VICTOR TERRACE: A ROW HOUSING REHABILITATION

ST. LOUIS, MISSOURI

MAUREEN WESTRICK

ARCHITECTURAL THESIS

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MUNCIE, INDIANA

PREFACE

Victor Terrace is the product of a series of events starting many months before thesis officially commenced. Those thoughts, wide and varied, began to come into focus with the first quarter of thesis, 404, as research into the rehabilitation of urban housing as a tool to the stabilization of our cities as units of people living peacefully together. There must be a link between the family as a unit, its decline, and the increase of disrespect towards the property of others. The decline of the family is linked with the interaction of people as a community, the community to the city and so on.

This was a big undertaking. The task was too wide to be explored at any detail in the time allowed. On the other hand, when narrowed down the topic was too precise for resources at hand.

During an early 404 sketch problem the houses on Victor Street surfaced from a field trip taken the year before. A more practical avenue was opened for exploration. These five terrace houses were expanded, contracted, subtracted from, added to, duplicated, contradicted and

complimented over the 8 months to follow. I think of my final scheme as only one of many possible solutions in the evolution of the project, which shows potential for even further progression if time allowed.

Victor Terrace has been an interesting, exciting, and extremely meaningful project for which I am grateful for having had the opportunity to experience. I would like to thank the following persons for all their encouragement, support and help along the way. Without their presence this thesis would have been a much more rocky road:

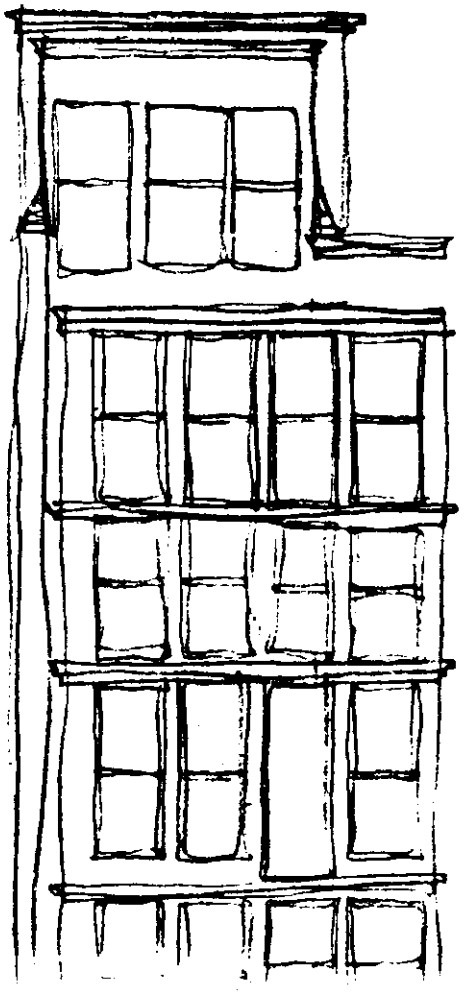
My parents and family
Bill and Lish Schantz
Steve Alspaugh
Kevin Thompson
Mark Demerly
All other fellow students too numerous to mention.
The faculty and staff of GAP

A shocking number of sound structures, both residential and residential hopefuls, are being razed to make way for high density housing, commercial developments or car parks. Many of these have been abandoned when the supporting community has moved to the outlying developments. The American public has come to equate "old" with ugly, out of fashion and out-dated, and "new" with the beautiful, stylish and in vogue, which accounts for the haste to raze and build anew.

There is a need to retain this housing potential. Historically, aesthetically and logically. Whether this be through historical preservation, restoration or rehabilitation, the neighborhood and community as a whole will benefit.

Many times the new construction in older areas are not designed to compliment and reflect the prevailing architectural styles, thus destroying the visual cohesiveness of that community.

The quality of remaining neighborhood identity erodes in direct proportion to the increasing number of nonconforming intrusions that change its sense of place. The destruction of a single building in a row changes the delicate



spacial relationship of the individual units to each other and to the streetscape by eroding the closed sense of the defining wall of continuity.

Until recently the economies of real estate development always favoured new construction over re-use. Tax laws, lending policies, construction methods and design philosophy all once conspired to make the re-use of existing buildings appear to be more costly than demolition and replacement. The present economy, the shortage of materials, and the concern of energy wastage have made the recycling of existing buildings ever more inviting.

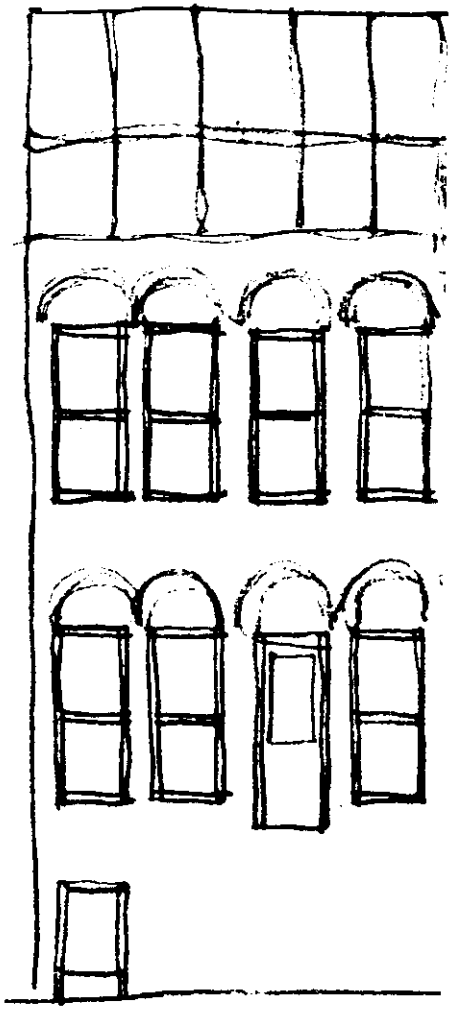
Programs and legislation on the federal, state and local levels now encourage the revitalization of our urban fabric. Massive urban rehabilitation projects, federally funded, offer aid to homemakers. New York City's Master Plan is a good example of official interest in the renovation of neighborhood fabric.

In recent years a large number of older city houses have been purchased and then renovated by people one might expect to find in suburban homes or middle-income apartments. On a larger scale, redundant

warehouses, office buildings and factories are being rehabilitated into residential uses on the speculative market as well as for lower and fixed-income levels. This regeneration, extension, and alteration of existing buildings is a part of the history of architecture as well as providing a record of social change.

Society should be taught to realize that many structures executed by our forefathers are worthy of attention. Buildings constructed today and tomorrow are not necessarily better than the ones they may replace.

The distinctions between restoring a building, preservation for re-use and reconstruction of all or parts are considered to be fine-lined (though the definitions are being made more clear everyday) and possibly minor when considering the benefits reaped by the movement. All three have educational and social values and must be considered worthwhile. Preservation for re-use can have an important impact on our way of life and on the education and behavior of future generations. This approach can demonstrate that the forms and materials devised in the past are still valid and viable for the functions of today's life.



Old buildings have a place in the urban fabric. Their aesthetic forms conceived for by gone eras can still produce a valid emotional impact. Buildings become tangible proof of the continuous evolution of our civilization when each generation leaves its mark but also respects that of its predecessors.

The theory that as Americans we haven't a sense of our own civilization as a continuim is probably closely related to the much discussed topic of alienation and the lack of social and family responsibility on the part of young people. We haven't any self-confidence as a civilization. Roots in the past can contribute to the needed self-assurance.

This past cannot be duplicated by reconstructions / reproductions and be expected to gain the respect of our people. Architecture is a unique expression of time, society, technology, scientific knowledge and political and economic organization.

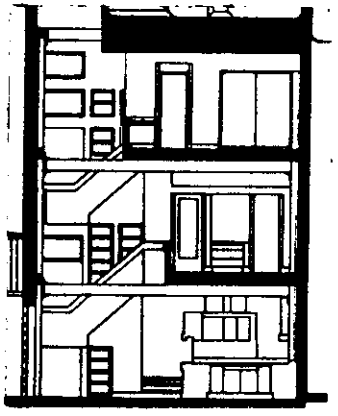
BUILDING TYPES

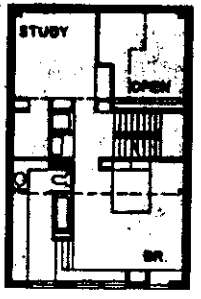
Candy Factory Court
Philadelphia, Pennsylvania
Baker Rothchild Horn Blyth, Architects

From a rather ordinary turn of the century urban building, last used as a candy factory, BRHB have zoned an office for themselves plus four condominium apartments.

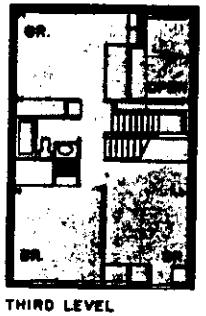
The most elaborate of the 4 homes extends upward through three floors with entry, living, kitchen and dining on the lowest floor. The intermediate floor includes master bedroom and study overlooking the dining area while the topmost level gives way to additional bedrooms. A spectacular well space, filled with daylight from skylights in the roof, gives a drama and verticality seldom achieved in a residential contex.

The buildings' original steel structure has been retained and used to express the volumetric organization. New walls were added where needed and those requiring insulation were treated with a sandblasted plaster over sprayed on insulation.

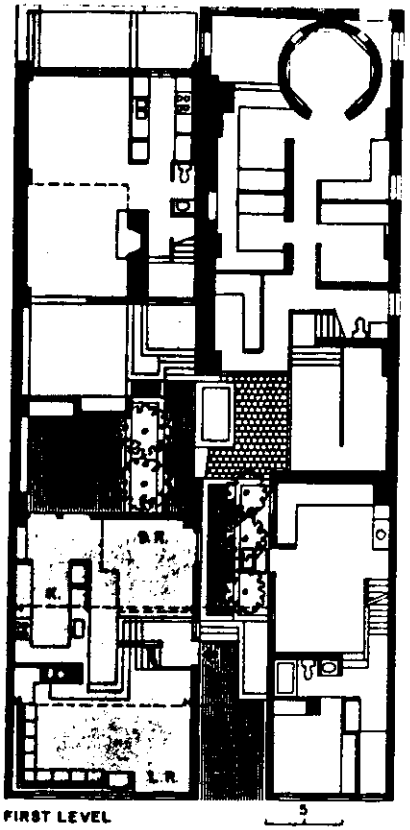




SECOND LEVEL



THIRD LEVEL



FIRST LEVEL

Brandywine House
Wilmington, Delaware

Brandywine House is a 19th century building that has been renovated in Wilmington's inner city, and now used for elderly persons housing.

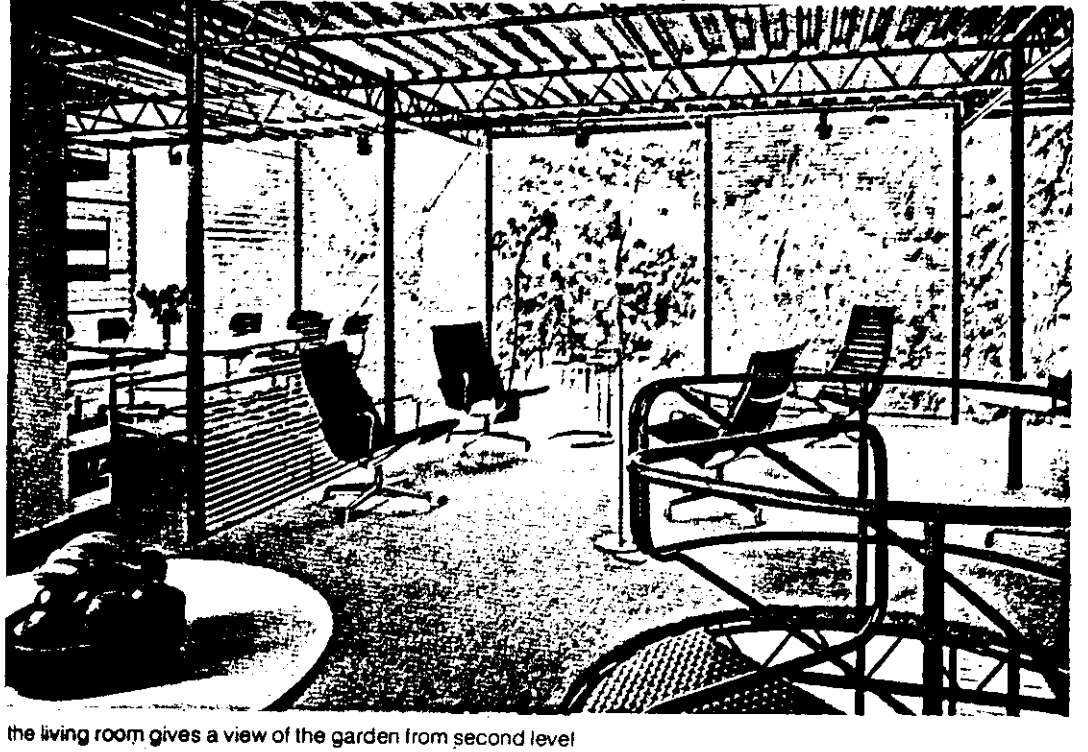
Brandywine is self-sufficient as the rent is paid by the 9 residents, provides utilities, staff services and debt reduction on the federal loan which made the saving of the structure possible. It is an example of a new spirit and dimension in preservation - adaptive use rehabilitation in urban areas, to provide housing for older people on fixed incomes.

Renovation funding came through the city of Wilmington under the Community Development Block Grant Program established by the Housing and Community Development Act of 1974

Hopkin's House
London
Michael Hopkins, Architect

The Hopkins house makes use of industrialized building materials on a domestic scale. In addition, it breaks with other conventions of house design by doing away with permanent room divisions and traditional definitions of territory and also by incorporating the offices for an active architectural firm into the program.

Because industrialized building components have now become commonly accepted in the



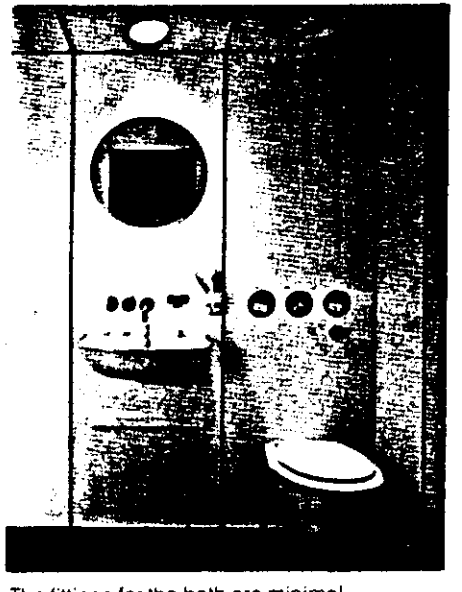
the living room gives a view of the garden from second level

residential environment, the Hopkins set themselves the goal of using as few materials as possible and of eliminating the number of details involved

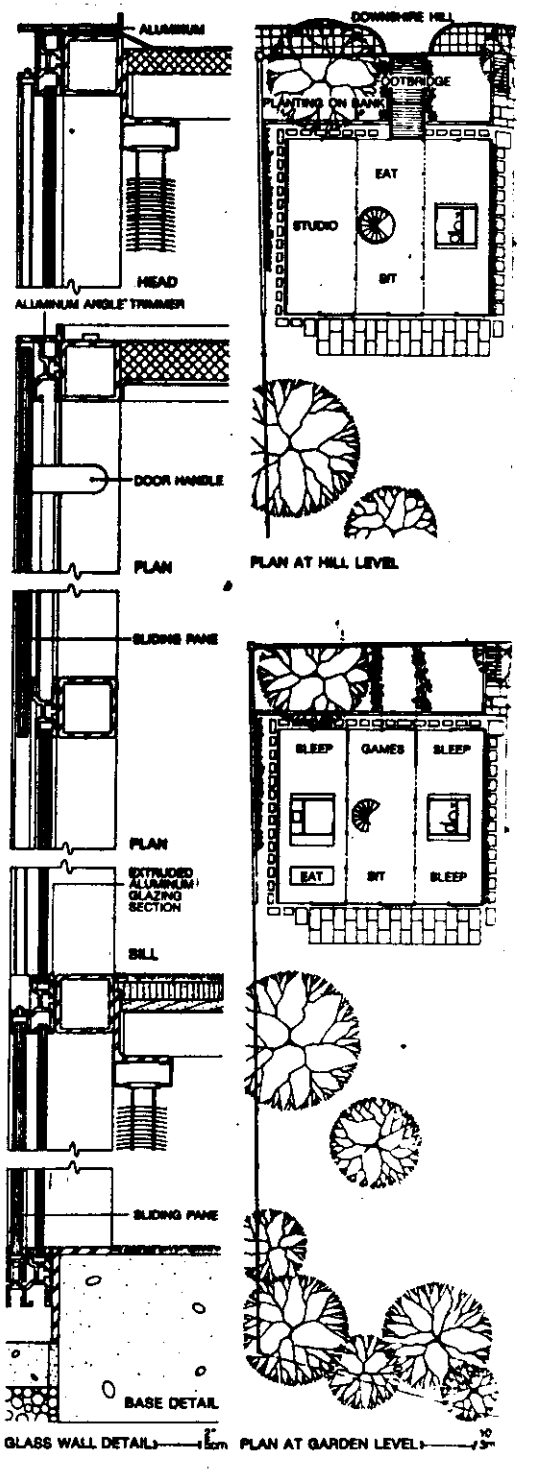
The elements that went into constructing the house are extremely simple: steel structural frame, tempered glass and insulated profiled steel decking. The structure spans in 2 directions on a base module of 6½' and on a 6½' x 13' structural grid. The plan area is 39' x 32½' with eight internal columns.

The space is divided along the structural grid lines by only the lightest of possible partitions – silver venetian blinds.

In winter the house is draft-free when all the sliding glass panels are closed. It is able to take advantage of direct solar gain in the daytime by keeping the blinds open and also receives "scatter radiation" on overcast days. An industrial system of ducted forced warm air supplements the passive solar system.



The fittings for the bath are minimal



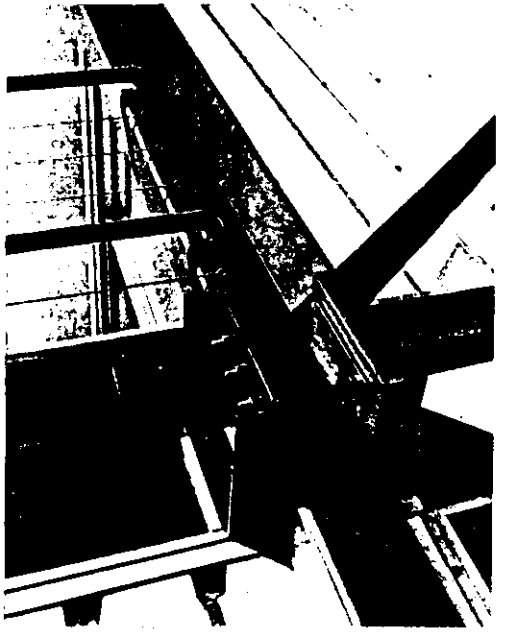
Schulitz House
Beverly Hills, California
Helmut C. Schulitz, Architect

A resurgence of interest in industrialized components for private residences is occuring in the design field, possibly as much out of frustration with rising labor and material costs as out of renewed interest in technology and determination to prove that industrialized housing can [illegible] mobile home parks littering [illegible].

Helmut Schulitz, a [illegible] whose current work [illegible] is a direct descendant of the California tradition of Eames and the [illegible] Stoyt House, is a supporter of the potential of open systems industrialized design.

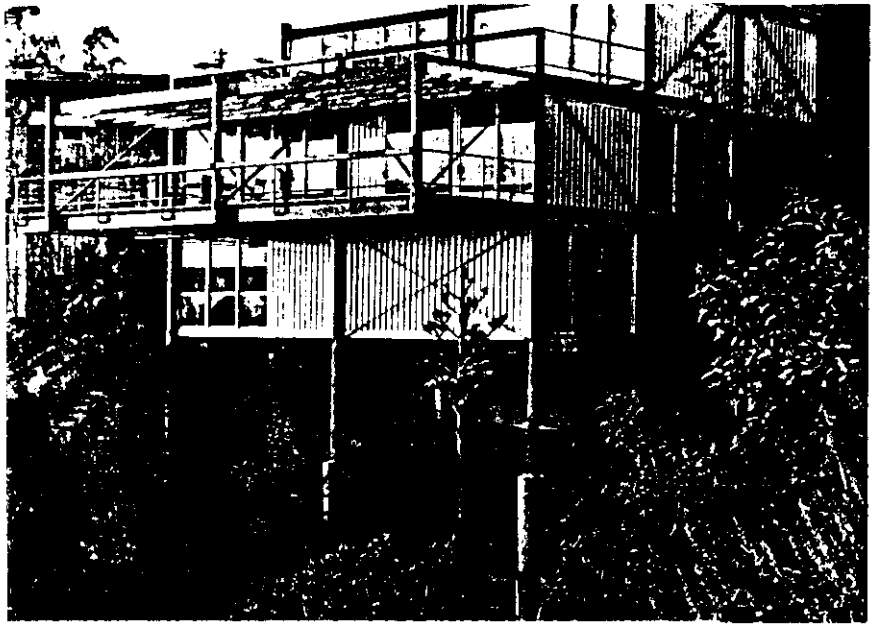
Schulitz has been pursuing the concept of open systems using a modular coordination grid, usually 100mm (4in.). The open systems concept allows for the introduction of variation without the need for a large number of repetitive elements; it allows for variety and flexibility at a small scale; and it enables the designer to choose stock catalogue building components off the shelf.

Schulitz has built a prototypical house for



himself, his wife and 2 children. Erected on a steeply sloping (40°) site, the house attempts to realize some of the flexibility inherent in open systems design.

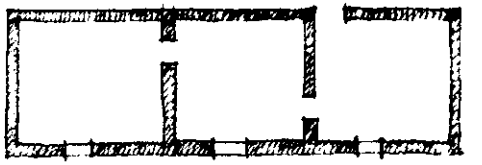
"Its structural purity exposes all the bolted connections and welded joints. The aesthetic honesty is both less sophisticated and more visually complex than the severity of Mies van der Rohe's Farnsworth House or Philip Johnson's Glass House."[A]



A. "Test Case" Progressive Architecture. V58:10, Oct. 1977. p.78

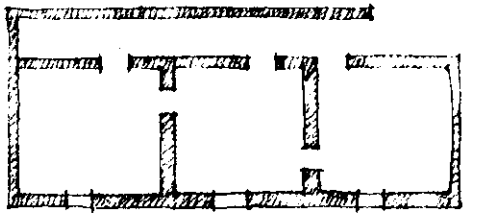
Rooms Linked

Rooms can be linked in a row. The arrangement is simple, but there is no circulation but through one room to another. Circulation may be improved by the addition of a hall along one or both sides. Covering linked rooms is equal to roofing: The roofing can be exposed as ceiling, showing structure. There is the possibility of natural lighting from two sides.



a.

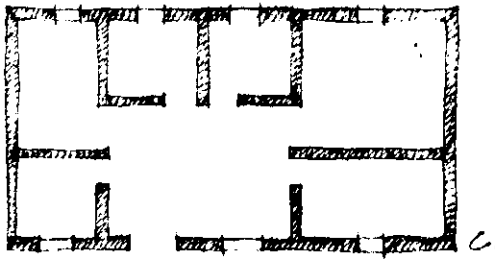
Small linked room house in Portugal.



b.

Rooms Bunched

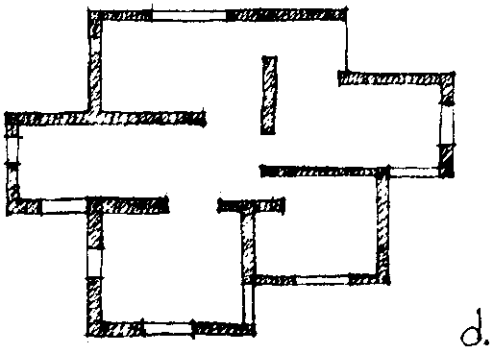
By bunching, rooms can be gathered around a central entry point or passage-way. Or they can be bunched together completely with circulation around them. This arrangement accomodates the greatest area within a minimum perimeter.



c.

Rooms around a Core

Rooms can be arranged by wrapping them around a core. This core can be a solid, such as a chimney; a void such as a light well; or a working element such as a stair. Each room can receive light and air on at least two sides. Privacy is easier obtained from the exterior than from the interior, making it ideal to back other properties. Again, the roof and the ceiling can be one.



d.

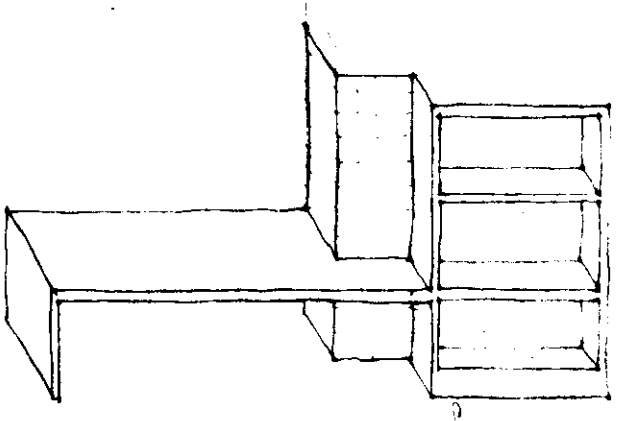
Rooms Confronting the Outside

Organization of spaces along a line to face some part of the outdoors beyond the building has the advantage of allowing those rooms to share in the amenity. This outdoor area may be something which already exists, something public, or a private space such as a garden. [fig e]

e.

Living elements becoming the Rooms

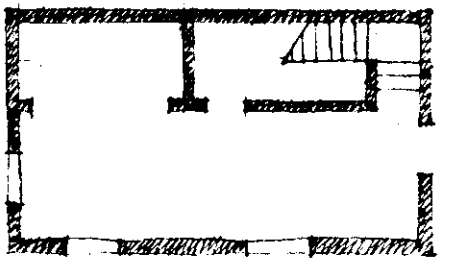
The elements of living, and their domain create the space rather than being separate items within that space. The dining table might flow from the wall; a seat may be a part of the fireplace; or bookshelves are the wall itself. [fig f]



f.

Rooms containing the Machines of Living

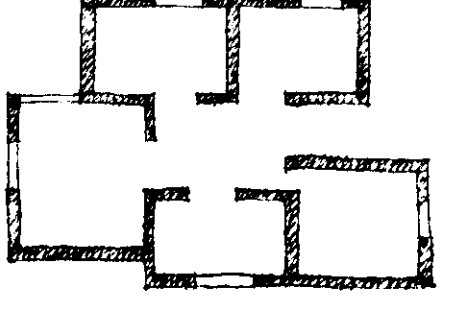
The machines of living; kitchen, bath, services, appliances and circulation can be placed within the structure to form a wall, a core, or a tower. [illegible]



g.

Machines of Living Outside the Rooms

Locating support elements outside the room offers simplicity as well as economy. Areas regarded sufficienty small, such as kitchen, bath, services, circulation and bedrooms can be organized around the main living space. [illegible]



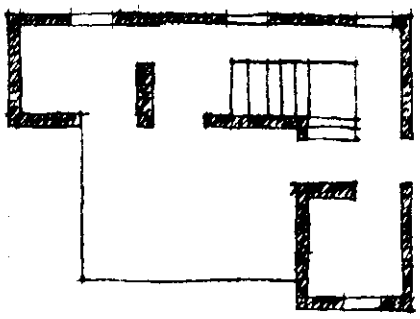
h.

Sandwiching of Living Elements Between Rooms

In sandwich organization, rooms are lined up in a row, then a row of support elements, followed by another row of rooms. The more complex the program, the more layers exist. A virtue of sandwiching is the traditional association of similar sized rooms unbroken by the intrusion of services.

Accomodating the Auto

Several choices are available here. The automobile can be excluded by barrier, invited in via the carport, or included within the house.



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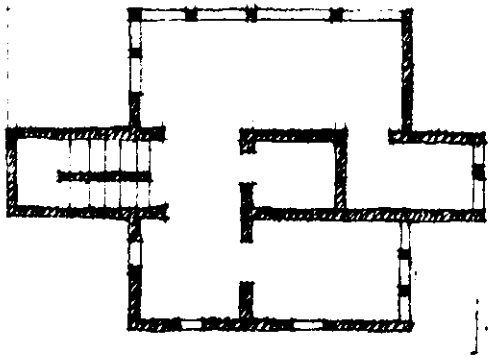

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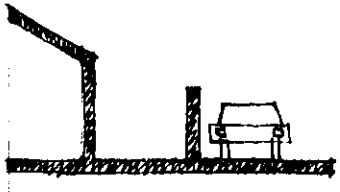

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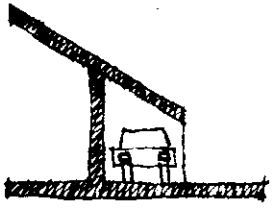

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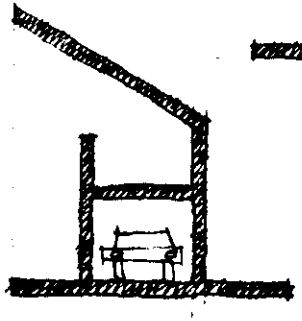


m.

404

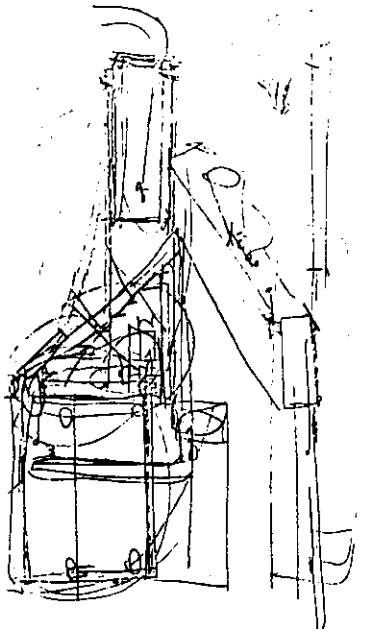
PROJECT PROPOSAL

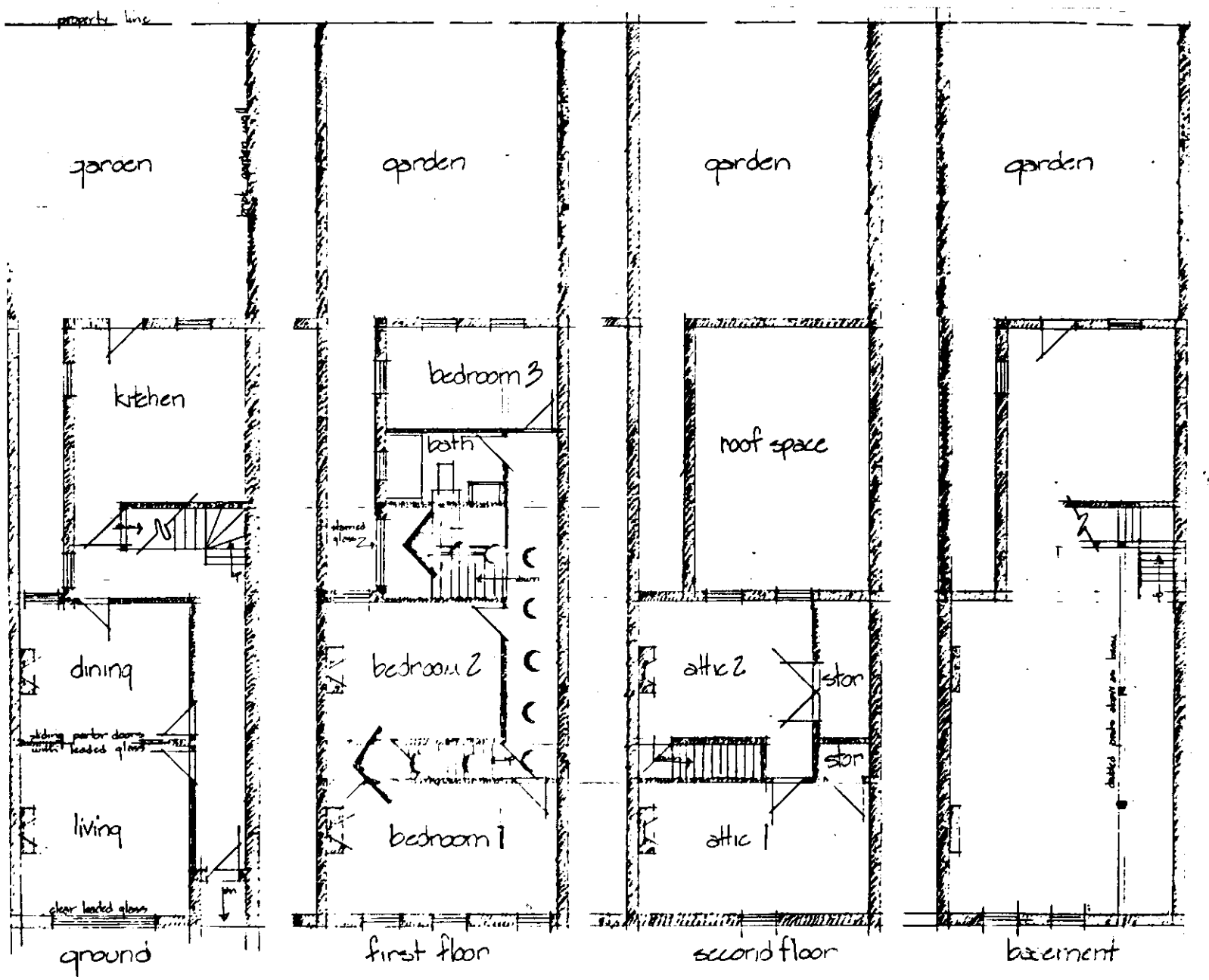
New Environments within Existing Structures

With the ever rising cost of construction, labor, and money, coupled with an awareness for the beauty and potential of existing structures, individuals are turning to older homes in historically rich neighborhoods as an alternative to new construction in the suburbs and country. Though structurally sound many of these require extensive restoration or rehabilitation. While the choice of systems and services is virtually unlimited in new construction there is an unwritten understanding that there is a limit on rehabs.

What I would like to do is define and expand the "limits" which are too readily excepted and confining. With countless studies into prefabrication and modularization in connection with the new, I'd like to make the associations into the existing, the old, the historic.

I realize this may be an unusual combination of study for thesis, not being a "building", but there is a variety of reasons for choosing such a project. The first and foremost is that it interests me- a successful project should be satisfying and enjoyable, not a chore. Secondly, it is a different type of project. Habitable structures have become a thesis standard even though as architects we may branch into such a wide area of disciplines. Lastly, after working in several offices holding responsibilities on a variety of projects, I have enjoyed the rehabs and renewals the most. I find I have a long term interest in this area and would like this opportunity to not only expand my knowledge but to have input into the area as well.





SKETCH PROBLEM

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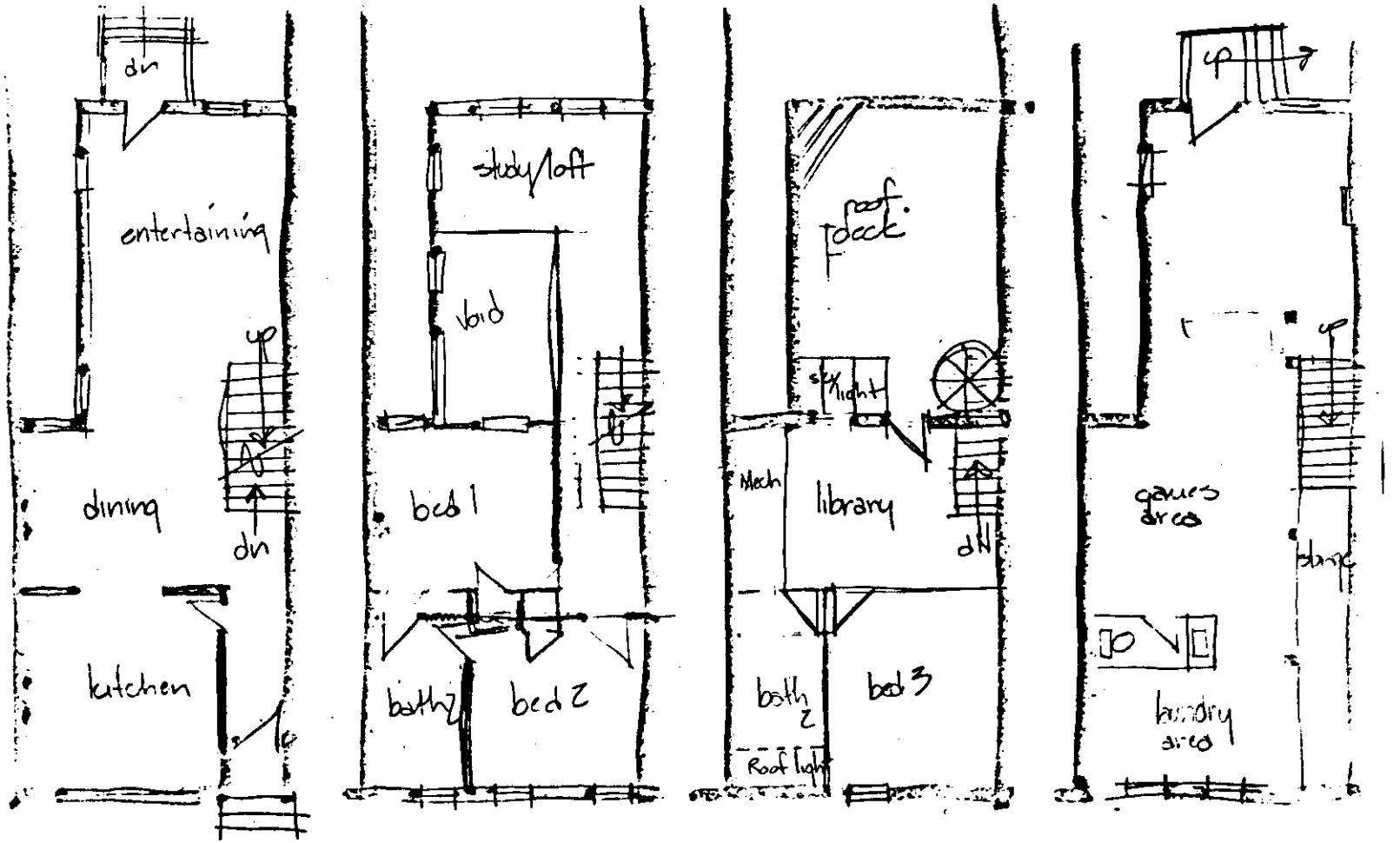
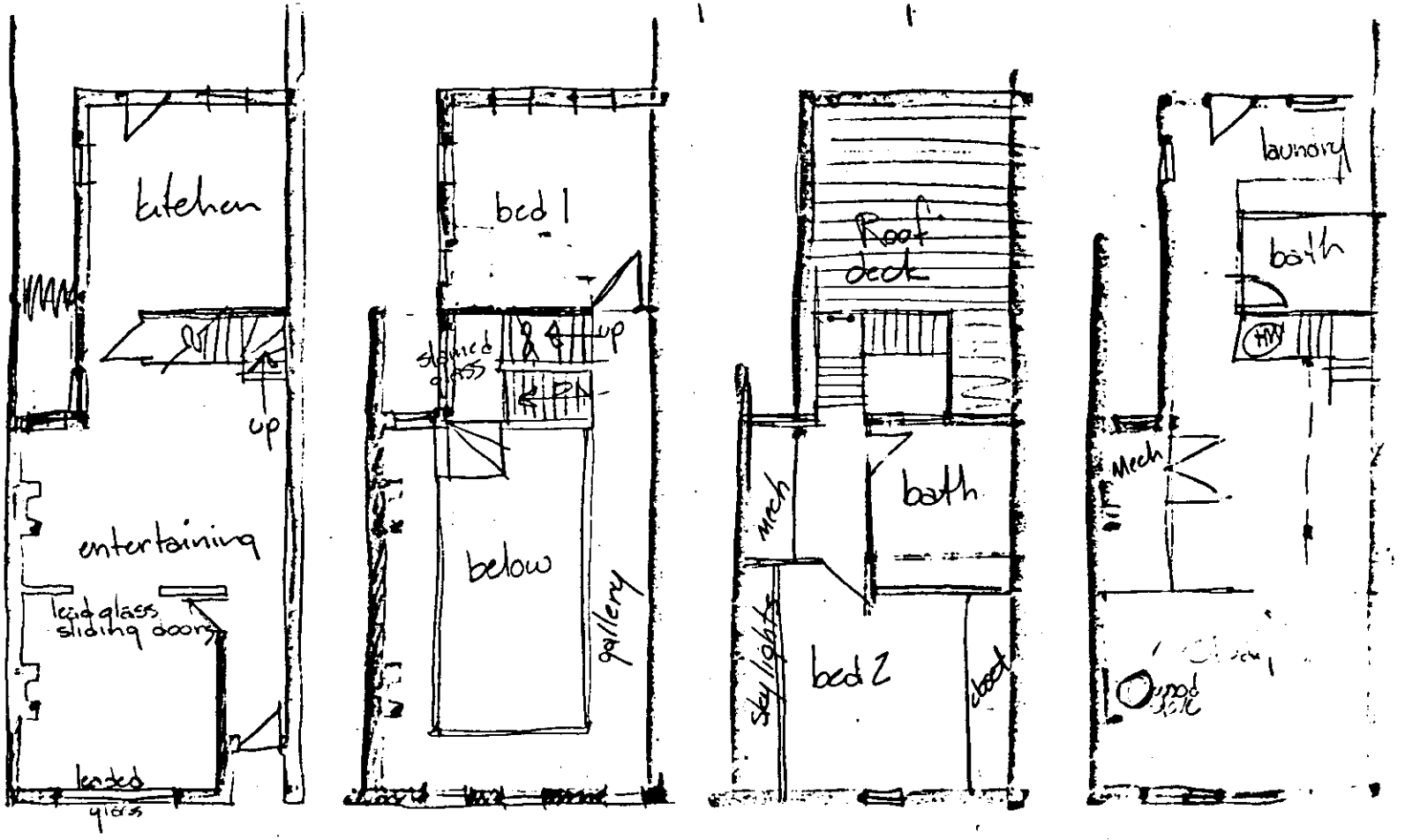


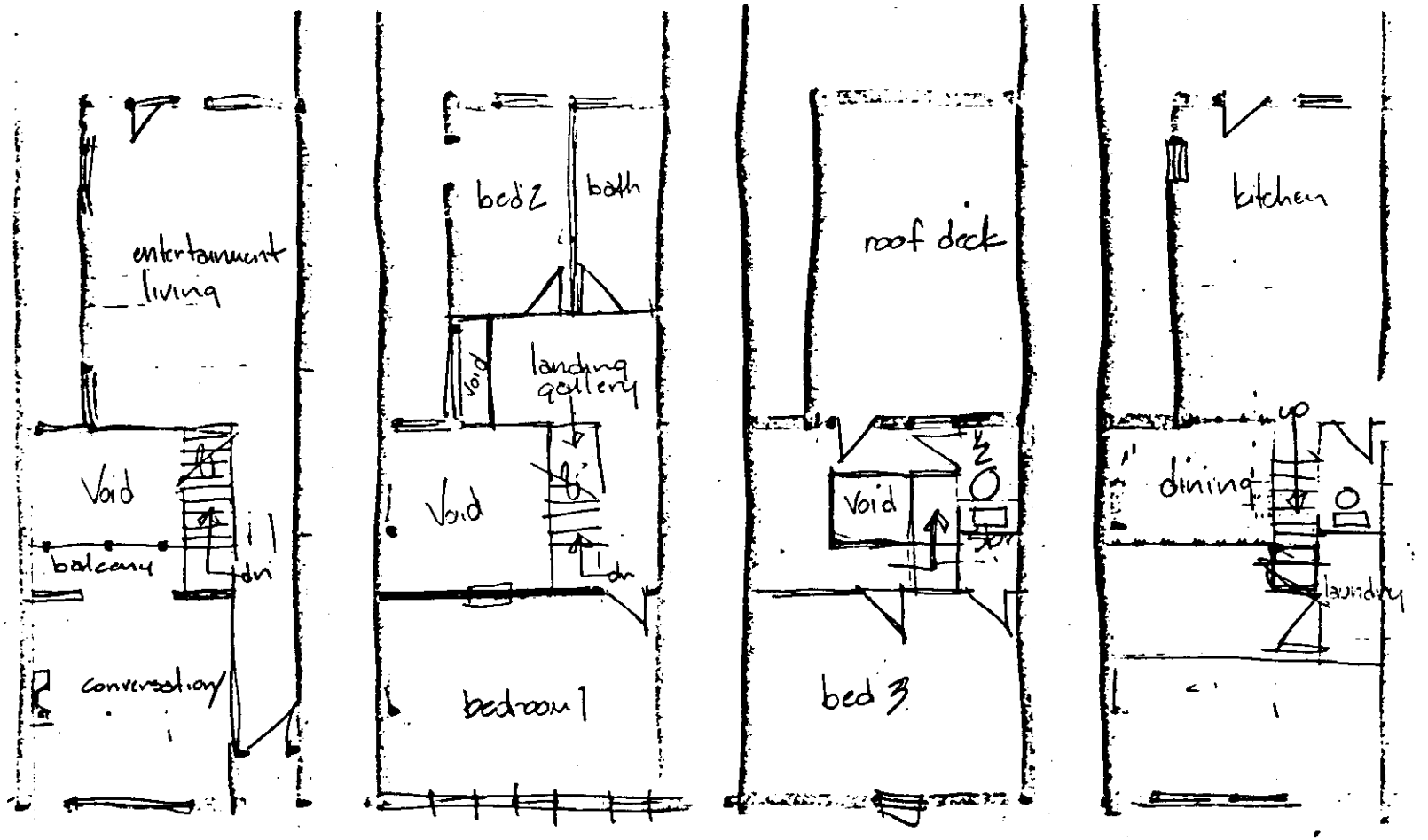
SKETCH PROBLEM

SCHEME ONE



SKETCH PROBLEM 1

SCHEME TWO



SKETCH PROBLEM

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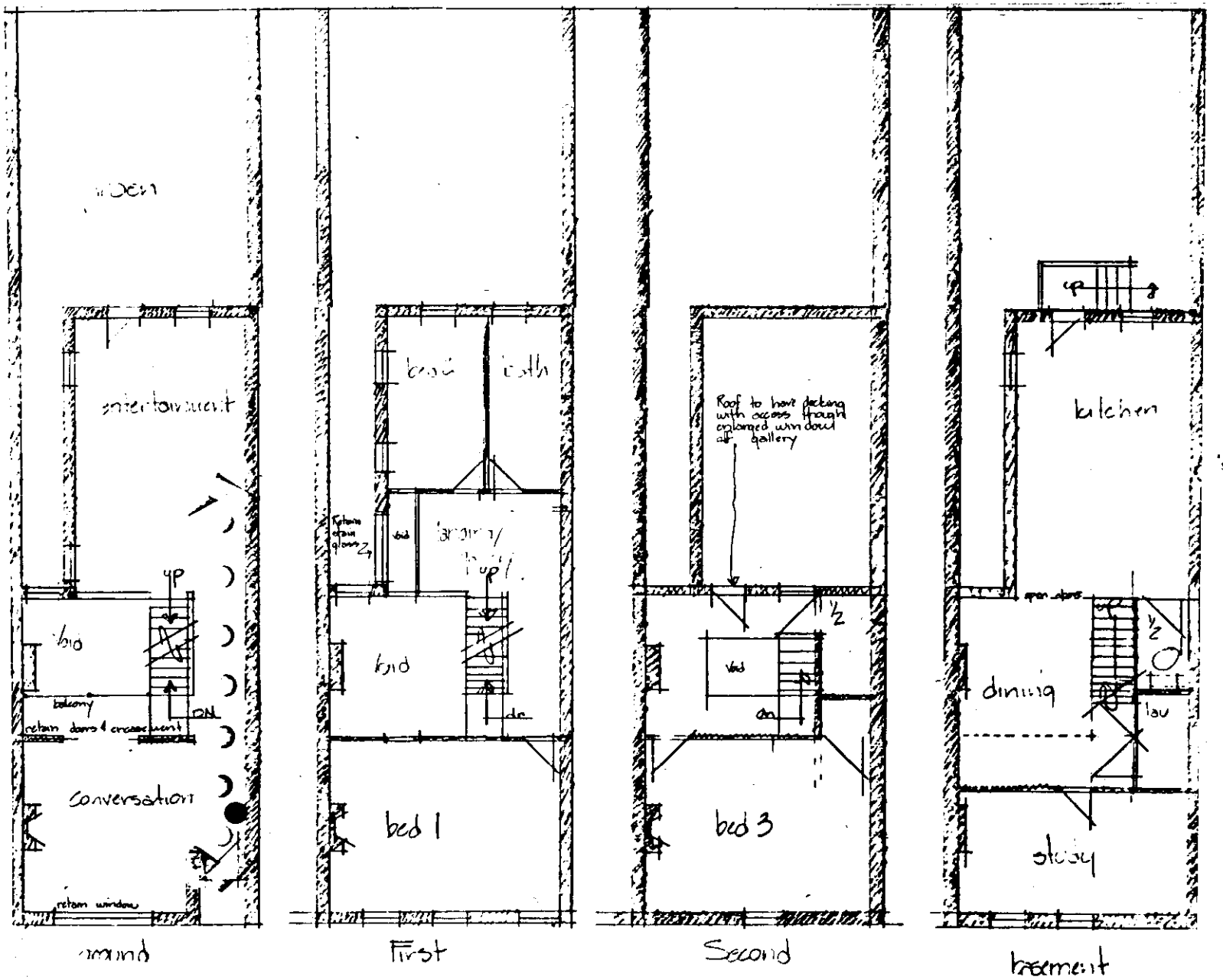
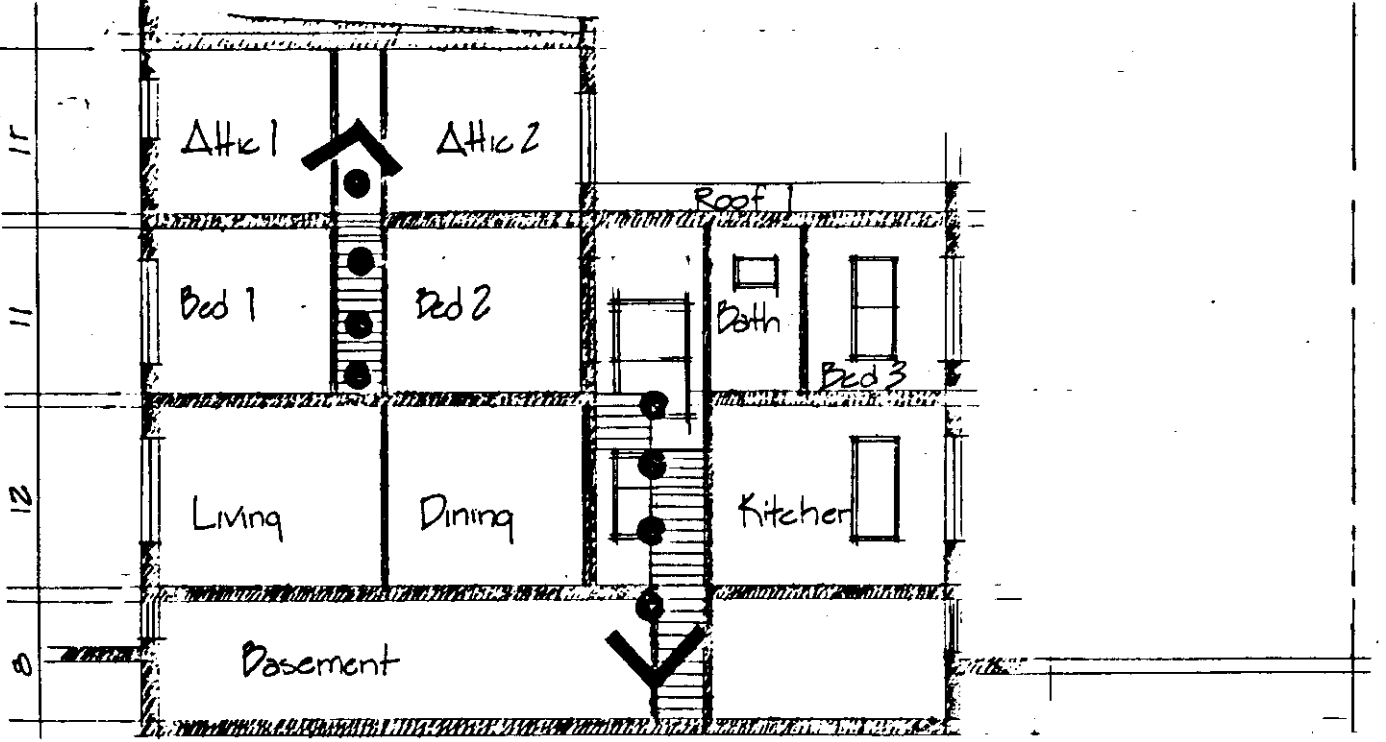


SKETCH PROBLEM PROPOSAL



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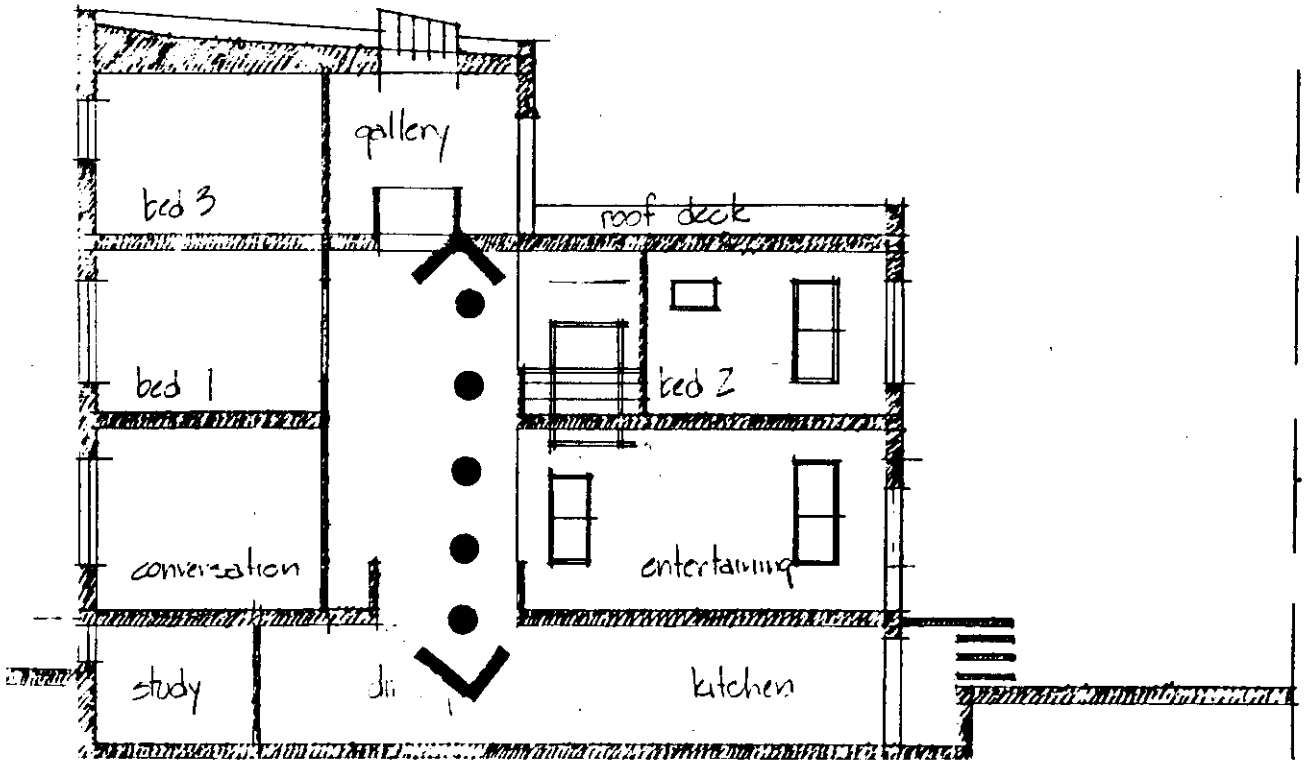
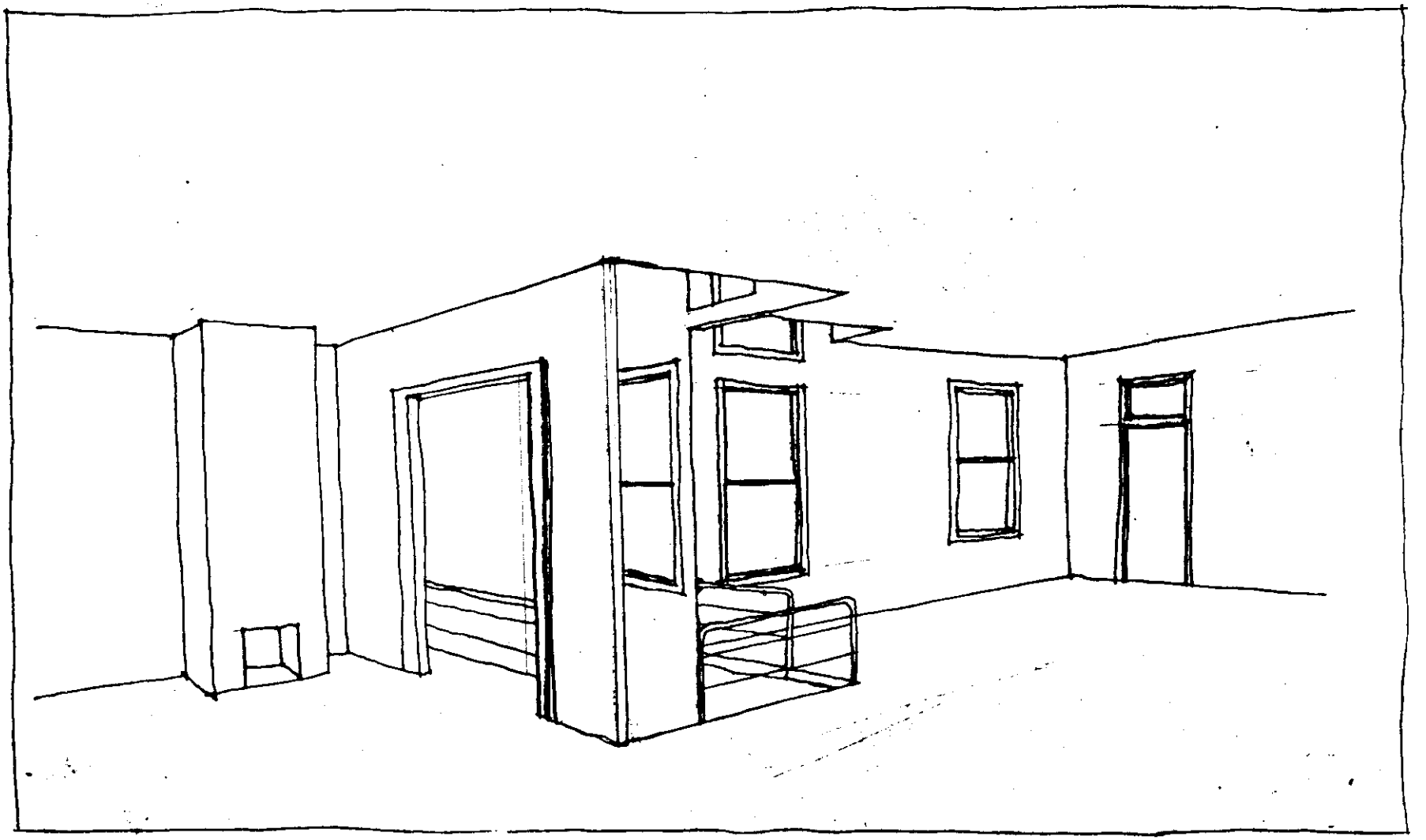


PROPOSED SECTION



SKETCH PROBLEM!

INTERIOR PERSPECTIVE

In Praise Of Old Houses

By RUTH HOLLADAY

Old houses are political and people who move into them are making a political statement, whether they intend to or not.

A big city newspaper editor once took a trip to Europe and came back not making comparisons of American vs. French cuisine or raving about the art museums.

Instead, he was impressed by what he saw in England, and what he saw was so obvious that the English never play it up in their "Visit Great Britain" ads: In England, people live in old houses. They work in old buildings. They function in old structures that we in America would bulldoze over and spit on just as we are putting up another Col. Sanders.

I am for new buildings, too, but I also like old buildings, old houses included.

THE AREAS IN which restoration efforts are thriving in Indianapolis are well-known: Lockerbie Square, the Old Northside, Herron Morton Place, Woodruff Place, Chatham-Arch, Fletcher Place.

But restoration is not limited to areas with historical ties — it is a process that can and should occur wherever there are nice old homes in need of paint, plaster and patching.

In Indianapolis, there are any number of borderline neighborhoods — neighborhoods tottering on the brink of going down or coming up — in which beautiful houses exist. These houses are Cinderellas — in rags, but waiting for a fairy godmother to transform them.

Such houses are a reminder that because something is old, it is not useless. And the people who wave the wand at them are a living reminder that humans have the power to effect change.

OFTEN, THEY are young couples who cut their teeth on the belief that, in America, you start out big, in houses as in everything. But when the realities of an inflationary housing market and a deflationary salary set in, they settle for a house with a less-than-exclusive price tag — and find something else in the bargain.

Old houses make a poetic statement: that what was lost can be found, what was covered with crusted paint and dirt can be scraped and scrubbed, what was tattered and worn and ugly can be mended and refreshed and made beautiful.

It is all part of a transformation process that humans apparently crave: rousing the sleeping beauty, taming the savage beast. Stripping old faded wallpaper or paint is perhaps not quite as romantic, but it's basically of the same stuff.

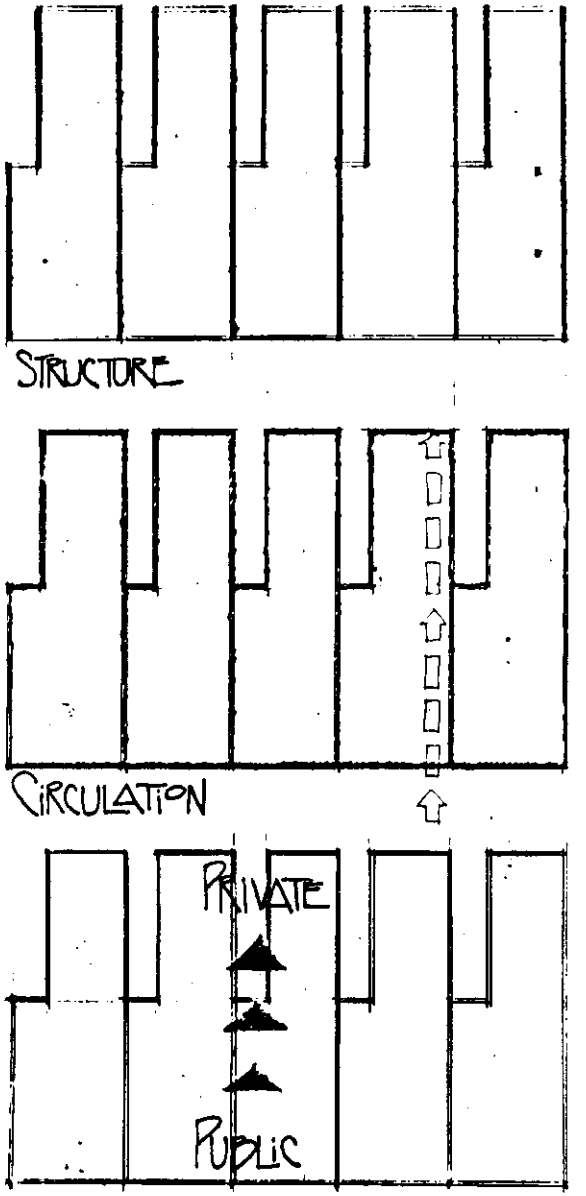
FINALLY, THIS should be said in praise of old houses: Often, they are in more interesting neighborhoods than their new suburban counterparts. They are more likely to be surrounded by trees.

They are blessed with features like porches and attics, which, as everyone knows, are the stuff of which dreams are born on rainy lazy days. And window seats and bay windows, too. Who knows how many geniuses were launched just because there was a window seat in which to curl and dream?

And the final, vital point about old houses:

They are often in the city. And if the city is to survive as an integrated, decent community, in which to raise children and dogs, then we must be kind to old houses and treat them with a little respect, as our friends the English apparently have.

DESCRIPTION OF EXISTING CONDITIONS

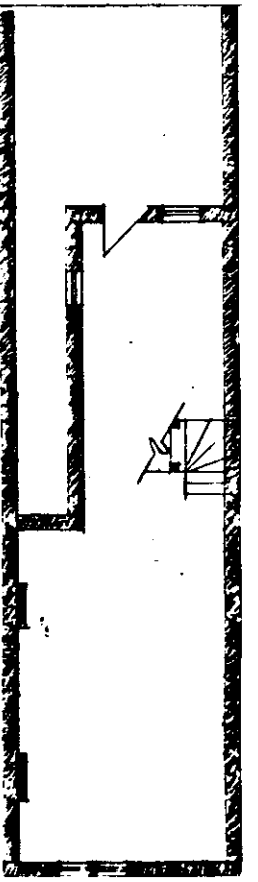


EXISTING ELEVATION

GRAPHIC ANALYSIS

The garden level is one large room, which in all cases has never been subdivided. The floor is rough concrete, the walls are exposed brickwork and the floor joists above are exposed as well.

The south portion of this area (stair onward) receives abundant light and fresh air through two windows and one door. Windows are located on the north end, but are of much smaller dimension and admit little air with fair amounts of light.

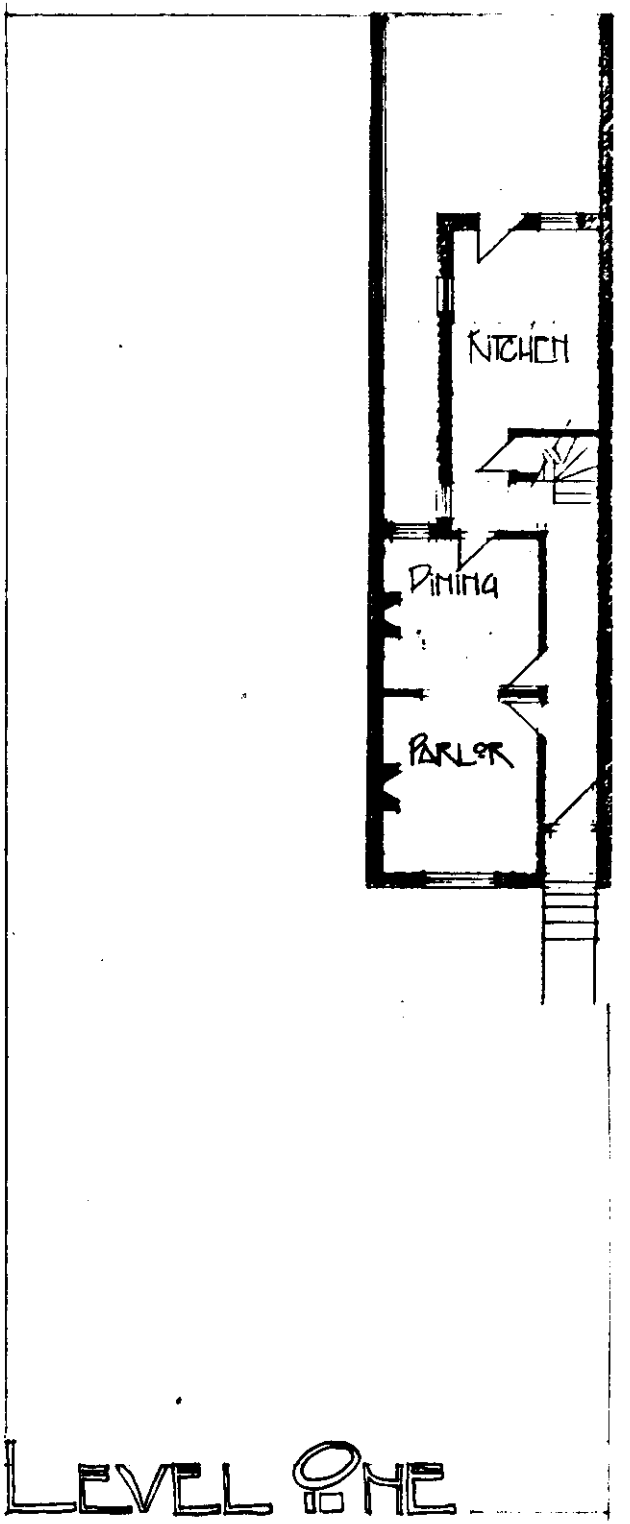


GARDEN LEVEL

Three major spaces, along with circulation, dominate the first level of these terrace houses.

The parlor and dining rooms have matching fireplaces with slate mantels. Also of interest is the leaded glass which is found in the large arched parlor window and in the paneled sliding doors separating the dining room and parlor.

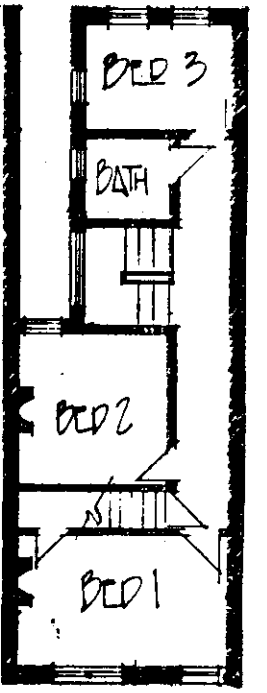
Finishes throughout are plaster on lath walls and ceilings; hardwood floors; oak woodwork; and brass door hardware.



Circulation and service dominate the second level. The stair, which begins modestly on level one opens into a colored light filled 1½ storey space as it breaks through the floor plane. A narrow steep stair picks up the vertical circulation at the end of the hall.

A bath has been stolen from a bedroom, leaving too little space for either. A second bedroom is of modest proportions, but lacks storage of any kind. The largest, and most light filled of bedrooms, has a closet under the stair with ventilating transom.

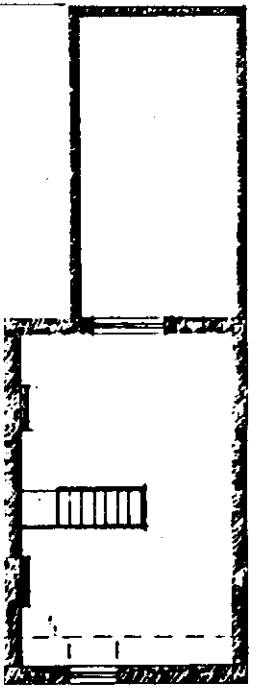
Finishes throughout are plaster on lath walls and ceilings; hardwood floors; oak woodwork; and brass door hardware.



LEVEL TWO

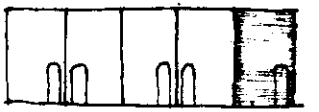
The stair acts as a dividing force in this open expanse. To the south are two full size windows overlooking a flat roof space. To the north is an attic dormer, admitting a limited amount of light.

Finishes on this level are plaster on lath walls and ceilings; softwood floors; & pine woodwork.



LEVEL THREE

Five Houses - Five Families



Family one

Young working couple, future family
Entertain frequently
gardeners

Requirements:

	sq. ft.
Kitchen	100
Dining	140
Lounge	250
Bar	25
Master bedroom	225
Guest bedroom	120
2 baths @	100
	70
½ bath	20
sauna	40
greenhouse	70
sewing/hobby rm.	80
laundry	70
mechanical	30
library/den	80
games room	

Family Two

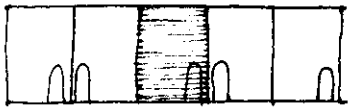
Couple with one son, one daughter
Wife - artist
daughter - plays piano

Requirements:

	sq. ft.
Kitchen	125
Dining	175
Lounge	300
Master bedroom	250
2 childrens bedrooms	120
	120
Guest bedroom/study	150
2 baths	100
	100
½ bath	20
craftroom	100
studio	80
music room (piano area)	20
utility room	120
recreation area	200
mechanical area	30
gallery	60
garage - 1 car	252

Family - Three

An extended family with parents, 3 children (two boys, one girl) and a yet active grandmother. Family hobbies of special consideration include photography and quilting.



Requirements:

		sq. ft.
Kitchen		125
Dining		180
Lounge		250
solarium		70
4 bedrooms	(master)	225
	(girl's)	120
	(boys')	250
	(guest's)	120
2 baths		70
		70
½ bath		20
darkroom		30
quilting studio		80
laundry area		70
mechanical area		30
garage - 2 car		450

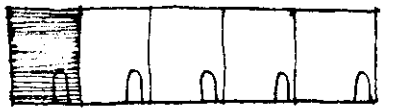
Family Fur.

A writer husband, gardening wife with 4 sons and 2 daughters.
Hobbies include model building, sewing and tap dancing.

Requirements:

	sq.ft.
Kitchen } dining }	350
Living room	200
recreation room	300
4 bedrooms (master)	200
	225
	225
	225
1 guestroom with	120
bath	70
2 baths	140
utility room	120
mechanical space	30
office/study	100
2 car garage	450

Household Five



A basic 2-bedroom apartment for rental

Requirements:

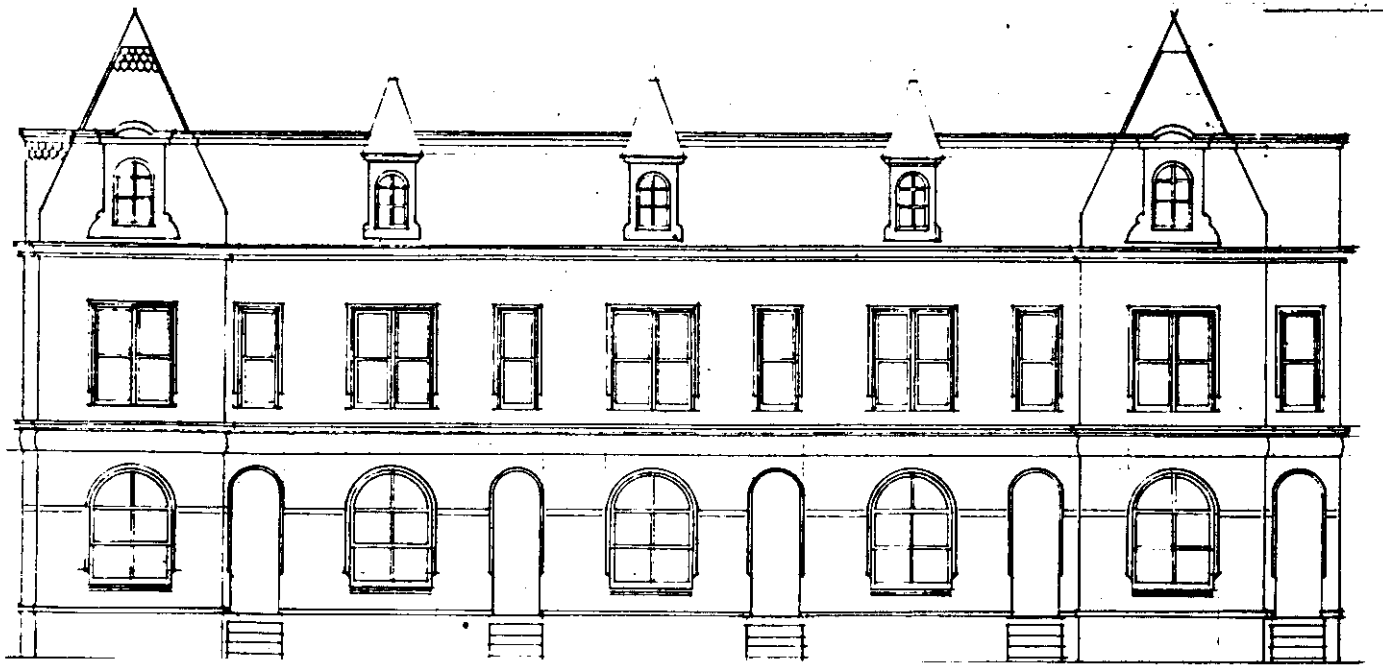
	sq. ft.
Kitchen	90
dining	90
Living room	200
2 bedrooms	225
	225
Bath	100
laundry area	50

Household Six

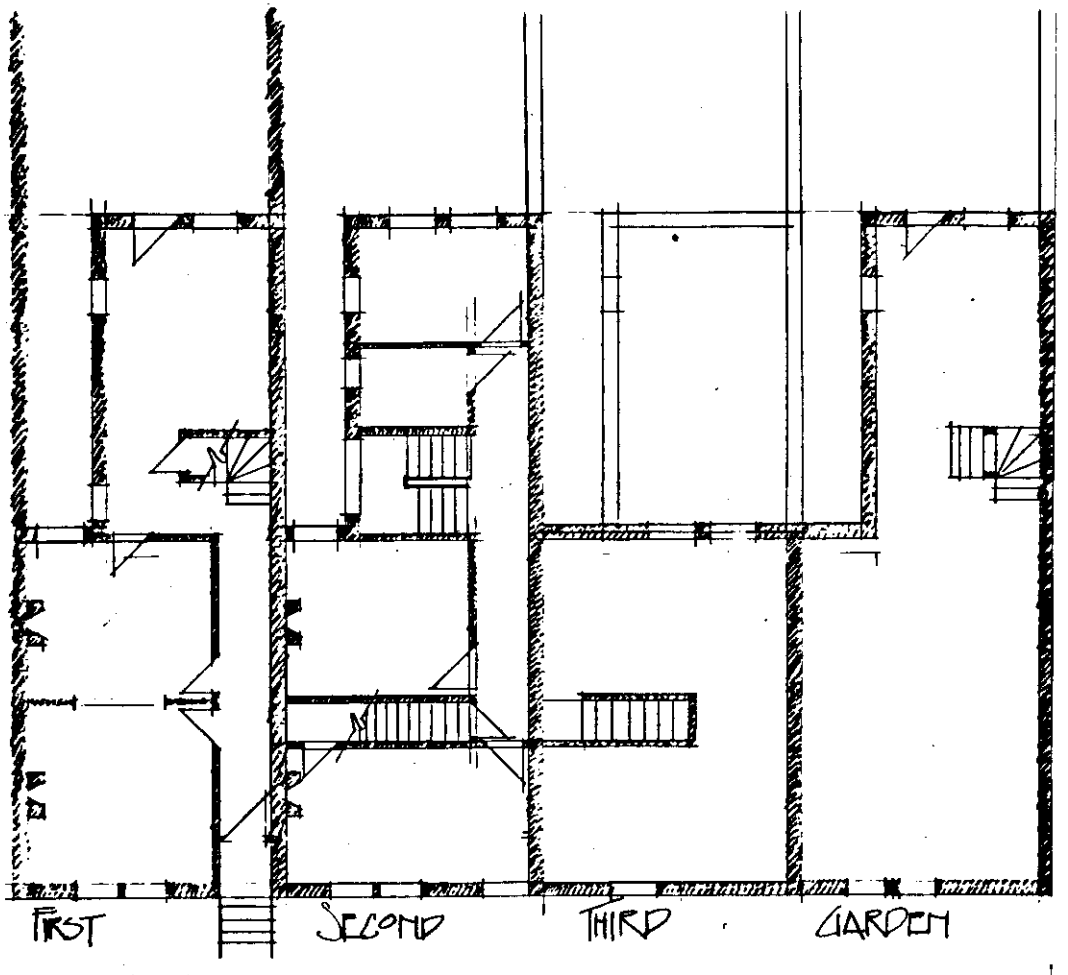
A basic 2 bedroom apartment for rental

Requirements:

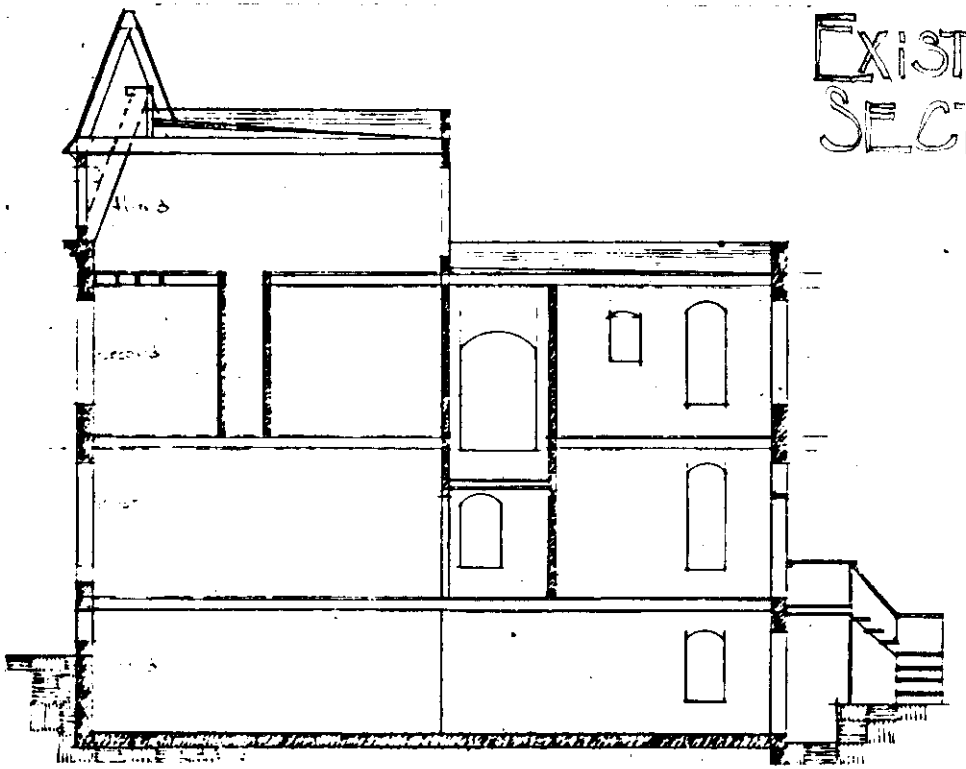
	sq. ft.
Kitchen	90
dining	90
Living room	200
2 bedrooms	225
	225
Bath	100
laundry area	50



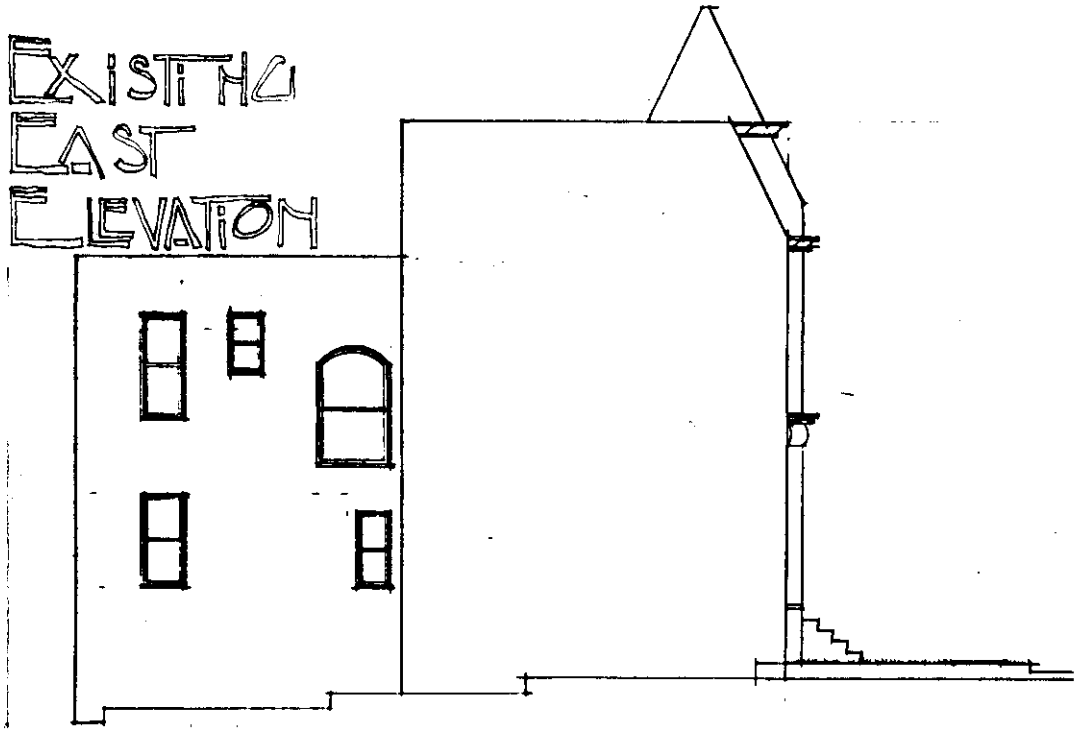
EXISTING STRUCTURE: ELEVATIONS



TYPICAL EXISTING FLOOR PLANS



EXISTING SECTION B.B



EXISTING EAST ELEVATION

PROJECT GOALS

PHYSICAL

More efficient use of space - Use all of it
- better circulation
- planned kitchens, baths, laundrees

More efficient use of materials
- cores of wet facilities
- back-to-back / stacks etc

Reuse of items
i.e. sliding doors, balusters, moldings, glass

Better lighting levels

Advantage of south exposure

Garden as living space

PSYCHOLOGICAL / EMOTIONAL

Quality of Garden level improved
i.e. better lighting (less basement feeling)
better environmental

Cozy spaces

Active spaces

Quiet spaces

thought evoking spaces

PHILOSOPHICAL

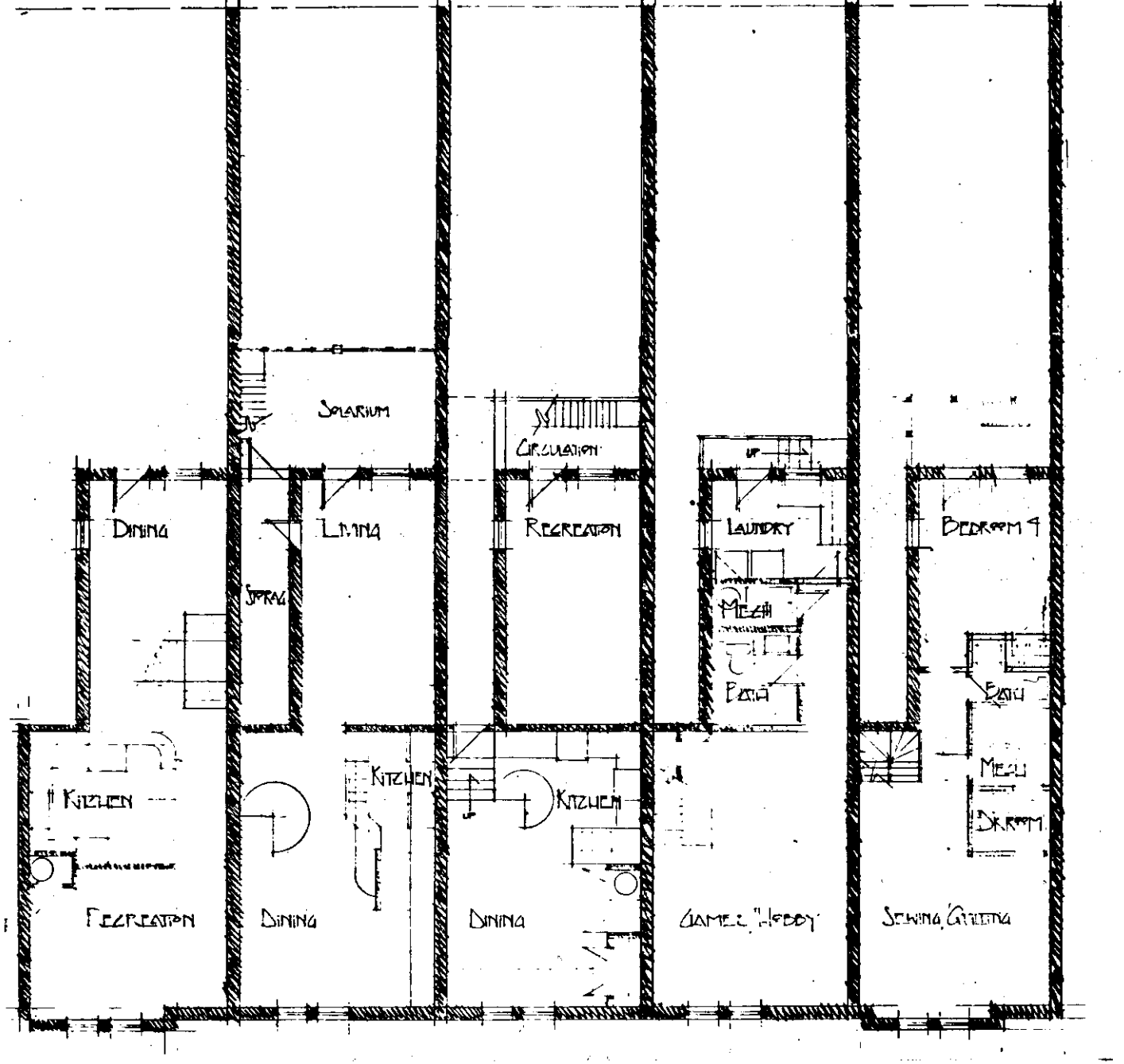
Old Structure are valid as built

Old structure are valid as add-on structure

changing structure.

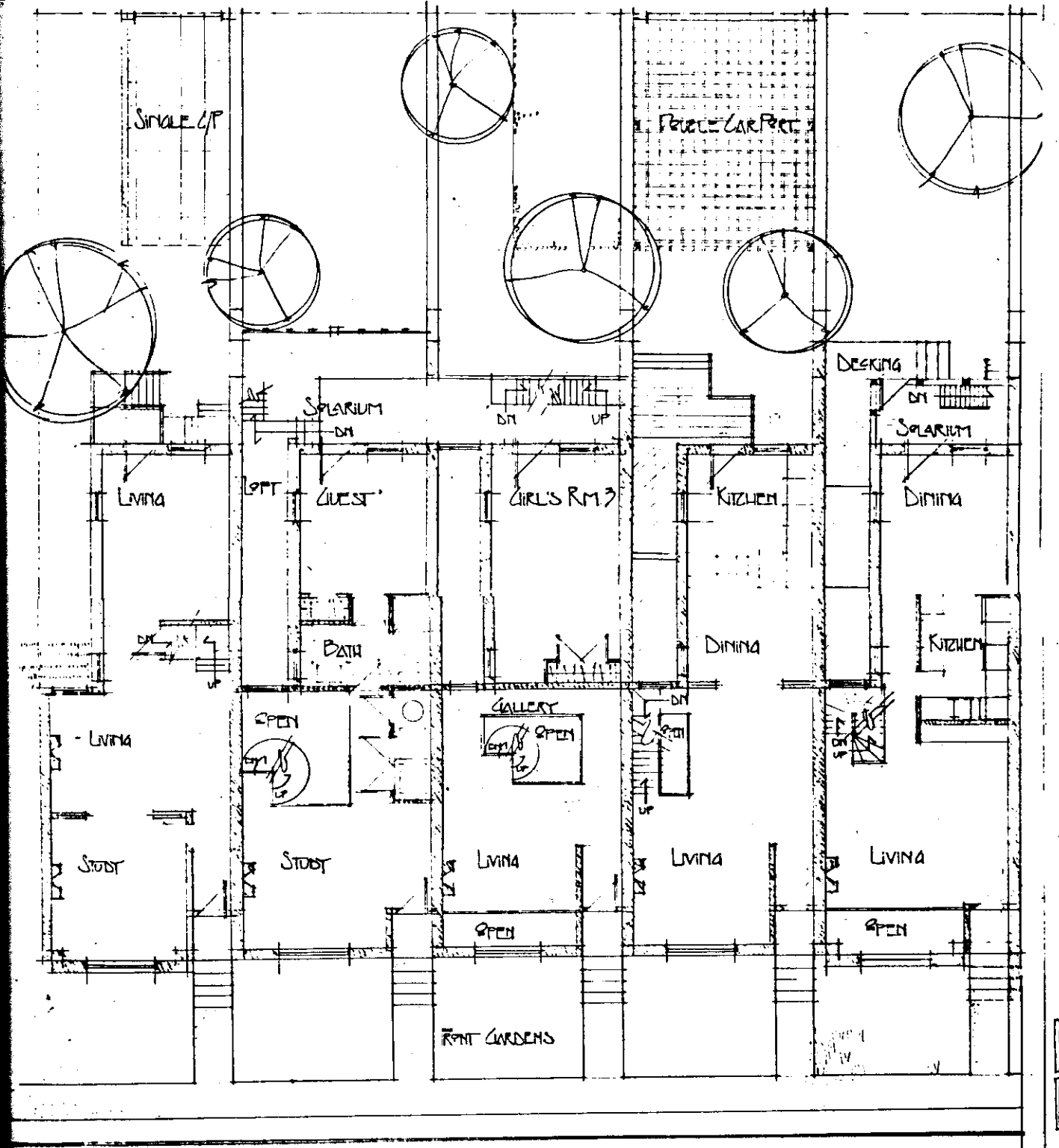
Change is a record of time/society

INVENTORY [GENERAL]	LEAVE	RELOCATE	ASSET	DETRIMENT	IMPROVE WITH	CORRECT	ACCEPTABLE	RESTORE AS NEC.	REFURBISH AS NEC.	REPLACE AS NEC.	REPLACE TOTALLY	NEW USE
GARDEN LEVEL												
Full 8' ceilings												
Windows to garden												
Door to garden												
Basement windows to street												
No direction to dark basement like												
FIRST FLOOR . INCLUDING GARDEN												
Quaillish front garden												
Porch - stoop												
Hardwood door w/glazing												
Tiling detail @ alcove												
Brass hardware												
Parlour Window ☐ orig lead glass												
☐ replacement												
Sliding doors ⊞ orig leaded glass												
⊞ replacement lights												
⊞ orig w/o glass												
10' ceilings												
Oak woodwork												
Hardwood floors in all but kitchen												
Vinyl in existing kitch												
Central stair												
Fireplaces in Parlour / Dining (exist)												
Door to back garden												
30' x 16' back garden to alley												
3' x 2' light well to east												
Access to alley												
Movement at door												
SECOND FLOOR												
Landing ☐ orig stain glass												
☐ replaced clear												
Split Circulation - Vertical												
Long halls												
Fireplace in 2 bedrooms - exist												
Under stair closet between rooms												
Lack of linen space												
Cramped bath												
Interior Hall tends to be dark												
THIRD FLOOR												
No storage												
Directing Circulation												
Access to deck possible												
Use of deck possible												
Extension of space to deck												
Small window to front												
South face windows												
Unused at present												

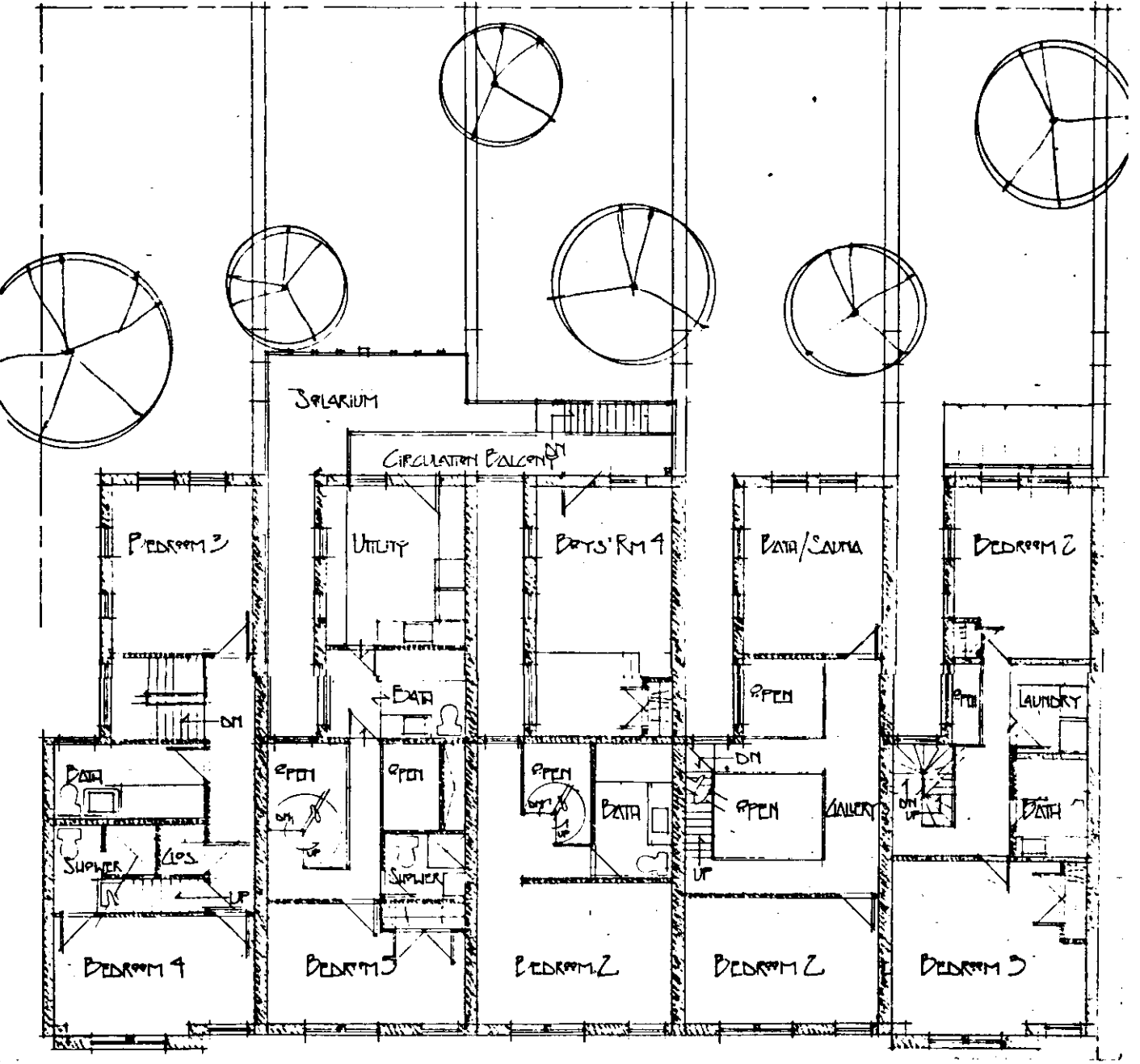


MID-TERM

GARDEN LEVEL

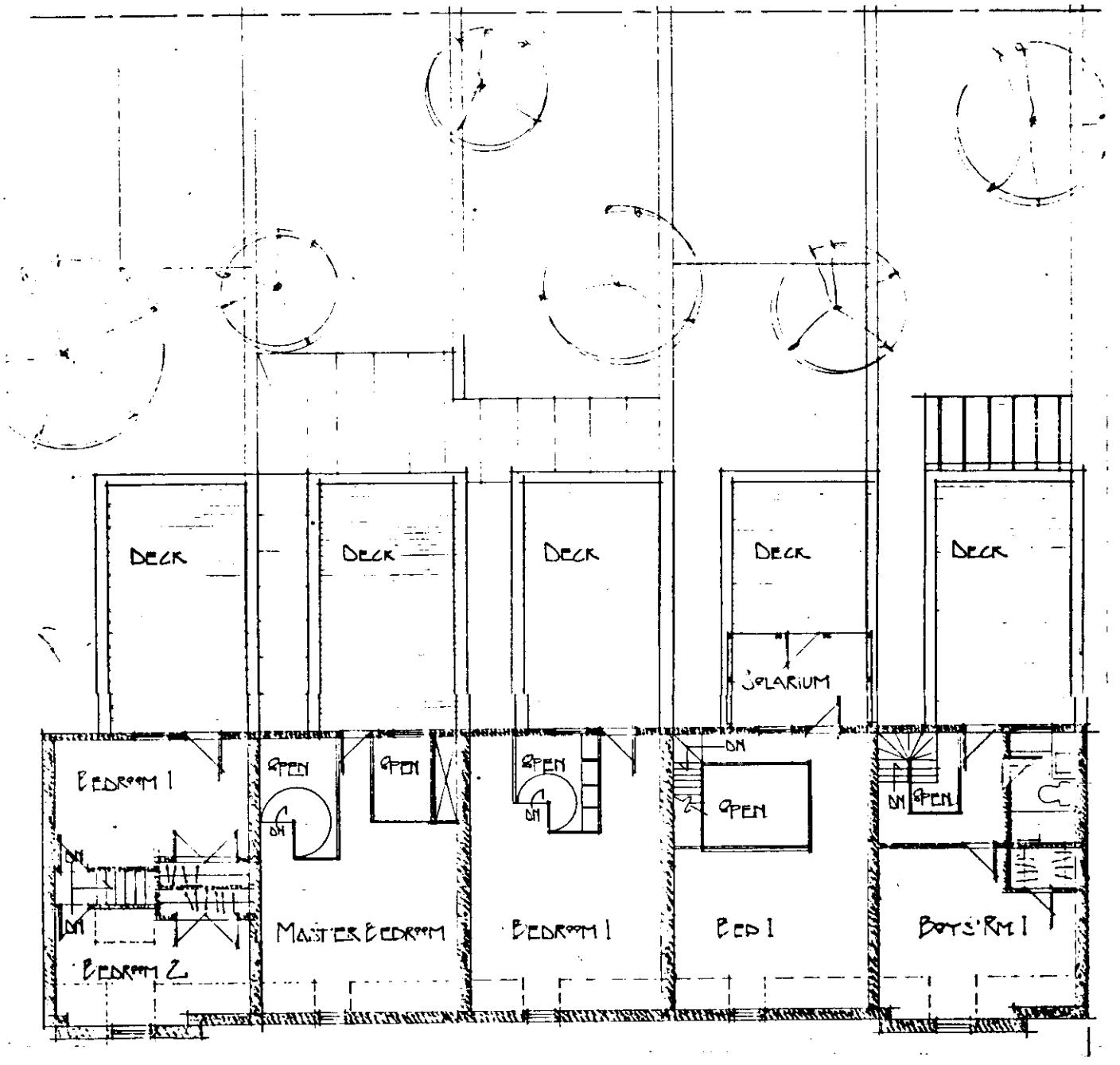


MID-TERM LEVEL ONE

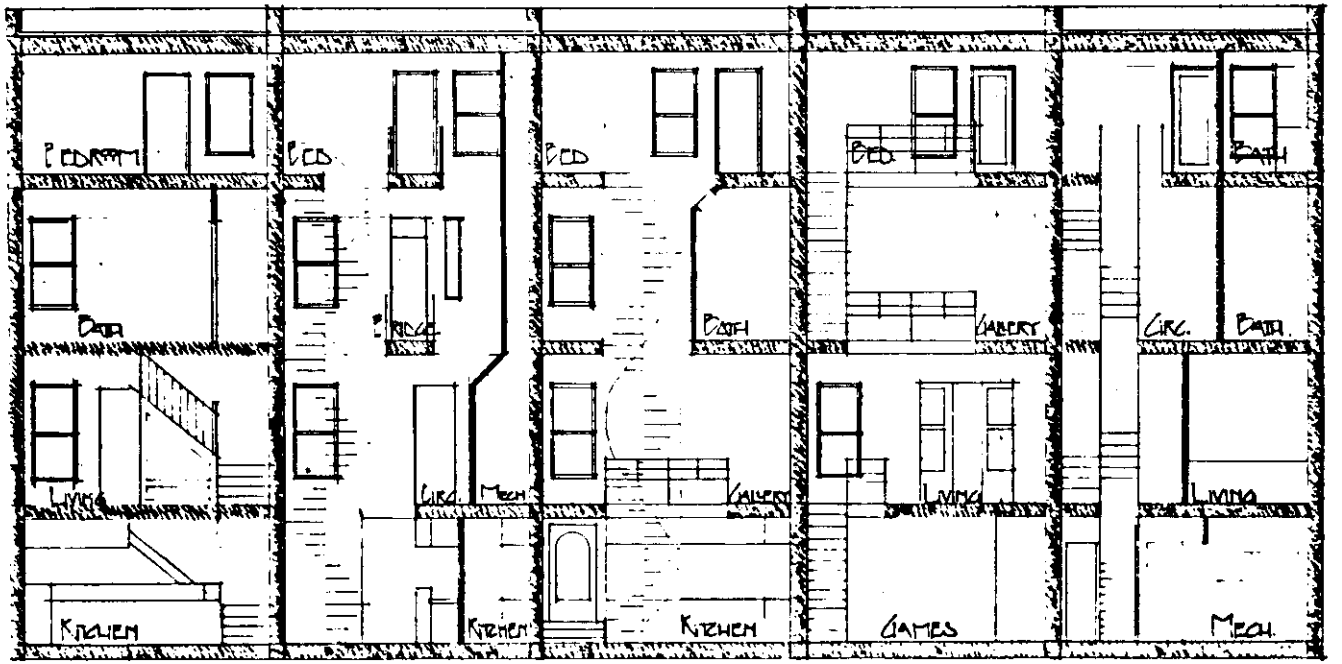


MID-TERM

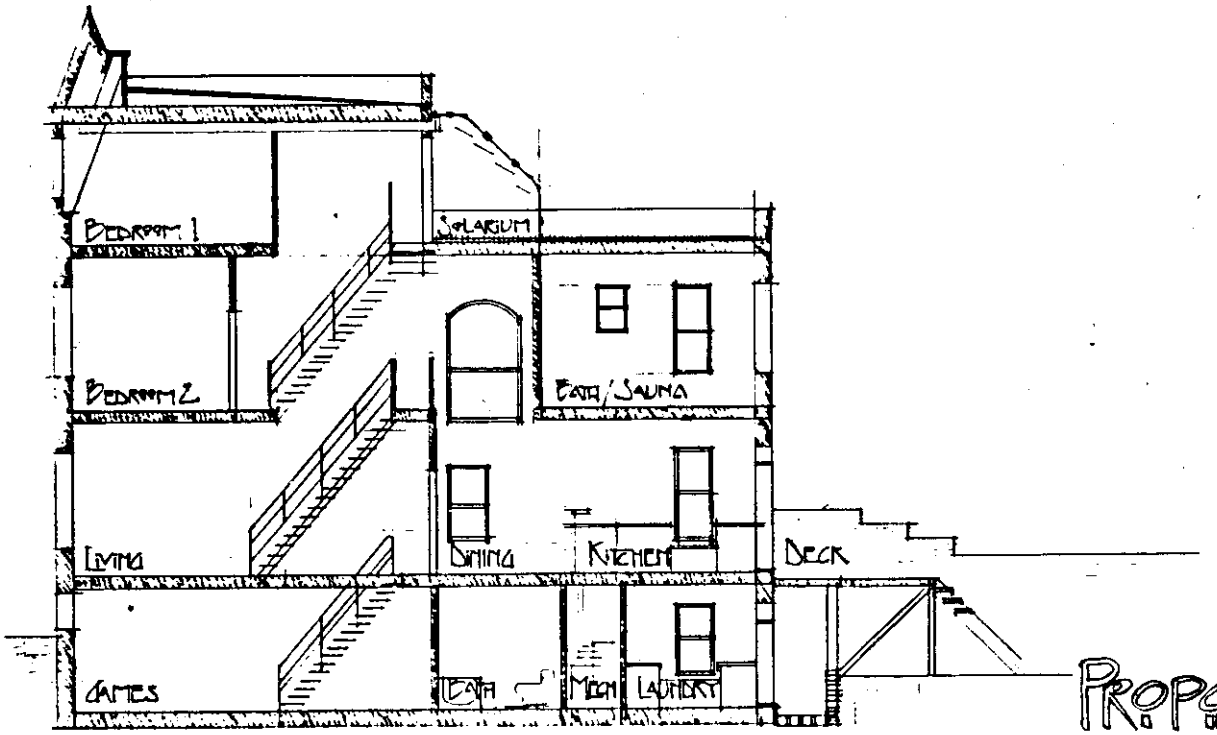
LEVEL TWO



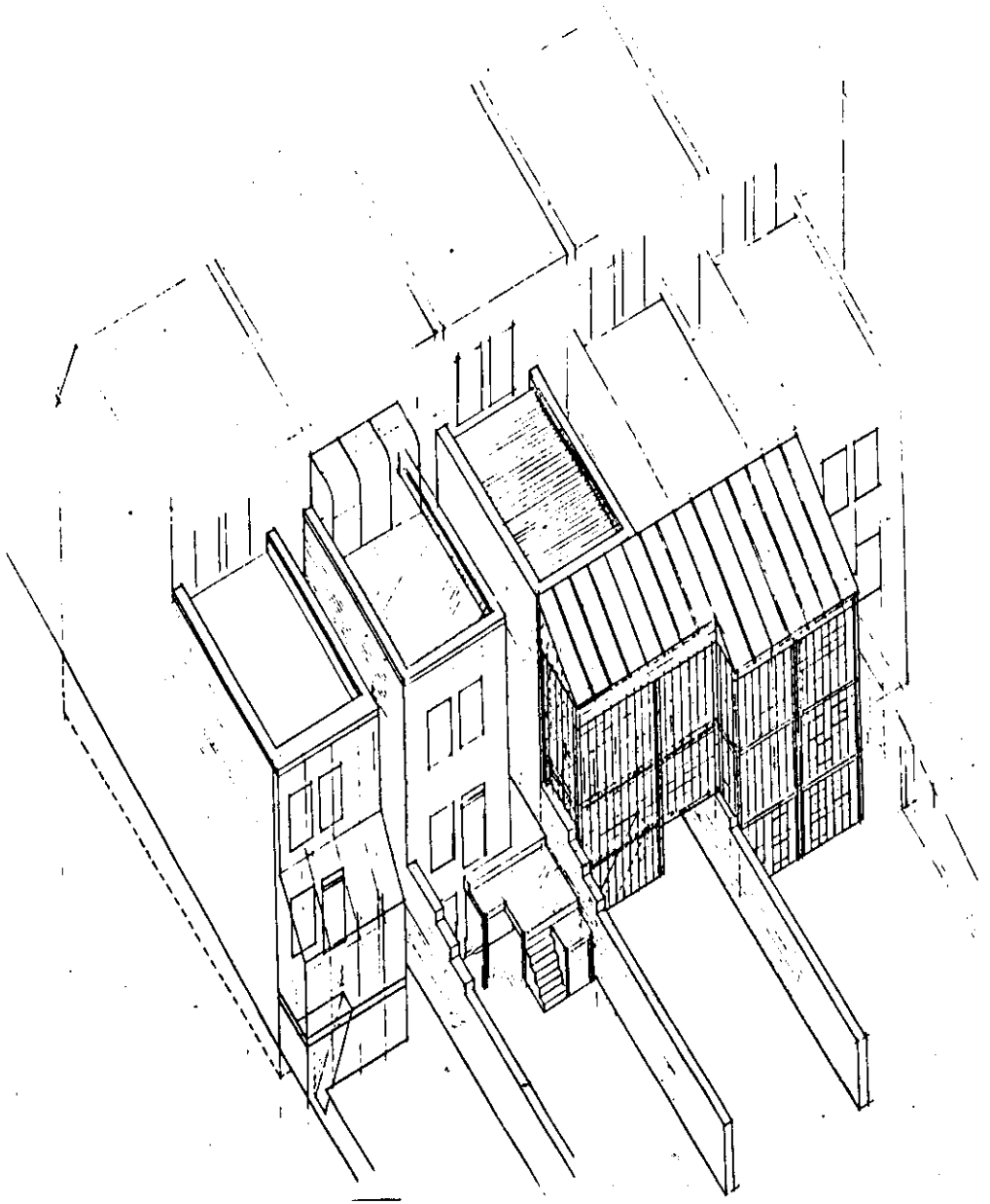
MID-TERM LEVEL THREE



PROPOSED SECTION A-A

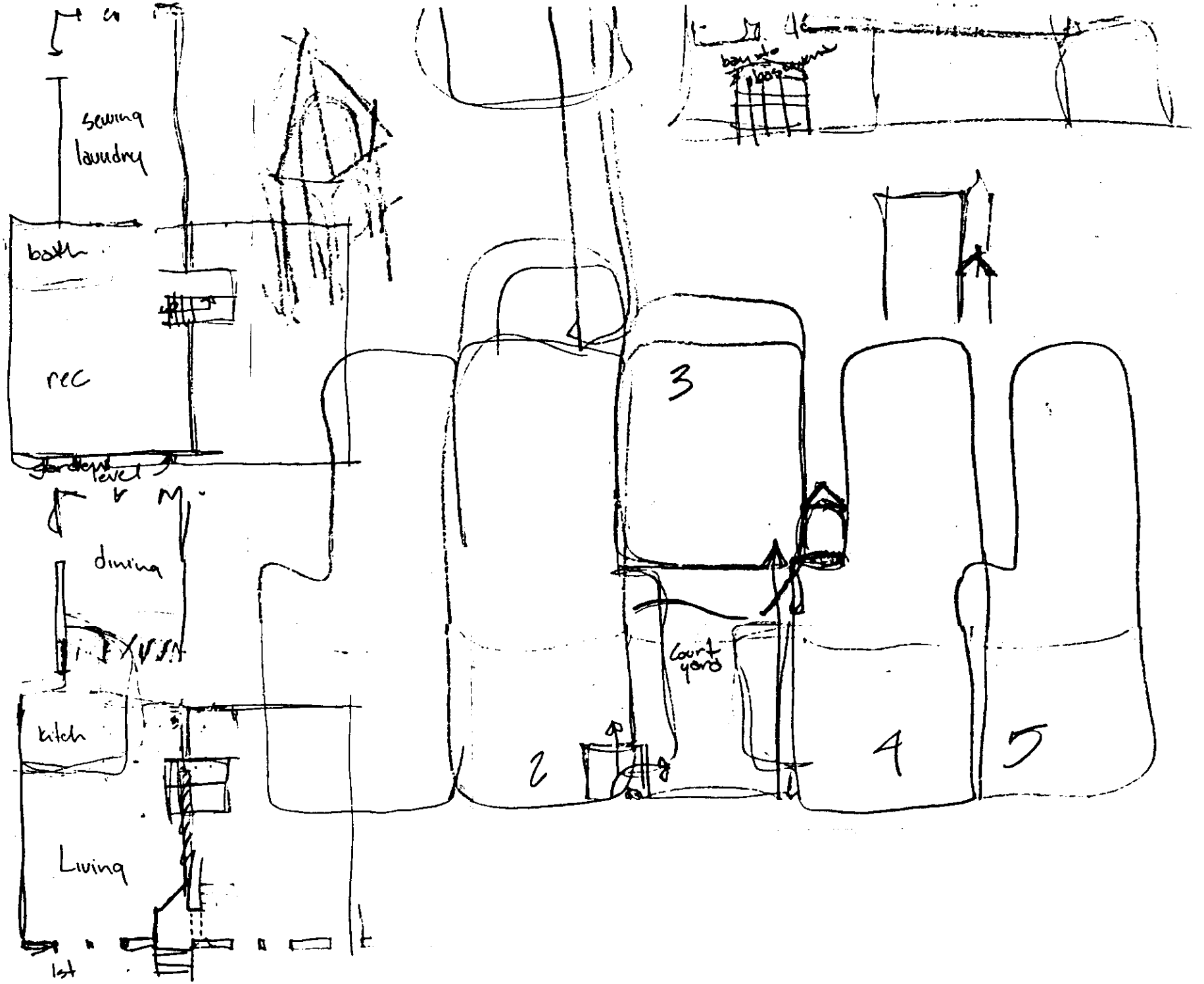


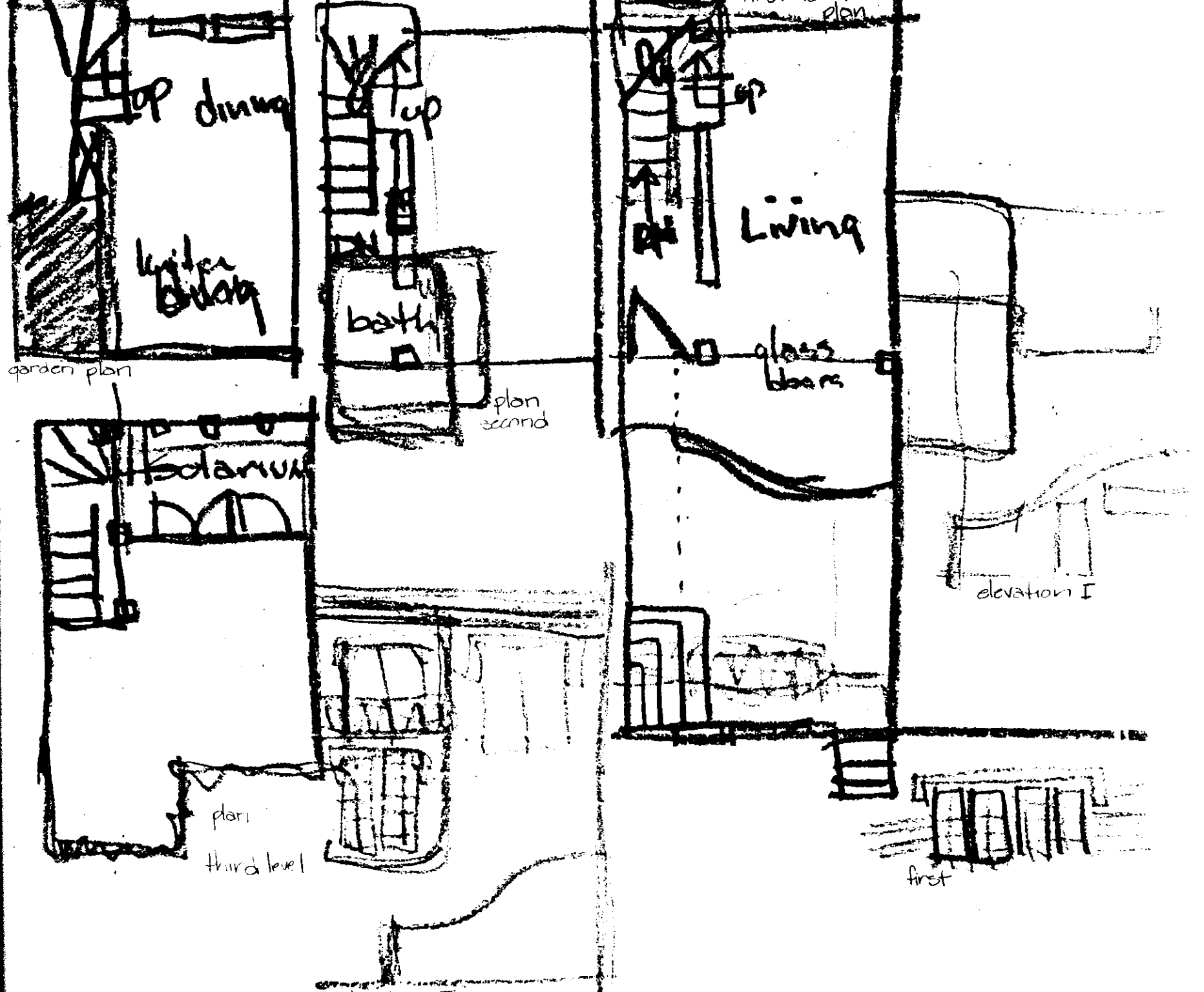
PROPOSED SECTION B-B

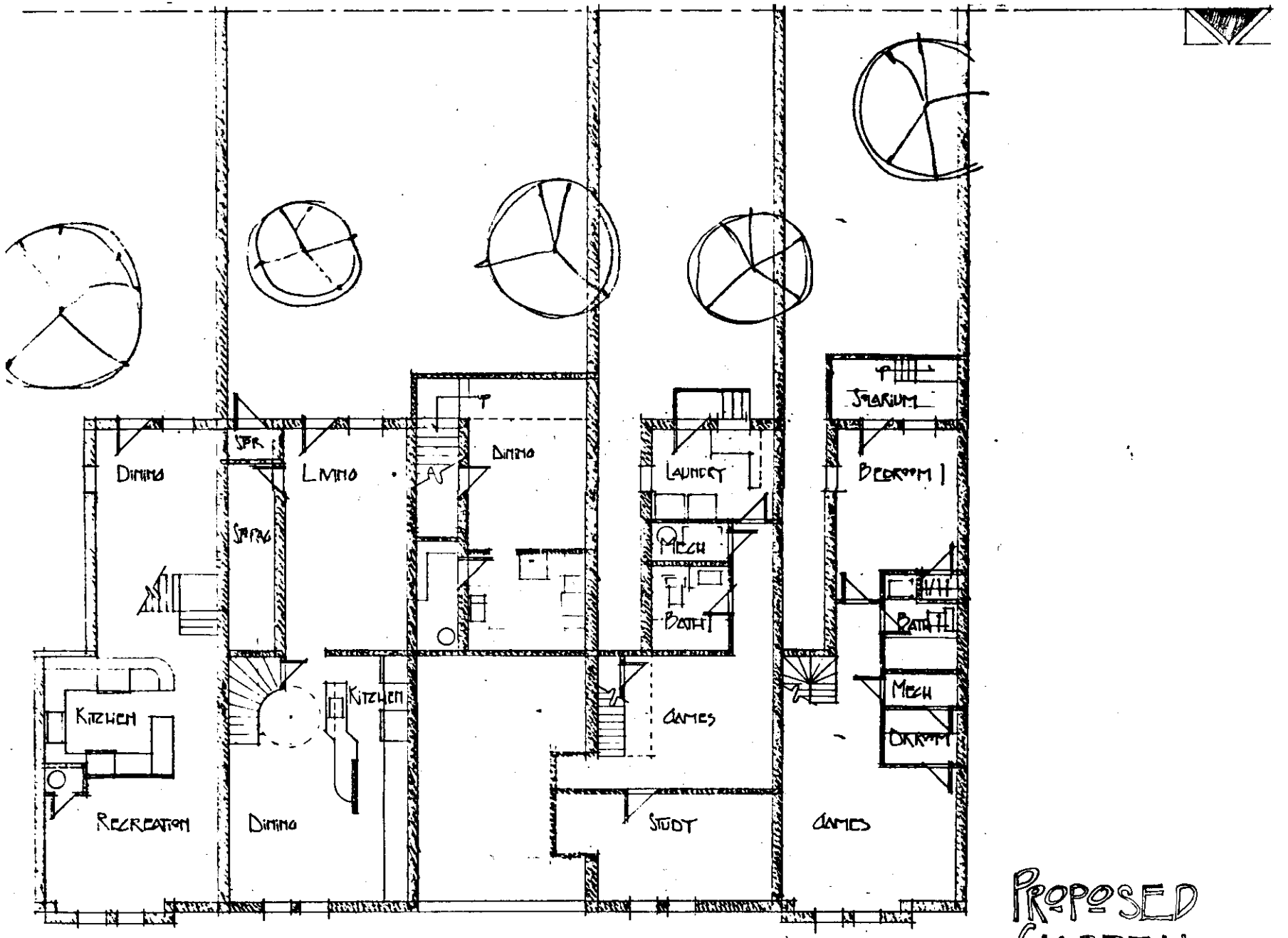


405 MID-TERM

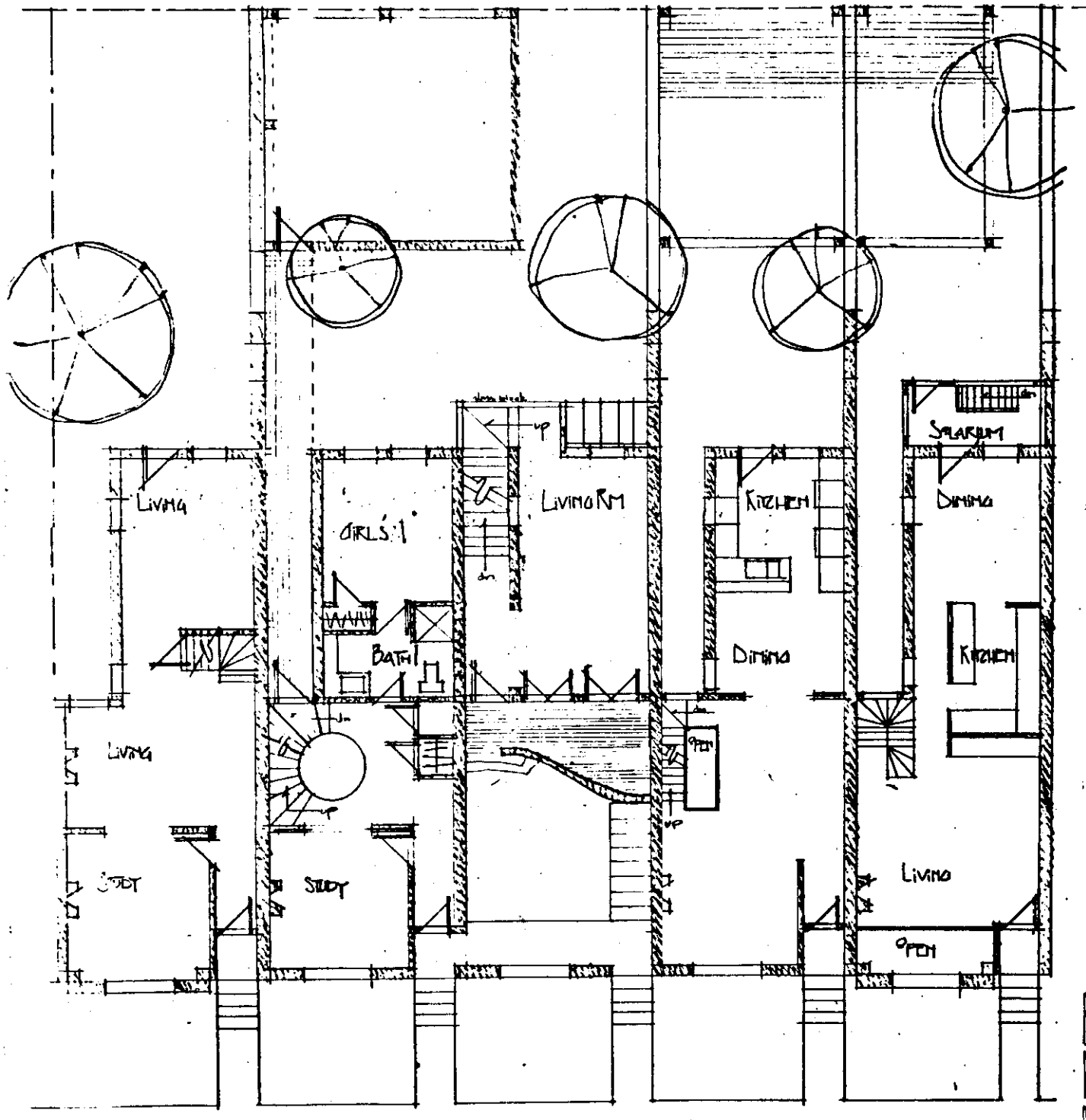
AXONOMETRIC


sewing
laundry
bath
rec
dining
kitch
Living
1st
3
2
4
5
Court yard

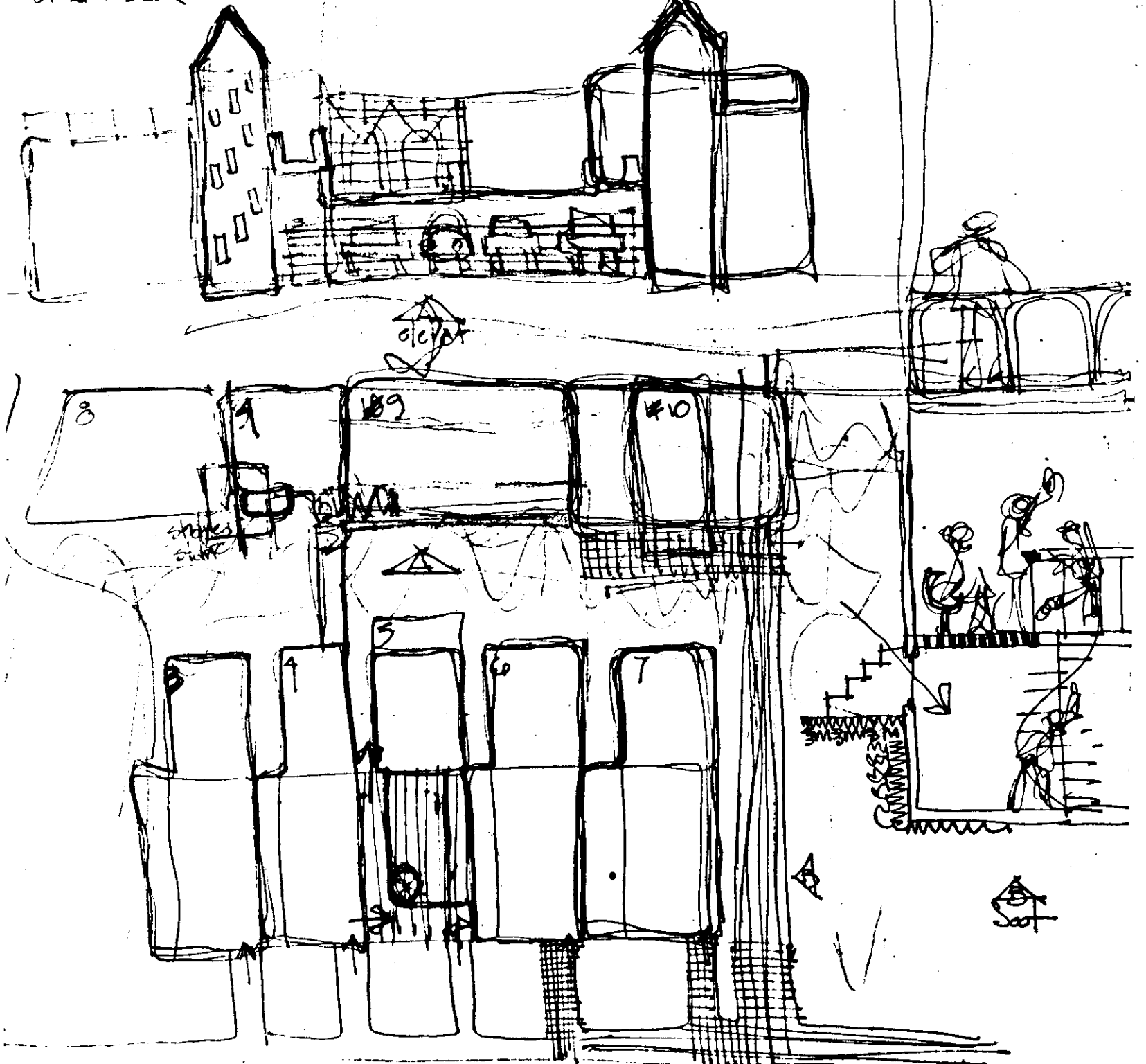

up
dining
kitchen
up
bath
plan
second
up
Living
glass
doors
plan
garden plan
botanum
plan
third level
elevation I
first

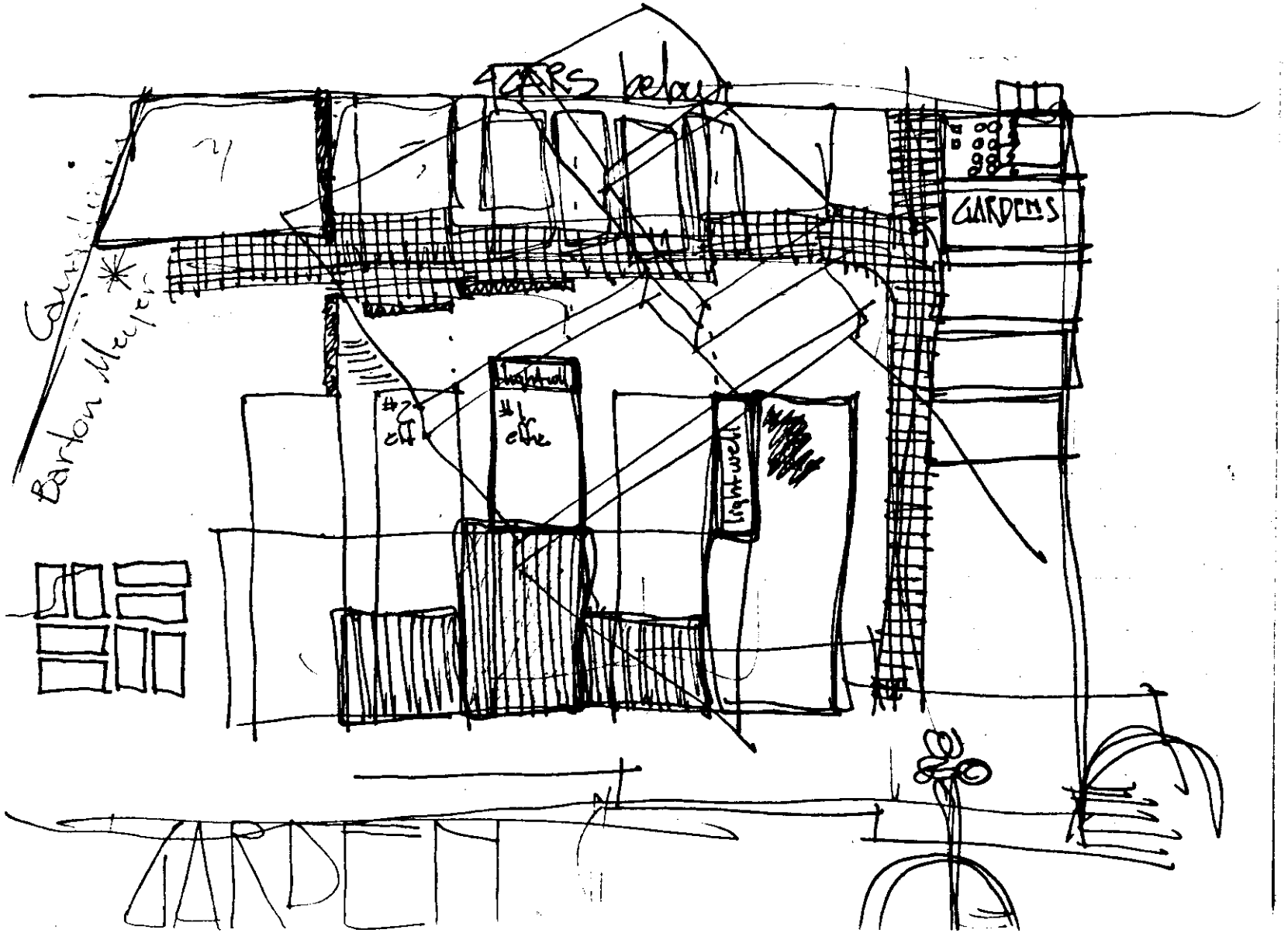


PROPOSED GARDEN LEVEL FLOOR PLANS.

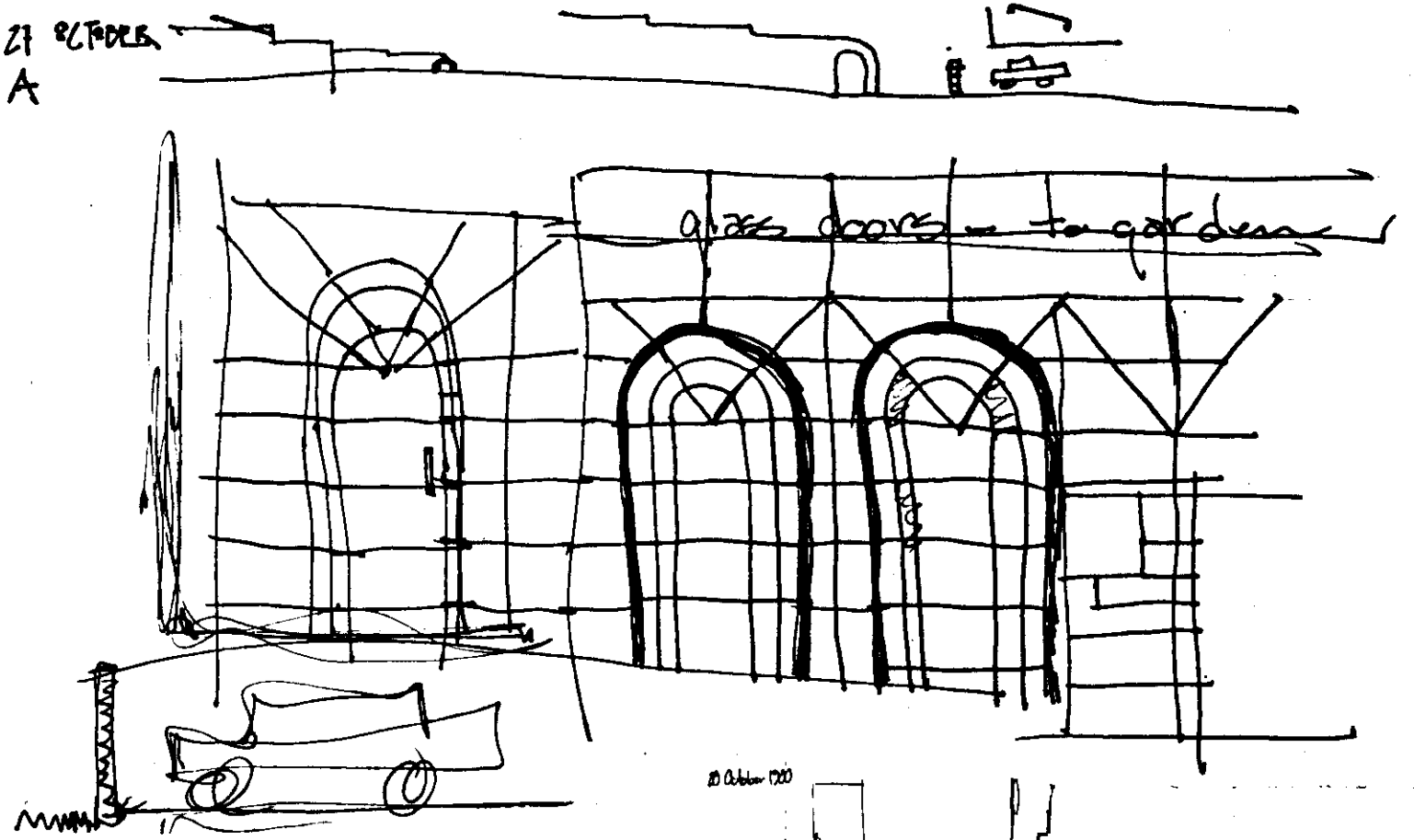


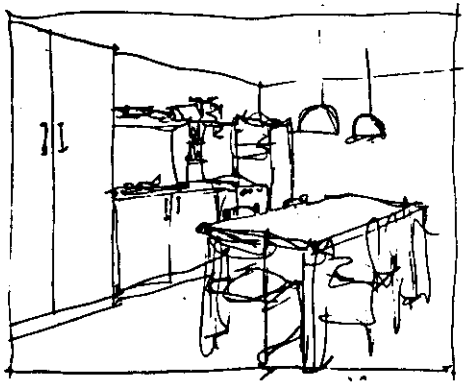
PROPOSED FIRST FLOOR PLANS

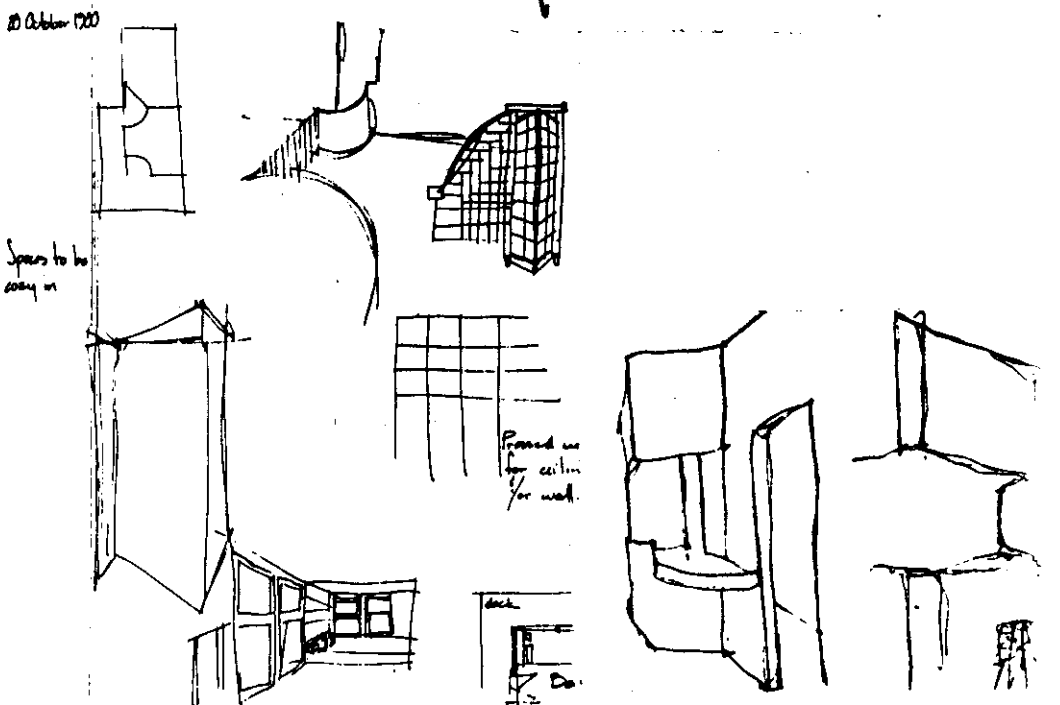

8
9
#9
#10
5
4
6
7
Sect

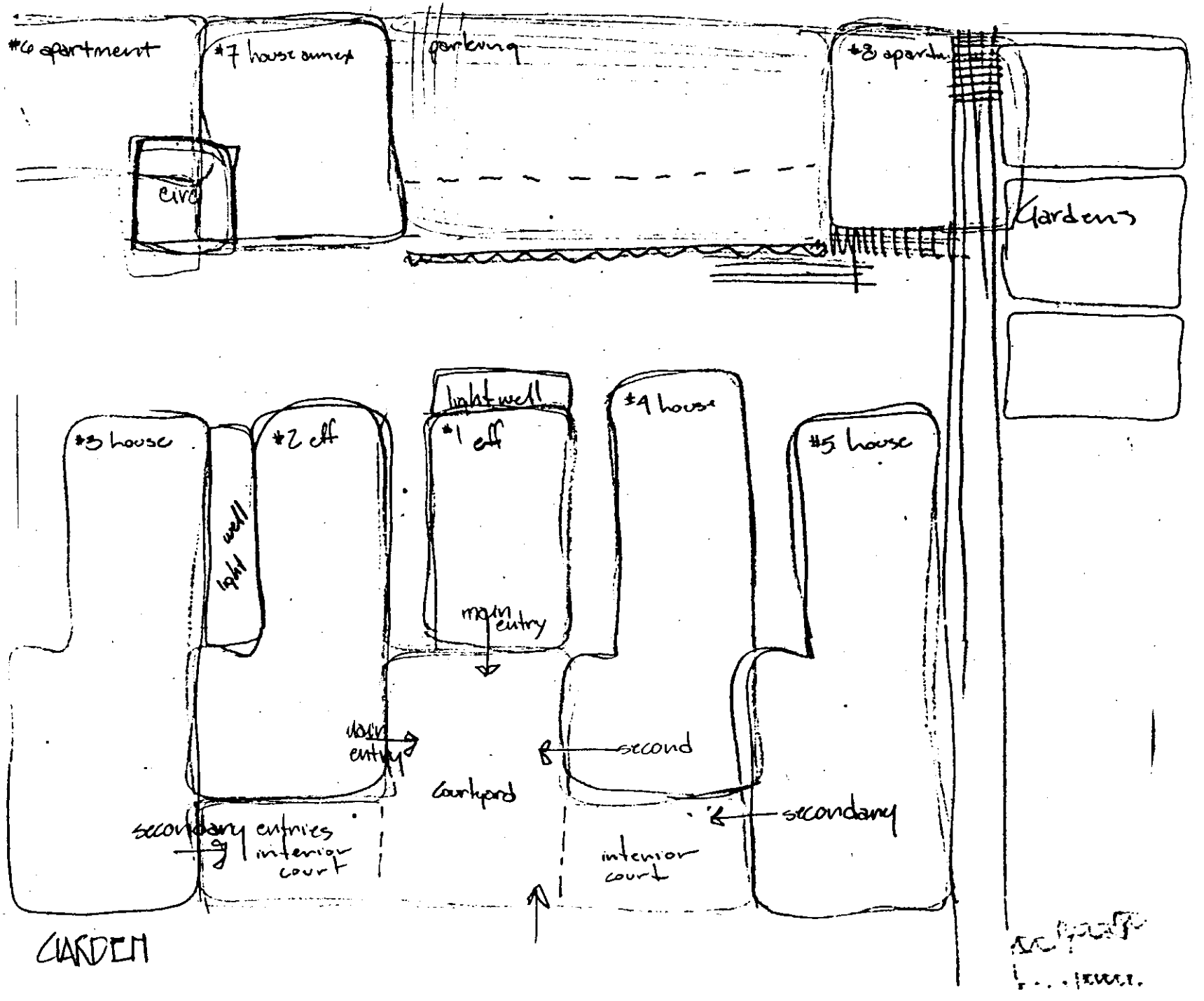

4 CARS below
GARDENS
#2 cff
#1 cffee
Barton Maples
GARDEN

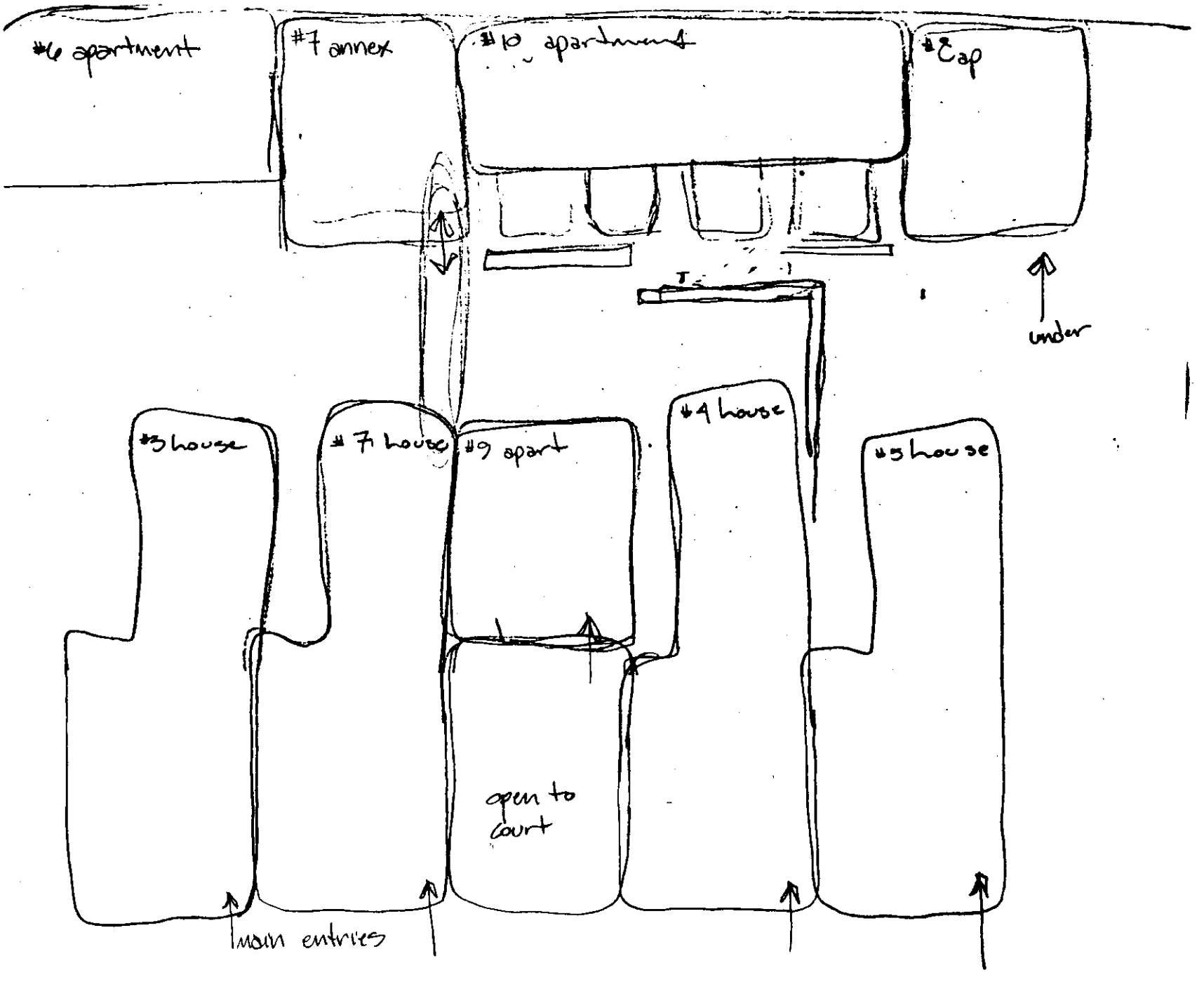
27 OCTOBER
A

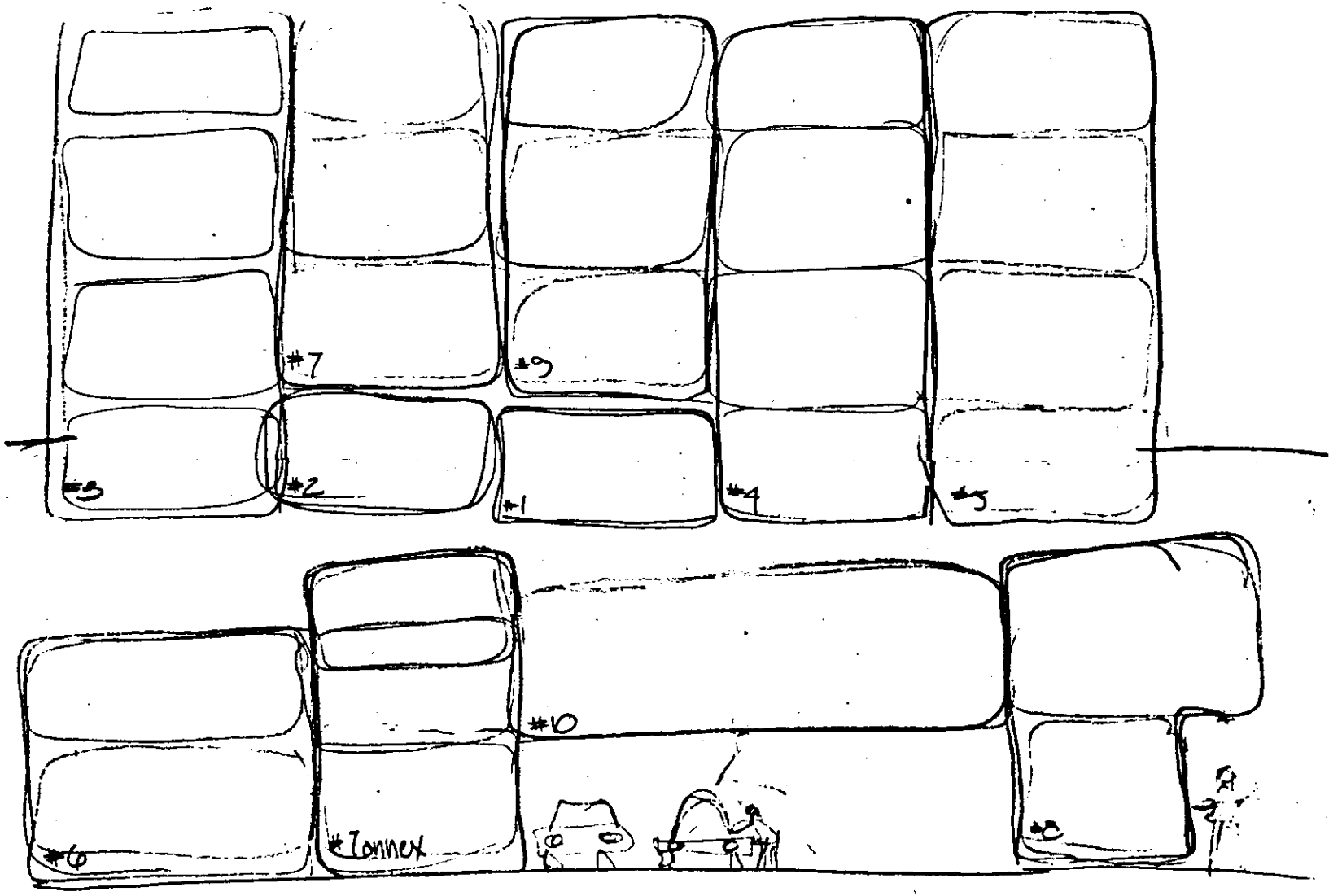







#6 apartment
#7 house annex
parking
#8 apartm
circ
Gardens
light well
#4 house
#3 house
#2 off
#1 off
#5 house
light well
main entry
main entry
second
Courtyard
secondary
secondary entries
interior court
interior court
GARDEN


#6 apartment
#7 annex
#10 apartment
#8 ap
under
#3 house
#7 house
#9 apart
#4 house
#5 house
open to court
main entries


#7
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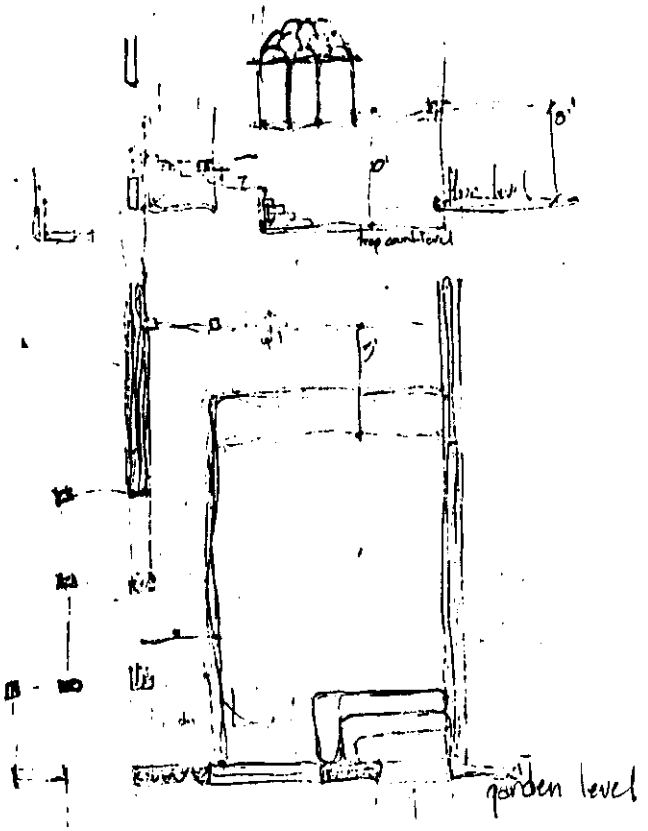
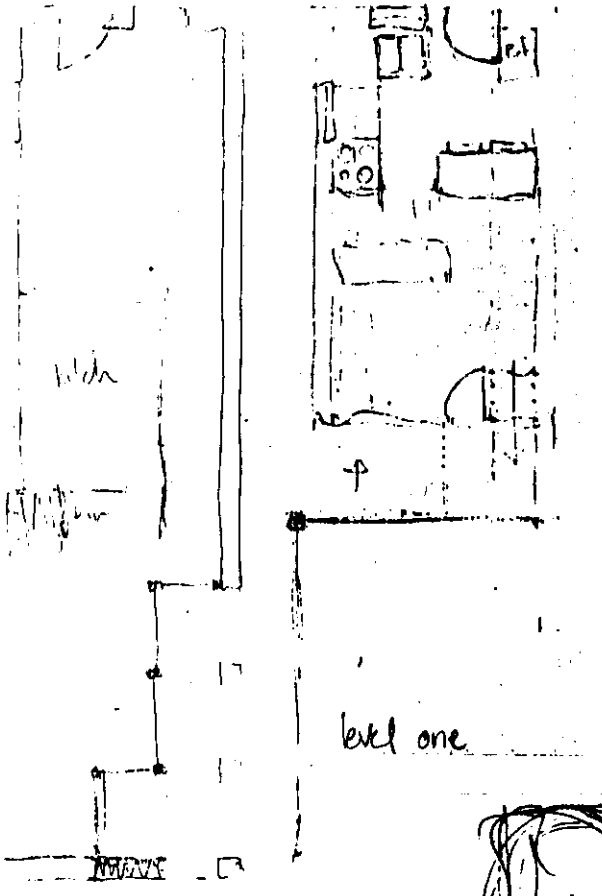
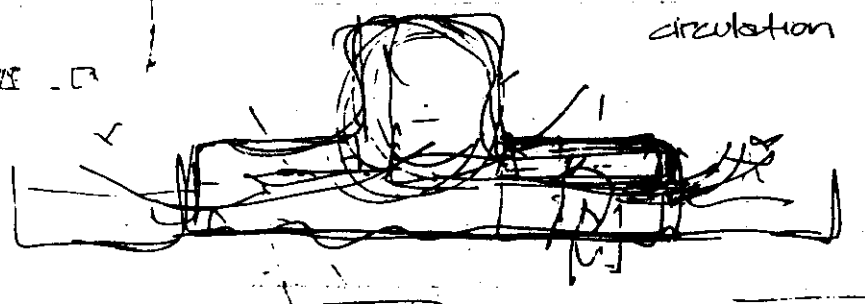
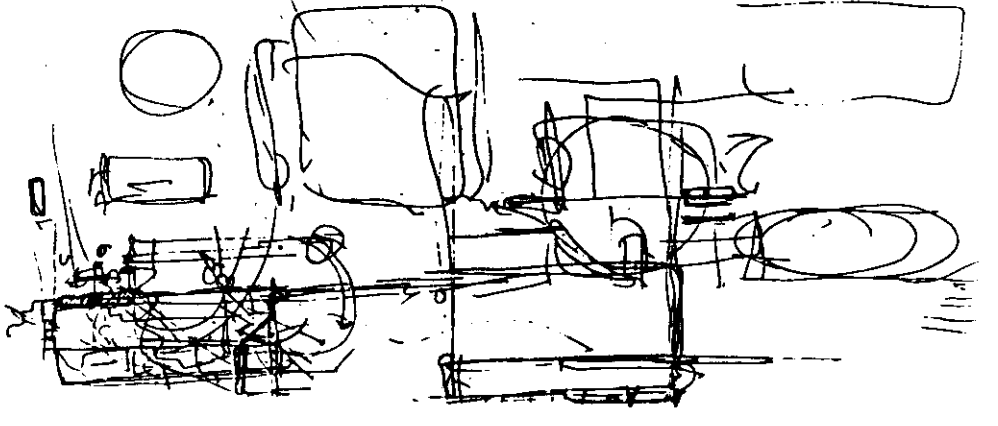
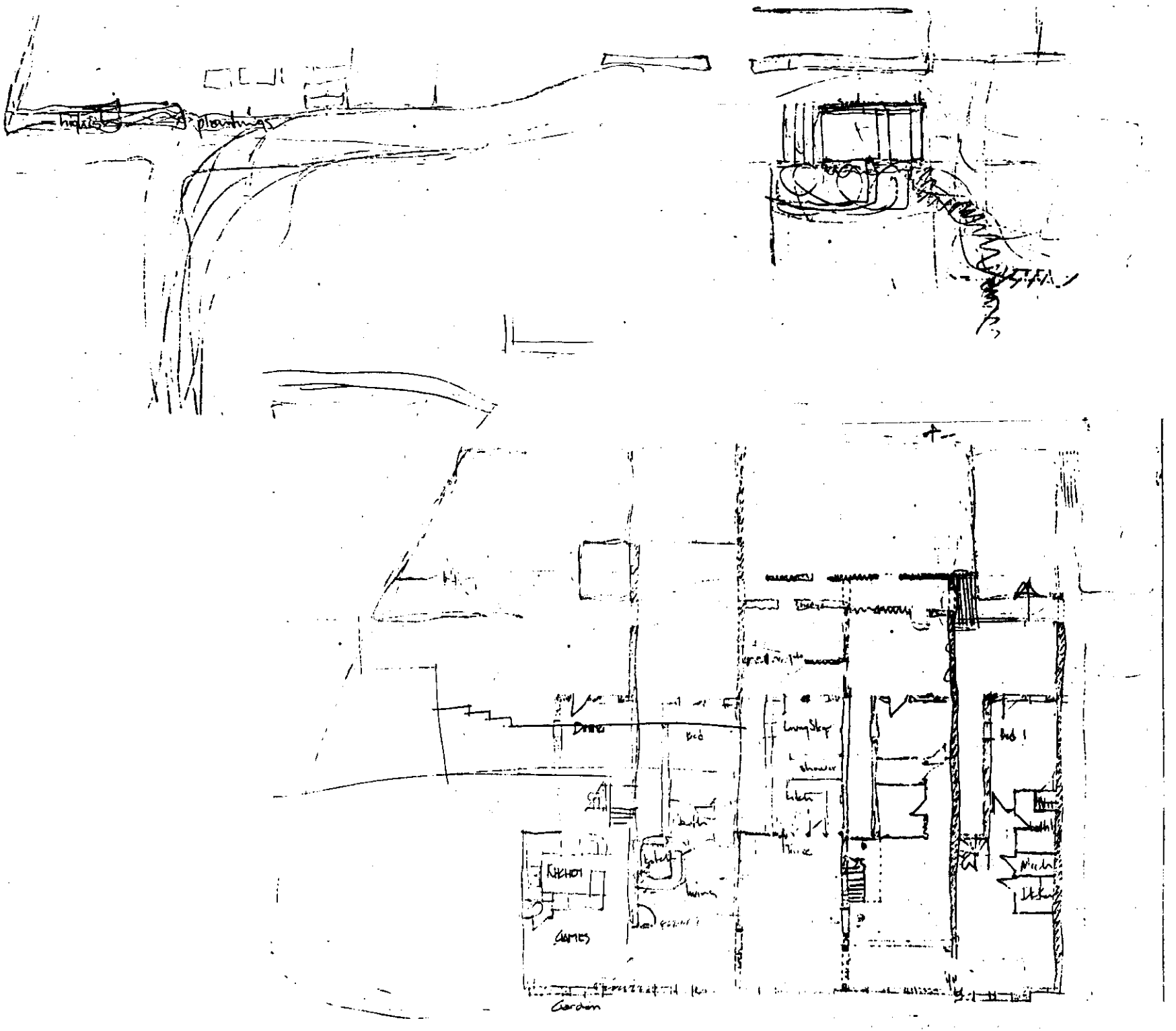
#2
#1
#4
#5
#10
#6
#Annex
#8

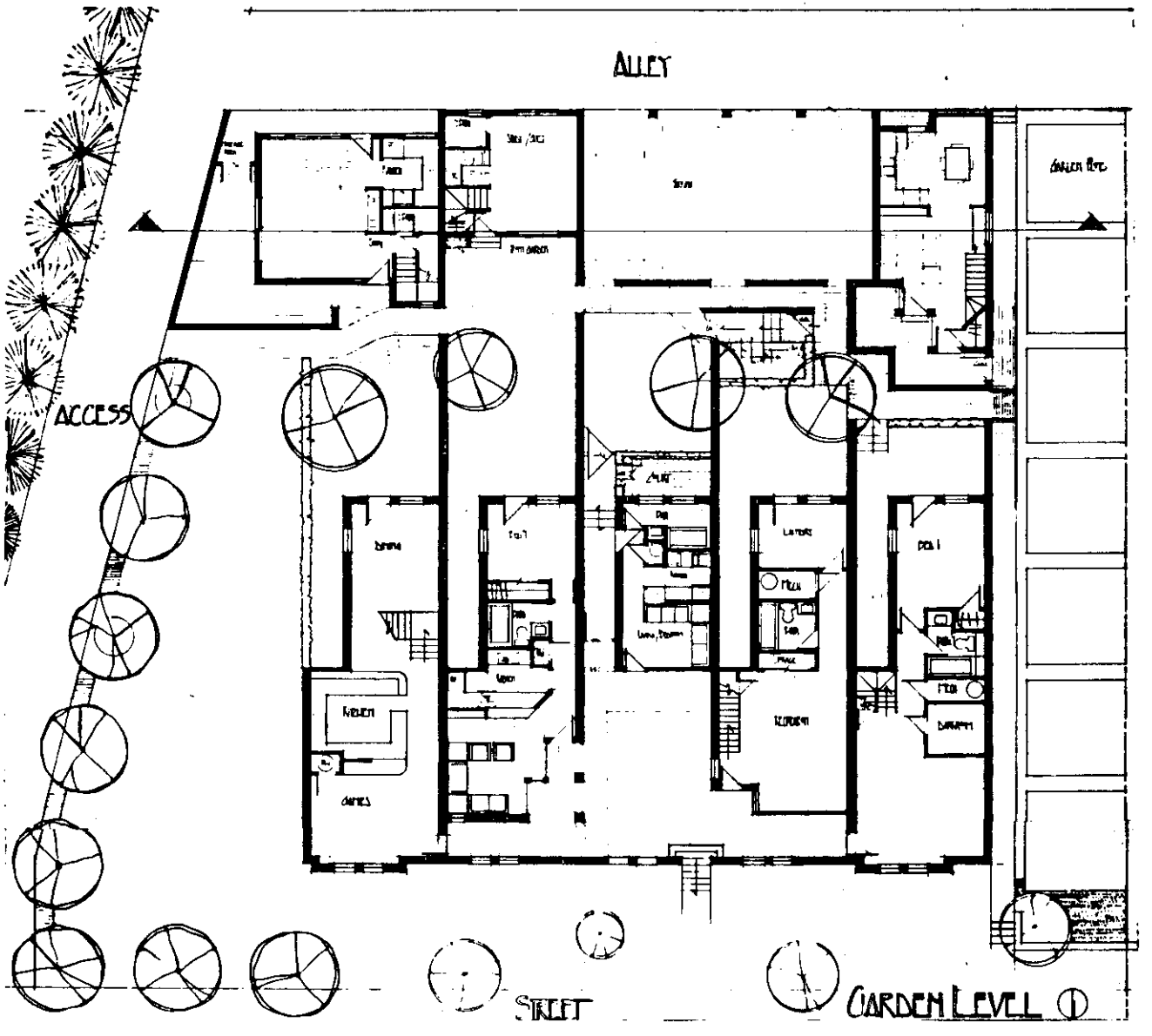

garden level


level one


circulation

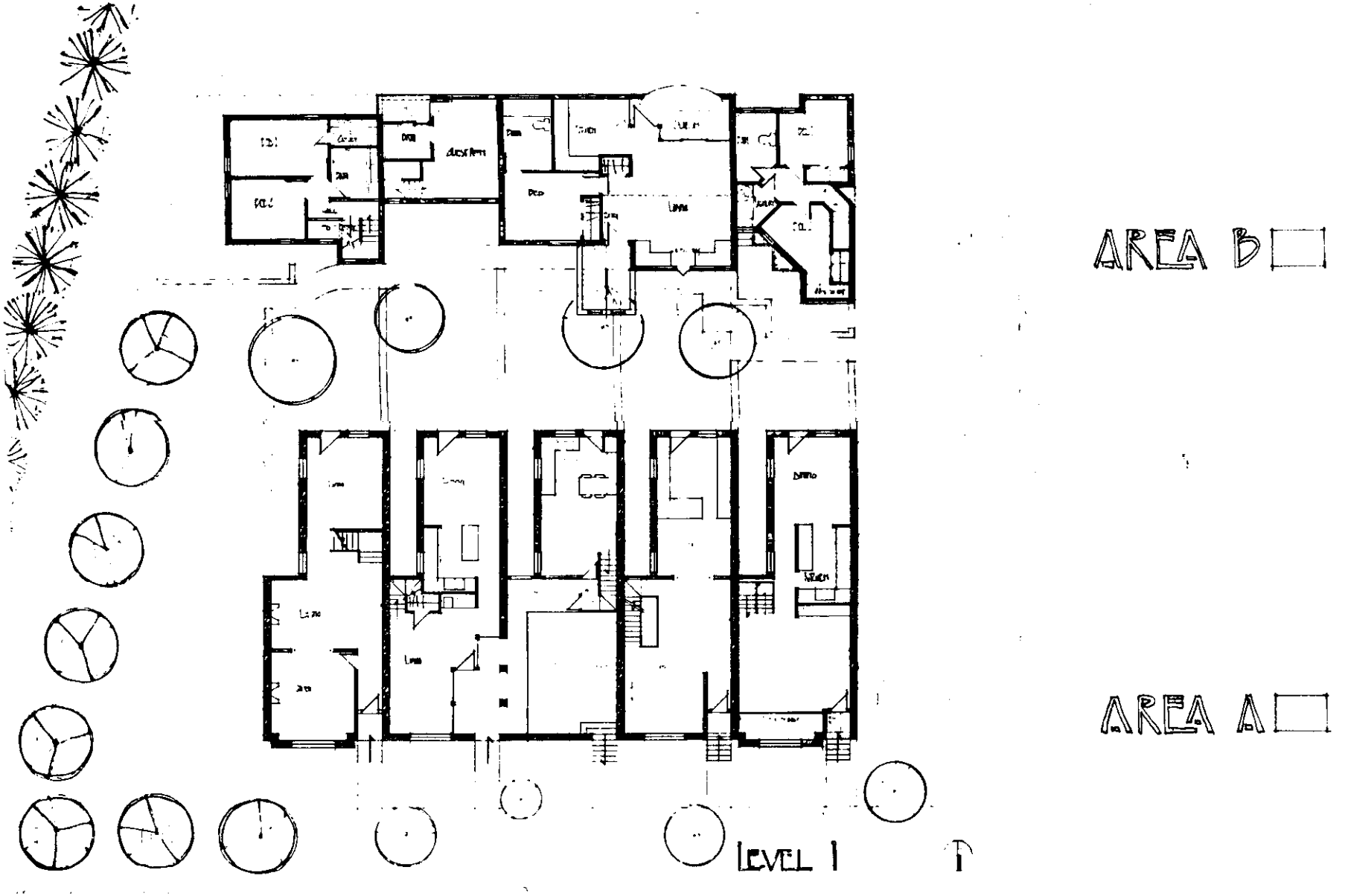



KITCHEN
GAMES
Garden
Bed 1



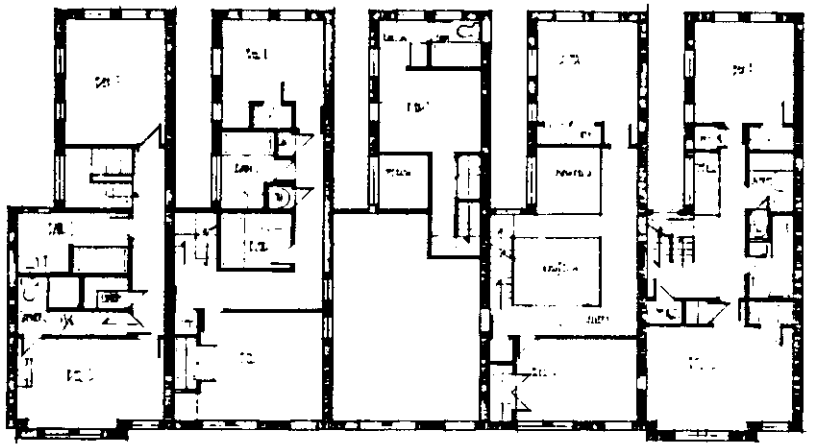
4.05 FINAL

GARDEN LEVEL

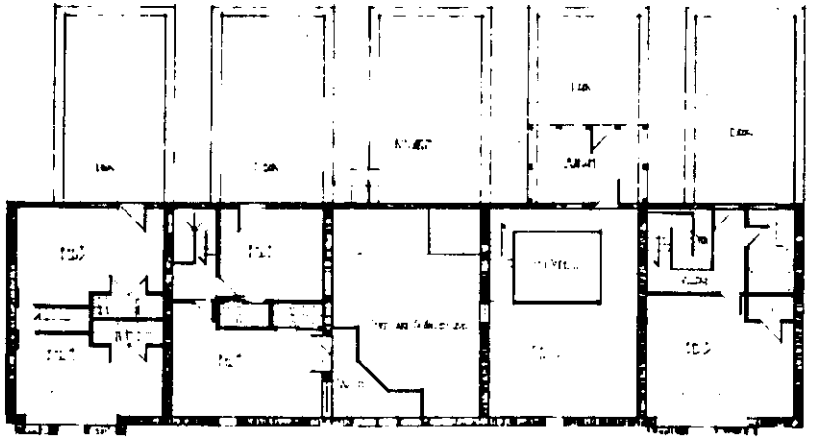


4.05 FINAL

LEVEL ONE



LEVEL 2



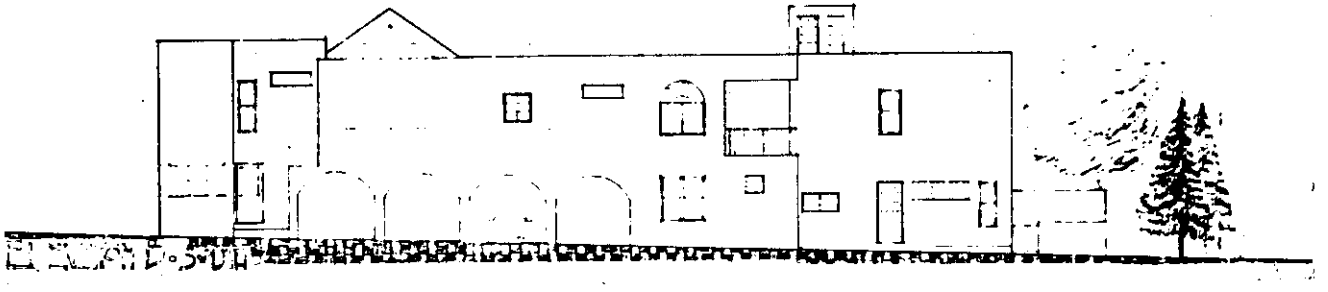
LEVEL 3

4.05 FINAL

LEVEL TWO

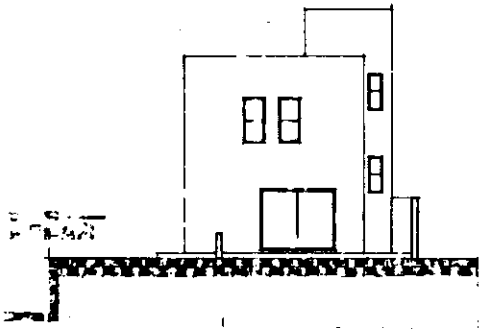
LEVEL THREE

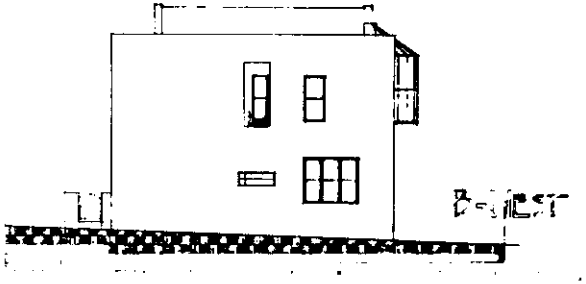
NORTH - B



SOUTH - B

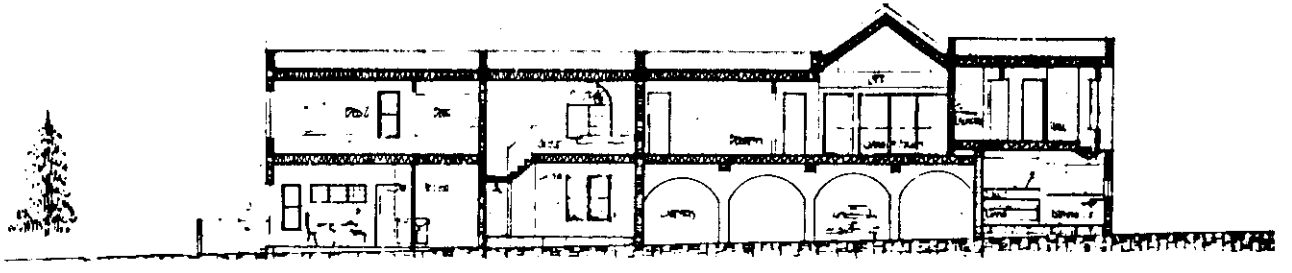
NEW ELEVATIONS





EAST-B

WEST-B

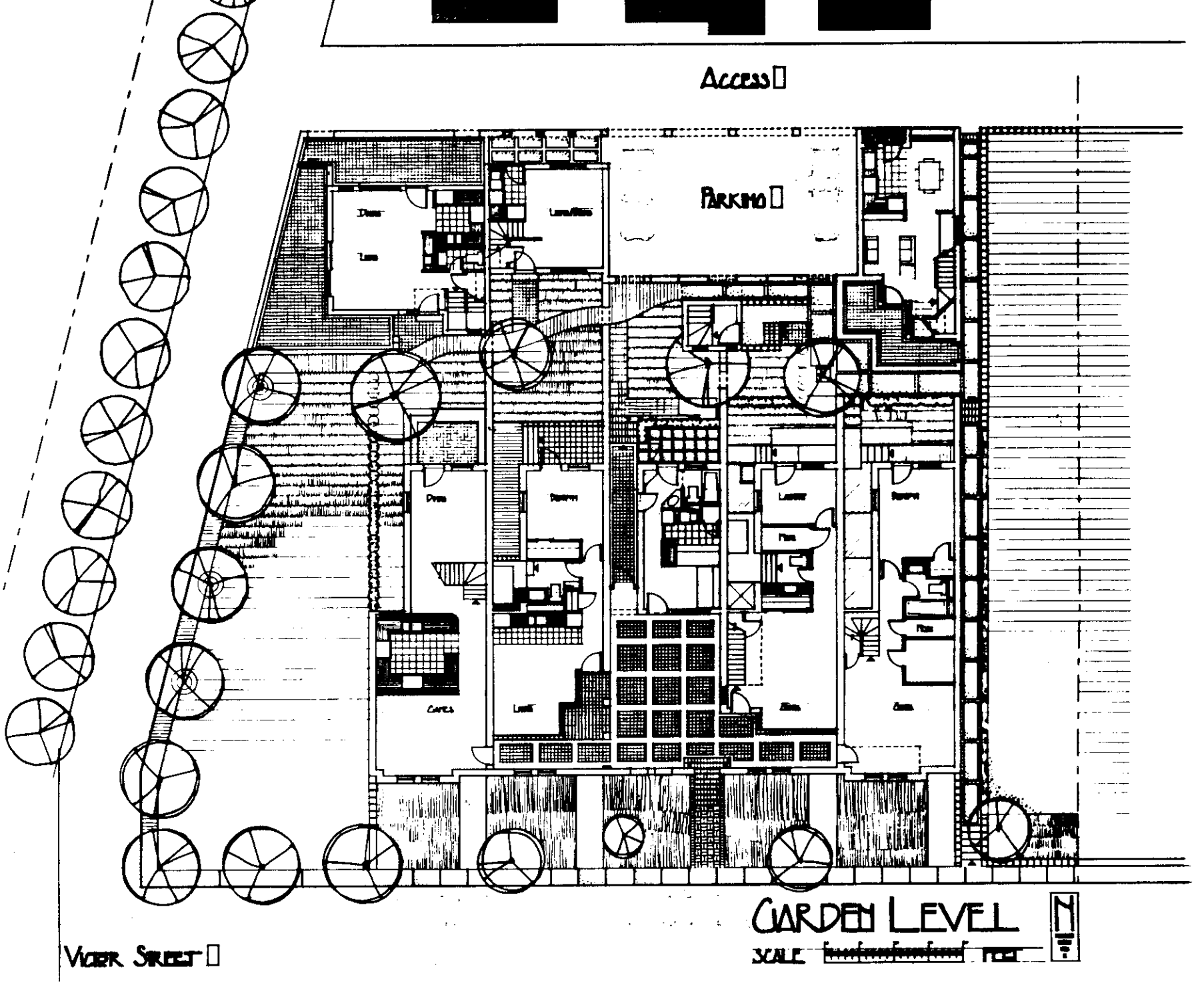


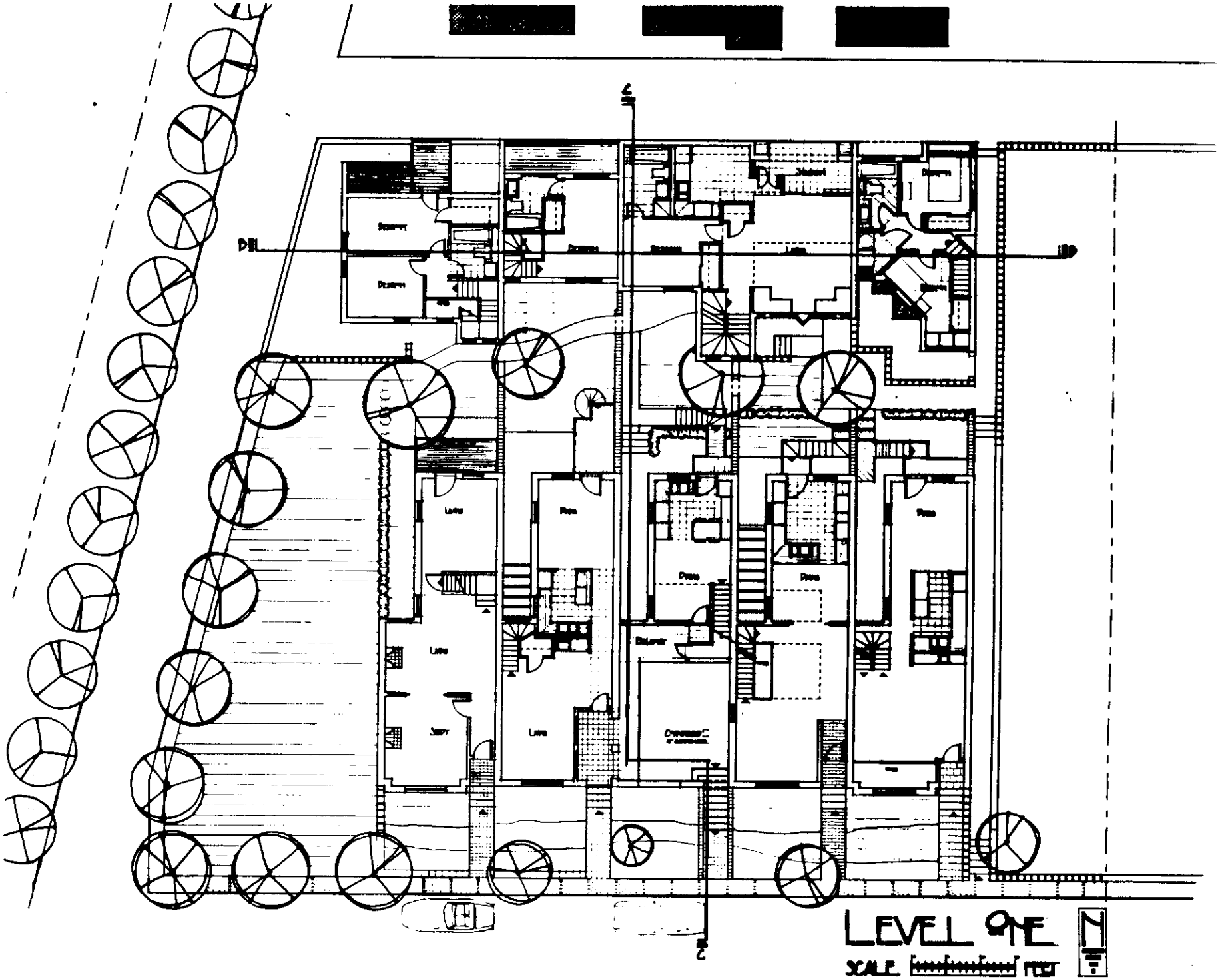
SECTION

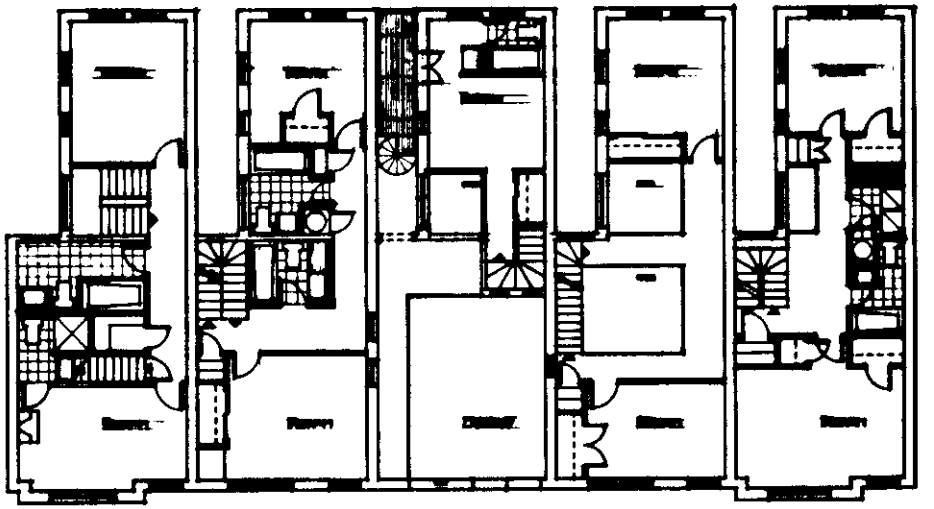
NEW ELEVATIONS
SECTION

4.95 FINAL

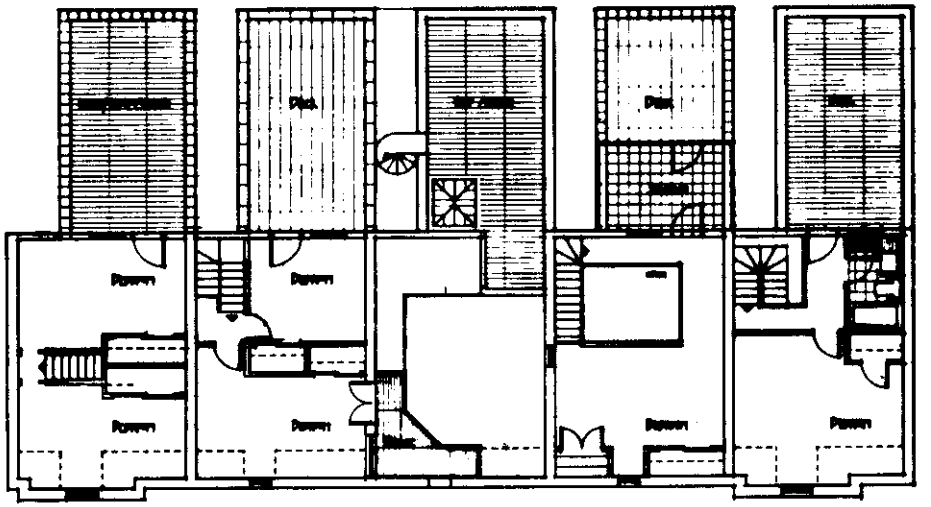
4º6 FINALS


Access
Parking
Vicker Street
Garden Level
Scale
N


LEVEL ONE
SCALE
FEET

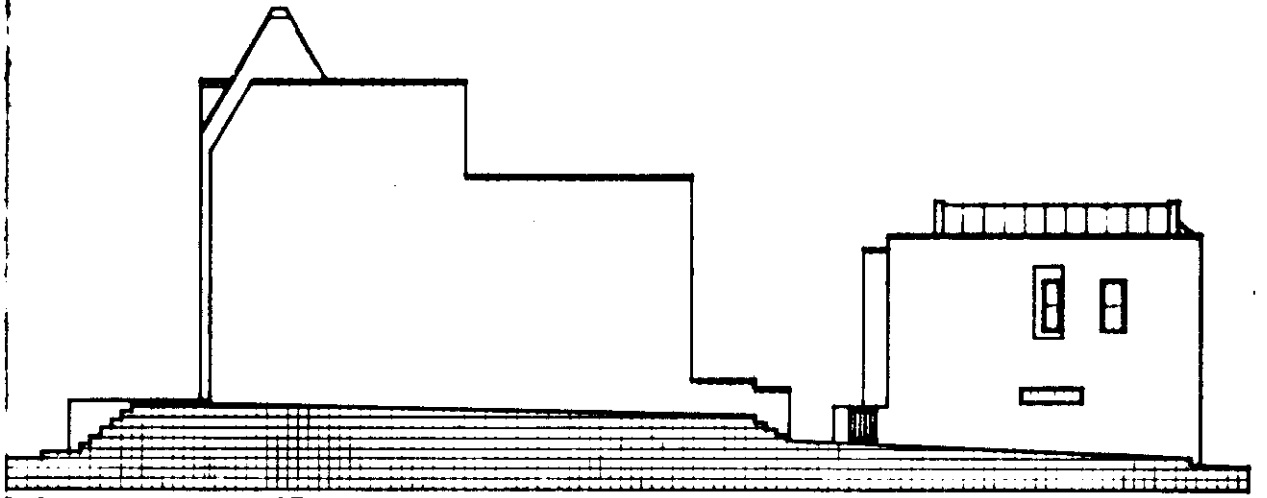


LEVEL TWO

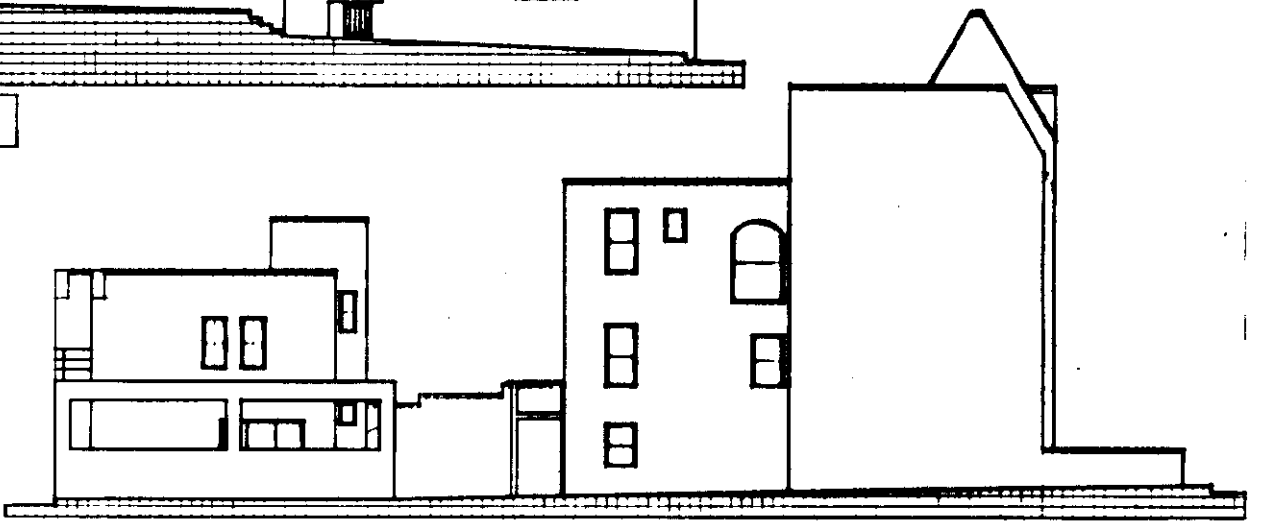


LEVEL THREE

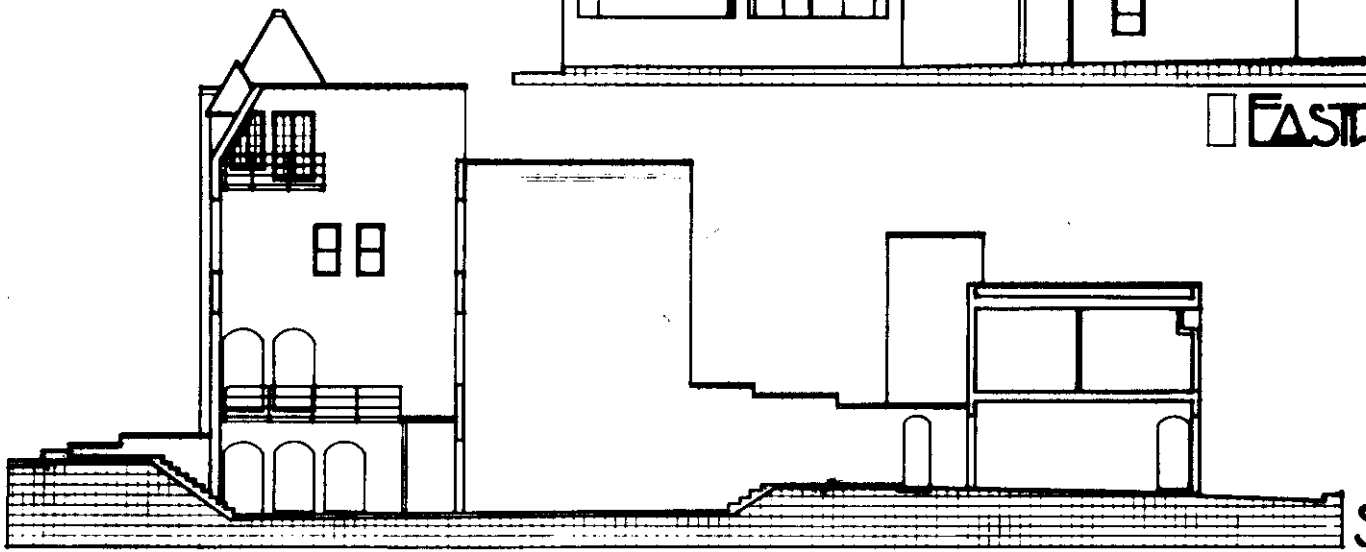
SCALE FEET



WESTWARD ELEVATION

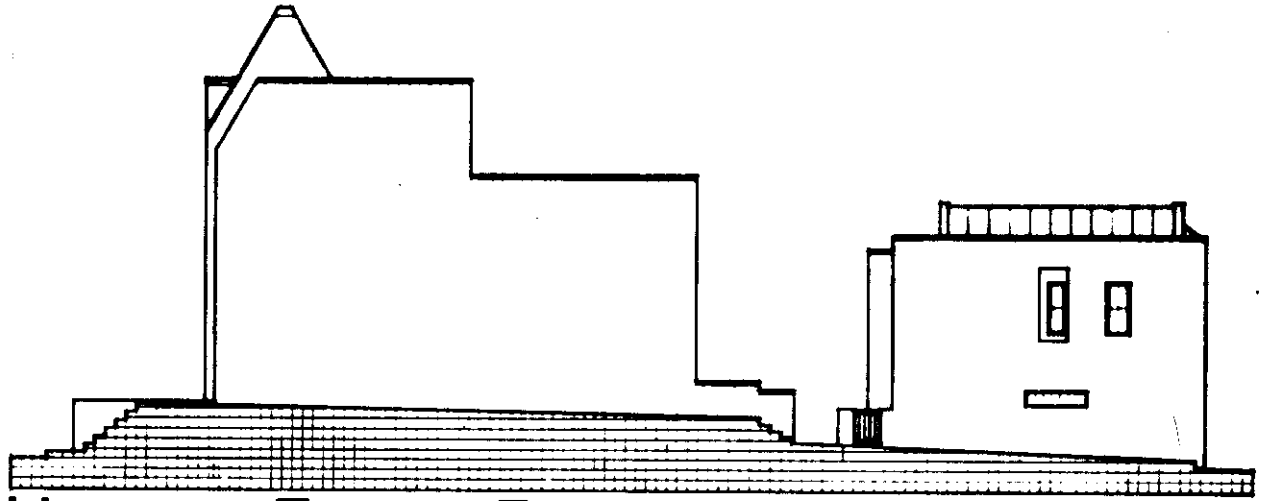


EASTWARD ELEVATION



SECTION C-C

SCALE FT.



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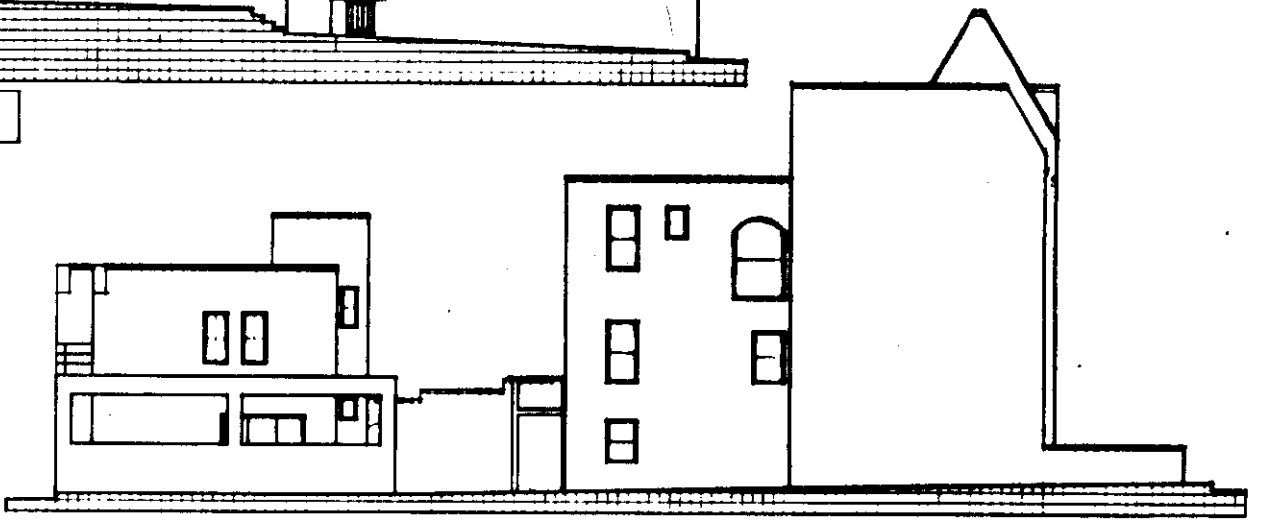
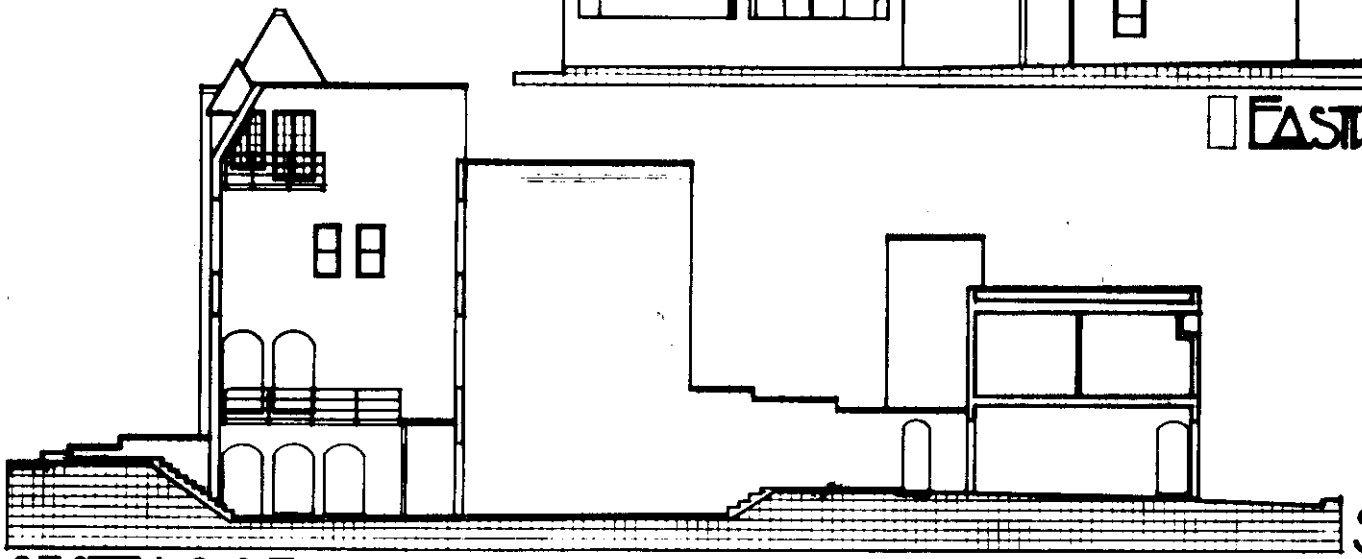
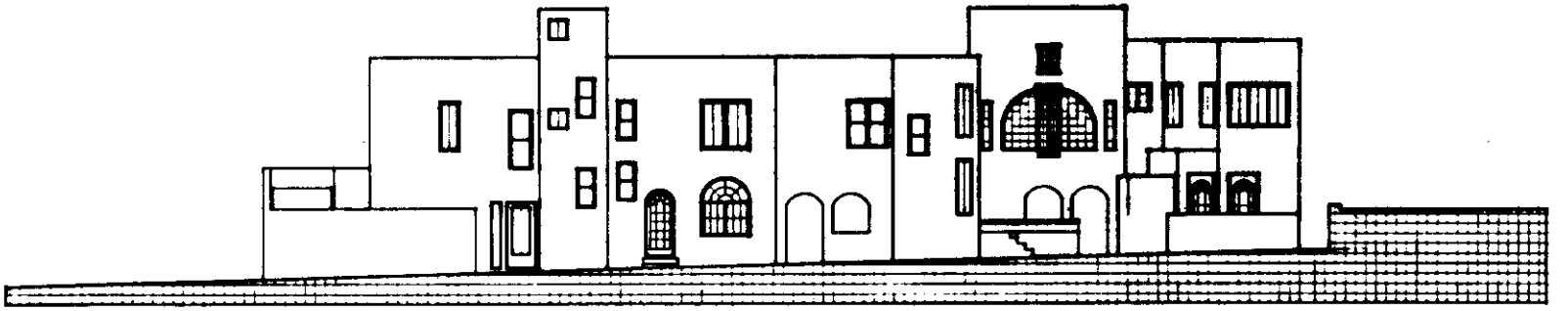


EASTWARD ELEVATION

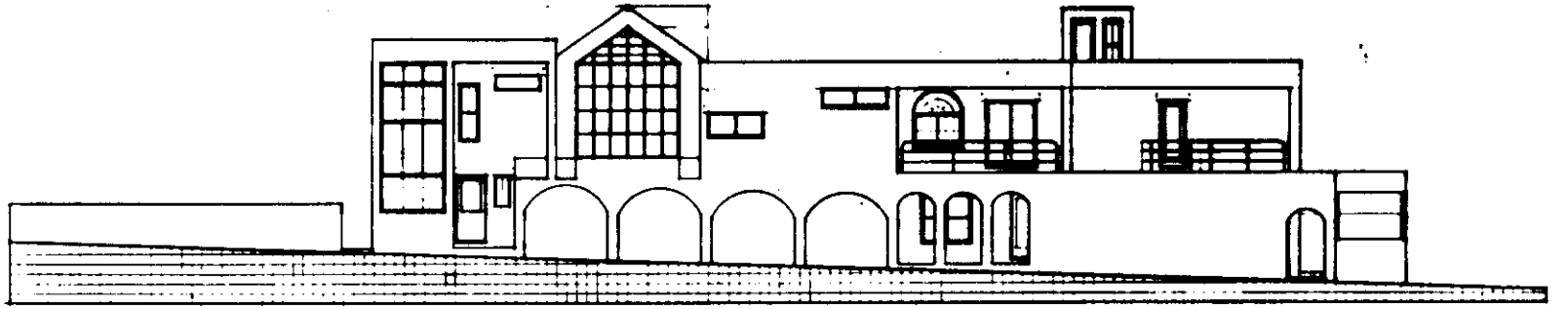


SECTION C-C

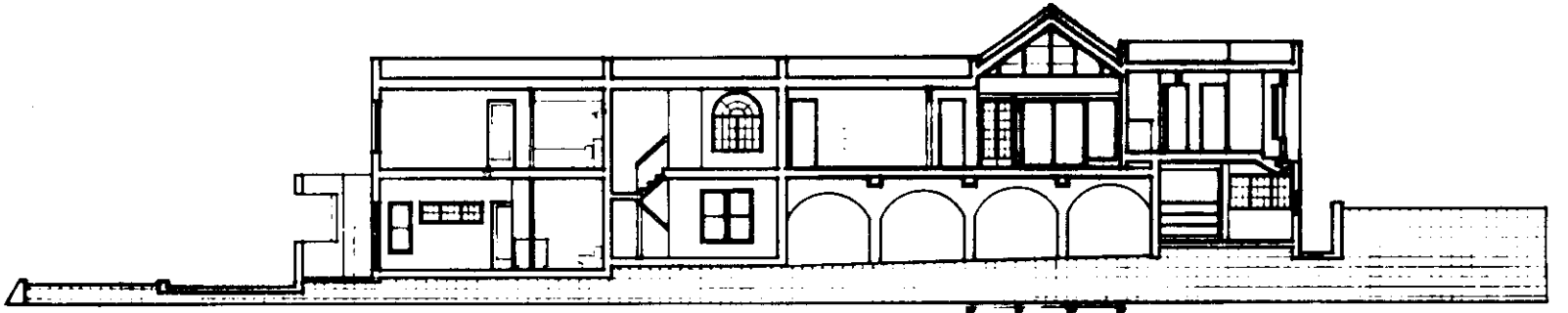
SCALE FT.



NORTH ELEVATION B



SOUTH ELEVATION B



SCALE FT. SECTION B-B