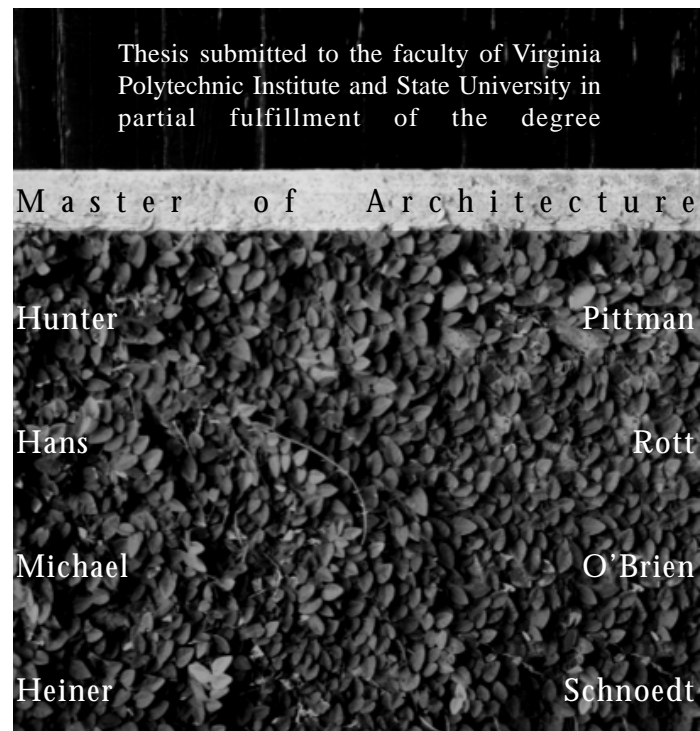


ARCHITECTURE: IN THE LINE OF ECONOMY

ARCHITECTURE: IN THE LINE OF ECONOMY



Robert Warren Baumbach

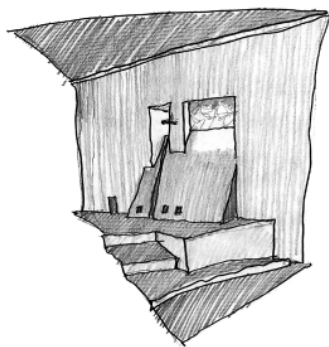
this book is dedicated to my mom and dad

ABSTRACT

Three houses are presented in this book. Each house has been designed with distinct site parameters with the expectation that obvious differences in form would occur. The focus of this investigation lies within the significant parallels that exist between the projects and how those parallels relate to the principles that constitute a framework of operation for a designer.

CONTENTS

Introduction	1
Some Thoughts on Architecture	2
A House for an Alley	6
A House for the Edge of a Field	13
A House for a Hillside	21
Some Realized Projects	29
Conclusion	33
Image Credits, Notes	34
Vita	35



INTRODUCTION

Studying architecture has provided me with a forum in which to clarify convictions and develop principles that will serve as a basis for my work. That basis, I have found, is inexorably bound to those moral and ethical standards which I have established for living. In *Sculpting in Time* Andrei Tarkovsky writes that, “the work could have all been done in my head, but there is a certain danger in not having to reach final conclusions: it’s all too easy to be satisfied with glimpses of intuition, rather than sound coherent reasoning.”¹

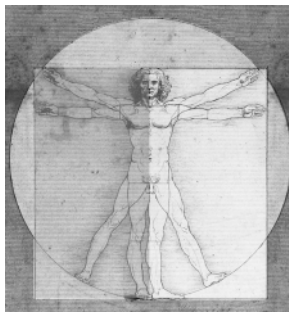
This thesis marks the conclusion of an attempt to translate my position from intuition and sensibility into words and architecture that I am able to critique, develop, and refine.

SOME THOUGHTS ON ARCHITECTURE



ON STYLE AND SUBSTANCE

Contrived and pretentious results await the designer who preoccupies himself with trying to invent a new style. Having a thorough understanding of ourselves as designers while engaging in the act of making will inevitably lead to an honest expression of an autonomous work.



ON HUMANITY AND ORDER

Within each of us is the ability to distinguish music from noise, poetry from drivel. In art we sense the presence of an order that is linked to the soul of man. The human eye and thus the soul is able to discern sensitivity and thoughtfulness in a work. It is when those substantial traces of humanity are embedded in a building that it begins to transcend the ordinary.

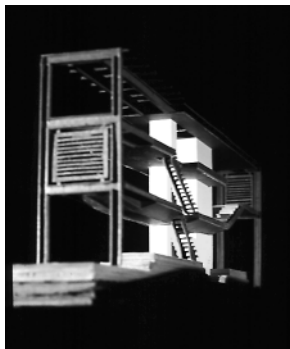


ON BEAUTY AND THE ESSENTIAL

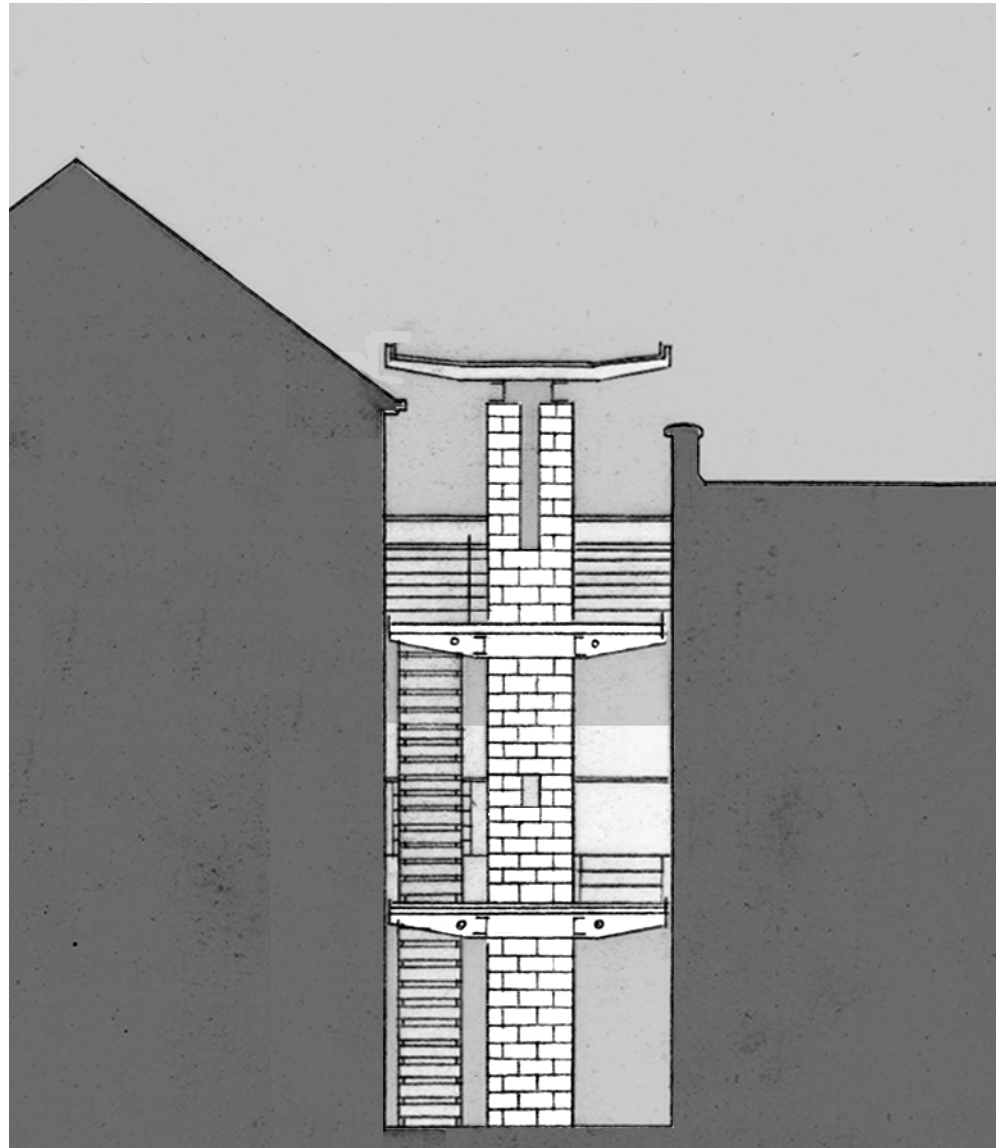
There is purpose, clarity, and substance in the vernacular architecture of southwest Virginia, where a certain frugality regulates craftsmanship. The barns, mills, and farmhouses address what is essential to their purpose and unconsciously reveal a certain truthfulness.

Where the concern for economy exists, the route to the essential is always more direct.

The line of beauty is the result of perfect economy. -R. W. Emerson²

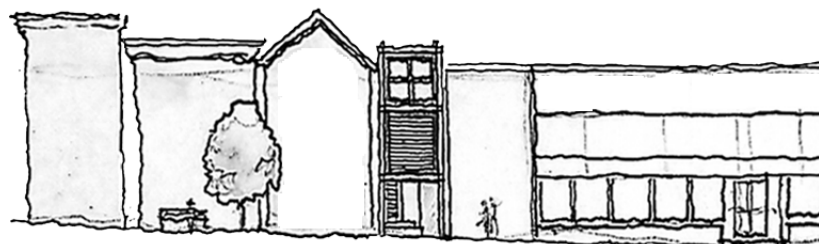


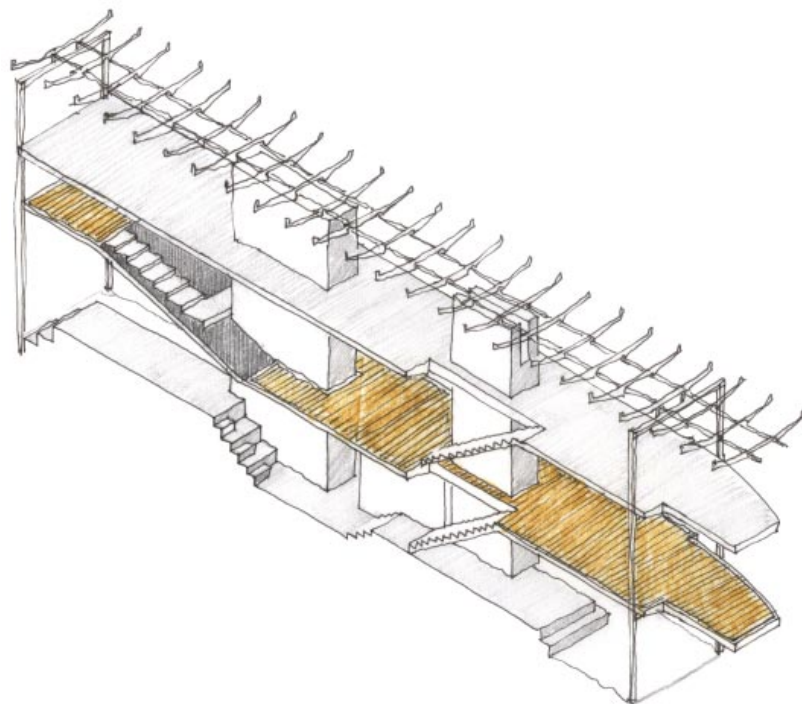
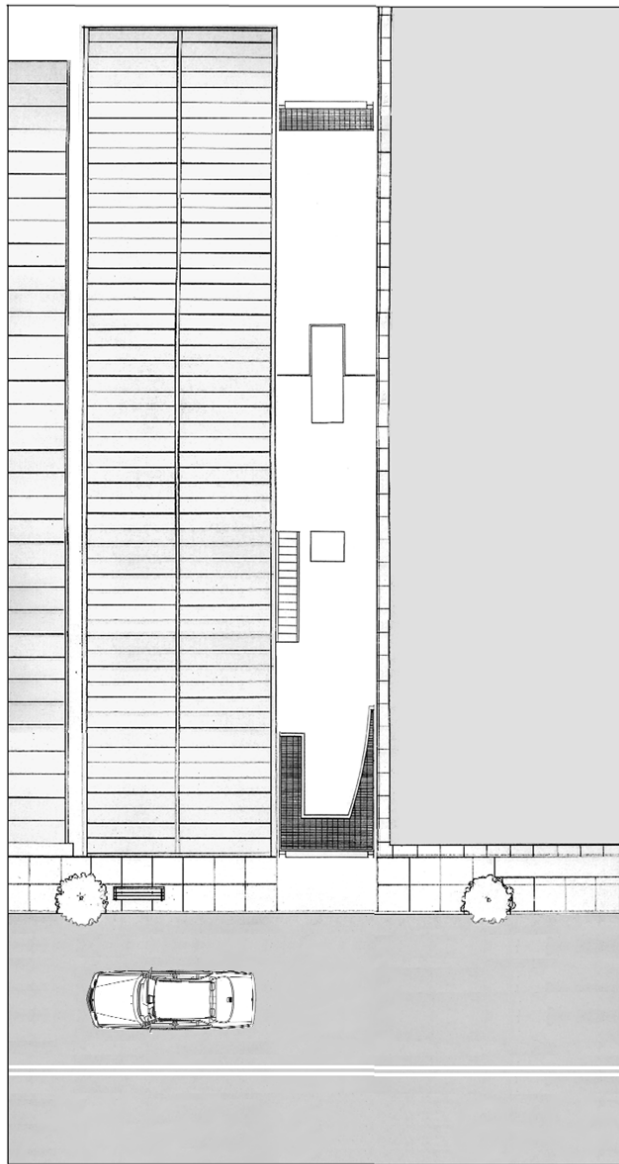
PROJECT 1: A HOUSE FOR AN ALLEY

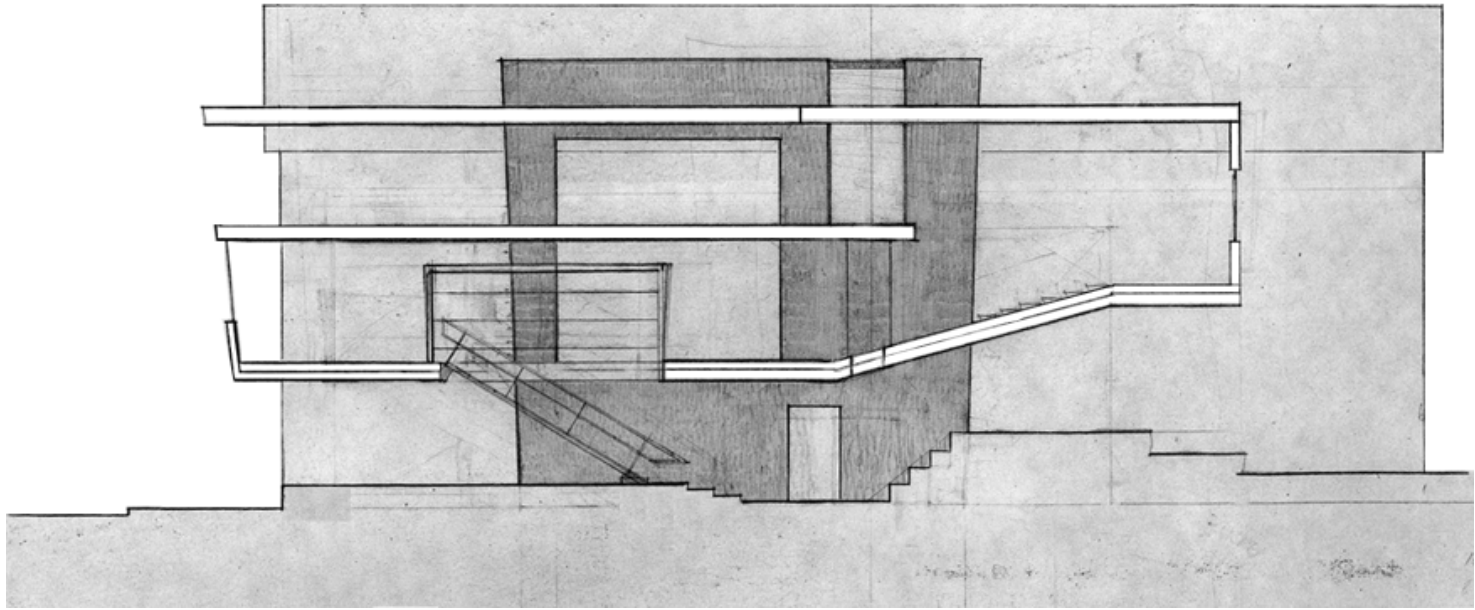


house for an alley
Blacksburg, Virginia

A twelve foot wide alley contained by the brick walls of two adjacent buildings is the site for the first of three houses. A centralized concrete core lifts the main floor and roof garden off the ground to preserve the public easement. An opening in the core at the easement level provides an entrance into the first private region of the house. This region, having the same width as the easement, is the 'yard' of the house and leads to the stairs which ascend into the house. Inside the house, the core houses the primary utilities, makes subtle transitions for the primary spaces, and creates opportunities for paths and places.







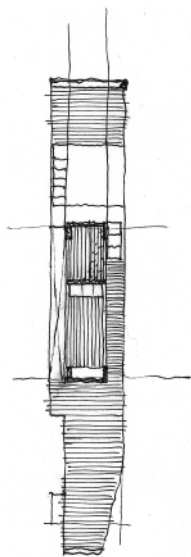
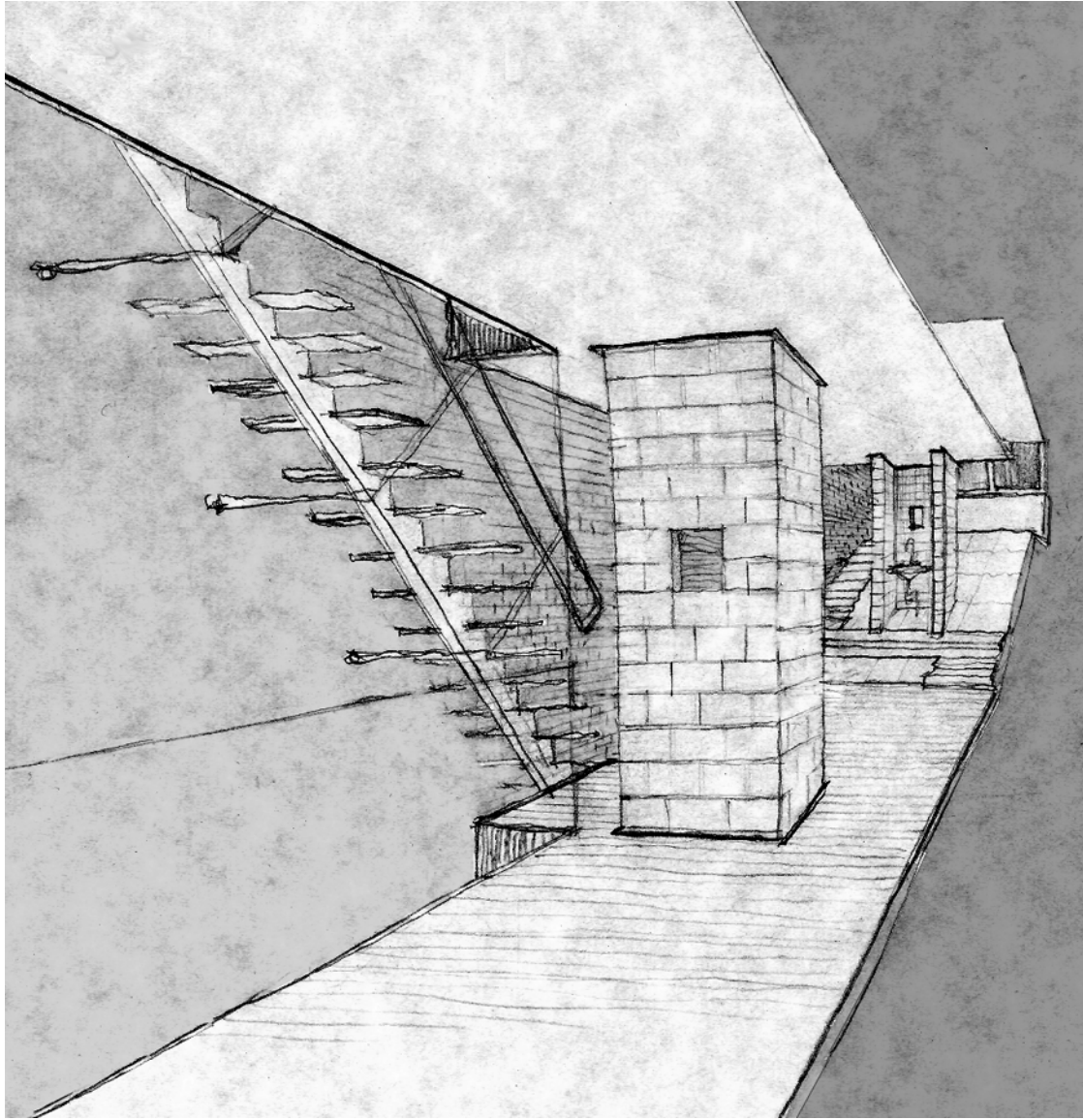
entry level



main floor



roof garden



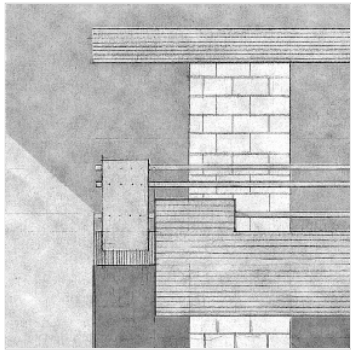
early study of plan & interior of main floor (view from main st.)



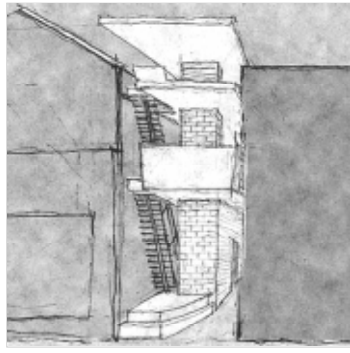
main floor

- 1. *living room*
- 2. *kitchen*
- 3. *bathroom*
- 4. *studio*
- 5. *bedroom*
- 6. *terrace*

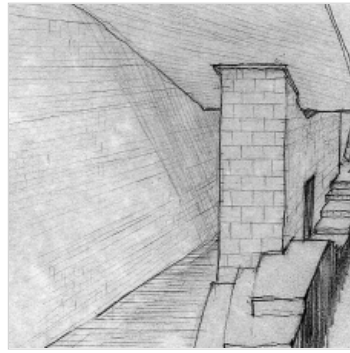




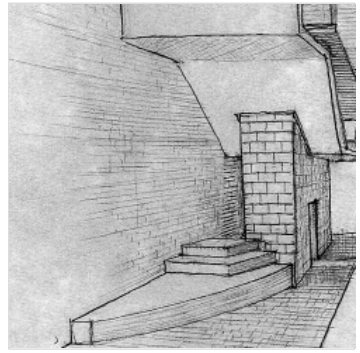
a



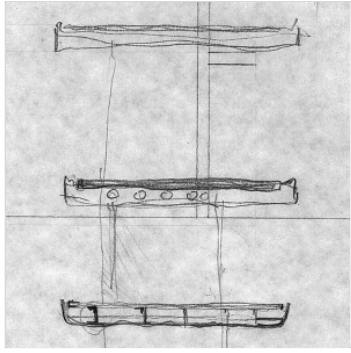
b



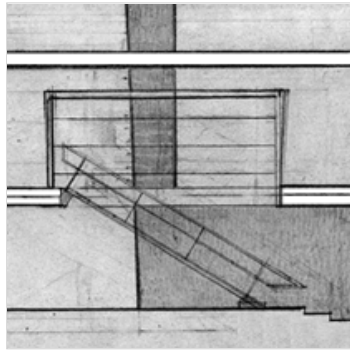
c



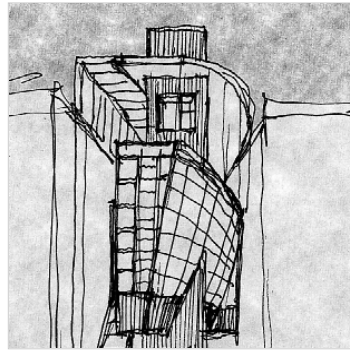
d



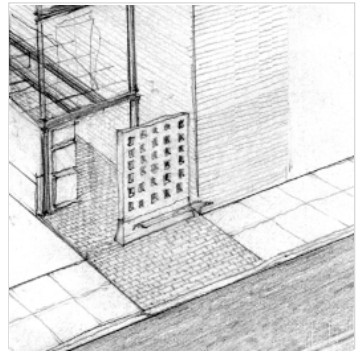
e



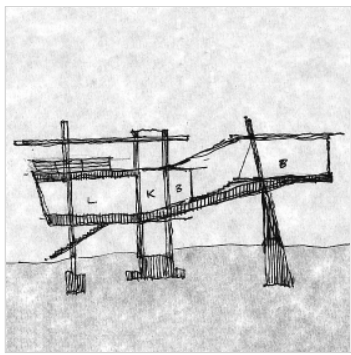
f



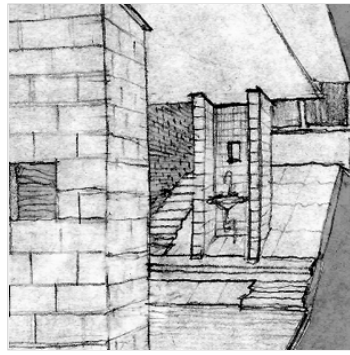
g



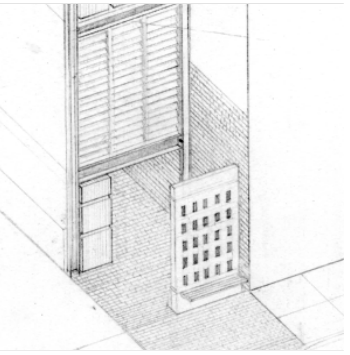
h



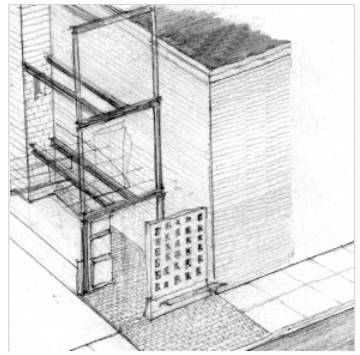
i



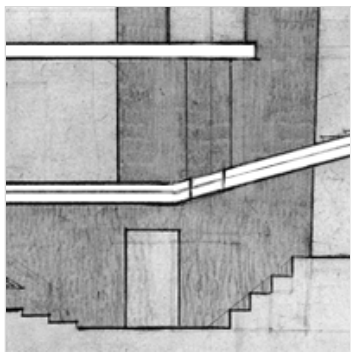
j



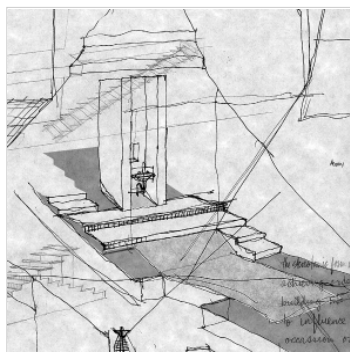
k



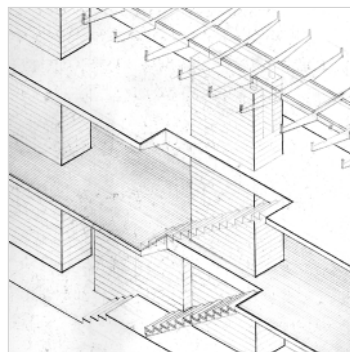
l



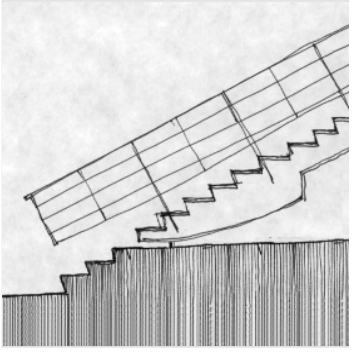
m



n

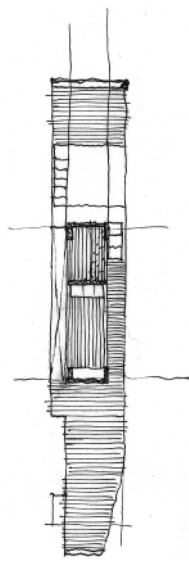
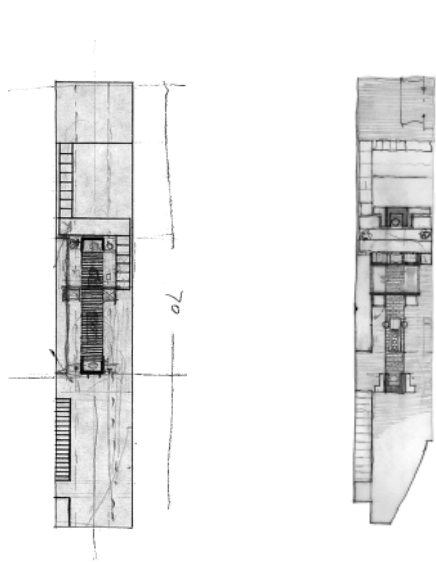


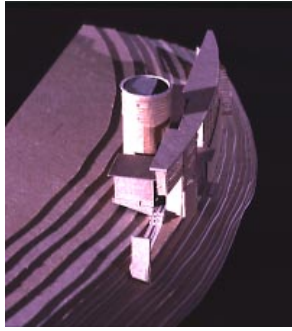
o



p

a. parapet and railing of roof garden b. initial study of continuous floor and parapet c. easement / core study looking towards main st. d. core / ceiling study looking towards main st. e. potential suspended floor types f. stair and glass weather protection g. early conceptual study integrating core and glass wedge h. easement / sidewalk material study i. section looking at core / structure / flooring system j. interior perspective of dual sink cores k. sidewalk / transition zone for urban condition l. core and steel structure integration m. entrance condition from easement into realm of 'yard' n. stair / platform / sink-core condition o. concrete 'yard' to steel stair transition p. concrete / steel detail

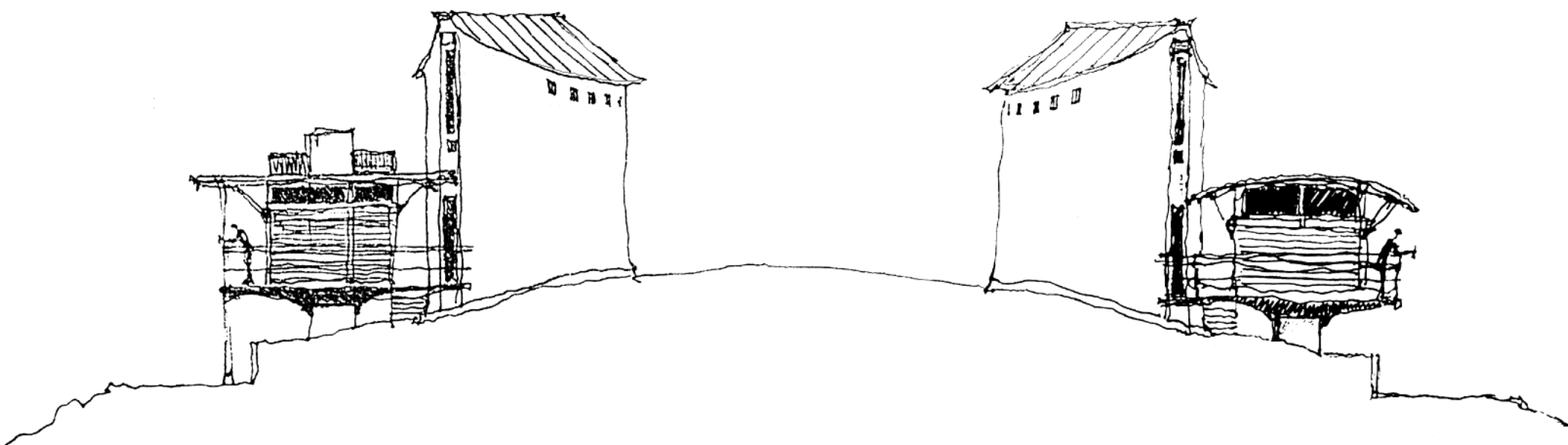


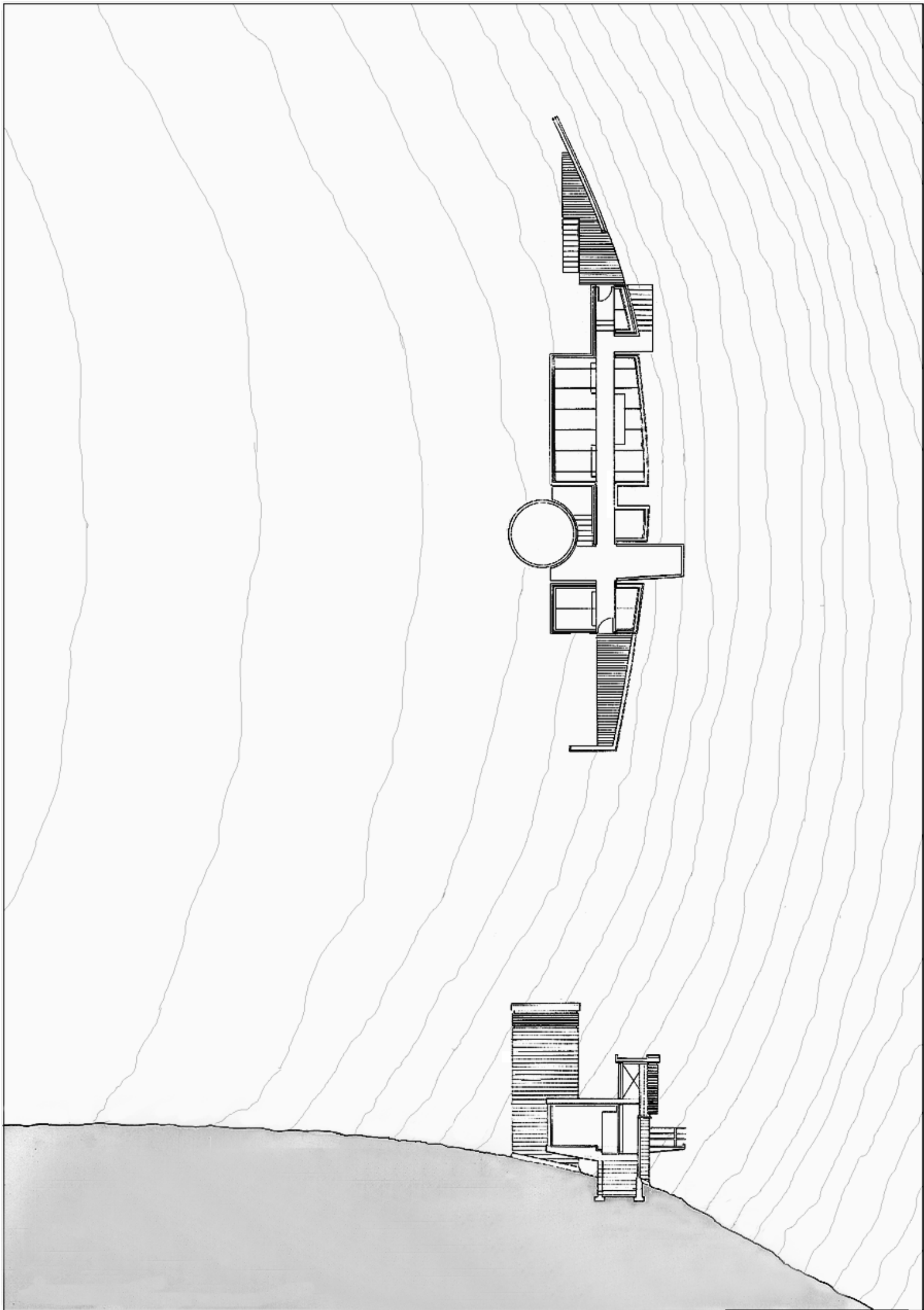


PROJECT 2: A HOUSE FOR THE EDGE OF A FIELD

a house for the edge of the field
North Fork Valley, Virginia

A field at the top of a knoll in the North Fork Valley is the site for the second house. The Blue Ridge Mountains along with the edge of the field offer the site parameters for this project. With a concern for preserving the field, the house was positioned at the brow of the west facing hill. The slight belly in the field prompted the need for a house raised on a platform. The tower would provide a better view of the valley. The two early studies below begin to show the platform and the tower and how they might lend themselves to housing the public and private entities of the program.

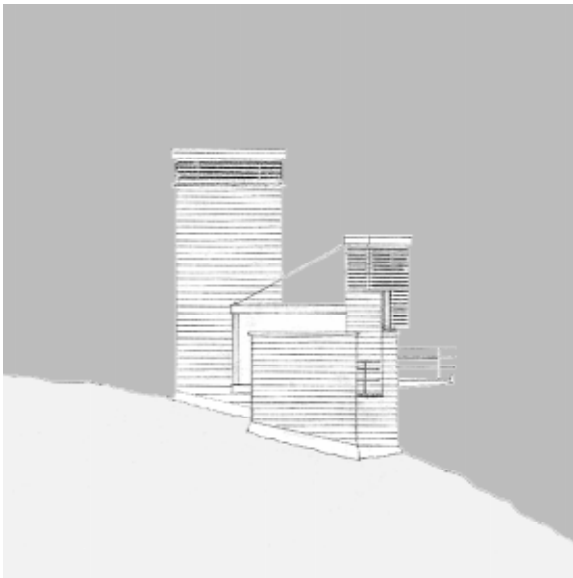




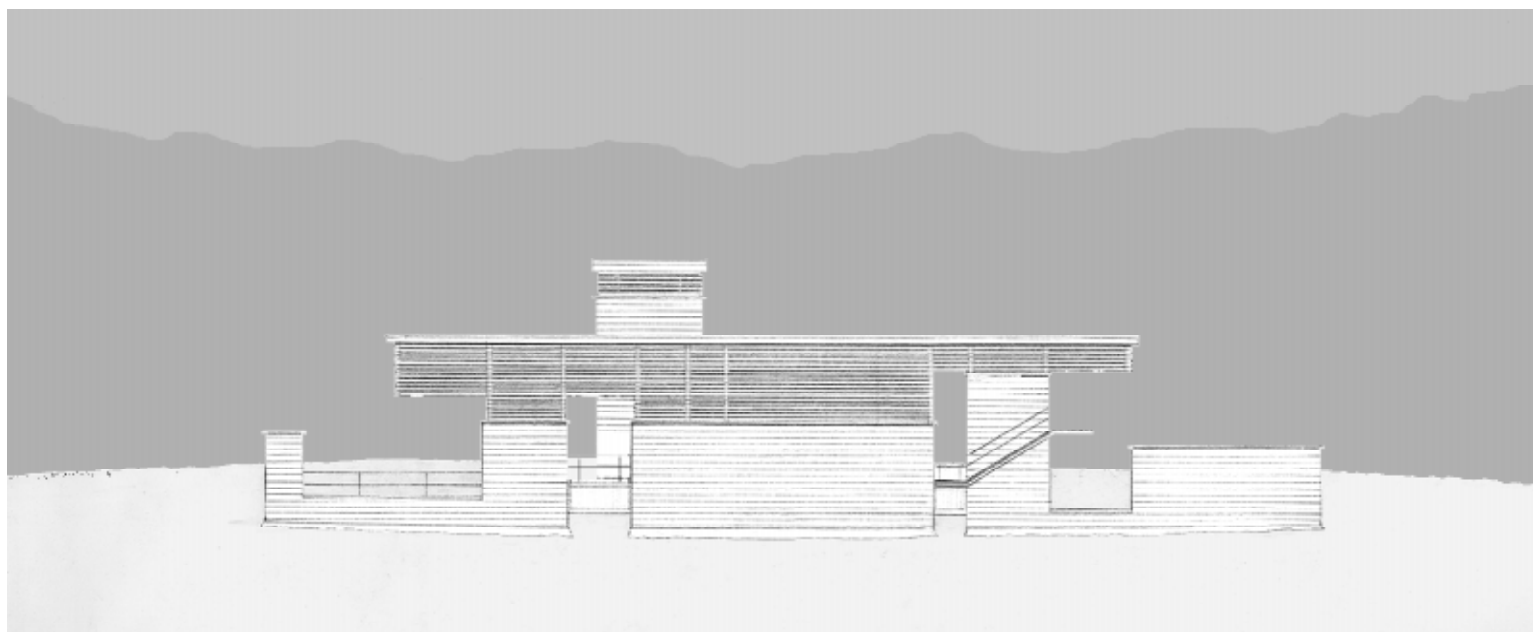
contour interval: 1.5'



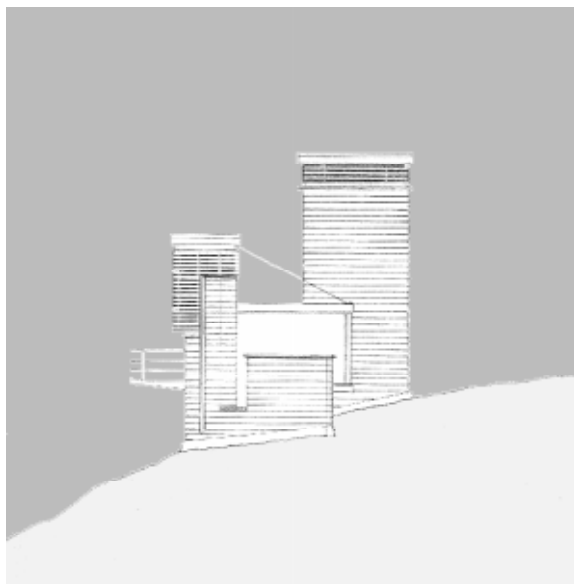
24'



north elevation



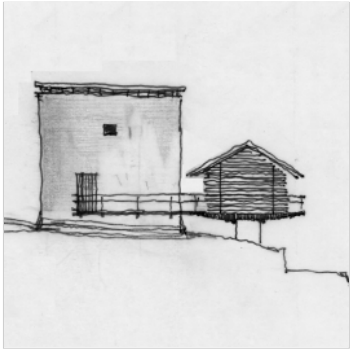
west elevation



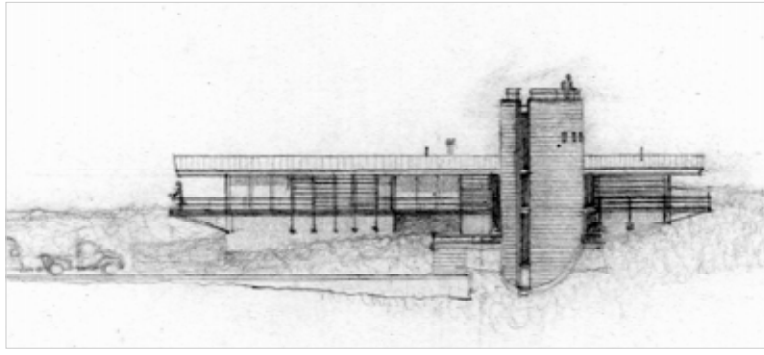
south elevation



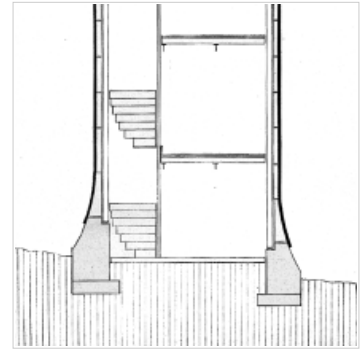
east elevation



a



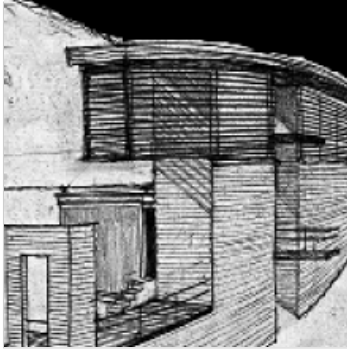
b



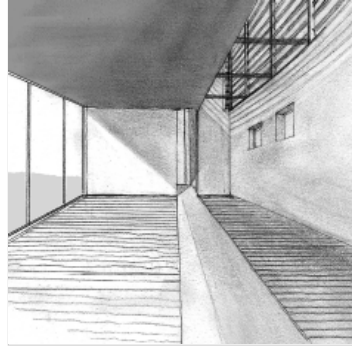
c



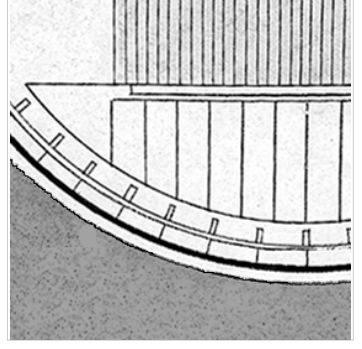
d



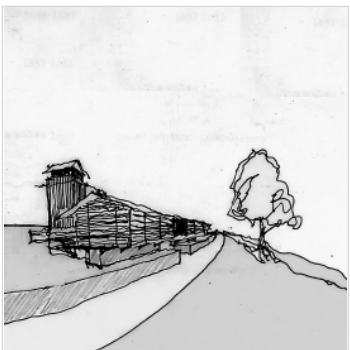
e



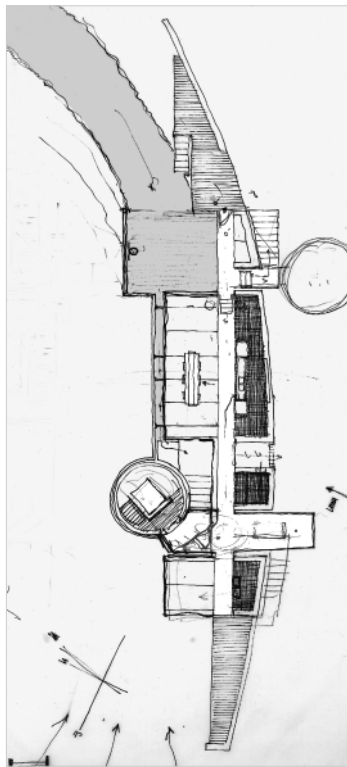
f



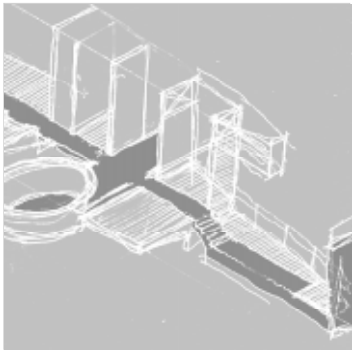
g



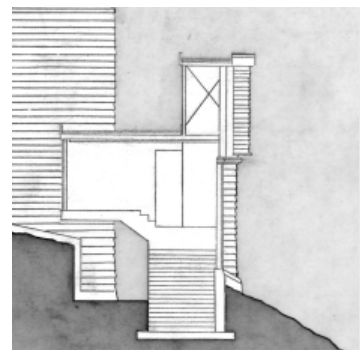
h



i



j

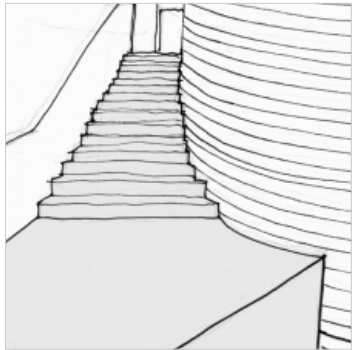


k

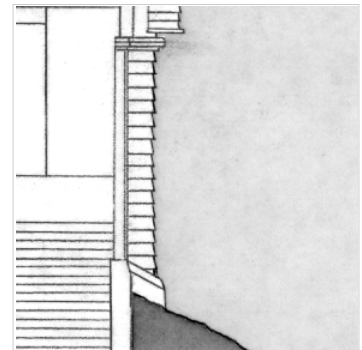


l

m

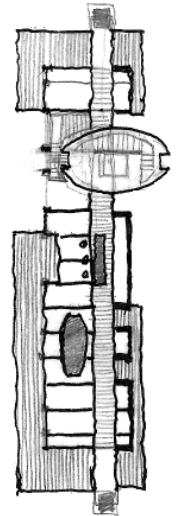
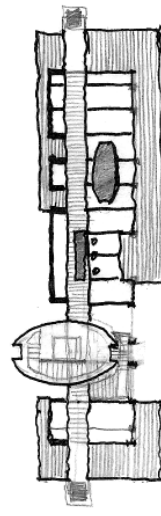
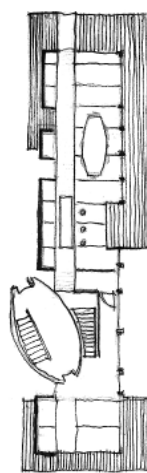
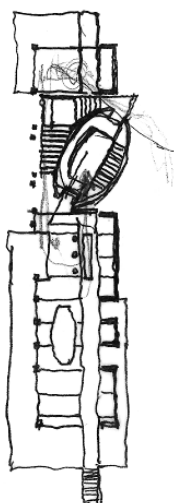
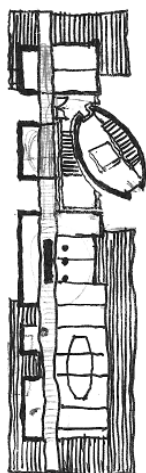
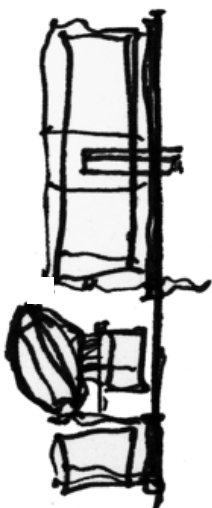


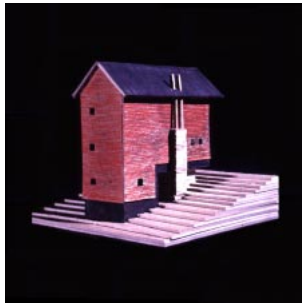
n



n

a. north elevation platform and tower - one of three b. west elevation with rectilinear plan c. section of elliptical shaped tower d. north elevation platform and tower - two of three e. perspective looking southward f. interior perspective of dining room, path, and kitchen g. stair / bedroom condition in elliptical shaped tower h. early study looking southward i. axon sketch showing path / tower condition j. section-elevation cut through studio k. north elevation platform and tower - one of three l. plan of platform and tower with curved wall m. stair / tower condition on rectilinear plan n. curved-wall section





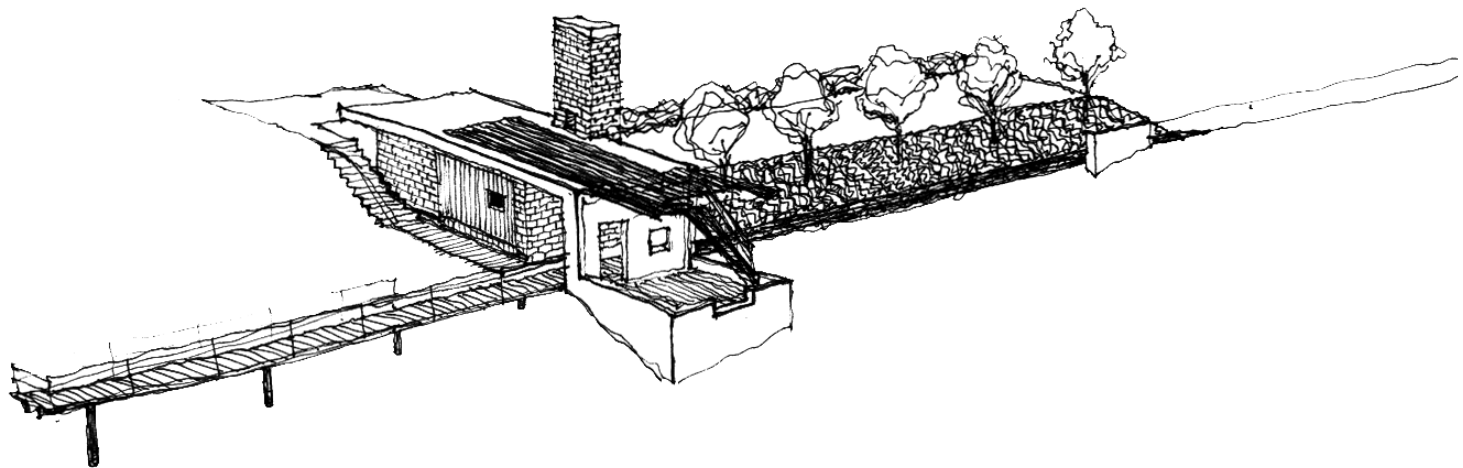
PROJECT 3: A HOUSE FOR A HILLSIDE

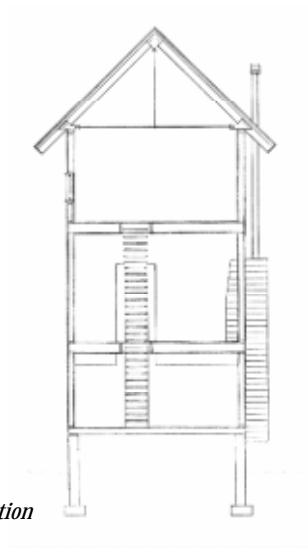
house for a hillside
Brush Mountain, Virginia

A wooded hillside at the foothills of Brush Mountain is the site of the third house.

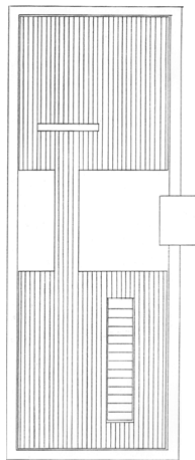
The slope of the foothills generated a lateral driveway and footpath approach to the house. The threshold and entrance utilize the lower part of the foundation necessary to compensate for the slope. The lower foundation, made of poured concrete, provides a transition space for the primary living space on the main floor while the upper foundation made of concrete block houses utilities and provides a place for dry storage.

Significant about the conception of this project is the concern for an architecture that is modern without the false appearance of being modern. Inspiration was taken from local traditional buildings which embody modern principles. What are those qualities which compel us towards both a modern and traditional architecture? The derivative of vernacular architecture seems to hold within it a connection between the two.

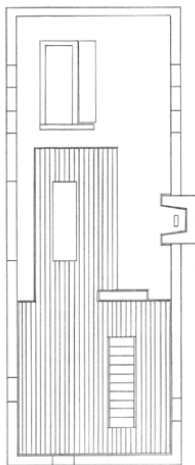




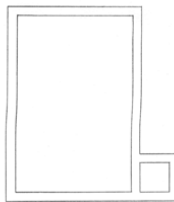
transverse section



third floor



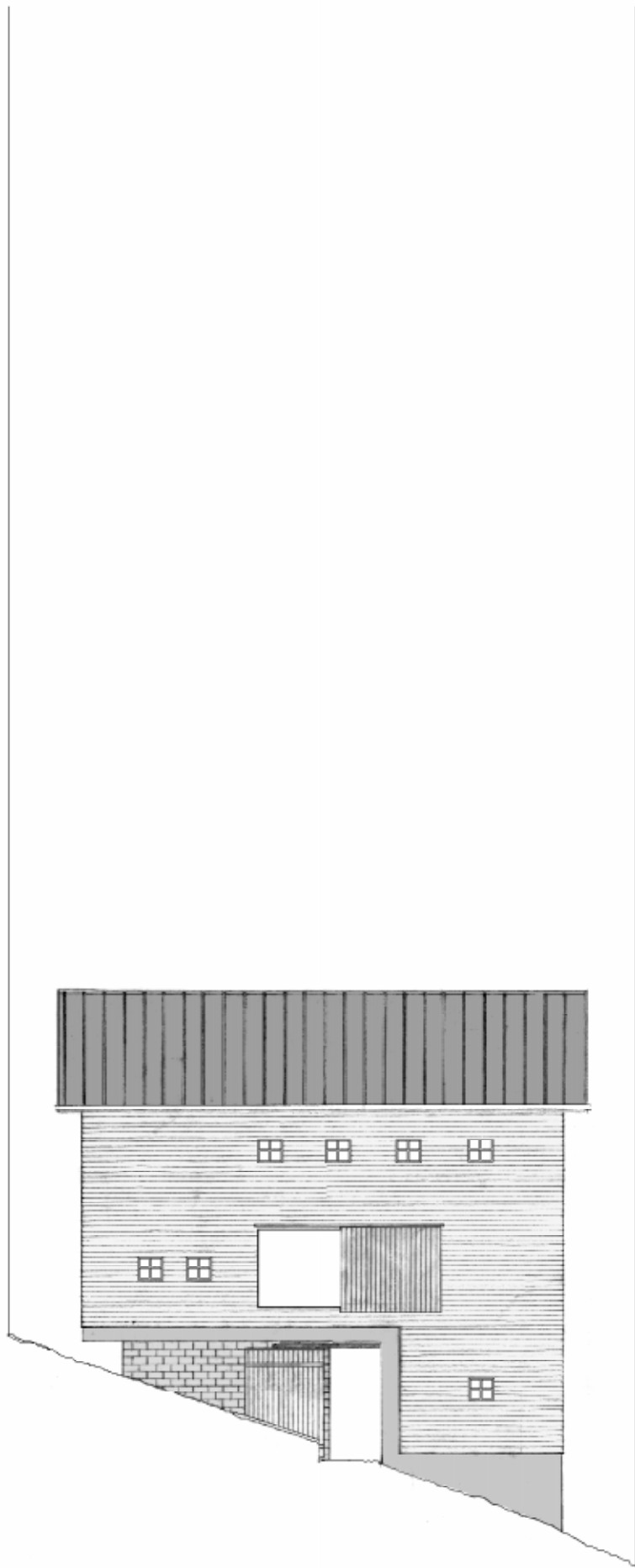
second floor



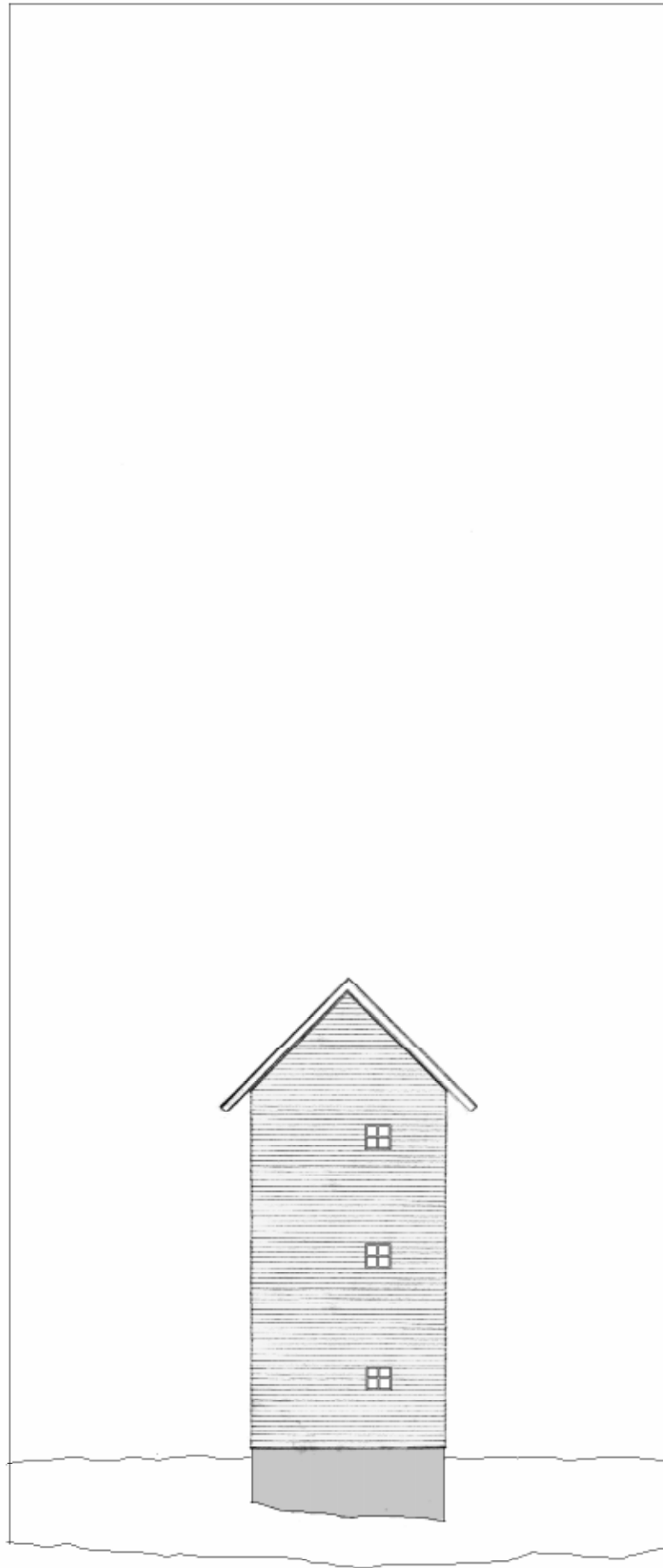
main floor



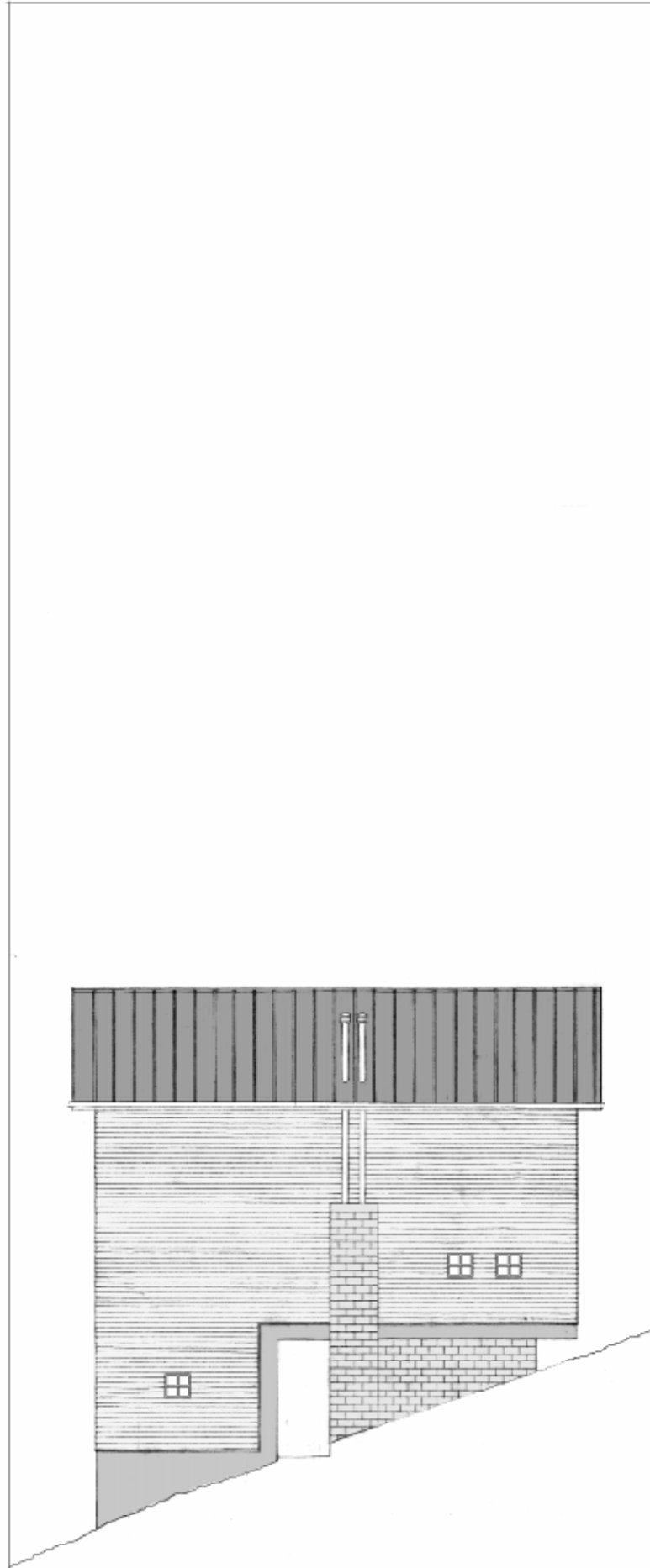
north elevation



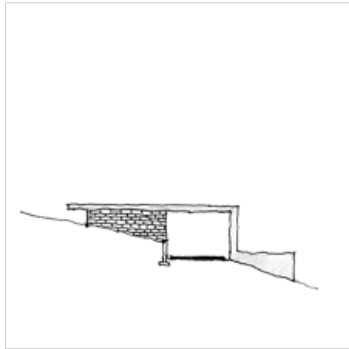
west elevation



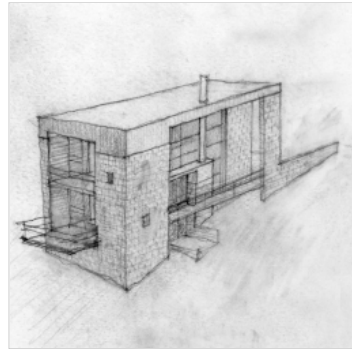
south elevation



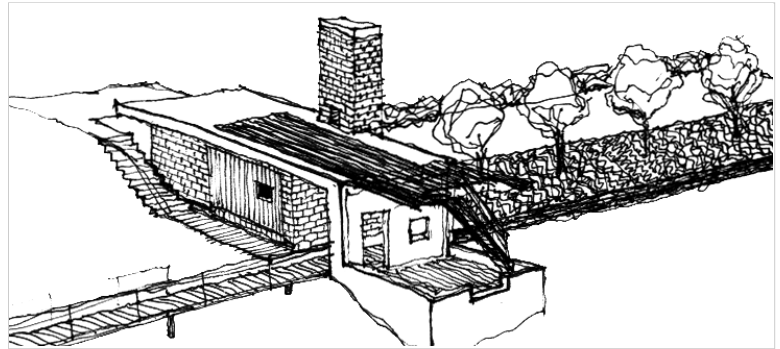
east elevation



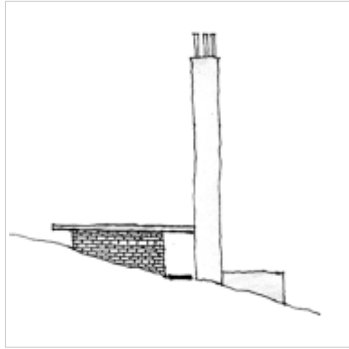
a



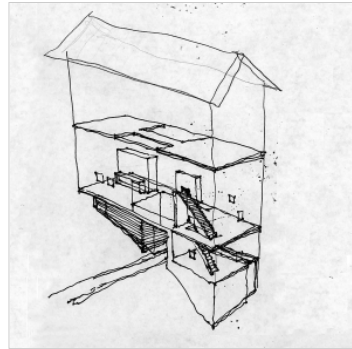
b



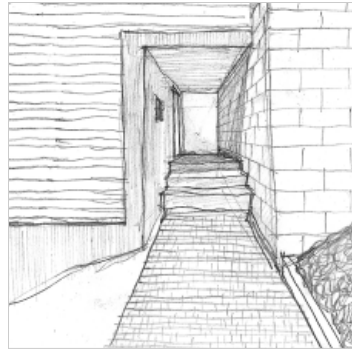
c



d



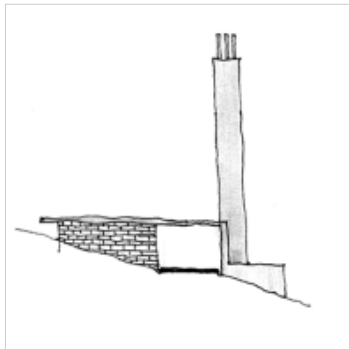
e



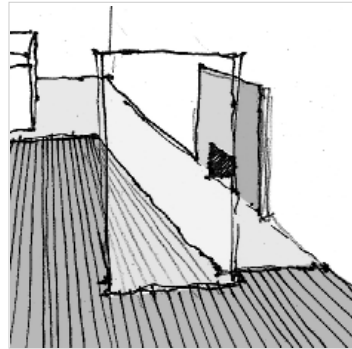
f



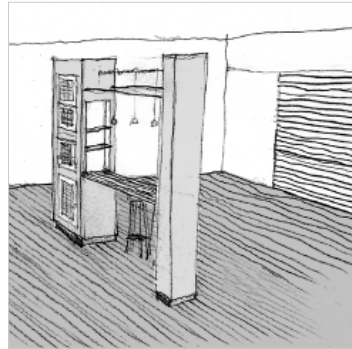
g



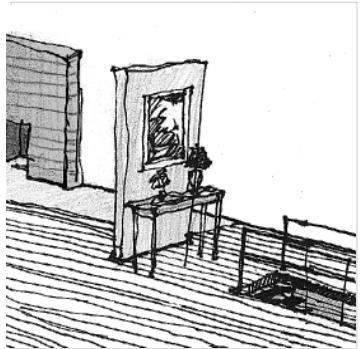
h



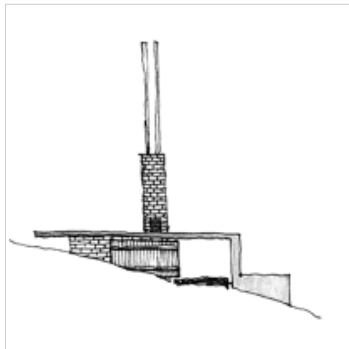
i



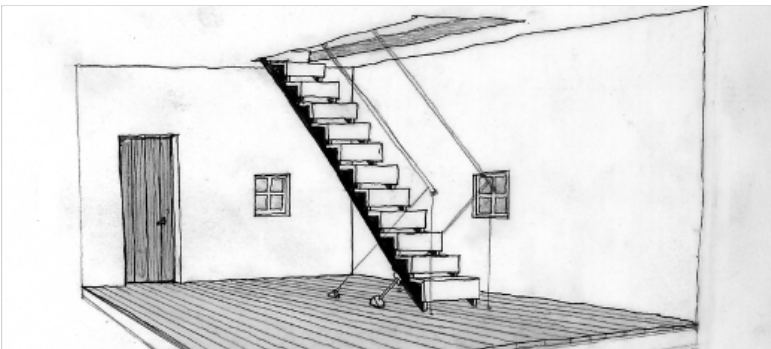
j



k



l

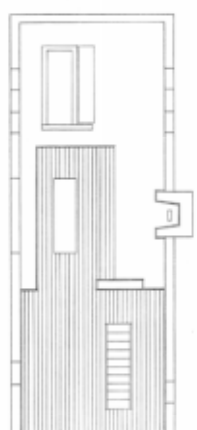
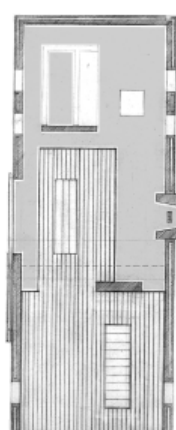
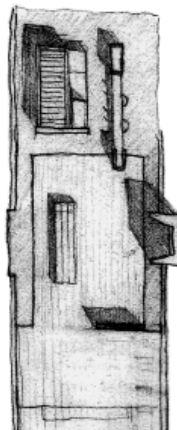
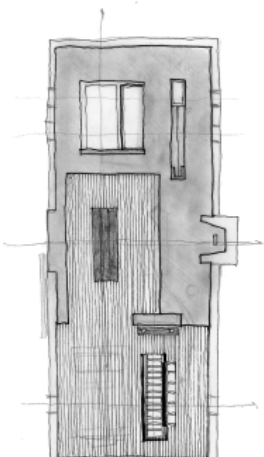
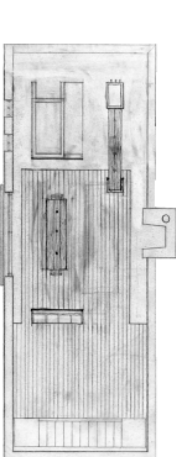


m



n

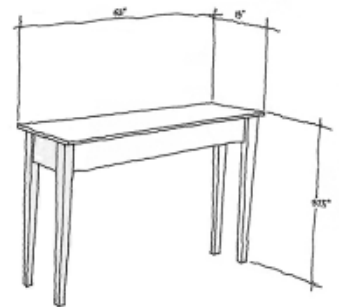
a. entrance / foundation / fireplace - study one of four b. early conceptual drawing c. foundation drawing showing entrance and utility basements d. entrance / foundation / fireplace - study two of four e. sketch of three floors f. sidewalk / breezeway / foundation perspective g. north elevation entrance and porch condition h. entrance / foundation / fireplace - study three of four i. foundation slab / wood floor condition j. work space and storage for kitchen k. stair from entrance-foundation l. entrance / foundation / fireplace - study one of four m. entrance from breezeway / stair up to main floor n. dining room / fireplace looking eastward

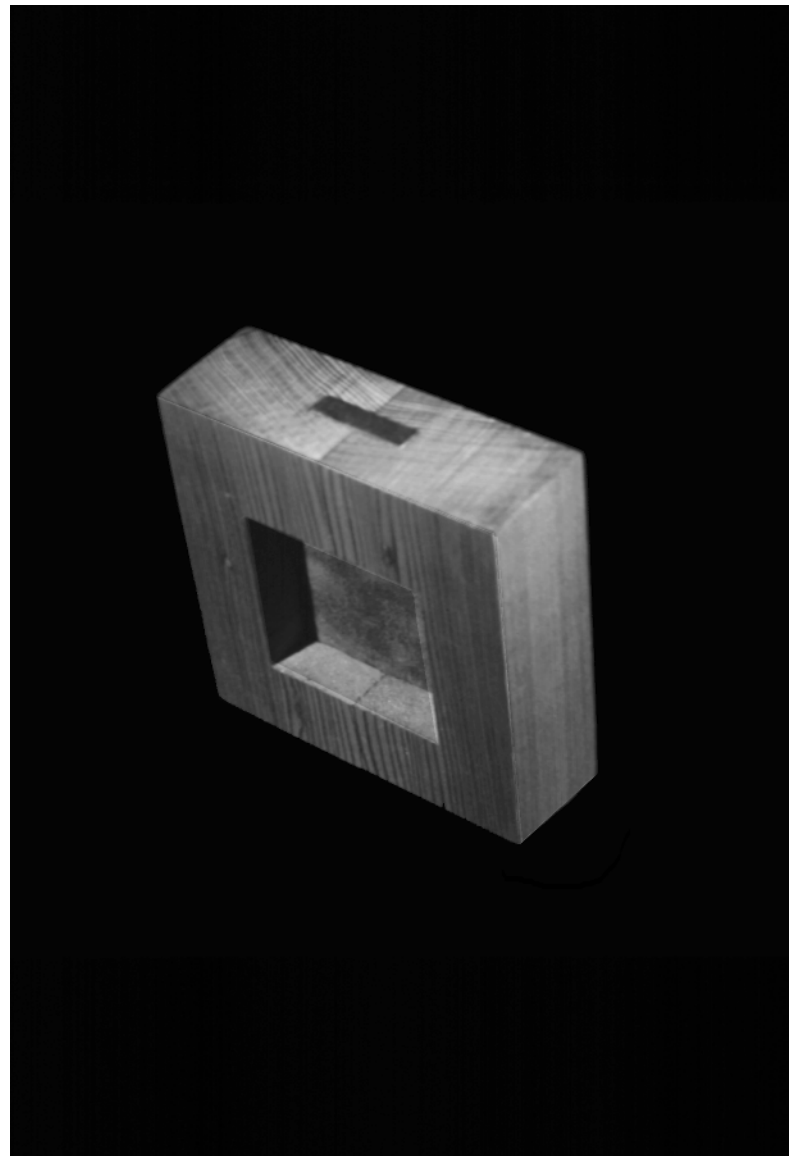


SOME REALIZED PROJECTS

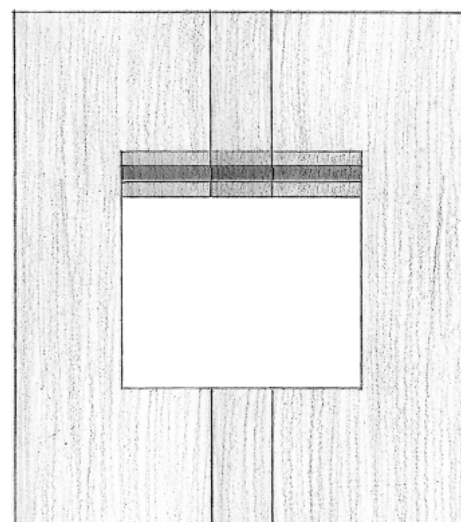
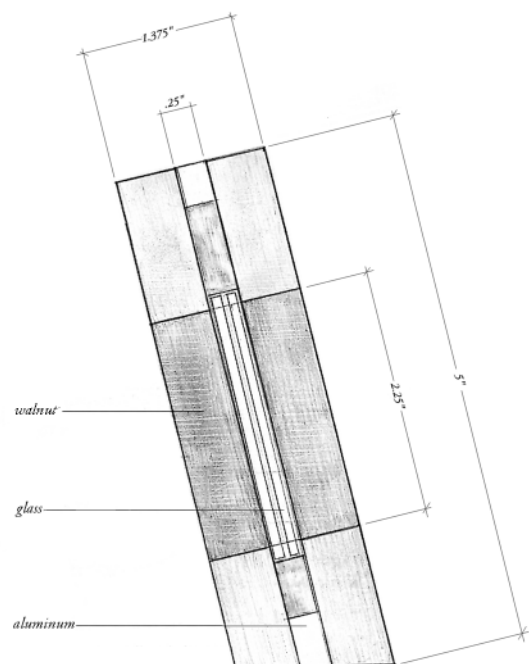


entry hall table
walnut, 13"x52"x37.5"h,
mortise & tenon construction



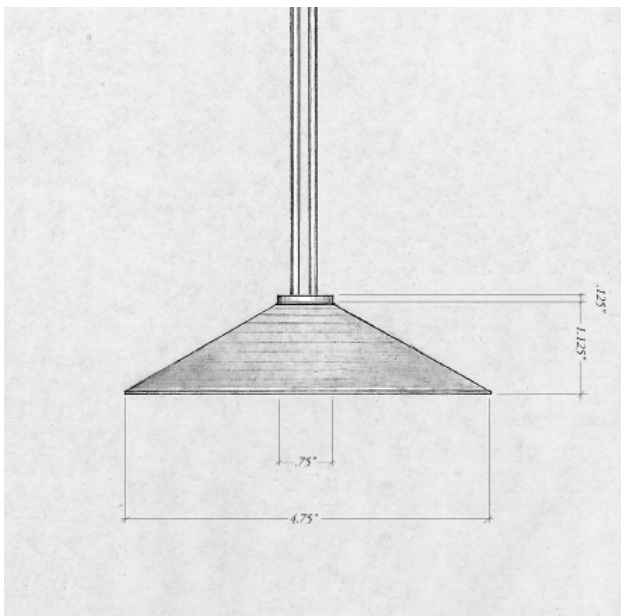


picture frame
redwood, 5"x1.25"x4.75" h,
glass, aluminum: friction fit





ceramic lamp
*wheel-turned ceramic: 5.125" dia.,
lathe-turned housing: 1.25" dia.*



CONCLUSION

Naturally, we as architects must understand the abilities of our builders, the limitations of our materials, and the rules and codes which govern our profession.

However, an understanding of what is right and wrong in architecture can be found within ourselves. The moral and ethical standards that we set will inevitably translate into our work.

The concern for economy translates into an architecture which is appropriate, purposive, and well founded.

A well-founded architecture supports those decisions which express the internal nature of the designer. It confirms the intentions of the designer and makes valid those traces of humanity which transcend ordinary buildings.

image credits

p.4, <i>Middleton Inn, W. G. Clark</i>	Author
p.6, <i>La Tourette, Le Corbusier</i>	Author
p.7, <i>Magney House</i>	Farrelly, E.M., <i>Three Houses: Glenn Murcutt</i> , Phaidon Press Limited, London, 1993, p.69
p.8, <i>vitruvian man (altered by author)</i>	Santi, Bruno, <i>Leonardo Da Vinci</i> , SCALA Istituto Fotografico, Firenze, 1990, p.50
p.9, <i>corn crib</i>	Tabitha Simpson
p.10, <i>Equivalent, Music No.1, Lake George</i>	Stieglitz, Alfred, <i>Alfred Stieglitz</i> , Aperture Foundation, New York, 1989, p.87

notes

1. Tarkovsky, Andrei, *Sculpting in Time*, University of Texas Press, Austin, 1991, p.15
2. Andrews, Edward Deming and Faith Andrews, *Book of Shaker Furniture*, Indiana University Press, Bloomington and London, 1966, p.12

vita

Robert Warren Baumbach

- 3 August 1970 Born, Bellevue, Pennsylvania
- 1993-1997 Master of Architecture
Virginia Polytechnic Institute & State University
- 1989-1993 Bachelor of Arts in Architecture History and Theory
University of Pittsburgh
- 1988-1994 Basic Training and Advanced Individual Training
United States Army
- 1989-1996 Baumbach Landscape Design & Construction
Founder and Operator
- 1994-1996 Virginia Polytechnic Institute & State University
Graduate Teaching Assistantship
- Spring 1993 Ross Bianco Architects, P.C.
Intern Draftsman
- Fall 1992 Uhl Construction Corporation
Laborer
- Spring 1991 Hayes Large Architects
Undergraduate Intern