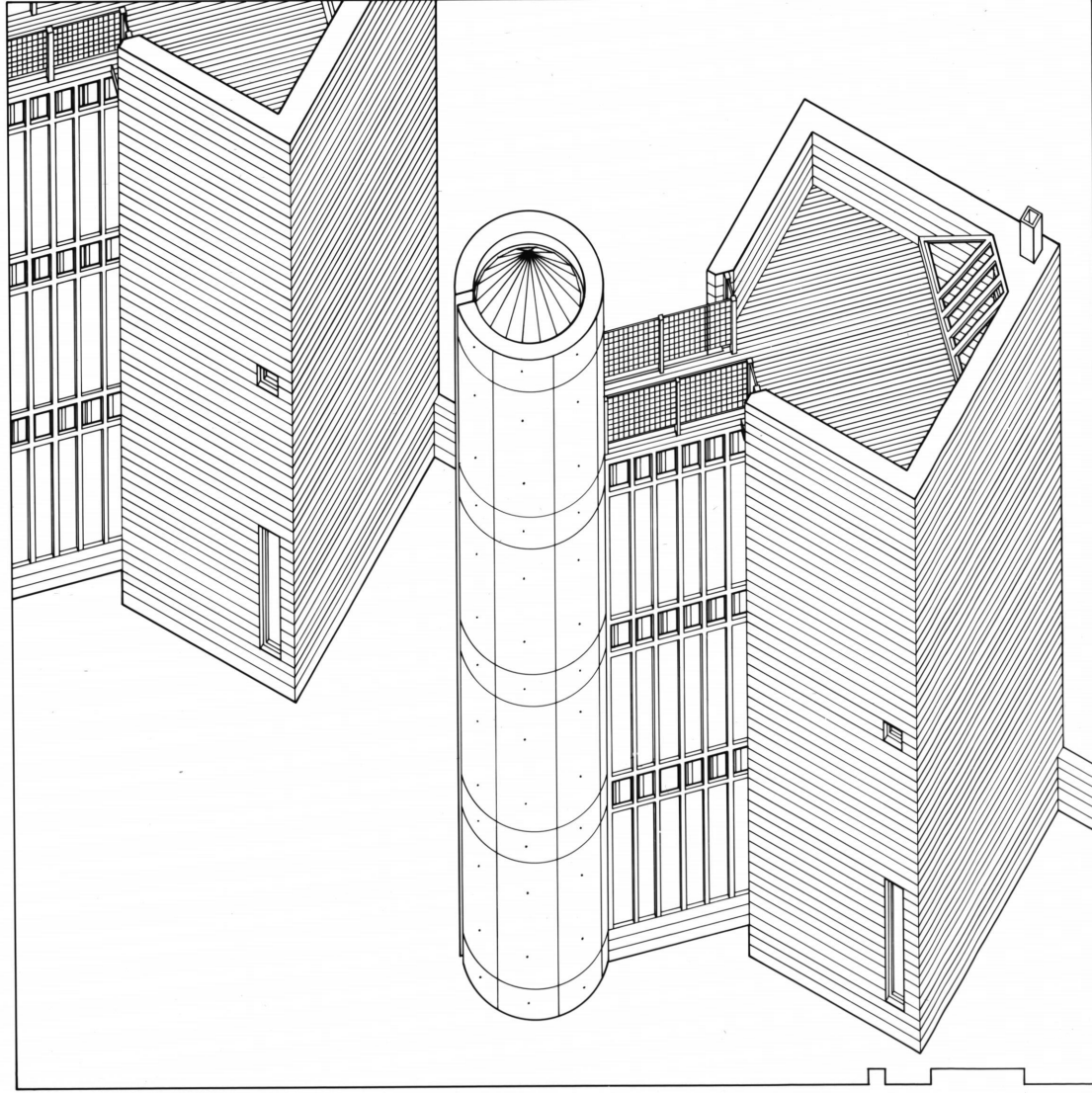
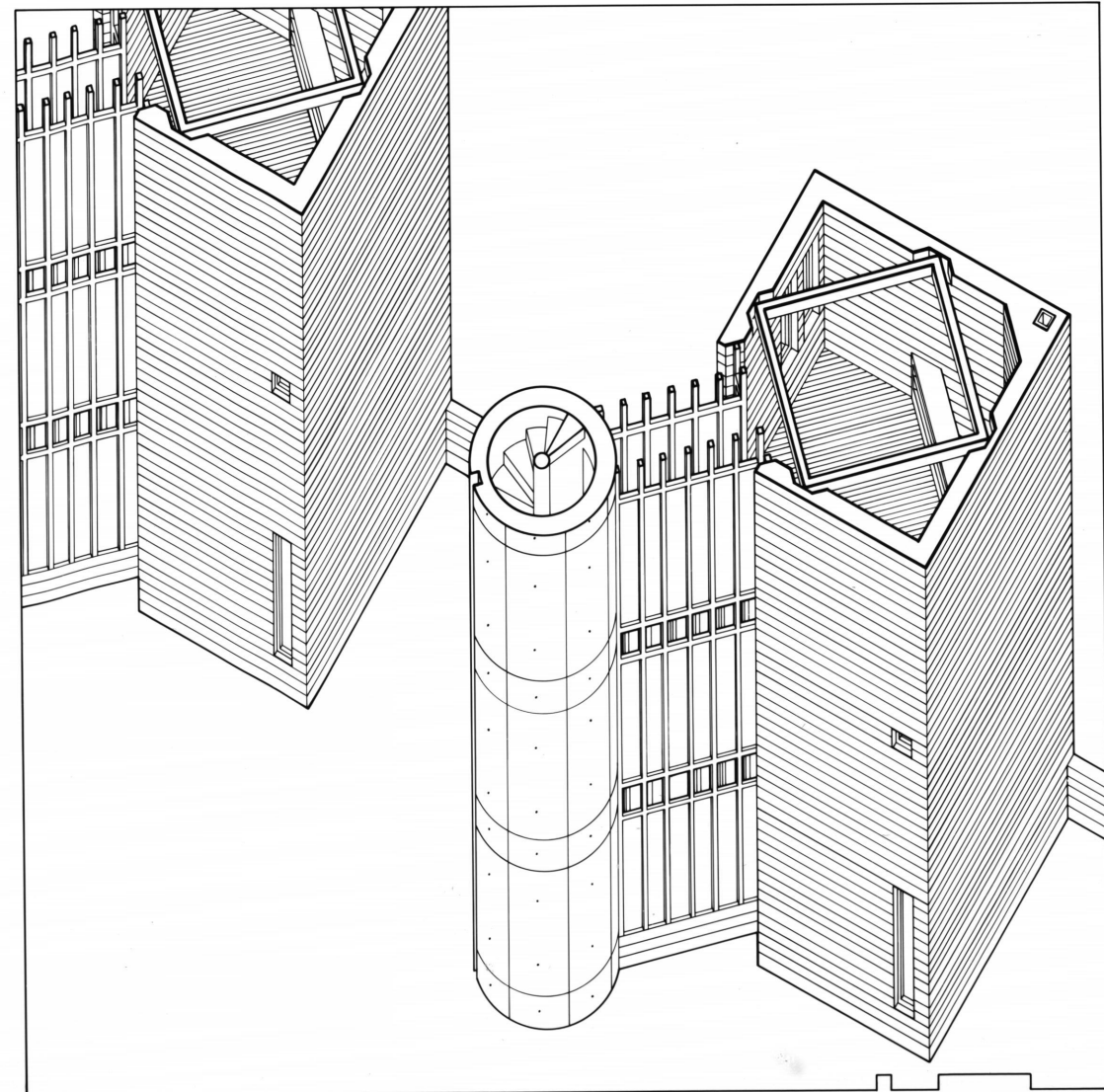
THIRD LEVEL PLAN  
AXONOMETRIC





ROOF LEVEL PLAN

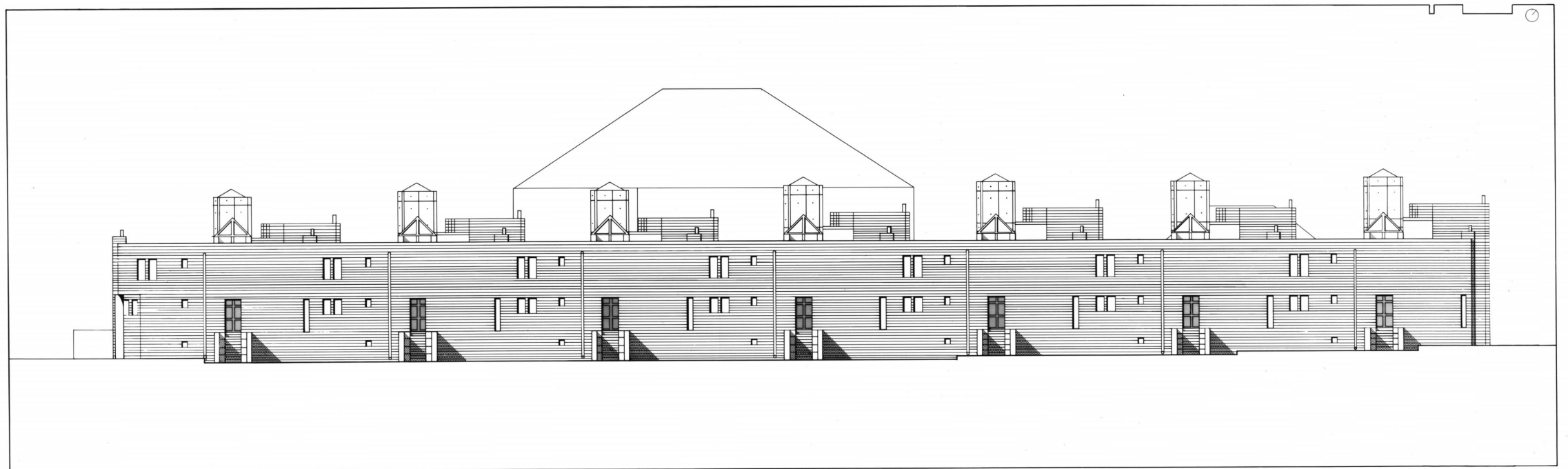
AXONOMETRIC

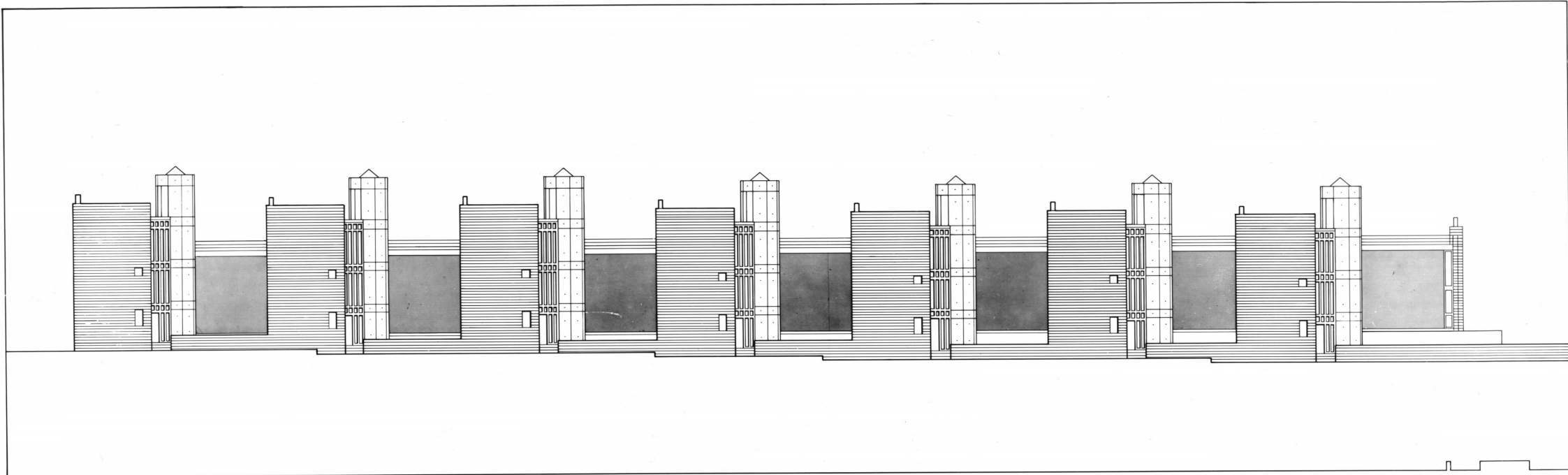




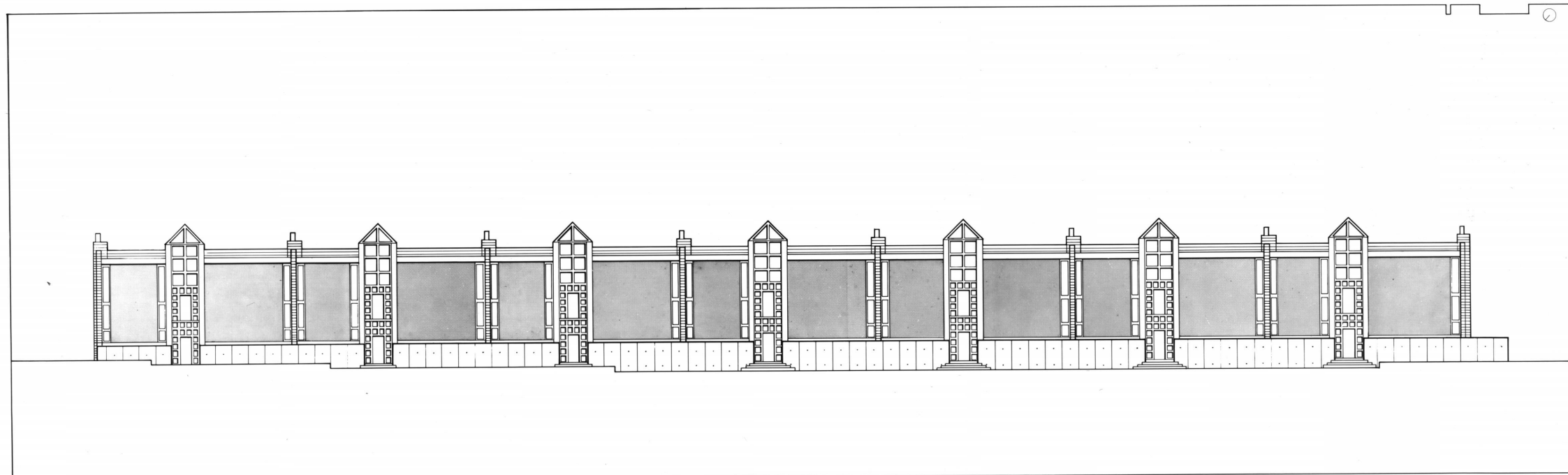


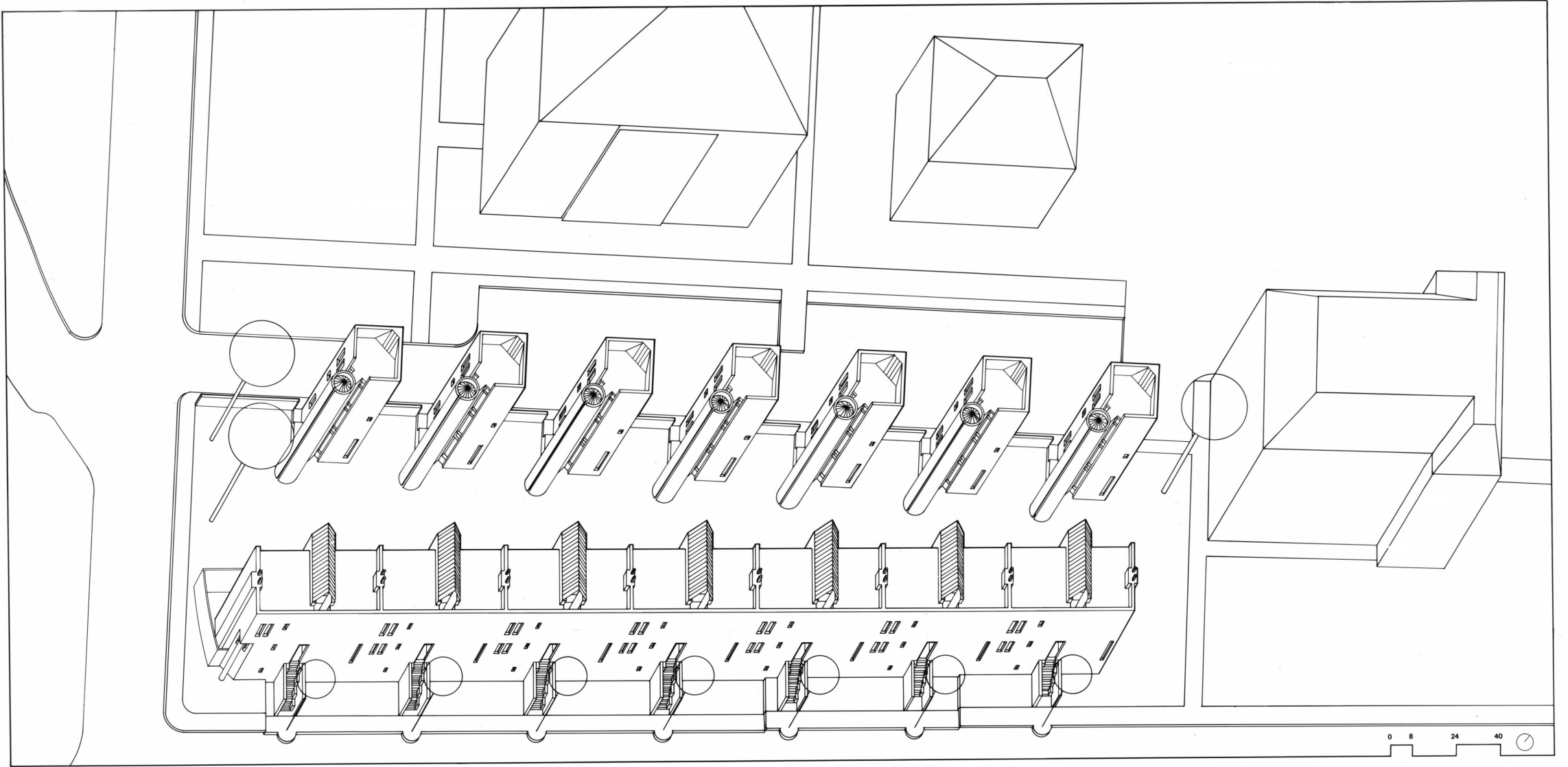
STREET ELEVATION





REAR ELEVATION





AXONOMETRIC

## **Selected Bibliography**

Dal Co, Francesco, **Mario Botta: Architetture 1960-1985.**; Electa, Milan, 1987.

Eliot, T.S., **The Wasteland and Other Poems** Harcourt Brace and Jovanovich, New York, 1965.

Frampton, Kenneth, **Tadao Ando: Buildings, Projects, Writings.** Rizzoli, New York, 1984.

Le Corbusier, **Toward a new Architecture.** The Architectural Press, New York, 1946.

Lobell, John, **Between Silence and Light: Spirit in the Architecture of Louis I. Kahn.** Shambhala Press, Boulder, CO, 1979.

Norberg-Schulz, Christian, **Genius Loci: Towards a Phenomenology of Architecture.** Rizzoli International Inc., Milano, Italy, 1984.

Ronner, Heinz, **Louis I. Kahn: Complete works 1935-1974.** Western Press, Boulder, 1977.

Venturi, Robert, **Complexity and Contradiction in Architecture.** The Museum of Modern Art, New York, 1977.

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