



THE

LUSTRON

PLANNING GUIDE

location

size

cost

streets

blocks

lots

utilities

plantings

illustrations

LUSTRON CORPORATION

COLUMBUS, OHIO

FOREWORD . . .

The information contained in this guide has been collected from many sources. The Guide is not intended as a complete text on the technique of land planning nor should it be considered a substitute for the experienced technical training of land or site planners at the scene of operation. It does, however, set forth a few principles to aid the dealer in the economical development of the land on which the Lustron Home is erected.

The intelligent use of this guide should be of assistance to the dealer in solving some of the land planning problems.

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INTRODUCTION

GOOD PLANNING IS GOOD LUSTRON BUSINESS . . .

Well planned, properly improved residential neighborhoods have long been recognized as essential factors in the marketing of properties in all price ranges. Lustron Homes situated upon lots in well planned neighborhoods will have greater marketability and stability of value.

The product which you merchandize is essentially a house, lot and its environment---the Lustron Corporation provides the house---the dealer and the customer provide the lot and environment. The manner in which the lot and environment is provided can play an important part to enhance marketability, improve the quality of mortgage security, and increase amount of insurable mortgage.

Chapter I will interest the dealer who is thinking in terms of erecting Lustron Homes on individual improved lots. The basic physical and economic factors which must be considered in the selection of sites are outlined in this chapter. An action program for locating "ready-for-use" lots and a system whereby these lots can be listed and classified is also included, together with various types of lot treatments illustrating how Lustron's "New Standard for Living" can be extended to the outdoors.

As the magnitude of the dealers' building activities increases, it will, in many cases, necessitate turning to unimproved land for the provision of suitable dwelling sites.

Chapter II outlines some of the important considerations which must be remembered in developing unimproved land. As the focus of the planning is shifted from one or two houses to the integrated group, a change takes place which is not merely one of degree; it produces an entirely new kind of problem. Instead of being concerned with one or more houses on individual lots within an existing framework of streets, walks, roads, and sewers, the dealer will be called on to create the very framework itself. It will afford an opportunity to create more interesting sites of greater sales appeal, and, in many instances, at less cost.

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PART I

SELECTING A LOT FOR THE LUSTRON HOME

In selecting a lot for a Lustron Home, the dealer should consider cost, location, physical characteristics, size and shape, utilities and services, and legal aspects.

COST . . .

Lot prices vary and are influenced by size, location, existing improvements and the number of existing lots in your city. The value of the improved lot generally averages 12 1/2 to 15 percent of the total cost of house and lot.

Check physical characteristics before a selection is made--often-times a cheap lot will require more than the original savings to provide footings, foundations, cuts and fills, and other lot improvements.

In considering unimproved lots or partially improved lots, investigate cost of providing necessary improvements such as streets, water, and sewers.

If FHA financing is being considered, request the local FHA office to inspect and appraise the lot being considered. This can be done for a small fee.

LOCATION . . .

Remember that location will influence desirability and value of the lot. Select lots located in a neighborhood of owner-occupied homes--pride of ownership results in better maintenance of yards and buildings.

GOOD when near or accessible to:

- a. suitable schools, churches recreational centers, amusements, shopping center.
- b. convenient transportation and traffic arteries.
- c. fire and police protection.
- d. public utilities and street maintenance.

POOR when near:

- a. smoke, dirt, odors, noise and unsightly areas.
- b. ponds, dumps, railroads, industrial areas and fire hazards.

GOOD when:

- a. land is in residential area.
- b. area is zoned for residential building.
- c. land is well drained and relatively level.
- d. land has scattered existing trees.
- e. approach routes are favorable.
- f. located on "right side" of town.

POOR when:

- a. adjacent to or on street bearing heavy or fast traffic.
- b. zoning allows undesirable use of land.
- c. adjacent property values are lower.
- d. land is heavily wooded.
- e. approach routes are congested or through depreciated, commercial or industrial areas.
- f. fighting long established adverse trends.

PHYSICAL CHARACTERISTICS . . .

Select a relatively flat lot--slopes will increase cost of foundation and make the building of a terrace, walls and drive costly.

Select lots free of heavy growth and stone outcrops--they will increase clearing and foundation costs.

Select lots free of fill--it will increase cost of foundation and make gardening difficult.

If possible, select lots having one or more existing trees--they will add to the overall value of the property.

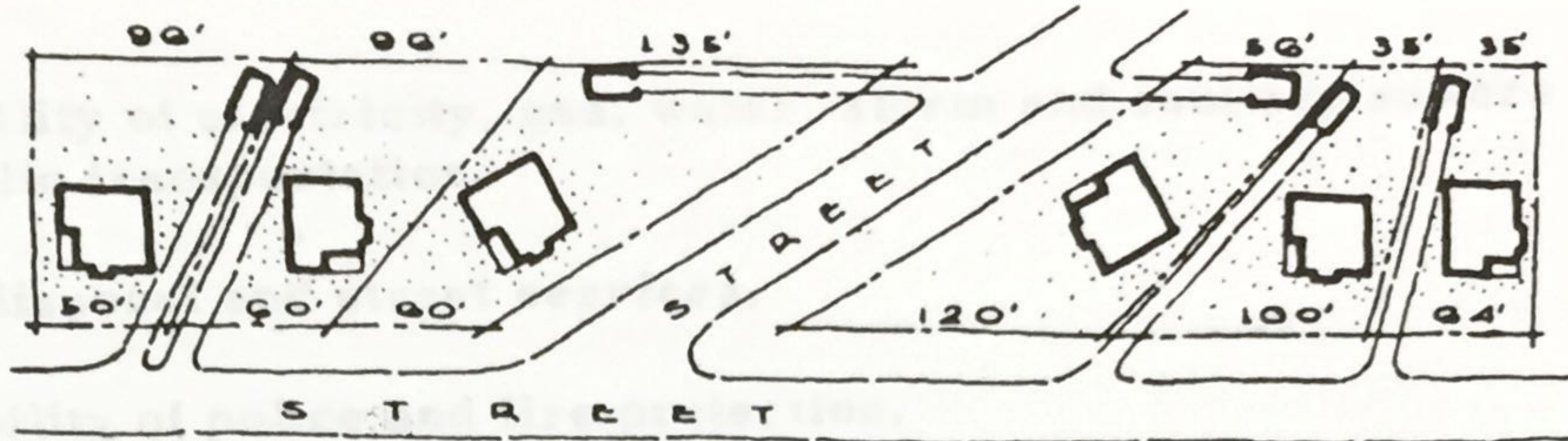
Low lots may be wet and hard to drain--check drainage.

SIZE AND SHAPE OF LOTS . . .

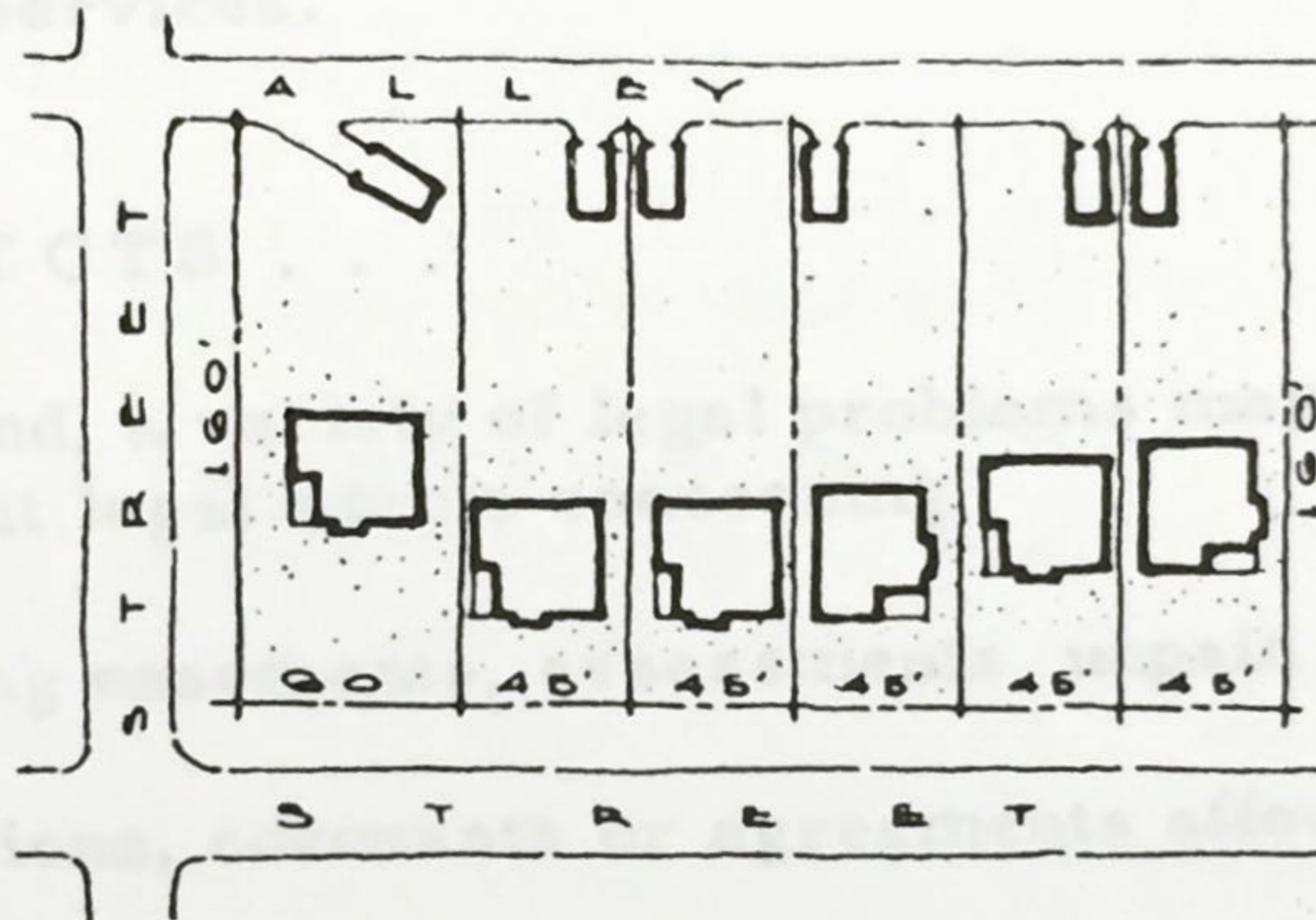
Choose lots of such size and proportion as will permit good use of the grounds and good house placement. Remember that the Lustron Home is 35'-0" wide and 35'-6" deep (which includes the rear platform).

A 60' x 120' or 50' x 100' lot is recommended minimum width and depth for a Lustron Home.

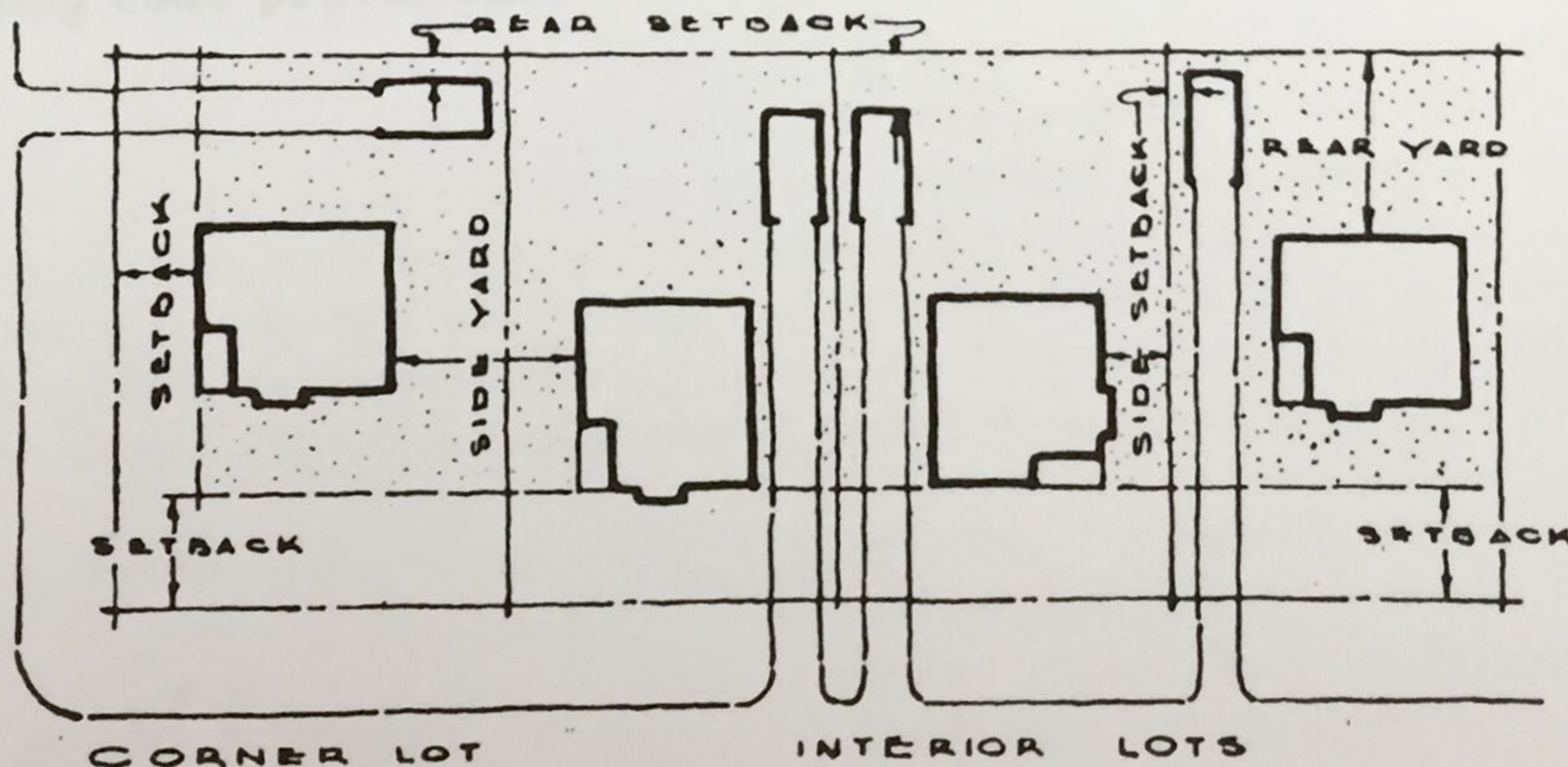
- a. Avoid irregular shaped lots where side lot lines are at an acute angle with the street.



- b. Avoid using deep narrow lots.



- c. Select a lot of sufficient width so as to conform to established minimum building lines. These lines are established to prevent overcrowding and encroachment upon adjoining property rights. In some cities there are minimum restrictions and the house can be set back beyond this line.



STREETS, UTILITIES, AND SERVICES . . .

Check:

Availability of electricity, gas, water, storm and sanitary sewers and public transportation.

Waste disposal and street services.

Availability of police and fire protection.

Availability of schools.

If any utilities are lacking, investigate feasibility and cost of providing required services.

LEGAL ASPECTS . . .

In purchasing land, a variety of legal problems may be encountered. Secure competent legal advice concerning:

- a. Title, including easements, assessments, unpaid taxes, etc.
- b. Deed restrictions, covenants or agreements affecting the use of the lot.
- c. Check surveyors report against legal description of the lot in abstract of title.
- d. Applicable zoning laws, including city or county.
- e. Building code provisions.

PART II
SETTING UP THE ACTION PROGRAM FOR LOCATING
LUSTRON HOME SITES

In many cities there are areas of subdivided lots which have been left as a residue from past periods of subdivision expansion. These lots, in many instances, are well-located and have water, sewers, and streets ready for use and connections.

The utilization of these "ready-for-use" sites means finding where the lots are and how many Lustron Homes they will accommodate. It also means making an analysis on the availability of adequate utilities and passing upon their economic and physical suitability. The preparation of an inventory of lots available for immediate use will show what sites are frozen from use by delinquent taxes or special assessments, by restrictions or adverse zoning, by scattered ownership, deed restrictions, lack of adequate utilities, or facilities.

Translating this into an Action Program means, finding the answers to the following questions and recording the related pertinent data.

1. Where are the "ready-for-use" sites?
2. What is their relative suitability in terms of price, location, topography, and environment?
3. To what extent do they consist of:
 - a. vacant lots with installed utilities
 - b. vacant tracts with adequate utilities available at their boundaries.
4. Will deed restrictions permit building?
5. Are there obstacles to the use of these sites, such as: delinquent taxes, special assessments, cloudy title, scattered ownership, etc.?

The assembly of the essential information on these sites from local informed sources...quick field surveys...replies received in response to ads placed in local newspapers for lots of a stipulated price and desired physical characteristics...or analysis of data received from other sources in terms of the above questions will indicate what is available and what sites can be adapted to the dealers program. Obtaining exclusive lot listings and agreement upon price based on FHA conditional commitments beforehand will provide qualified lots suited to the varied neighborhood requirements of Lustron prospects.

The accompanying form indicates how this information could be listed on FHA approved lots. This information could readily be passed on to interested Lustron prospects when contacting the dealer. The second portion of the form suggests a dealers cost estimate sheet.

PART III

INDIVIDUAL LOT TREATMENT

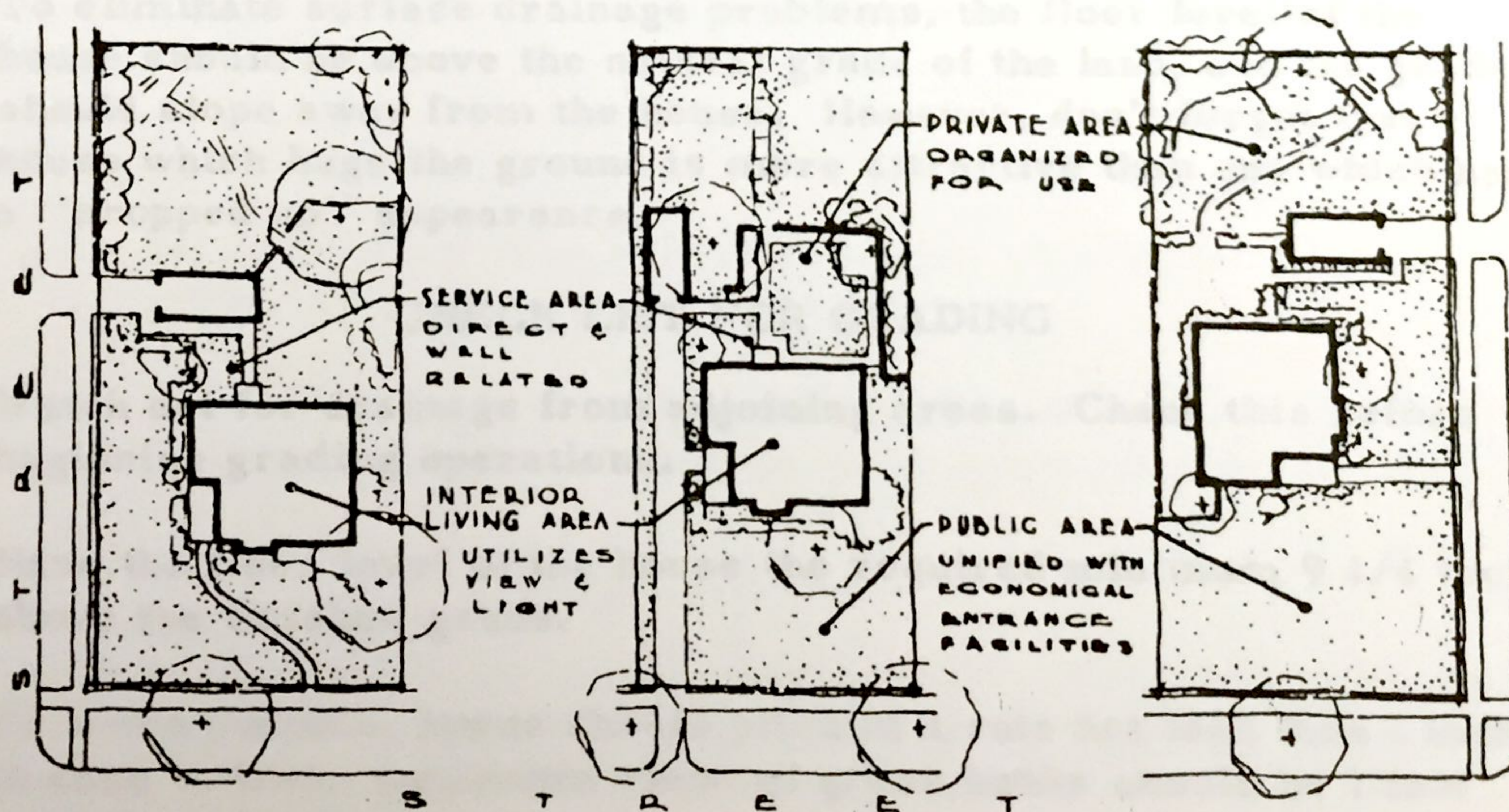
The placement of the Lustron Home on the lot will determine the division of the lot into public, service, and private areas. When the house is properly placed on the lot, rooms will be well related to suitable exterior areas and make for maximum convenience and use. Planning the lot as a unit will avoid wasting land and keep cost of approach walks and drives to a minimum.

PUBLIC SERVICE AREA . . .

The public and service area consisting of the front yard, approach walks and driveway are related by use to the front entrance, garage, and kitchen. Modern planning has eliminated alleys and encourages the street for all access to the house including service. Walks and drives should be situated so that deliveries and access to waste disposal containers can be made without undue intrusion into the private area.

PRIVATE AREA . . .

The private area or rear yard is the outdoor living space. It contains the garden, play-recreation, and drying yard. Purchase of a Lustron Home releases the owner for leisure. It should be remembered that no painting, redecorating, or maintenance is required. The Lustron owner has time to devote to other pursuits, so ample space should be provided to enjoy leisure, putter around, grow things, and for the children to play in safety.



LANDSCAPING THE INDIVIDUAL LOT . . .

Budgeting limitations will in most cases restrict the planting, seeding, or sodding to the front yard or public area. The planting scheme for this area should be kept extremely simple. A small amount of plant material carefully chosen and organized can supply a colorful effect.

The accompanying sketches indicate several suggested layouts for various types of lots. The overall lot treatment is shown indicating what can be done over a period of years in making each Lustron Home more livable and attractive. The entire lot need not be done all at the same time. However, any planting which is added by the owner at a later time should be part of the general scheme, so as to avoid sacrificing trees and soil, and eliminate unnecessary expense.

HOW TO PLAN THE LOT

Plan the house and grounds as a unit. Without planning, utility of the land is sacrificed, maintenance cost increased, and plants grow rampant. The overall appearance is haphazard. The mere planting of trees and bushes is not landscaping. Landscaping involves consideration of factors outlined below.

GRADING AND DRAINAGE:

Plan the grading ahead of construction operations. All grading should conform to the shape of the surrounding land.

To eliminate surface drainage problems, the floor level of the house should be above the natural grade of the land, and the grade should slope away from the house. However, don't forget that a house which hugs the ground is more attractive than one which has a "propped up" appearance.

CHECK LIST FOR GRADING

Watch out for drainage from adjoining areas. Check this before beginning grading operations.

Have the floor level of the house the required minimum 9 1/4 inches above the finished grade.

To avoid puddles, lawns should pitch at a rate not less than 1 inch to each 10 feet. Maximum slope of grass banks should be 1 foot rise to each 4 feet.

TOPSOIL:

Check excavating and grading operations and make sure that no topsoil is buried. This soil is valuable. Save it! Scrape off the dark soil and pile it to the side of the lot. Spread it back after filling.

IMPORTANT!

In building, use only that part of the land needed for building operations. Restrict the construction activities from defacing the rest of the lot; fence it off...it will pay. Don't encroach on adjoining properties. Don't bury odds and ends of building materials, building paper, mortar, etc. They are not conducive to growing plants.

WALKS:

Walks tie together the various areas of the land. They should be wide, direct, and pleasing.

CHECK LIST FOR WALKS

Make walks approaching the house at least 3 feet 6 inches wide so that two people can walk abreast.

Provide an even, smooth slope (at least 1 foot to 100) for drainage. Build walks flush with grade, but locate them on high enough land to avoid water standing on the pavement.

Use material that gives finely-textured surface but one that is not too smooth. Walks may be constructed of cement, brick, gravel or flagstone. If flagstones are used, large stones are better than small stones.

STEPS:

If steps are necessary, they should be broad, simple, interesting and safe. The isolated, single step is dangerous.

Risers should be low (5 inches) and treads broad (14 inches). Foundations should be below frost. Always pitch steps slightly, for drainage.

BUILD WELL!

Select your building material for walks, paths, walls, and other outdoor features with care. Remember that cheap material and construction does not pay, nor are they economical.

PLANT MATERIAL:

Existing

Stand guard over your existing trees during construction. Build rough wood fences or shields around them. Do not let the ground around the roots be trampled nor the treetops mutilated.

Verify the position of trees on your plot plan before you plan the lot, to avoid losing any valuable trees. If there are too many trees, save those which are desirable and which are in the best position as related to the house.

If possible, keep soil around trees at the original level. If you must fill over the roots, use broken stones or gravel--not soil. If heavy fill or cuts around a tree are necessary, seek expert advice.

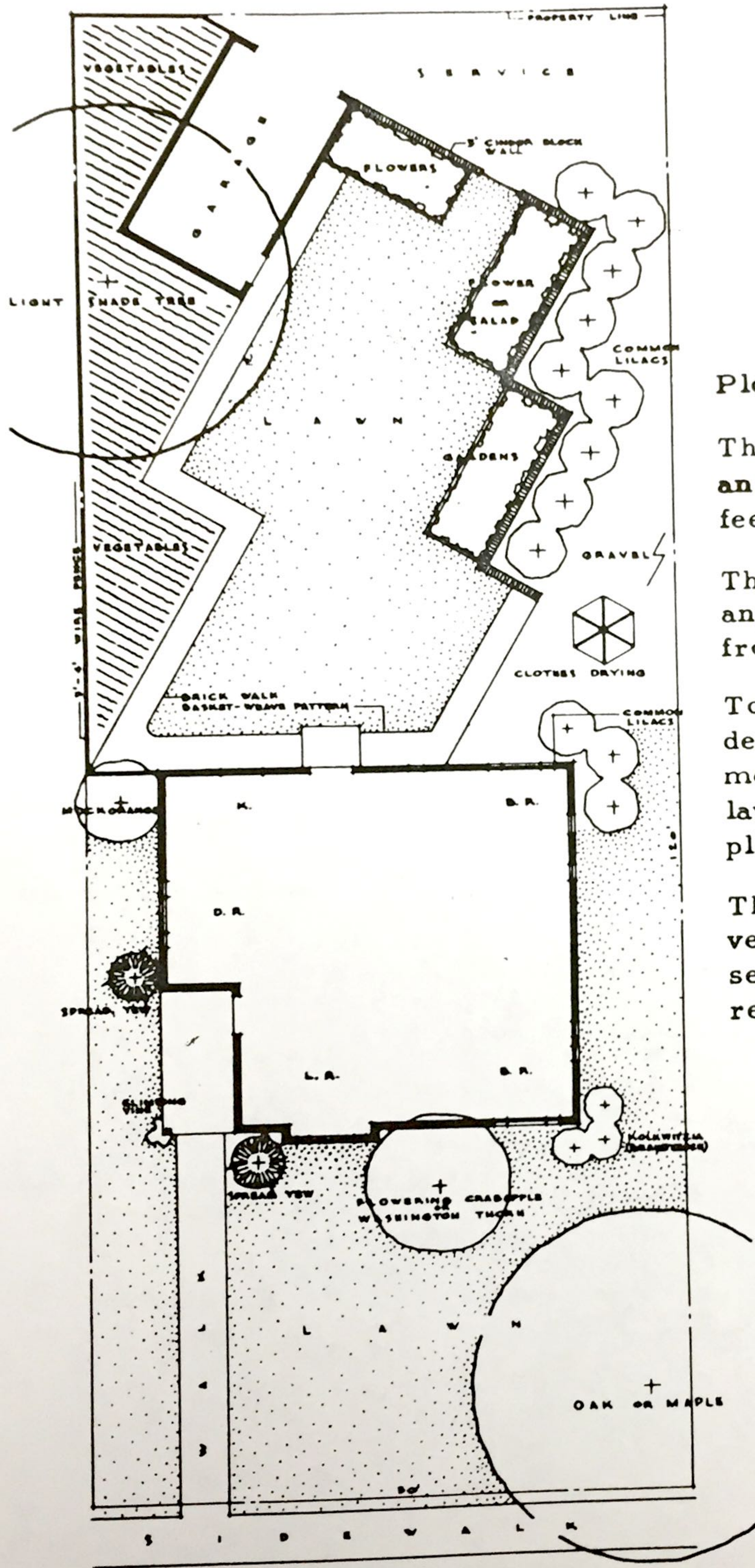
When the sewer must pass near the tree roots, use cast iron pipe for the sewer lines.

Proposed

Get the effect you want with well-chosen plantings! Plants are not merely ornamental accessories. They make up the masses in the yard, and are, consequently, the silhouettes which produce the design. Remember, don't overplant.

SUGGESTED LANDSCAPE PLANS . . .

Suggested planting schemes are shown on the accompanying drawings. The overall lot treatment is shown so that space is properly allocated and no land is wasted. Various types of interior and exterior lot treatments are shown which illustrate some of the points outlined in the preceding text. For additional information on landscaping, turn to Chapter II, Part II.



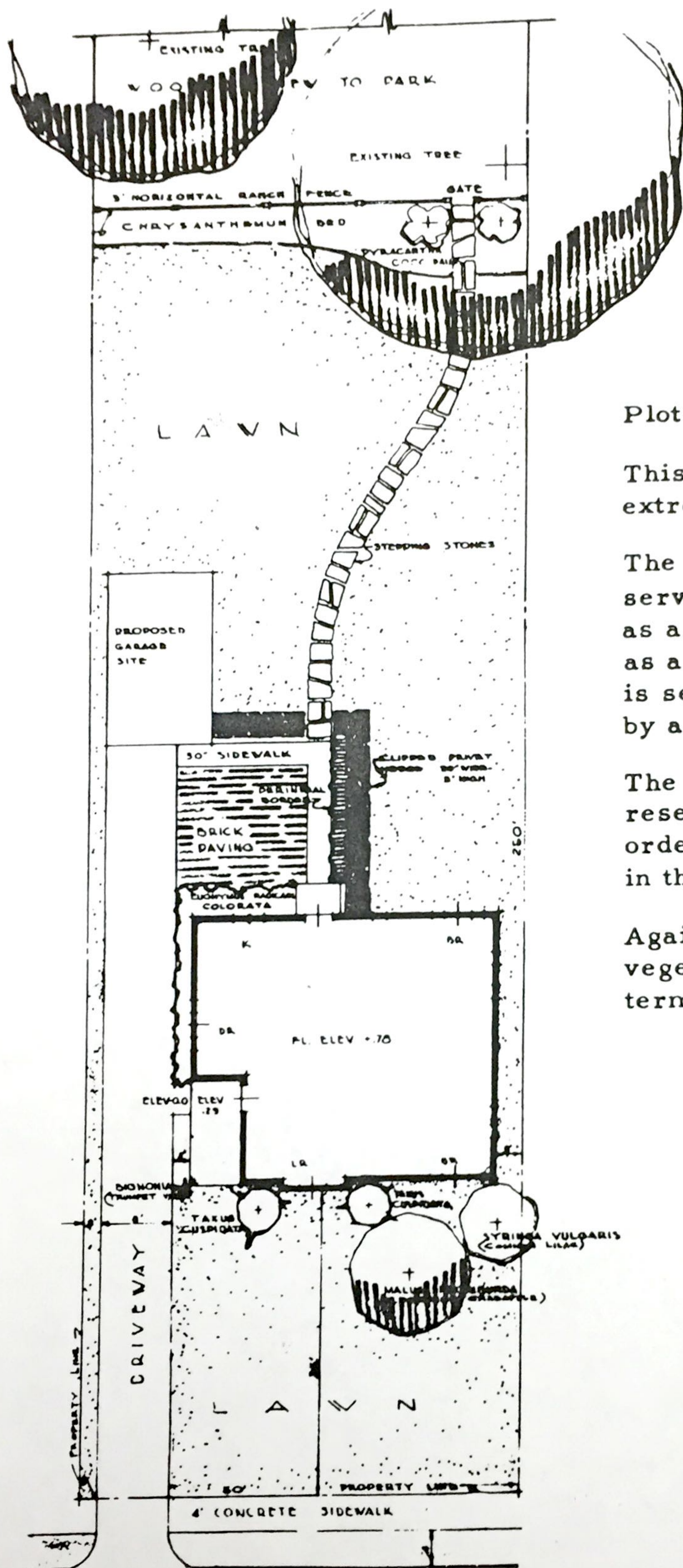
Plot Plan No. 1

This plan is suggested for an interior lot, 50 x 120 feet.

The garage is located at an angle to provide easy access from the alley.

To make the back yard seem deeper, a diagonal arrangement is used for the living-lawn and flower or vegetable plots.

The clothes lines are conveniently located near the service entrance and are reached by a brick walk.



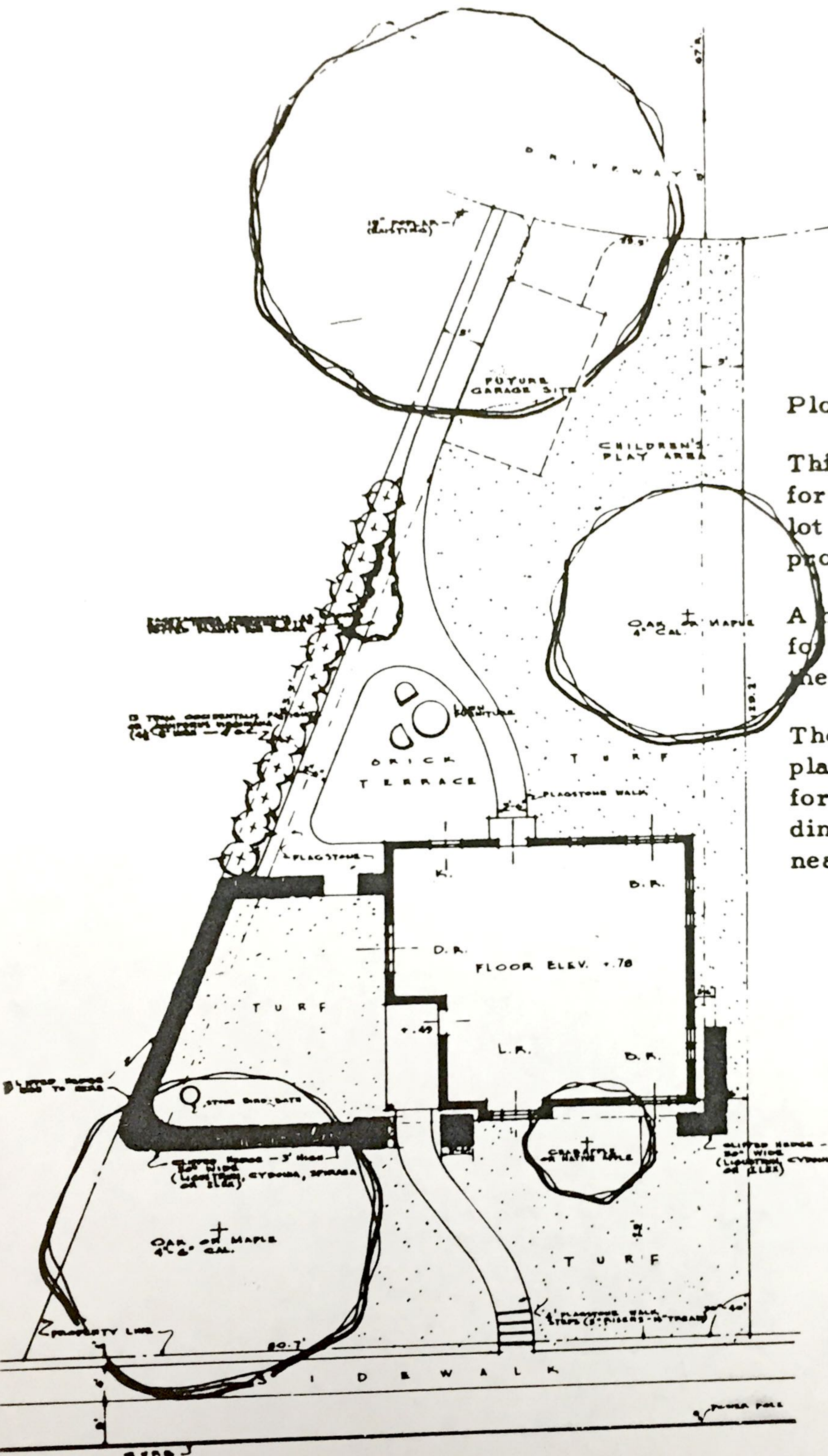
Plot Plan No. 2

This plan was designed for an extremely deep lot 50 x 250 feet.

The terrace is located near the service entrance and can be used as a play area for children or as a living-dining terrace. It is separated from the lawn area by a hedge.

The extreme rear of the lot is reserved as a copse woodland in order to reduce the maintenance in this expensively deep lot

Against the woods, a flower or vegetable border is suggested to terminate the lawn area.

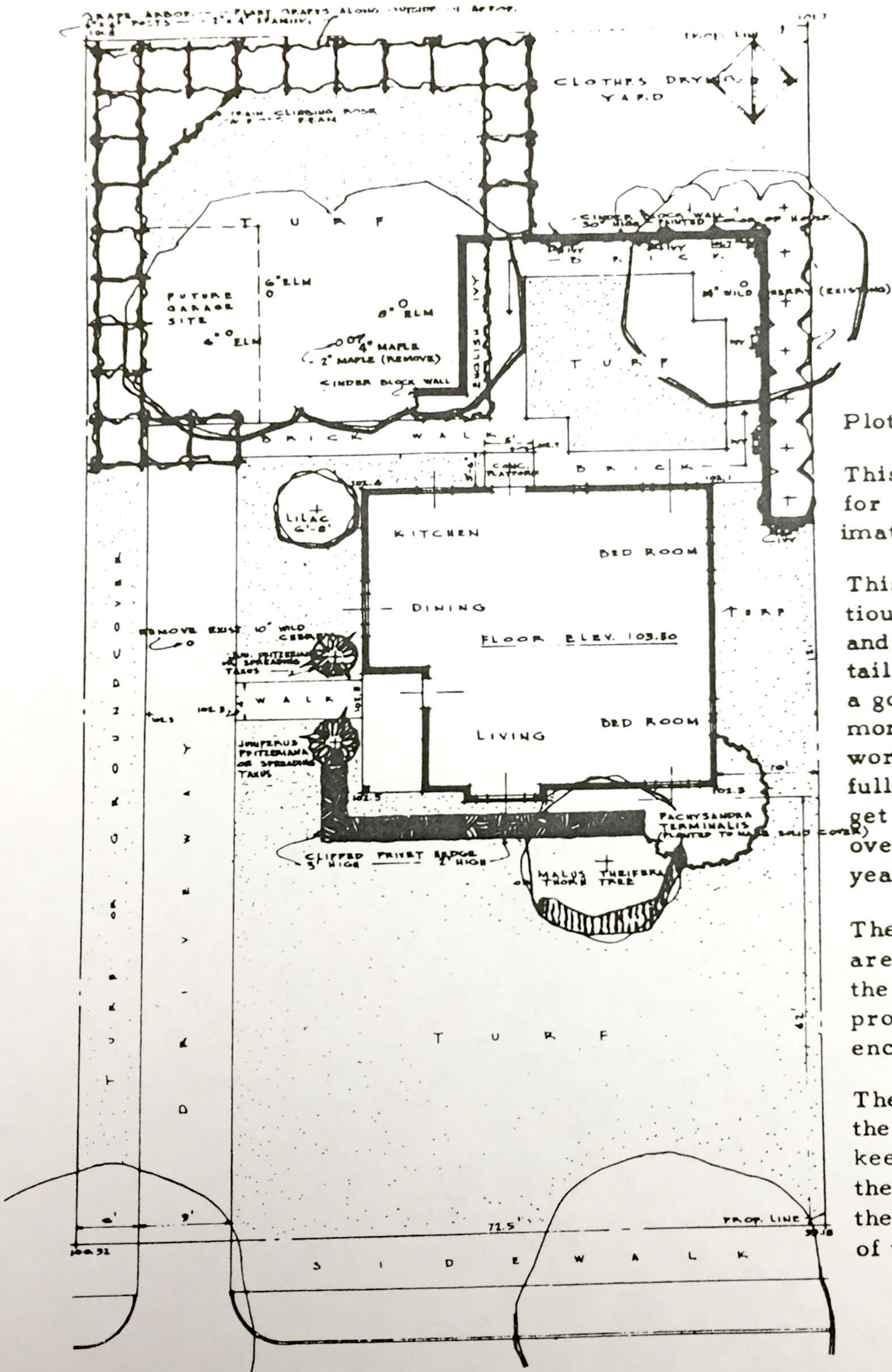


Plot Plan No. 3

This plan was designed for an irregular shaped lot with a frontage approximately 80 feet.

A hedge provides privacy for the area adjacent to the entrance porch.

The high evergreen screen planting provides privacy for the paved living or dining terrace located near the service entrance.



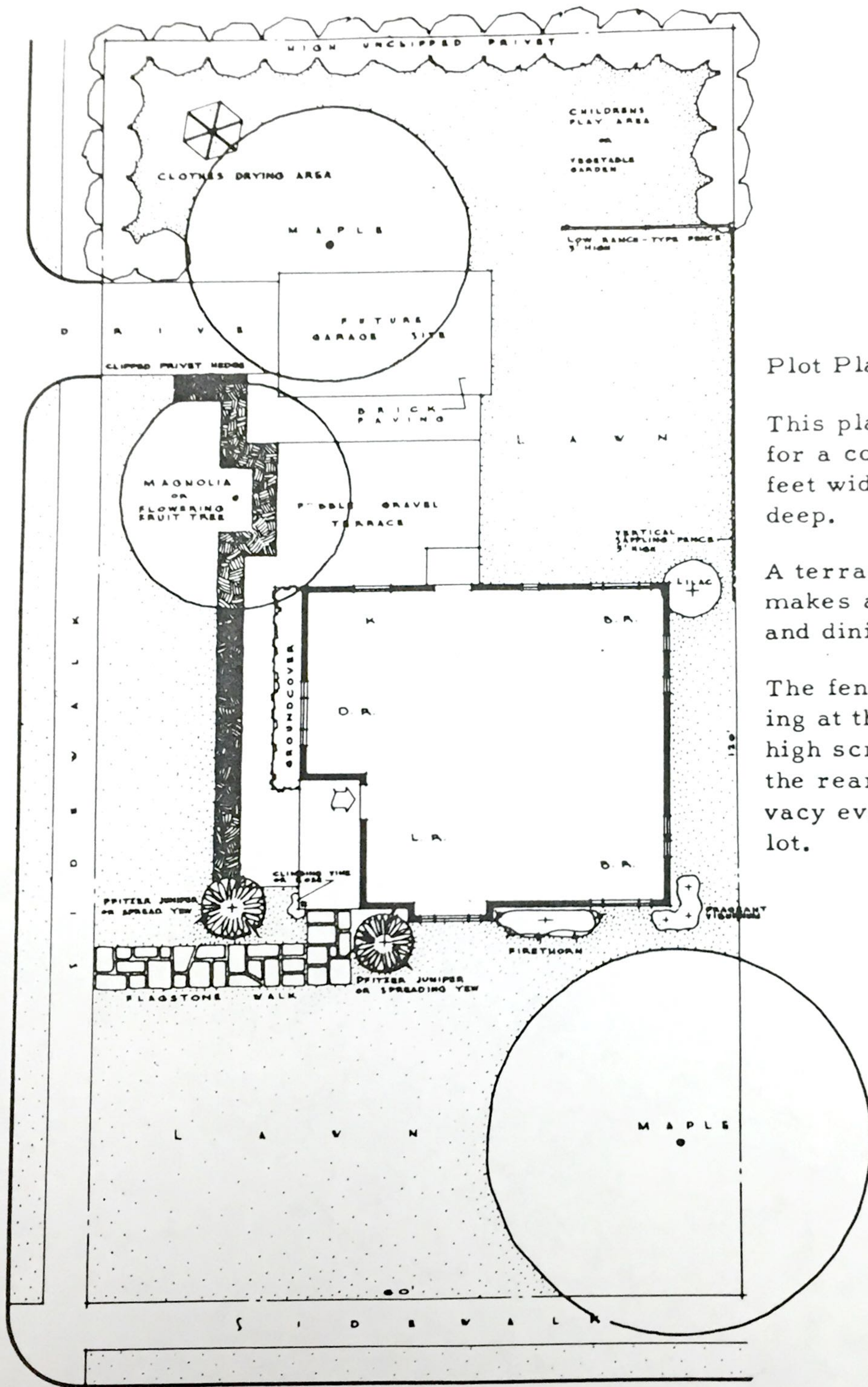
Plot Plan No. 4

This plan was designed for a larger lot approximately 72 x 121 feet.

This is a fairly pretentious landscape plan and will eventually entail the expenditure of a goodly amount of money and time. The work should be carefully planned and a budget worked out to extend over a period of several years.

The arbor separates the areas and together with the high screen planting provides privacy for the enclosed area.

The use of the hedge at the front of the house keeps the planting in the modern character of the architectural style of the house.

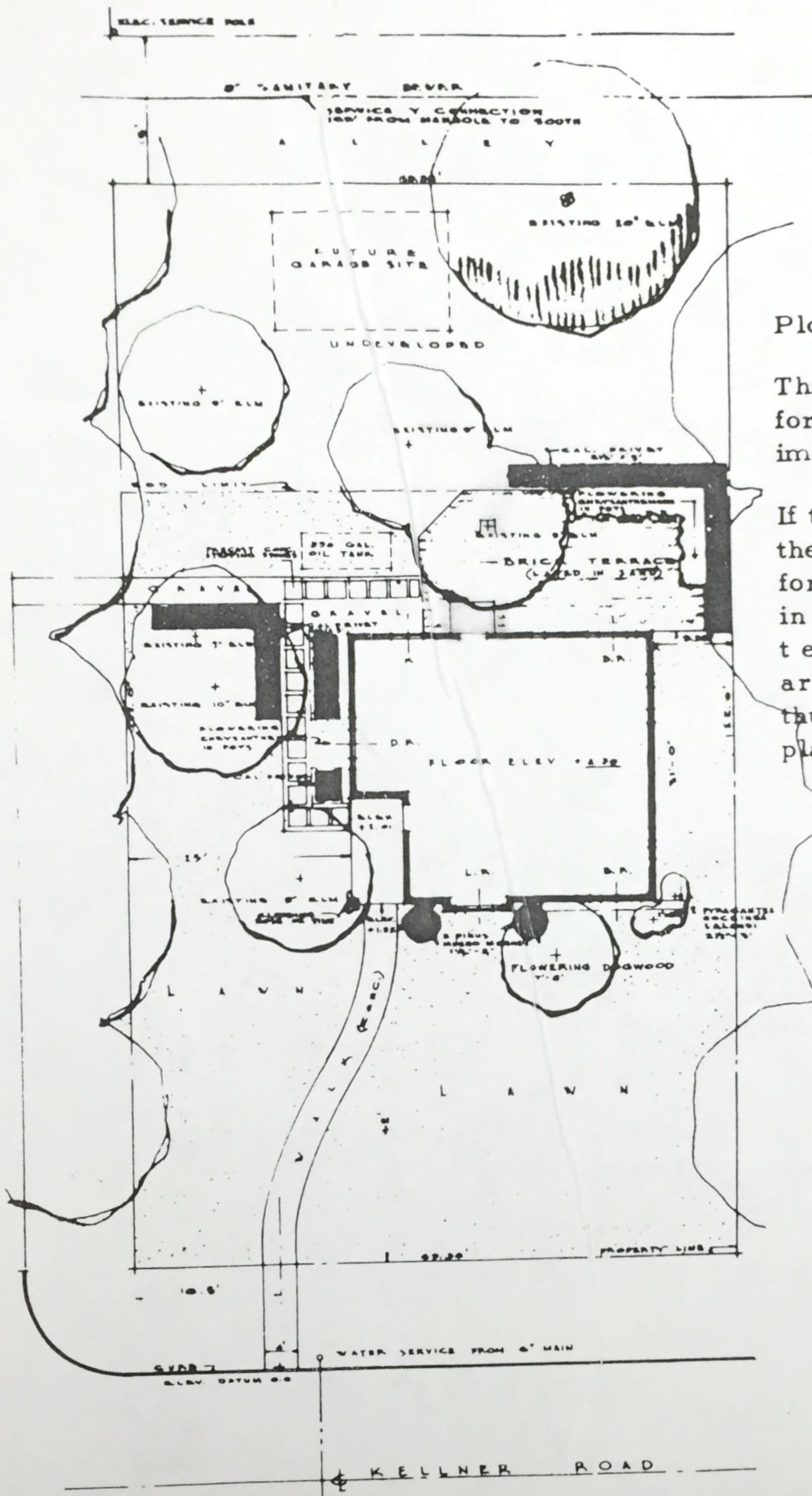


Plot Plan No. 5

This plan is suggested for a corner lot, 60 feet wide and 120 feet deep.

A terrace at the rear makes an outdoor living and dining area.

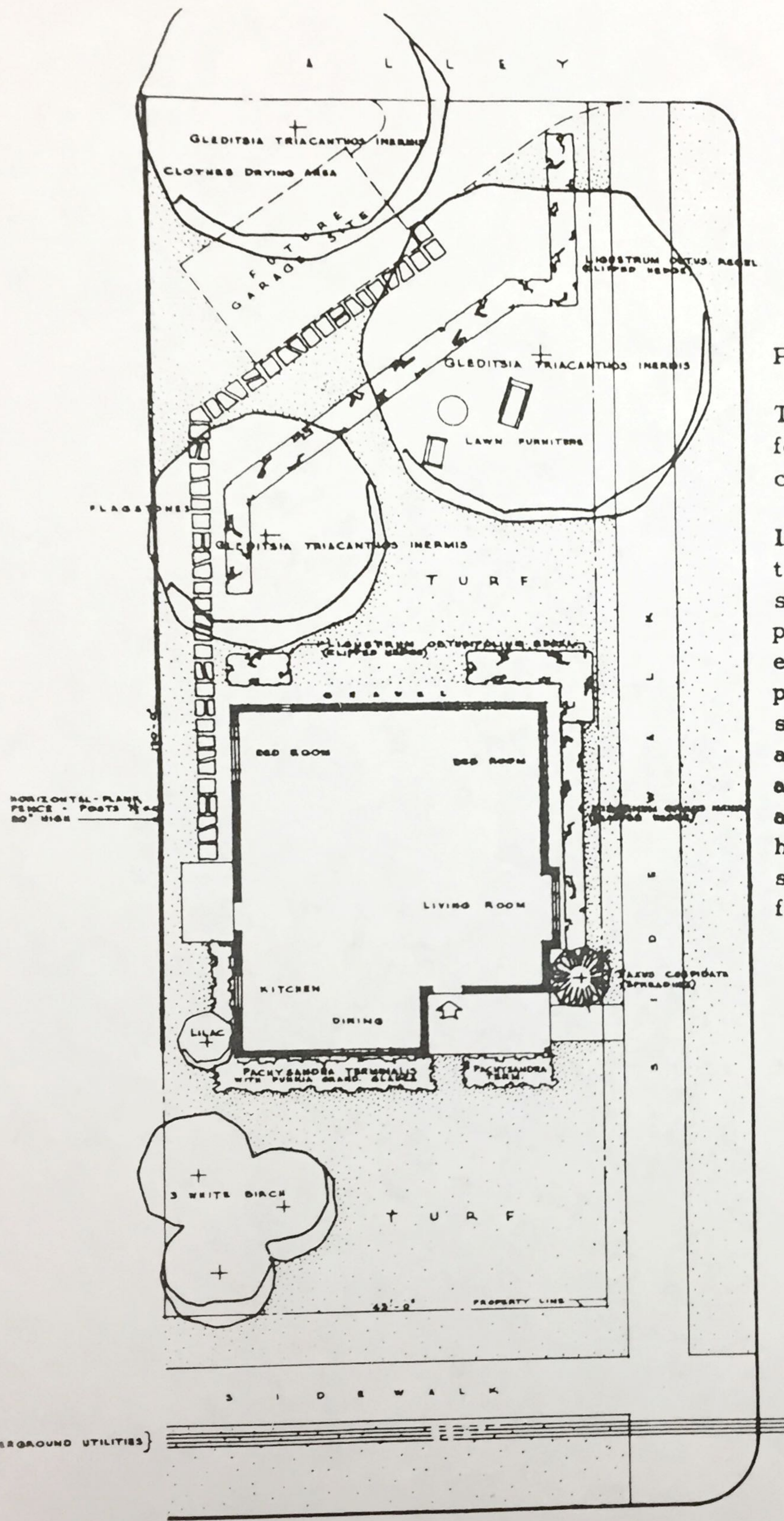
The fence and the planting at the sides and the high screen planting at the rear provides privacy even on this corner lot.



Plot Plan No. 6

This plan is suggested for a corner lot approximately 70 x 122 feet.

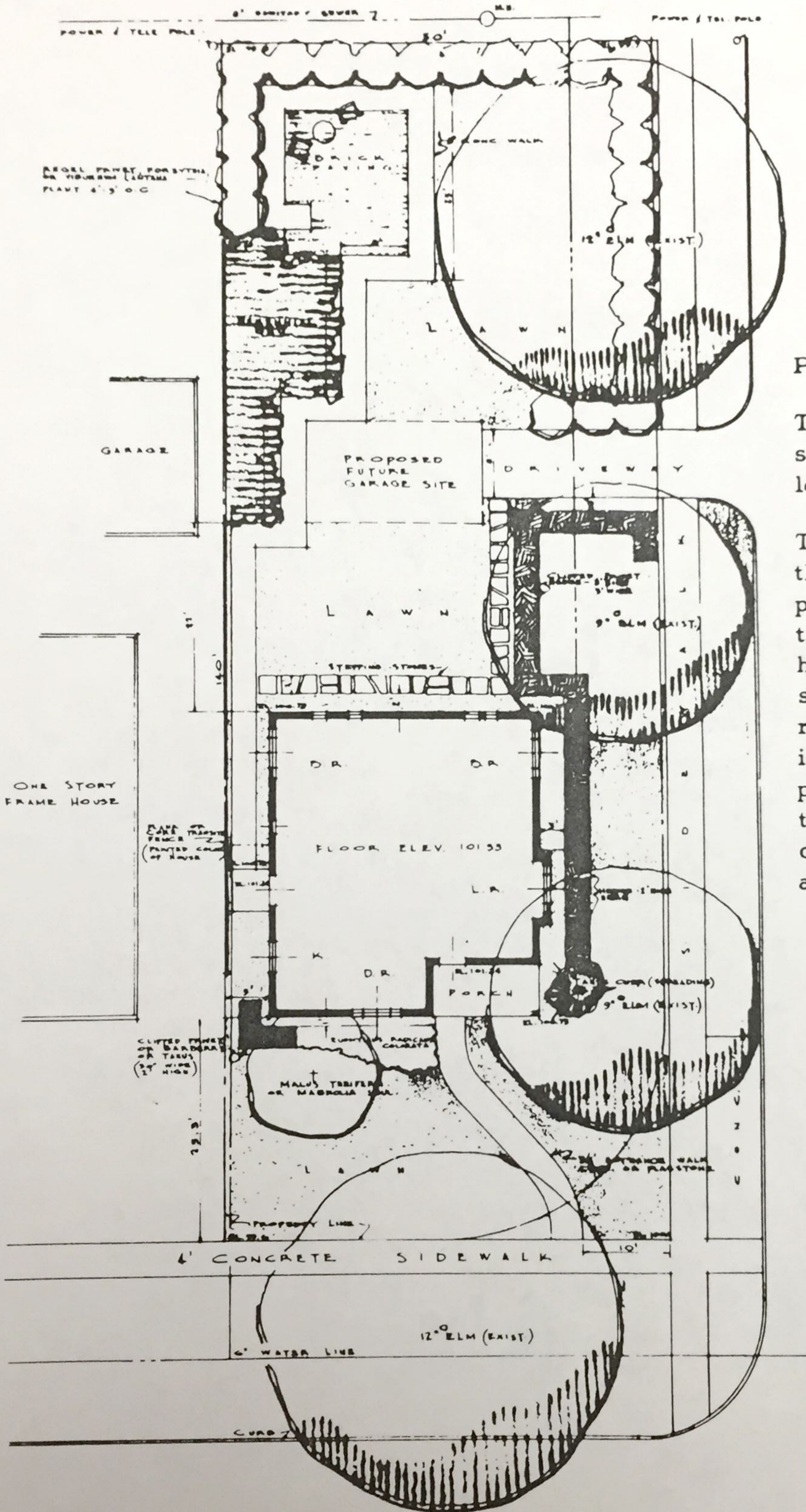
If there are children in the family, a play area for them could be arranged in the area behind the paved terrace. The various areas are separated by a hedge, thus simplifying the entire planting and plant material.



Plot Plan No. 7

This plan is suggested for an extremely narrow corner lot, 43 x 120 feet.

If the building restrictions pertaining to the side yard limit lines will permit the house to be erected on the lot, this plan is particularly pleasant. The garage located at the rear of the lot, and at an angle, provides easy access from the alley. The hedge repeating the angle screens the service area from the living lawn.



Plot Plan No. 8

This plan is another suggestion for a corner lot 50 x 140 feet.

The existing trees on the right side of the property determined the placement of the house. The hedge and screen planting at the rear of the property is suggested to provide privacy. The lawn near the rear of the house could be used as a play area for children.

PART IV

DELIVERY AND ERECTION OF THE LUSTRON HOME

REQUIREMENTS . . .

The complete Lustron Home Package is transported to the site on one large truck-trailer unit which is 45 feet in overall length, including the tractor. The trailer without the tractor is 32'-6" long and 8'-0" wide and 12'-1" high from the ground to the top of the load. The overall weight is approximately 24 tons.

The delivery-unloading of the Lustron Home Package and the erection in the minimum man-hours requires that:

- a. Lots front along all-weather access roads to facilitate delivery.
- b. Temporary roadbed provisions be made where required, to permit unloading close to foundation slab.
- c. All footings, foundations, floor and porch slabs be in place and inspected in accordance with local building codes and trenches and other excavation be back-filled and the lot rough graded to within 11 inches from the finished floor elevation prior to actual delivery.
- d. All underground utilities (water, storm or sanitary sewers, gas, and/or the oil fuel tank) be installed and inspected in accordance with local building codes prior to delivery.
- e. In order to facilitate the removal of the larger items, such as trusses, heater unit, Thor unit, etc., it is suggested that the dealer either construct out of rough lumber or have available at the site a minimum of six wooden horses, 42" in height, and a minimum of eight 2" x 8" x 16' planks to make a platform for the handling of materials from the high levels of the trailer.

PART I

SELECTING SITES FOR LUSTRON DEVELOPMENTS

LOCATION . . .

GOOD when near or accessible to:

- a. suitable schools, churches, recreational centers, amusements, shopping center.
- b. convenient transportation and traffic arteries.
- c. fire and police protection.
- d. public utilities and street maintenance.

POOR when near:

- a. smoke, dirt, odors, noise, and unsightly areas.
- b. ponds, dumps, railroads, industrial areas and fire hazards.

GOOD when:

- a. land is in residential area.
- b. area is zoned for residential building.
- c. land is well drained and relatively level.
- d. land has scattered existing trees.
- e. approach routes are favorable.
- f. located on "right side" of town.

POOR when:

- a. adjacent to or on street bearing heavy or fast traffic.
- b. zoning allows undesirable use of land.
- c. adjacent property values are lower.
- d. land is heavily wooded.
- e. approach routes are congested or through depreciated, commercial or industrial areas.
- f. fighting long established adverse trends.

SIZE . . .

High taxes and carrying charges make it unprofitable to carry large tracts. Future expansion can usually be provided through long time options on adjoining areas. Average size development is 35 acres.

COST . . .

For Lustron Homes, the improved lot should average 12 1/2 percent of total cost of house and lot. The initial cost of land improvements vary due to the nature of terrain and local regulations pertaining to subdivision development.

PHYSICAL CHARACTERISTICS . . .

The Lustron Home, by nature of design, is best suited to moderate rolling sites, which will give variations in the eave and ridge line.

Site improvements cost rises where slopes exceed 10 percent.

Scattered trees are desirable. Heavily wooded sites or stone outcrops increase clearing and foundation costs.

The site should have good natural drainage--avoiding marshes, swamps, or wet-pockets, which must be drained at high costs.

Site should be free from nearby undesirable land use, cheap developments, railroad tracks, etc.

Avoid sites split by major thoroughfares.

UTILITIES AND SERVICES . . .

Check:

Availability of electricity, gas, water, storm and sanitary sewers, and public transportation.

Present capacity of services and ability to handle increased load.

Waste disposal and street services.

Availability of police and fire protection.

Availability of schools.

In the initial stages, a Lustron dealer may desire to use, as building sites, groups of improved lots in platted subdivisions. Such building sites must be selected with care and should have the physical characteristics and be provided with the services listed above. The selection of groups of lots fronting along streets of a gridiron pattern may in some instances require re-platting in order to obtain lots of sufficient width and to introduce variations in the building lines.

IMPORTANT!

Before you select sites for a group development, secure the advice of a competent site planner or landscape architect.

If you are contemplating submitting an application for mortgage insurance to the local office of the Federal Housing Administration, consult with that Agency before a final site selection is made...it may forestall possible unnecessary expense.

LEGAL ASPECTS . . .

In connection with subdivision activities, a dealer should be aware that a variety of legal problems may be encountered and should freely consult his local attorney throughout the operation. Some of the matters on which the dealer should secure competent legal advice are:

- a. Title to land including easements, assessments, unpaid taxes, etc.
- b. Deed restrictions, covenants or agreements affecting the use of the land.
- c. Check surveyor's report against legal description of land in abstract of title.
- d. Dedication of new subdivisions, including streets, alleys, etc.
- e. Applicable zoning laws, including city or county.
- f. Building code provisions.
- g. Permits or licenses for opening new streets, extending utilities, and conducting other building operations.
- h. Ascertaining political subdivision, such as city, county, or township which has jurisdiction of land for supplying facilities and services.
- j. Platting of new subdivision or re-platting of part or all of old subdivisions.

PART II

PLANNING THE LUSTRON DEVELOPMENT

Planning a new development is more than the drafting of street and lot lines. It deals with the transformation of raw land (a wholesale product) into building lots (a retailable product); determination of physical surroundings and the placement of the Lustron Home in those surroundings; and the relation of one Lustron Home to the other, to open spaces, to roads, to surface and sub-surface utilities. This must be done in good taste. Also, economically and efficiently so as to be maintained with minimum of expense. It is a complicated technique which will require the assistance of trained personnel. Remember, the Lustron Home should be set in a sound economic surrounding upon a well-ordered arrangement of land and ground forms.

REQUIRED SITE INFORMATION

Before your site planner or landscape architect can begin to develop plans for a Lustron Development, you must have the data listed below concerning the site:

- a. Property Line Map (scale 1"=100') showing outside boundaries, location and dimensions of existing streets, alleys along boundary, computed area of all parcels.
- b. Topographic Map (scale 1"=100') showing contours, test pits, existing trees, buildings, walks, fences, rock outcrops, boundary of property.
- c. Public Utilities Maps showing location, size, etc., of existing sanitary and storm sewers, water, gas, and electrical service.
- d. Site Location Map showing location of project in relation to principal approaches, schools, shopping facilities, etc.

PLANNING THE SITE . . .

STREETS:

The initial cost of street improvements will be an important factor in deciding the sales price of individual lots. Street layouts must not ignore topography. Any street layout which does not consider topography and soil characteristics is wasteful.

Through care and skillfully designed street systems, increasing length of blocks and utilization of efficient street widths, it is possible to reduce the area devoted to streets which will mean reduction in first costs of paving and public utilities, and also reductions

in cost of repairing and maintenance. Approximately 20 percent of land is usually devoted to streets.

Recommended Width of Major Streets:

Property line to property line.....60 feet or more
Paved roadway34 feet or more
Sidewalks.....5-6 feet wide

Recommended Width of Minor Streets:

Property line to property line.....50 feet wide
Paved roadway..... 24-26 feet
Sidewalks....4 feet wide

Court Streets or Culs-de-Sac:

These should be limited to a length of 500 feet and have a minimum turnaround of not less than 40 feet. Loop streets can be used to advantage in the center of excessively deep blocks.

Street Intersections:

Use a 15 foot curb radii on minor streets to reduce speed of automobiles in turning corners and endangering pedestrians and to save paving costs. Avoid acute angle street intersections--they create blocks which are difficult to lot.

Street Planting Strips Next to Curb:

When curb and sidewalks are separated, use an 8 foot minimum planting strip for street trees.

Private Driveways:

Recommended 8 foot wide drives with 3 to 5 foot radii at curb. The use of the rolled curb will eliminate the use of curb returns.

Rolled Curb and Gutter:

The use of a combined curb and gutter, poured in one unit, will permit location of driveways at any point without breaking the curb. Usual hung forms are eliminated. The work is shaped and finished in one operation by a template resting on front and back forms. A rolled curb and gutter is a practical way of reducing cost of streets. At intersections, work into a straight curb to discourage corner cutting by automobiles and to prevent pedestrians from slipping on sloping surface at cross walks.

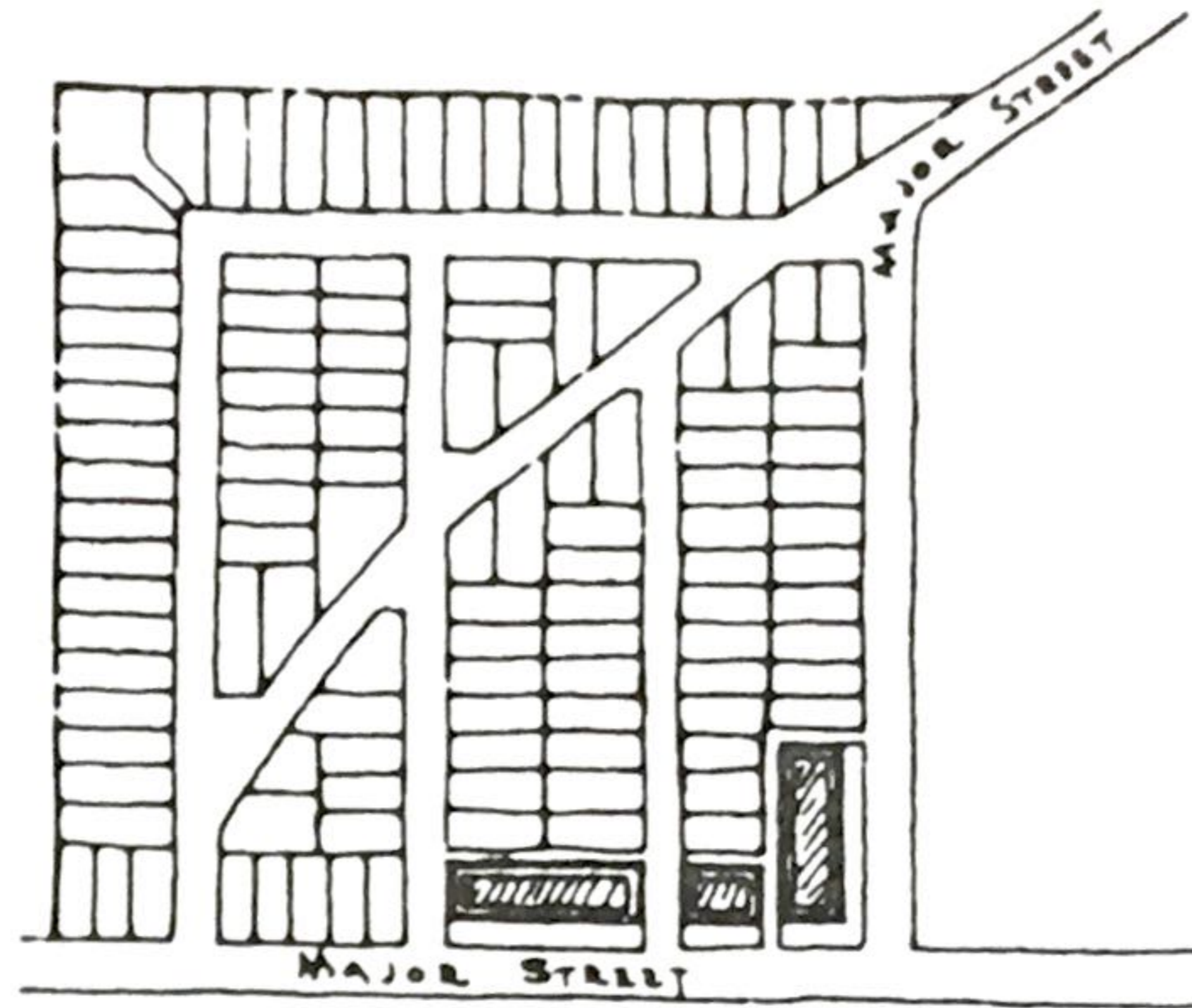
DISCOURAGE HEAVY THROUGH TRAFFIC

Minor streets should be so arranged as to make fast through travel impossible. Rapidly moving traffic on local residential streets results in an undue number of accidents and also unnecessarily increases the cost of pavement construction and maintenance.

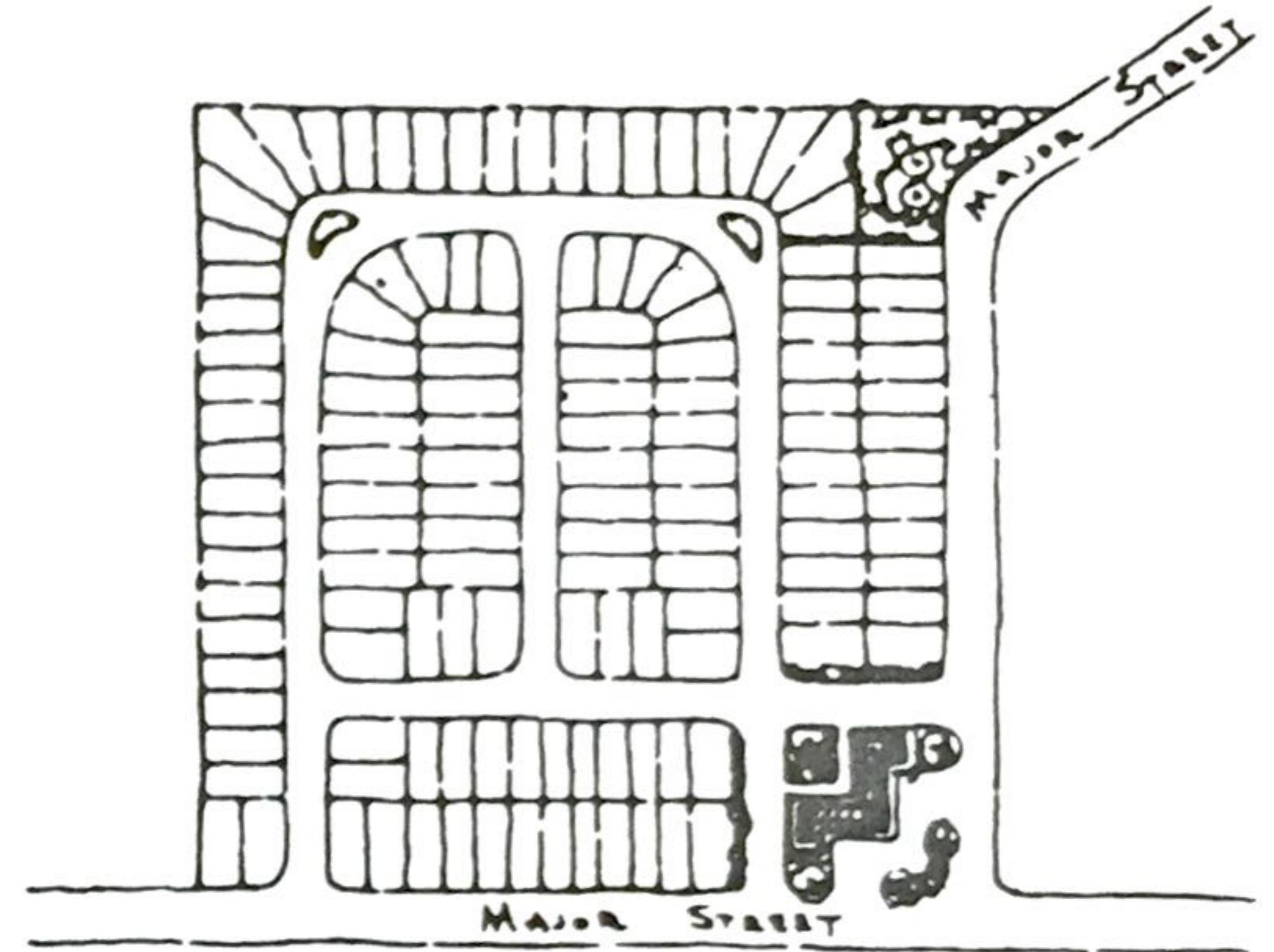
The mixture of local and through traffic on a residential street creates a condition which tends toward a doubtful policy as to land use and neighborhood growth. Where lots have unlimited and direct access to a heavy traffic street there is a constant threat that the restrictive covenants and zoning ordinance may be broken down by pressure to convert detached dwelling lots into income properties.

The upper illustration at the right shows poor street planning that results in unfavorable conditions.

BAD



GOOD



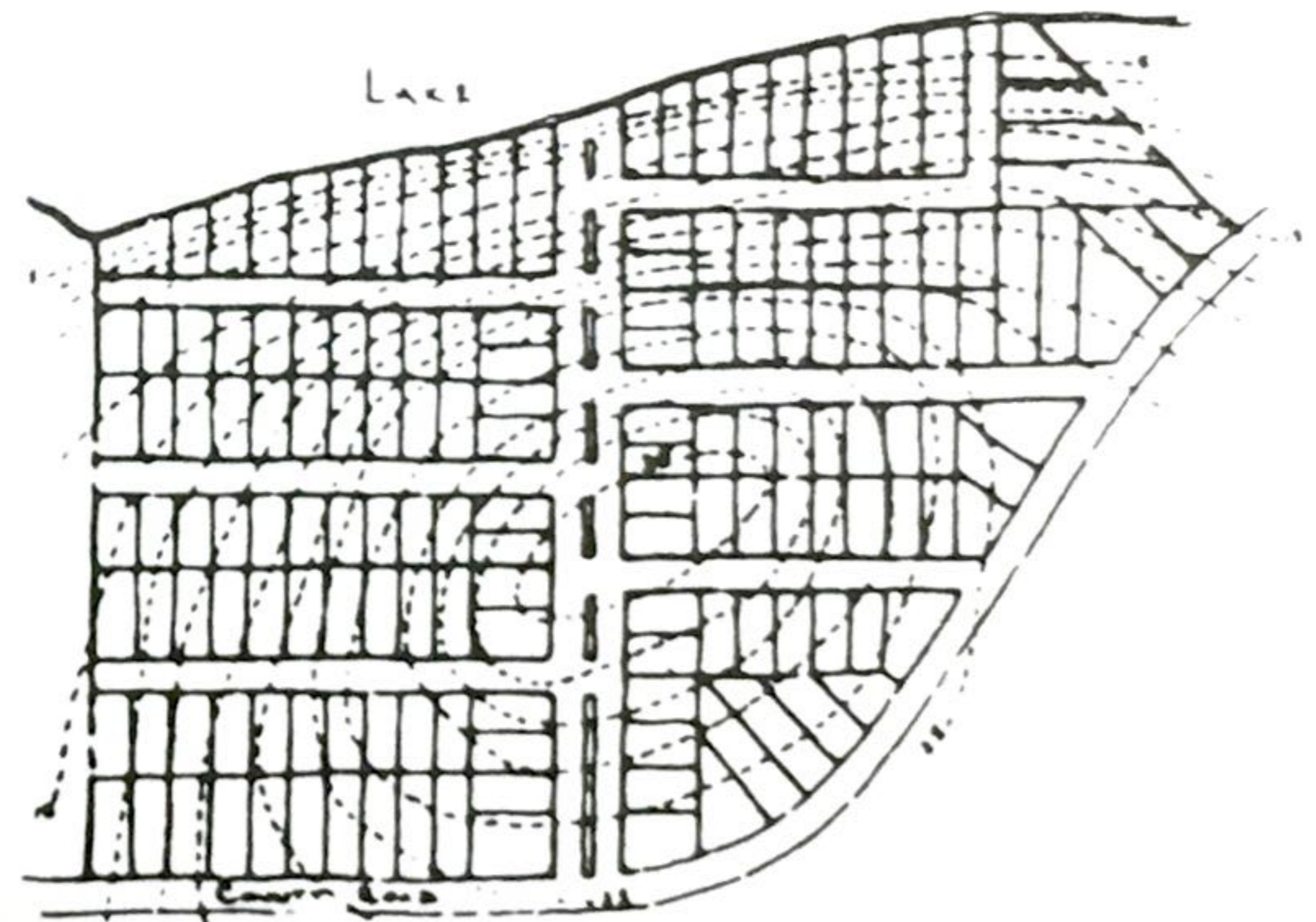
STREETS SHOULD FIT CONTOURS OF IRREGULAR LAND

When ground levels of a tract vary considerably, streets should be laid out to conform to natural conditions. Observations as to high and low ground are often adequate to determine the location of streets. If the land is rough, a topographical map should be made to obtain a complete representation of ground conditions.

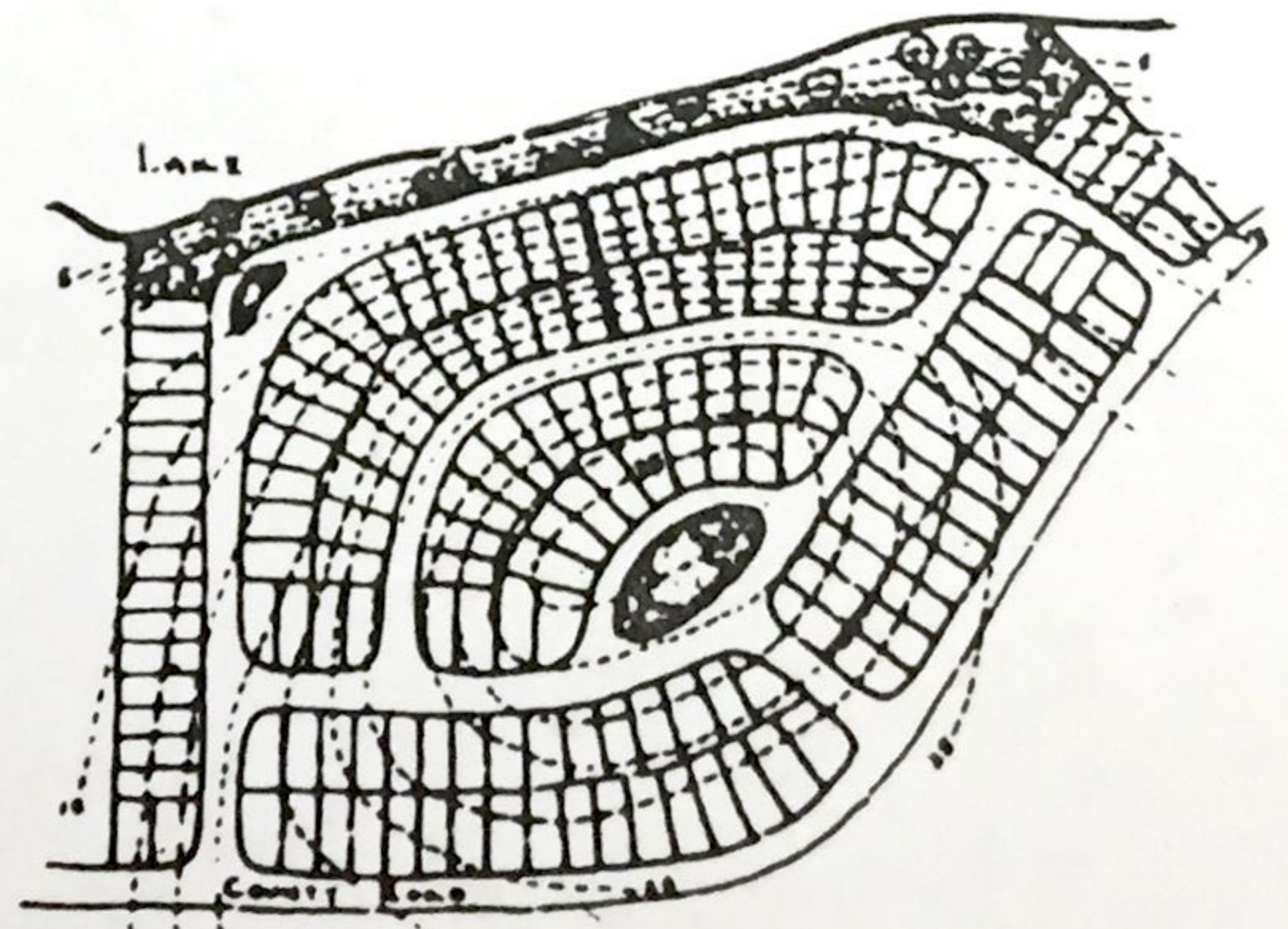
Streets laid out to fit the contours of the land will avoid excessive grades and reduce construction cost. A subdivision plan based upon the topography of the site not only makes possible a better designed development, but also makes the installation of utilities more economical.

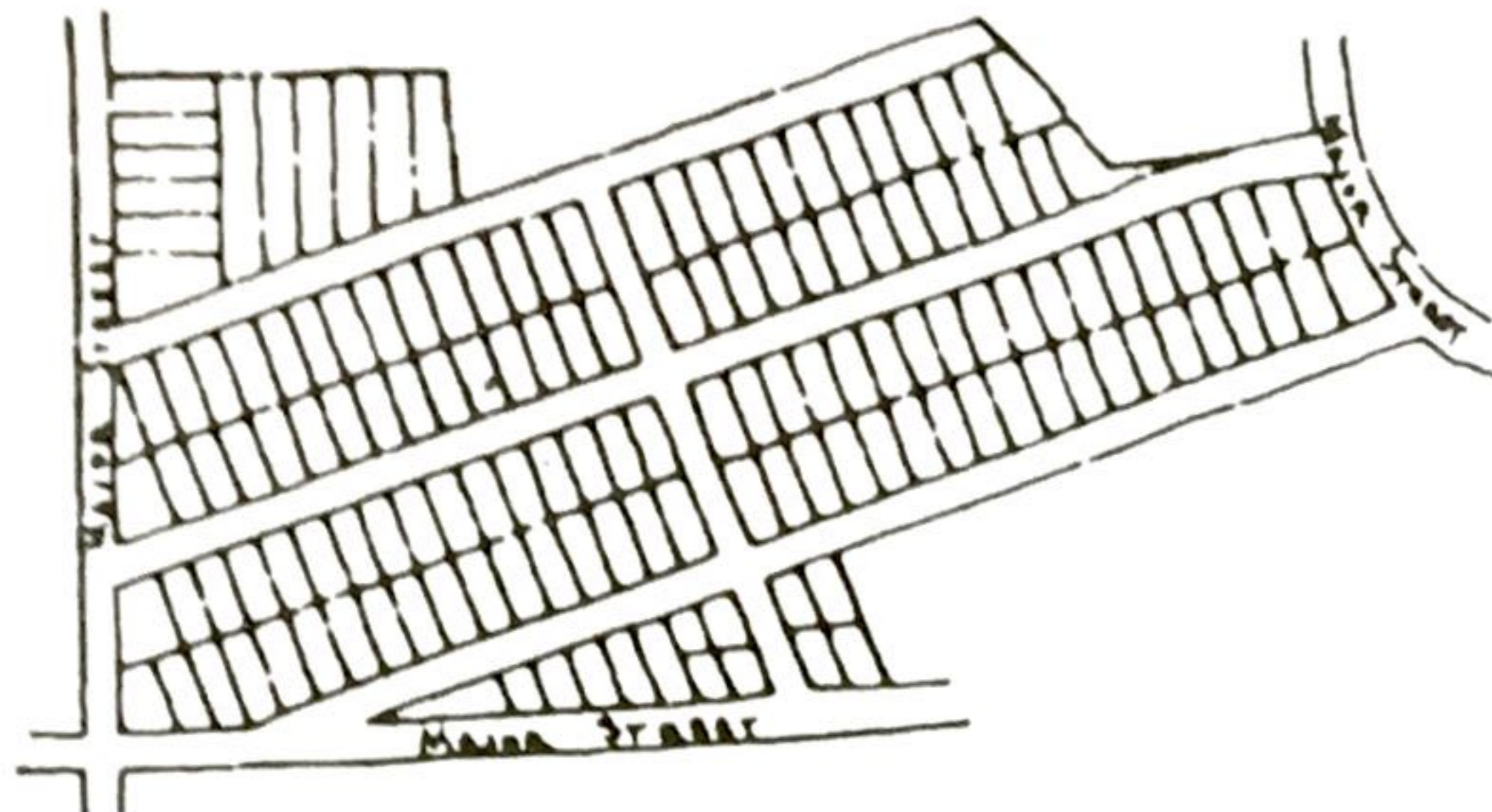
In locating streets, consideration should be given to the size and shape of lots and blocks in order to obtain the best use of the land.

BAD

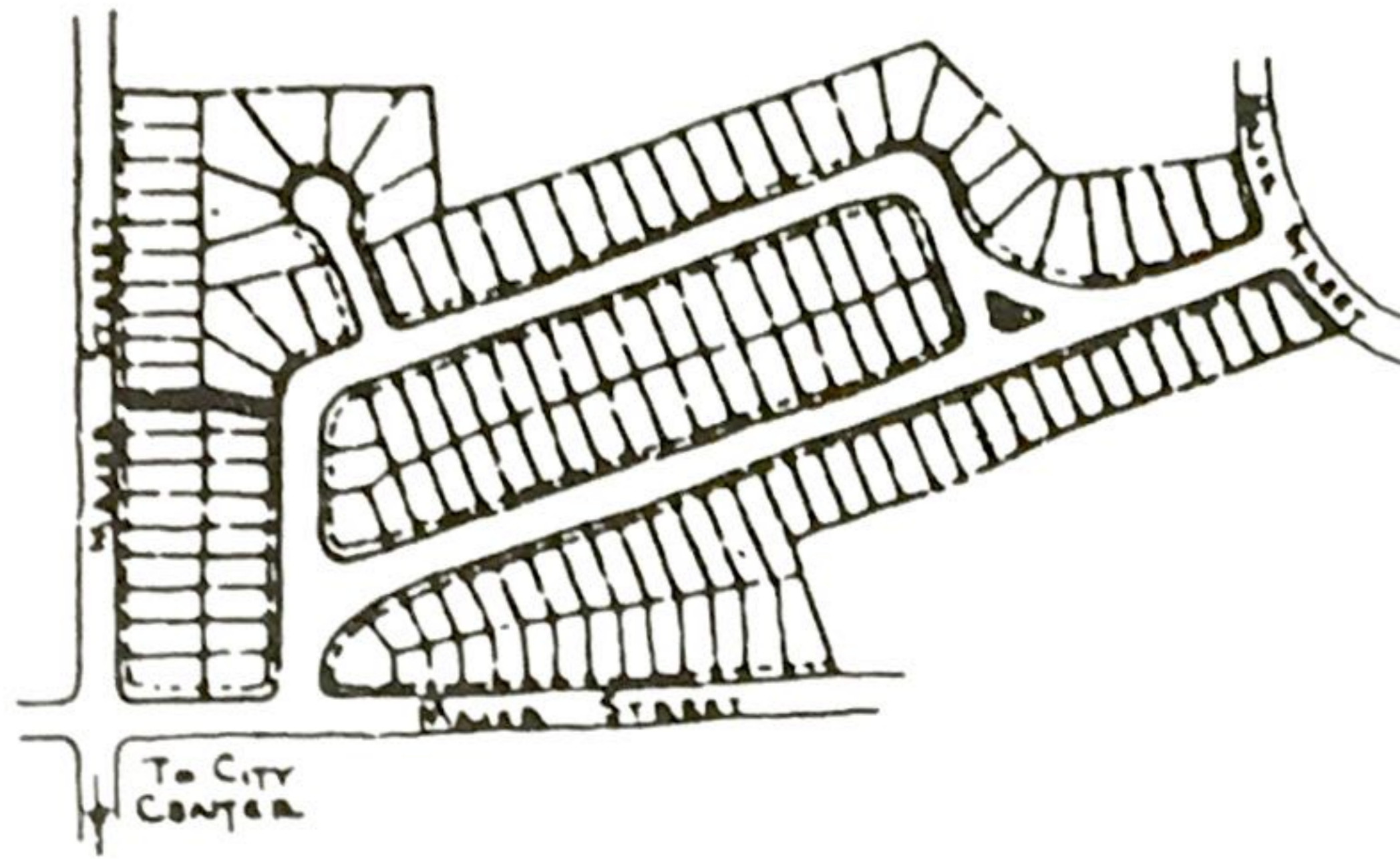


GOOD





BAD



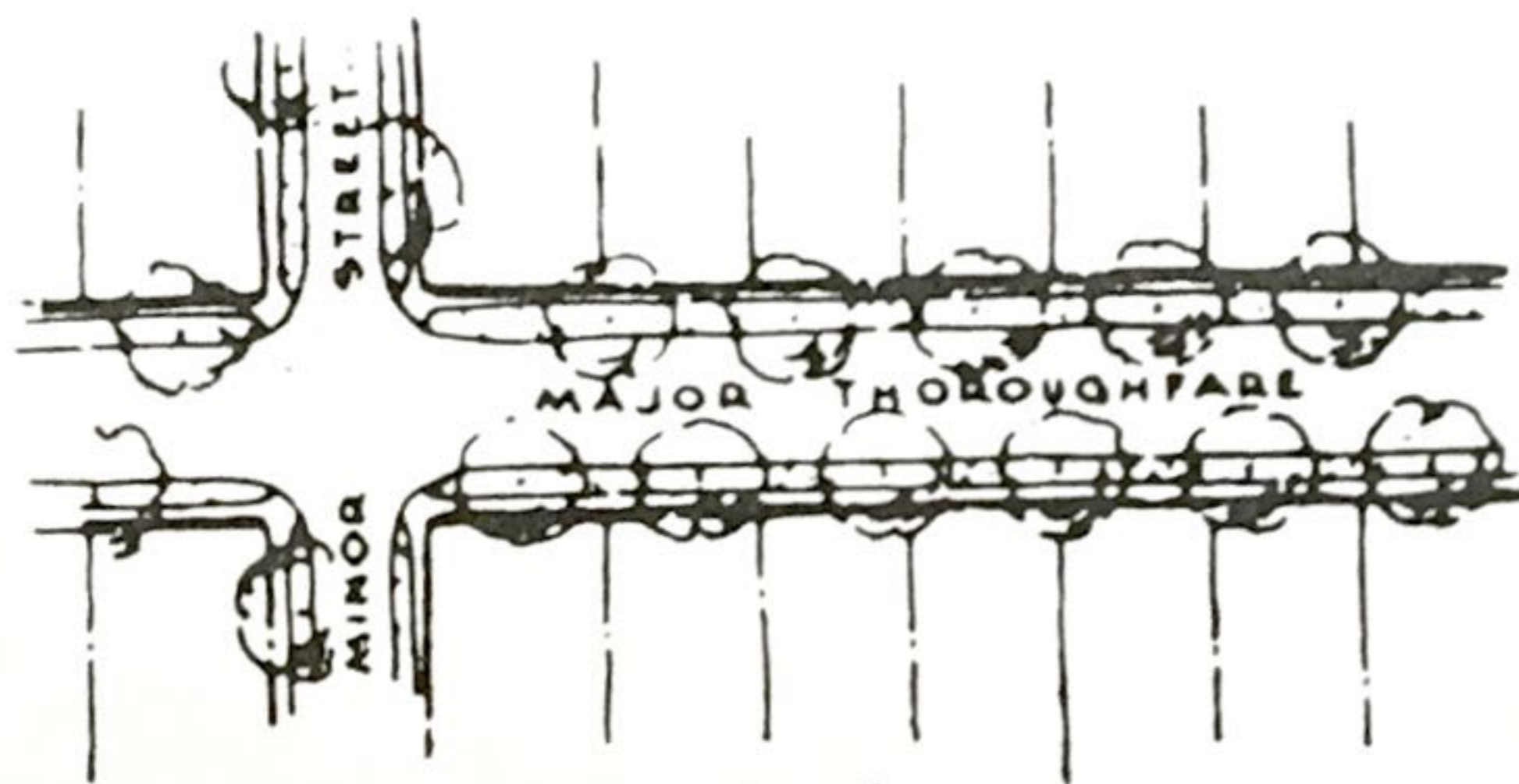
GOOD

MINOR STREETS SHOULD ENTER MAJOR STREETS AT RIGHT ANGLES

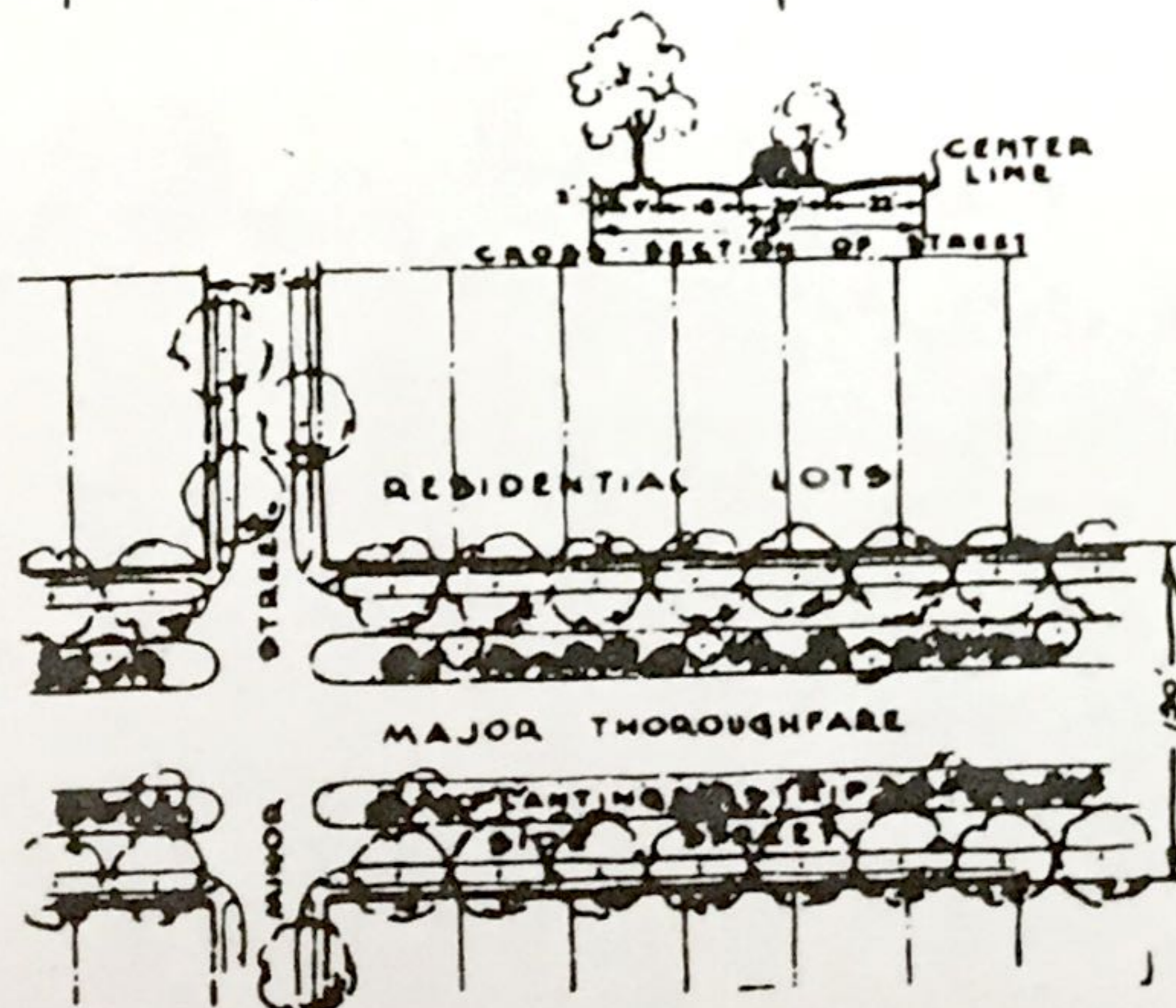
Streets should intersect each other as nearly at right angles as is practicable, and the number of streets converging upon a single point should be kept at a minimum. All minor streets approaching a major thoroughfare at acute angles should be turned so that for a distance of about 100 feet they will be at right angles to the major street.

When minor streets join a thoroughfare at raking angles, visibility is greatly impaired for both motorists and pedestrians. Drivers are also tempted to turn in and out of such streets without greatly reducing their speed.

The sketch plans at the left illustrate how hazardous traffic intersections can be improved by correct platting to obtain streets crossing at right angles.



BAD



GOOD

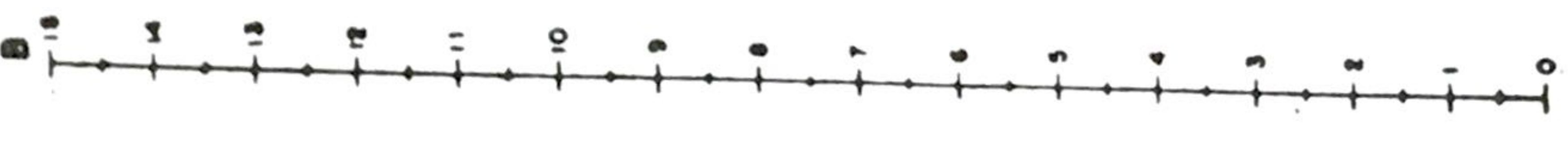
PROTECT RESIDENTIAL LOTS AGAINST MAJOR STREET TRAFFIC

When residential lots are located on a major thoroughfare, it is suggested that the through traffic be separated from local service by a planting strip about 20 feet wide.

An 18-foot local service roadway should be located inside of this planting protecting the residences against the noise and dust of traffic, and lessening the street dangers to children. Increase in the desirability of the lots will offset the cost of added street width and the planting of trees and shrubs will add to its attractiveness.

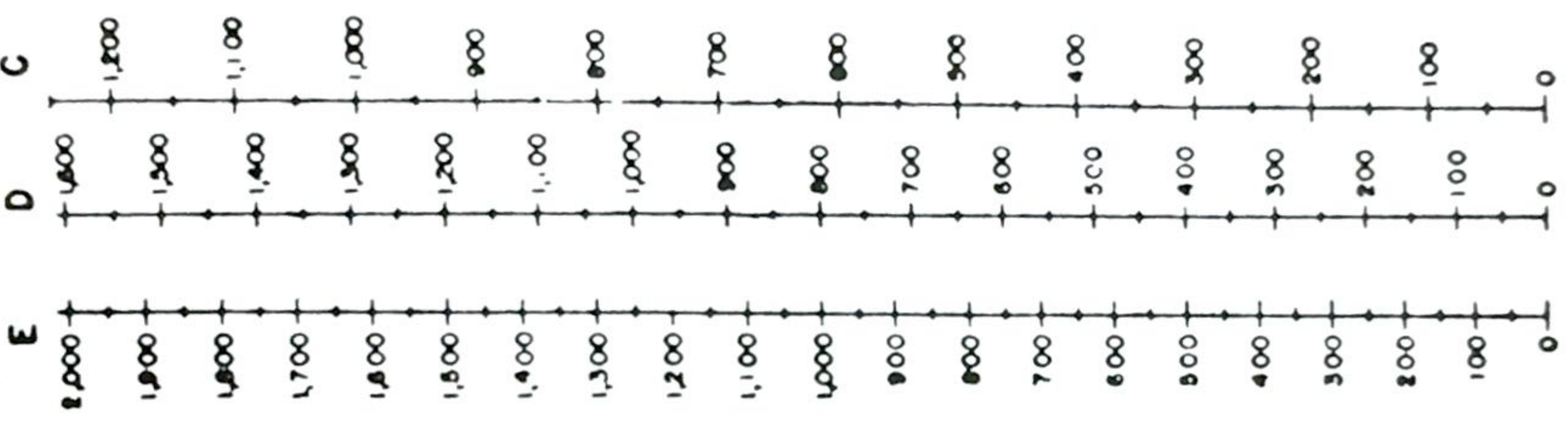
In the past it has been the custom of developers of subdivisions to set aside all property on main thoroughfares for business or apartments because of the belief that a major highway was not a suitable place for a private dwelling. The result has been spotted developments, with many vacant lots.

COST OF STREET IMPROVEMENTS DOLLARS PER FRONT FOOT SCALE



TOTAL COST - DOLLARS PER LOT INCLUDING RAW LAND & STREET IMPROVEMENTS

SCALE SCALE SCALE



INSTRUCTIONS

LAY STRAIGHT EDGE ACROSS SCALES "A", "B", "C", "D" AND "E" SO THAT IT CROSSES SCALE "A" AT THE POINT REPRESENTING THE COST OF RAW LAND PER ACRE, AND CROSSES SCALE "B" AT THE POINT REPRESENTING THE COST OF STREET IMPROVEMENTS PER FRONT FOOT. THE READING AT THE POINT WHERE THE STRAIGHT EDGE CROSSES SCALE "C" INDICATES THE TOTAL COST OF AN IMPROVED 60 FT BY 120 FT LOT, WHERE THE STRAIGHT EDGE CROSSES SCALE "D", INDICATES THE TOTAL COST OF AN IMPROVED 60 FT BY 120 FT LOT, WHERE THE STRAIGHT EDGE CROSSES SCALE "E", INDICATES THE TOTAL COST OF AN IMPROVED 70 FT BY 140 FT LOT.

EXAMPLE: WHERE THE COST OF RAW LAND IS \$900 PER ACRE, AND THE REQUIRED IMPROVEMENTS COST \$7 PER FRONT FOOT - PLACE THE STRAIGHT EDGE ON SCALE "A" AT \$900 AND SCALE "B" AT \$7

FOR 6 LOTS PER ACRE - 60'x100', READ ON SCALE "C" \$500, THE COST OF AN IMPROVED LOT

FOR 4.2 LOTS PER ACRE - 60'x120', READ ON SCALE "D" \$630, THE COST OF AN IMPROVED LOT.

FOR 3.1 LOTS PER ACRE - 70'x140', READ ON SCALE "E" \$780, THE COST OF AN IMPROVED LOT.

NOTE -
IN THIS CHART APPROXIMATELY 25% OF THE GROSS ACREAGE IS ALLOWED FOR PUBLICLY DEDICATED LAND.

LOT SIZE	NET LOTS PER ACRE
50'x100'	6.0
60'x120'	4.2
70'x140'	3.1

IN ARRIVING AT THE TOTAL COST OF EACH IMPROVED LOT AN ALLOWANCE MUST BE ADDED TO THE FRONT FOOT COST FOR THE INSTALLATION OF IMPROVEMENTS IN THE CROSS STREETS ON WHICH NO LOTS FACE. THIS ALLOWANCE WILL VARY FROM 12% TO 40% DEPENDING ON THE LENGTH AND WIDTH OF BLOCKS.

AN ADDITIONAL ALLOWANCE FOR RAW LAND COST SHOULD BE MADE WHERE LARGE PARK AREAS ARE DEDICATED.

LAND PLANNING DIVISION
FEDERAL HOUSING ADMINISTRATION

The approximate total cost of an improved lot can be computed on this chart from raw land costs and street improvement costs.

AVERAGE FRONT FOOT COST FOR STREET IMPROVEMENTS IN SUBDIVISIONS IN 1947

	Northeastern States			Southeastern States			North Central States			Southwestern States			West Coast States		
	Unit Cost	Front Foot Cost	Front Foot Cost	Unit Cost	Front Foot Cost	Front Foot Cost	Unit Cost	Front Foot Cost	Front Foot Cost	Unit Cost	Front Foot Cost	Front Foot Cost	Unit Cost	Front Foot Cost	
Grading - Average 12" Cut..	\$1.00 cu.yd.	\$.50	\$.35	\$.70 cu.yd.	\$.35	\$.45	\$.90 cu.yd.	\$.45	\$.60 cu.yd.	\$.30	\$.75 cu.yd.	\$.38			
Paving --															
Base.....	.80 sq.yd.	1.05	.96	.75 sq.yd.	.96	1.60 sq.yd.	2.05	.83	.65 sq.yd.	.83	.70 sq.yd.	.90			
Wearing Surface.....	.55 sq.yd.	.71	.64	.50 sq.yd.	.64	.50 sq.yd.	.64	.64	.50 sq.yd.	.64	.90 sq.yd.	1.15			
Curb and Gutter - Cement Concrete,															
Rolled or Straight Faced.	1.50 lin.ft.	1.50	1.40	1.40 lin.ft.	1.40	1.65 lin.ft.	1.65	1.30	1.30 lin.ft.	1.30	1.50 lin.ft.	1.50			
Sidewalks - Cement Concrete															
4' x 4".....	.30 sq.ft.	1.20	1.20	.30 sq.ft.	1.20	.35 sq.ft.	1.40	1.20	.30 sq.ft.	1.20	.30 sq.ft.	1.20			
Sanitary Sewer - Minimum 8"	2.75 lin.ft.	1.38	1.25	2.50 lin.ft.	1.25	2.10 lin.ft.	1.05	1.15	2.30 lin.ft.	1.15	2.25 lin.ft.	1.13			
Storm Drainage.....	3.25 lin.ft.	.54	.54	3.25 lin.ft.	.54	3.00 lin.ft.	.50	.50	3.00 lin.ft.	.50	2.70 lin.ft.	.45			
Water.....	2.50 lin.ft.	1.25	1.13	2.25 lin.ft.	1.13	3.00 lin.ft.	1.50	1.05	2.10 lin.ft.	1.05	2.25 lin.ft.	1.13			
Planting and Seeding - (6 1/2 sq.ft.grass @ \$.03, on tree every 60' @ \$6.00).....															
		.29	.29		.29	.49	.49	.29		.29		.29			
	Sub-Total	\$ 8.42	\$ 7.76		\$ 7.76	\$ 9.73	\$ 9.73	\$ 7.26		\$ 7.26		\$ 8.13			
For street improvements on which no houses face 15%..		1.26	1.16		1.16	1.46	1.46	1.09		1.09		1.22			
Engineering 6%.....		.58	.54		.54	.67	.67	.50		.50		.56			
	Total	\$10.26	\$ 9.46		\$ 9.46	\$11.86	\$11.86	\$ 8.85		\$ 8.85		\$ 9.91			

Notes:

Cost figures supplied by The Urban Land Institute, Washington, D. C.
 Above estimates based on development of a tract of about 30 acres (approximately 135 lots, 60' x 120') with 25% of gross acreage allowed for roads, etc.
 Front foot cost based on a 26 foot pavement width using a 2 foot overall width for curb and gutter.

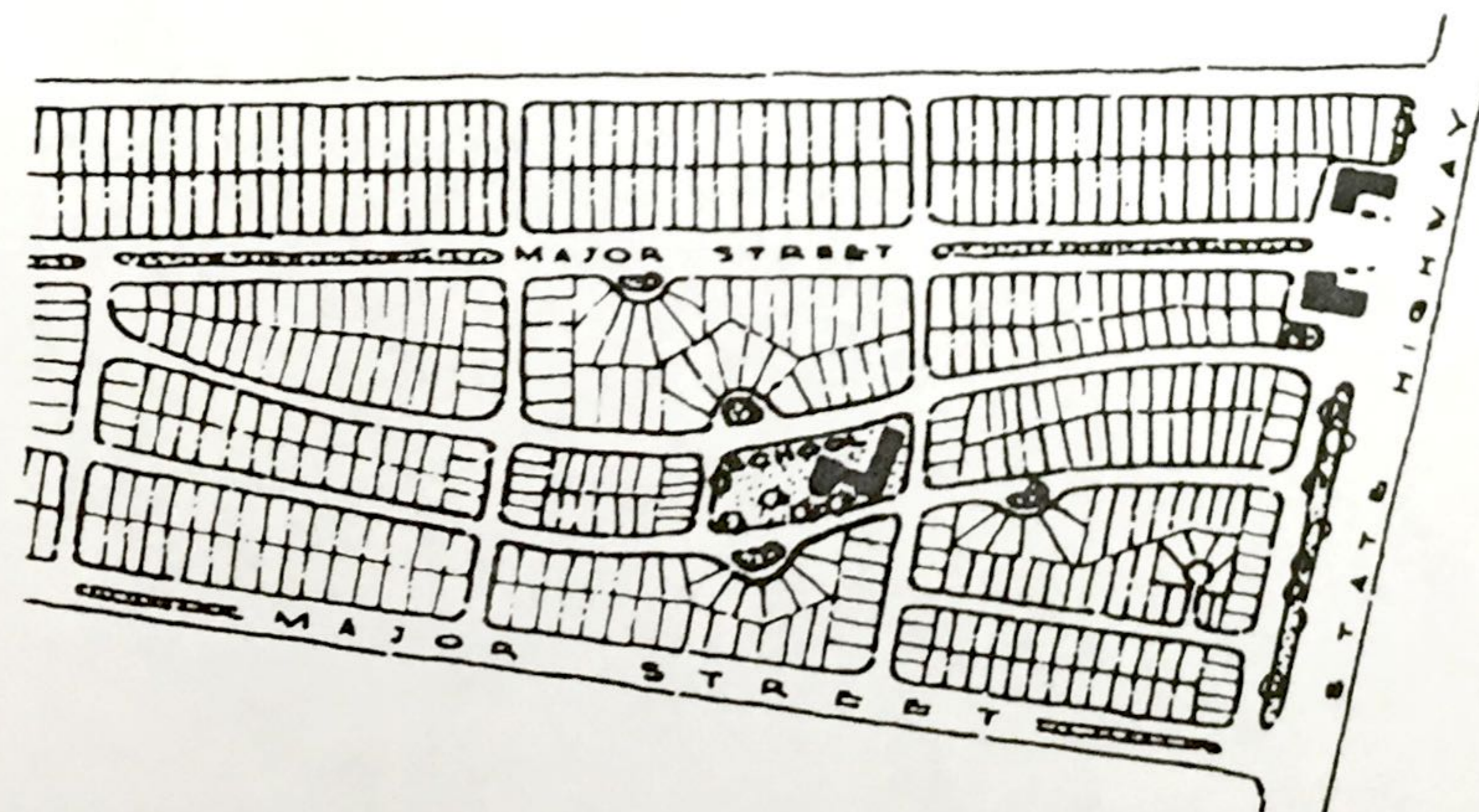
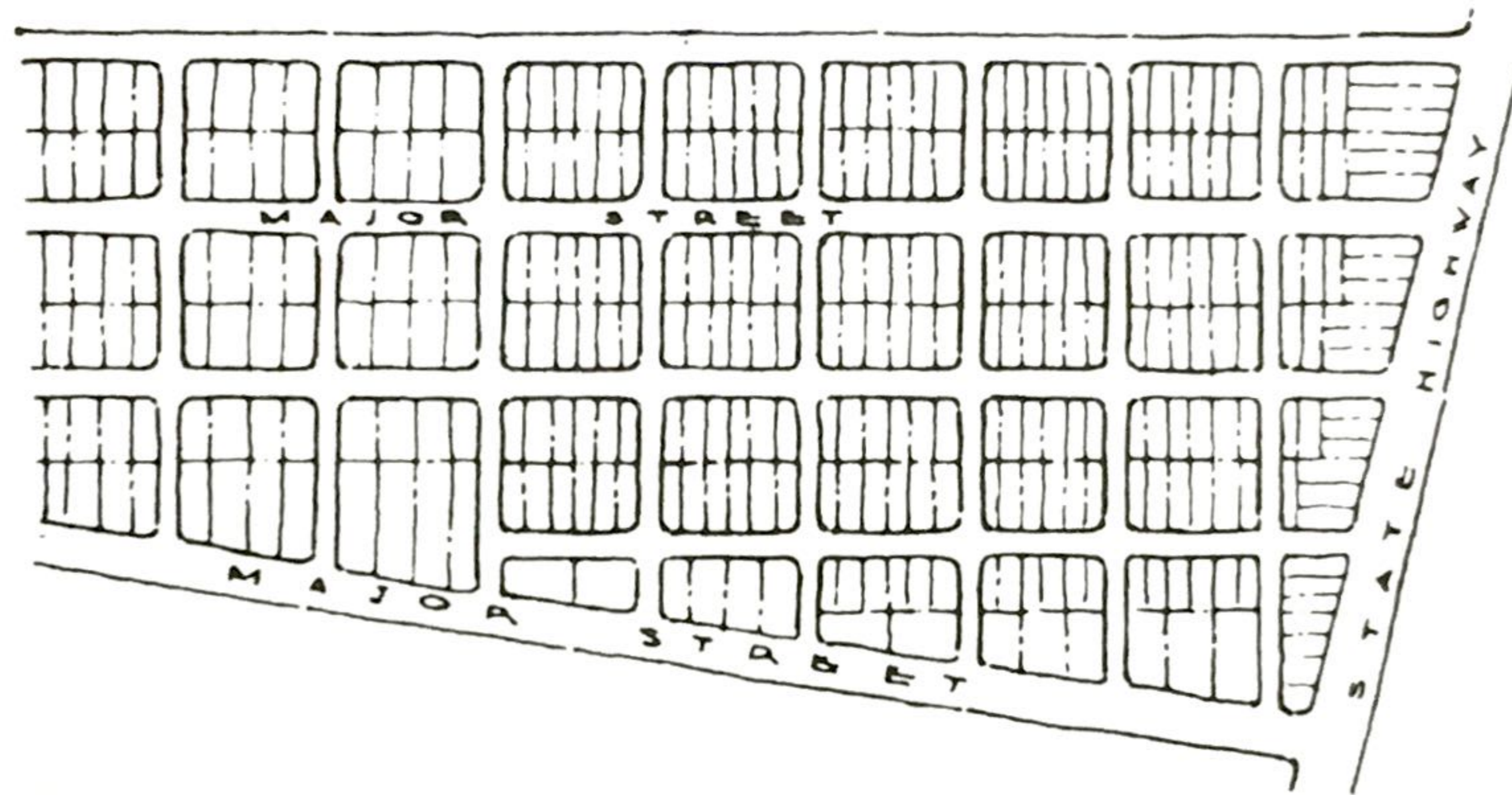
BLOCK SIZES:

Short blocks are not economical, they increase initial construction costs because of the large number of cross streets, and also increase traffic hazards and travel time through such districts. The platting of suburban residential blocks up to 1,300 feet in length by two lot depths wide, bounded by streets that are adjusted to topographic and traffic requirements are more economical. The use of crosswalks through long blocks is sometimes desirable for convenient access to remotely situated building lots.

Long blocks provide safety and create savings up to 20 percent in street and utility costs.

Super blocks schemed with court streets are successful when controlled through central maintenance.

Original Plan



Revised Plan

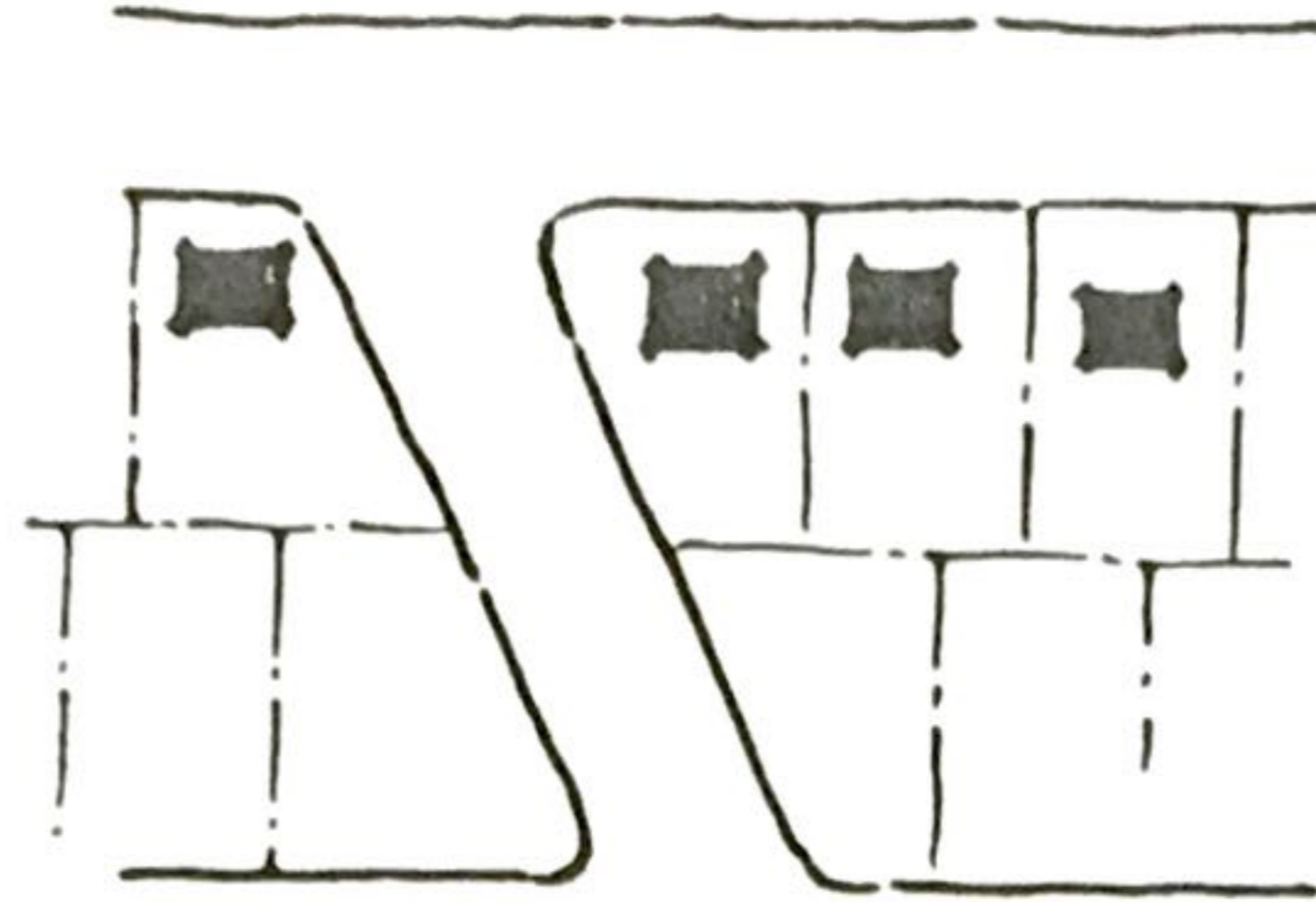
The above sketches contrast two types of local street design...one an example of the rigid gridiron pattern, the other planned to meet the requirements of local access and circulation. In the lower plan, better shaped lots are secured and those facing the State Highway are protected by park strip. This plan also provides a local shopping center and school site.

LOT LINES :

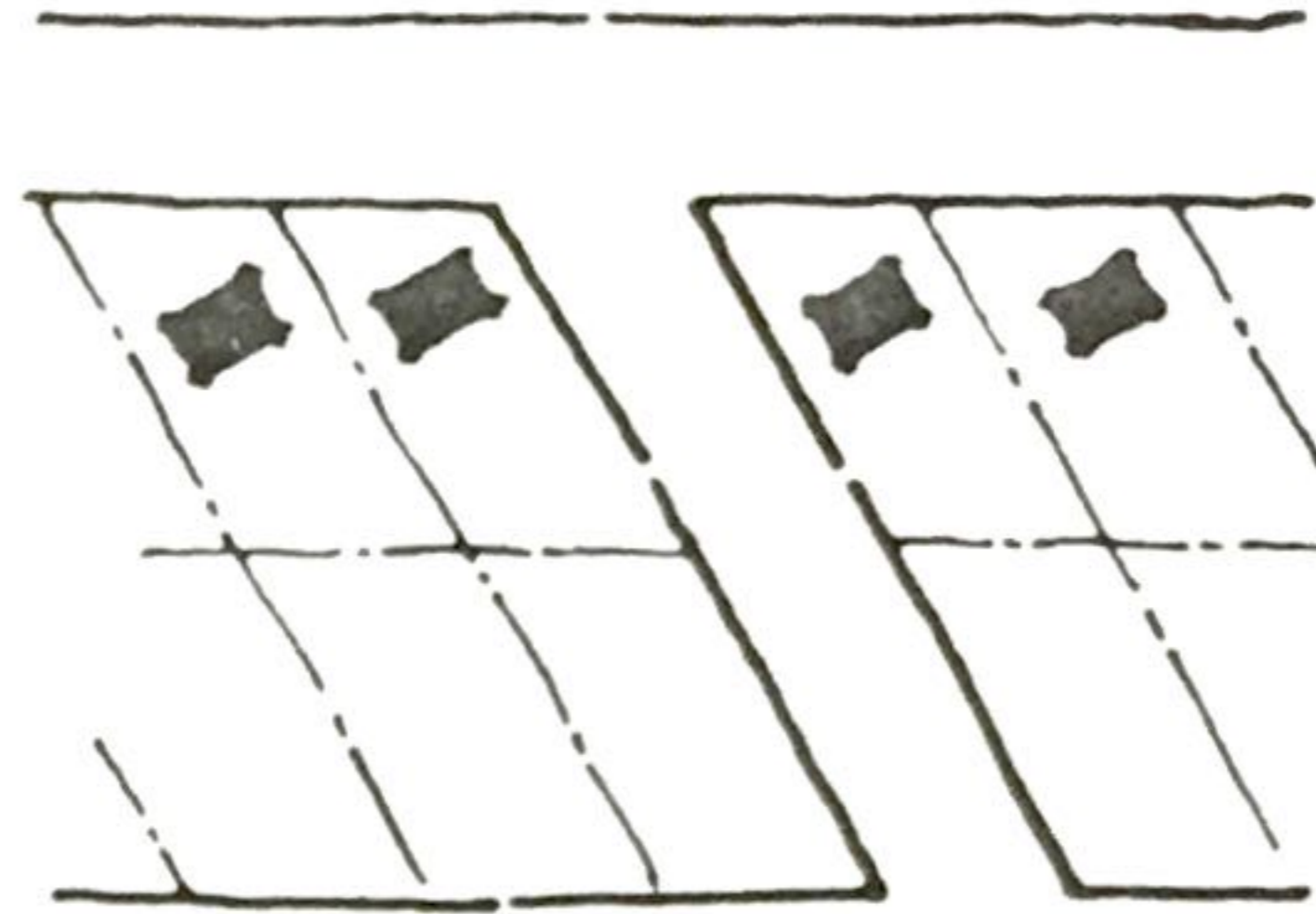
When carefully studied, lot lines can result in increased value by creation of more desirable and usable home sites. Existing streets and property lines are often controlling factors. Several common mistakes made in lotting are shown below. If the streets and lot lines can be relocated in platted subdivisions, it is worth the trouble.

When diagonal streets cannot be avoided:

Lot this way

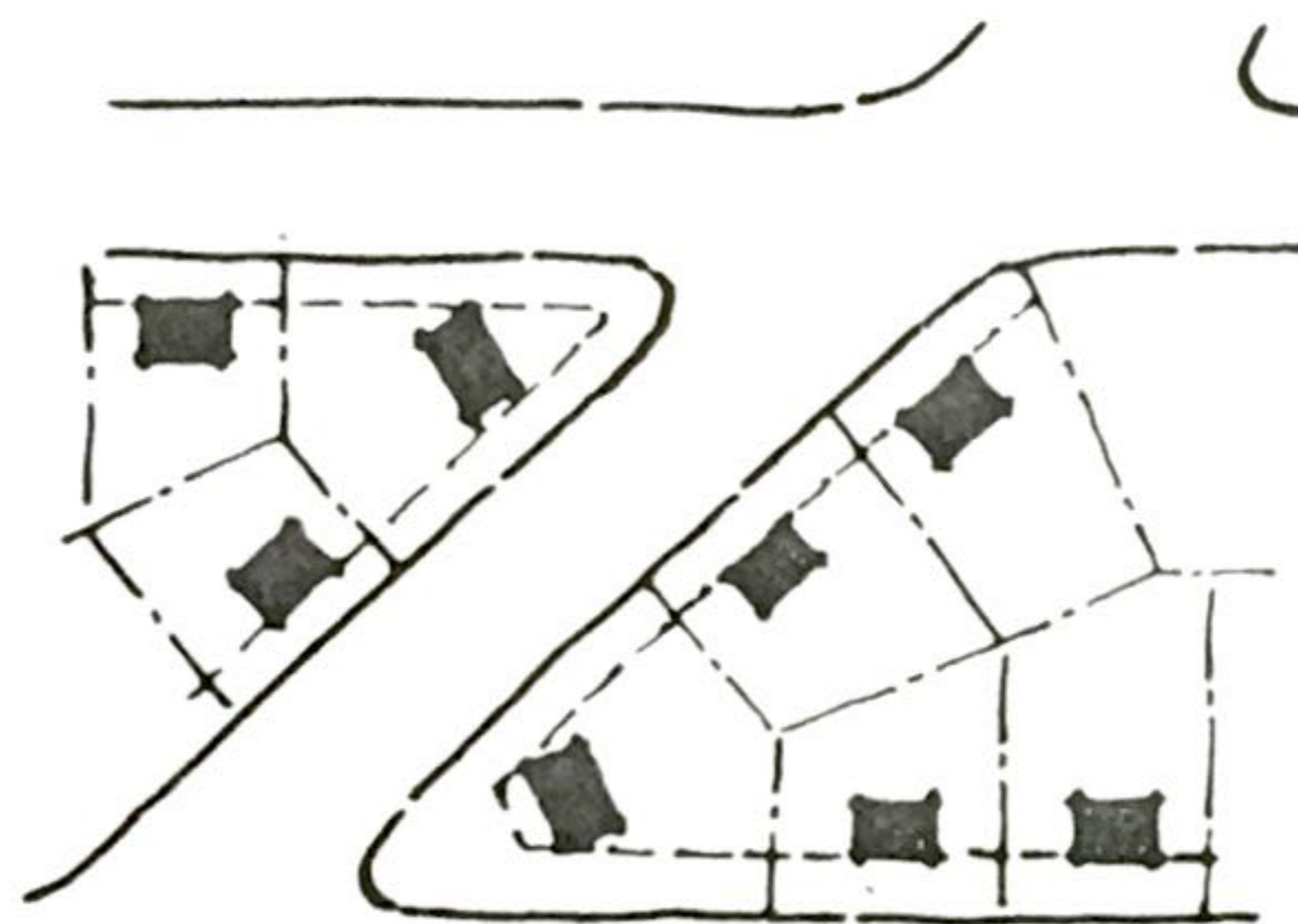


Not this

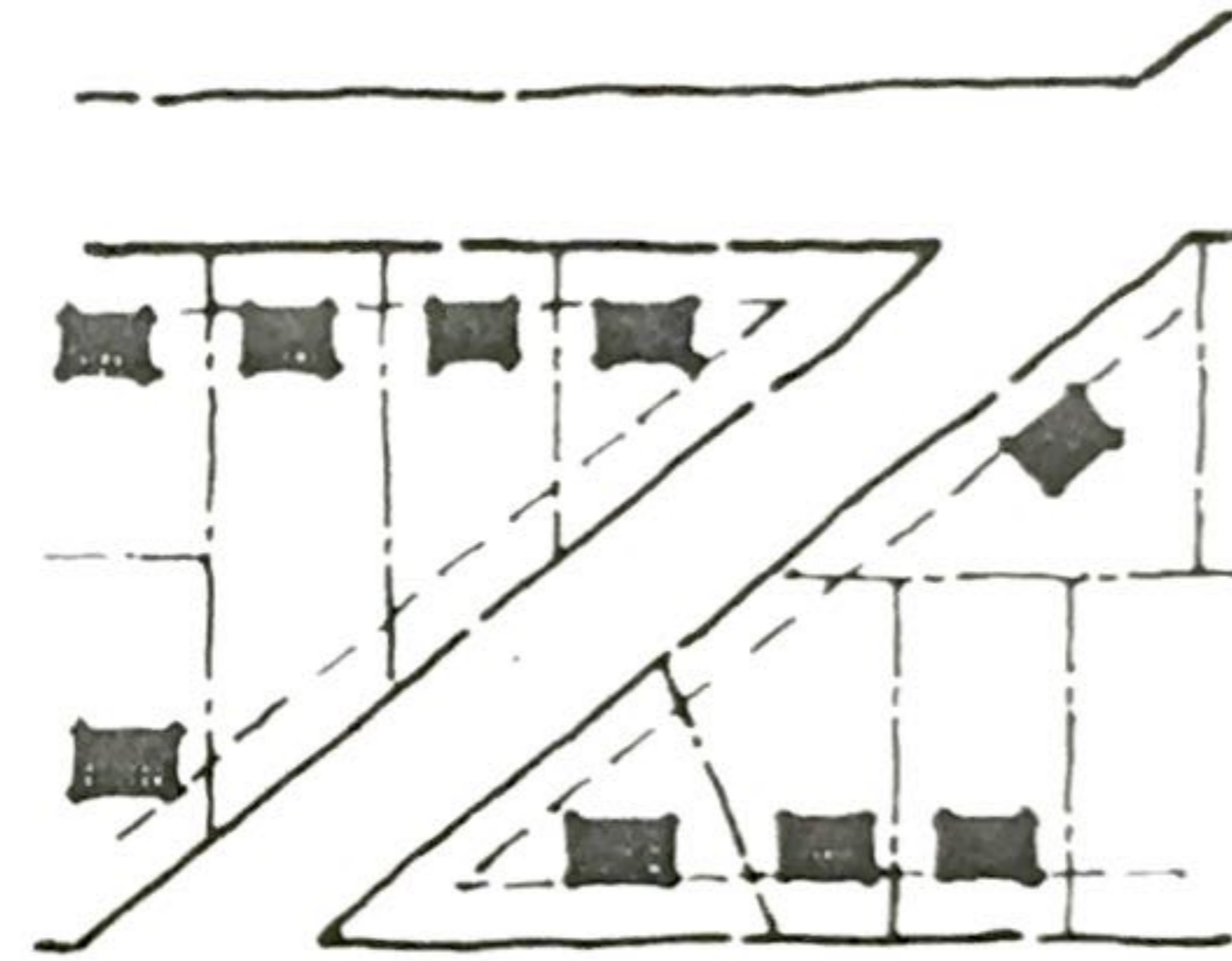


When existing intersecting streets form acute-angled intersections:

Lot this way

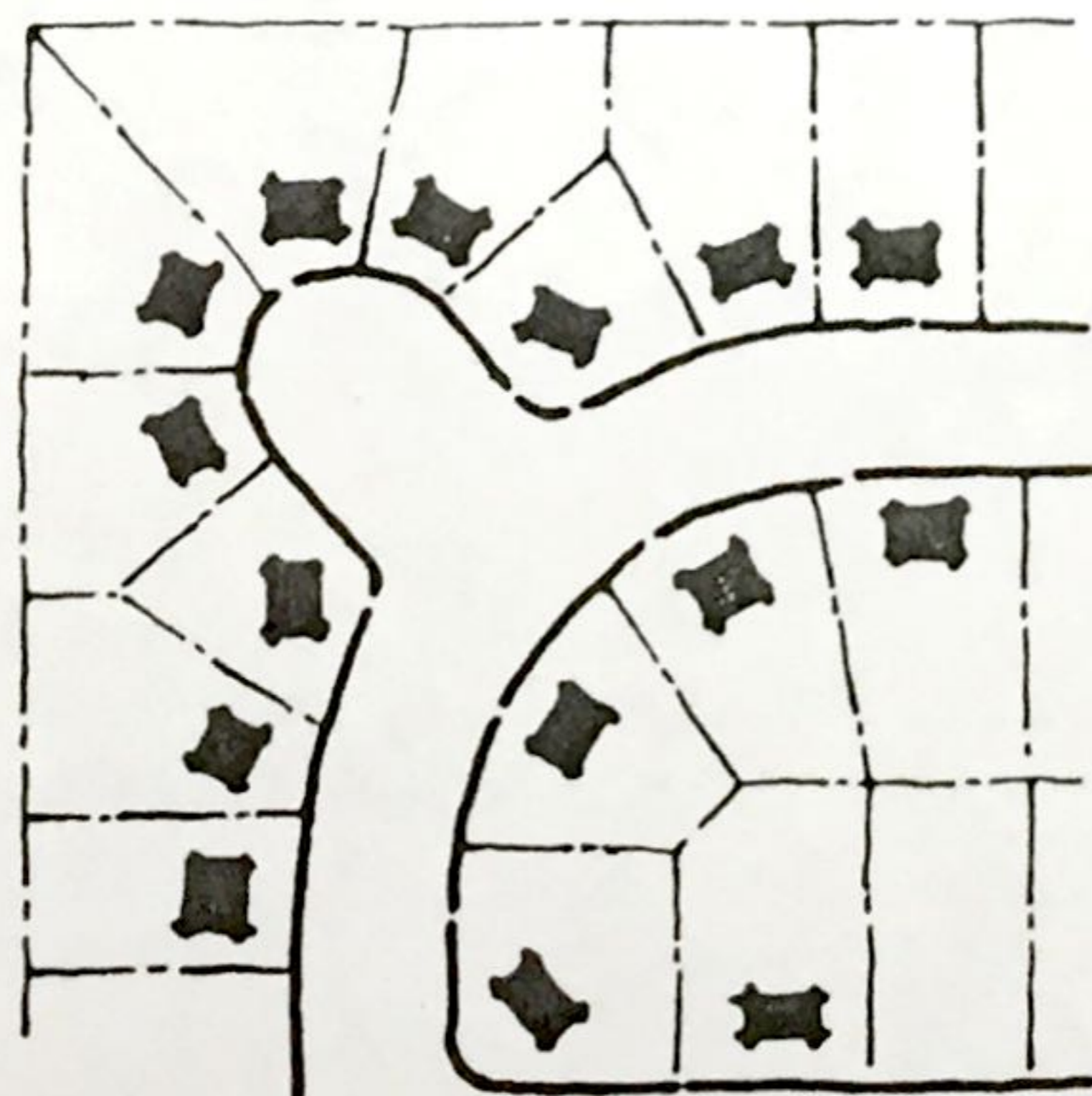


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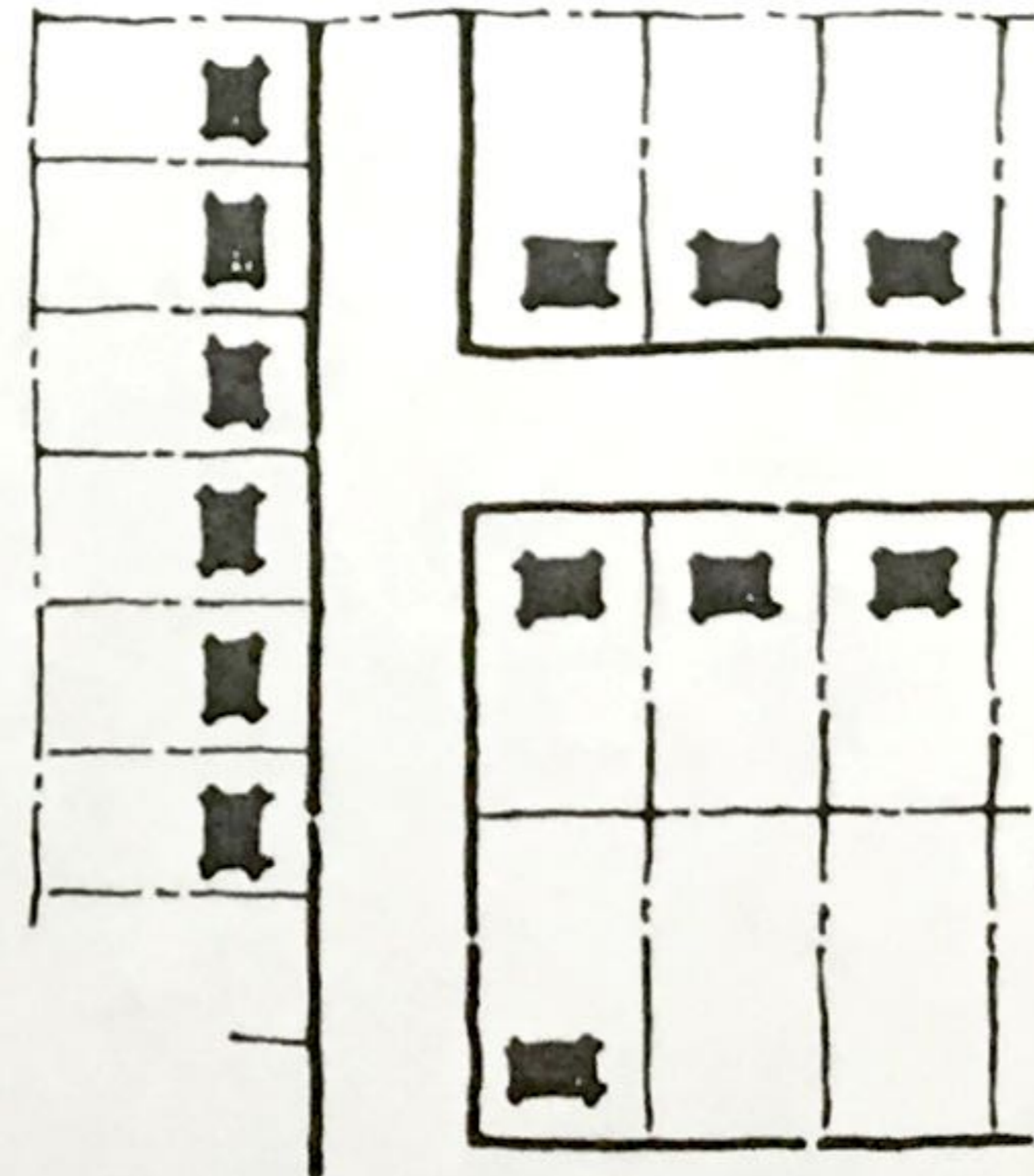


Where future street extensions are not required in corners of property:

Lot in this manner



Not this



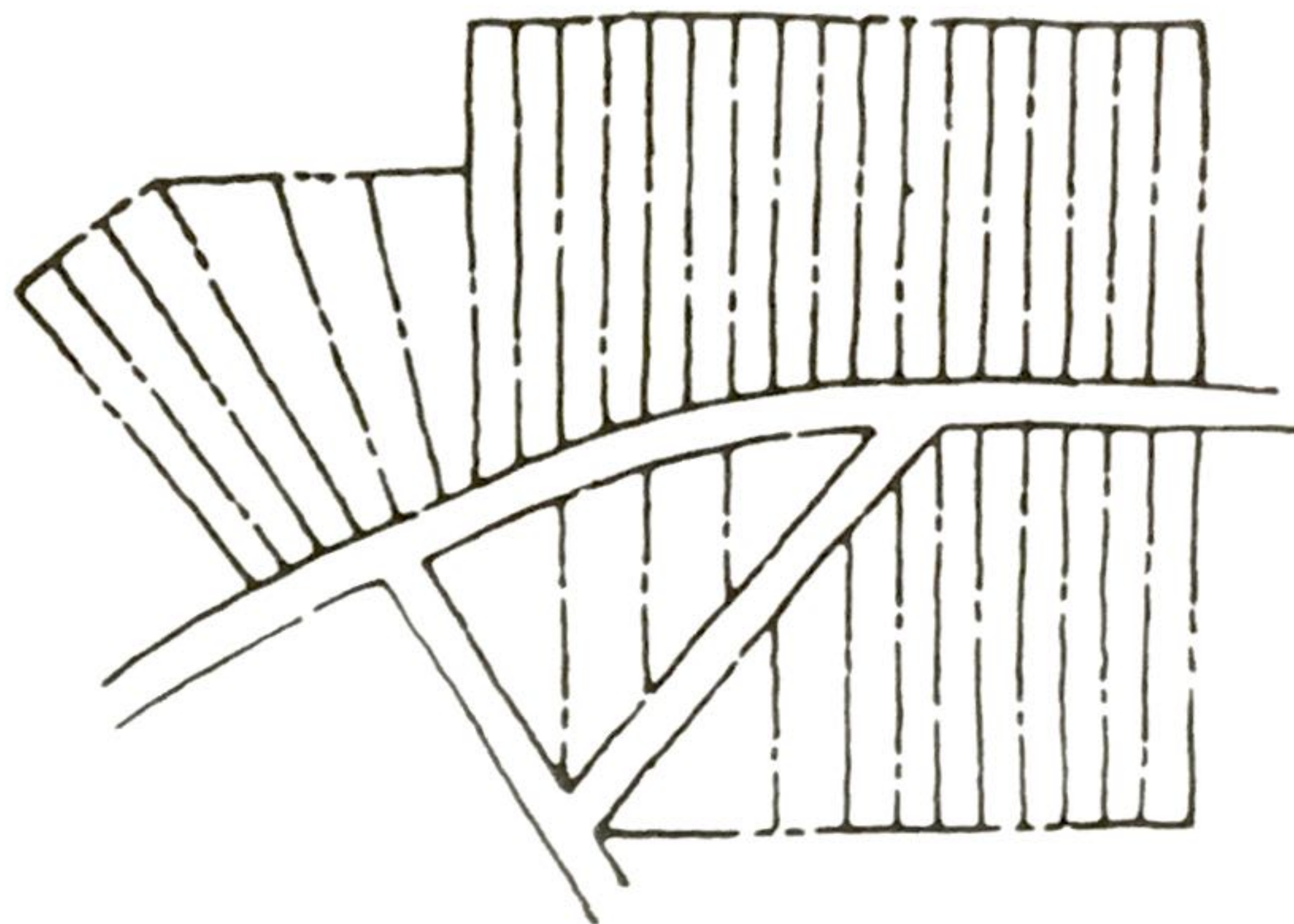
Make lot lines perpendicular or radial to the street. Zoning laws and deed restrictions usually establish the relationship between building lines and property lines.

DEEP LOTS ARE WASTEFUL

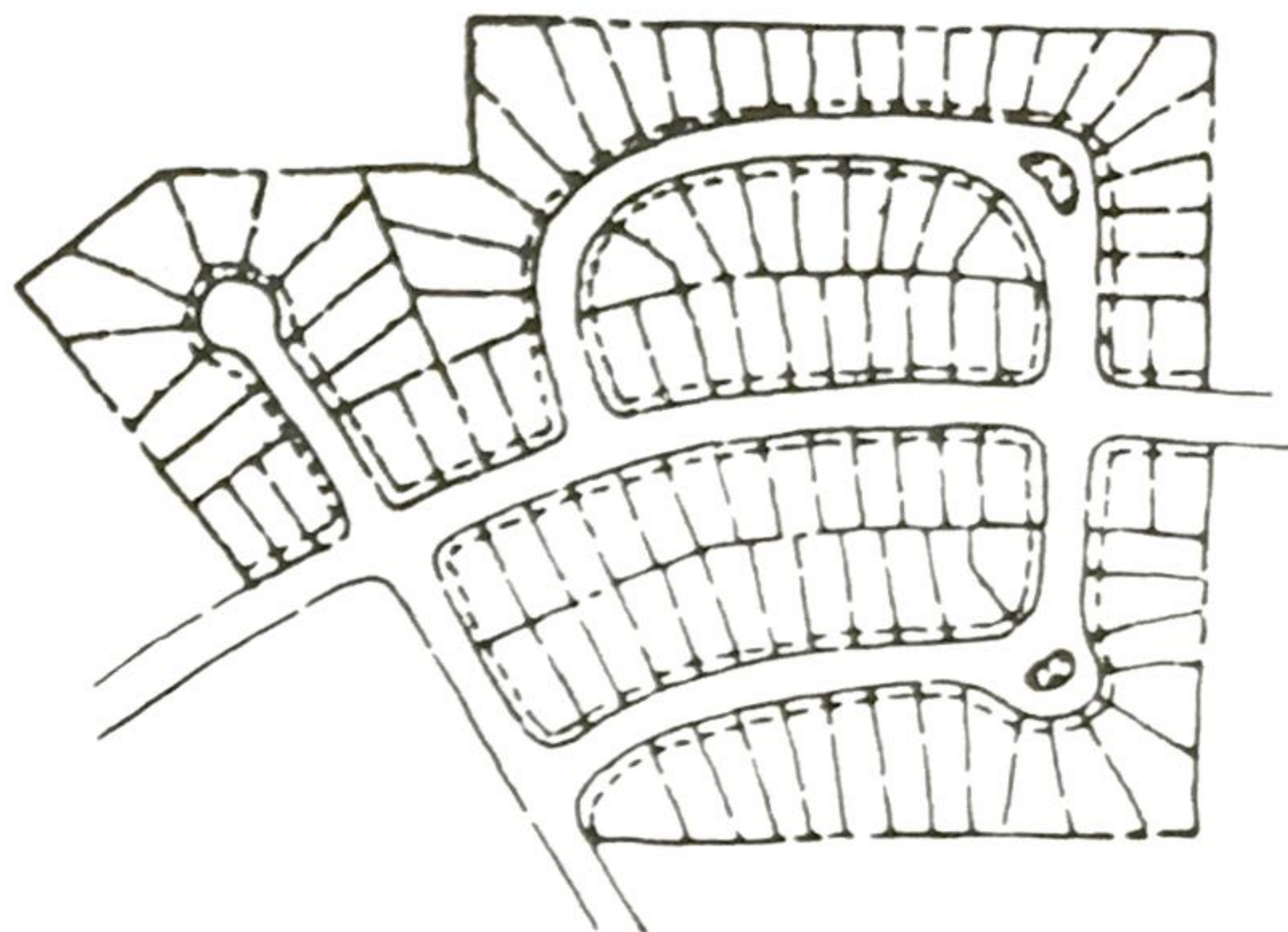
Great depth in a residential lot generally does not increase its salability by virtue of its large area. This type of platting materially decreases the number of lots in a subdivision. Residential lots over 150 feet in depth are usually undesirable unless they are one-quarter of an acre or more in size. Replacement of barns by garages has made deep lots unnecessary.

If consistent with economical land subdivision, residential lots of 50 or 60 feet in width should not greatly exceed 130 feet in depth. Lots of from 100 to 120 feet in depth will usually be found satisfactory for single-family dwellings. Lot sizes should be arrived at only after a careful study of local conditions and by an analysis of the relationship between front foot utility and street construction costs and the value of undeveloped land.

BAD



GOOD

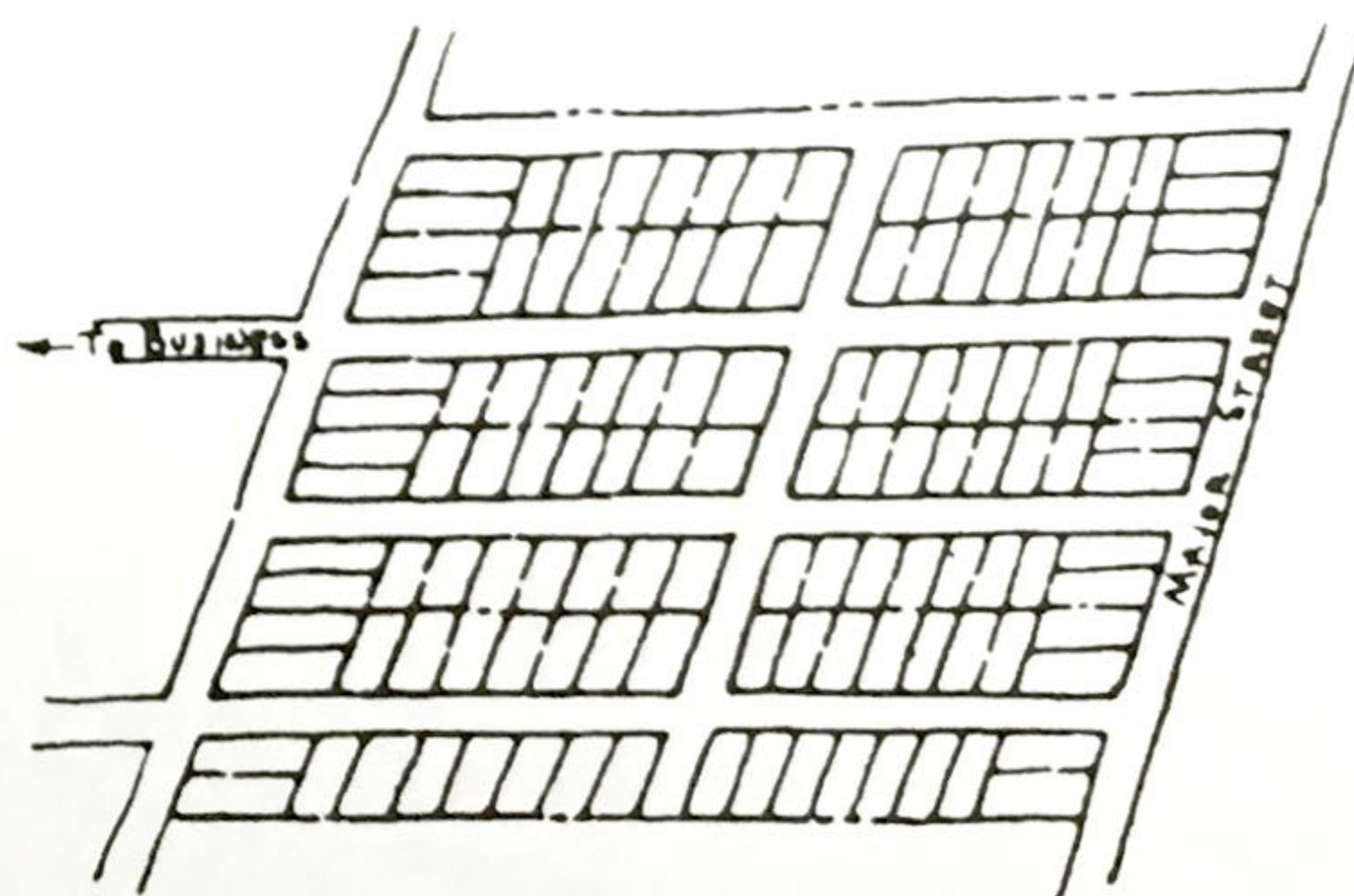


MAKE LOT LINES PERPENDICULAR TO STREET

In order that maximum use be obtained from all lots, it is suggested that the lot lines be kept perpendicular or radial to street lines. When this is not done, there is a tendency to build houses on lots so that the sides of the houses are parallel with the side lot lines. This creates an unattractive sawtooth arrangement and many times causes the front of one house to face into the side or rear of a neighboring house.

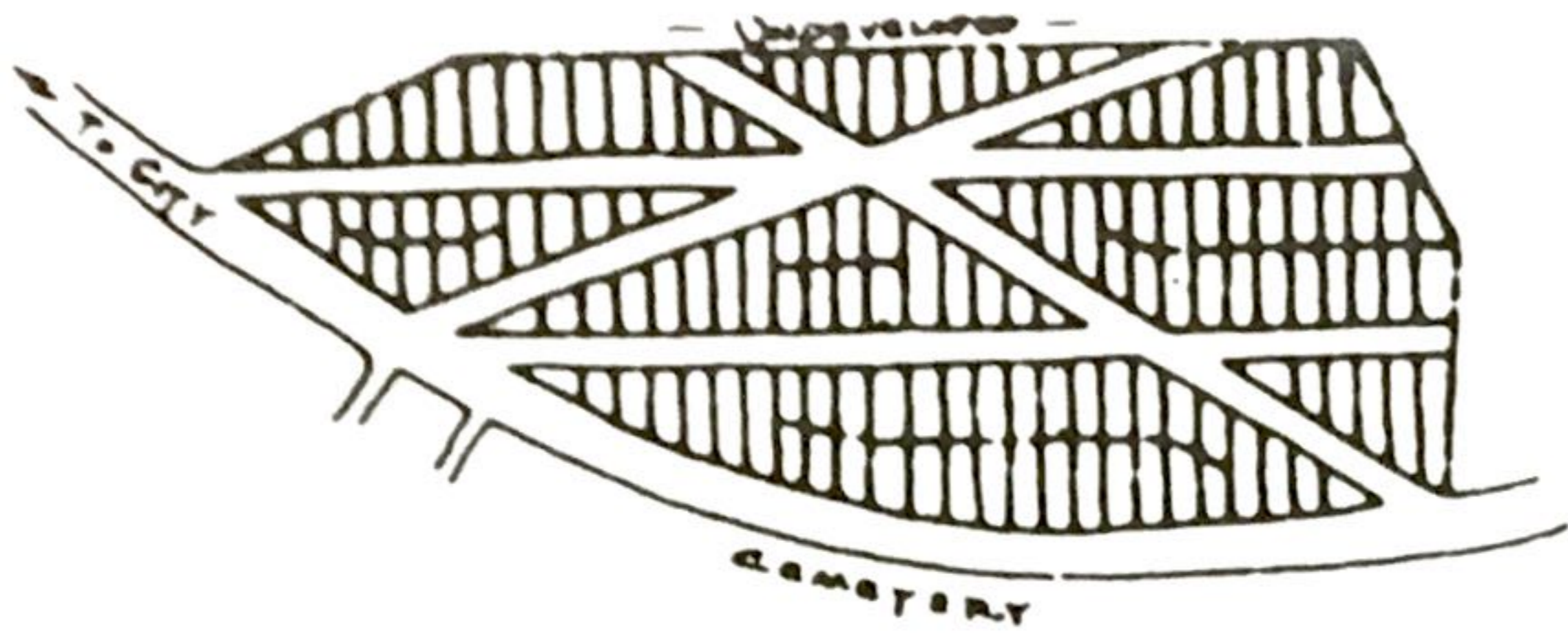
If a maximum use is to be made of every square foot of the lot area, it is important that the lot be well shaped. If lines are not kept perpendicular to the street, sharp-angled corners will result. These are difficult to utilize and gives the area an undesirable appearance.

BAD

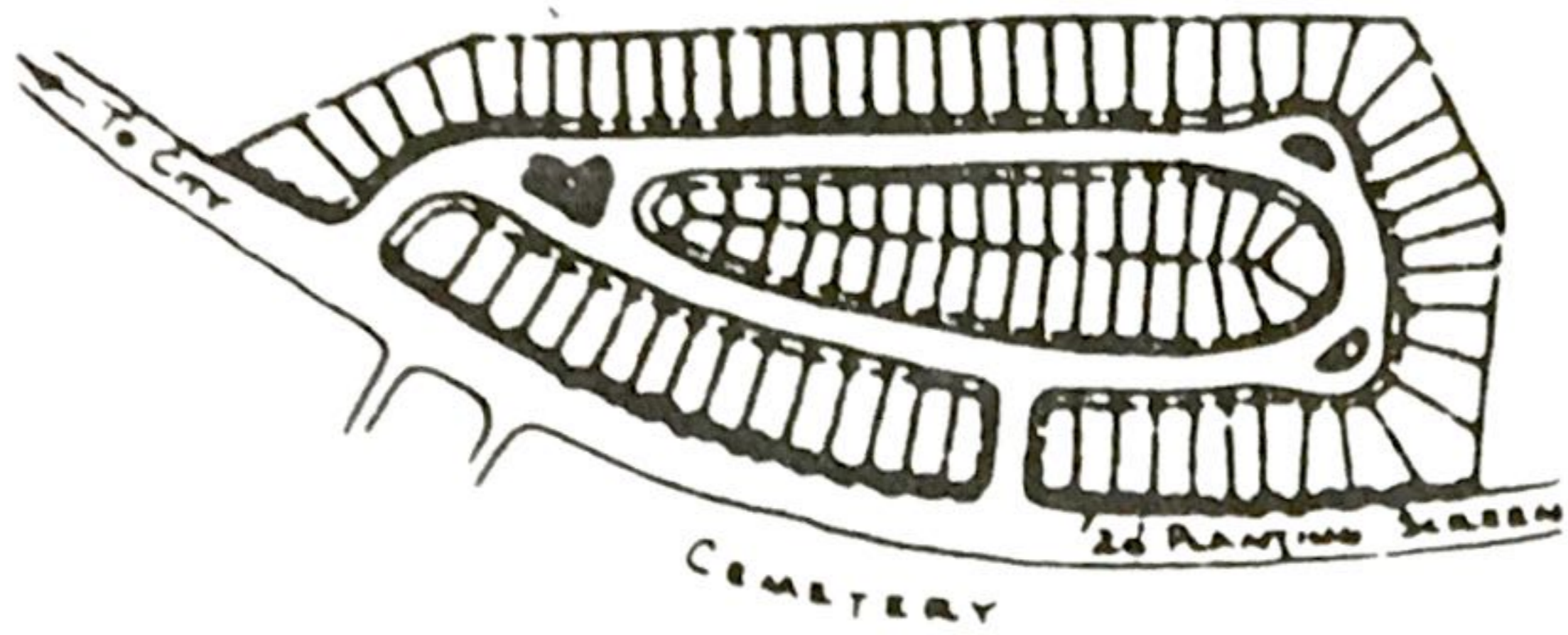


GOOD





BAD



GOOD

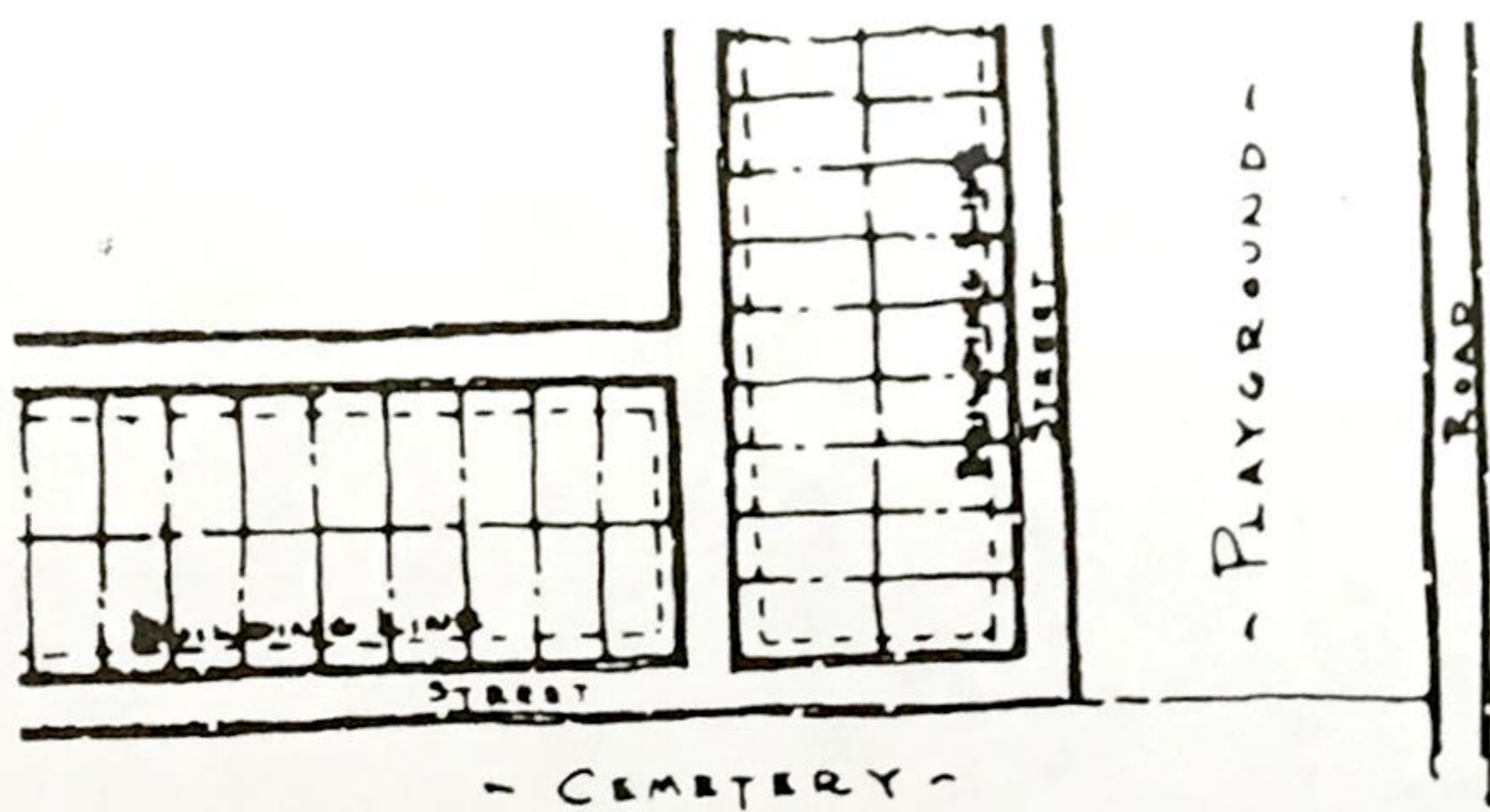
AVOID SHARP-ANGLED LOTS

Lots that have sharp-pointed corners are wasteful of land because the resulting wedge-shaped areas have little or no utility. Such lots also constitute poor building sites.

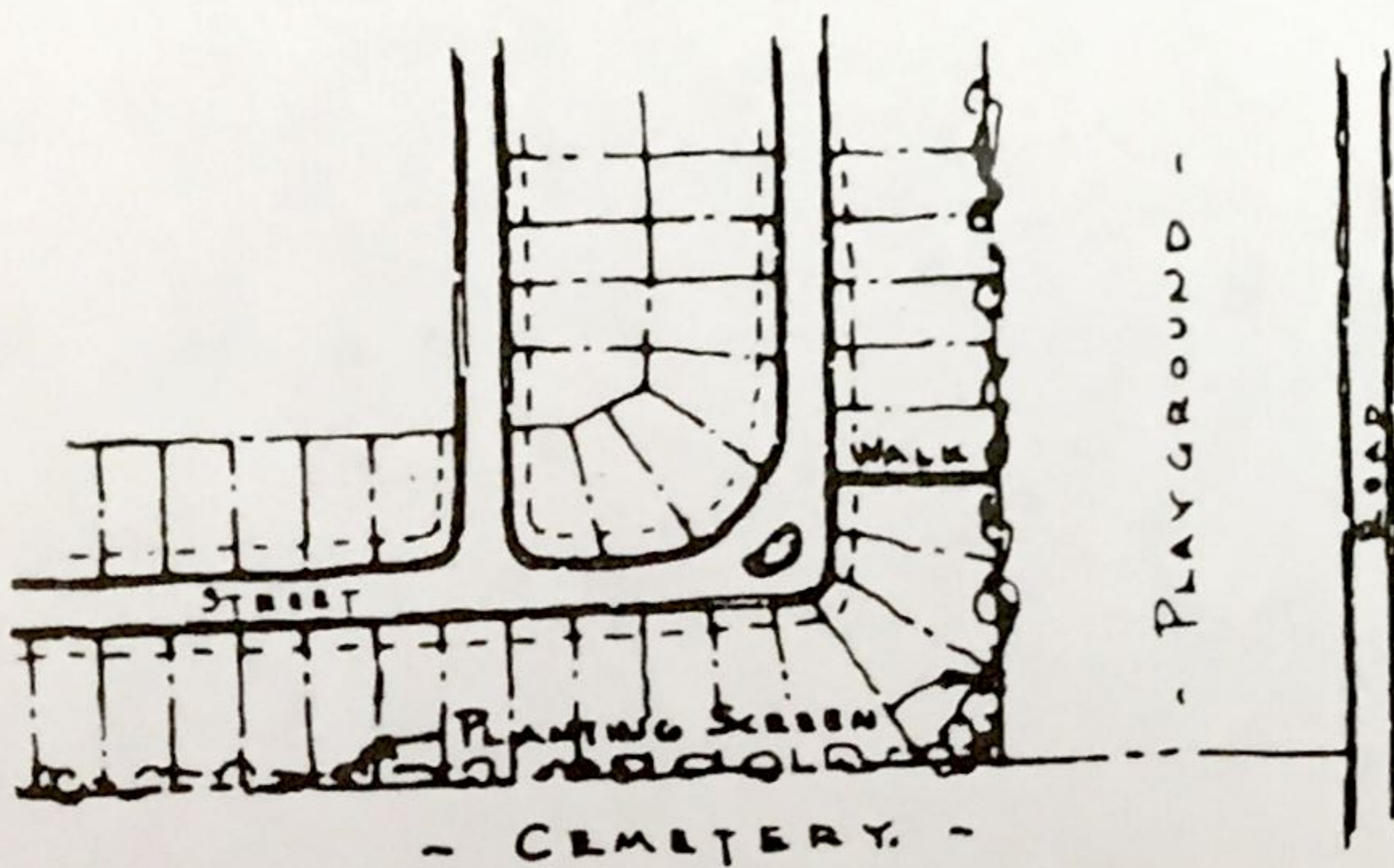
Sharp-angled lots can be avoided by planning streets to intersect at right angles and by making side lot lines perpendicular or radial to street lines.

In the sketches at the left are contrasted an extravagant—though not unusual—type of subdivision plan and a suggested revised design which has 40 percent less street area, better sized and shaped lots, and eliminates hazardous traffic intersections.

Attention also is directed to the manner in which deep lots are backed against the highway bounding one side of the tract, thus permitting all houses to face into the subdivision.



BAD



GOOD

PROTECT LOTS AGAINST ADJACENT NONCONFORMING USES

Residential lots should be arranged so that they will not be seriously affected by a nonconforming use of adjoining property. Objectionable properties can be blocked off by screen planting, or the lots backed against the nonconforming land so that houses built on them front away from the objectionable use. It is suggested that where possible the subdivision boundary line be along the rear of a lot rather than the center of a street.

The appearance and value of a building site is improved when it faces a similar site across the street. Correct location of lots, well-drawn restrictive covenants and zoning ordinances are a protection against the blighting influence of adjoining nonconforming property uses.

STREET AND UTILITY CONSTRUCTION:

The following outlines briefly a few engineering considerations which are generally incorporated in the engineer's plans and specifications.

Grading:

Grading plans fix the floor elevation for each Lustron Home and establish all finished grades of project streets, drives and walks.

For economy in grading, a balance between cut and fill should be attained. Existing grades near trees should be preserved. Retaining earth banks should not exceed 3 to 1 slope.

Surfaced Areas:

Selection of pavement must be based on subgrade, climatic conditions, comparative costs, and on suitable construction for acceptance in dedication by the municipality.

For macadam or gravel pavements, specify 6 to 8 inch rolled base with 1 1/2 to 2 inch ready mixed or bituminous top. This standard practice is made in low cost developments. Keep crown relatively flat...maximum 3/8 inches per foot on bituminous pavement is satisfactory. This provides a 5 inch crown in a 26 foot wide roadway. A higher crown is recommended for gravel. For concrete, less than 3/8 inches is satisfactory.

Utilities:

When installing utilities, locate water mains and gas lines in street planting strip between walk and street, or when walk and curb are continuous, back of walk. Locate one fire hydrant per 400 to 500 feet. Locate electric and telephone lines on easements along the rear lot lines. Ten feet is recommended width of easement, five feet on either side of rear lot line.

For economy in utility construction, public sewer systems should be used whenever possible. The next choice is a community system. When separate septic tanks are used. The lot must be 2 to 4 times the size of the regular lot to provide for the disposal field.

LANDSCAPING:

In developing a planting scheme for a Lustron Development, the unit of design is no longer the individual lot or the single house, but the entire group.

When a whole neighborhood of Lustron Homes is planned and built at one time, there is an opportunity to group them appropriately with the minimum resemblance to arrangement in rows. Through variation in setback line, orientation, color, and plant material, it is possible to develop outdoor spaces, vistas, a variety of frontages and enclosures which can enhance the entire relation between the outdoors and interior of the Lustron house. There is an incentive in the planning of group developments to plan for these amenities--such opportunities do not exist when working with the individual lot.

A good planting scheme will contribute to the beauty of the Lustron Development and serve useful purposes as well. Undesirable views can be screened and noise diverted by well-located screen plantings of shrubs and trees. Hedges can be located to control foot traffic and also to emphasize the variation of setback in Lustron Group Developments and to create a neat and harmonious appearance. Street trees are effective in reducing glare, stabilizing temperature and are very effective in blotting up excess heat, light and sound. Trees can be made to frame the structure or low branched varieties can supply privacy. Flowering trees such as hawthorn, dogwood, flowering crab, and cherry, will, during flowering season, attract prospective Lustron buyers.

Planting Recommendations:

Narrow streets need only have trees on one side, preferably on the south or west side for effective shading. Long curves are most effective with trees on both sides or on the outside of the curves. Fifty or sixty feet spacing is recommended.

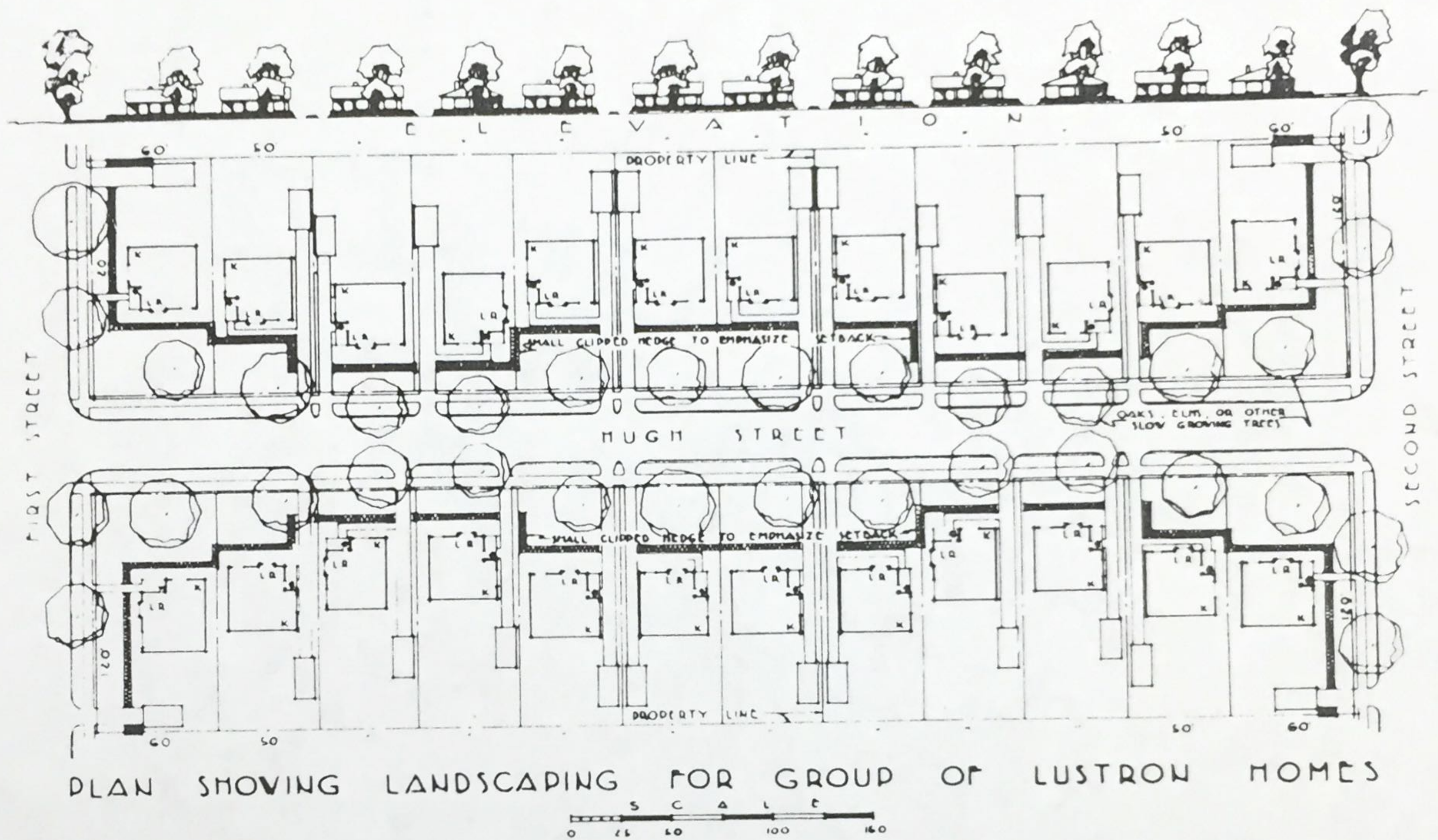
All plant material should be selected for its hardiness and its relative freedom from pests.

Choose neat, slow growing trees and plant material--frequently in new developments an attempt is made to imitate older developments by planting quick-growing but short-lived varieties.

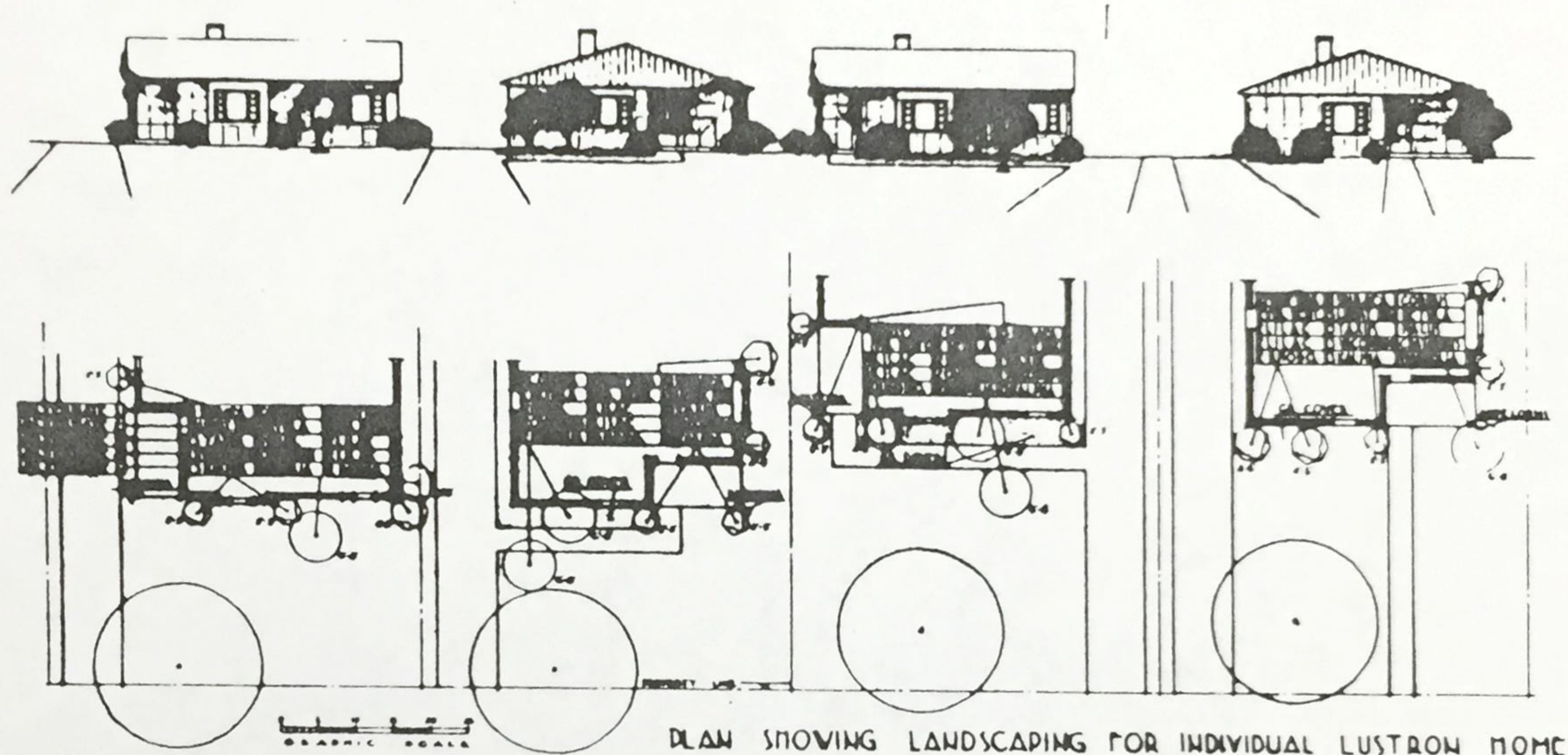
Landscaping a Group Development of Lustron Homes:

The landscaping of group developments of Lustron Homes should be governed by two essential considerations. First, there is the need to keep cost within definite limits, and next, the necessity of securing the maximum return from whatever planting is done. Landscaping

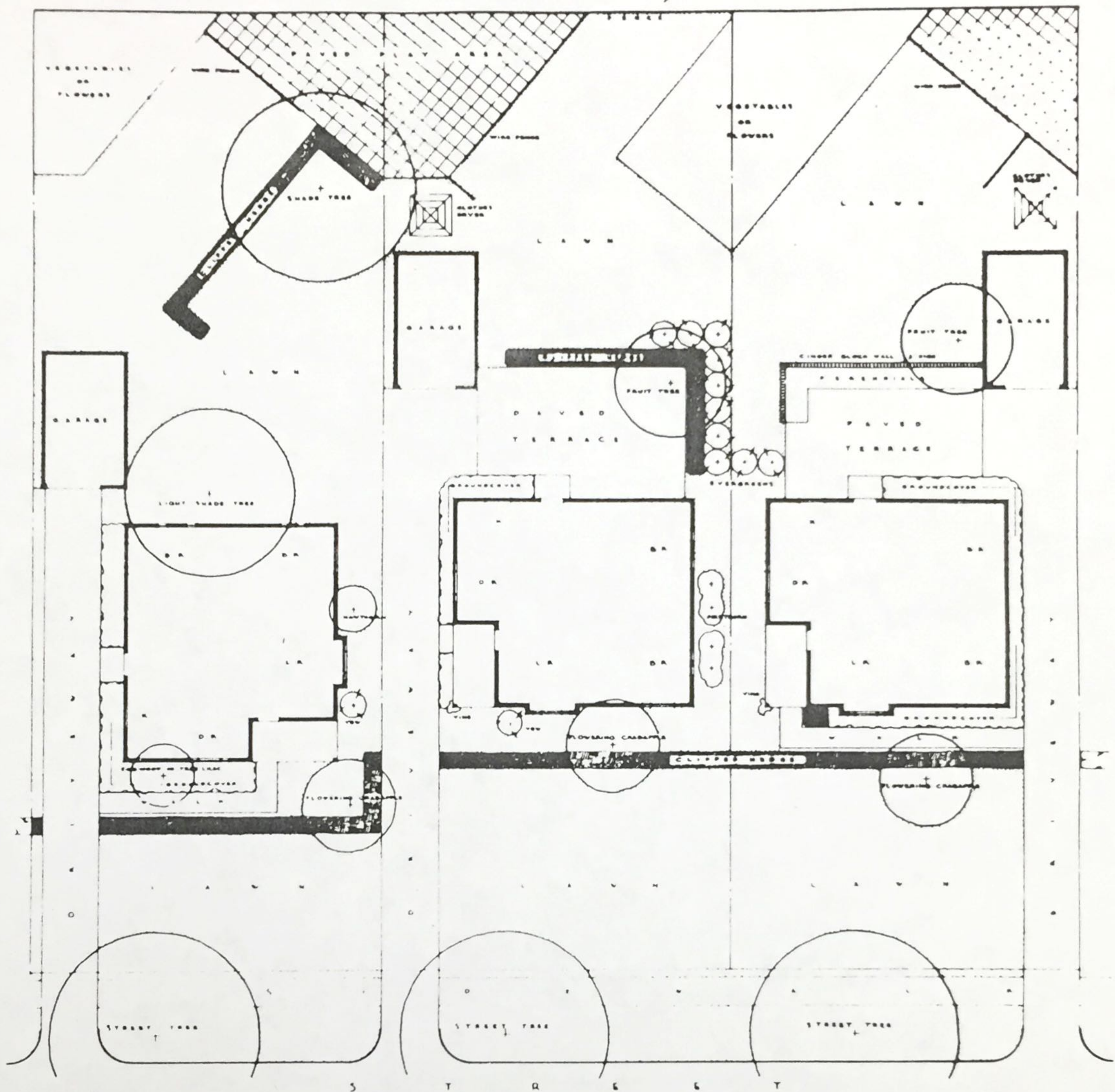
for the average small house located in a group development usually consists of placing a couple of evergreen spikes on either side of the front door and the use of some foundation planting and scattered shrubs which oftentimes does more harm than good.



The planting for a group development of Lustron Homes should not emphasize the individual house. The selection and the arrangement of plant material can be extremely simple. The accompanying sketch illustrates a planting composition for an entire block where a clipped hedge and a few trees make a very pleasing composition. Variation in setback line, orientation and color, introduces an element of variety; yet the resultant effect is unified and harmonious in its overall appearance.



Another suggestion for landscaping individual Lustron Homes located in a group development is shown on the accompanying drawing. The plan and elevations show four individual Lustron Homes. For each five alternate "packaged" planting plans there are alternate lists of plant materials. This scheme provides a basic, flexible plan with a wide variety of combinations from which a selection can be made. This scheme makes the services of a landscape architect available to each Lustron dealer. The plant materials are chosen so that whatever selection is made, the resultant effect will be a unified harmonious planting composition for the entire group. One plant will not clash in form with another or be out of scale with the structure.



This plan is a suggestion for the development of a group of Lustron Homes.

Variation and interest has been achieved by varying the set-back line, by changing the elevation to the street, and by landscaping the group as a unit instead of treating each as an individual isolated lot.

In the development of the back yards, the main consideration was to retain the individuality of the separate lots and still maintain a continuity of design that carries from one lot to the other, thereby creating a feeling of spaciousness on a lot 50' wide.

COLOR COMBINATIONS:

The four basic exterior colors of the Lustron houses will aid in giving variation to a group development. Such variation is not attained merely by alternating the four exterior colors in monotonous sequence, but rather through the harmonious grouping of two or more houses of the same color side by side and carefully considering the color of the adjoining houses. Two suggested arrangements are indicated in the accompanying sketches. Other plans showing various exterior color combinations are available upon request.

