

LANDSCAPE PLANNING FOR

Residential Properties



MICHIGAN STATE UNIVERSITY
Cooperative Extension Service • East Lansing

WHERE IS THE BEST LOCATION FOR YOU TO HAVE YOUR HOME



D. NEWTON GLICK

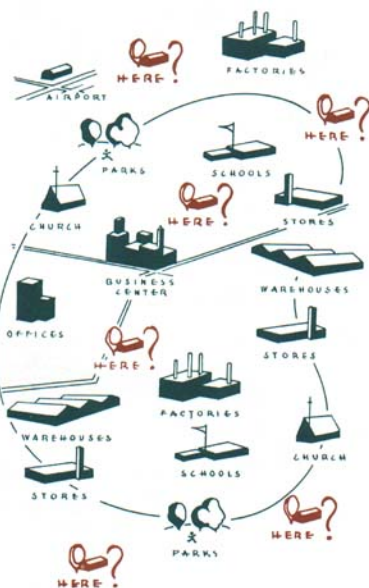
Department of Landscape Architecture
and Urban Planning

—All sketches by the author

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SELECT THE GENERAL LOCATION FIRST —



LOOK FOR —

- a locality that is close to the places you commonly go

these include your place of work, stores, schools, church, parks

spend as little time as possible traveling in traffic

- convenient public transportation

these include bus, streetcar, subway, train

- an attractive neighborhood

choose a lot in the vicinity of nice homes with well kept lawns, trees, and ample space between the houses

locate where land values are rising

- the possibility of encroachment by undesirable uses and nuisances

avoid factories, business districts, railroads, airports, dumps, smoke, soot, dust

proper zoning can prevent the intrusion of these things

- a location on a secondary street

avoid the noise and congestion of heavy traffic

- utilities

you will need water and facilities for disposing of sewage — are these already available or can they be installed economically for your own private use — you may also desire a storm sewer and a gas main near your property.

- services

you will want electricity, telephone, mail delivery, garbage removal, fire and police protection, street lights

- streets and sidewalks

are they in good repair or are assessments for improvements likely — if they do not exist at present, you will probably have to pay part of the cost for their installation

well established street trees are a big asset

- financing

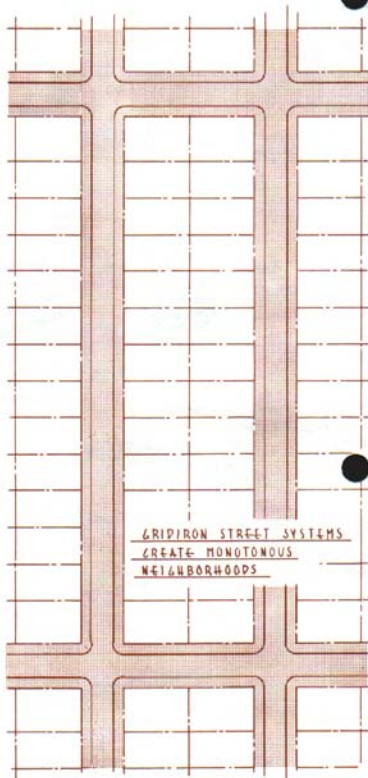
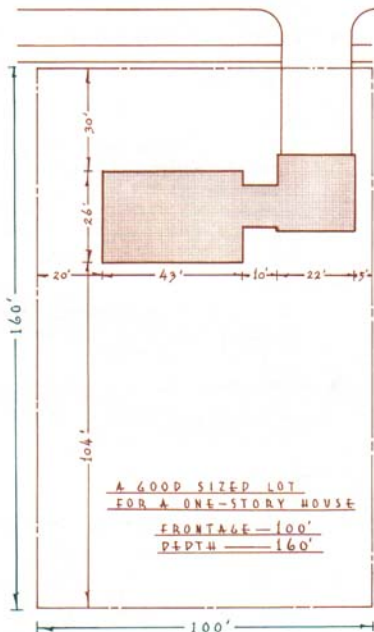
before you invest in property find out what lending organizations will make loans in the neighborhood in which you are interested

THEN ANALYZE THE DETAILS —

CONSIDER —

- size

the lot must be big enough to accommodate your needs — will you have a small house or a large house — a two-story structure or ranch type — a garage or carport — driveway — lawns — areas for service and for outdoor living



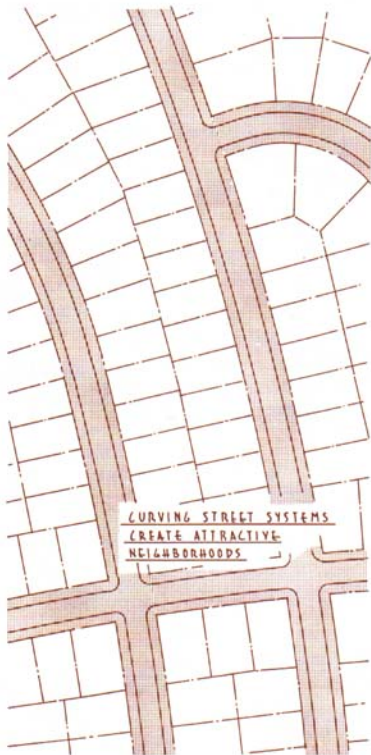
a huge lot is not necessary — they are expensive to buy and maintain — if the things you place on it are properly organized

you do need plenty of frontage along the street especially for a one-story house — 70 feet may be sufficient but 100 feet or more is much better

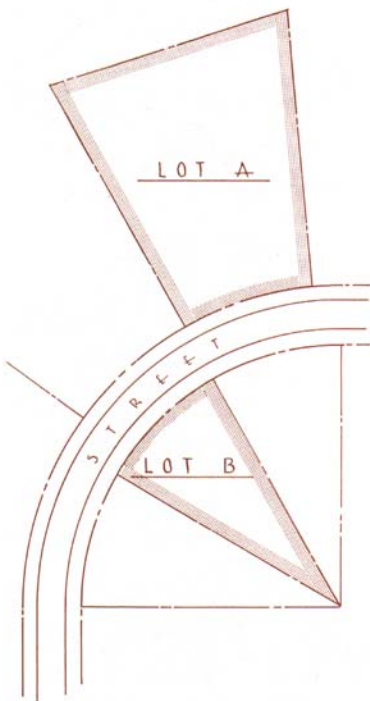
your lot should be at least 120 feet deep — a depth of 200 feet is very ample.

- shape

rectangular lots are very common but usually lie in monotonous neighborhoods with straight streets



reasonably irregular lots can be developed in interesting ways and are likely to occur in attractive neighborhoods



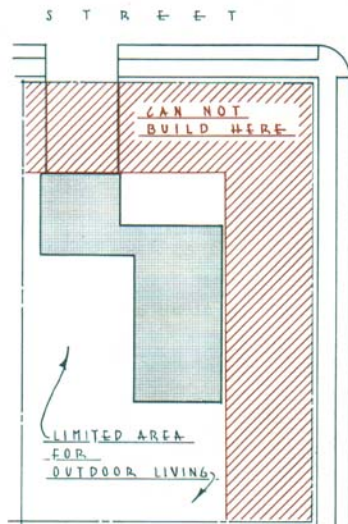
LOTS A & B HAVE THE SAME
STREET FRONTAGE AND THE SAME
DEPTH BUT LOT A IS MUCH
MORE USEFUL

on long, narrow lots it may be best to place the house with an end toward the street

lots on the outside of a sharp curve are preferable to the pie-shaped lots which occur on the inside of the curve

- **corner lots**

receive considerable noise from traffic



CORNER LOTS CREATE BIG FRONT YARDS AND LEAVE LITTLE SPACE FOR OTHER THINGS

require the installation of additional utilities, walks and roads

ADVANTAGES
DISTANT VIEWS
GOOD DRAINAGE
GOOD AIR CIRCULATION

limit the use of the outdoor space

make privacy hard to obtain even if the lots are extra large

- **topography**

high land is better for homes than low land

the land should slope to provide for the natural drainage of surface water

an upward slope from the street offers an attractive setting for the house and may handle sewage better

lots with interesting natural features — woods, large trees, streams, rock outcrop, irregular ground forms — are particularly adaptable to good living

- **soil**

you will have plants on your property — the better the soil, the better they will grow

sandy soil dries out quickly and contains little natural plant food

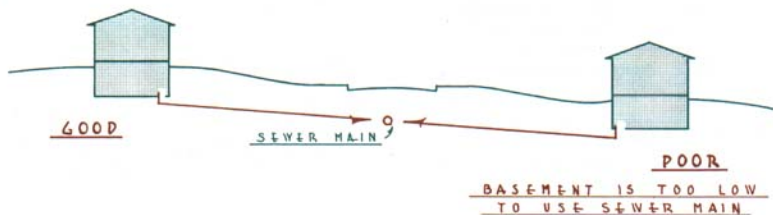
sandy loam is good

clay loam is best

clay is difficult to work and gets very hard when dry — creates problems in growing plants

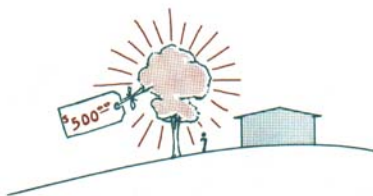
topsoil is valuable — when you build, save it for future use

DISADVANTAGES
DAMP
EARLY FROSTS
RESTRICTED VIEWS
POOR AIR CIRCULATION



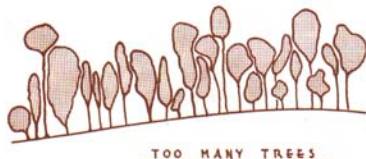
soil conditions must also be satisfactory for house foundations and perhaps a sewage disposal system

trees should be at elevations which will not require an appreciable change in the ground level around them — you should not lower the ground level around a tree more than six inches or raise it more than one foot without installing a tree well

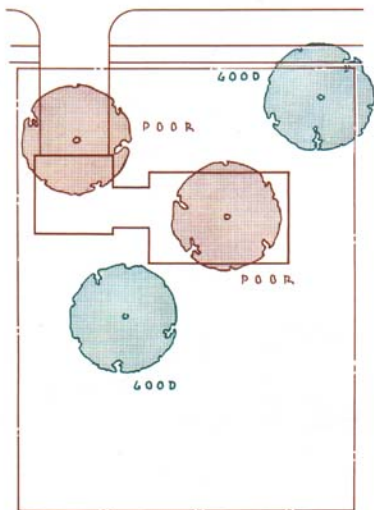


• existing trees

trees are very important for shade and appearance — they grow slowly and cost a good deal to move in



try to find a lot with trees growing on it — but not too many for crowding makes them weak and poorly shaped trees must also be in the right locations



- **economical building conditions**

locations on rock and low land are expensive to develop — so are sites requiring heavy grading and the removal of numerous trees and stumps

- **views from the property**

good views are a big asset

- **a site which is suitable to the architectural style of the proposed house**

some houses are particularly adaptable to flat land such as those of the colonial and ranch type

other houses fit better on sloping land

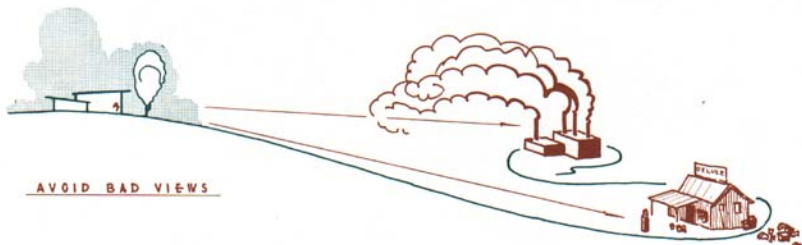
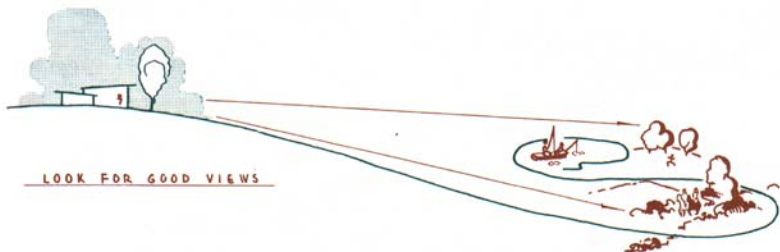
such as contemporary and split level homes

- **good orientation — the direction a lot faces**

your outdoor living areas, as well as those in your house, should face approximately south — the sunlight from that direction can be controlled most effectively

eastern exposures for living areas are reasonably good

northern and western exposures are the least desirable — northern exposures are cold and damp — western exposures are hard to adjust to the low afternoon sun



- **zoning regulations and deed restrictions**

zoning laws usually establish the kind of building that can be built on a lot and designate that portion of the property on which structures cannot be built

deed restrictions may govern many things such as the right of access across your property by others

these regulations and restrictions are generally beneficial — but some do more harm than good such as those which prohibit fences on side and rear property lines

easements across a property are not desirable for the owner

there should be controls on billboards, building lines and construction standards

- **title**

a marketable title is extremely important — beware of questionable ownership, uncertain boundaries, liens, back taxes and assessments

- **cost**

a cheap lot is not necessarily a good lot — more is required of a home site than a place to build a house

choose a home site that provides for a complete, coordinated development — this means a site for your house *plus* the opportunity to develop the rest of the property in a pleasant, useful and attractive manner

- **taxes**

taxes vary a great deal — they are usually higher in the cities — but you get more services and facilities

check the tax rate and the likelihood of it being increased

- **legal advice**

have an attorney check your transaction — you will be amply repaid in peace of mind and perhaps prevent future trouble

FINALLY —

- **selecting a lot is a personal matter — people's requirements and preferences vary**
- **every lot will have some disadvantages — some of the things you desire will be missing, but**
- **careful planning can overcome many problems**

PLAN BEFORE YOU BUILD —

much money is being wasted, many mistakes being made and many disappointments being experienced by amateurs who have proceeded without any plans

from the very beginning every object on your property should be located in accordance with a general plan — this includes such things as the house, garage, driveway, walks, terrace, patio, walls, fences, clotheslines, pools, flower beds, gardens, play yards, trees, shrubs, lawn

the house and outdoor areas should be designed together to assure the greatest convenience and best use of the entire property — doors and windows in the house must be placed for proper access and appropriate views

you may make your own plan or have it prepared by a qualified landscape architect

OBTAIN THE SERVICES OF A QUALIFIED LANDSCAPE ARCHITECT

- he will have at least one of these qualifications

membership in the American Society of Landscape Architects

a degree in landscape architecture from an accredited college or university

registration as a *landscape architect* by a state licensing board (at the present time this is available only in California.)

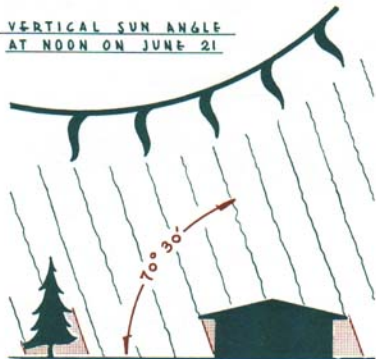
considerable experience in landscape design with a number of jobs completed for clients who are well satisfied

YOU MAY NEED SEVERAL KINDS OF PLANS

- the preliminary plan

shows the tentative location of all items on the property and is made for discussion with the home owner

VERTICAL SUN ANGLE
AT NOON ON JUNE 21



- the general plan

shows the location of all items involved plus some dimensions and notes

- the grading plan

shows changes in the shape of the ground which are necessary to accommodate the facilities shown on the general plan and to handle surface drainage

- construction drawings

structural details which show the kinds of materials to be used and the manner in which they are to be put together

- the planting plan

shows the name, size, and location of all plants to be used

- special plans

show a variety of information as required for certain conditions such as night lighting, irrigation, topsoil depths, fertilizer applications

- sketches

will be a big help in visualizing your proposed development

YOU MAY NEED CONTRACTS AND SPECIFICATIONS —

these are desirable on all jobs when you have the work done by others

HOW MUCH DOES IT COST TO LANDSCAPE A RESIDENTIAL PROPERTY?

allow between 10% and 30% of the cost of the house for a complete outdoor development — this includes everything outside the house walls as drive, walks, fences, walls, terraces, patios, lawn, plants and professional services

budget the money for outdoor use in the beginning and save it for that purpose — a bare house standing on a lot looks as though the owners ran out of money before the job was finished

BEGIN WITH A SURVEY —

before you can do much planning you will need an accurate and complete description of the area involved — information you will need includes the location of existing items such as property lines, buildings of all types with entrances and windows indicated, fences, walks, driveway, trees and shrubs, septic tank and disposal field, telephone poles, slope of the land, views from the

property and the location of structures on adjacent lots

on large or complicated properties the survey should be made by a registered surveyor

on small properties you can obtain the data yourself

LOCAL CLIMATIC CONDITIONS ARE IMPORTANT IN YOUR PLANNING —

use them to your advantage

The following information relates to central Michigan

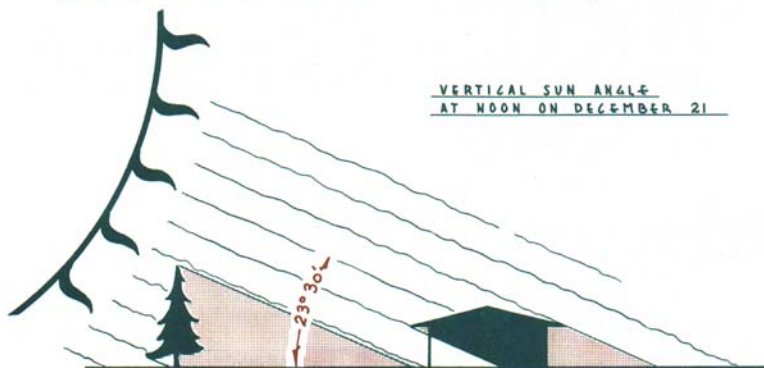
- vertical sun angles vary with the time of year

in summer the sun is high in the sky and shadows are short (see the diagram on the opposite page)

windows on the south side of a house can be in complete shade if a sufficient roof overhang is provided

during July and August the most comfortable areas for outdoor living are on the north side of the house — during the rest of the year the south side is most pleasant

in winter the sun is low in the sky and shadows are long



VERTICAL SUN ANGLE
AT NOON ON DECEMBER 21



S U M M E R S H A D E A N D W I N T E R S U N

the north side of the house is cold and dark but windows on the south side receive full sunshine

- **wide roof overhangs on the south side of a house can control the sun's rays — your rooms get heat and sunlight in winter and are cool and shaded in summer**

even on overcast, winter days a good deal of heat is received when the sun's rays strike glass

deciduous trees (those which drop their leaves in winter) work like venetian blinds — they screen out the sun in summer and let it through in winter

- **horizontal sun angles vary a great deal during the year**
- **rainfall**
moisture is essential to all plant growth
rather uniform precipitation occurs

throughout the year for an annual total of 31 inches — January and February have less than two inches each month; March, April, July, August, September, October, November and December have between 2 and 3 inches; May and June have over 3 inches.

- **humidity**
the humidity is high in winter and moderate in summer — it is not a major problem because air circulation is good
- **wind directions**
these vary with the time of year but are generally from the west
wind directions and velocities are important in planning for comfortable living
- **sunshine and cloudiness**

Michigan has much cloudy weather — plan to take advantage of the sunshine whenever it is available (study the chart given on page 14)

- freezing temperatures

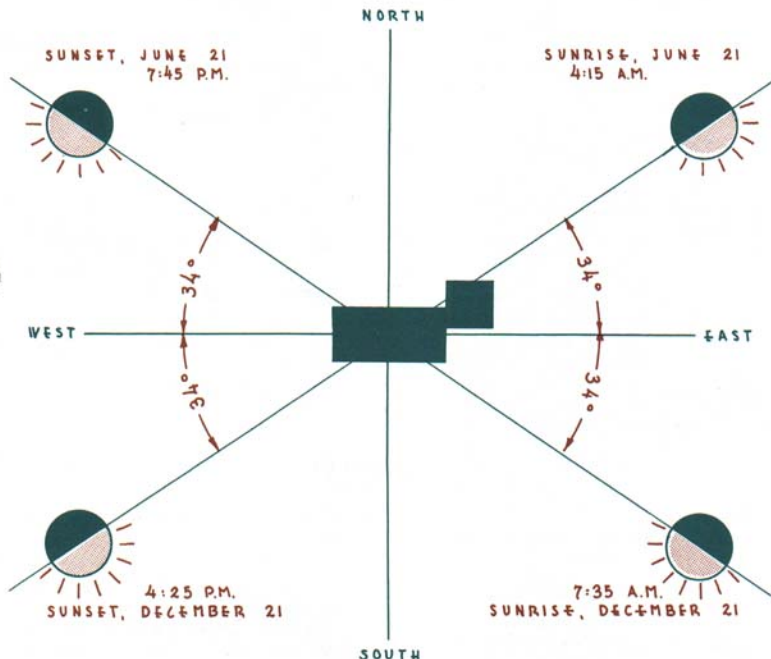
in the spring the last freezing temperature is expected around May 7

in the fall the first freezing temperature is expected around October 8

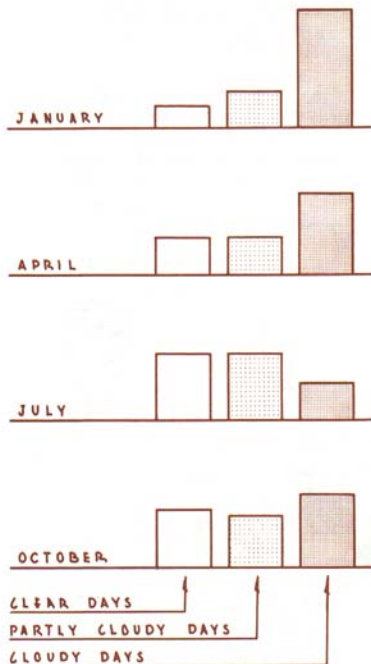
(these are average dates to be used as a guide; check local conditions for your particular part of the state)

A WELL PLANNED PROPERTY WILL TAKE ADVANTAGE OF LOCAL CLIMATIC CONDITIONS

- make climatic conditions work for you — it costs no more to build a house, or a fence, or a garden or to plant a tree in the right place than in the wrong place



POSITIONS OF SUNRISE AND SUNSET
IN CENTRAL MICHIGAN



IN PLANNING— ANALYZE YOUR REQUIREMENTS FIRST

- in general, you will probably want
 - an attractive home — both from the street and throughout the entire property
 - your car close to your house
 - privacy in your outdoor living space
 - a play yard for children with appropriate equipment

an outdoor area for drying or airing clothes

convenient delivery and storage for fuel — coal, wood, oil

outdoor exercise — gardening is an excellent hobby

protection from insects at night

shade during summer afternoons

a place for entertaining — picnics, barbecues, teas

attractive views from your windows

shade trees, fruit trees, flowering shrubs, lawn

a vegetable garden

some flowers

storage for garden and play equipment

miscellaneous structures — fish pool, swimming pool, garden shelter, greenhouse, walls, fences, terraces, patio

an efficient plan that will be convenient and not waste space

grounds that are easy to maintain — do you expect to do the work yourself or hire it done?

PLAN FOR —

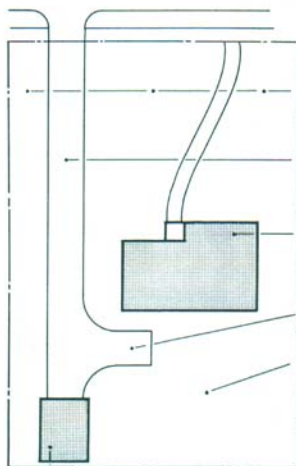
- the good coordination of your indoor and outdoor areas

the outdoor areas are:

approach area — the street side of the property devoted to a good setting for the house and access to it by walk and driveway — there is no need for a large front yard — usually simple lawns with limited plantings which continue from one property to the next contribute most to an attractive street — hedges, flower beds, walls and fences on the property lines are seldom beneficial

LANDSCAPE PLANNING

SHOULD BEGIN BEFORE THE HOUSE IS BUILT —
LOCATE THE HOUSE AND GARAGE PROPERLY



FRONT LAWN IS TOO LARGE
AND TOO BROKEN UP

LONG DRIVEWAYS WASTE LAND
AND ARE EXPENSIVE TO BUILD

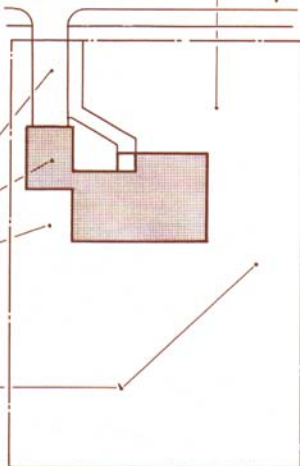
POOR HOUSE LOCATION DIVIDES
LOT INTO SMALL AREAS

BACKYARD WASTES SPACE

LIMITED SPACE FOR OUTDOOR LIVING

GARAGE LOCATION
WASTES SPACE AND
IS INCONVENIENT

SUFFICIENT FRONT LAWN

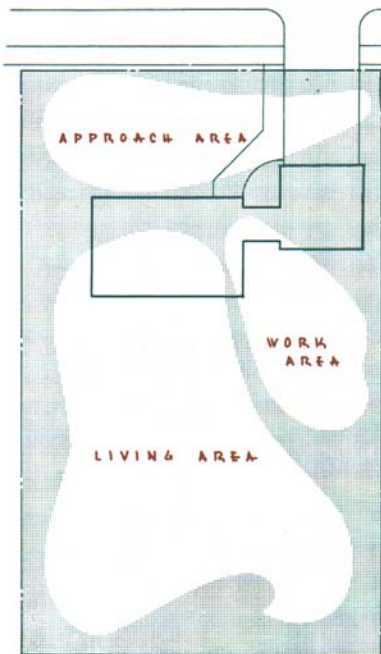


SHORT, ECONOMICAL DRIVEWAY

GARAGE CONVENIENT TO HOUSE

SMALL SIDE YARD ON SERVICE
END OF HOUSE IS DESIRABLE

AMPLE SPACE FOR OUTDOOR LIVING,
PLAY, GARDENING, ETC.



living area — for outdoor rest, relaxation and entertaining in reasonable privacy — includes terraces, patios, lawns, attractive planting, flower borders — considerable privacy from neighboring lots is desirable and may be obtained through planting or the construction of fences and walls — should be directly accessible from the main living area of the house

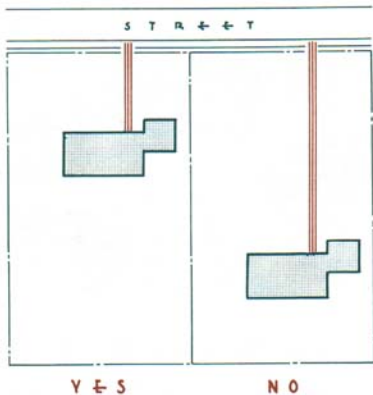
work area — for children's play space, drying yard, vegetable garden and general service requirements — may be quite small and should be adjacent to the kitchen portion of the house and the

garage where many activities of a service nature are likely to be centered

today people are doing more and more of their own work around their houses — it is important that they have good work space for these odd jobs

IDEAS FOR IMPROVING YOUR PLANNING

- place house close to street to reduce cost of connections for water, sewage, gas



- put the service area of your house — kitchen, utility room, toilets, closets, storage, garage — towards the street and your main rooms towards the back of the property

remember that streets are service facilities characterized by noise and congestion, delivery and garbage trucks, telephone poles and traffic signs

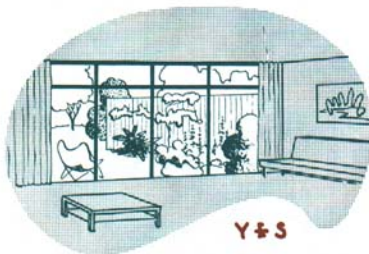
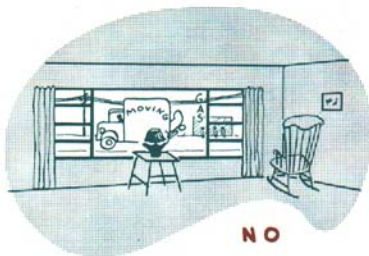
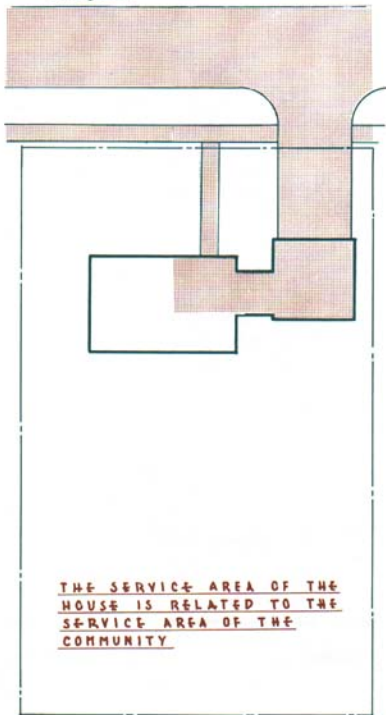
this leaves the rear of the property — where sufficient space is likely to be available — for outdoor living in a quiet, peaceful and beautiful setting

- create privacy in your outdoor living area by screening out all, or part, of adjacent properties — you are entitled to restful outdoor areas which are not visible from the neighbors

may be accomplished by architectural materials — wood, stone, brick, concrete — used as fences, walls or other structures

may be accomplished by plants used as hedges or masses of foliage

the best effect is obtained through a combination of architectural materials and plants

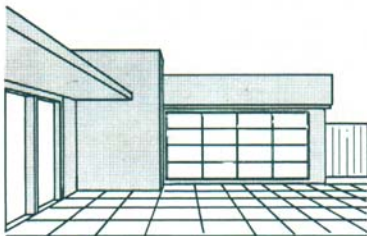


- "picture windows" are very desirable when properly used

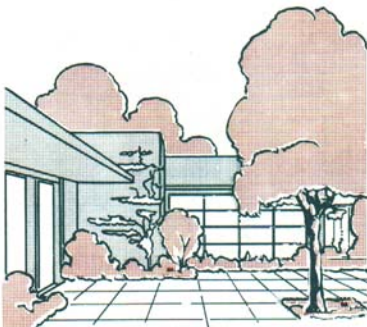
the location of large windows should be carefully studied in relation to the views seen through them — window locations and views should be planned together

occasionally an appropriate view is provided by mother nature — but usually you must create it yourself

large windows are most useful on the south side of a house where they receive sun in winter and where the hot summer sun can be controlled most effectively



NO



YES

- double the use of your garage or carport

it can provide children's play space and storage for their toys and equipment, storage for lawn and garden tools, space for a workshop and for drying clothes, space for outdoor living

its location can protect the house from winter storms and summer sun and make the house look bigger and more attractive

- terraces and patios

should be ample in size for furniture, plants and the entertaining of several people

should have paved surfaces — stone, brick, tile, concrete — because they make the area more useful

for practical and artistic reasons, leave room for plants between the paving and the house

- fences are particularly advantageous

where privacy is desired

where undesirable views should be screened

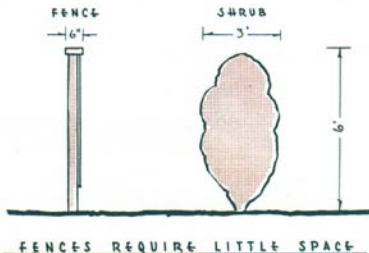
where an interesting effect is desired at times of the year when most plants have no foliage or flowers

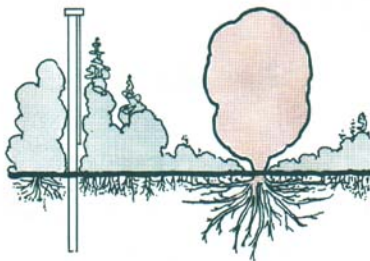
where space is limited — fences can be built in a width of 6" while plants should have at least 3'

where a support is needed for vines

where a background is needed for the proper display of flower beds

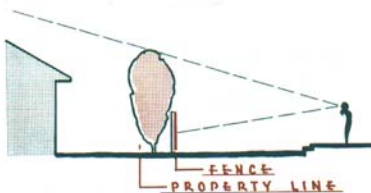
where shrub roots would rob adjacent flower beds of moisture and food





LARGE SHRUBS TAKE FOOD AND MOISTURE FROM SMALLER PLANTS

for artistic reasons it is often better to place the fence a few feet from the property line — this makes it possible to control your background with plants



fences can be built in many different designs for practical and artistic reasons

- provide for outdoor eating — consider the advantages of portable grills over masonry structures

they are much cheaper

their movability is a real advantage

they are less likely to degenerate into outdoor incinerators

- provide play space for children which can be converted to other uses

a paved surface has important advantages over grass — wheel toys work better and the area is more useful when the ground is damp

if properly planned, structures built for children can be adapted to other uses

- if you like swimming, consider a swimming pool on your property

it can be enjoyed when you have only a few minutes available for recreation it can add a great deal of beauty to your property

it must be enclosed by fence or wall for the protection of children

- for artistic effects, use the same materials in developing your outdoor areas that are used in your home

houses of stone, brick, painted wood or natural wood should use some of the same materials for fences, walls, steps, pavings, garden structures, plant boxes, etc.

- plan a compact development

you waste money when you waste space

- keep your design simple

it will look better and be less expensive

- take advantage of sloping sites

a change in the ground level is desirable for drainage and for appearance

- design with maintenance in mind

paved areas require much less maintenance than grass

keep bed lines and patterns simple

select plants that do not require special pruning, winter protection or spraying

- consider night lighting for your garden

it is relatively inexpensive and creates interesting pictures

SELECT THE PROPER PLANTS —

- every home needs plants to make it more livable, attractive and valuable

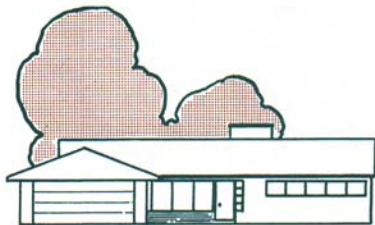
an unplanted house is unfinished — plants are required to give it a home-like character and to make it a pleasant place in which to live — even the finest building can be enhanced by proper planting

plants can do many practical and artistic things for you — give shape to outdoor areas, provide shade, protection from the wind and food for birds in winter, catch dust, deaden sound, eliminate undesirable views and can offer many colors, shapes and textures

plants — unlike almost everything else you buy — become more valuable as they get older and accordingly increase the value of your property — you are being extravagant when you don't plant your home

- a good landscape composition around your house will be composed of

a proper background —



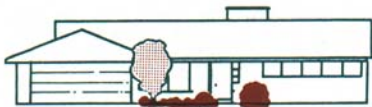
one that softens the silhouette of the house against the sky

good enframement —



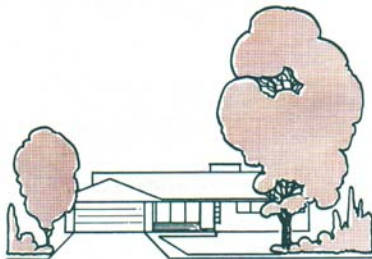
one that separates your house from its surroundings just as a frame makes a picture more attractive

well placed accents —



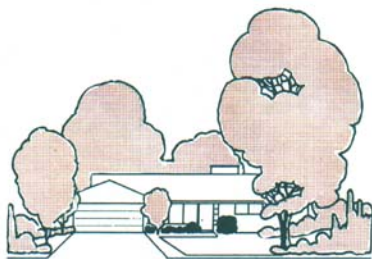
those that draw attention to the important parts of your home — usually the front entrance

an attractive foreground —



one that creates a pleasant setting of lawns, trees, and shrubs for your home

the combined effect of background, enframement, accents, and background will produce an attractive and livable home



- plants must be carefully selected—every species has its own characteristics—choose them according to their

soil preferences — sand, clay, loam, muck

exposure requirements — sun, wind, shade

moisture requirements — dry locations, considerable water, good drainage, swampy conditions

rate of growth — some grow more in one year than others do in twenty

eventual height — plants can get too big for many locations

form — tall, narrow, round, spreading, dense, open in growth habit

texture — small foliage, coarse foliage, glossy surface or dull

season of bloom — spring, summer, fall

color of bloom — must blend with surroundings

- plants are available in many shapes — each has its place in landscape compositions



DECIDUOUS SHRUBS



DECIDUOUS TREES



EVERGREENS

year around interest — evergreens do not change much — others change with the seasons

maintenance requirements — pruning, winter protection

resistance to insects and disease

cost — some are many times as expensive as others and may be worth it

- **particular care must be used in selecting plants for one-story homes**

use small growing trees

use trees that do not grow too large

use shrubs that grow slowly and remain relatively small

when you plant, consider the future effect

- **use a good many deciduous plants with your evergreens**

evergreen plants are very fine for accenting important features of your home, such as the main entrance, and for their winter foliage — but, their appearance does not change much throughout the year and most of those which thrive in Michigan do not have conspicuous flowers or fruits

deciduous shrubs usually provide conspicuous flowers and may have showy fruits and autumn color — many are attractive at all seasons of the year

deciduous shrubs are much less expensive than evergreens

- **don't depend on native plants alone**

plants which grow naturally in your locality are undoubtedly hardy and may be used successfully on residential properties — however, most of our best ornamental plants have been introduced from other areas

in buying plants, always buy from a reputable nursery

- **avoid "foundation planting"**

when houses had high, unattractive foundations it was often desirable to cover them up with plants although they gave an unstable appearance to the house

modern homes are often built of masonry in which the wall material continues to the ground line or they have low and inconspicuous foundations — in these cases, place your plants artistically — do not plant them in a row around your house



NO

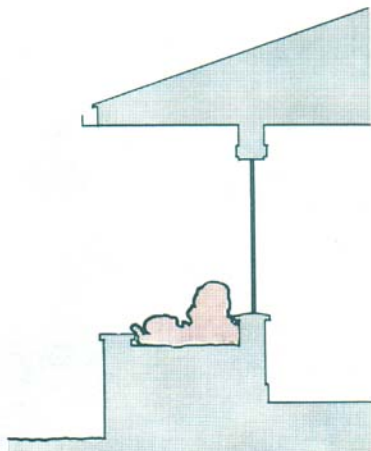


YES

- **raised "planters" under roofs are seldom satisfactory for growing plants**

plants require good soil, proper drainage, plenty of area for root development, sunlight, food and continuous moisture — it is difficult to provide these in raised areas under a roof unless the roof has openings for sun and rain

plants in flower pots can be attractively used outdoors but require frequent and regular watering

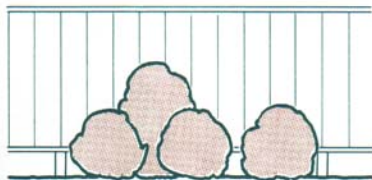


A GOOD PLACE TO GROW PLANTS

- **plant one big plant instead of many little ones**

small plants are usually planted close together to give an immediate effect but become crowded as they grow and usually create poor landscape pictures

one large plant will cost no more than several small ones and will be more attractive for a longer period of time



NO

- **consider the vines when you plan your planting**

many fine vines are available for landscape work — they require some type of support on which to grow

the combination of vine and its support can be very attractive

- **plants must be well planted and properly maintained**

give your plants special care the first year after planting — your efforts will be repaid many times through stronger and more attractive plants

plants, like people, are living things and have requirements which must be provided if they are to thrive — water, light, moisture, food and care when disease attacks

- **expect to replace some of your plants occasionally**

when given proper growing conditions, woody plants remain attractive for a number of years — but sometimes they become overgrown, poorly shaped or, for one reason or another, do not grow well — when this happens you should expect to replace them just as you do your wall-paper, draperies, floor coverings and upholstery — the occasional rejuvenation of planted areas is important for their continued attractiveness.



YES

PROPER LANDSCAPE PLANNING GIVES YOU —

- MORE ENJOYMENT
- MORE COMFORT
- MORE BEAUTY
- GREATER EFFICIENCY IN THE USE
OF YOUR SPACE
- GREATER ECONOMY IN CONSTRUCTION
AND PLANTING
- EASIER MAINTENANCE
- INCREASED PROPERTY VALUES

