PREAMBLE

As a background to the new zoning ordinance, we define those qualities in the city of Pasadena today, which we consider vital to the character and quality of Pasadena.

The character of Pasadena is an indefinable quality; it is something which people feel, and wish to preserve. Yet it is clearly hard to define in simple quantifiable terms.

Also, it cannot be attributed clearly, to any one part of town. The city is varied. It is the sum total of these variations and qualities which make up the unique and precious character that people love and are attached to.

Neverthless, it is essential for us to try and pin down what "the" character of Pasadena is: since it is only such a description which can form the backbone of our prescriptions in the zoning ordinance. We shall therefore do our best to extract a definition of the central "something" which is the character of Pasadena that people love and feel.

Once we understand clearly, what it is that people love and cherish, and once we succeed in defining the key invariant characteristics that make up this "something", then we can go on to specify the character which is needed, in new construction, to maintain and continue the growth of the Pasadena tradition: and we can then embed this character, in the details of the zoning ordinance.

-oOo-

Center for Environmental Structure
Christopher Alexander
Artemis Anninou

Daniel Solomon and Associates
Daniel Solomon
Kathryn Clarke

with Phoebe Wall

August 6, 1987

To: Task force and city staff.
From: Multi-family zoning Consultants.
Re: First draft of Ordinance.

The enclosed material shows a first draft of the possible complete zoning ordinance.

In this draft, we strongly emphasise the process aspect of the new type of zoning regulation. In a separate submission, you will also receive a "short" version of the application form, and application process.

This draft is being circulated only to facilitate discussion among task force members. It is intended to enable you to get a sense of the possible overall format which the new ordinance may contain. It is not yet worked out in detail as to content nor as to specific ordinance regulations.

However it gives you an opportunity to see the whole shape of what we are doing, and to give you a chance to raise questions about the fundamental direction of our work.

It is extremely important for us to get feedback on this material. We request the possibility of a meeting in the near future, where we can discuss these issues in detail, once you gave had a chance to study them.

PASADENA ZONING ORDINANCE

FOR

MULTI-FAMILY HOUSING

DRAFT FOR DISCUSSION

August 6 1978

Center for Environmental Structure
Christopher Alexander
Artemis Anninou

Daniel Solomon and Associates
Daniel Solomon
Kathryn Clarke

with Phoebe Wall

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PREFACE

The ordinance contains seven chapters. Unlike most contemporary zoning ordinances, the first four chapters of this ordinance describe philosophy, intention and examples. It is our specific intention to include these chapters within the ordinance itself, to make sure that all users of the ordinance can clearly grasp the entirely new intent and procedure of the ordinance.

Chapter 5 contains a general description of the planning process which applicants must use, to produce adequate plans for multi-family housing projects. The last two chapters contain the legally binding portions of the ordinance.

Chapter 6 contains the definition of the application process, and together with the procedure by which this process is to be administered by Planning personnel. It includes precise standards and criteria for the administration of the process. This application procedure forms the core of the ordinance.

Chapter 7 contains a full definition of all legally binding regulations which exist within the ordinance.

PART ONE

PHILOSOPHY AND INTENT

CHAPTER 1

INTENT OF THE ORDINANCE

SUMMARY OF PASADENA CHARACTER

According to our observations, the special character of the city comes from a series of qualities, which may be understood according to the following categories.

1. The character of streets.
2. The quality of open space.
3. The size of open space.
4. Existence of certain key building types.
5. Building height.
6. Building density.
7. Key building forms.
8. Quality of parking.
9. Quality of driveways.
10. Identity of individual units.
11. Building materials and color.
12. Roofs and building details.
13. Trees, plants and gardens.
14. Paving and ground surface.
15. Sequential character of open space

DETAILED DEFINITION OF CHARACTER

In each of these ~~thirteen~~ Sixteen categories, we shall now outline what we believe to be the essential characteristics that "make" the character of the city.

16. Relationship of unit entrances to street & open spaces

1. The character of streets.

The noticeable and important things about Pasadena streets are these:

1. No parking allowed at night, which creates a general absence of cars compared with other cities, and a more slow and graceful character, dominated more by trees and buildings.

2. The canopy of beautiful trees, and avenue-like character of many streets.

3. Green patch of grass between building and sidewalk.

4. A definite long space formed between the line of trees and building fronts.

5. Buildings entering into the street, so that street is enlivened by the buildings, doors and windows, stoops, and entrances.

SKETCHES

PHOTOGRAPHS

2. The quality of open space.

The noticeable and important things about space in Pasadena neighborhoods are these:

1. In the most memorable places, a character dominated by gardens.

2. In a few all-important historical cases, these gardens exist in the form of internal or half enclosed courtyards.

3. In all cases, these courtyards and gardens are rather generous.

4. Magnificent front lawns, or glimpses of hidden gardens or courtyards.

5. In all cases, this beautiful private space (whether in the form of gardens, or courtyards) is visible, and felt, for a person on the street.

SKETCHES

PHOTOGRAPHS

3. The size of open space.

A very important and principal factor in the special feeling of the open space and gardens and courtyards in Pasadena is the physical size of the spaces.

1. Interior courtyards of the old Pasadena type, are typically 50x80, 45x85, 45x75 etc, with an average size of 3500 to 4000 sf.

2. Front gardens which achieve a feeling of pleasantness ,in relation to the buildings they support, tend to be in the range of 35x75, 40x70, etc, almost never less than 3000 sf.

3. In many cases, small gardens are amplified in their feeling by adjacent gardens. In these cases, the various gardens which work together, even when they appear quite modest, are often 4000, 5000 and up. For instance, four front gardens at Locust and Holliston, are 40x45 each, and together form a valuable part of the street, which has an area of 6-7000 sf.

4. In other cases, small interior gardens are amplified in their feeling, by adjacent setbacks, side yards, other other interior gardens and yards. Once again, it is rare for even a small garden to work, unless the perceived space is at least 2500, and usually more.

5. Additional characteristics of beautiful outdoor space, includes the hierahcy of space, formed by smaller spaces, which lead into larger spaces.

6. Another way in which small space is made to seem large, is when buildings immediately next to the space are one story only, thus created space with an inverted pyramid shape.

SKETCHES

PHOTOGRAPHS

4. Existence of certain key building types.

The major building types which created the character of Pasadena originally,were all highly respectful of space.

1. The courtyard type, which creates an interior garden, that creates movement in and out, and creates a threshold to the interior of the building.

2. The bungalow type, which creates a small compact volume, with a definite shaped garden next to it.

low pitch perpendicular to the street & a porch.

3. The old apartment type, which creates a single block of apartments, and once again, has one or two gardens, with definite shapes, sometimes trapped between the building and its garages.

4. The mansion type, with a large and beautiful front lawn, going down to the street, this lawn shaped by buildings on either side.

SKETCHES

PHOTOGRAPHS

5. Building height.

Most of the old and beautiful character of Pasadena is two-story construction. Careful observation of existing streets like Oakland, So El Molino, California, San Pasqual, etc, shows that the special feeling of the street and neighborhood character comes from the two one-story and two-story buildings.

More particularly, we have identified the following characteristics:

1. In the places with a beautiful feeling, houses and apartments are almost always one or two-story.

2. In many places a mixture of one-story buildings, even in modest amount, helps to keep the character.

3. Three-story buildings most often do something to destroy the feeling.

4. Occasional three-story buildings in back are not harmful.

5. Three-story buildings scattered here and there are alright too, as long as they do not play a dominant role.

6. It is the two-story scale, with its particular feeling of relationship between window and ground, between a human person and the roofline, that establishes the comfortable and domestic quality of the "old" Pasadena.

SKETCHES

PHOTOGRAPHS

6. Building density.

The density and texture of the old city, is a principal factor in the beauty which people remember.

1. Very simply stated, the buildings and the gardens are in equal balance. It is not a dense conglomeration, in which buildings exceed gardens. It is not a suburban texture, in which gardens outweigh buildings.

2. Also, within this texture, buildings are of reasonable scale, on the order of 25-100 feet long.

3. The massive development projects, covering many lots, are totally at odds with this texture.

4. Density is such that most buildings have a direct relation to the ground. It is the equal relationship of building to garden, where you feel the ground, you feel the garden, and you feel the building, that is most important.

5. It is also very important that in the historic character of Pasadena, most development was on lots between 50 and 100 feet wide. Thus the city has a close grain, of relatively small projects, on lots large enough to contain beautiful gardens, but not large enough to permit "mass development".

SKETCHES

PHOTOGRAPHS

We believe this character is attainable at densities in the range of RM16,32 and 48, but only with the most careful attention to detail, ground, lot coverage, and quality.

7. Key building forms.

The actual shape and form of buildings is very important. Some of the older types, have a simple and harmonious character. Certain newer types are obnoxious, and quickly destroy character.

1. Long buildings at right angles to the street, are among the most obnoxious.

2. Buildings with a square volume, are common, and pleasant.

3. Buildings which are long and narrow, but parallel to the street, work well.

4. Small bungalows, with strongly pitched roofs are fine.

5. On larger buildings, flat roofs with strong cornice details are alright. The flat roof, when roof line is not done right, becomes unpleasant.

6. Building with blind front to the street are terrible.

7. Buildings with apartments over garages are very nice, and part of old character.

8. Pitched roof buildings, over long narrow buildings, helping to form courtyards where the eave forms the space.

SKETCHES

PHOTOGRAPHS

8. Quality of parking.

The Pasadena quality, depends very much on a specific characteristics of parking in the neighborhoods.

1. Parking is relatively invisible in the beautiful parts of the city. This is usually because it is behind the buildings. The long lots make this particularly natural and sensible in Pasadena.

2. Underground parking is only consistenty with the city's character, when it avoids the platform solution.

3. Podium projects, create an air of artificality which destroys the old feeling.

4. This is occasionally avoided, when the podium is very carefully graded in, with softly sloping gardens coming from podium height to street. This can only be accomplished with full underground parking and forced air ventilation. Attempts to do it with natural ventilation, leave gaping holes, visible cars, and accentuate the feeling of unnaturalness which has started to destroy the city.

5. Many parking lots are pleasant to be in, almost like minor backyards or patios.

6. Parking ratio, especially in those parts of Pasadena which people love the most, was extremely low -- sometimes as low as 0.5, and 1.0 at the most.

7. In beautiful areas, parked cars are never visible. Present day "six-pack" and tuck-under arrangements, where parked cars and driveways dominate the scene, are obnoxious, and highly destructive.

SKETCHES

PHOTOGRAPHS

9. Quality of driveways.

Driveways, like parking, play an important role in the feeling of Pasadena.

1. Driveways are very modest in width.

2. There are very few driveways.

3. The driveways which were built, in the old days, were not only narrow, but also beautifully useful and pleasant, even as places to walk.

4. There are very few curb cuts, and those which exist are small and unobtrusive.

5. Driveways that are beautiful In Pasadena are like mysterious paths, leading through trees or shrubs, to some place in the back. Those driveways, like six-pack developments, where a wide aisle and parked cars entirely dominate half of a 50 foot lot with asphalt and cars, completely lose this character.

SKETCHES

PHOTOGRAPHS

10. Identity of individual units.

In the Pasadena which people remember and love, each part of the space has a human character. This comes partly from the care of craftsmanship; but it comes above all, because places have identity of ownership of individuals and individual families.

In recent times, the apartments and condominiums have begun to create an abstract character, caused essentially by the development process.

Yet, even in condominiums and apartment buildings, when made old style, one had a comfortable and individual human touch, in each one of these places.

In detail, we can pick out the following characteristics:

1. Each persons front door clearly marked.

2. Use of outdoor stairs, leading to one or two units.

3. Plentiful flowers, seats, benches, tables, belonging to individual families.

4. Private outdoor space, earmarked by individual families.

5. Group space, in gardens and courtyards, which is shared by a small number of families, not managed by abstract developer.

6. Spots in the sun, where people can sit outside.

7. Individual colors, paint, etc, on windows and doors, marking individual units. This cannot be done, under some condominimum or apartment policy.

SKETCHES

PHOTOGRAPHS

11. Building materials and color.

The actual materials of the "typical" Pasadena are quite different from many of the recently built developers horrors.

Specifically:

1. Stucco and plaster exteriors, were often done. This does not only include obvious spanish colonial style, but also a more american stucco, often brown or grey, less pretentiously spanish, but still very much the essence of Pasadena.

2. Tile roofs, flat roofs, slate roofs are all fine.

3. Red paving tile on the ground, was often important.

4. A rather informal style, elegant and simple, but not pretentious.

5. Low masonry walls, plastered block.

6. Wooden windows.

7. Flower beds and flowering bushes.

8. Craftsman bungalow construction with redwood, visible beams, small details.

SKETCHES

PHOTOGRAPHS

12. Roofs and building details.

Some of the recently imported building styles are very destructive to the Pasadena character.

1. Cedar siding, for example, has no place in this town.

2. Washed stained wood surfaces are also very strange.

3. Cheap stucco, pebble dash coat, also unsuitable. Stucco should be broomed or trowelled.

4. Aluminium window details, should be avaided when possible.

5. The beauty of the old Pasadena character came from wind sills.

6. Door-surrounds play an important role. Doors to apartments, and doors of passages ways, are marked with a moulding, at the change of surface.

7. Brick details, on walls.

8. The essence of the good details, is not the expense of the details, but the love and care with which they are placed. This has a direct bearing on the craft tradition, which existed in Pasadena. It is the fact that individual bits of buildings, were made by people who cared about what they were doing, that is the most marked, and most easily destroyed by development, that is essentially abstract in character.

9. Concrete block is fine.

10. Small patios with umbrellas, tables, vines.

13. Trees, plants and gardens.

One of the characteristics of Developer Pasadena, which is ruining the city, is an extremely unintelligent approach to planting.

This happens when plants are placed indiscriminately, merely to satisfy an a landscaping requirement, and completely fail to create pleasant masses of vegetation, which has any human significance.

Typical examples: developer's birch saplings planted along with planter boxes and pebble precast paving.

In the Pasadena which people love, the vegetation has a more definite and formal character.

1. Flower beds along buildings.

2. Lawns of definite shape.

3. Trees in groups, forming edges of space.

4. Flowering bushes, in definite masses, which help to enliven a particular garden or courtyard or terrace.

5. Hanging gardens, potted flowers, etc, which again form clear edges to spaces like terraces of definite geometry and shape.

6. Single trees, in courtyards, giving shade and making a center to the space.

7. Hedges, forming edges of lawns or gardens.

8. Small walls, which people can sit on, or walls with doors and windows.

SKETCHES

PHOTOGRAPHS

14. Paving and ground surface.

The ground surface of the loved Pasadena also has very definite characteristics.

Once again, it is not fancy in a nouveau riche way, but elegant and simple.

1. Inexpensive concrete, on paths and driveways.

2. Asphalt, when made with a care for people to walk on it.

3. Mexican paving tile, laid in the earth, with grout, but not laid on a slab (this latter is too expensive, and tends to create the false expensive image which developers tend to promote.

SKETCHES

PHOTOGRAPHS

CHAPTER 2

COHERENCE OF THE NEIGHBORHOOD

The main purpose of this chapter, is to establish the neighborhood as the basis of the ordinance.

What this means, in effect, is that the ultimate purpose of the ordinance is to protect and enhance the character of the neighborhood. Within this conceptual framework, each individual project then has the "task" or obligation to do as much as it can to increase the well-being and "wholeness" of the neighborhood in which it is built.

In order to make this idea clear, it is necessary to set forth some general guidelines for the well being of neighborhoods, and a philosophy which makes it clear how each project is expected to play its role in the gradual improvement and beautification of the neighborhoods.

The key idea which underlies this philosophy, is the idea that each project must be shaped according to its context. The ordinance itself will provide the mechanisms which will help to promote and/or assure the development of projects which are indeed sensitive to their individual contexts.

This "context-sensitive nature" of the neighborhood problem, requires that the ordinance has a process which avoids the trap of simple stereotypes or models in the projects that are built, and is instead capable of producing a richer variety of projects that are unique and beautiful, each one according to to the particular harmony of the neighborhood where it occurs.

In order to enhance the neighborhood, there is a second key idea which plays a central role throughout this ordinance.

The neighborhood is created by buildings and gardens. Contemporary development often places emphasis on buildings, but forgets the gardens.

Yet the structure of the neighborhood, its space, is really made up as a system of cooperating spaces including the street itself, together with all the gardens which are created by individual projects.

It is the overall effect and character of this street-plus-gardens, which makes the neighborhood beautiful, or makes it ugly.

In this ordinance, the primary obligation of each individual project, is therefore to create beautiful and useful gardens. It is these gardens, and the cooperation between nearby gardens and street, which makes or breaks the neighborhood. The buildings, which from the developers points of view, are the primary goal of any project, are thus seen as secondary, from the point of view of the neighborhood. Seen from the point of view of the neighborhood, the buildings are the means through which gardens are created. And, although the developer can, and must, make his effort to make a pleasant and useful building, his primary obligation, vis-a-vis the city, and vis-a-vis this zoning ordinance, is to make sure that his buildings create significant and beautiful space, which will contribute effectively to the beauty of the neighborhood.

The main intent of the ordinance is thus to create a beautiful atmosphere in the neighborhood, by guaranteeing that each project makes a signficant contribution to the structure of the gardens on the lot where it is built.

OVERALL DESCRIPTION OF THE PASADENA NEIGHBORHOOD WHICH IS INTENDED TO BE CREATED BY THIS ORDINANCE.

The following paragraphs describe the atmosphere and character of the Pasadena street and neighborhood. This is an idealised picture, intended to describe the future of Pasadena, as it develops during the next thirty years. It is printed here, with the intention that every single development which occurs, even on a single lot, must make a contribution to this character.

The rules of the ordinance, which come later, will show exactly how each individual project must contribute to this character.

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OVERALL CHARACTER

The overall character of the community for both residents and visitors is primarily made by the citywide patterns of tree lined streets bounded by planted, green open spaces. Some of these spaces are interior gardens and courtyards; others are front gardens, opening directly on the street. Most of them are generous in size: small gardens and courts punctuate the larger ones.

The perceived height of the buildings is mainly two stories, giving an intimate feel to this relatively dense residential setting.

Parking is almost invisible; curb cuts are at a minimum; and driveways are infrequent; shared driveways lead to back alleys and hidden parking areas at the rear of the lots.

-oOo-

MORE DETAILED CHARACTER

THE CHARACTER OF THE STREET:

Each street has an avenue of trees. The street space then has three components: the one tunnel of space under the avenue, where the cars are, and two minor long spaces, on the house side of the trees. This space between the trees and the house, is given a coherent well defined character, because it is made of definite, well shaped and usable front and interior gardens, that are always bounded by buildings, low walls, and hedges.

The shape of the street is made more definite by the fact that buildings frequently come right up to the sidewalk. These buildings which come close to the sidewalk help to establish the street as a contained space, and make room for the interior gardens and courtyards that are visible, as you walk along the street.

There are a number of major elements elaborating these spaces: porches, apartment entrances, garden gates or paths leading to internal courts, balconies, trellised walks.

THE CHARACTER OF THE INTERIOR GARDENS AND BUILDINGS:

As you move to the more private areas of the lot you find a pattern of buildings and open spaces, made of interconnected gardens and courtyards ranging in size from very small (600sf) to large (4500sf). Some are visible from the street and some are not. They are in the shape of a simple rectangle, bounded by building walls and hedges or fences.

Neighboring lots will cooperate to create large gardens. The connections between the gardens are by means of a passageway through a building, a garden path between buildings, etc.

Buildings are shaped to produce this beautiful pattern of open space and gardens. To achieve this, many parts of buildings are oriented parallel to the street, even crossing lot boundaries. The buildings sometimes adjoin at the side lot lines, like this:

DIAGRAM

Building shapes are simple and narrow so that each apartment gets light on two sides.

Some entrances to individual apartments are visible and accessible from the street. Almost all apartment entrances that don't face the street open from interior gardens. In some cases they open to the gardens through porches and patios.

Most buildings are two storey, with an occasional third storey over garages at the back of the lots. Buildings which come close to the street usually have a one storey section immediately next to the street. Roof gardens and balconies are common.

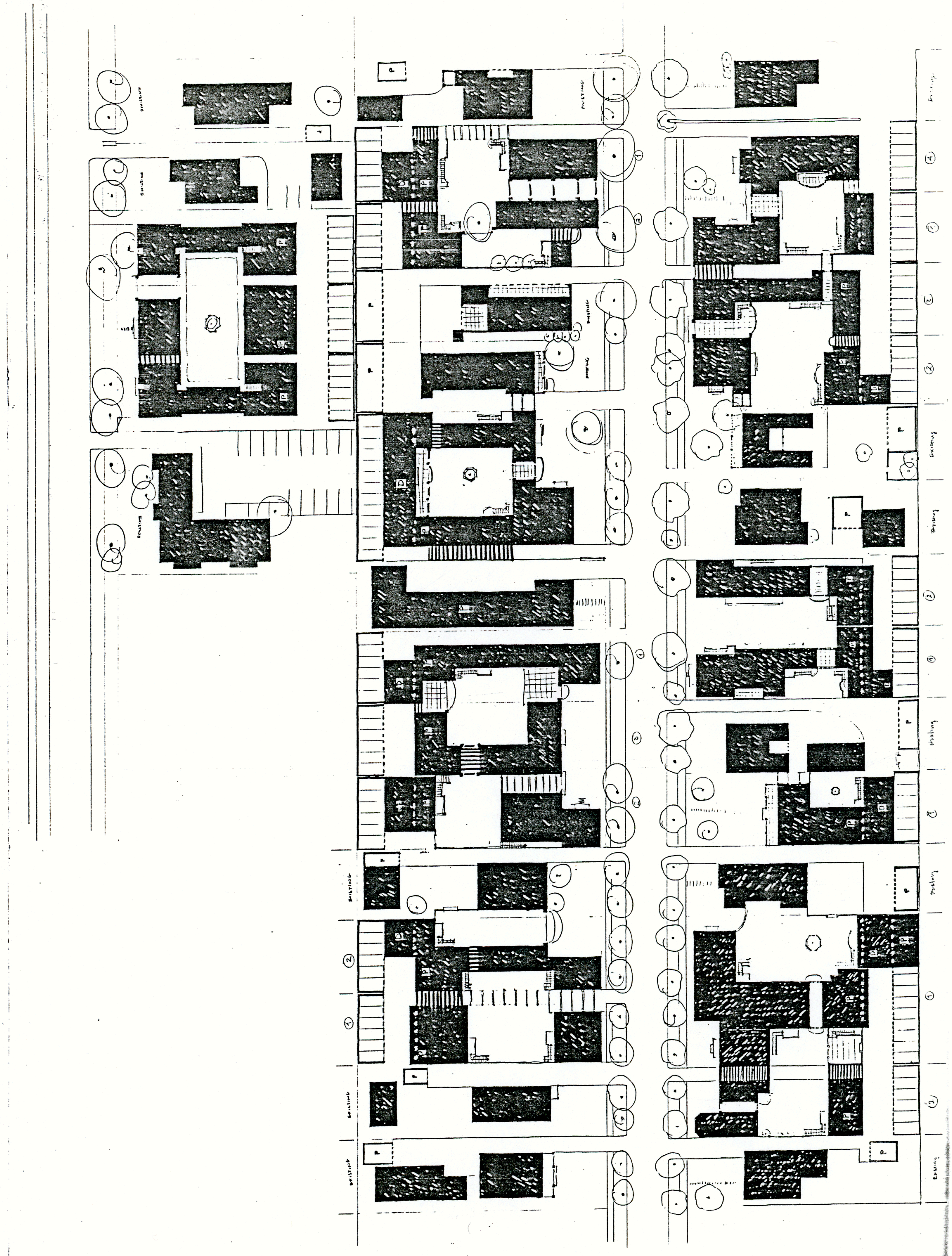
There are pleasant connections between the gardens and the parking at the rear of the lots, such as archways, tree lined paths, trellised walks.

DRIVEWAYS:

The number of curb cuts and driveways is severely limited to allow the shape and quality of coherent garden space to dominate the neighborhood. Driveways occur no more than every two or three lots, and lead to parking in the back of the lots.

THE CHARACTER OF THE PARKING AREAS:

Parking is not visible from the street. It is shielded from the street by buildings. On some lots, parking areas are served by the rear alley ways. Often second storey apartments are located above the garages. Trees and flower beds border these areas. Whenever possible, parking is treated as usable pedestrian space, and subdivided to form playgrounds.



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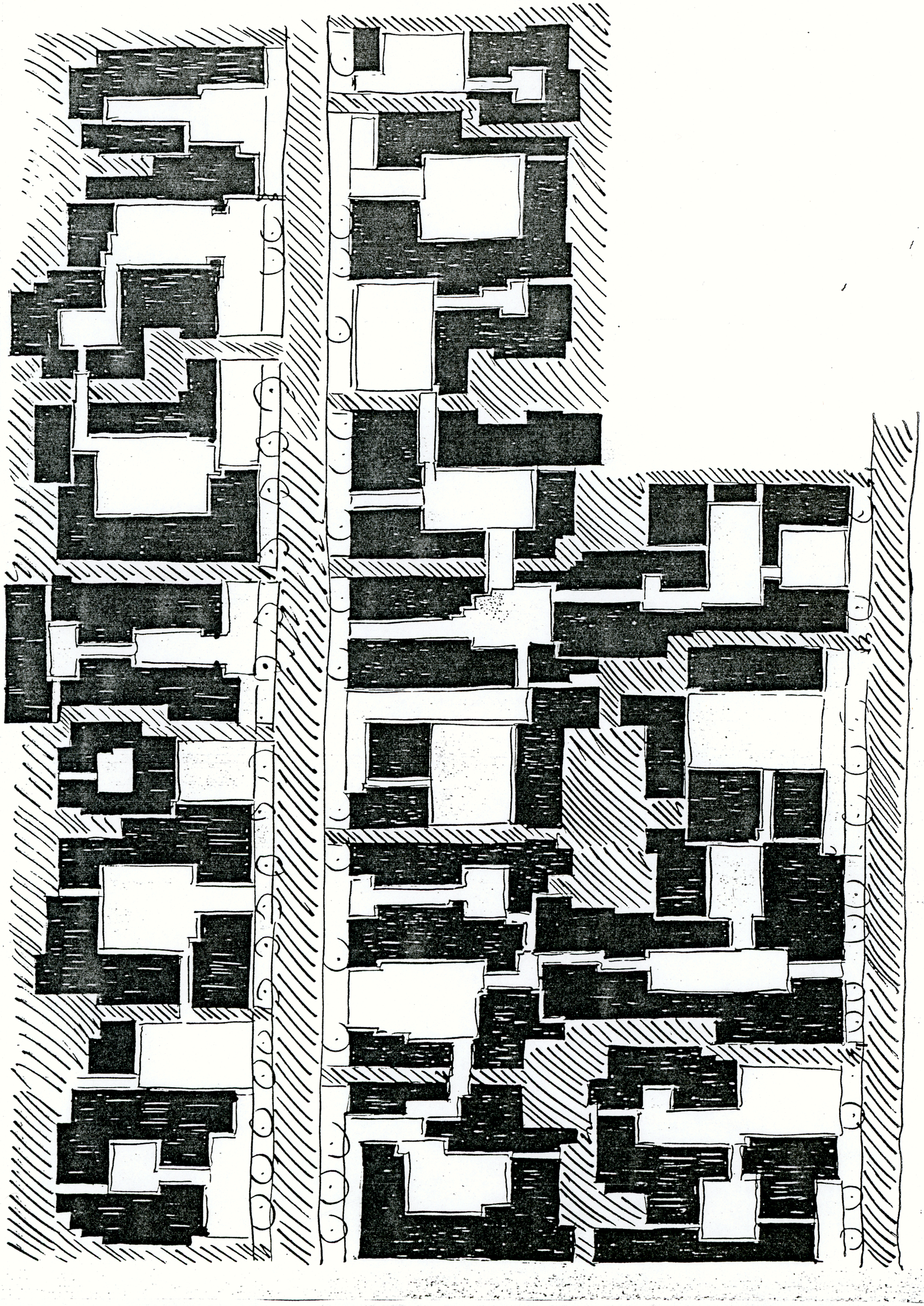


CHAPTER 3

EXAMPLES OF INDIVIDUAL PROJECTS

In this chapter we shall show a variety of example projects which will demonstrate the "kind" of projects which can be produced within the framework of the ordinance.

Once again, it is our express intention that these example projects should actually be included in the ordinance itself, so that applicants may benefit from these examples, when they use the ordinance to produce their own projects and project applications.

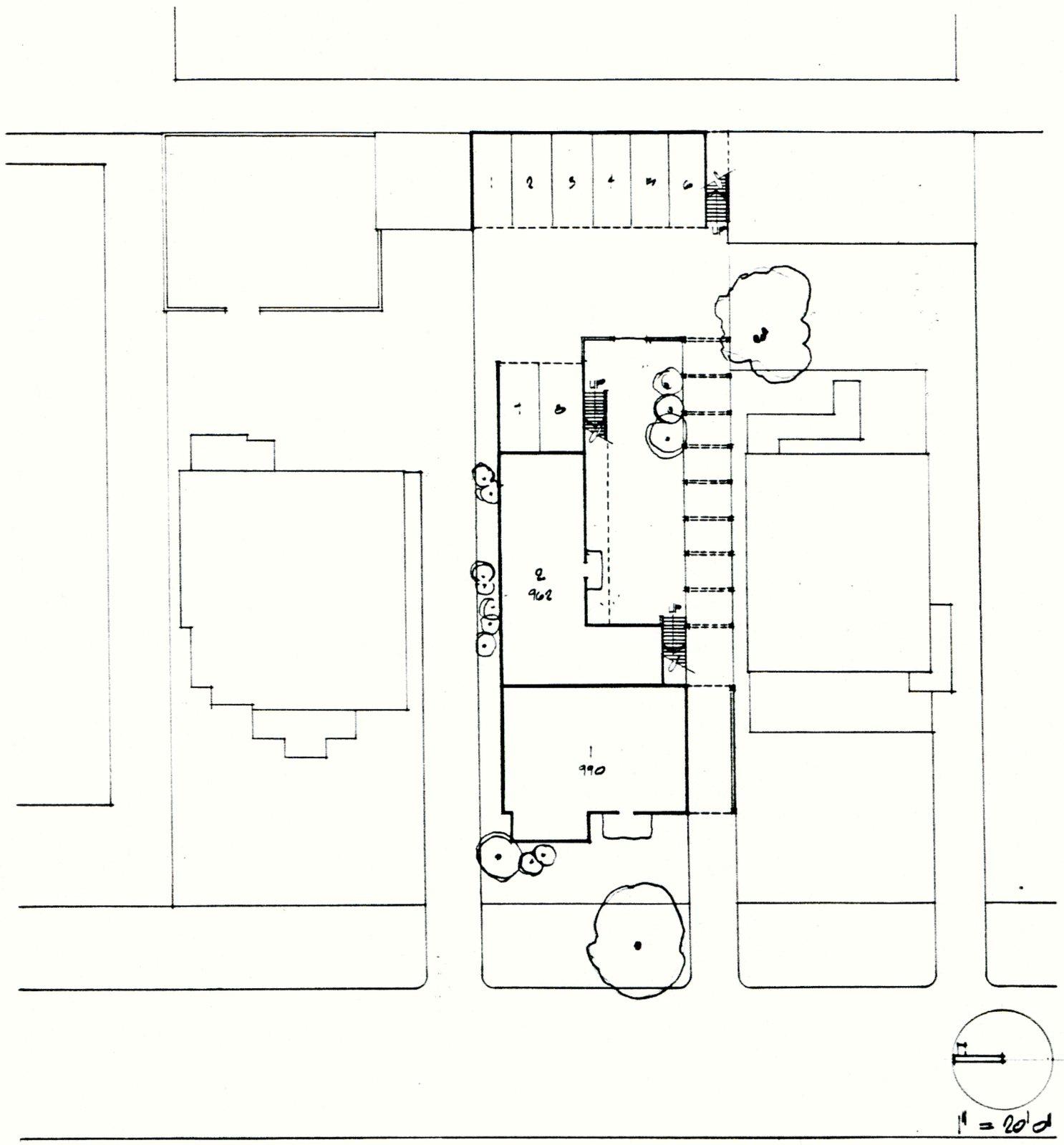
In the final version of the ordinance, we shall show more explicitly, how the individual projects succeed in being context sensitive, and how and why, they do help to create a good morphology and character for the neighborhoods where they occur.

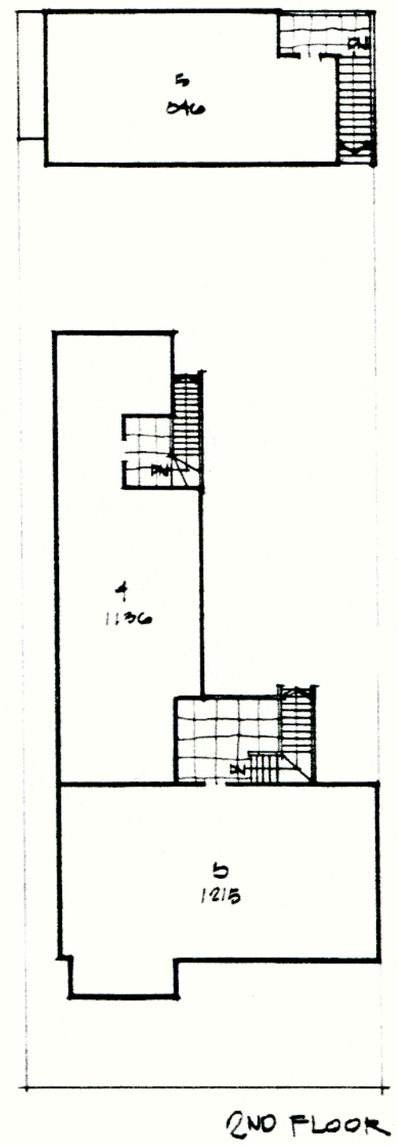
Four of these example projects, are shown again, at the end of chapter 5. There we show how these projects arise, step-by-step, from proper adherence to the layout process.

These examples demonstrate the way in which the process of the ordinance will help to create organic development on individual parcels, and how these individual projects will help to repair the neighborhood and make it whole.

The examples show a wide variety of different parcel sizes, and densities. In all cases the projects become integrated and helpful to the structure of the neighborhood.

It is also important to note that the single process of the ordinance produces a wide variety of different projects, with their own unique characters, according to the contexts where they occur.

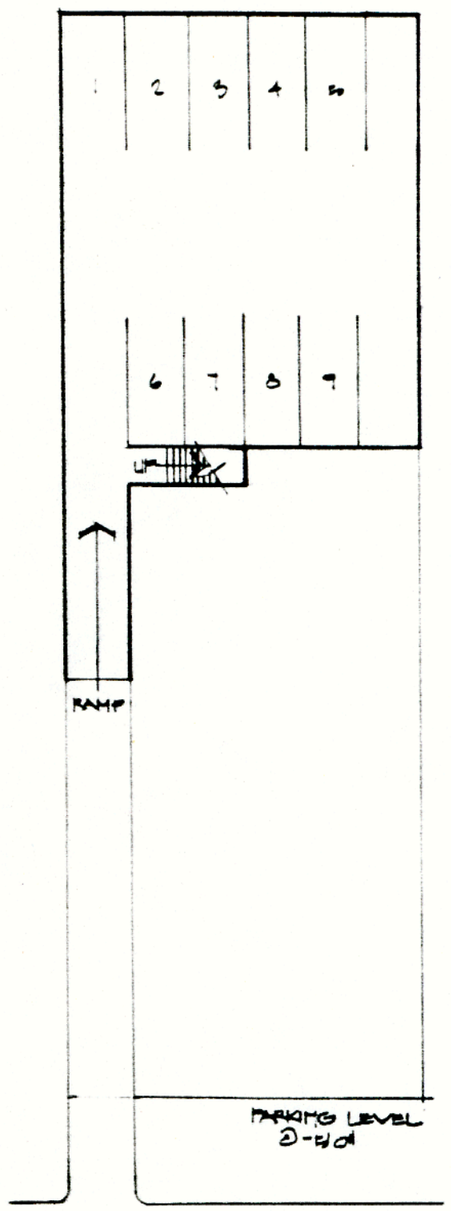


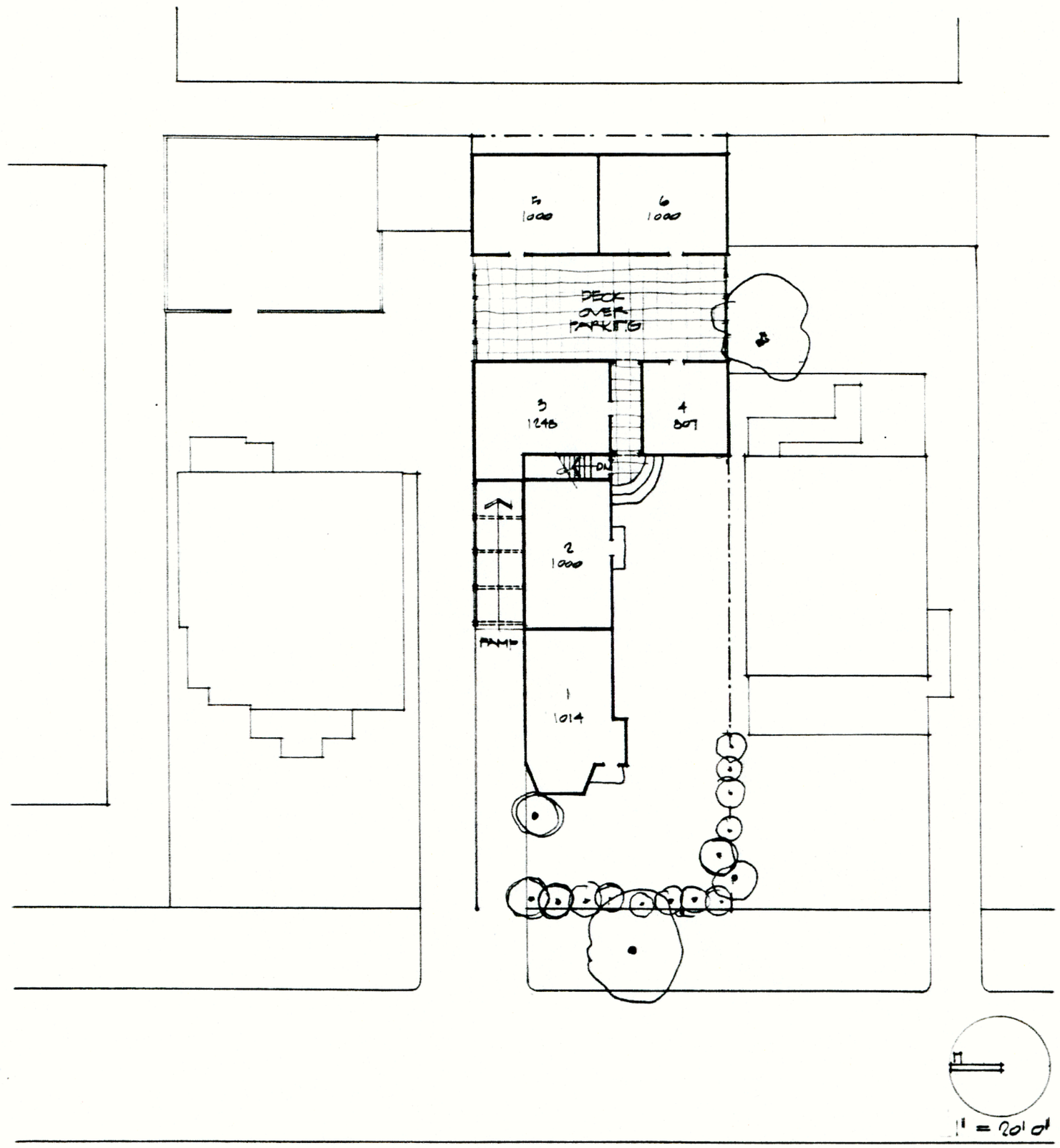


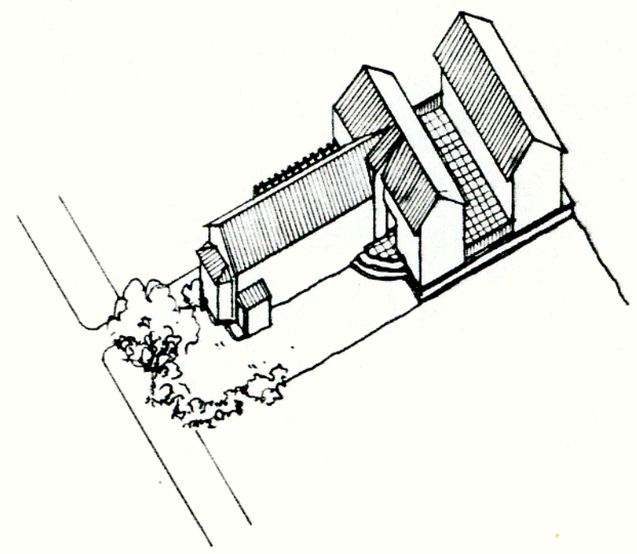
PASADENA MULTI-FAMILY HOUSING

Address: 376 S. OAKLAND
Present zoning area: RM-32
Lot size - area: 50' - 153 7650 sf
Floor area: 5149 sf
FAR: 0.67

Garden area: 1740 sf
Parking location & area: GRADE 2391 sf
No. of parking spaces: 8
No. & average size of units: 5 @ 1030 sf



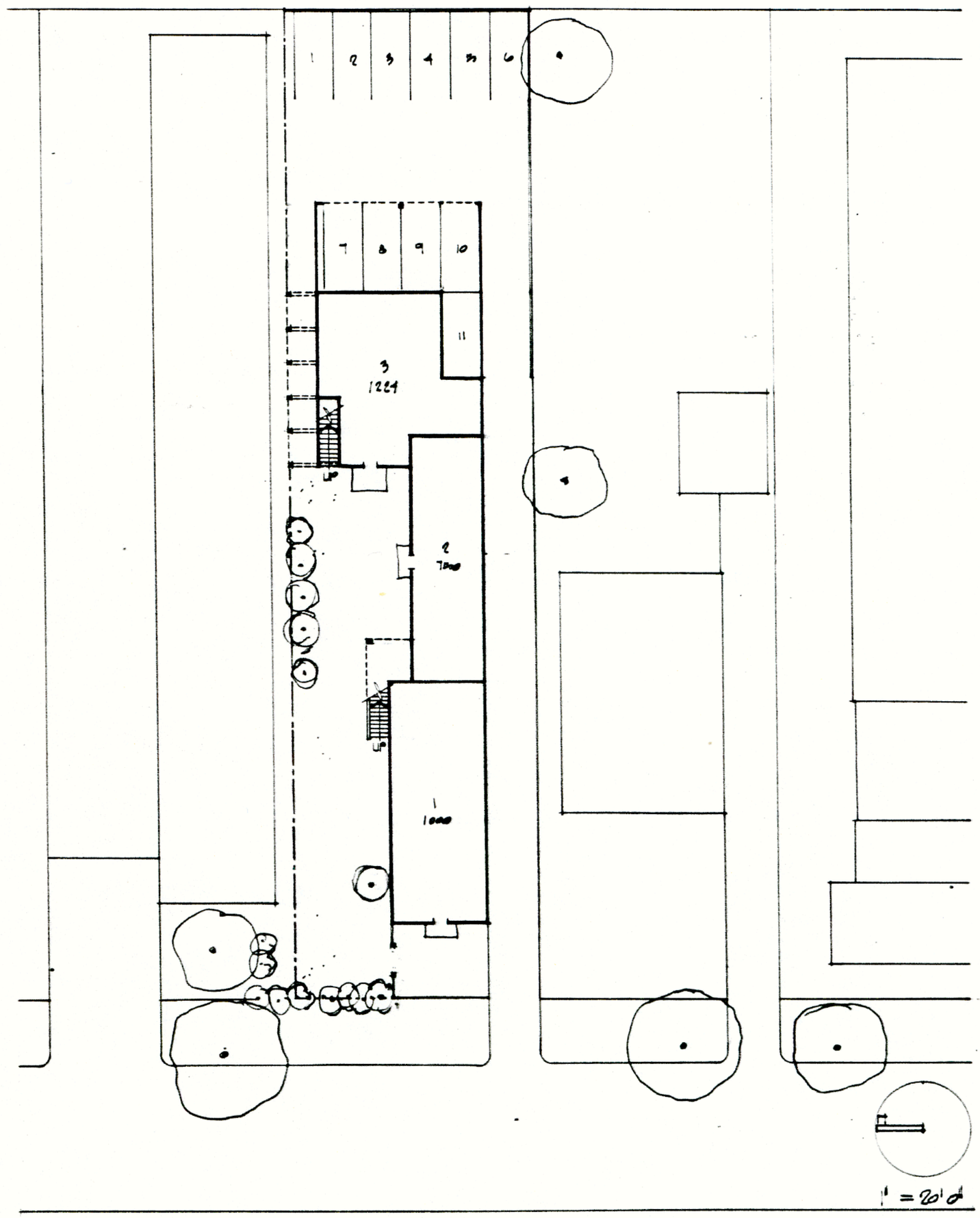


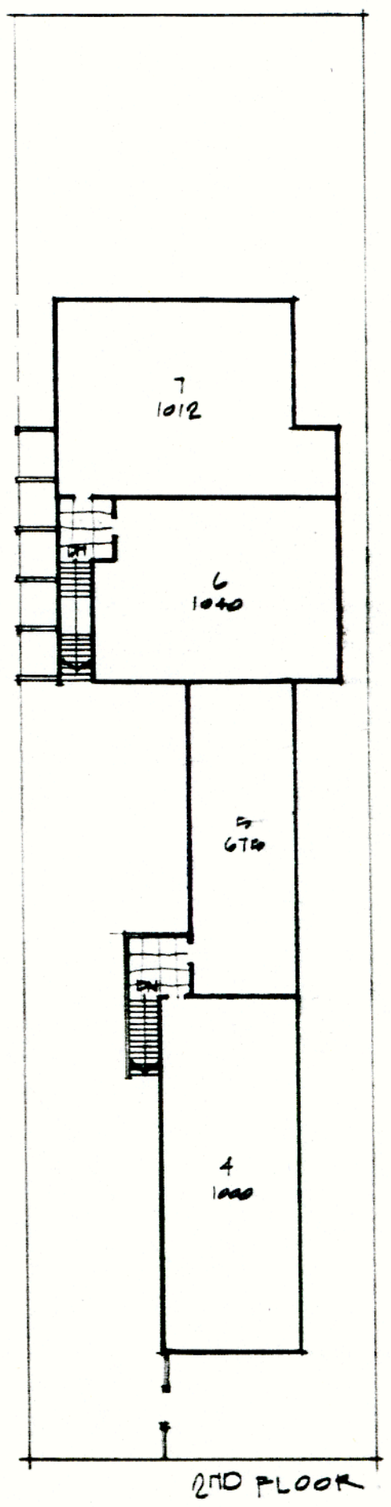


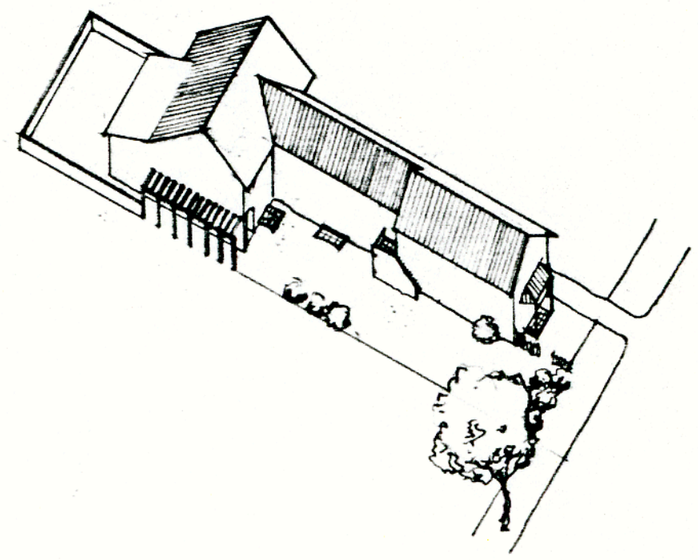
PASADENA MULTI-FAMILY HOUSING

Address: 376 S. OAKLAND
Present zoning area: RM - 32
Lot size - area: 50' x 153' 7650 sf
Floor area: 6069 sf
FAR: 0.79

Garden area: 2670 sf
Parking location & area: HALF UNDER 2950 sf
No. of parking spaces: 9
No. & average size of units: 6 1000 sf



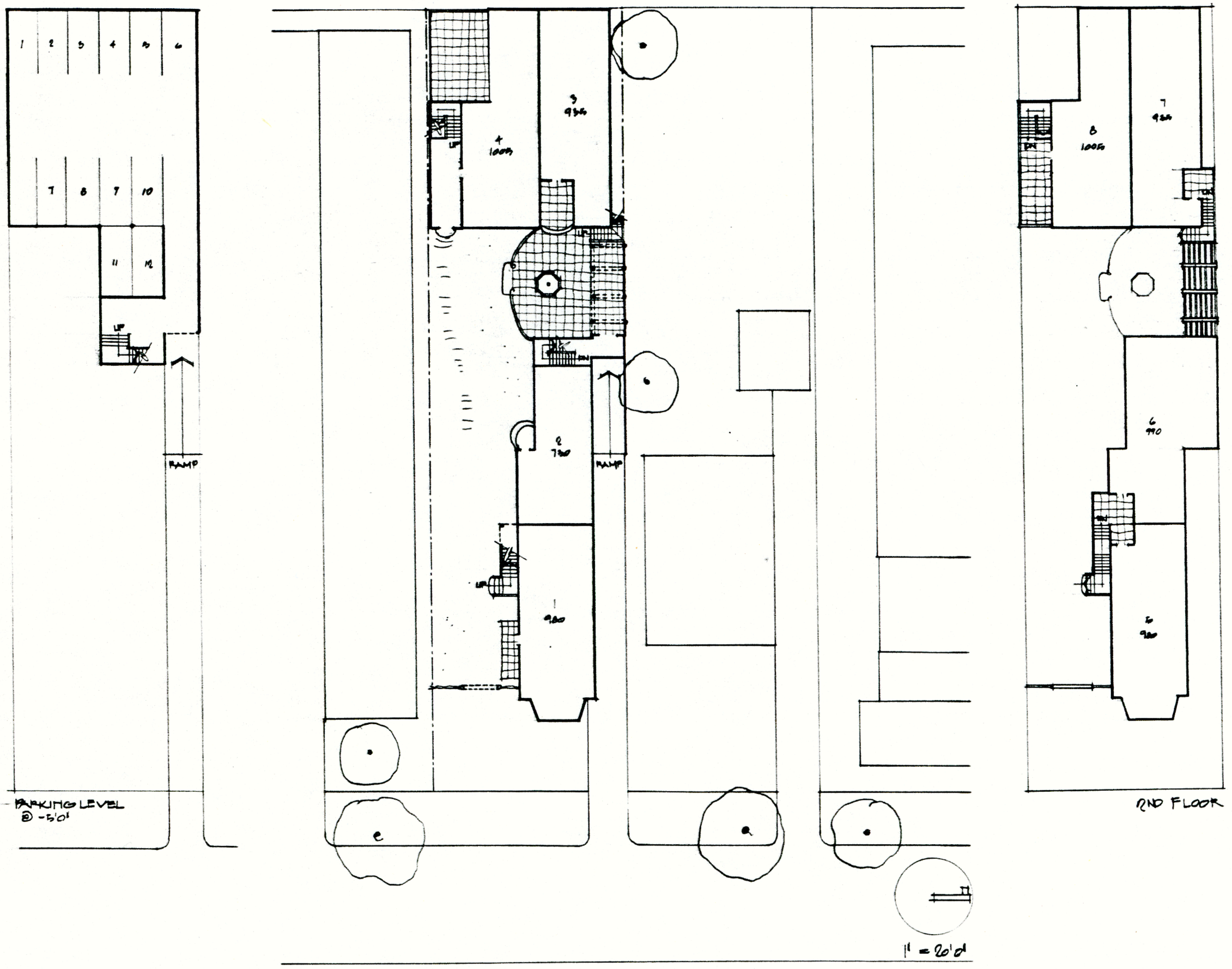


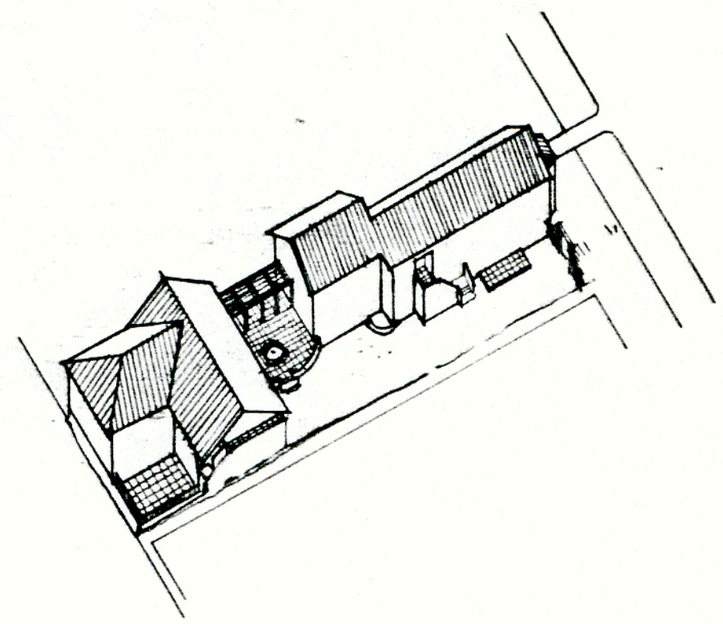


PASADENA MULTI-FAMILY HOUSING

Address: 285 HOLLISTON
Present zoning area: RM-32
Lot size - area: 50' x 205' 10250 sf
Floor area: 6477 sf
FAR: 0.63

Garden area: 2400 sf
Parking location & area: AT GRADE 5000 sf
No. of parking spaces: 11
No. & average size of units: 7 @ 925 sf

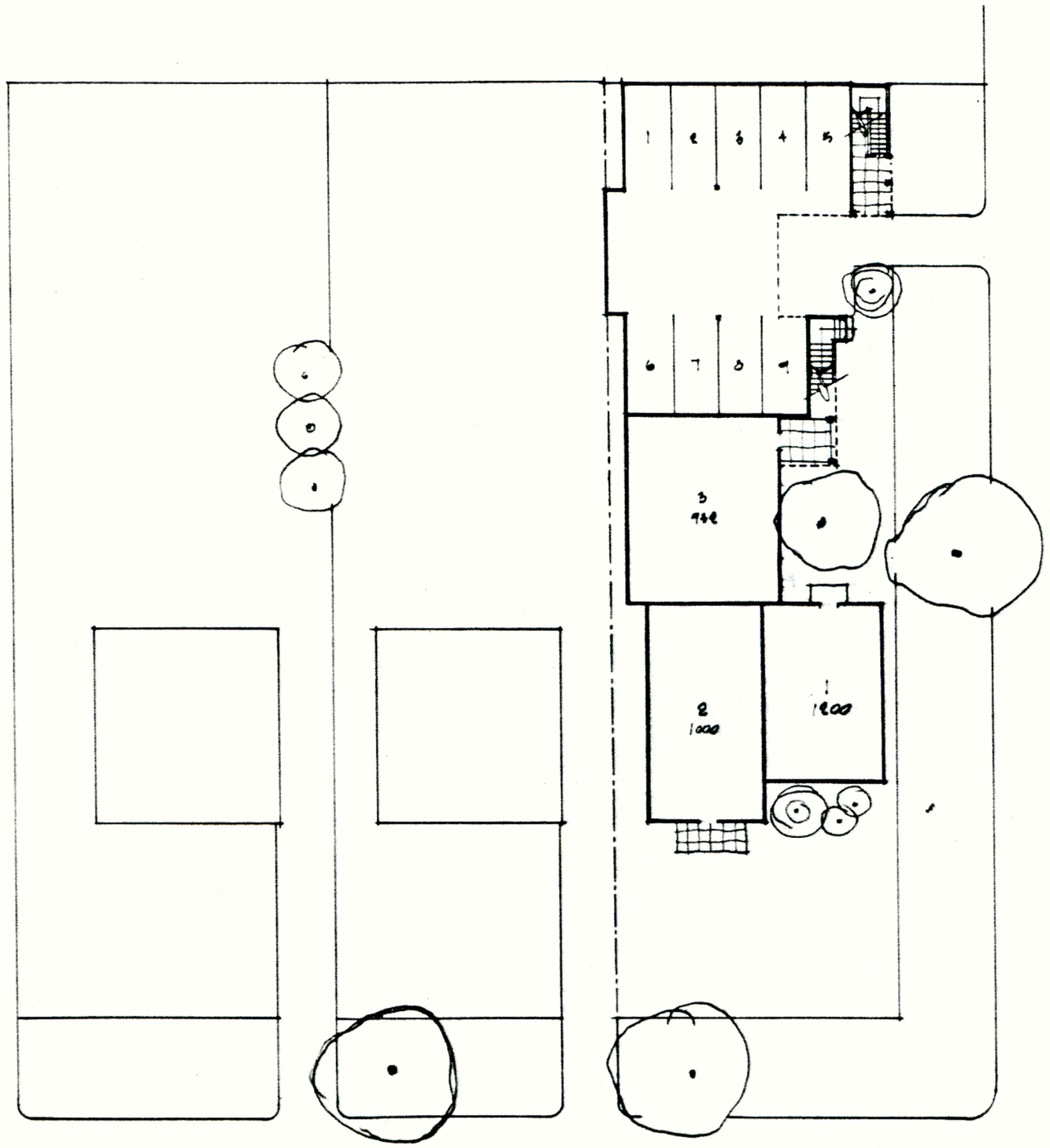




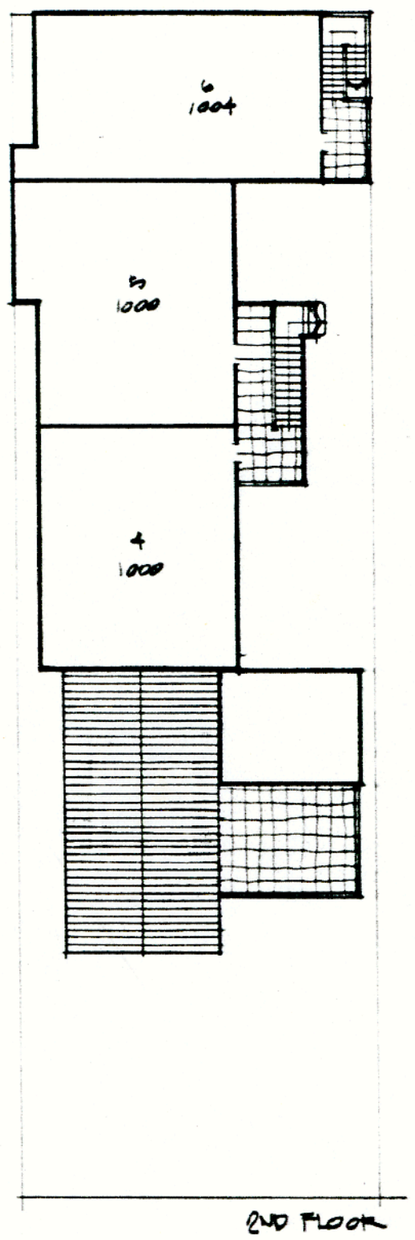
PASADENA MULTI-FAMILY HOUSING

Address: 205 HOLLISTON
Present zoning area: RM - 32
Lot size - area: 50' x 205' 10250 sf
Floor area: 7700 sf
FAR: 0.75

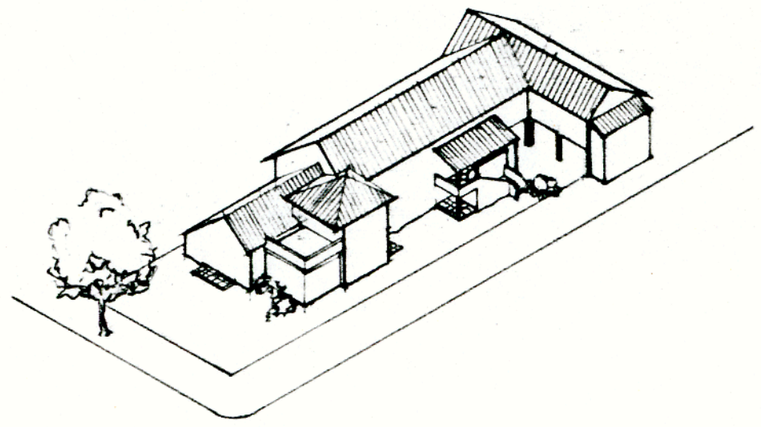
Garden area: 3460 sf
Parking location & area: HALF UNDER 4250 sf
No. of parking spaces: 12
No. & average size of units: 8 @ 960 sf



1" = 20'-0"



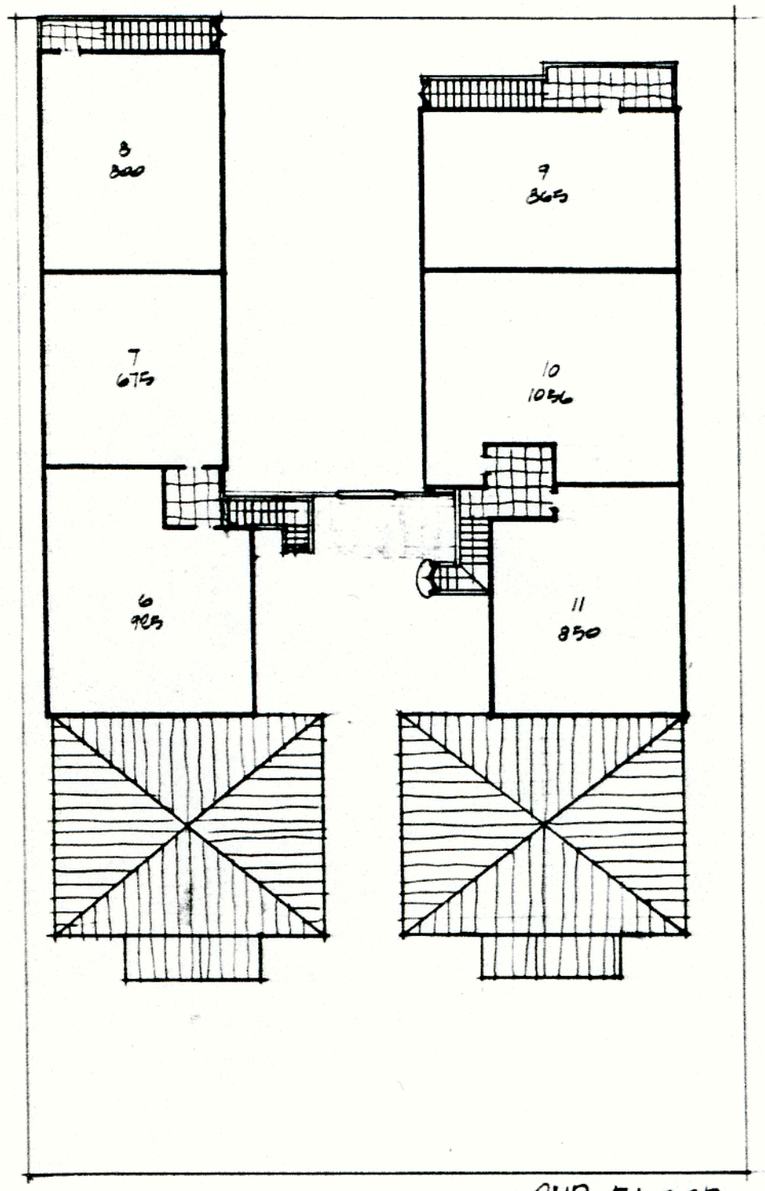
2ND FLOOR



PASADENA MULTI-FAMILY HOUSING

Address: 1540 LOCUST
Present zoning area: RM-32
Lot size - area: 50' × 168' 8400 sf
Floor area: 6216 sf
FAR: 0.74

Garden area: 1800 sf
Parking location & area: GRADE 2250 sf
No. of parking spaces: 9
No. & average size of units: 6 @ 1028 sf



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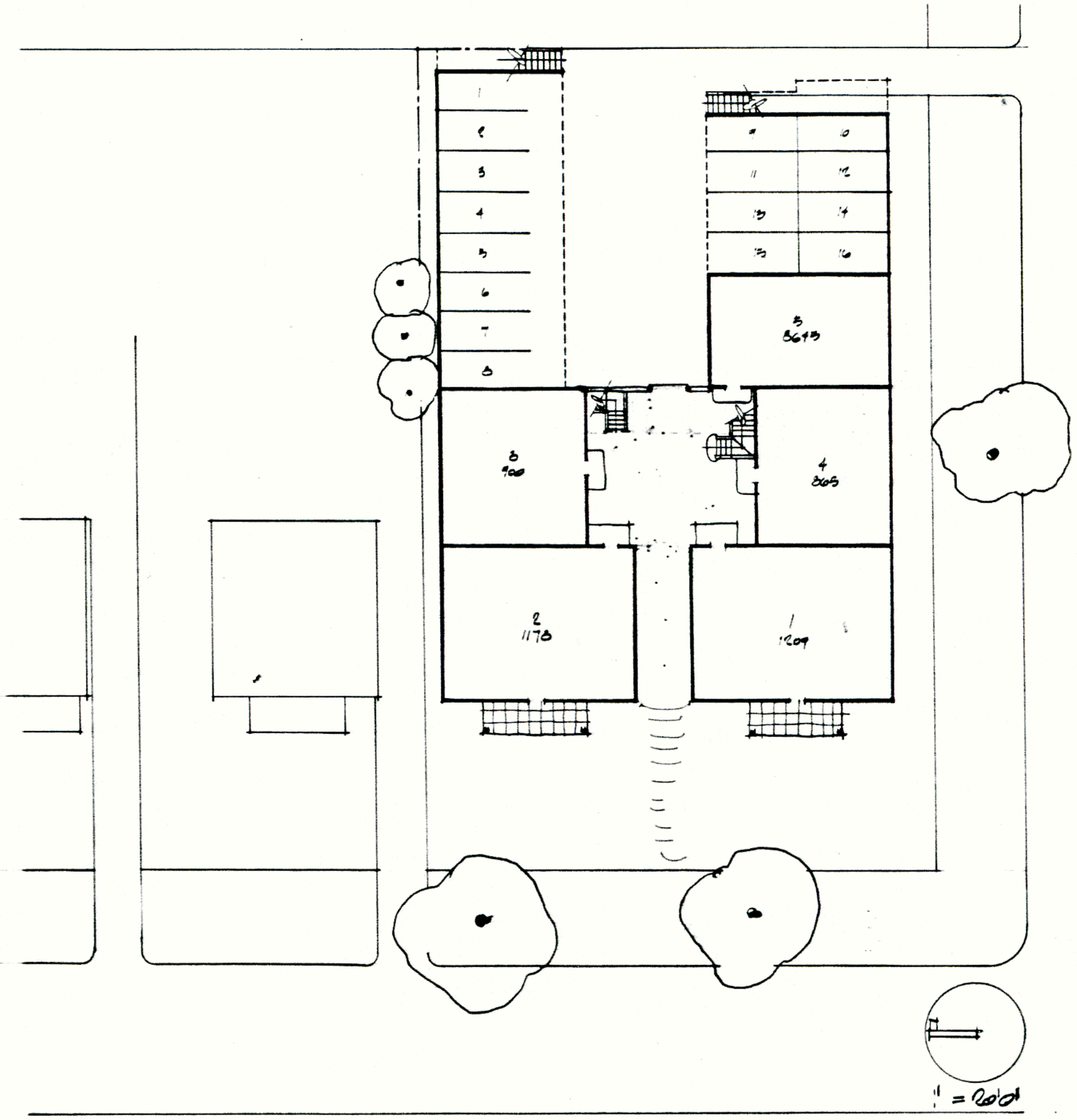

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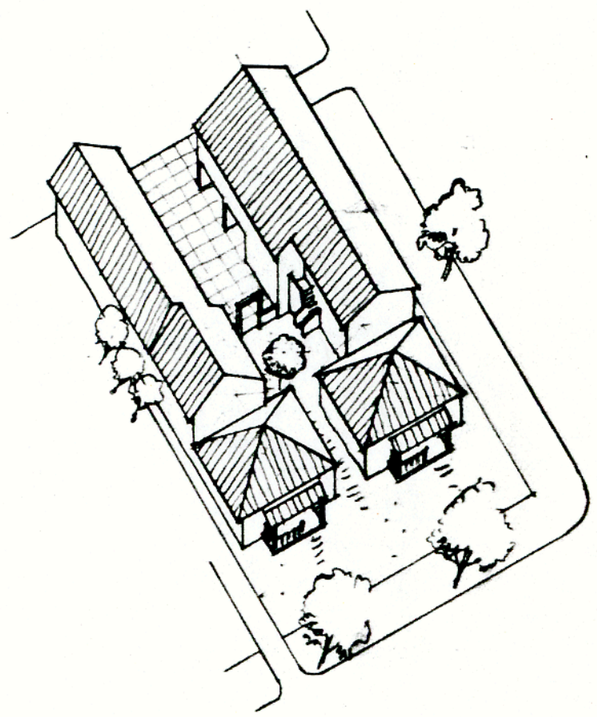
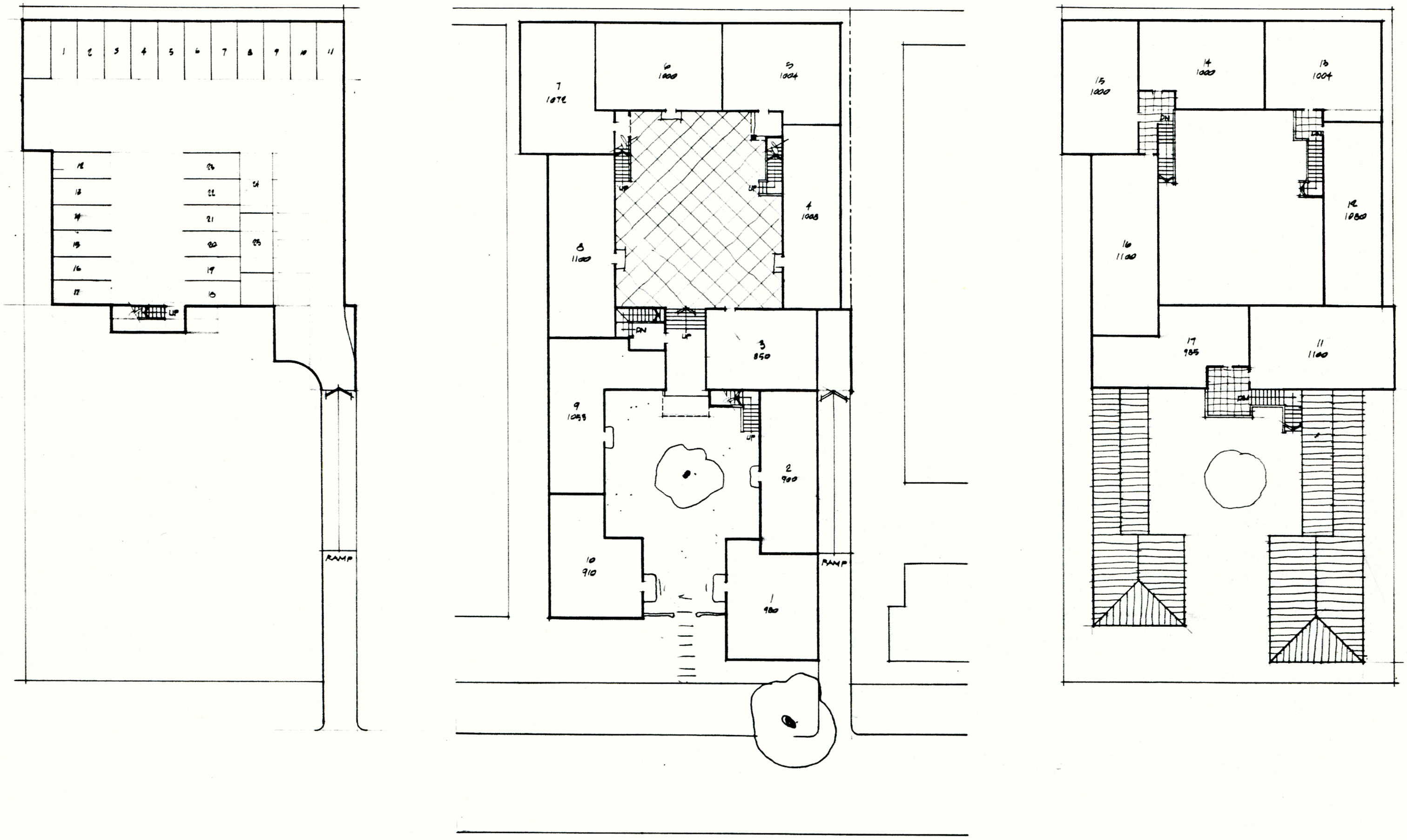


PASADENA MULTI-FAMILY HOUSING

Address: 1340 LOCUST
Present zoning area: RM-32
Lot size - area: 16800 sf
Floor area: 10406
FAR: 0.62

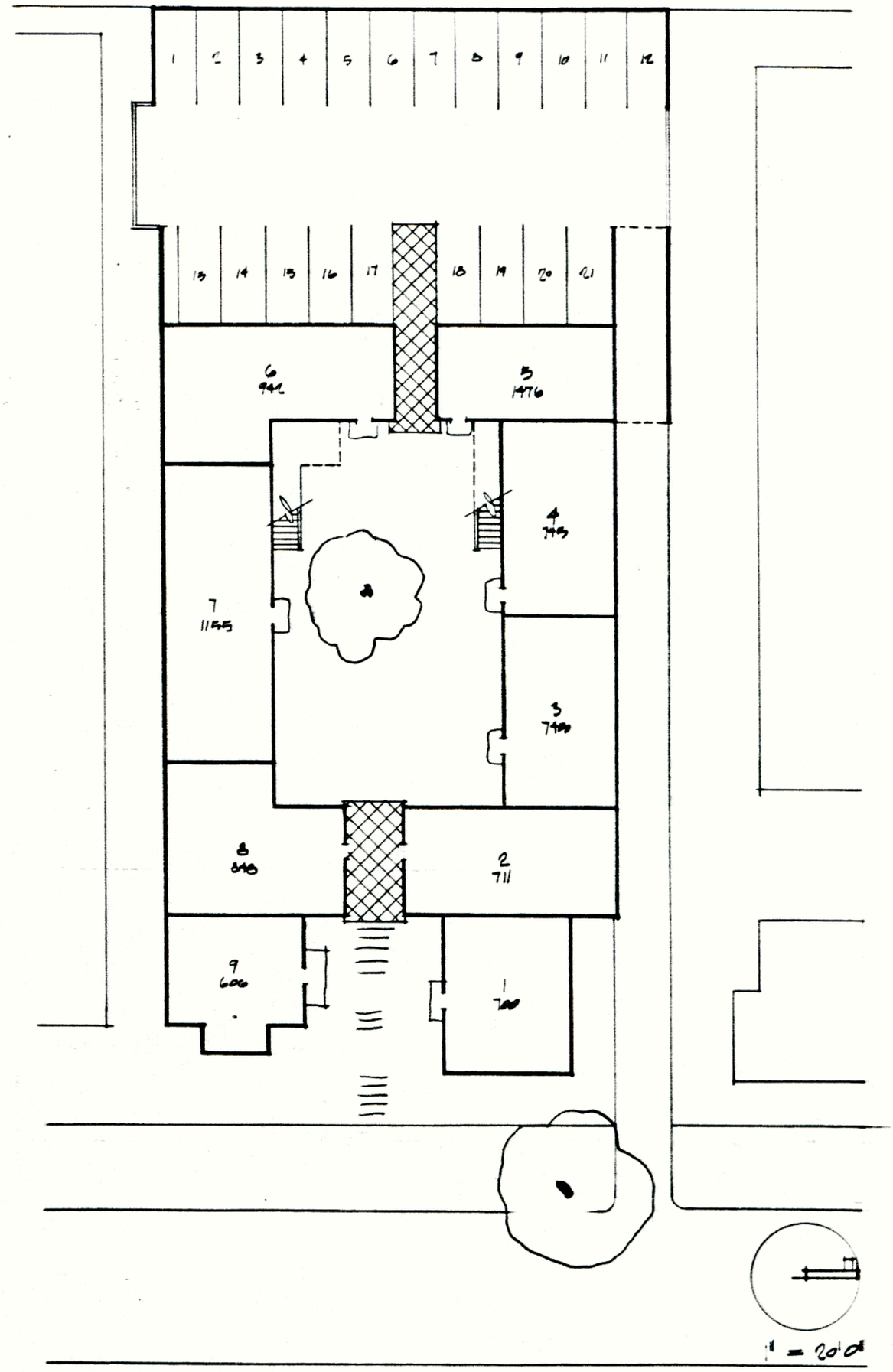
Garage area: 3500 sf
Parking location & area: AT GRADE 5216 sf
No. of parking spaces: 16
No. & average size of units: 11 @ 950 sf

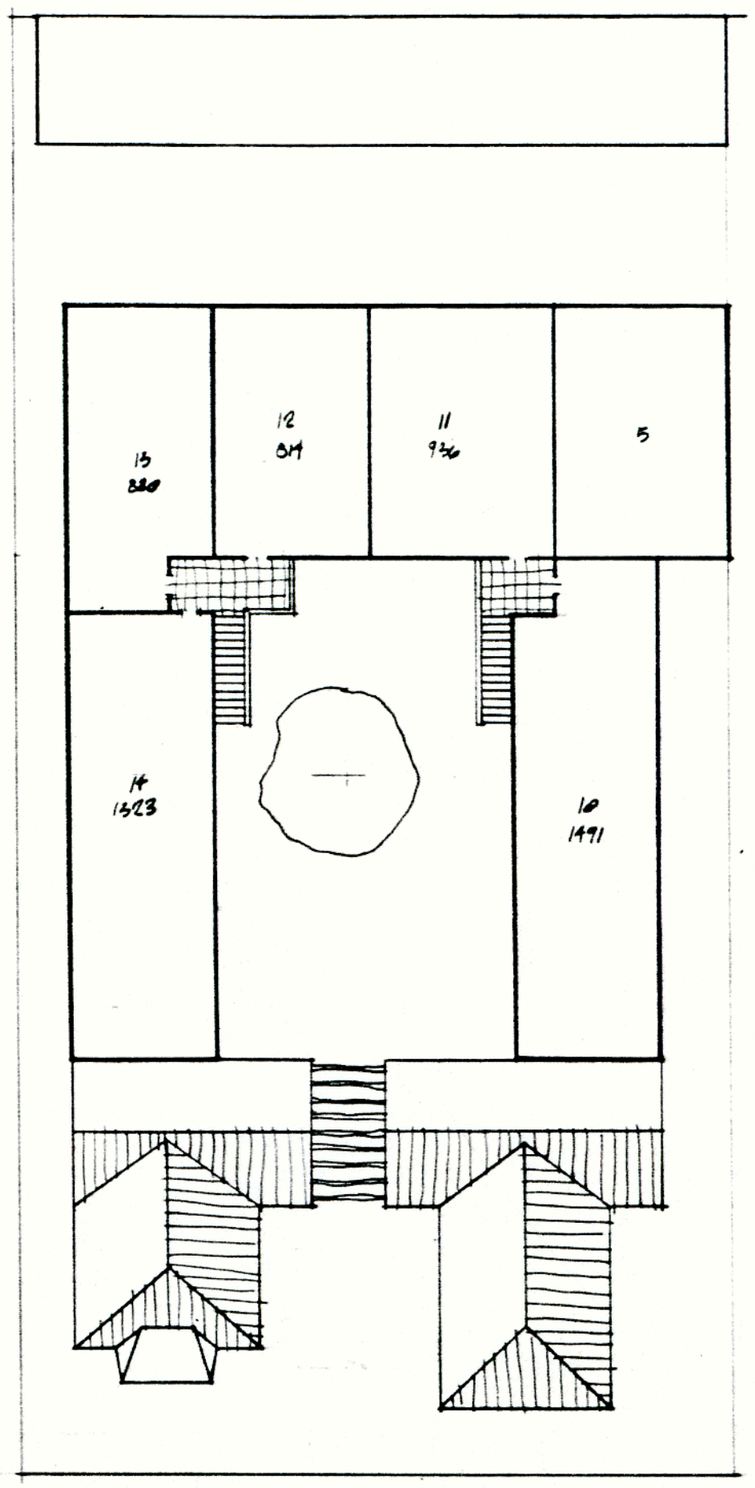


PASADENA MULTI-FAMILY HOUSING

Address: 285 HOLLISTON
Present zoning area: RM-32
Lot size - area: 100' x 205' 20500 sf
Floor area: 17146 sf
FAR: 0.84

Garden area: 9160 sf
Parking location & area: HALF UNDER 8160 sf
No. of parking spaces: 25
No. & average size of units: 17 @ 1008 sf

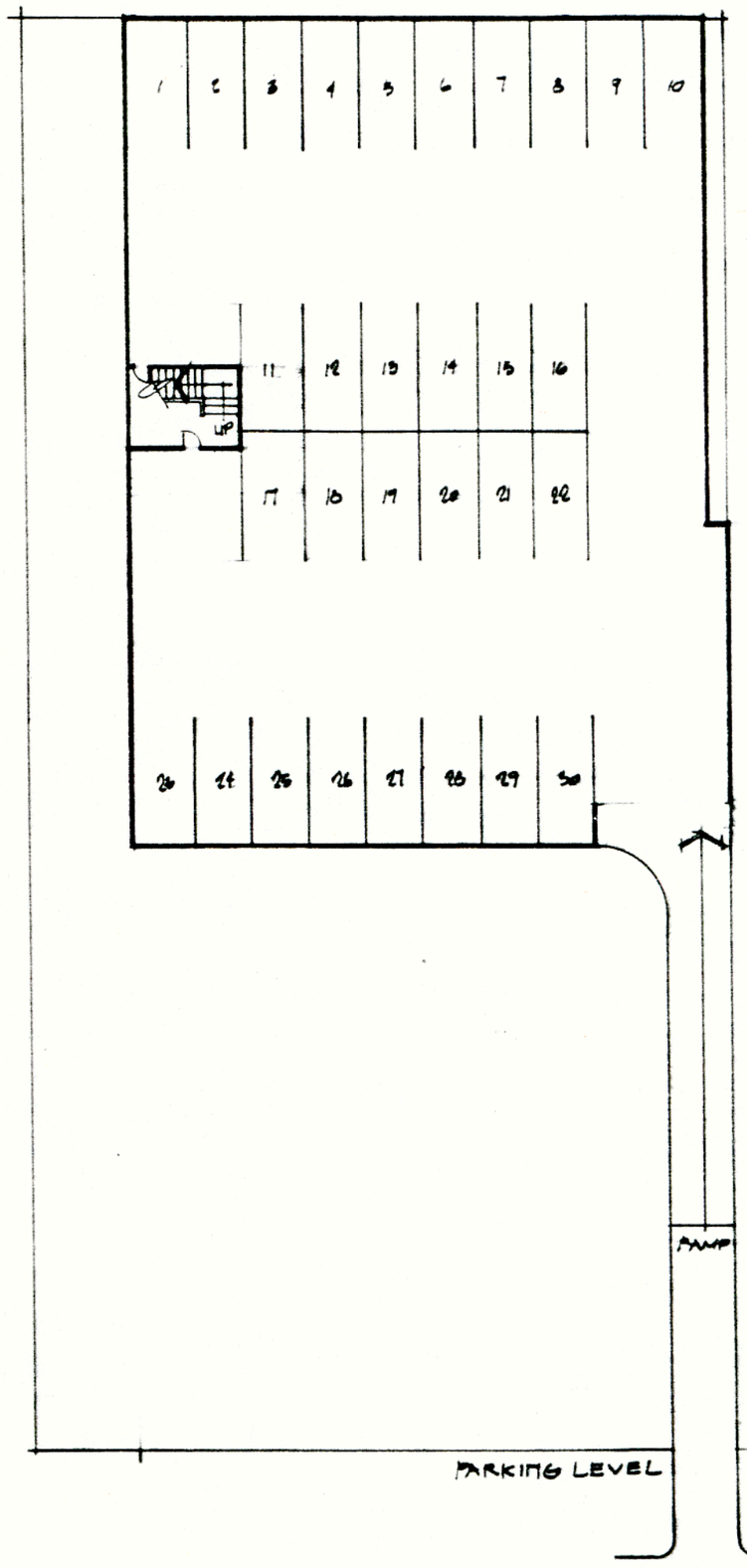


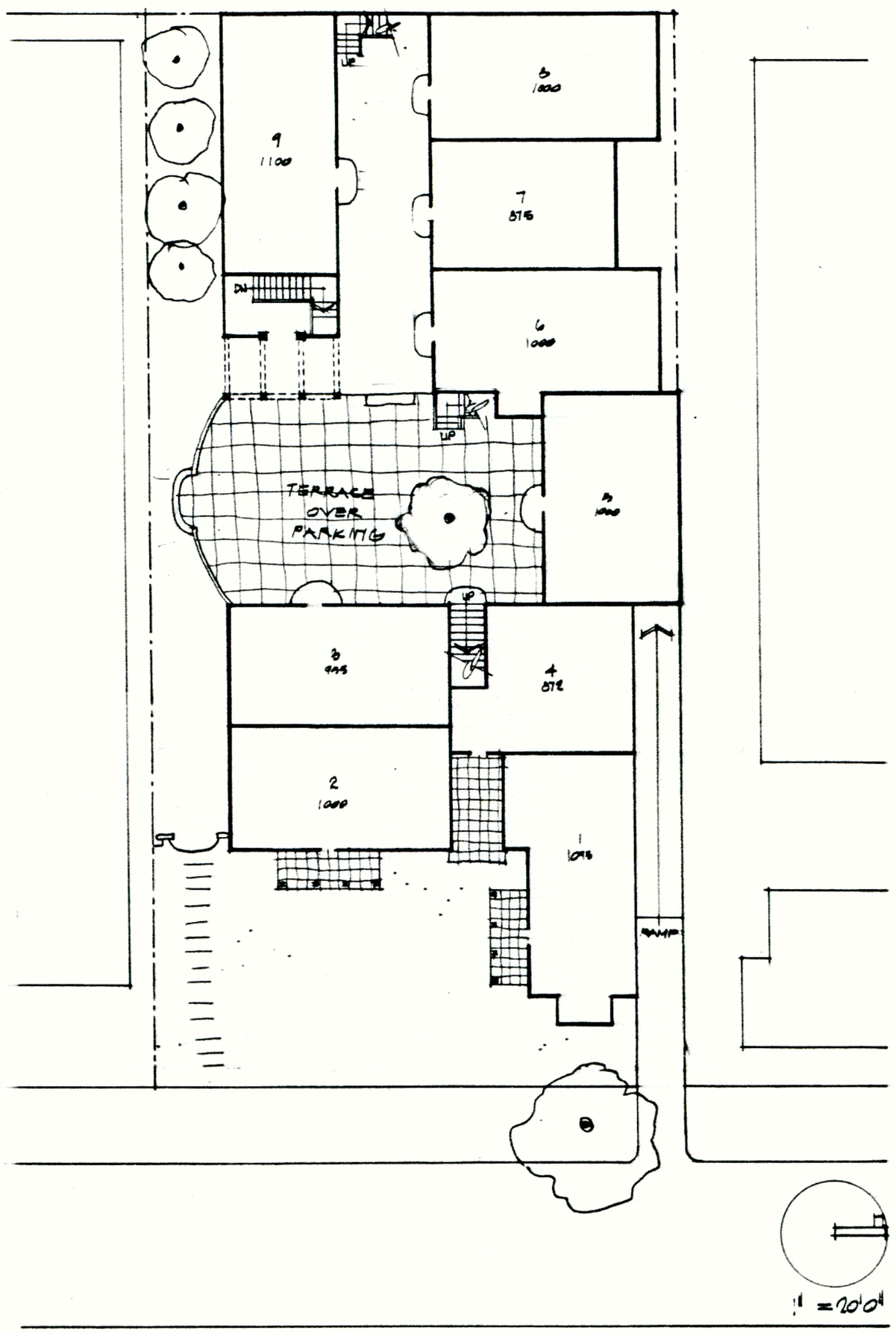


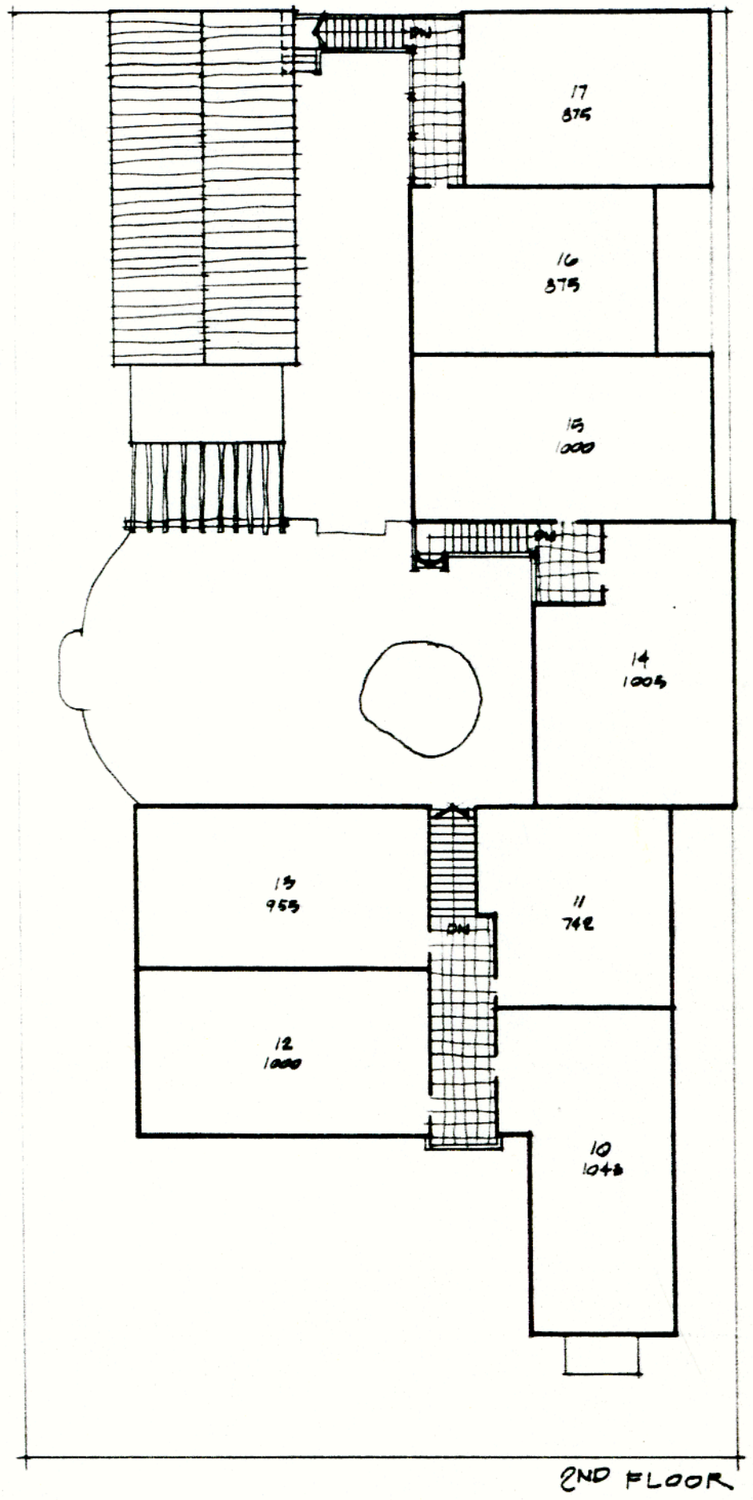
PASADENA MULTI-FAMILY HOUSING

Address: 205 HOLLISTON
Present zoning area: RM-32
Lot size - area: 100' x 205' 20500 sf
Floor area: 18372 sf
FAR: 0.65

Garden area: 2940 sf
Parking location & area: GRADE 5358 sf
No. of parking spaces: 21
No. & average size of units: 14 @ 955 sf



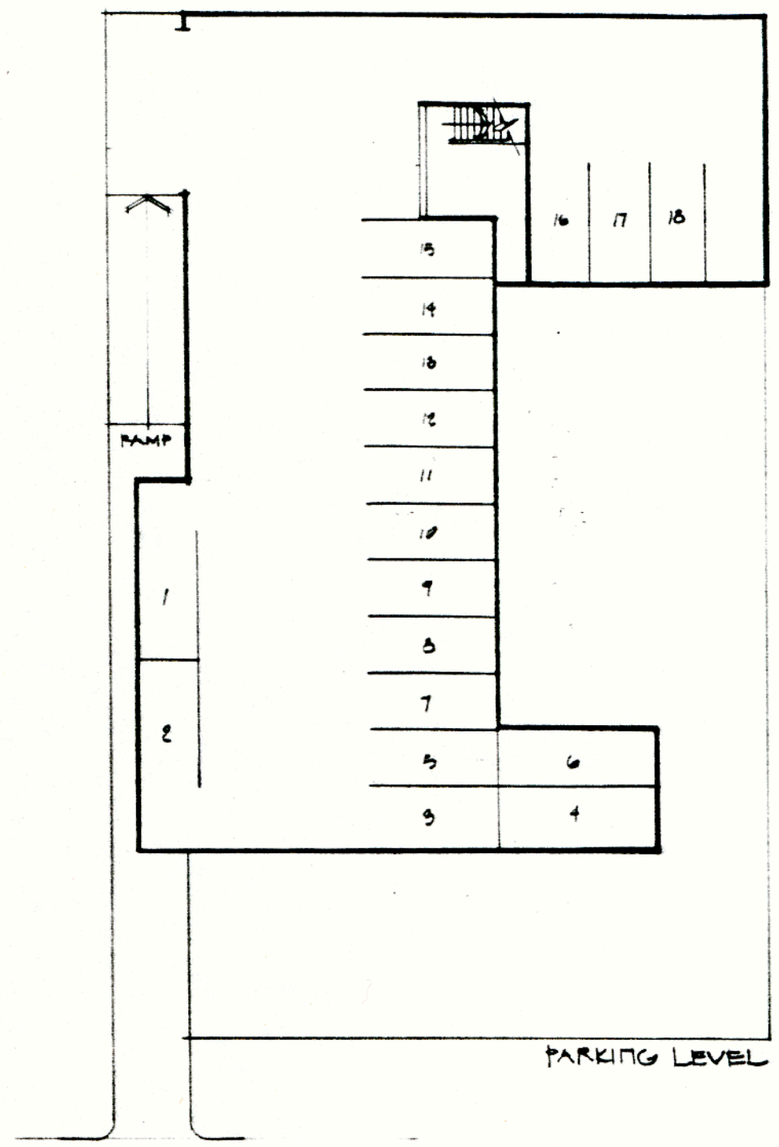




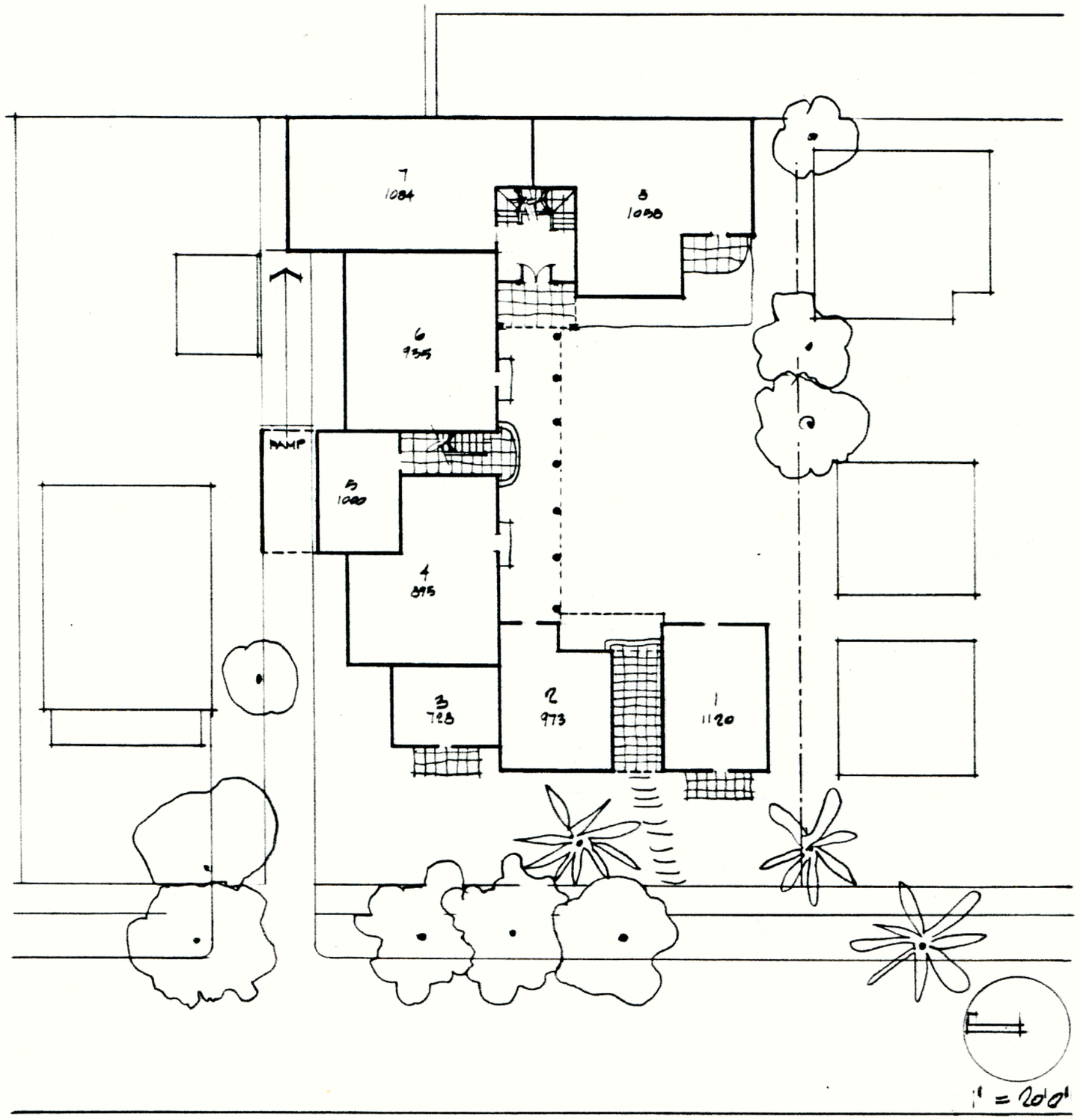
PASADENA MULTI-FAMILY HOUSING

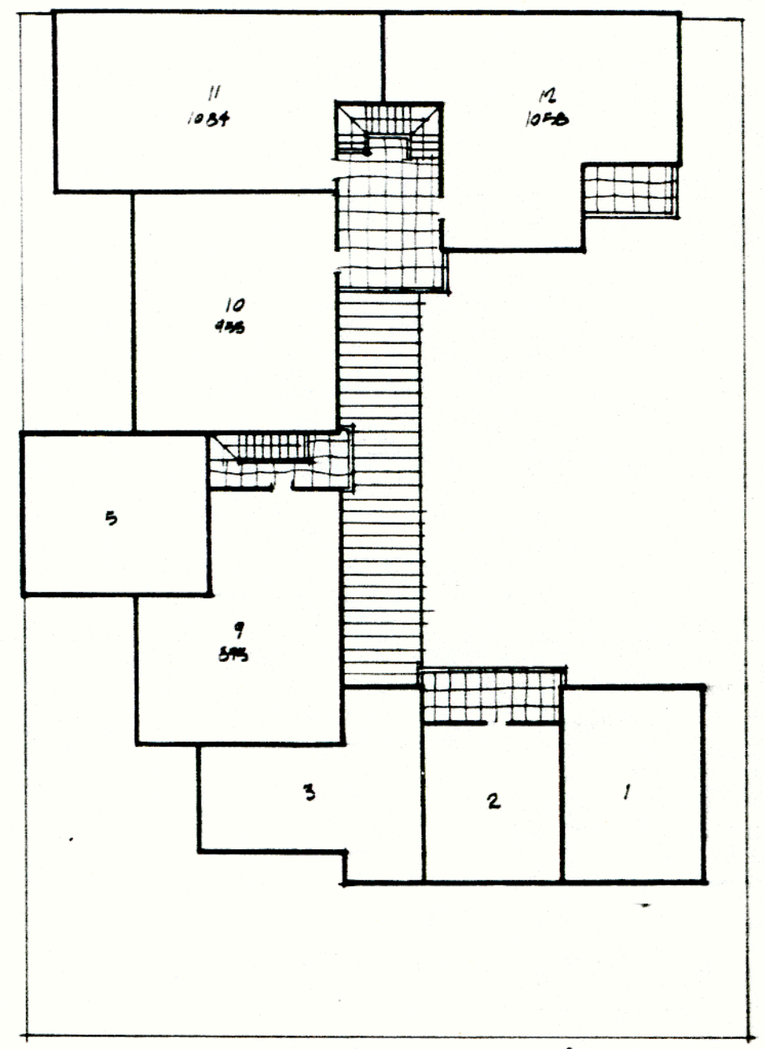
Address: 285 HOLLISTON
Present zoning area: RM-32
Lot size - area: 100' x 209' 20500 sf
Floor area: 18000 sf
FAR: 0.88

Garden area: 3130 sf
Parking location & area: HALF UNDER 9600 sf
No. of parking spaces: 30
No. & average size of units: 17 @ 1059 sf

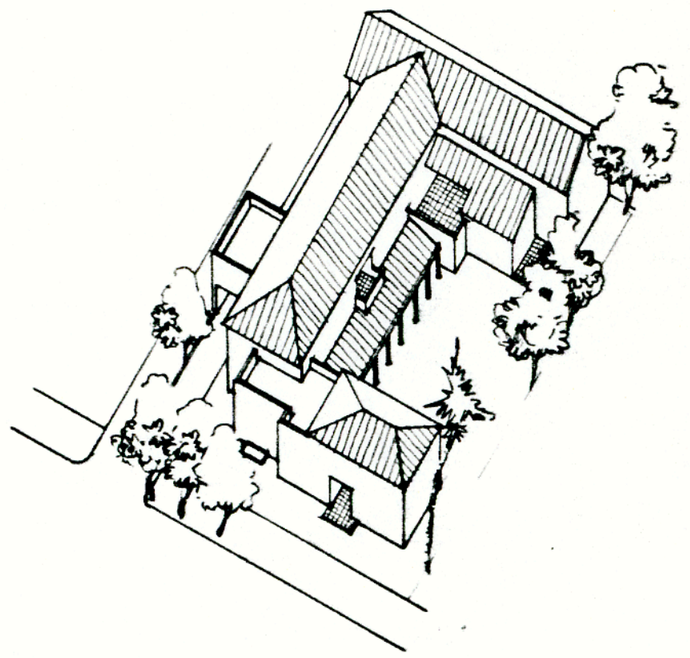


PARKING LEVEL





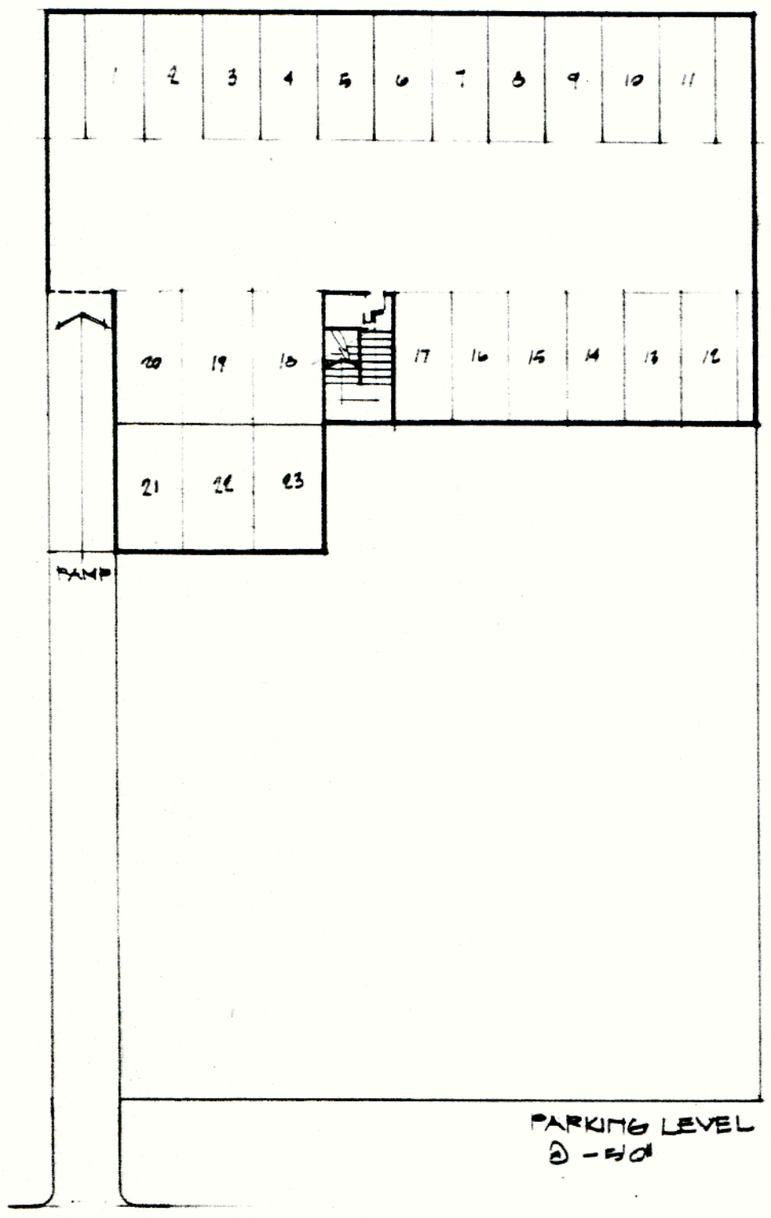
2ND FLOOR



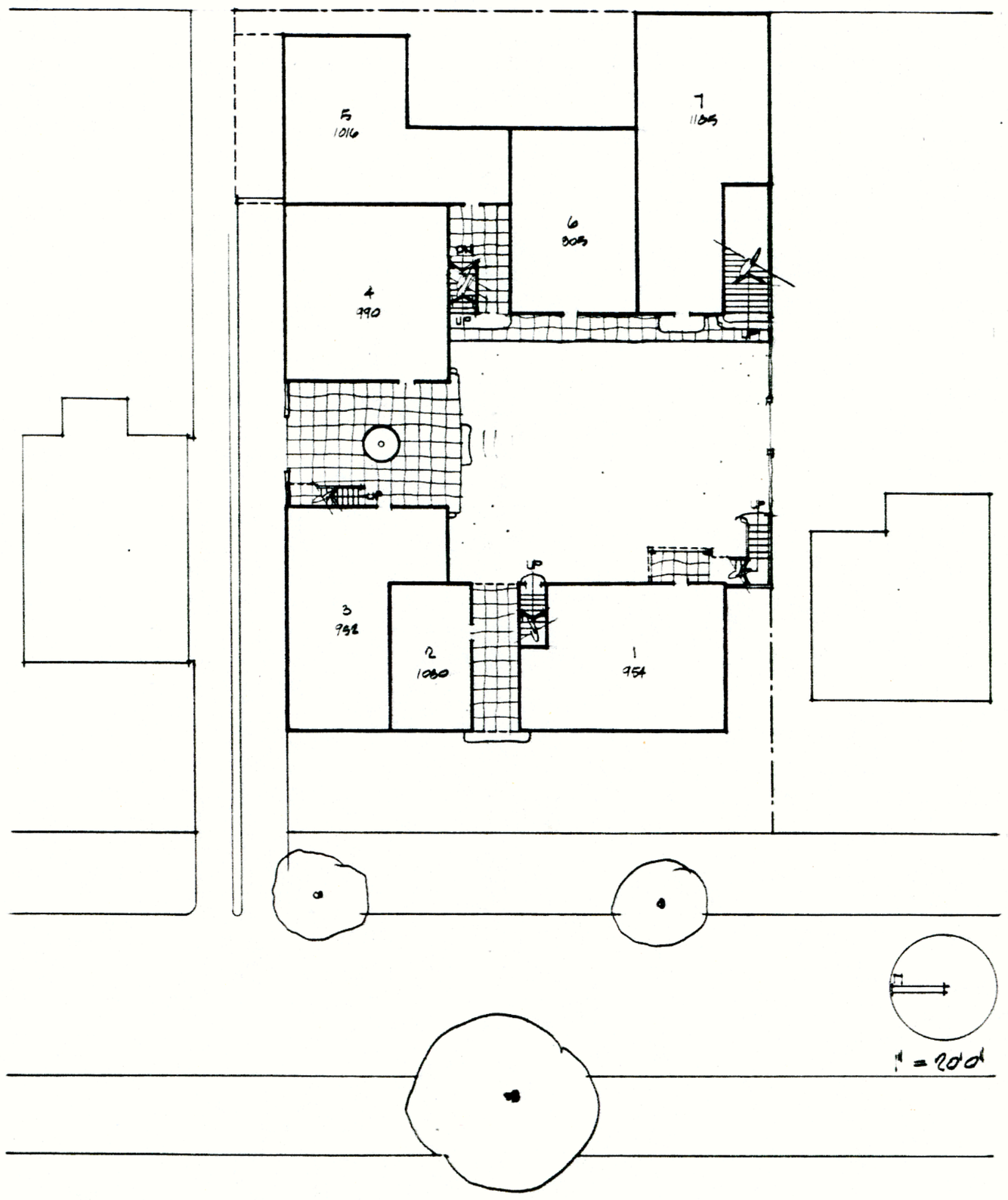
PASADENA MULTI-FAMILY HOUSING

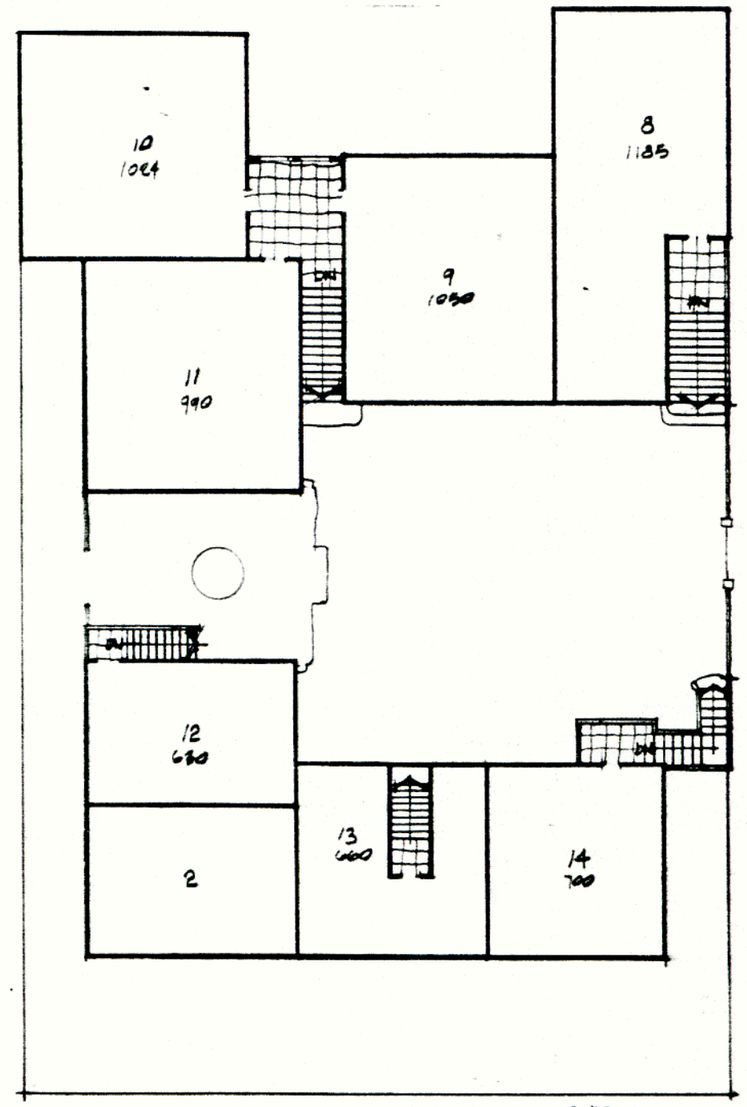
Address: 130 N. CHESTER
Present zoning area: RM-48
Lot size - area: 100' x 145' 14500 sf
Floor area: 13087 sf
FAR: 0.90

Garden area: 2600 sf
Parking location & area: HALF UNDER 7200 sf
No. of parking spaces: 18
No. & average size of units: 12 @ 1000 sf



PARKING LEVEL
@ -5'0"





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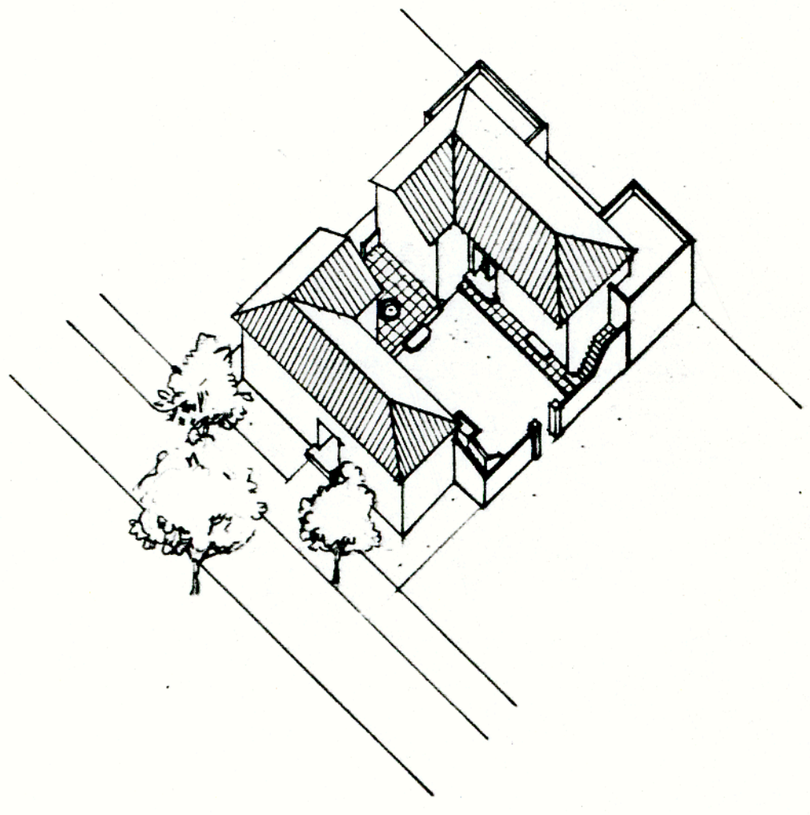


PASADENA MULTI-FAMILY HOUSING

Address: 130 N. CHESTER
Present zoning area: RM-48
Lot size - area: 100' x 154' 15400 sf
Floor area: 13221
FAR: 0.86

Garden area: 3000 sf
Parking location & area: HALF UNDER 6540 sf
No. of parking spaces: 25
No. & average size of units: 14 @ 945 sf

The following drawings show examples of successive developments on adjacent lots.

These examples demonstrate the way in which the process of the ordinance will help to create coherent development when separate and independent developers pursue their own aims, on nearby parcels, within the framework of the ordinance.

Although the developers are acting individually and privately, the effect of the ordinance is to make sure that their separate projects <u>together</u> tend to produce a greater whole in their contributions top the neighborhood.

EXAMPLE #1.

TWO ADJACENT LOTS

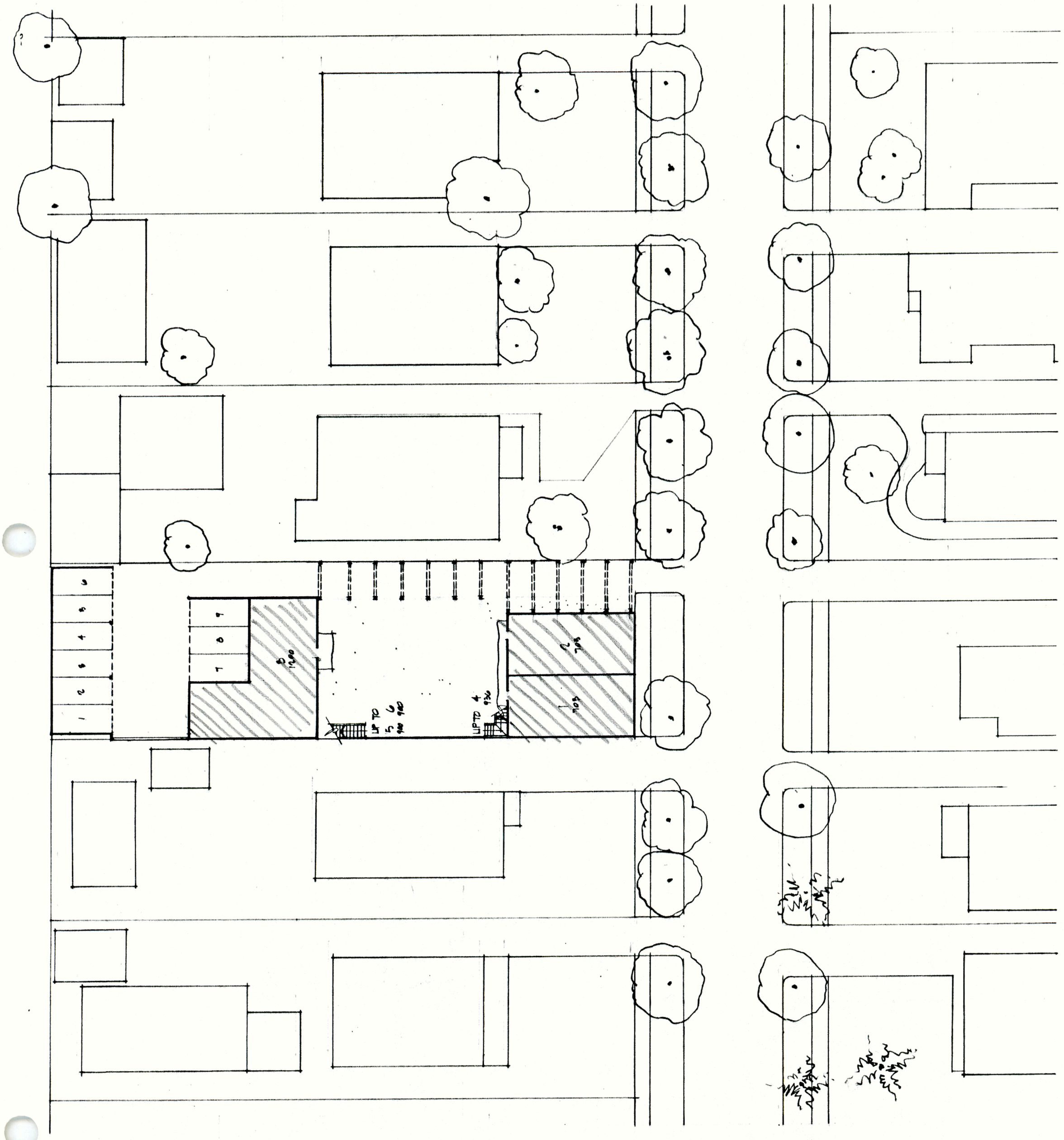
EXAMPLE #2.

THREE ADJACENT LOTS

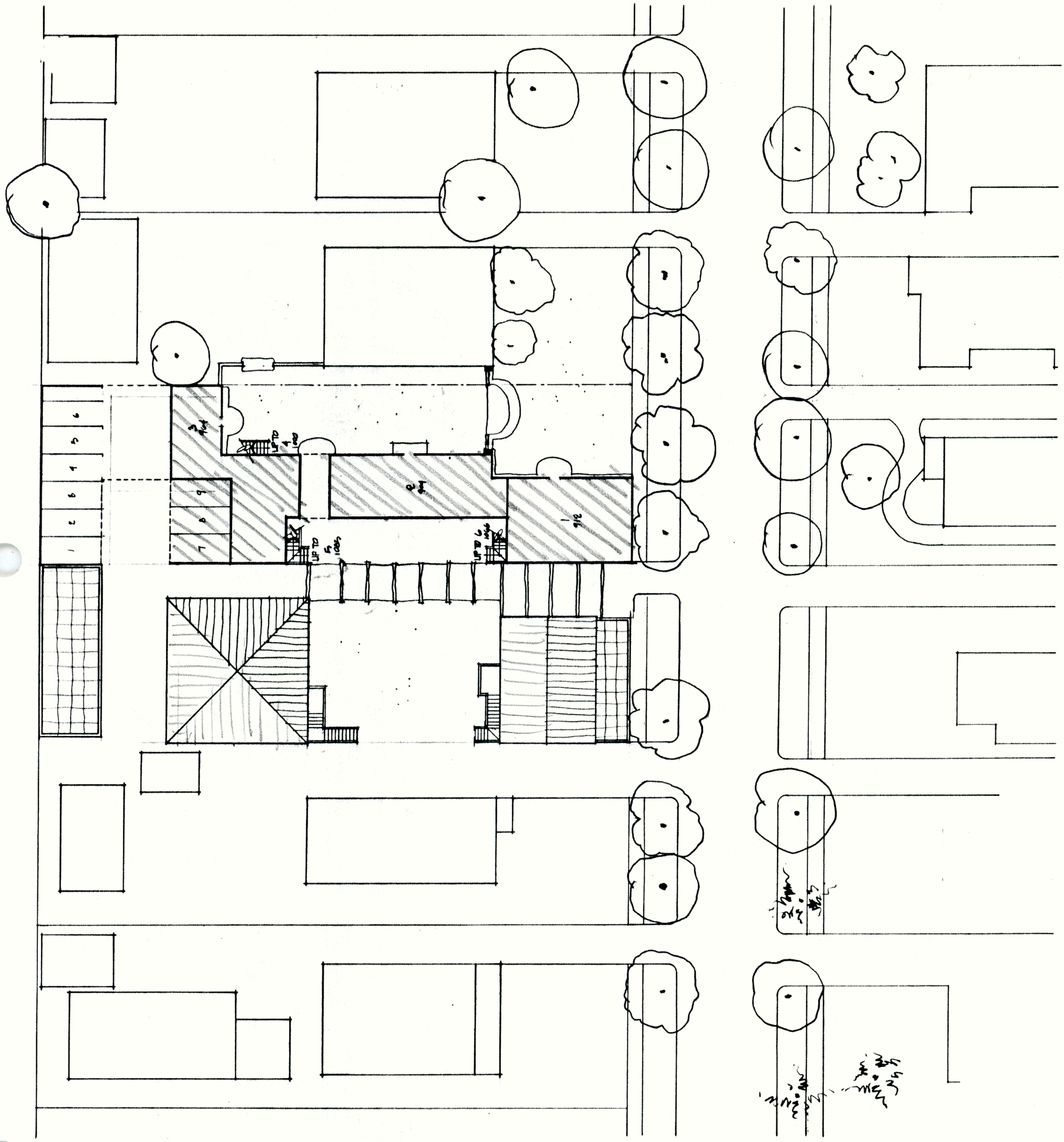
EXAMPLE #1.

TWO ADJACENT LOTS

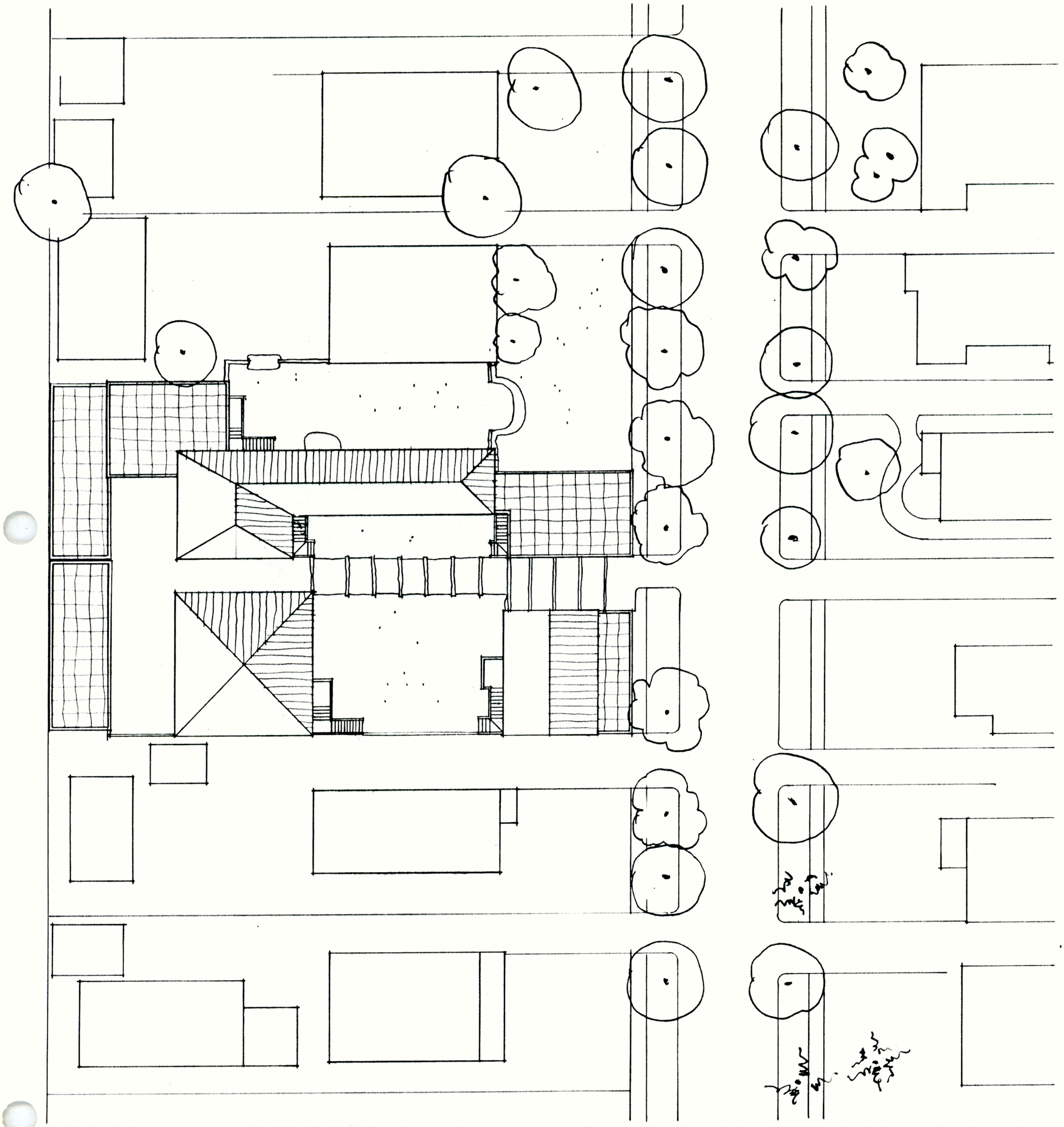
1st project



2nd project



Final scheme

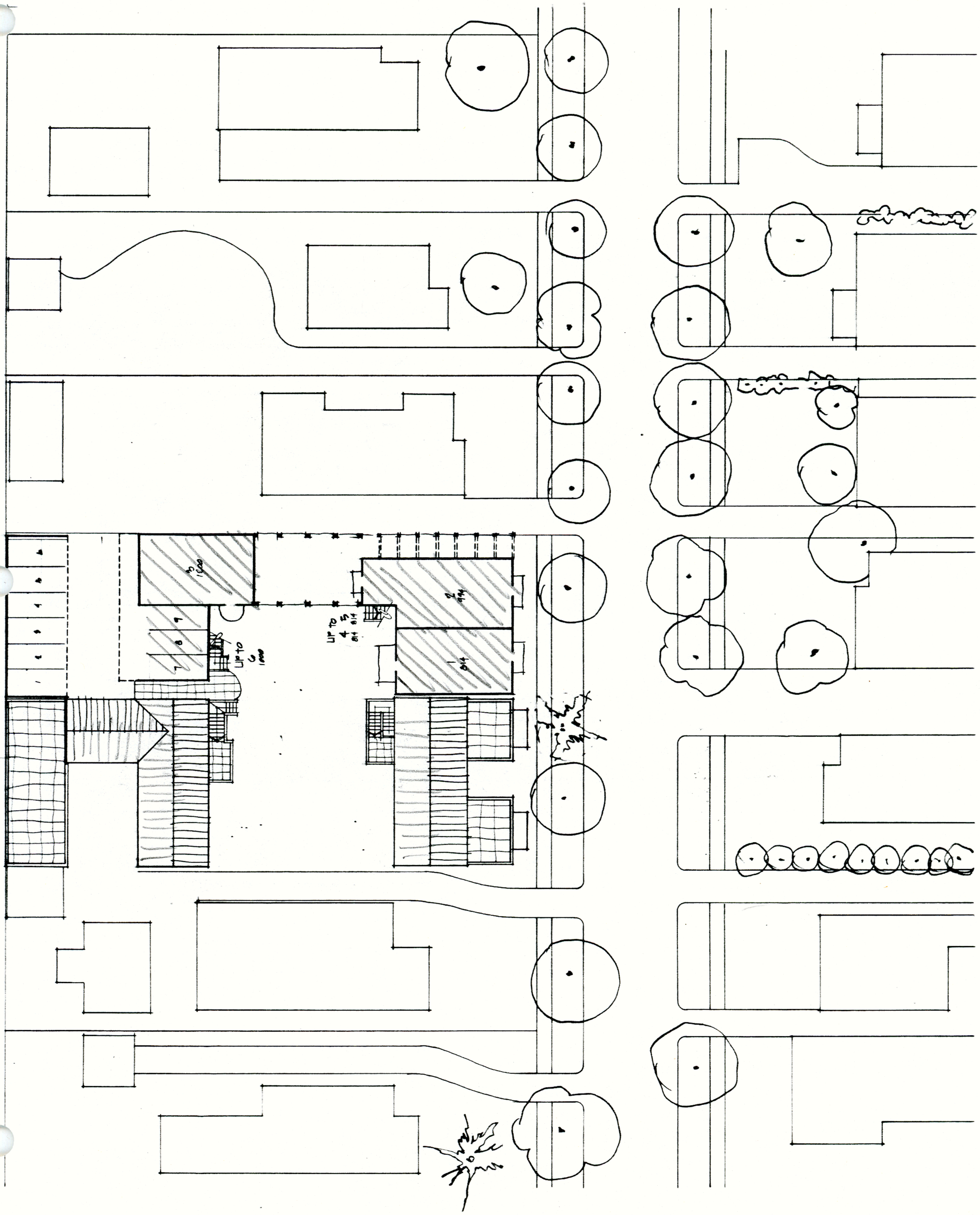


EXAMPLE #2.

THREE ADJACENT LOTS

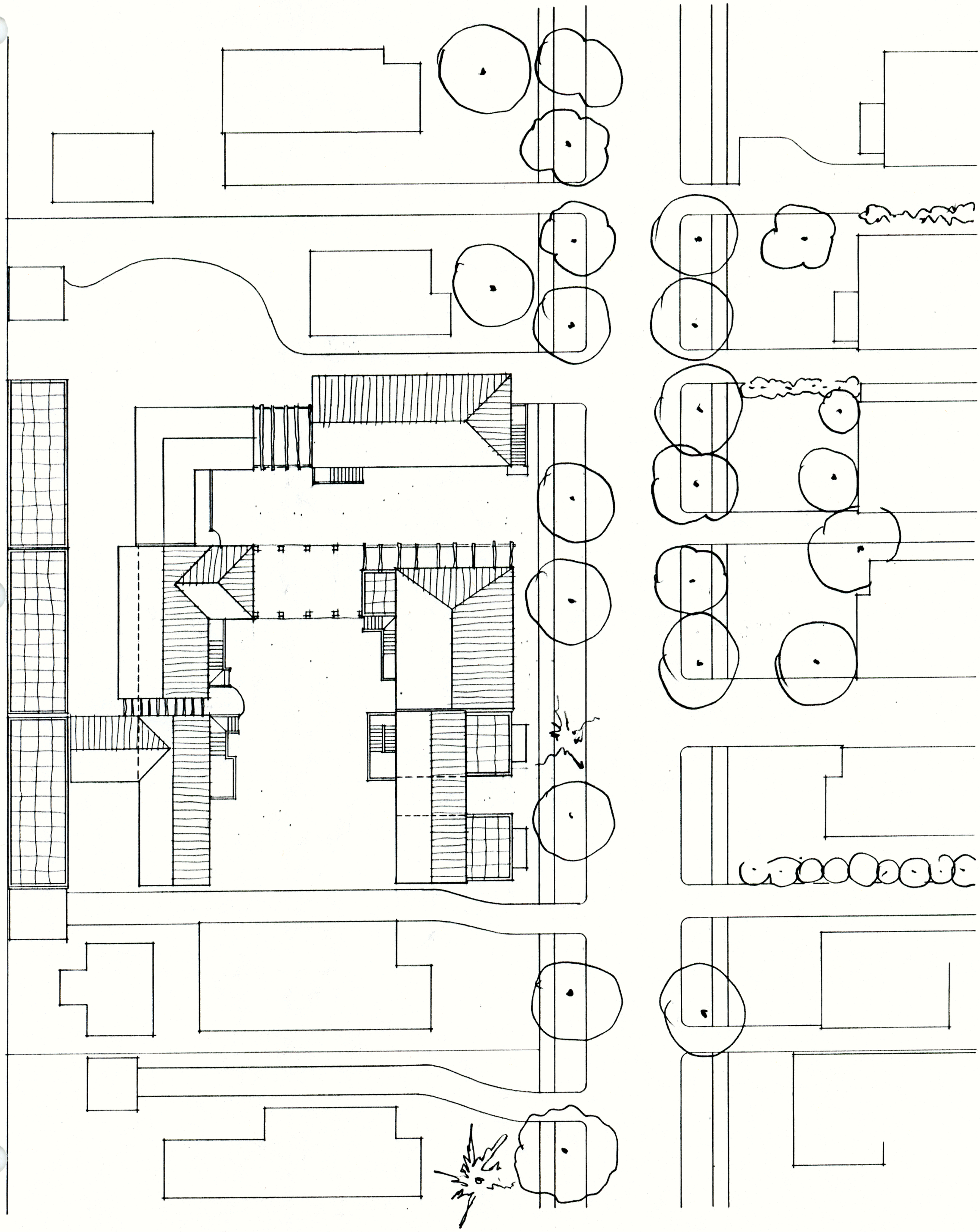
1st project

2nd project



3rd project

Final scheme.



CHAPTER 4

DENSITY

In this chapter, not yet written, we shall address the problem of density in all its aspects. Questions addressed will include:

1. Modifications in the specification of density zones for areas now covered by RM 16, 32 and 48.

2. Dependence of density on parking configurations and building type.

3. Dependence of density on local density in the neighborhood.

4. Density bonuses.

5. Methods of calculating density.

IMPORTANT NOTE:

It is fundamental to the way this ordinance works, is that the procedure which is described in chapters 5,6 and 7, is a single procedure, that works in the same way for all densities. Minor regulations which only apply in particular densities,. are introduced where appropriate, but the overall process, application procedure, standards and guidelines are written in such a way that they apply to all density zones.

PART TWO: PROCEDURE

CHAPTER 5

THE LAYOUT PROCESS: HOW TO USE THIS DOCUMENT

The basis of this zoning ordinance is a layout process, coupled with an application procedure. The two together will ensure that each project meets the individual and private requirements of the developer, while also guaranteeing an effective and helpful contribution to the neighborhood as a whole.

In this chapter we shall describe the layout process. This layout process itself is not mandatary. What is mandatory in the ordinance, are only the application procedure described in chapter 6 and the guidelines and standards described in chapter 7.

However, the application procedure and guidelines have developed out of the layout process described in this chapter. Unless the applicant has some very specific reason for wanting to ignore or modify the layout process, we strongly recommend that it be used.

This will guarantee, in the simplest and most efficient way, compliance with the legal requirements of chapters 6 and 7.

The backbone of the layout process lies in its structure and sequence. It has four main stages, and within these four stages there are thirteen detailed steps.

1. RELATIONSHIP TO NEIGHBORHOOD CONTEXT

1.1 Map the context and surroundings.
1.2 Decide basic arrangement and position of main garden to enhance surrounding projects and the neighborhood.
1.3 Calculate numerical parameters.

2. OVERALL ORGANIZATION OF PROJECT.

2.1 Provide driveway and locate parking.
2.2 Shape gardens precisely to create cooperation with adjacent gardens.
2.3 Place building volumes.

3. DETAILED ORGANIZATION OF PROJECT

3.1 Lay out details of parking.
3.2 Division into apartments.
3.3 Locate and shape apartment entrances.

4. CHARACTER OF PROJECT

4.1 Map details of nearby buildings.
4.2 Articulate roofs and eaves.
4.3 Design details of gardens.
4.4 Choose building materials and color.

These steps are designed to be simple, smooth, and coherent in their sequence, so that the applicant can fill out the application forms, with a minimum of fuss, and also with a minimum of interpretation.

The layout process is also designed, so that an applicant who fills out the necessary steps, in the required order, will be able to establish his conformity with the legal requirements of the zoning ordiannce in a minimum of time, and with a minimum of effort.

The process is also designed to reduce to a minimum the amount of interpretation and discretion required from city staff.

Finally, and perhaps most important, the process is designed to facilitate the actual design and planning of new development projects.

Since the sequence of steps in the application process has been chosen with great care, so that a potential developer, who merely wishes to check the possibility of a project on a new site, can pencil out a feasible project within a very short time, merely by following the steps in the order given.

This will then enable him to create a project which meets all legal requirements, and to examine the possible results of a conforming project, quickly and economically.

We believe this new aspect of the zoning ordinance will greatly facilitate the development process, and that it will encourage new projects of high quality.

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<u>At the end of this chapter, there are four worked examples, showing projects which have been generated by this layout process</u>.

STAGE 1

RELATIONSHIP TO NEIGHBORHOOD CONTEXT

STEP 1.1 MAP THE CONTEXT AND SURROUNDINGS.

To begin the layout process, and to make sure that your project does something useful for the community, it is necessary to start by understanding, deeply, the essential structure of what is there, both on your lot, and in the immediate vicinity.

Draw a map at a scale of 1 inch equals 50 feet. The map must show your lot, two lots on either side, the back 50' of the lots behind these five lots, and the front 100' of the five lots across the street.

Show dimensions.

On this drawing survey and identify the following structures:

1. Lot boundaries.

2. Footprints of all buildings on surrounding lots. Each building or part of a building must be shown with its height in feet.

3. All gardens on surrounding lots. Examine how big they are, where they are located, what their shapes are. In particular, you must identify those gardens which are beautiful and worth while for you to make a connection to them, or worth while sitting and looking in their direction and enjoying them.

4. Beautiful open space in the street, which helps to create the atmosphere of the neighborhood.

5. Parking structures on surrounding lots.

6. Big trees on your site or on the street, and on adjacent lots.

7. Existing driveways and back-alleys on nearby lots, with special reference to any possible pattern of access in which these existing driveways and alleys might serve the back of your lot.

8. Setback dimensions on adjacent lots.

9. Any windows on next door buildings facing your lot, which serve living areas, and must have good light preserved.

10. Groups of doors or other entrances on next door lots, which create a pattern of movement and pleasantness that must be preserved, and which may form the basis of a new space or center in your project.

11. Walkways and entrance paths on surrounding lots.

-o0o-

Examine this context map, and choose four things.

1. The most beautiful spot on the site, where it is most pleasant to stand. This should include any magnificent trees if they exist.

2. Identify the most beautiful spot in the next door gardens on either side. Choose which one is most beautiful to look into.

3. Identify any very beautiful space in the street, which is worthwhile to keep.

4. Identify any pattern of entrances on nearby buildings, which is near or adjacent to the site.

Choose one of these four which will be most significant as the focus of the main garden or courtyard.

STEP 1.2. DECIDE BASIC ARRANGEMENT AND POSITION OF MAIN GARDEN TO ENHANCE SURROUNDING PROJECTS AND THE NEIGHBORHOOD.

The character of the neighborhood which is described on Part 1 of the Zoning Ordinance, page __, can only be obtained by cooperation between lots. The beauty of character which we hope for, cannot arise merely as a result of what is done on individual parcels, but only as a result of coherent cooperation between parcels with regard to gardens, courtyards, parking, buildings, setbacks, light and air, and driveways.

This principle of cooperation is fundamental to the nature of the new zoning ordinance. It seeks to promote a type of cooperation between adjacent developments so as to create a larger whole for the benefit of the entire community. This is especially fundamental, since the great majority of new construction in Pasadena, is single lot development. At present, 90% of all developments occur on single lots. Even with incentives to encourage development of double parcels, we believe that single lot development will always represent 80% of new projects.

In any case it is also desirable, that development be kept small in scale, since this will continue to maintain the intimate character of Pasadena which has existed in the past. Large lot development introduces an undesirable and commercial crudeness of grain. It is desirable that the city should be able to build up the beautiful and coherent character described in part one, in an intimate fashion. This can only be done by cooperation between lots.

The success of this ordinance therefore requires an entirely new frame of mind. When approaching a development, it is necessary for the developer to ask himself consciously, how what he does, on his lot, will cooperate, with adjacent developments, to produce a harmonious whole in the neighborhood.

-oOo-

In particular the following types of cooperation are all critical:

1. Cooperation between gardens or open spaces, to form larger gardens and open spaces.

2. Cooperation between building positions, to maintain the coherency of open space and light access, and to permit growth of realtively long stretches of building volume parallel to the street.

3. Cooperation between driveways and back alleys, with easements, to reduce the number of driveways.

4. Cooperation between parking lot positions, to improve accessibility from driveways and alleys.

-oOo-

Now, examine the context map prepared on the previous step regarding the following matters:

1. The possibility to obtain easement for the use of existing driveway on adjacent lot.

2. Identify next door gardens facing towards your lot, with which the proposed garden in your lot can cooperate in order to create a larger garden.

3. Identify any beautiful open sapce along the street on the adjacent lots, front lawns or deep front gardens, which is worthwhile preserving and extending by your acts.

4. Examine the configuration of existing parking on adjacent lots, whether or not they interfere with the use of existing driveway on adjacent lot.

5. Examine carefully the position and configuration of building volumes on adjacent lots and consider the possibility of placing your volumes in a way that creates continuity of building volumes along the street.

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Finally, before beginning the detailed design and layout of your project, it is necessary to get a single basic vision of the project.

This vision hinges on the position and nature of the main garden, and the way this main garden is supported and created by the building volume. You must decide where the main garden is, and in what fashion the building volume will surround this main garden, and complement it.

It is fundamental to the process being used in this ordinance, that your solution to this problem emanates from the pattern of existing space and buildings in the neighborhood and that it does the maximum possible to help the neighborhood.

You must be able to argue that the position of the main garden you have chosen, and the overall arrangement of space does the maximum possible for the lot, for the street, and for the neighborhood.

Choose a single position of the main garden which does the most possible to connect with existing spaces on next-door lots, and which also does the most possible to provide a balanced variety of space in the neighborhood.

-o0o-

More precisely:

The main garden must be a single rectangle, and must be placed in such a way as to cooperate with nearby gardens and street space, in one of four possible configurations.

1. An internal courtyard entirely contained within the lot. This is mainly possible on a double lot, and is difficult on a single lot.

SKETCH

2. An internal garden, formed by cooperation between two or more lots. In this case, the garden must cooperate with an adjacent interior garden, to form a single space.

SKETCH

3. A deep front garden, entirely contained within the lot. In this case, the front garden must cooperate with existing buildings of adjacent lots on at least one side, and must form a "deep" garden on the street, with the frontage of the building at least 75' back from the sidewalk.

SKETCH

4. A long front garden, formed by cooperation between two or more lots. In this case, the garden must cooperate with other front gardens on at least one side, with the frontage of the buildings at least 40' back from the sidewalk so as to form a "long" garden along the street.

SKETCH

STEP 1.3 CALCULATE NUMERICAL PARAMETERS.

1.3a Calculate allowable built space.

This rule gives maximum allowable total built space.

Get your lot area.

Get context FAR on two lots on each side, plus three lots across the street.

On a double lot, allowed FAR is 1.30 x context FAR, or .75 whichever is less. On a single lot, allowed FAR is 1.15 x context FAR, or .65 whichever is less.

Note. Allowed density is higher on double lot than on a single lot.

1.3b Calculate number of apartments.

Calculate number of units, N.

Choose average apartment size between 700 sf and 1300 sf. Most typical average is 850 net, 1000 including stairs and hallways. Divide total built area by average size, to get number of units.

1.3c Calculate number of parking spaces and required parking area.

Required parking spaces is 1.5 times N.

Total needed parking area will be approximately 450xN square feet. This number is not a requirement, but for convenience of calculation and layout.

1.3d Calculate the total area of gardens.

Now calculate the total area that your lot must provide for the formation of all gardens and/or courtyards.

Calculate as follows:

1. On a single lot, the total area for gardens must be 3300 sf, or 35% of the lot, whichever is greater.

2. On a double lot, the total area for gardens must be 6500 sf, or 37% of the lot, whichever is greater.

If a single lot has to provide a driveway (see step X below), then the amount of open space may be reduced to 2800 sf or 32% of the lot whichever is greater. However please note that most lots are not permitted to have driveways.

1.3e Calculate the area of main garden.

At least 70% of the total space required for garden space on your lot, must be used for the formation of the main garden. This main garden is to be aggregated in the form of a single rectangular entity of space, which is surrounded and bounded by buildings, hedges or low walls. The remainder of the required open space will be used for the formation of secondary subsidiary gardens.

STAGE 2

OVERALL ORGANIZATION OF PROJECT.

STEP 2.1 PROVIDE DRIVEWAY AND LOCATE PARKING.

2.1a Acquire easement on a driveway which is on adjacent lot.

If either of the two adjacent lots -- one on the right and one on the left -- adjacent to your property has already been developed to an apartment building, and if its driveway is capable of providing access to the rear of your lot by means of back alleys or connecting parking aisles, then you must share the use of this driveway.

In this case you are not allowed to build a new driveway. You must acquire an easement for the use of the available driveway. The city makes this possible by law.

DIAGRAM

If there is an existing house on an adjacent lot, you must use the driveway belonging to this house, if the owner will agree to give an easement. In this case your new development has to guarantee a spacious and pleasant green space that is adjacent to the house and is good for it. In this case, the minimum distance between your apartment building and the existing house must be no less than 30'.

If the existing single family does not grant the easement, then you do not have to guarantee that the green space of the new apartment building will be good for the house.

You also have an option of the following bonuses for using existing driveway of adjacent lot:
1. 15% increase on allowed FAR.
2. 15% reduction on property taxes.
3. Recovery of driveway cost by adjacent properties, sharing driveway.

2.1b Acquire easement on a driveway which is one lot removed from your lot.

If there is no driveway on the next door lot, which you can use, you must then check the lots which are one lot removed from your lot.

The same rules apply, except that in this case, there must not only be a usable and available driveway, but there must also be a parking aisle, or driveway, which can bring tenants across the back of the intermediate lot, to the back of your lot.

Once again, if there is an existing house on an adjacent lot, you must use the driveway belonging to this house, if the owner will agree to give an easement, with the same conditions as before.

You also have an option of the following bonuses for using existing driveway of adjacent lot:

1. 15% increase on allowed FAR.
2. 15% reduction on property taxes.
3. Recovery of driveway cost by adjacent properties, sharing driveway.

2.1c If no easement is available, provide for a new driveway.

If no available driveway exists, then you must provide a ten foot driveway.

Locate the new driveway along the property line.

You must bear in mind that in the future you must provide an easement on the driveway, which will allow tenants of other adjacent lots to use it.

NOTE. If you are forced to provide a driveway on a single lot, you may then reduce the required garden area to 2800 sf, or 32% of the lot, whichever is greater.

???? You also have an option of the following bonuses for providing a driveway to be shared:
1. 15% increase on allowed FAR.
2. 15% reduction on property taxes.
3. Recovery of driveway cost by adjacent properties, sharing driveway.

OPTION:

You may allow a widening along the driveway, 16'x24', midway along its length, where two cars can pass each other.

2.1d Locate parking at the rear of the lot.

All parking will be located at the rear of the lot. In no case may the parking areas penetrate the front half of the lot.

All parking must be at grade.

Details of parking layout are to be worked out later.

(Note: more needs to be said about various possibilities of underground and half underground parking configurations).

STEP 2.2 SHAPE GARDENS PRECISELY TO CREATE COOPERATION WITH ADJACENT GARDENS

2.2a Now, shape the main garden precisely.

Adjust and refine the exact size and extent of the main garden.

When cooperating with adjacent lots you will find yourself in one of the following positions:

A. If you are initiating the formation of a main garden, you must provide at least 70% of your required garden space in this one main garden. It must be a well shaped, rectangular space.

B. If there is an existing main garden, already initiated in one of the adjacent lots, you will have to complete and extend this main garden. In this case, the completed space must be at least 4500 sf.

C. If your garden is on a double lot, the main garden itself must be at least 4500 sf.

2.2b Place secondary gardens to encourage cooperation between gardens.

It is important that the main garden, can itself be enlarged and extended by other future actions, by other developers on the neighboring lots on either side. To make this possible, the main garden must always open onto one side lotline, except in the case where the lot is more than 100' wide.

In any case there must always be some garden touching each of the two side yard lotlines. Where this requirement is fulfilled on both sides by the main garden, there need not be any secondary garden. On a single lot where the main garden touches just one side yard, the other side will require a secondary garden. On a double lot where the main garden does not touch either side, two secondary gardens must be created on the side lotlines to fulfil the requirement.

STEP 2.3 PLACE BUILDING VOLUMES.

2.3a Now, locate and shape your buildings according to the beauty of the garden and the character of the street.

.....
.....

Provide substantial enclosure to the garden by the location of the building volumes. At least 60% of its perimeter is enclosed by buildings.

Allow for connections and passages between gardens.

Maximum width of building volumes is 35'.

No building volume between 15' to 35' back from the sidewalk.

2.3b Pay attention to the front lot line.

Limited amount of single storey building volumes are allowed to be built up to the front lot line. These buildings or portions of buildings must be built in such a way that the front is 1' to 5' from the property line.

If there is no other building on your side of the street, within 250' in either direction, that goes to the front property line, then you are strongly encouraged to place at least part of your building up to the street.

2.3c While locating and shaping your building volumes allow your interior garden to be visible fromt he street.

Interior courtyards and gardens should be experienced from the street, and be visible from it, so that they contribute to the beauty and liveliness of the street.

Some interior gardens will be wide open on the street and some will feel secluded, connected to the street through a passage. This type of variety is extremely desirable.

At the time your new project is about to take place, the feeling of the whole street, from the point of view of visibility of gardens, has to be assessed.

The new apartment should open or enclose its garden towards the street to a degree that contributes mainly to the liveliness and character of the street as a whole.

2.3d Permission to build along side lot line, while allowing for continuity of building volumes.

While placing your building volumes you should bear in mind that you CAN build along the side and back lot lines.

There are two major reasons for allowing it:
a. No open space is waisted to left over strips of unusable space.
b. The fact that a building volume can be on the side lot lines allows for a cooperation between adjacent building volumes in the sense that building volumes can extend all the width of the lot, or they can touch each other. So, it is possible to introduce building volumes parallel to the street together with building volumes prependicular to the street, thus enabling the formation and enclosure of gardens and courtyards.

However, if you decide to do so, you should respect the adjacent properties. You should pay attention to existing major windows and entrances of adjacent buildings, and you should keep appropriate distances.

And follow the rules below:

1. The length of building volume along zero lot line on sides and back should not exceed 35% of the perimeter of the lot.

2. The length of any building volume along zero lot line on the side and back (except from carports) should not be more than 50 ft.

3. Place one of your building volumes parallel to the direction of the street, while enclosing the garden.

4. Building volumes of adjacent properties should never touch each other along their long dimension. Their common wall should not be more than 35 ft.

5. You should try to encourage building volumes parallel to the street.

2.3e Building volume could extend over driveway.

.....

2.3f Now, calculate again your total building volume.

Throughout the building volume you have defined, the average building height will need to be two stories, to get the maximum allowable density. There will be occasional exceptions to one story, and some exceptions to three stories.

In addition, it should be assumed that approximately half the parking area, is covered by a second story of apartments. On the basis of these assumptions, you may now calculate the total floor area, for the case where all building is built to two stories.

Then, in order to bring the building volume into line with the allowed development, the following adjustments must now be made.

1. On any building within 50' of the street, at least 50% of its length along the street must be softened by one storey porches, alcoves, room extensions or galleries.

2. Any three storey construction needed to complete the full allowable density, must be placed on the back 40% of the lot. Three storey construction may be built over parking.

STAGE 3

DETAILED ORGANIZATION OF PROJECT.

STEP 3.1 LAY OUT DETAILS OF PARKING.

3.1a. Locate parking spaces.

3.1b. Provide for back alley easement.

3.1c. Shape parking space as positive and usable space.

3.1d. If driveway adjacent to garden, make it feel part of the garden.

STEP 3.2 DIVIDE BUILDING VOLUME INTO APARTMENTS.

Within the overall building volume which has been established, the N apartments permitted by the ordinance, may now be identified.

3.2a. Define the location of the apartments.

Cut up the total volume, into apartments. There must be no attempt to make apartments of standard shape. Rather, each apartment should now take a shape which is appropriate to its unique position.

Each apartment must get light from at least two sides.

The apartments should be divided out, with the following rules in mind:

1. At least one, and possibly two apartments should be entered directly from the street side, with entrances visible from the street.

2. In as many cases as possible, the apartments should have access from the main garden.

3. The pattern of circulation which is created, should encourage very simple access from the parking lot, through the main garden, to the apartments.

3.2b. Provide for a connection from the parking through the garden to the apartments.

STEP 3.3 DIVIDE BUILDING VOLUME INTO APARTMENTS.

3.3a. Locate apartment entrances in relationship to the gardens and street.

Some entrances to apartments should be embellished with porches, stoops, steps, or stairs. This should be done only for those cases where this element helps the overall structure.

STAGE 4

CHARACTER OF PROJECT.

STEP 4.1 MAP DETAILS OF NEARBY BUILDINGS.

STEP 4.2 ARTICULATE ROOFS AND EAVES.

4.2a. Shape roofs in relationship to roofs of adjacent buildings.

STEP 4.3 DESIGN DETAILS OF GARDEN.

4.3a. Define clearly all edges of garden with trees, plants, low walls, hedges, etc..

4.3b. Define position of major trees in the main garden and along the street.

4.3c. Locate lawn areas and paved areas in the garden.

4.3d. Locate paths and entrance gates.

STEP 4.4 CHOOSE BUILDING MATERIALS AND COLOR.

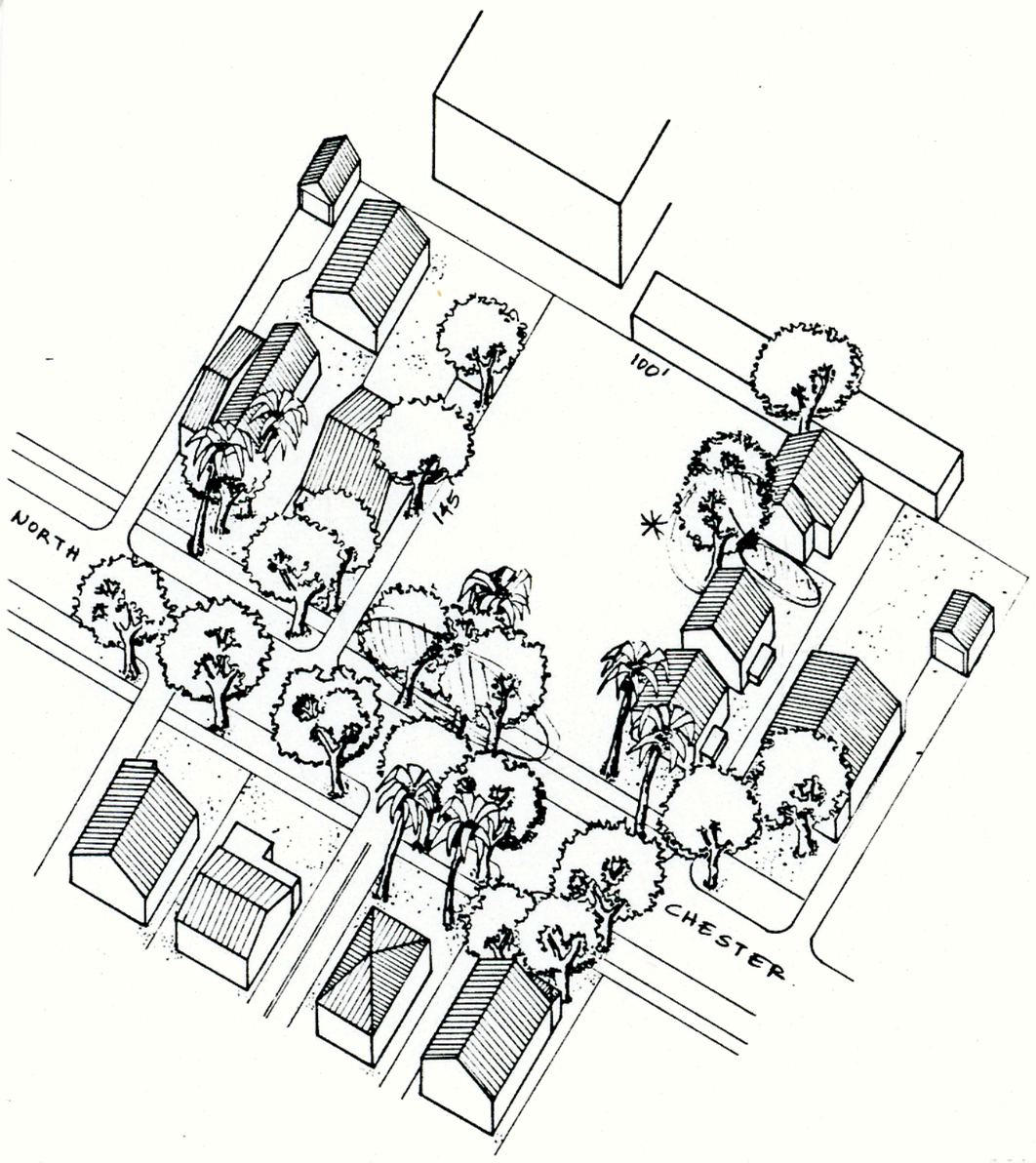
4.4a. Choose building materials and color for exterior walls, roof, and ground surfaces.

WORKED EXAMPLE #1

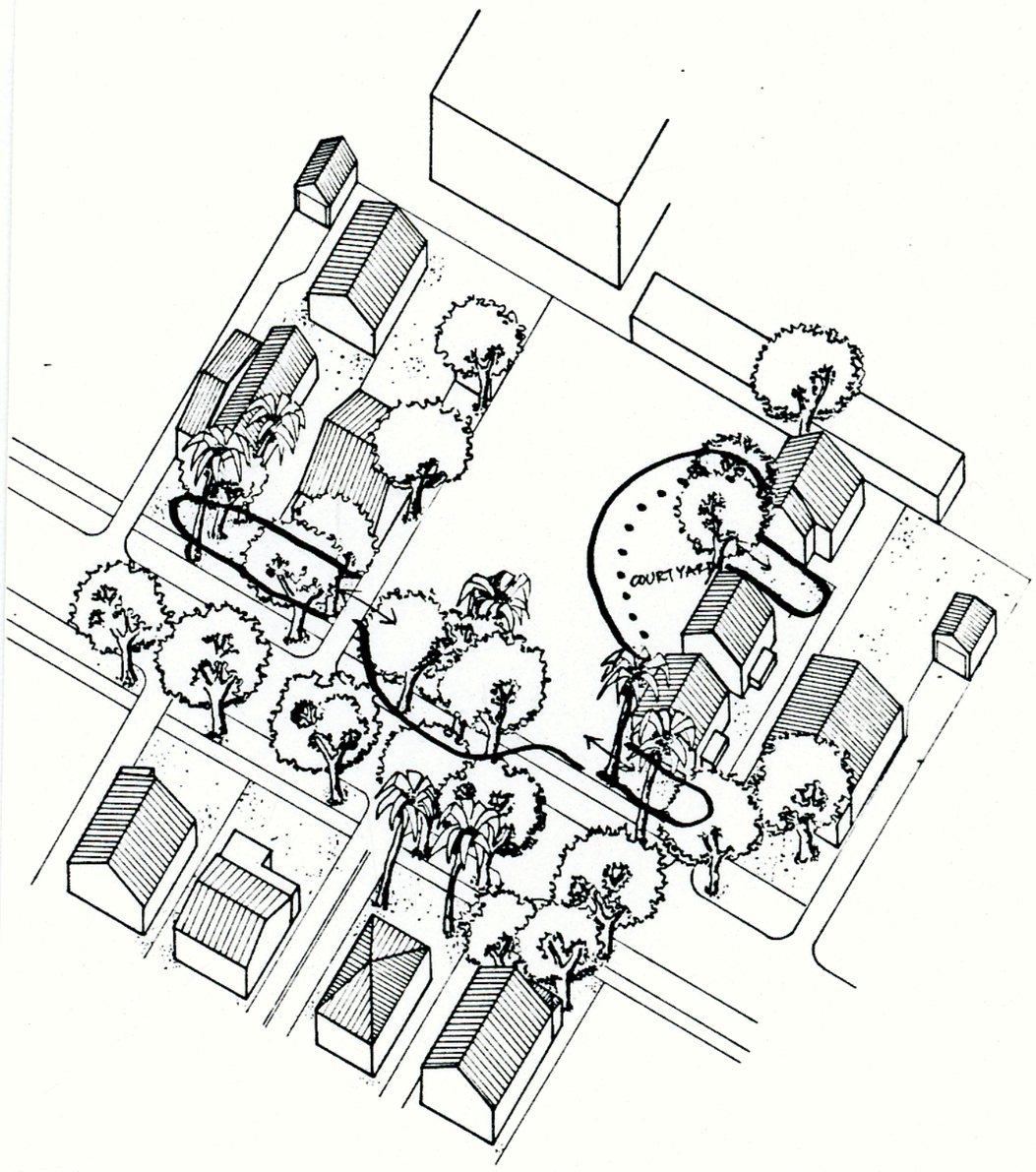
146-148 North Chester.

34 units per acre.

1. MAP THE CONTEXT AND SURROUNDINGS OF LOT.



2. DECIDE ARRANGMENT AND POSITION OF MAIN GARDEN.



3. CALCULATE NUMERICAL PARAMETERS.

146-148 NORTH CHESTER ST.

CALCULATE THE FOLLOWING KEY NUMERICAL PARAMETERS, AS REQUIRED BY THE ZONING ORDINANCE.

(Refer to Step #5 of the Process, p.__ of the Zoning Ordinance).

Density Zone: RM-48

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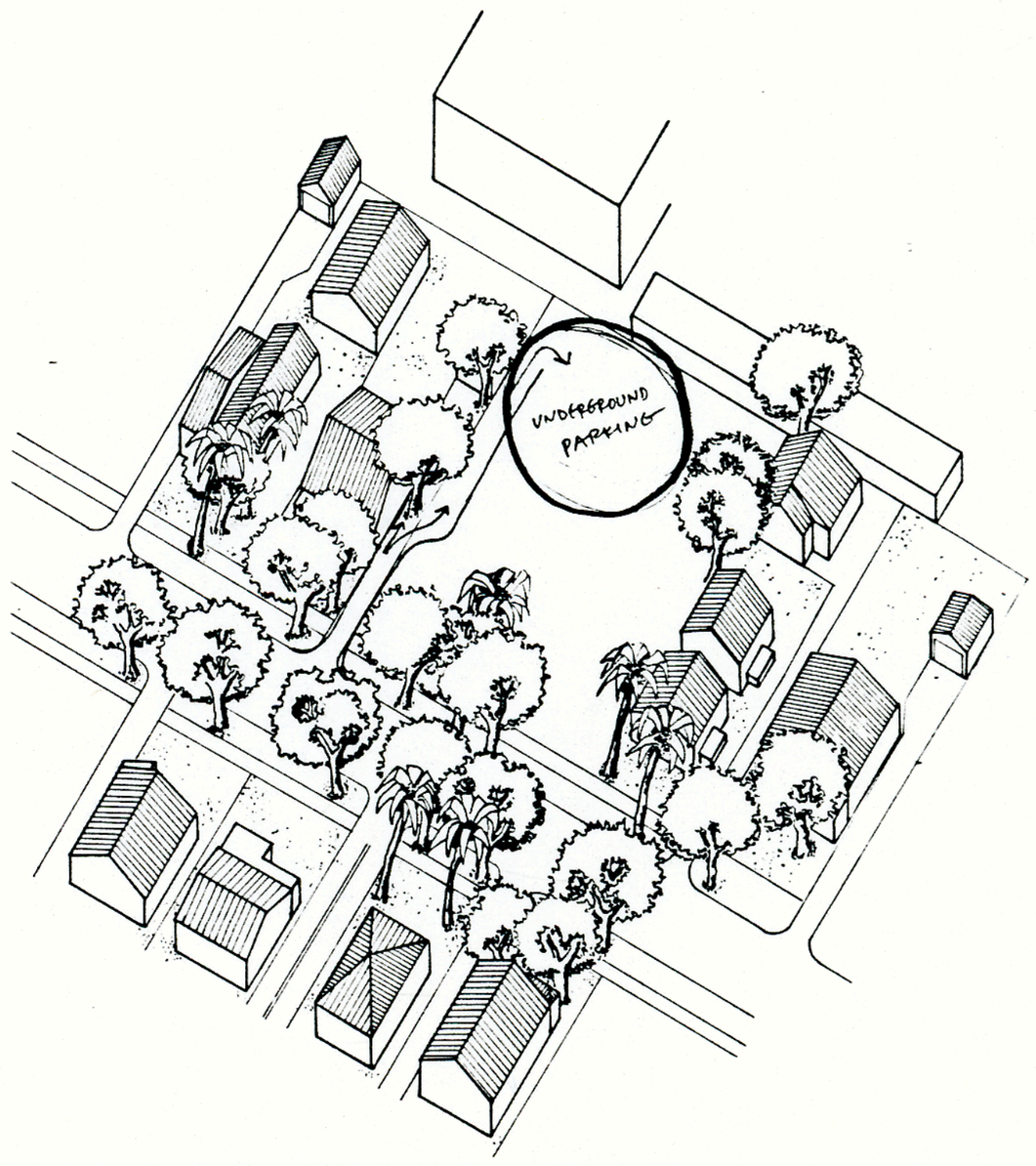
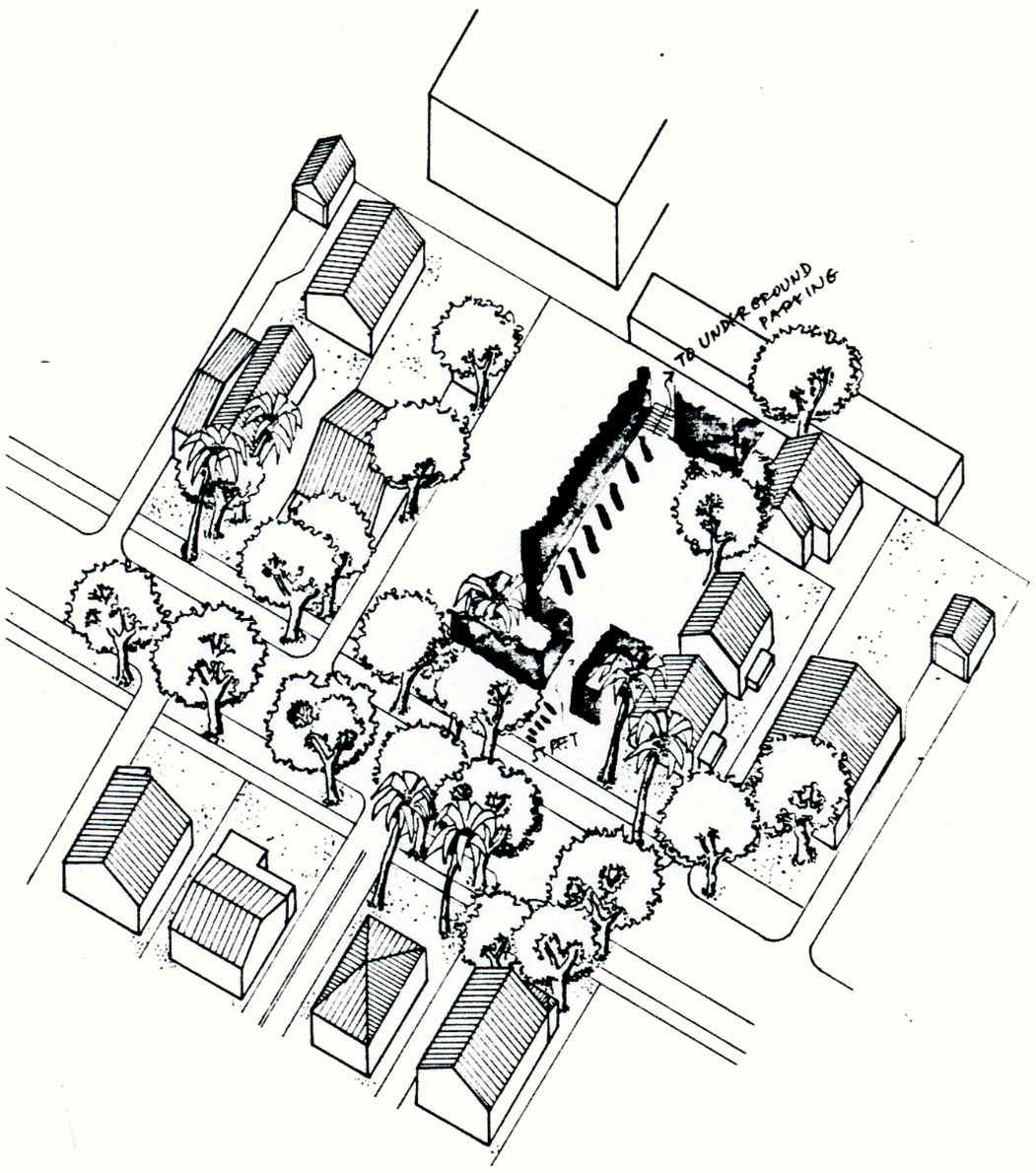
1)	Lot area:	15,400 sf
2)	Context FAR:	0.31
3)	Multiplier:	—
4)	Allowable lot FAR:	0.90
5)	Allowable built space:	13,087 sf
6)	Number of units:	12
7)	Required # of parking spaces:	18
8)	Required parking area:	7,200 sf > 5,400 REQ'D
9)	Total required area of gardens:	6,200 sf
10)	Required area of main garden:	3,750 sf

---

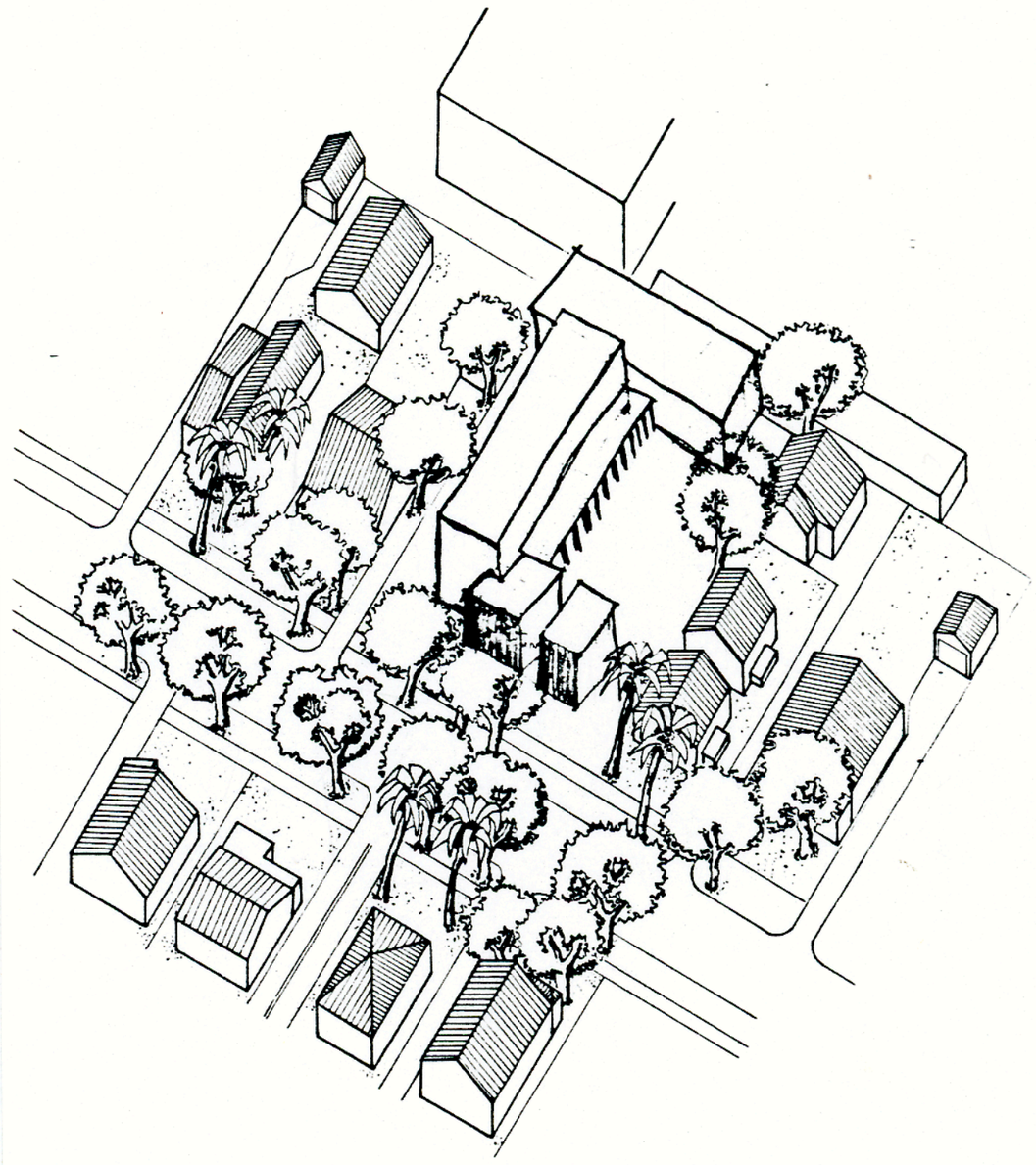
4. PROVIDE DRIVEWAY AND LOCATE PARKING.



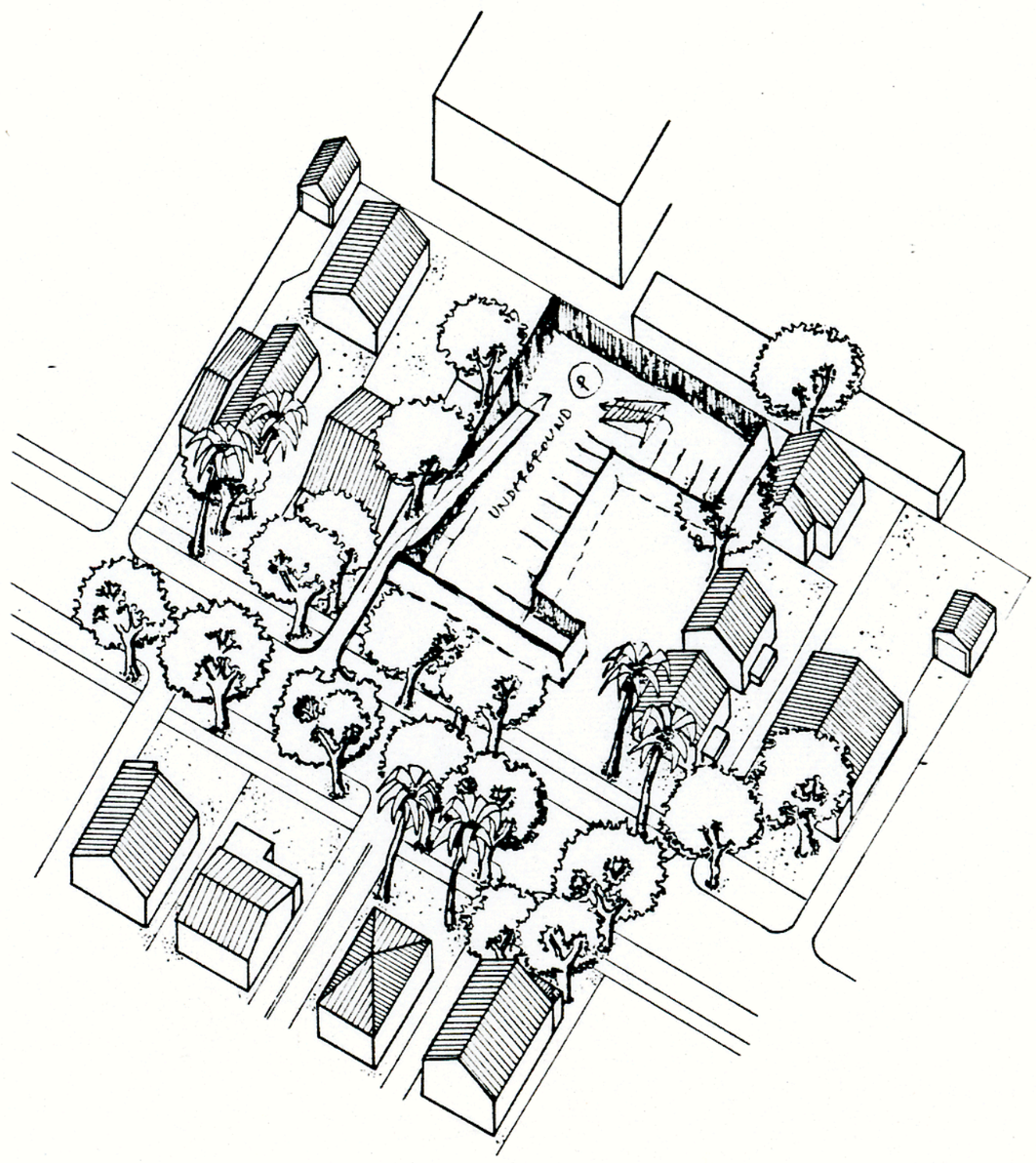
5. ESTABLISH SEQUENCE OF OPEN SPACES FROM STREET TO PARKING LOT, AND DEFINE EDGES.



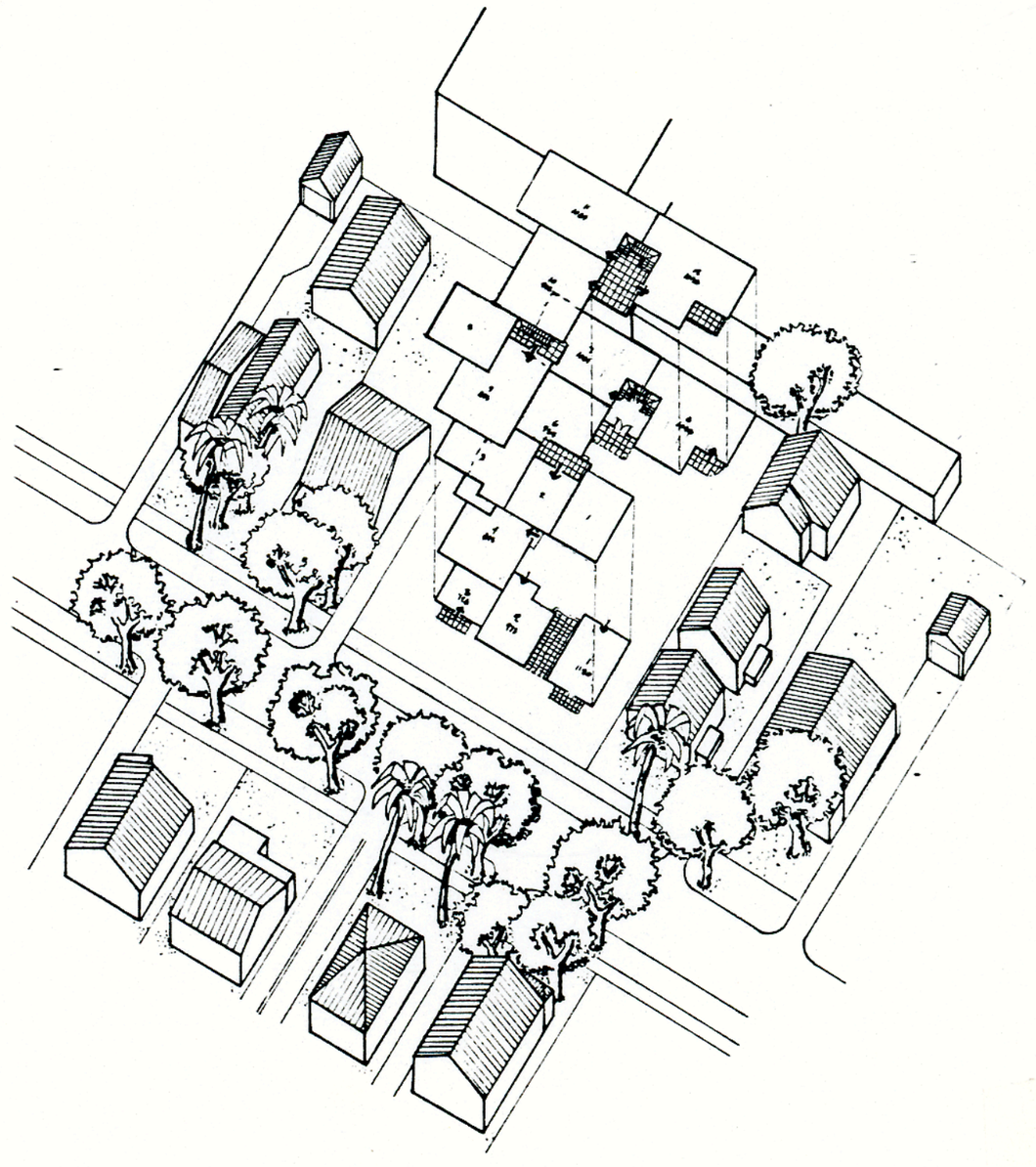
6. PLACE BUILDING VOLUMES.



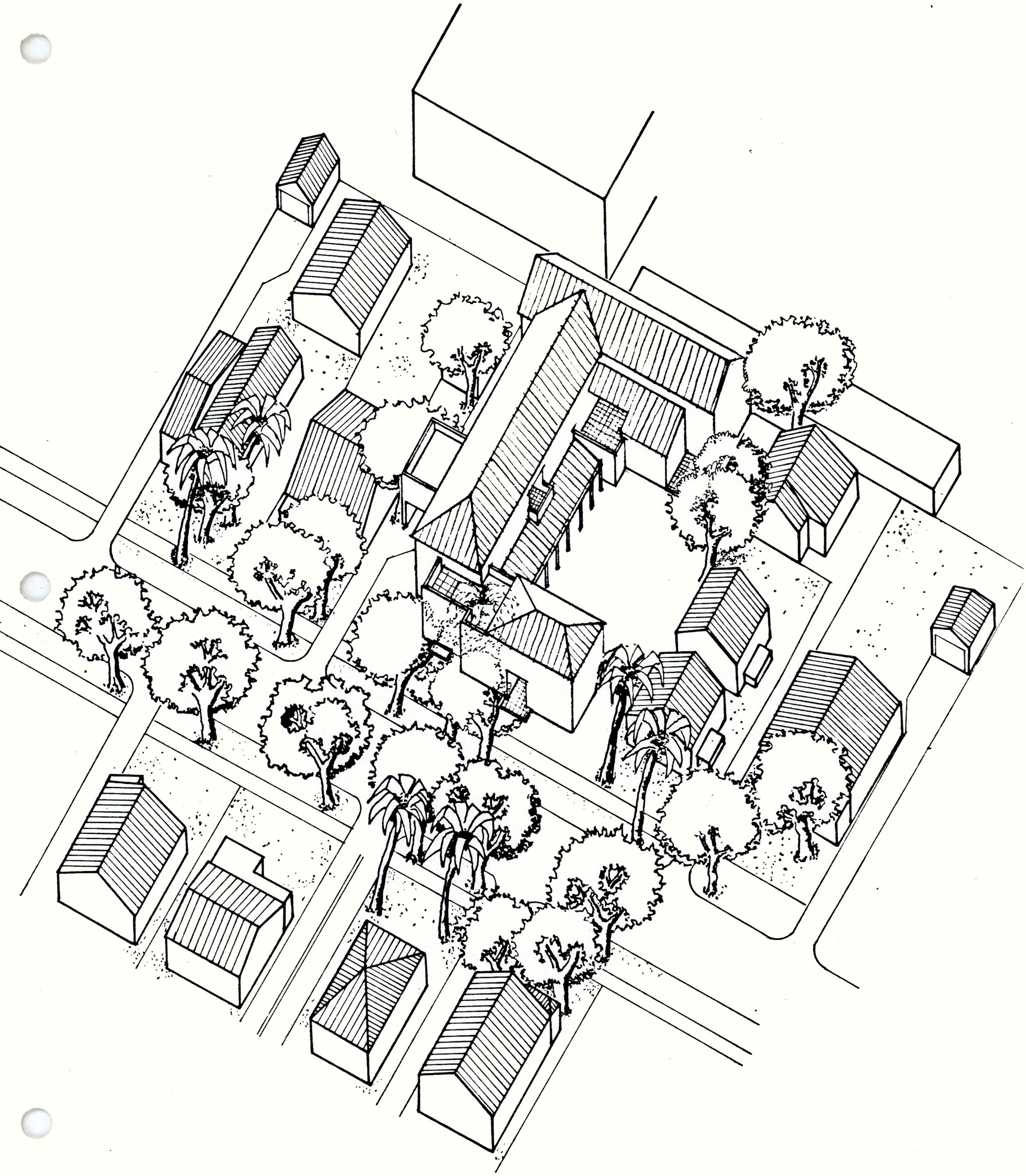
7. DESIGN PARKING PRECISELY.



8. DIVIDE BUILDING VOLUME INTO APARTMENT UNITS, AND PLACE ENTRANCES.



9. ESTABLISH CHARACTER OF PROJECT.

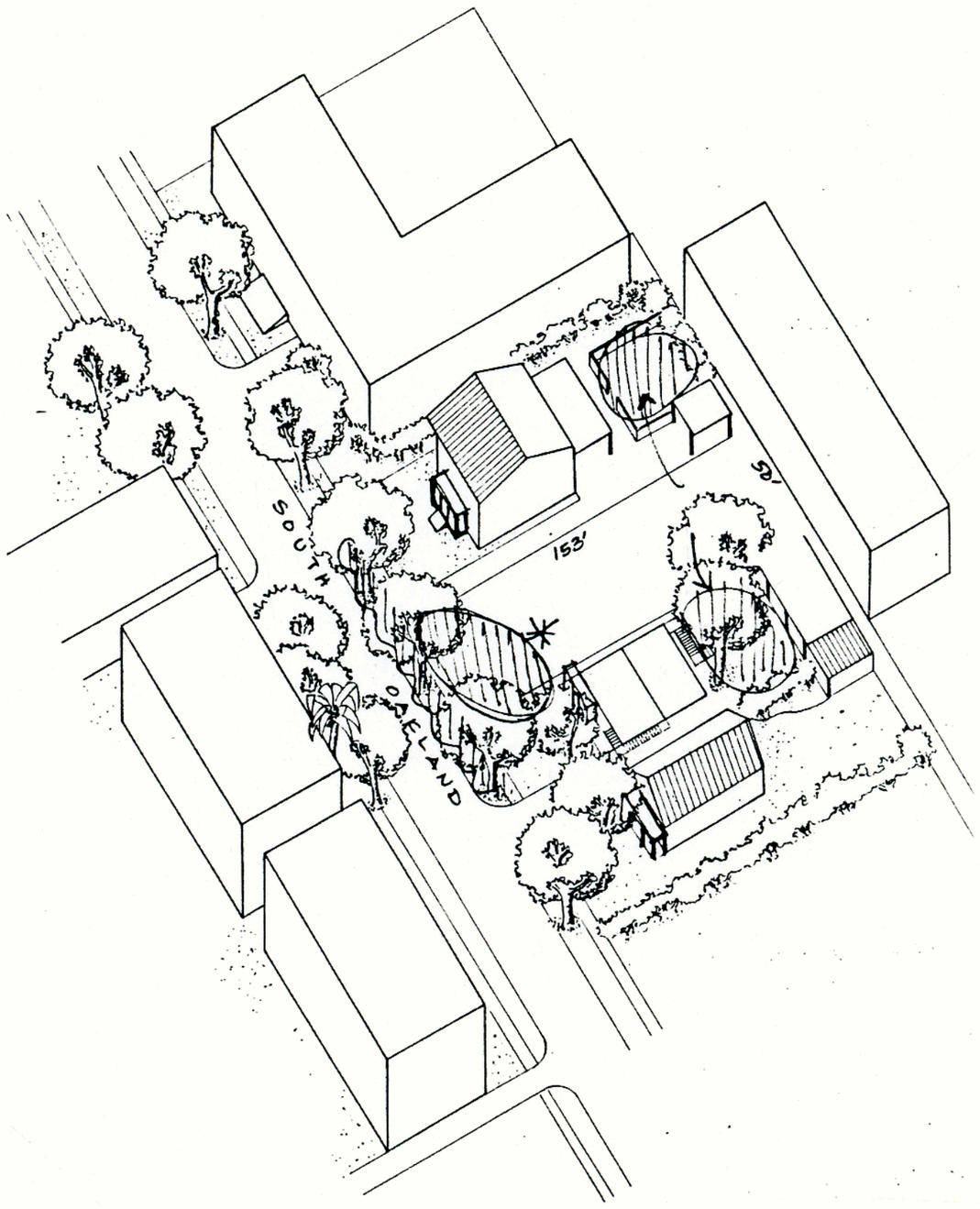


WORKED EXAMPLE #2

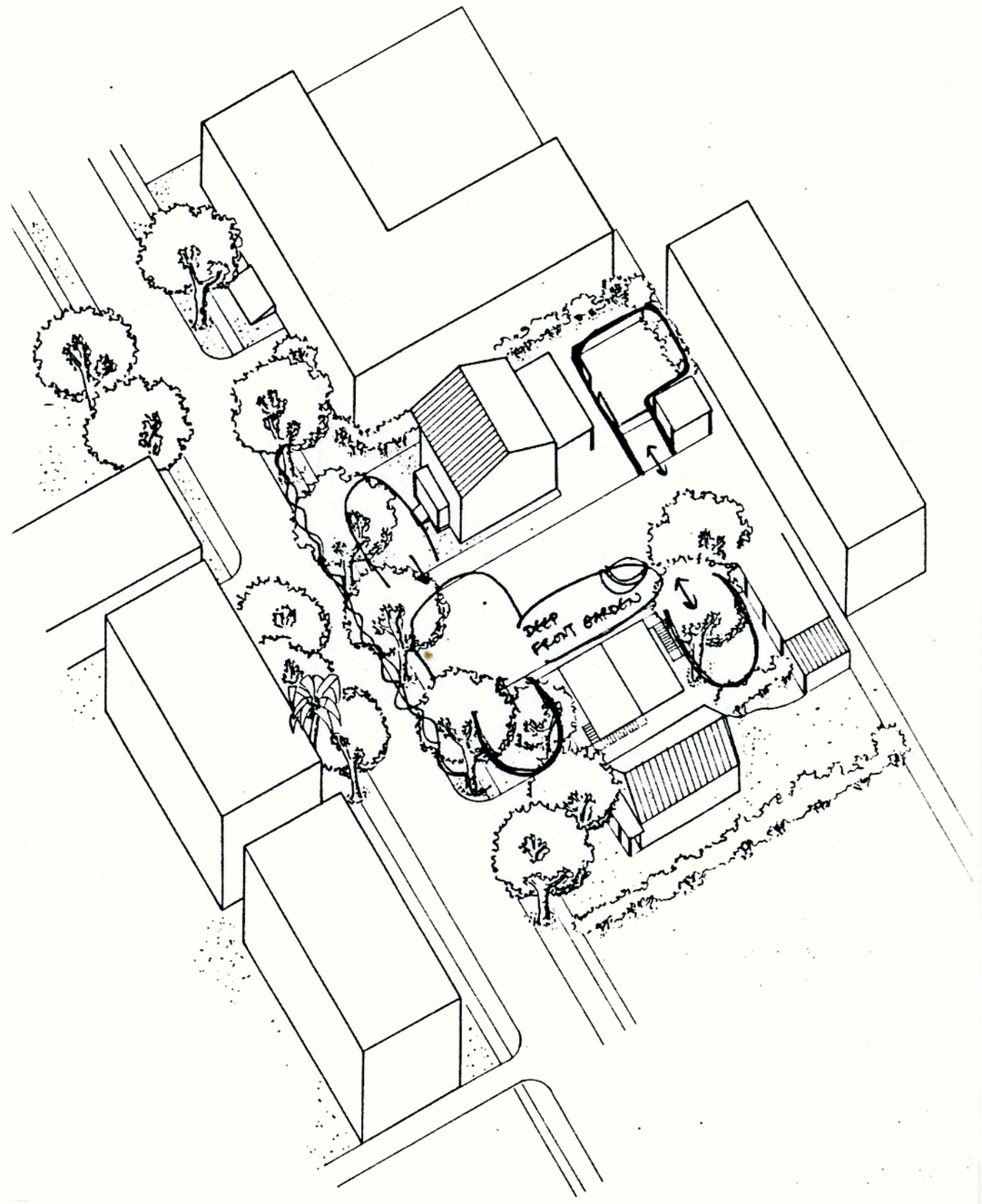
376 South Oakland.

32 units per acre.

1. MAP THE CONTEXT AND SURROUNDINGS OF LOT.



2. DECIDE ARRANGMENT AND POSITION OF MAIN GARDEN.



3. CALCULATE NUMERICAL PARAMETERS.

376 SOUTH OAKLAND ST.

CALCULATE THE FOLLOWING KEY NUMERICAL PARAMETERS, AS REQUIRED BY THE ZONING ORDINANCE.

(Refer to Step #5 of the Process, p.__ of the Zoning Ordinance).

Density Zone: RM-32

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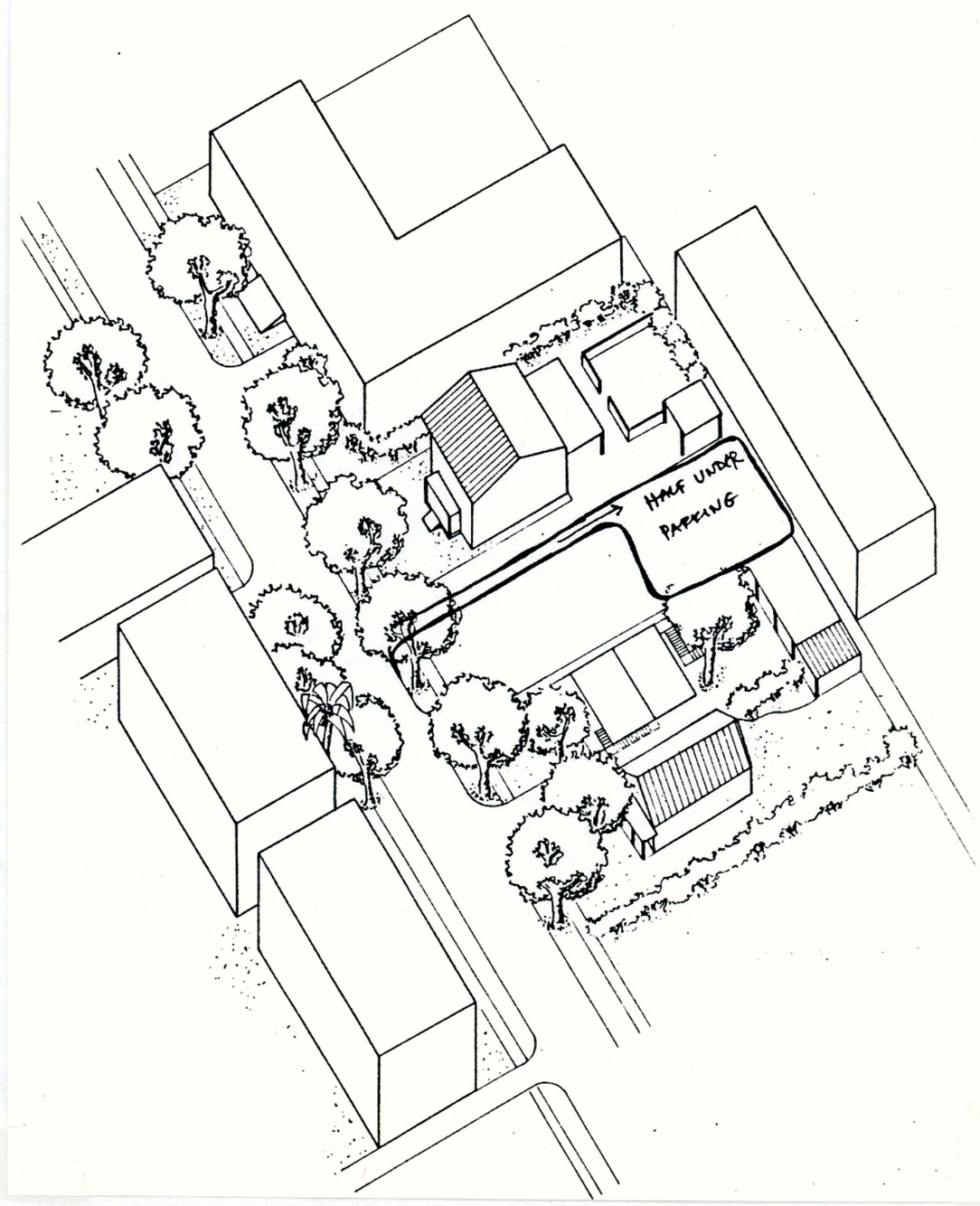
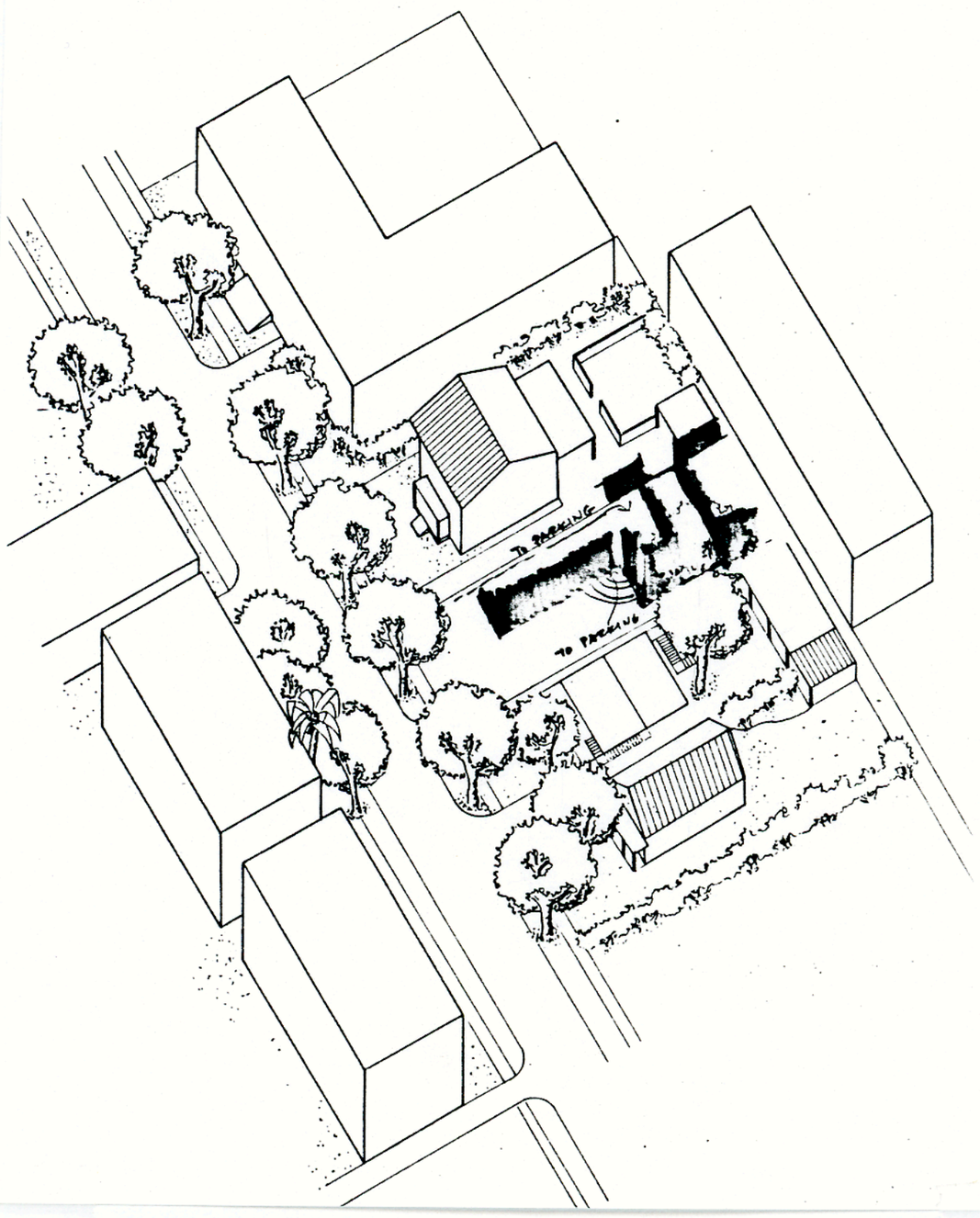
1)	Lot area:	7,650 sf
2)	Context FAR:	0.89
3)	Multiplier:	—
4)	Allowable lot FAR:	0.79
5)	Allowable built space:	6,069 sf
6)	Number of units:	6
7)	Required # of parking spaces:	9
8)	Required parking area:	3,950 sf
9)	Total required area of gardens:	3,670 sf
10)	Required area of main garden:	2,670 sf

---

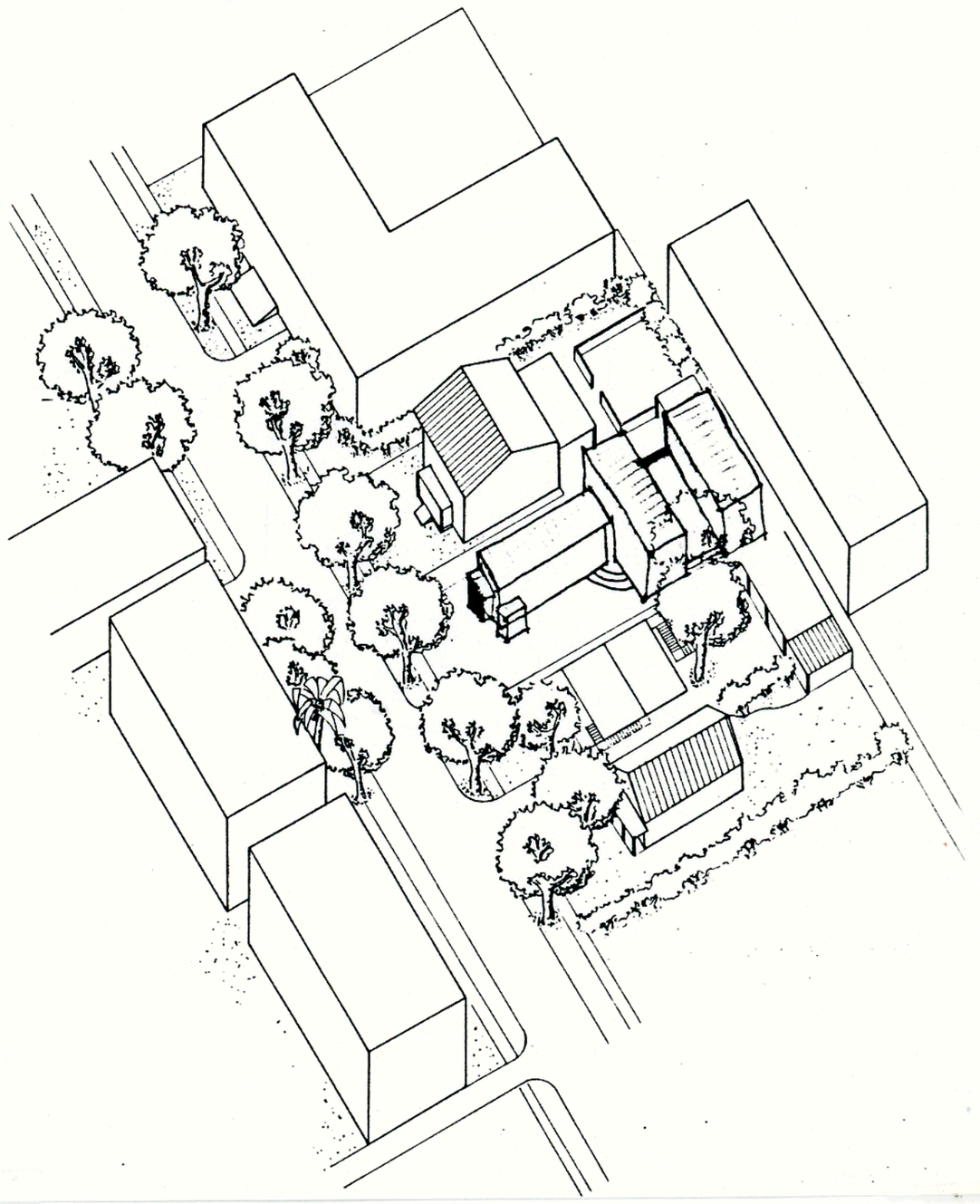
4. PROVIDE DRIVEWAY AND LOCATE PARKING.



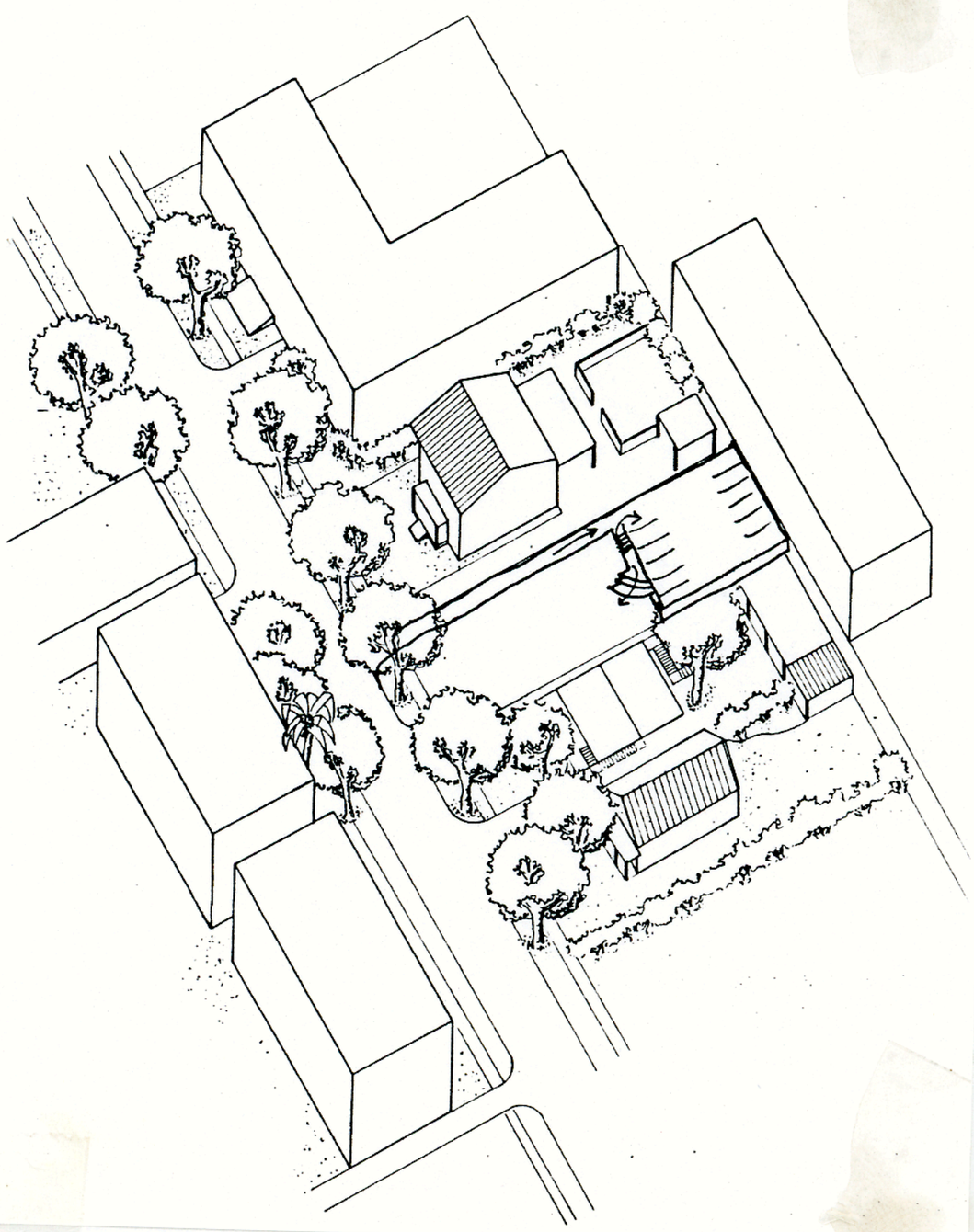
5. ESTABLISH SEQUENCE OF OPEN SPACES FROM STREET TO PARKING LOT, AND DEFINE EDGES.



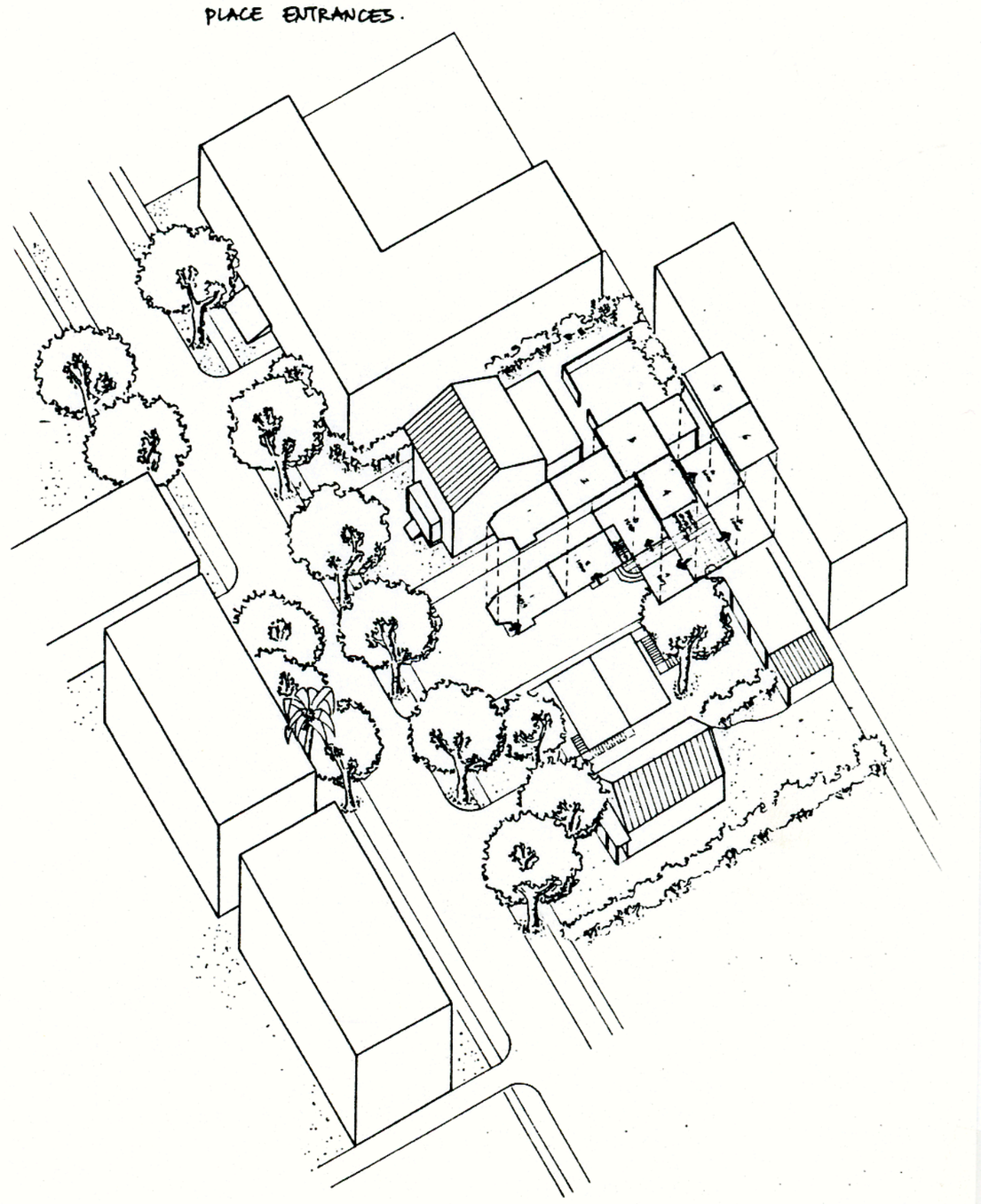
6. PLACE BUILDING VOLUMES.



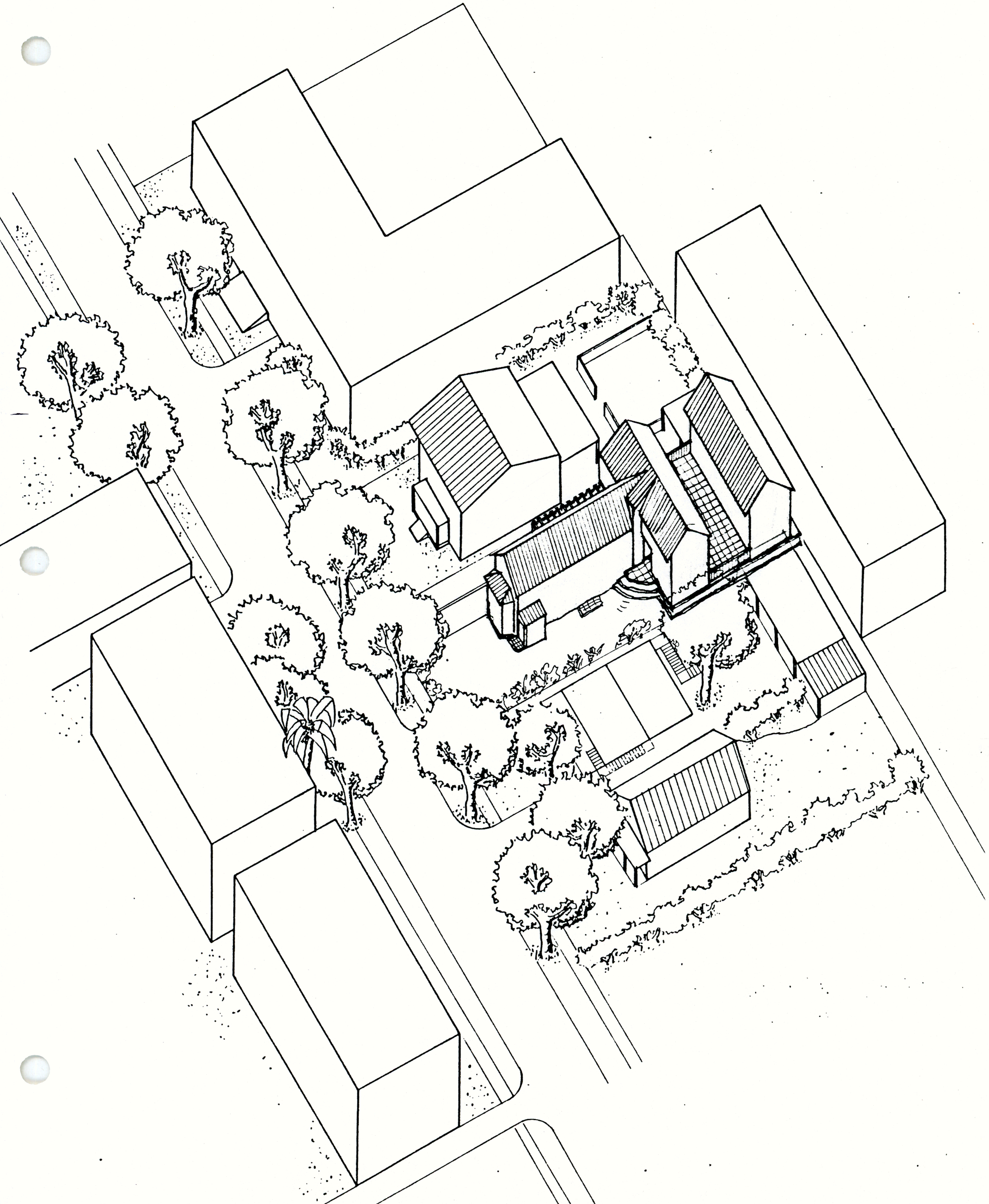
7. DESIGN PARKING PRECISELY.



8. DIVIDE BUILDING VOLUME INTO APARTMENT UNITS, AND PLACE ENTRANCES.



9. ESTABLISH CHARACTER OF PROJECT.

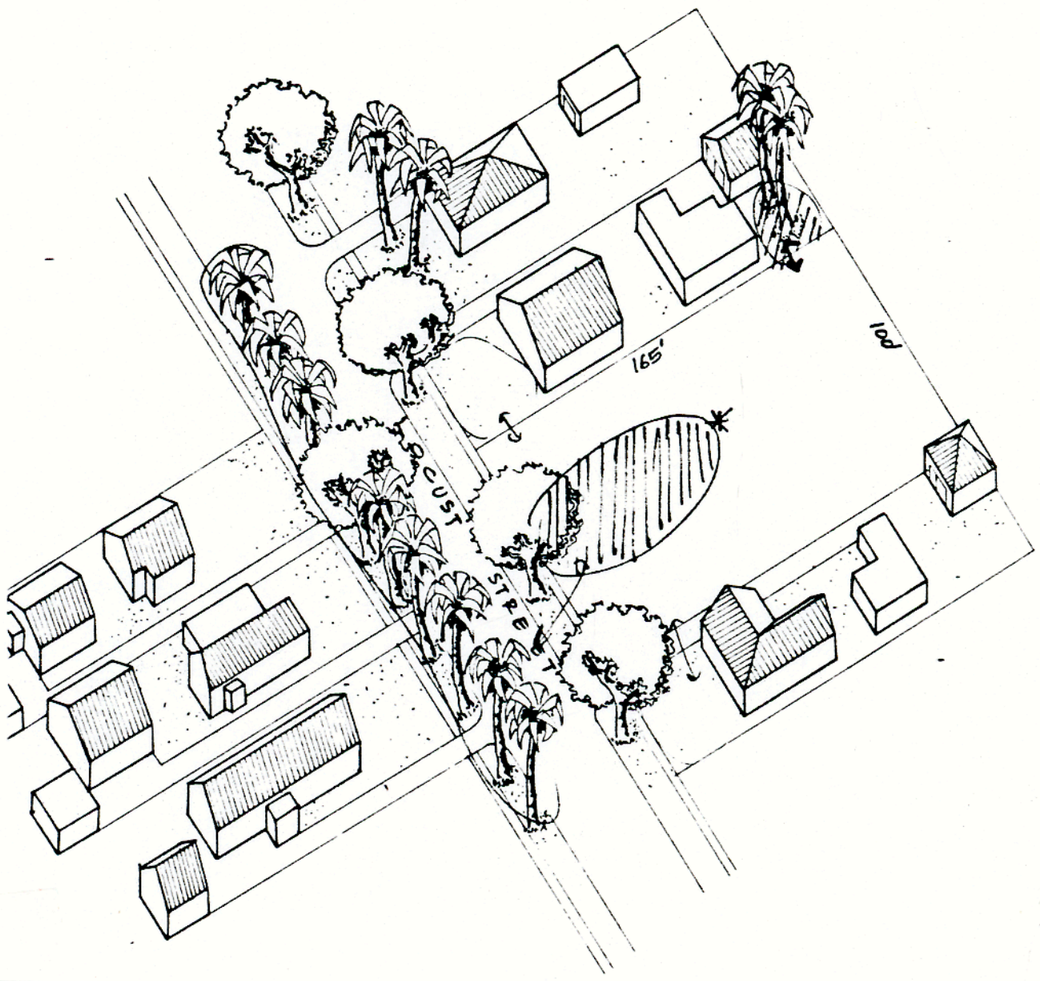


WORKED EXAMPLE #3

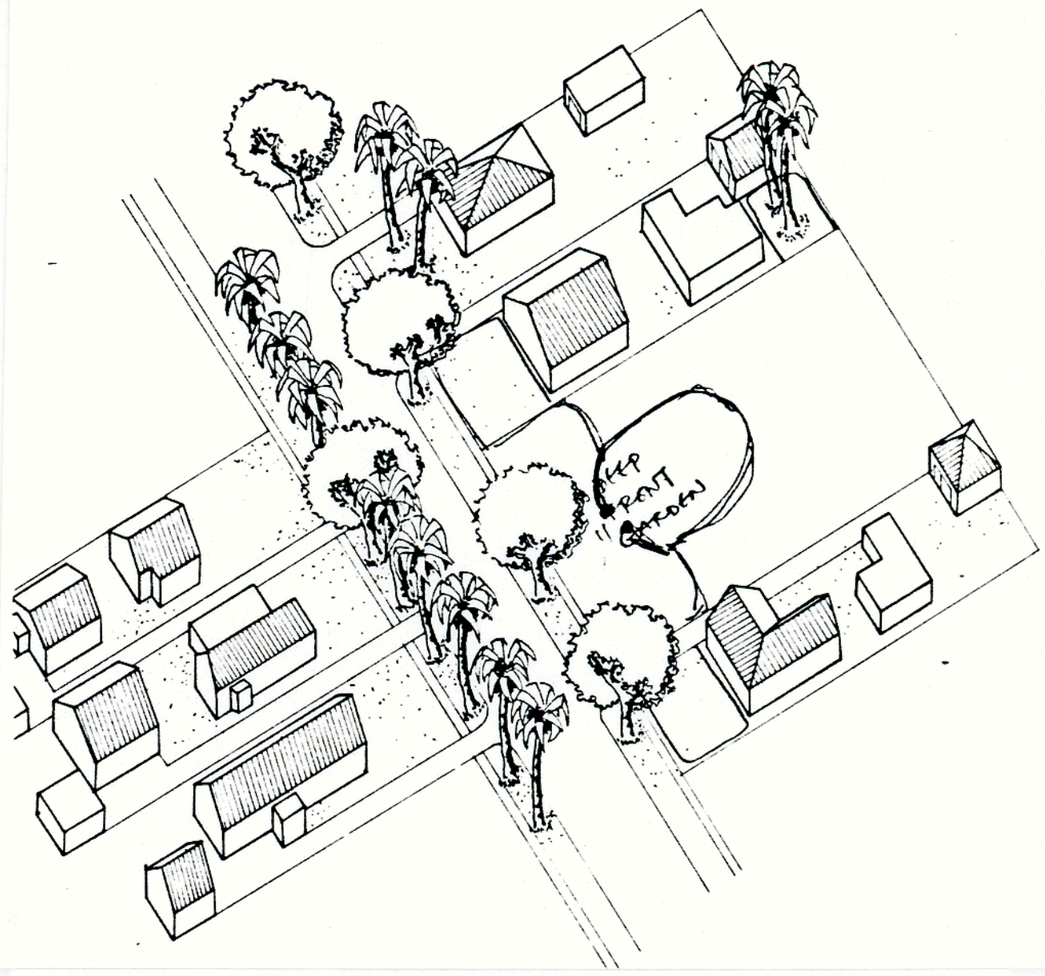
1543-1551 Locust.

20 units per acre.

1. MAP THE CONTEXT AND SURROUNDINGS OF LOT.



2. DECIDE ARRANGEMENT AND POSITION OF MAIN GARDEN.



3. CALCULATE NUMERICAL PARAMETERS.

1543-1551 LOCUST ST.

CALCULATE THE FOLLOWING KEY NUMERICAL PARAMETERS, AS REQUIRED BY THE ZONING ORDINANCE.

(Refer to Step #5 of the Process, p.__ of the Zoning Ordinance).

Density Zone: RM-16

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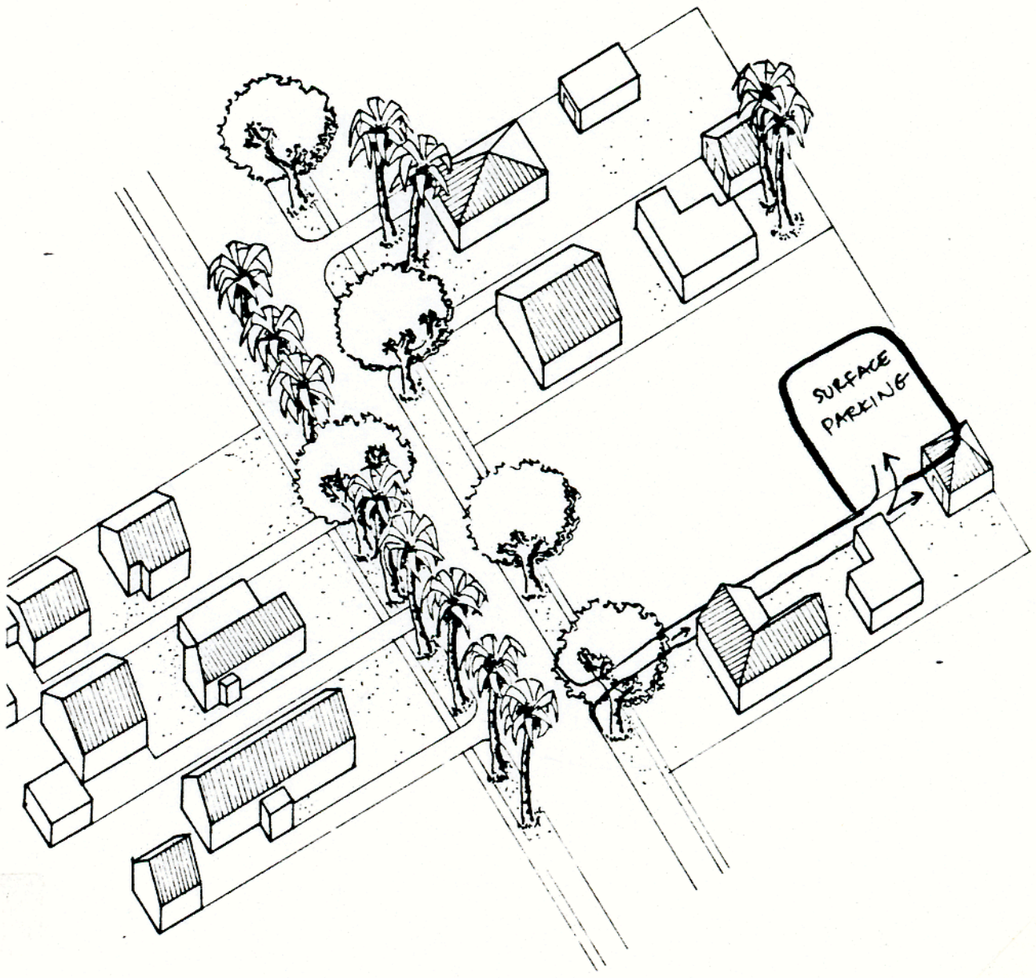
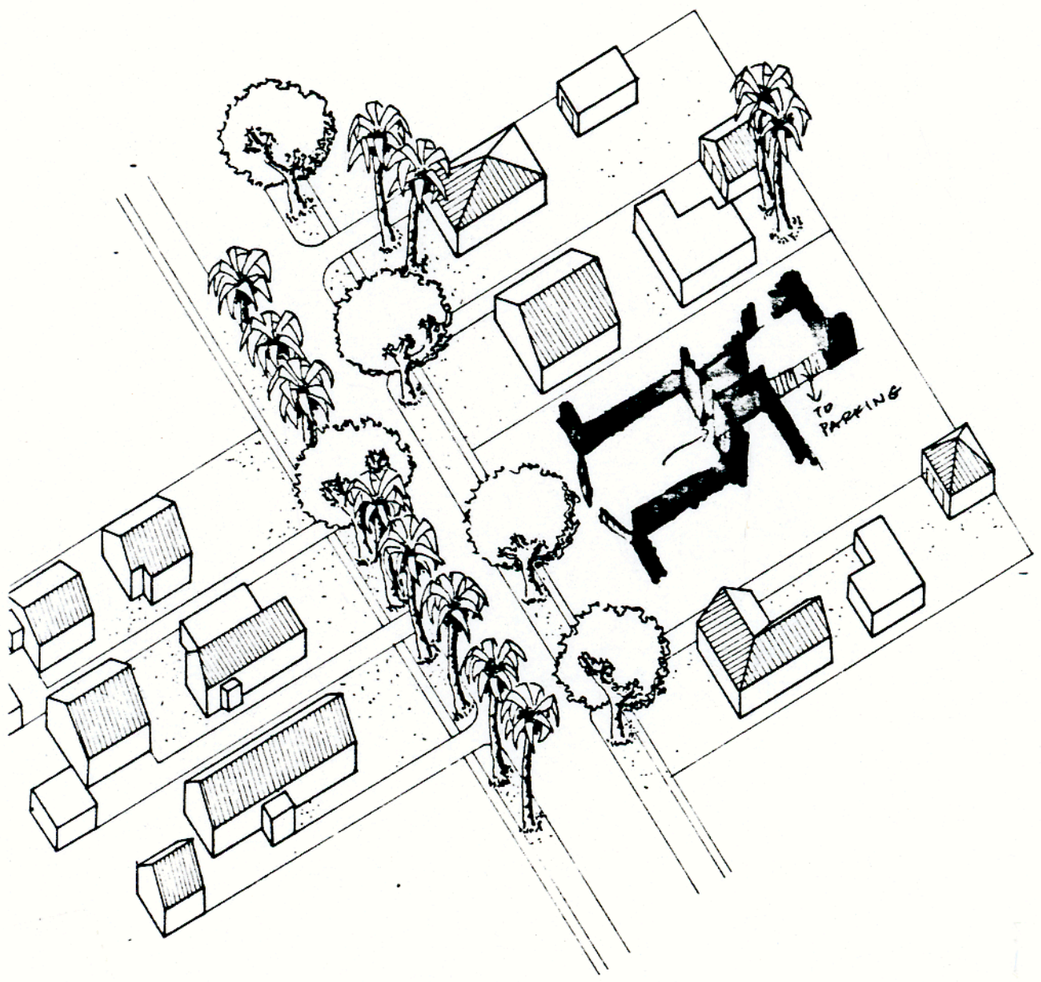
1)	Lot area:	16,500 sf
2)	Context FAR:	0.18
3)	Multiplier:	–
4)	Allowable lot FAR:	0.48
5)	Allowable built space:	7,962 sf
6)	Number of units:	8
7)	Required # of parking spaces:	12
8)	Required parking area:	_____ sf
9)	Total required area of gardens:	6658 sf
10)	Required area of main garden:	2,308 sf

---

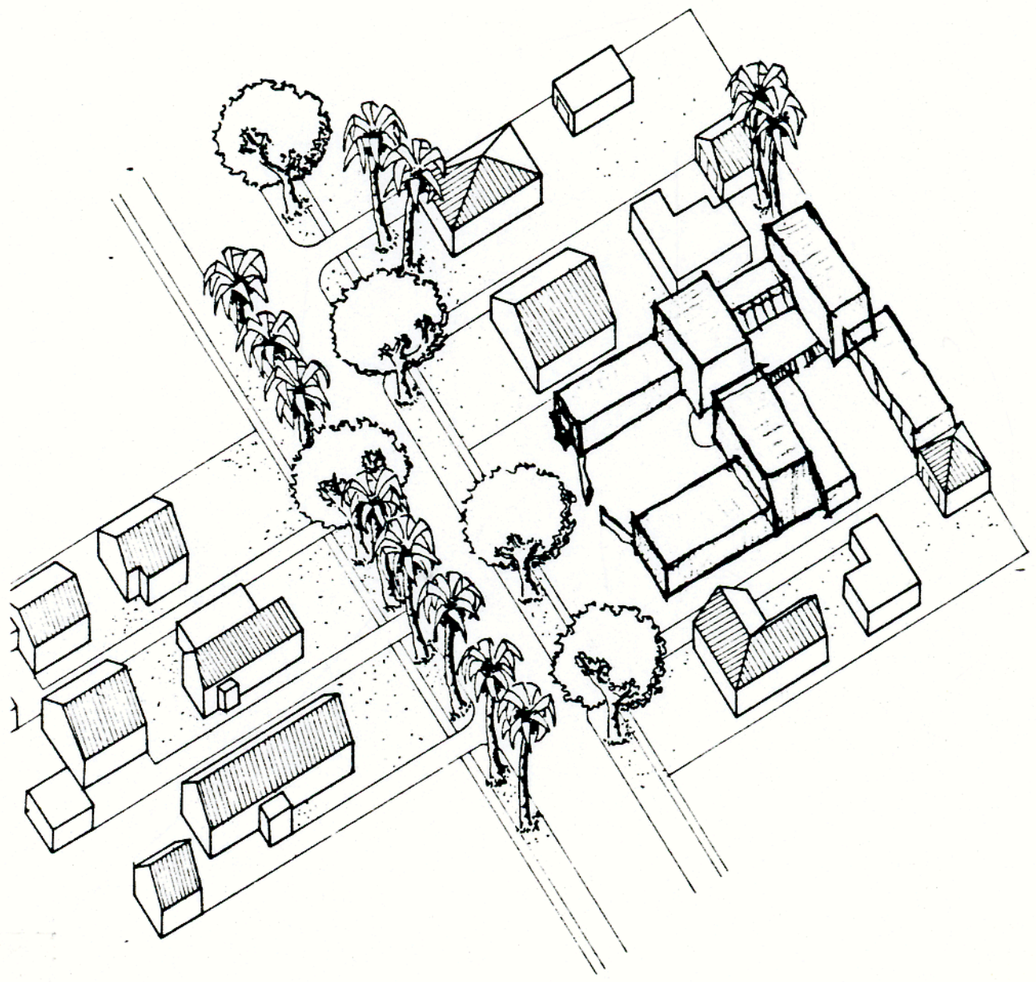
4. PROVIDE DRIVEWAY AND LOCATE PARKING.



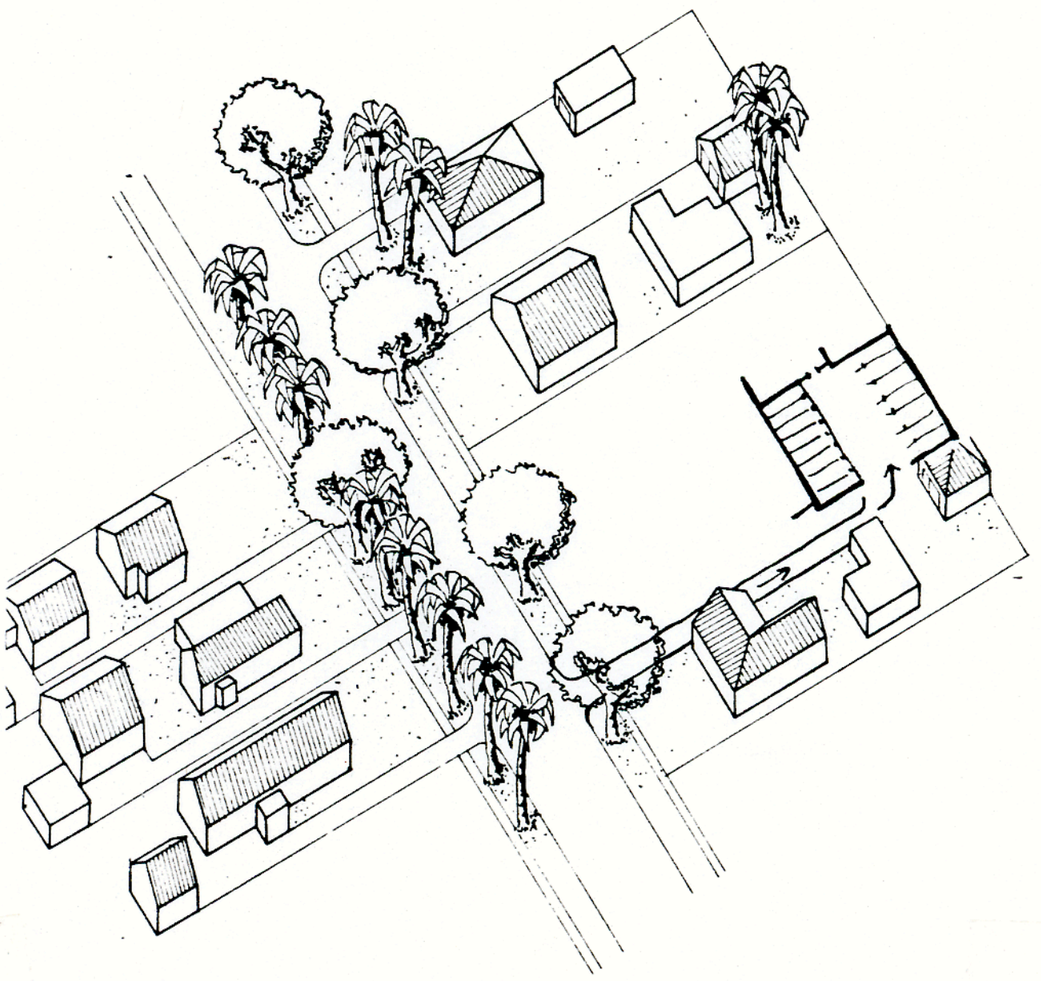
5. ESTABLISH SEQUENCE OF OPEN SPACES FROM STREET TO PARKING LOT, AND DEFINE EDGES.



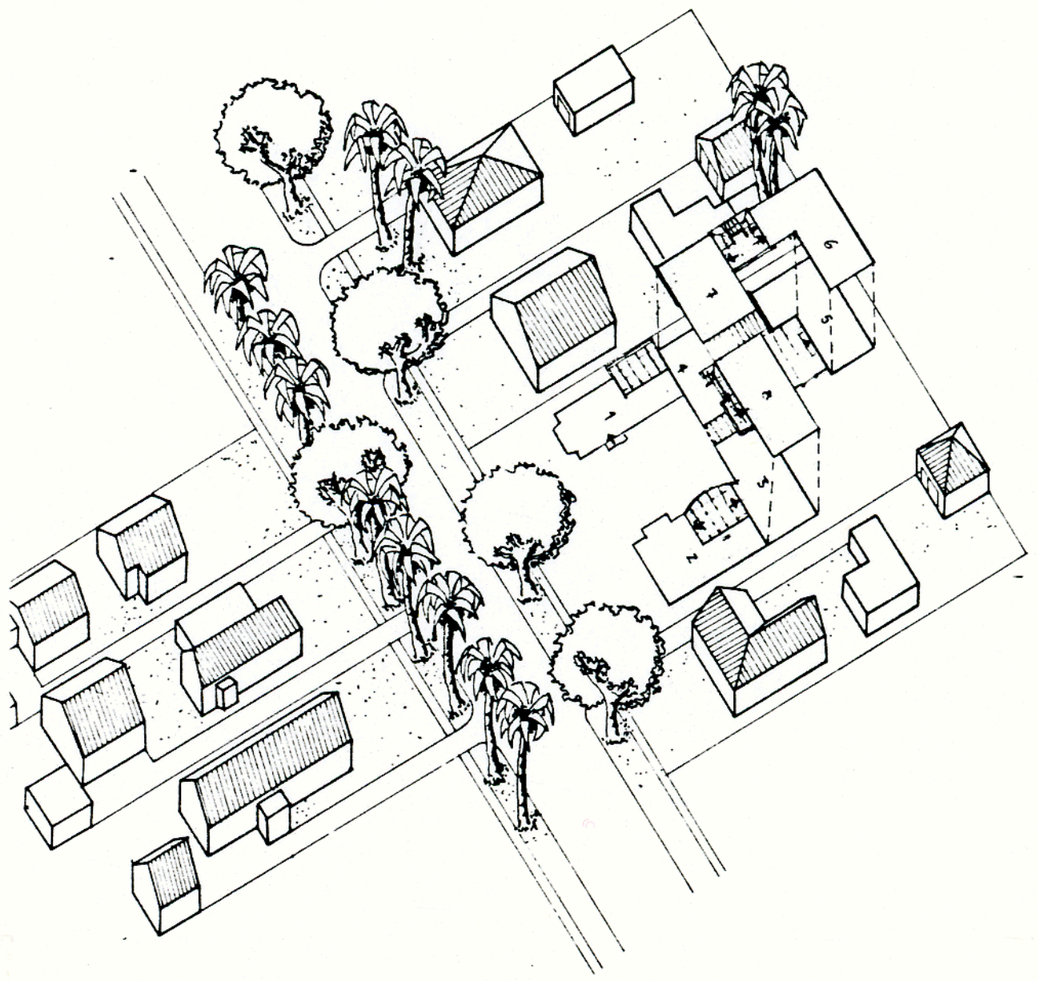
6. PLACE BUILDING VOLUMES.



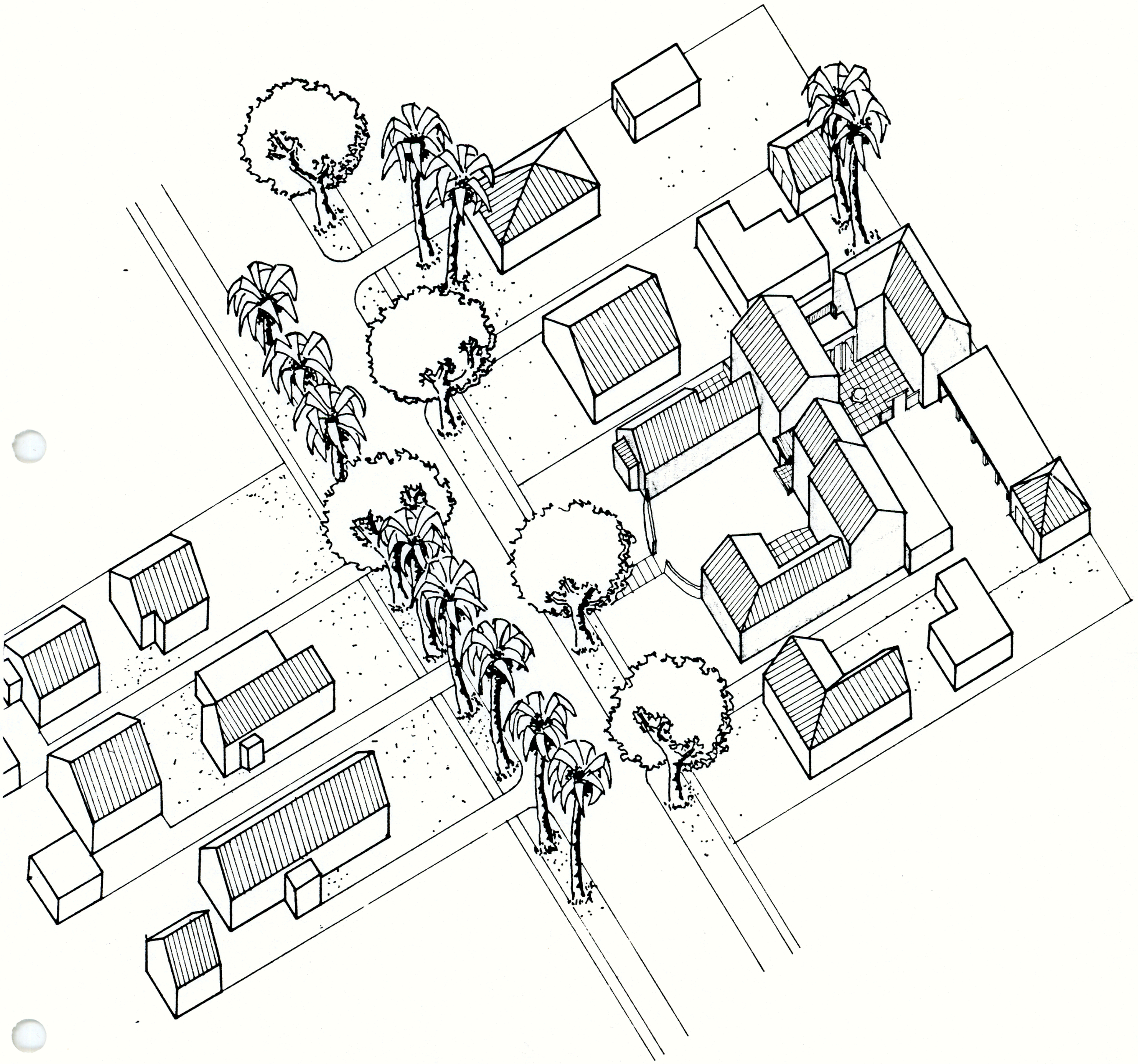
7. DESIGN PARKING PRECISELY.



8. DIVIDE BUILDING VOLUME INTO APARTMENT UNITS, AND PLACE ENTRANCES.



9. ESTABLISH CHARACTER OF PROJECT.

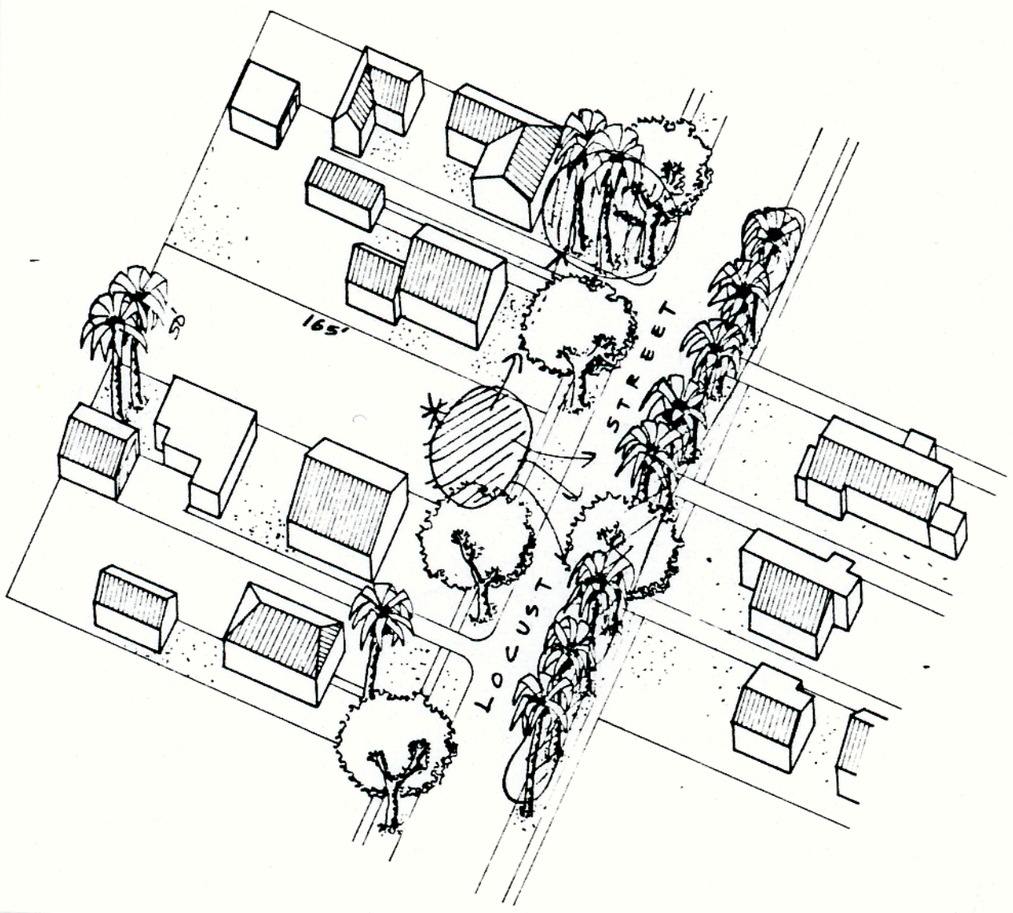


WORKED EXAMPLE #4

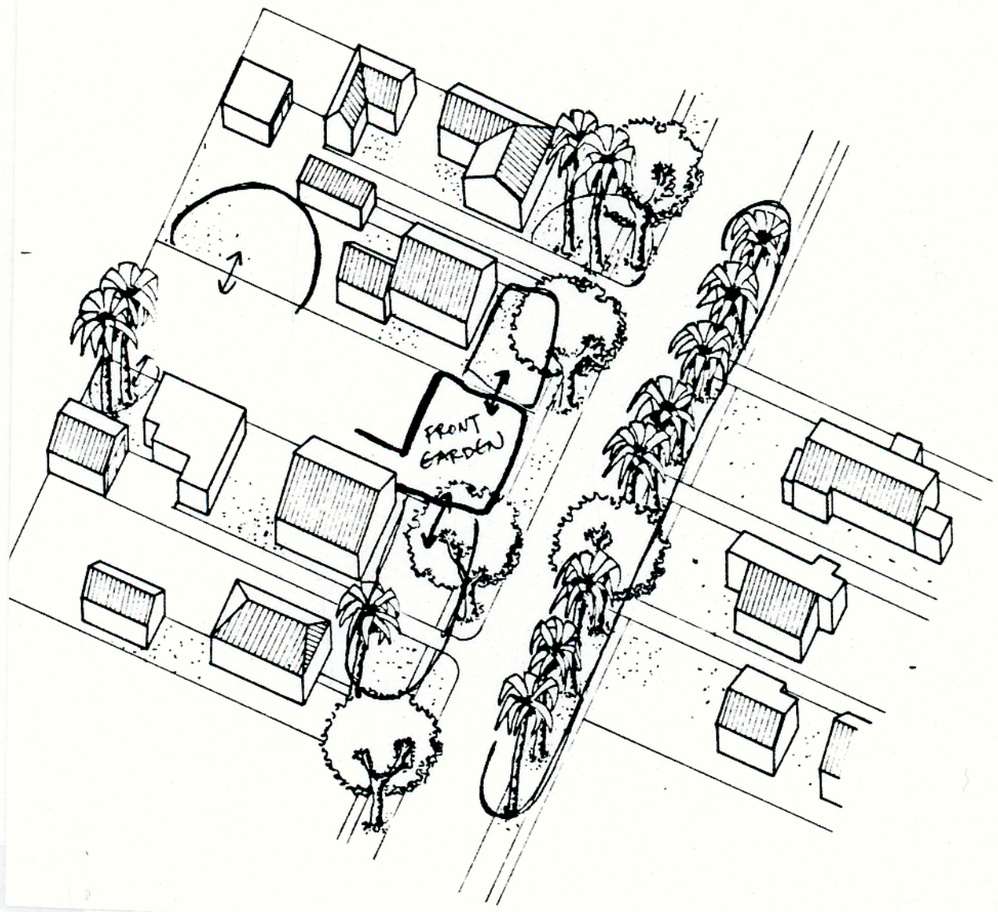
1543-1549 Locust.

15 units per acre.

1. MAP THE CONTEXT AND SURROUNDINGS OF LOT.



2. DECIDE ARRANGEMENT AND POSITION OF MAIN GARDEN.



3. CALCULATE NUMERICAL PARAMETERS.

1543-1549 LOCUST ST.

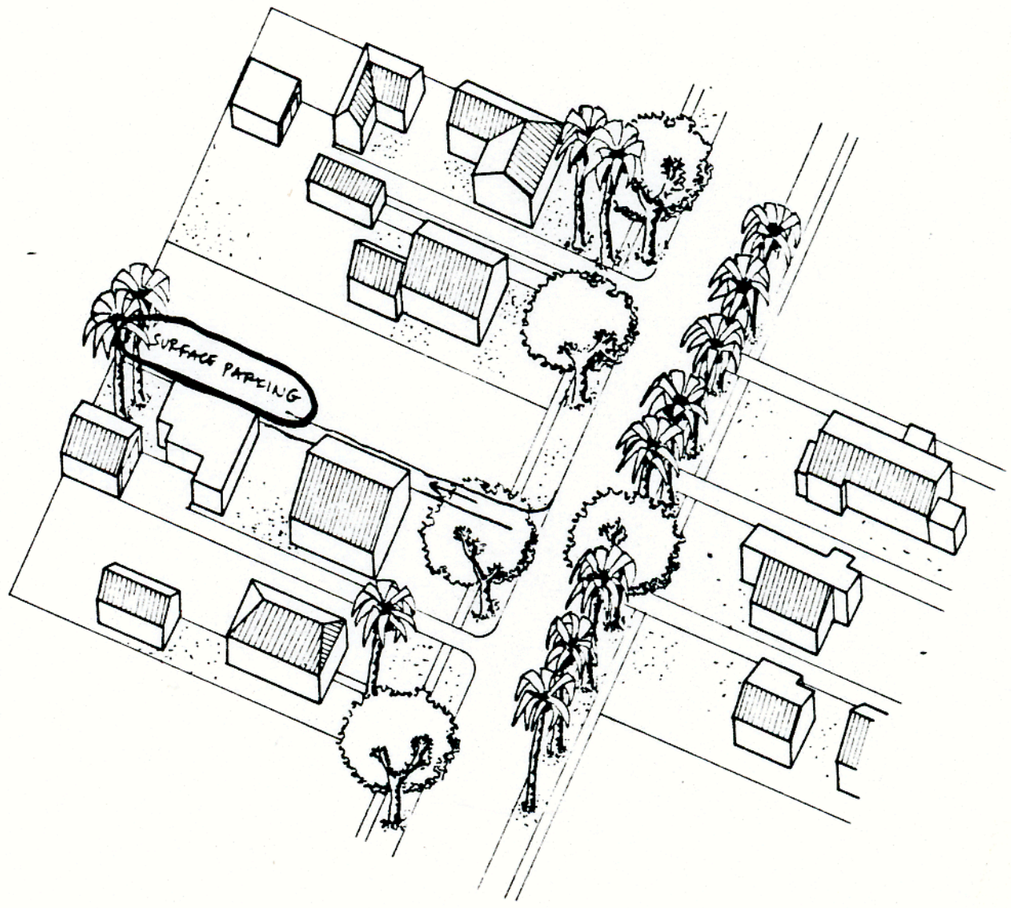
CALCULATE THE FOLLOWING KEY NUMERICAL PARAMETERS, AS REQUIRED BY THE ZONING ORDINANCE.

(Refer to Step #5 of the Process, p.__ of the Zoning Ordinance).

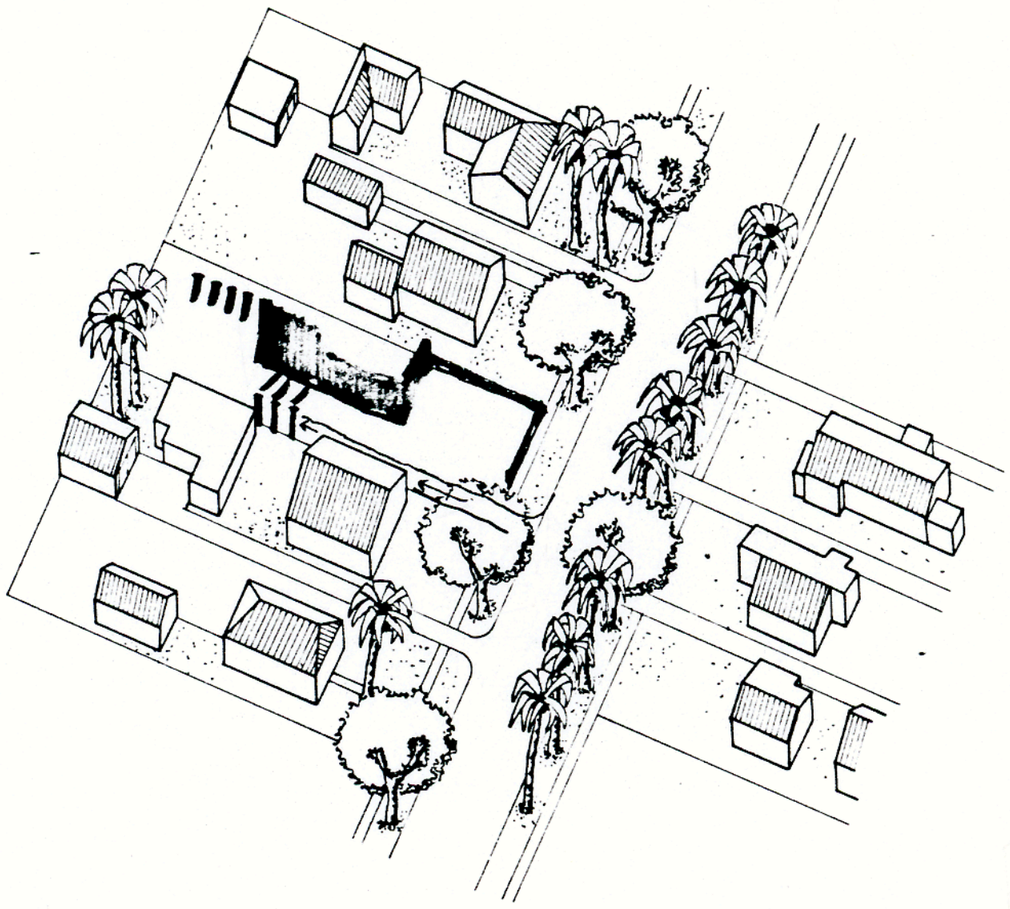
Density Zone: RM-16

1)	Lot area:	8,250 sf
2)	Context FAR:	0.18
3)	Multiplier:	-
4)	Allowable lot FAR:	0.36
5)	Allowable built space:	3,000 sf
6)	Number of units:	3
7)	Required # of parking spaces:	5
8)	Required parking area:	1,500 sf
9)	Total required area of gardens:	3302 sf
10)	Required area of main garden:	2576 sf

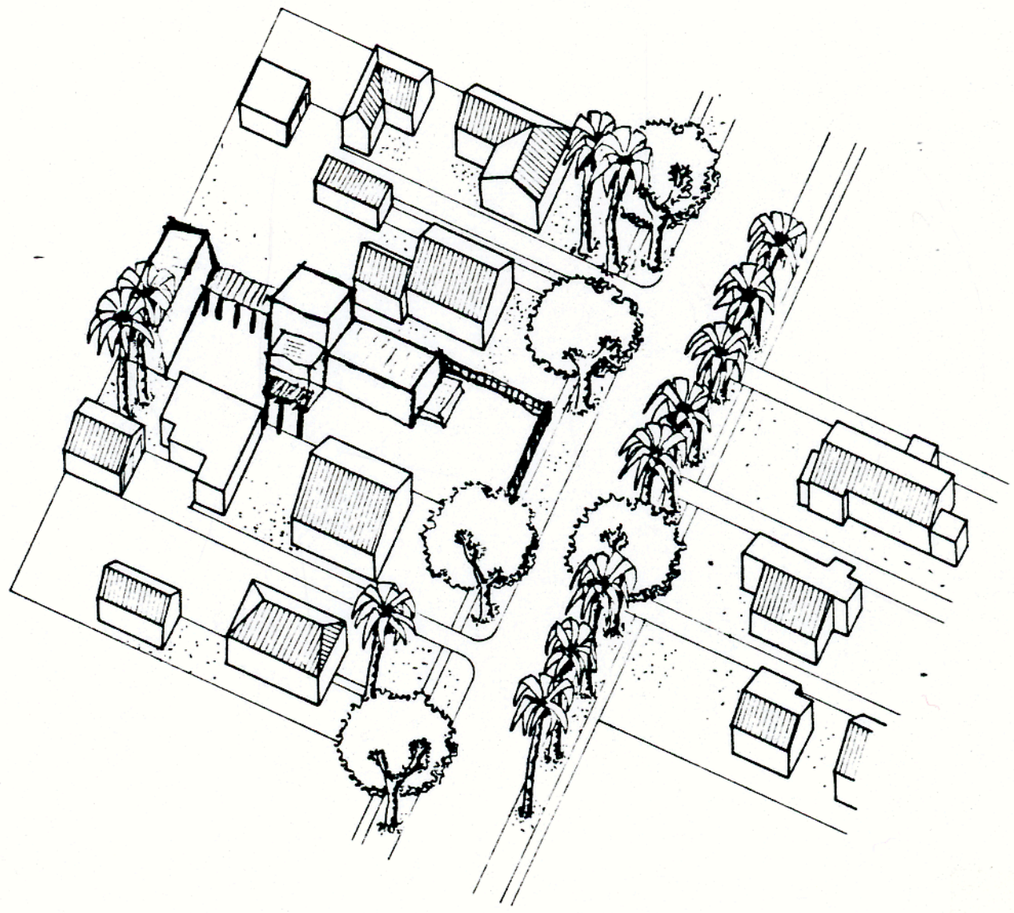
4. PROVIDE DRIVEWAY AND LOCATE PARKING.



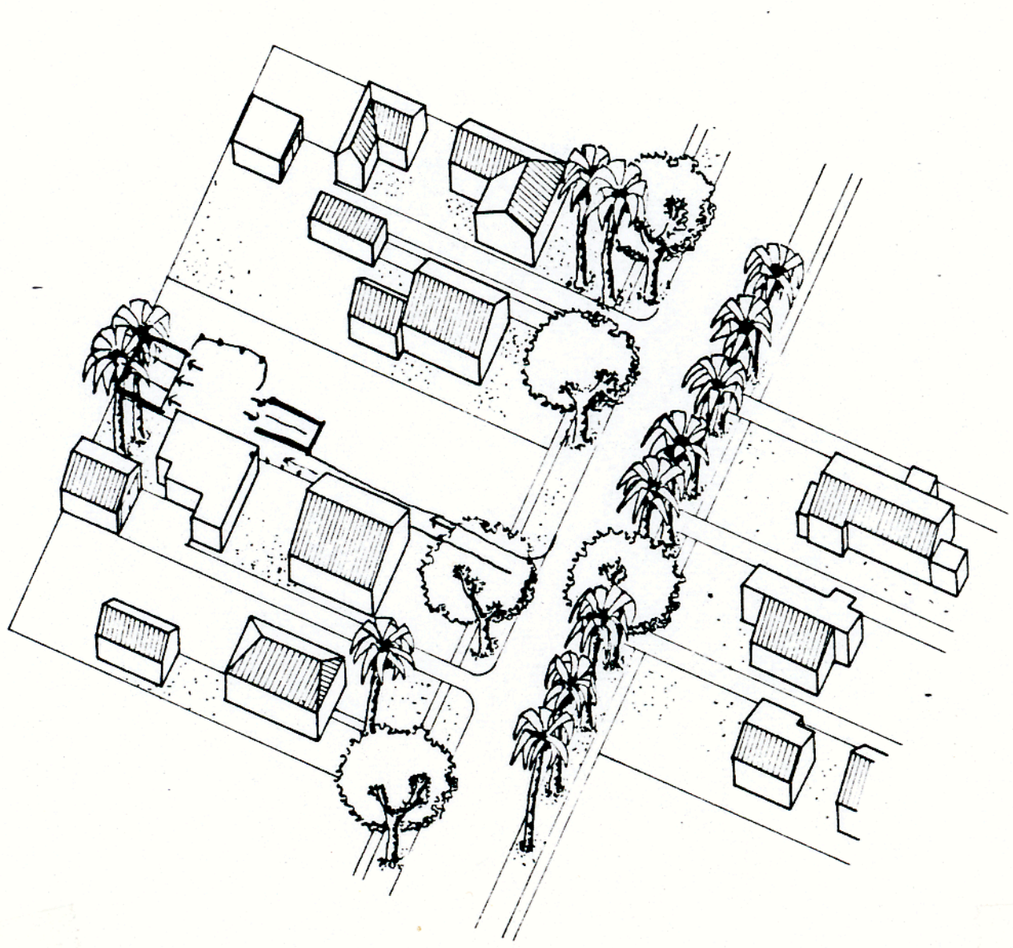
5. ESTABLISH SEQUENCE OF OPEN SPACES FROM STREET TO PARKING LOT, AND DEFINE EDGES.



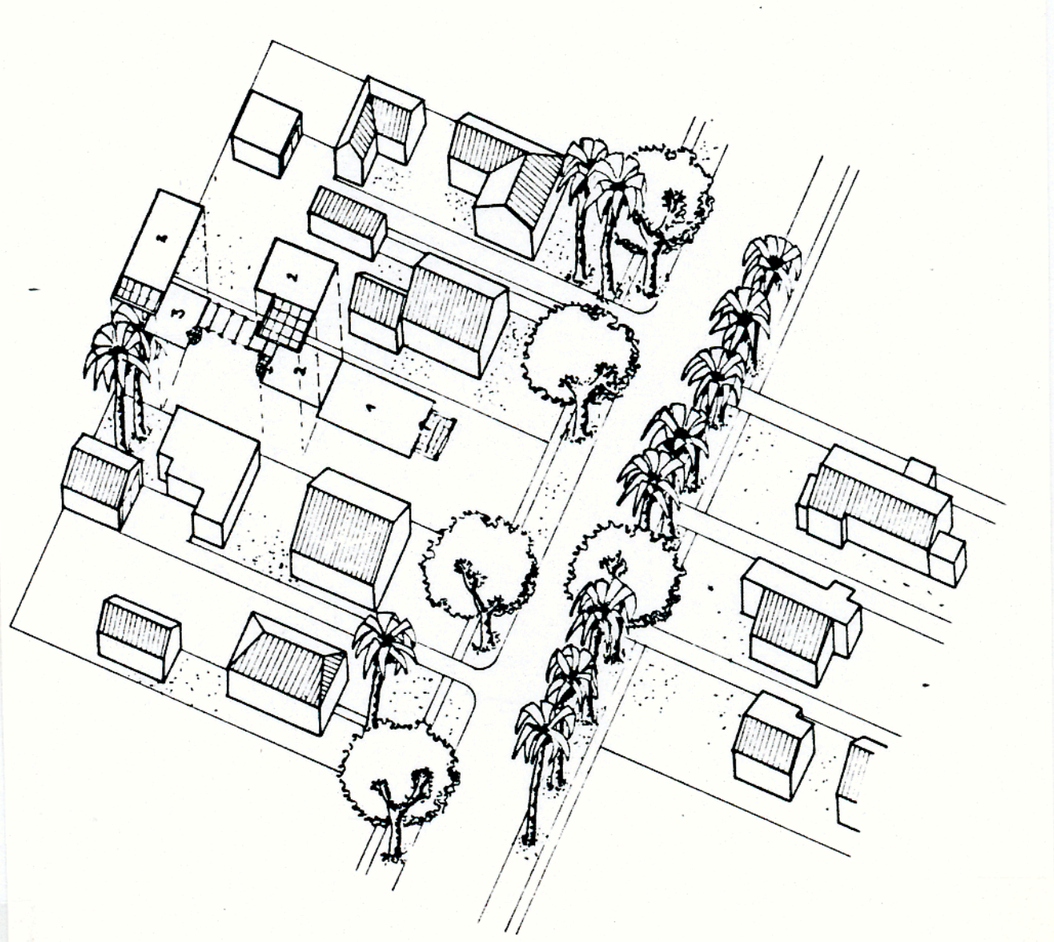
6. PLACE BUILDING VOLUMES.



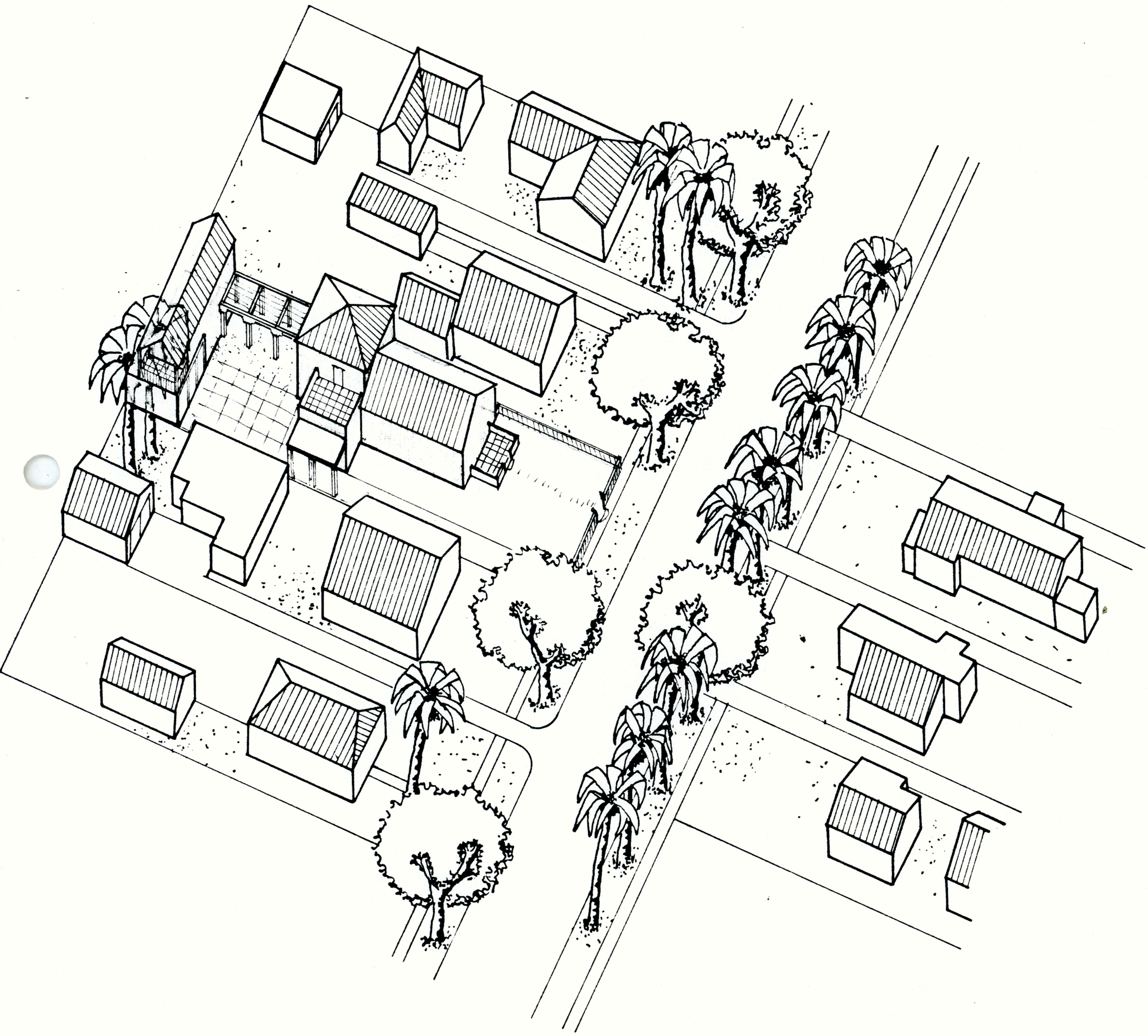
7. DESIGN PARKING PRECISELY.



8. DIVIDE BUILDING VOLUME INTO APARTMENT UNITS, AND PLACE ENTRANCES.



9. ESTABLISH CHARACTER OF PROJECT.



CHAPTER 6

PERMIT APPLICATION FORMS AND PROCEDURE

The application permit for a multi-family residential building has the form of dynamic process. It consists of four stages that the applicant has to follow and four check points with the planning officials at the end of each stage.

The four stages refer to four different aspects of the project:

Stage 1. Relationship to neighborhood context.
Stage 2. Overall organization of project.
Stage 3. Detailed organization of project.
Stage 4. Character of project.

Each stage consists of a sequence of design and layout steps.

Each step has the following structure:
1. First, the applicant completes the design and layout steps, as specified in the zoning ordinance, and prepares the required documents and material.

2. The applicant meets with the planning official, who reviews and checks the completion of the stage and the conformity of the decisions to the zoning ordinance.

3. At the end of each stage the applicant and the planning official reach specific conclusions and agreements concerning the relevant issues of the planning process, and sign a form "Stage __ Approval". This form specifies final decisions of the given planning stage, to be kept and respected by the following decisions.

The following sequence specifies the permit application stages, the design and layout steps in each stage, and the required check points.

STAGE 1.
RELATIONSHIP TO NEIGHBORHOOD CONTEXT

1.1 Map the context and surroundings.
1.2 Decide basic arrangement and position of main garden to enhance surrounding projects and the neighborhood.
1.3 Calculate numerical parameters of proposed project.
CHECK POINT 1.

STAGE 2.
OVERALL ORGANIZATION OF PROJECT.

2.1 Provide driveway and locate parking.
2.2 Shape gardens precisely on the basis of cooperation with adjacent lots.
2.3 Place building volumes.
CHECK POINT 2.

STAGE 3.
DETAILED ORGANIZATION OF PROJECT

3.1 Layout details of parking.
3.2 Divide into apartments.
3.3 Locate and shape apartment entrances.
CHECK POINT 3.

STAGE 4.
CHARACTER OF PROJECT

4.1 Map details of nearby buildings.
4.2 Articulate roofs and eaves.
4.3 Design details of gardens.
4.4 Choose building materials and color.
CHECK POINT 4.

STAGE 1
OF PLANNING PERMIT

RELATIONSHIP TO NEIGHBORHOOD CONTEXT

STAGE 1
OF PLANNING PERMIT

RELATIONSHIP TO NEIGHBORHOOD CONTEXT

The first stage of the planning permit process deals with the relationship of the project with its surroundings. It consists of the following steps:

1.1 Map the context and surroundings.
1.2 Decide basic arrangement and position of main garden to enhance surrounding projects and the neighborhood.
1.3 Calculate numerical parameters of proposed project.

CHECK POINT I takes place after the applicant has completed the first five steps of the planning permit process.

REQUIRED DOCUMENTS AND MATERIAL FOR CHECK POINT 1.

Applicant and Building official meet on the site.

Applicant has to prepare the following:

a. Site context map at 1"=50', indicating the most beautiful spot on the site, where it is more pleasant to stand, and which includes any magnificent trees, if they exist.
b. A statement that explains how the proposed project intends to respond and relate with its surroundings, explaining intentions on the site.
c. Placement of stakes on the lot, which show the location of main garden.
d. Calculation of required numerical parameters of proposed project.

THE CRITERIA ACCORDING TO WHICH THE BUILDING OFFICIAL WILL JUDGE THE APPLICANT'S PROPOSAL.

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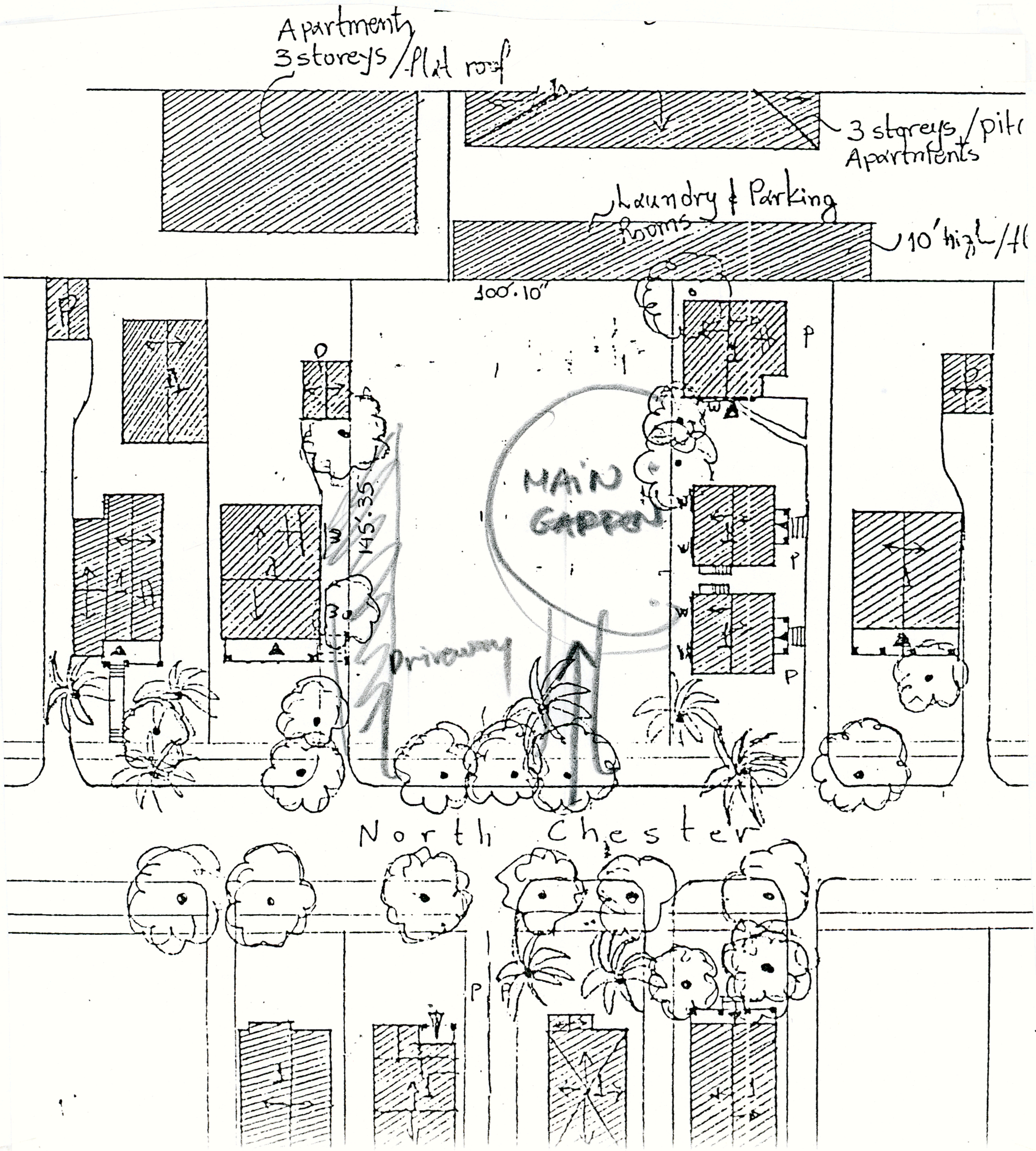
END OUTCOME OF CHECK POINT 1.

At the end of the first meeting, applicant gets final approval from building official concerning the following issues:

a. Location of the main garden.
b. Allowed density for the lot, number of units and number of parking spaces.
c. Use of existing driveway or provision of new driveway.

FORM 1.1: SITE CONTEXT MAP



FORM 1.2: STATEMENT OF INTENT

HOW THIS PROJECT INTENDS TO RESPOND AND RELATE TO ITS SURROUNDING PROJECTS.

A. OPEN SPACE:

B. DRIVEWAY:

C. PARKING:

D. BUILDING VOLUME:

FORM 1.3: TABLE OF REQUIRED KEY NUMERICAL PARAMETERS.

CALCULATE THE FOLLOWING KEY NUMERICAL PARAMETERS, AS REQUIRED BY THE ZONING ORDINANCE.

(Refer to Step 1.3 of the Process, p.__ of the Zoning Ordinance).

Density Zone:

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1) Lot area: _____sf

2) Context FAR: _____

3) Multiplier: _____

4) Allowable lot FAR: _____

5) Allowable built space: _____sf

6) Number of units: _____

7) Required # of parking spaces: _____

8) Required parking area: _____sf

9) Total required area of gardens: _____sf

10) Required area of main garden: _____sf

STAGE 2
OF PLANNING PERMIT

OVERALL ORGANIZATION OF PROJECT

STAGE 2
OF PLANNING PERMIT

INTERNAL ORGANIZATION OF PROJECT.

After applicant has acquired approval for the first stage of the planning permit, and on the basis of the agreement reached between applicant and building official the applicant will proceed on the second stage of the application process.

The second stage of the planning permit process deals with the internal organization of the project.It consists of the following steps:

2.1 Provide driveway and locate parking.
2.2 Shape gardens precisely on the basis of cooperation with adjacent lots.
2.3 Place building volumes.

CHECK POINT II takes place after the applicant has completed the following four steps of this stage.

REQUIRED DOCUMENTS AND MATERIAL FOR CHECK POINT 2.

Applicant has to meet planning official in the building department.

Applicant has to prepare the following:

a. A volumetric model of the proposed building, at 1"=20', showing also the existing buildings on the surrounding sites.
b. Filled-in forms:
   - Driveway and parking standards.
   - Main garden and open space standards.
   - Building volume standards.
c. Cerificate of acquisition of easement for the use of existing driveway on adjacent lot.

THE CRITERIA ACCORDING TO WHICH THE BUILDING OFFICIAL WILL JUDGE THE APPLICANT'S PROPOSAL.

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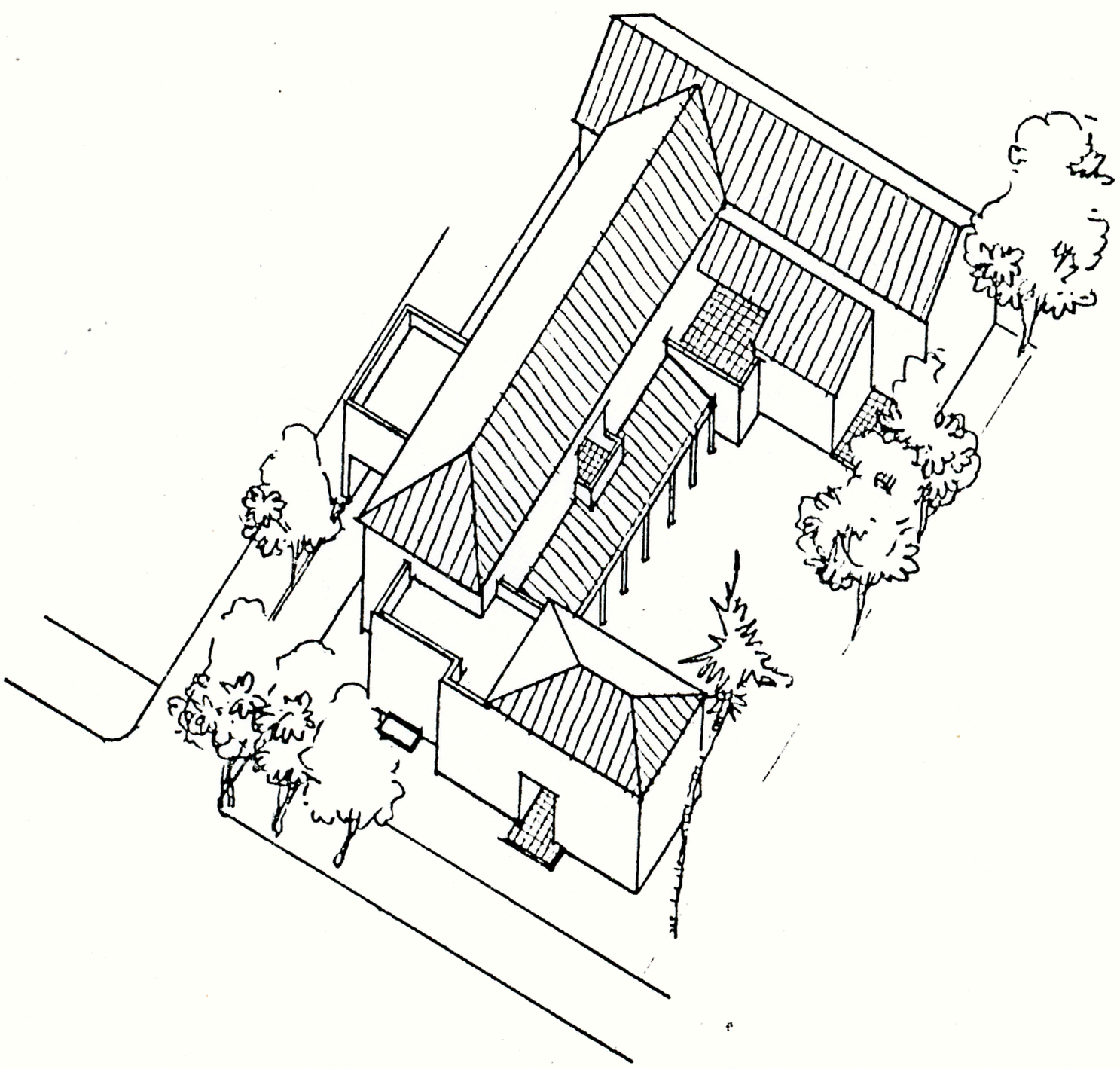
END OUTCOME OF CHECK POINT 2.

At the end of the second meeting, applicant gets final approval from building official concerning the following issues:

a. Volumetric configuration of building.
b. Shape and size of main garden and all open spaces.
c. Location and size of new driveway, and parking area.

FORM 2.1: VOLUMETRIC CONFIGURATION OF PROJECT



FORM 2.2: PARKING AND DRIVEWAY STANDARDS

(Refer to Step #2.1 of the Process, p.__ of the Zoning Ordinance).

Check below which one of the following two options for driveway you have chosen:
a) Use of adjacent driveway. _____
b) Provision of new driveway. _____

In case you are using adjacent driveway, attach document of easement provision by adjacent lot, and check below which bonus system you have chosen:
a) 15% increase of allowable FAR. _____
b) 15% reduction on property taxes. _____

In case you are providing for a new driveway, calculate below the increase of asphalt and concrete on grade, in the group of the three lots shown on the plan, after the addition of the new driveway and parking lots.

Before new driveway:
Asphalt area/total area of 3 lots: _____

After new driveway:
Asphalt area/total area of 3 lots: _____

% increase of asphalt area: _____

Specify the following:
1) Type of parking. _____

2) Number of cars the driveway serves. _____

3) Length and width of driveway. _____ft

4) Distance between the street and the nearest to the street parking space. _____ft

5) Width of curb cut. _____ft

FORM 2.3:MAIN GARDEN AND OPEN SPACE STANDARDS

(Refer to Step #2.2 of the Process, p.__ of the Zoning Ordinance).

Specify the following:

1) Area of main garden or courtyard in your lot. _____sf

2) Area of main garden together with area of adjacent garden, when in cooperation. _____sf

3) Area of subsidiary garden or other open space. _____sf

4) Area of subsidiary garden or other open space, when in cooperation _____sf

5) Total area of open space in your lot. _____sf

FORM 2.4: BUILDING VOLUME STANDARDS

(Refer to Step 2.3 of the Process, p.__ of the Zoning Ordinance).

Specify the following:

1) Total built area. _____sf

2) Minimum front setback. _____ft

3) Maximum front setback. _____ft

4) Height of building. _____ft

5) Height of building volumes on the front 15' of the lot, if different. _____ft

6) Height of building volumes on the rear 80' of the lot, if different. _____ft

7) Light easement dimensions adjacent to next-door windows serving living spaces. _____ft

8) Total length of building along zero side lot line. _____ft

9) Maximum length of building volume along zero side lot line. _____ft

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FORM 2.5: CERTIFICATE OF ACQUISITION OF DRIVEWAY EASEMENT FROM ADJACENT PROPERTY

SKETCH OF DRIVEWAY EASEMENT.

STAGE 3
OF PLANNING PERMIT

DETAILED ORGANIZATION OF PROJECT

STAGE 3
OF PLANNING PERMIT

DETAILED ORGANIZATION OF PROJECT

After applicant has acquired approval for the second stage of the planning permit, and on the basis of the agreement reached between applicant and building official the applicant will proceed on the third stage of the application process.

The third stage of the planning permit process deals with the detailed organization of the project. It consists of the following steps:

3.1 Layout details of parking.
3.2 Divide into apartments.
3.3 Locate and shape apartment entrances.

CHECK POINT III takes place after the applicant has completed the two steps of the planning permit process.

REQUIRED DOCUMENTS AND MATERIAL FOR CHECK POINT 3.

Applicant has to meet planning official in the building department.

Applicant has to prepare the following:
a. Floor plans the proposed building, at 1"=20', showing the internal layout of the building into appartment units, and the detailed layout of the parking.
b. Filled-in forms:
   - Parking standards.
   - Apartment unit standards.

THE CRITERIA ACCORDING TO WHICH THE BUILDING OFFICIAL WILL JUDGE THE APPLICANT'S PROPOSAL.

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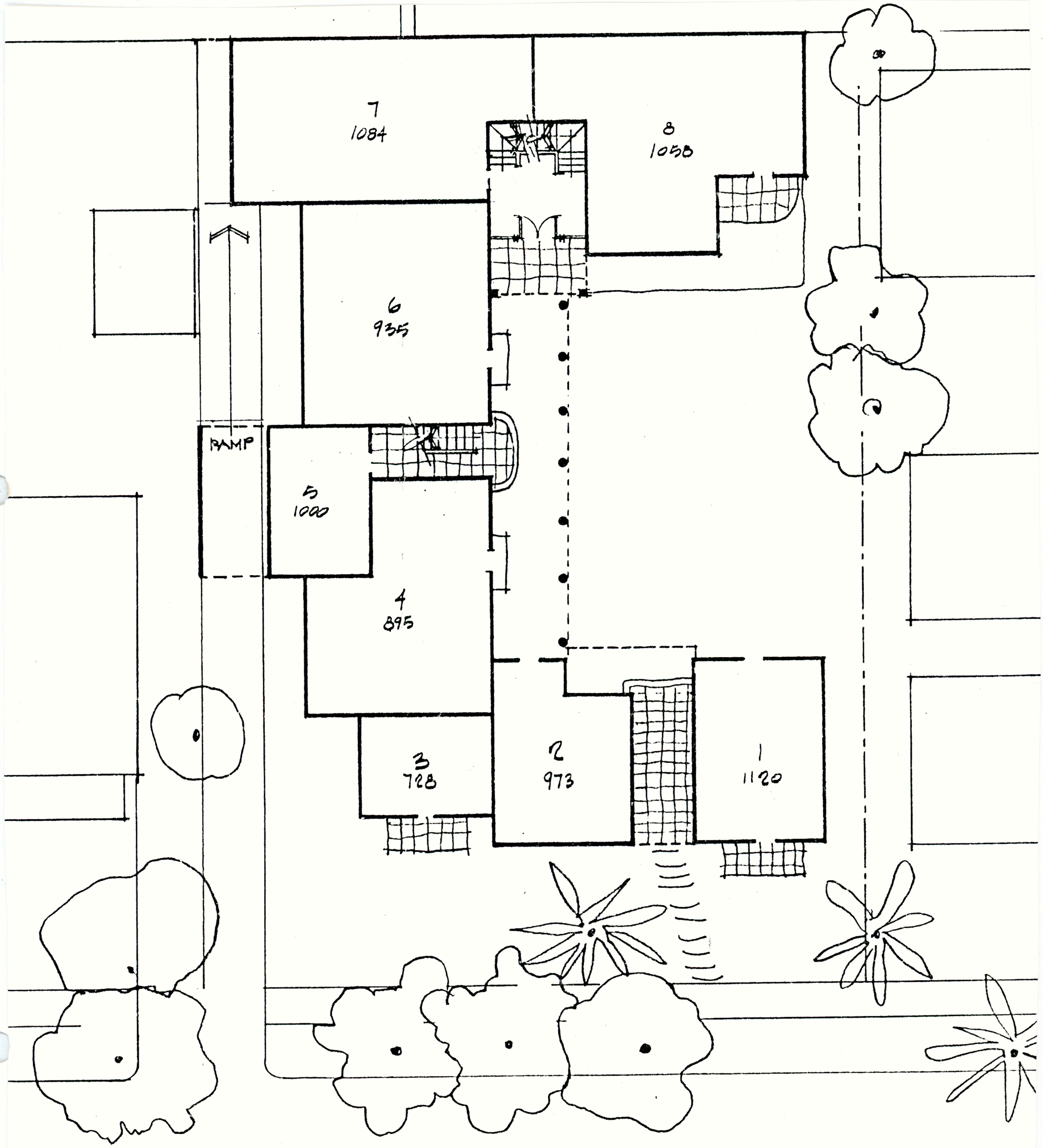
END OUTCOME OF CHECK POINT 3.

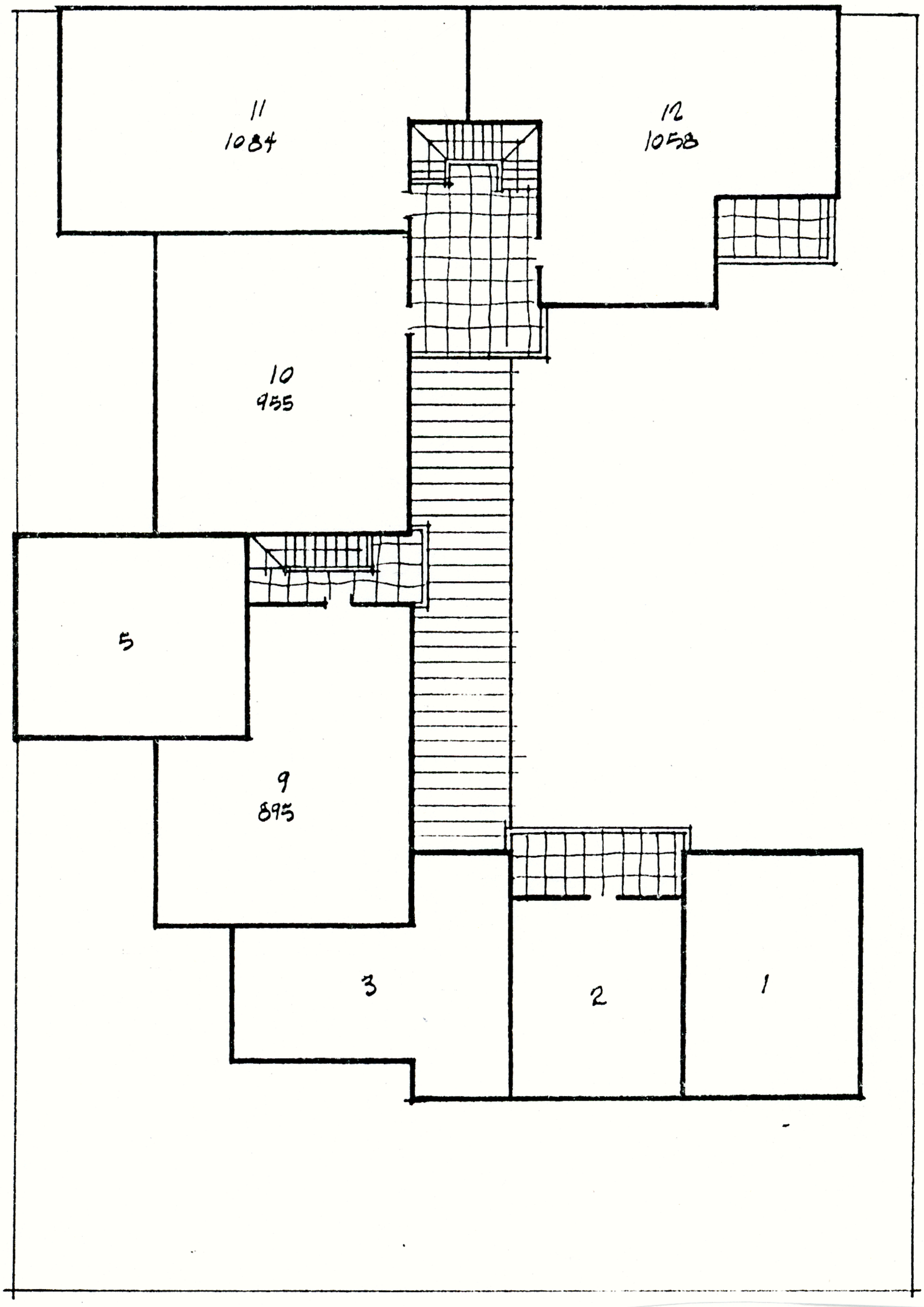
At the end of the third meeting, applicant gets final approval from building official concerning the following issues:

a. Internal layout of building into apartment units and location of entrances.
b. Design of parking details.

FORM 3.1: GROUND FLOOR PLAN OF PROPOSED BUILDING



FORM 3.2: SECOND FLOOR PLAN OF PROPOSED BUILDING



FORM 3.3: PARKING SPACE STANDARDS

(Refer to Step 3.1 of the Process, p.__ of the Zoning Ordinance).

Specify the following:

1) Number of provided parking spaces. _____

2) % of compact cars. _____

3) Width of parking aisle. _____ft

4) Dimensions of parking spaces. _____ft

5) Dimensions of compact parking spaces. _____ft

6) Number of parking spaces in tandem. _____

FORM 3.4: APARTMENT UNIT STANDARDS

(Refer to Step 3.2 of the Process, p.__ of the Zoning Ordinance).

Specify the following:

1. Average floor area of apartment: _____sf

2. Minimum floor area of apartment: _____sf

3. Number of 1-bedroom apartments: _____

4. Number of 2-bedroom apartments: _____

5. Number of 3-bedroom apartments or more: _____

STAGE 4
OF PLANNING PERMIT

CHARACTER OF PROJECT

STAGE 4
OF PLANNING PERMIT

CHARACTER OF PROJECT.

After applicant has acquired approval for the third stage of the planning permit, and on the basis of the agreement reached between applicant and building official the applicant will proceed on the last stage of the application process.

The fourth stage of the planning permit process deals with the detailed organization of the project. It consists of the following steps:

4.1 Map details of nearby buildings.
4.2 Articulate roofs and eaves.
4.3 Design details of gardens.
4.4 Choose building materials and color.

CHECK POINT IV takes place after the applicant has completed the last four steps of the planning permit process.

REQUIRED DOCUMENTS AND MATERIAL FOR CHECK POINT 4.

Applicant has to meet planning official in the building department.

Applicant has to prepare the following:

a. Photos of street, both sides, with surrounding buildings.
b. Detailed drawing of garden at 1"=10', showing paved and grass areas, benches, low walls, trees, hedges...
c. The following schedules:
   - Nearby architectural elements.
   - Landscaping.
   - Proposed building materials with color.
d. Sample of material for exterior walls, roof, and ground surfaces.

THE CRITERIA ACCORDING TO WHICH THE BUILDING OFFICIAL WILL JUDGE THE APPLICANT'S PROPOSAL.

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END OUTCOME OF CHECK POINT 4.

At the end of the four meeting, applicant gets final approval from building official concerning the following issues:

a. Articulation of roofs and other building details.
b. Detailed design of garden and landscaping.
c. Materials and color for walls and roof and ground surfaces.

FORM 4.1: PHOTOS OF STREET WITH BUILDINGS

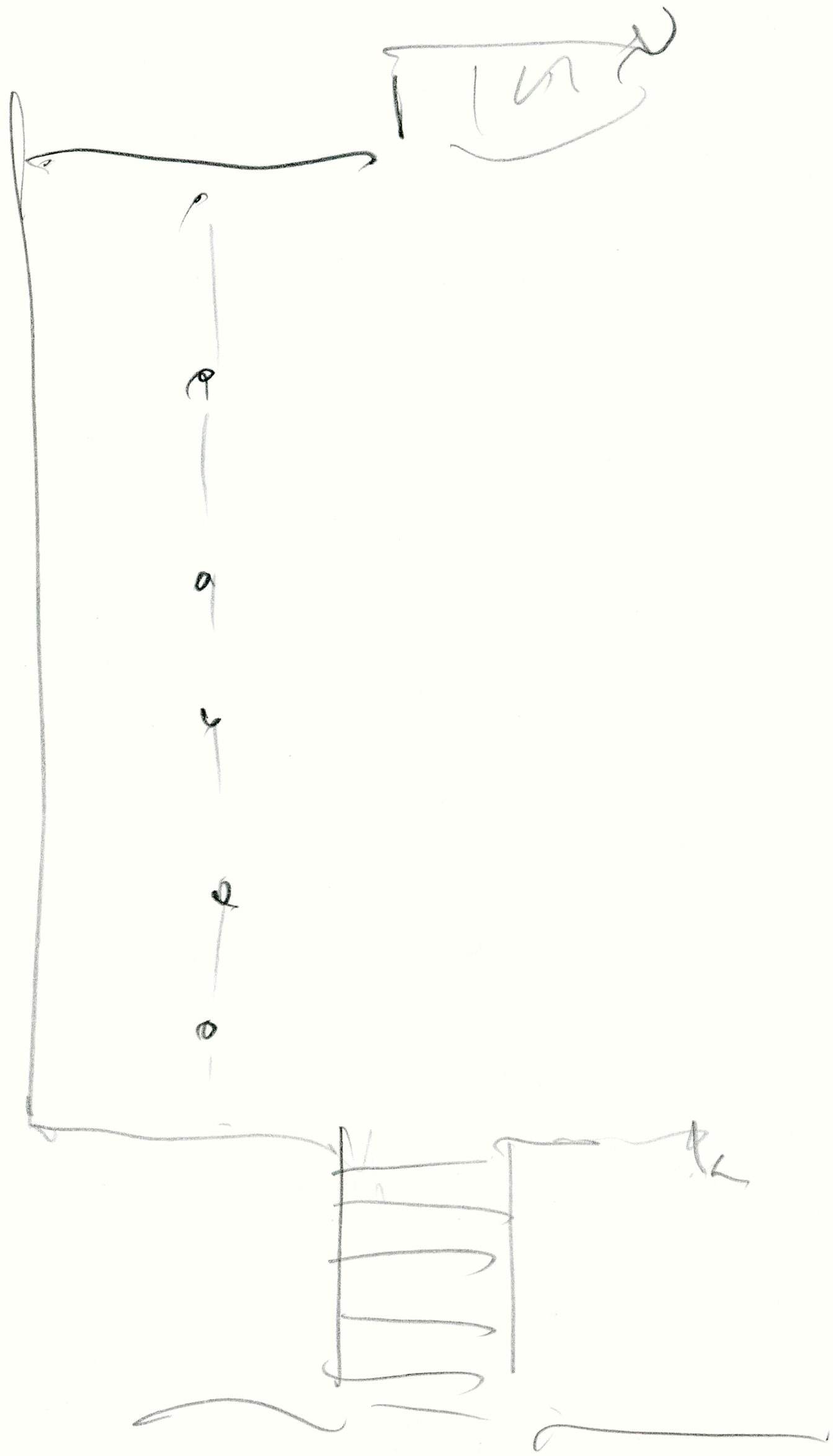
FORM 4.2: SCHEDULE OF NEARBY ARCHITECTURAL ELEMENTS.

(Refer to Step 4.1 of the Process, p.__ of the Zoning Ordinance).

Specify and describe the character and feeling of the most important features of the architectural elements in the nearby apartment buildings and houses, which contribute greatly to the identity of the street.

FORM 4.3: GARDEN PLAN.

(Refer to Step #4.3 of the Process, p.__ of the Zoning Ordinance).



FORM 4.4: SCHEDULE OF LANDSCAPING.

(Refer to Step 4.3 of the Process, p.__ of the Zoning Ordinance).

Specify the following:

1. Trees in main garden: _____
_____
_____

2. Trees along street: _____
_____
_____

3. Flowering beds: _____
_____
_____

4. Flowering bushes: _____
_____
_____

5. Hedges: _____
_____
_____

CHAPTER 7

GUIDELINES AND STANDARDS

The guidelines and standards of the zoning ordinance are grouped as follows:

RELATIONSHIP OF PROJECT WITH SURROUNDINGS.

1. Allowed density.
2. Building height limits.
3. Set backs.

INTERNAL ORGANIZATION OF PROJECT.

4. Parking standards.
5. Driveway and curd-cut standards.
6. Open space: gardens and courtyards.
7. Building volume.
8. Individual apartment units.

DETAILED ORGANIZATION OF PROJECT.

9. Roofs, eaves, porches, etc...
10. Building materials and color.
11. Trees, plants and gardens.
12. Paving and ground surface.

The guidelines in detail:

1. ALLOWED DENSITY.

1.1. Floor area ratio (FAR) as density measure, instead of units per acre.

1.2. Allowed FAR in present multi-family residential areas.

Single lots:

Present RM-16: Allowed FAR is 0.46 ????.
Present RM-32: Allowed FAR is 0.65 ????.
Present RM-48: Allowed FAR is 0.90 ????.

1.3. Increase of density in double lots.

The allowed density on double lots is 10% higher than that of single lots.

Double lots:

Present RM-16: Allowed FAR is 0.50 ????.
Present RM-32: Allowed FAR is 0.71 ????.
Present RM-48: Allowed FAR is 0.99 ????.

1.4. Context FAR.

Is this still a valid idea ?????

1.5. Density bonus.

a. Density bonus for use of existing driveway on adjacent lot.

b. Density bonus for underground parking.????

c. Density bonus for cooperation between adjacent gardens ??????

2. BUILDING HEIGHT LIMITS.

2.1. Building height.

Building volumes, in general, are limited to two (2) storey.

Exception:
When lot FAR is more than 0.50, then building volumes located in the rear 80 ft. of the lot can be three (3) storey.

Corner lots .....
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2.2. Building height of front building volumes.

a. In all densities, building volumes located within 10 ft. of the property line are limited to one (1) storey, for a depth of 30 ft. into the propery.

b. In cases where lot FAR is less than 0.50 and all surrounding buildings of the proposed project are one (1) storey, then front building volumes of the proposed project are limited to one (1) storey for a depth into the property that reaches 3/4 ??? (or 1/2) of the depth of the adjacent one (1) storey building volume, the closest to its property line.

c. In cases where lot FAR is more than 0.50, and all surrounding buildings of the proposed project are one (1) storey, then front building volumes of the proposed project are limited to one (1) storey for a depth of 40 ft. ???? into the property.

NOTE: Surrounding buildings include the following: 4 existing buildings on the right and the left of the proposed project and nine existing buildings across the street.

3. SETBACKS.

3.1. Front setback.

Required front set back is 10 ft. ?????

One storey building volumes are allowed in the front setback, given that the front of the building is 1' to 5' from the property line.

In case lot FAR is less than 0.50 and there is a prevailing pattern of front deep setbacks on the surrounding lots, 2 on each side, then proposed building must follow same setback. ?????? NOT CLEAR IF HELPFUL.

3.2. Building volumes along zero lot line, on the sides and rear of the lot.

Building volumes are allowed to be placed on zero lot line, on the side and rear of the lot, under the conditions specified on paragraphs 3.3. 3.4. 3.5 and 3.6.

When building volumes along zero lot line, no windows are allowed on the wall that is built along zero lot line.

3.3. Total allowable length of zero lot line building volume, on the side and rear of the lot.

The total length of building volumes along zero side and rear lot line, in any given lot, should not exceed 35% of the perimeter of the lot.

3.4. Maximum length of any building volume along zero lot line.

The length of any building volume along zero lot line on the side and back (except from carports) should not be more than 50 ft.

3.5. Maximum length of common walls.

Building volumes of adjacent properties should not have a common wall more than 35 ft. long.

3.6. Light easements.

Proposed building volumes should not obstruct light into windows of living spaces of adjacent buildings.

In detail:
a. Required minimum distance between new building volume and existing building volume of adjacent property with major window into living space (living room, dining room) is 18 ft. ???? (15 ft).

b. Required minimum distance between new building volume and existing building volume of adjacent property with window into secondary living space (bedroom, bathroom, entrance hall.....) is 10 ft.

3.7. Side setback. ?? NOT CLEAR IF NECESSARY.

Required side setback is 4 ft. (5 ft ????). If less than 4 ft. no windows are allowed on this wall.

3.8. Secondary structures along zero lot line on the sides and rear of the lot.

Carports, driveways, walls, staircases, trellises are allowed to be on zero lot line, beyond the total allowable length of building volumes, as specified on paragraph 3.3.

4. PARKING STANDARDS.

4.1. Parking configuration.

a. Surface carports.
b. Tuck-under parking.
c. Half-under parking.
d. Underground parking.

4.2. Aggregate parking vs. individualized parking.

Parking is ALWAYS aggregated.

4.3. Parking location.

In the case of surface, tuck-under and half-under parking, parking is ALWAYS located on the back half of the lot.

Parking carports can be located along zero back and side lot lines.

4.4. Parking aisle easement.

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4.5. Connection between parking and interior garden.

There is always a direct and easy connection from the parking through the interior garden or courtyard to the aparment units.

4.6. Number of parking spaces.

Parking spaces to apartment units ratio is 1.5:1.

Possible exception in underground parking.

4.7. Percentage of compact cars.

In all cases, 50% of parking spaces can be for compact cars.

4.8. Parking space standards and aisle widths.

Full size: 8.5 x 18
Compacts: 7.5 x 16
Aisle width: 22

4.9. Depth of underground parking and building-ground relationship.

Building must be in touch with the ground along street side, and along sides where access occurs.
This can arranged with sloping land, but building must not feel raised. In this case, building must be at least 50ft??? back from the street.
Another possibility is to make it mandatory that all underground garages have to be fully underground.

4.10. Location of underground parking.

Underground parking has to be located under building, NOT under gardens, unless its area is larger than the ground floor of the building.

4.11. Parking as a usable pedestrian space.

When less than 6 parking spaces, ...
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4.12. Ventilation and springlers for underground parking.

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5. DRIVEWAY AND CURB-CUT STANDARDS.

5.1. Number of driveways per lot.

One driveway is allowed per lot --single or double.

5.2. Cooperation between adjacent lots on the the use of existing driveway.

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5.3. Incentives for acquiring easement on an adjacent existing driveway.

15% increase on allowed FAR.
15% reduction on property taxes.

5.4. Pay-off of driveway easement to adjacent lot.

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5.5. Location of new driveway.

Driveway is always located on the side of the lot, along side lot line. Never on the middle of the lot.

On a corner lot, driveway can be along back lot line.

5.6. Driveway width.

Up to 6 cars: driveway width is 8'.
From 6 to 25 cars: driveway width is 10'.
For more than 25 cars: driveway width is 12'.

5.7. Curb-cut width.

Curb-cut width is always 10' ??????

5.8. Driveway slope for underground parking.

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5.9. Driveway under building.

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5.10. Driveway adjacent to interior garden or courtyard.

Make driveway adjacent to garden feel part of garden or courtyard. Paving material, trellis structure.....

6. OPEN SPACE: GARDENS & COURTYARDS.

6.1. Cooperation between gardens on adjacent lots.

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6.2. Required size of open space per lot.

On a single lot, without driveway:
The total area for gardens must be 3300 sf,
or 35% of the lot area, whichever is greater.

On a double lot, without driveway:
The total area for gardens must be 6500 sf,
or 37% of the lot area, whichever is greater.

On a single lot, with a new driveway:
The total area for gardens must be 2800 sf,
or 32% of the lot area, whichever is greater.

On a double lot:, with a new driveway:
The total area for gardens must be 5800 sf,
or 34% of the lot area, whichever is greater.

6.3. Required size of main garden or courtyard.

The main garden is at least 70% of the total area required for garden space.

6.4. Required size of main garden or courtyard, when in cooperation with adjacent lot garden.

If there is a garden already initiated in one of the adjacent lots, the new garden will have to extend the existing garden to an aggregate of 4500 sf.

6.5. Required size of subsidiary gardens.

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6.6. Types of main gardens.

(IT IS NOT CLEAR IF THESE TYPES REFER TO WHAT EACH INDIVIDUAL PROJECT CAN CONTRIBUTE OR TO THE FINAL OUTCOME AFTER THE COOPERATION BETWEEN ADJACENT LOTS).

a. An internal courtyard entirely contained within the lot. This is mainly possible on a double lot, and is difficult on a single lot.

b. An internal garden, formed by cooperation between two or more lots. In this case, the main garden must cooperate or have the potential to cooperate with an adjacent interior garden, to form a single space.

c. A deep front garden, entirely contained within the lot. In this case, the garden must cooperate ???? with buildings on at least one side, and must form a "deep" garden on the street at least 75 ft ???? back from the sidewalk.

d. A long front garden, formed by cooperation between two or more lots. In this case, the garden must cooperate with other front gardens on at least one side, with the frontage of the buildings at least 40 ft ???? back from the sidewalk so as to forma "long" front garden along the street.

6.7. Position of gardens and courtyards.

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6.8. Sequence and hierarchy of open spaces.

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6.9. Degree of enclosure of gardens and courtyards.

Open space needs life. This life comes from the fact that the space borrows life from the buildings which surround it. The rectangle of open space must be bounded by buildings, and by small walls, hedges, and trees. In general, coherent open space must have at least 65% (75% ???) of its perimeter bounded by perceivable boundaries of the above mentioned kinds.

6.10. Shape of open space.

The main garden should have a simple rectangular shape .....
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6.11. Private gardens and terraces.

When lot FAR less than 0.50, then at least half of the apartment units should have private small gardens or terraces on the second floor. These private open spaces should not be fully exposed to the main garden and common open spaces.

6.12. Visibility of interior garden and courtyard from street.

All interior gardens and courtyards should be experienced from the street, and be visible from it.

6.13. Fence removal between adjacent gardens.

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6.14. Fence height between adjacent gardens.

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7. BUILDING VOLUME.

7.1. Building shape and volume.

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7.2. Width of building volume, for daylight.

Maximum width of building volume is 35 ft.

7.3. Continuity of building volume with adjacent volumes.

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7.4. Relationship of building volume to street frontage.

No building volume is located between 15' and 35' back from the sidewalk.

7.5. Key building types. ???????

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7.6. Articulation of building volumes.

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8. INDIVIDUAL APARTMENT UNITS.

8.1. Unit size.

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8.2. Unit identity.

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8.3. Unit light access.

No living room has principal window into light court. Each living room must have a major windows looking into main garden or subsidiary gardens, as defined on 6.3, 6.4 and 6.5.

8.4. Open space solar access.

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8.5. Access from street to units.

Path from street to units shall pass through the main garden, for at least 70% of the units.

8.6. Access from parking to units.

Path from parking to units shall pass through the main garden, for at least 70% of the units.

8.7. Entrances to units.

In as many cases as possible, each apartment unit shall have an individual or shared ??? entry from the main garden.

8.8. Relationship between unit entrances and street.

At least one, and possibly two apartment units should be entered from the street side, with entrances visible from the street. Or, major window open to the street.

9. ROOFS, PORCHES, ETC.....

9.1. Roof shape and orientation.

9.2. Private decks, terraces and porhes.

9.3. Fence height and fence removal.

10. BUILDING MATERIALS AND COLOR.

11. TREES, PLANTS AND GARDENS.

12. PAVING AND GROUND SURFACES.