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This unit, designed for use with junior high school students, focuses on the factors involved in subdivision design and planning. Although it is specifically constructed for use in the Parkway School District, Chesterfield, Missouri, it could be adapted for use in any suburban area where subdivisions (multiple and/or single family units) exist. It examines the primary factors that bring about the need for new housing, advantages of these types of dwellings to a community, the effect of zoning laws, psychological considerations involved in subdivision planning, economic advantages of subdivisions, and the vocational opportunities created during the development of a subdivision. The unit includes the behavioral objectives and the expected student criteria for evaluation, pretests and posttests, suggested instructional sequence, teacher background information, a vocabulary list, appropriate student and teacher resource materials lists, and suggested student data sheets. (MLB)
ENVIRONMENTAL ECOLOGICAL EDUCATION PROJECT

Parkway School District
Chesterfield, Missouri

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Unit: The Development of a Subdivision
Within the Parkway School District

The work presented or reported herein was performed pursuant to a
Title III ESEA Grant administered by the
Missouri State Department of Education.
THE DEVELOPMENT OF A SUBDIVISION WITHIN

THE PARKWAY SCHOOL DISTRICT
NOTE TO TEACHERS

Several audio-visual aids have been included in this unit. Your authors believe these films and video tapes are a vital part of the unit and encourage you to have made arrangements in advance to insure that these teaching aids will be presented.

The film "No Room in the Suburbs" must be reserved through the St. Louis Home Builders Association at 994-7700. We suggest early reservation to assure availability. The teacher will have to pick up and return the film to the Home Builders office at 10104 Old Olive Street Road. These folks are very cooperative and are willing to help you in any area they can.

The film "Green City" must be reserved through the County Audio-Visual or the County Library and it is suggested that confirmation be obtained as quickly as possible to assure it being available.

The slide sequence on "Occupations and Careers in the Building Trade" must be reserved through the St. Louis Home Builders Association at 994-7700. Several weeks notice are advised to secure the slides and accompanying speaker.

The video tapes of Doug James and Leonard Kiem will be on file in the Environmental Ecological Education office located at East Junior and should be reserved through the Environmental Ecological Education staff.
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SETTING

The setting for this unit is any junior high school in the Parkway School District. Although the unit has been constructed for use within the Parkway district, it's application could be easily adapted for use in any suburban area where subdivisions (multiple and/or single family units) exist. The unit has the purpose of bringing into focus the change in lifestyle which has come about as a result of this important dwelling concept. Because of the attacks which have been made by some antagonists of subdivision design and planning, it is important that an understanding be made of how subdivisions, when properly planned and managed, can be beneficial to a community with a minimum of detriment to existing environment.
CONCEPTS

I. The need for new housing is brought about by several primary factors.

II. The physical and economic availability of land is a major consideration in the location of a subdivision.

III. There are advantages to a community as well as to an individual in considering both multiple and single family dwellings.

IV. There are advantages in purchasing either a new home or a pre-owned home.

V. Population density is directly related to the use of the community's natural resources.

VI. Zoning laws dictate subdivision design.

VII. A variety of ways for a person to satisfy his needs to relate with nature should be considered in developing a subdivision.

VIII. The cost of installing utility services is borne equally by the individual home owners.

IX. Subdivisions make available to the buying public many optional features which can substantially alter the cost of a house because of the desirability and/or importance of these features.

X. A large variety of vocational opportunities are created during the development of a subdivision.
CONCEPT NUMBER

I. 1. Eighty percent of the students will be able to list four conditions that would bring about the need for new housing in a given community.

II. 2. Seventy-five percent of the students will be able to explain in writing that the physical and economic availability of land is a major consideration in the location of a subdivision.

III. 3. Eighty percent of the students will be able to prepare a chart listing two advantages to a community in the development of a multiple family dwelling and a single family dwelling.

III. 4. Given a random listing of advantages to an individual of multiple versus single family dwellings and conversely, 80% of the students will be able to select the items related to each type of dwelling.

IV. 5. Eighty percent of the students will be able to list three advantages for purchasing both a new and a pre-owned home.

V. 6. Ninety percent of the students will be able to state in writing at least three natural resources whose use increases as the population of the community becomes larger.

VI. 7. Seventy percent of the students will be able to choose from a list, five effects that zoning laws have on the development of a subdivision.

VII. 8. Ninety percent of the students will describe in written form three ways in which man's need to relate with nature could be considered in developing a subdivision.

VIII. 9. One hundred percent of the students will be able to list three important utilities which are vital to a subdivision.

VIII. 10. Given a multiple choice item, 80% of the students will select the response that correctly identifies the party responsible for the cost of installing the various utilities in a subdivision.

IX. 11. One hundred percent of the students will be able to select from a list of ten items, two optional items they consider to be the most costly in a home.
12. 80% of the students will list nine vocational opportunities that are created during the development of a subdivision.
1. Make a chart listing two advantages to a community for the development of a multiple family dwelling complex or a single family dwelling complex.

2. From the following list of possible advantages to an individual in selecting either single or multiple family dwellings, on your answer sheet put an "s" alongside the letter which corresponds to those advantages which would be for single family dwellings and a "m" alongside those advantages for multiple family dwellings:
   a) represents a sense of ownership
   b) eliminates the need for a large initial cash outlay
   c) provides income tax deduction
   d) means no lawn and building upkeep
   e) permits freedom of choice in remodeling and decorating
   f) safer parking conditions and more available space

3. From the following list select five items which zoning laws affect in the development of a subdivision. On your answer sheet put an "X" alongside the letter which corresponds to your five choices:
   a) street width
   b) parking facilities
   c) building materials used
   d) architecture
   e) height of structure
   f) provisions for sidewalks
   g) floor plan
   h) lot size
   i) landscaping
   j) provisions for utilities (sewer, gas, water, etc.)

4. On your answer sheet circle the letter which corresponds to the person or company who is indirectly responsible for the cost of installing the various utilities in a subdivision:
   a) developer
   b) builder
   c) home owner
   d) utility company

5. List four reasons why people move into a given geographic area. (e.g. Parkway School District)

6. List three natural resources that are used in greater amounts as the population of the community increases.

7. List three important utilities which are vital to a subdivision.

8. List nine vocational opportunities that are created during the development of a subdivision.
6.

5.  9. Make a chart listing three advantages for purchasing either a new or a pre-owned home.

8. 10. List three ways in which man's need to relate with nature could be considered in developing a subdivision.

2. 11. List at least three major factors that are considered by a developer in acquiring land for locating a subdivision.

11. 12. From the following list of home features, identify the two most costly OPTIONAL FEATURES to a prospective home owner. (Hint: some of the items are basic and others are optionals.)

   a) 2 bedroom home    f) finished basement
   b) 1 bathroom        g) single garage
   c) air conditioning   h) unfinished basement
   d) central heating    i) dishwasher
   e) garbage disposal   j) rear entry garage
PRE-POST TEST ANSWER SHEET

1. MULTIPLE FAMILY DWELLINGS
   A. USES LESS LAND
   B. PROVIDES MORE TAXES
   SINGLE FAMILY DWELLINGS
   A. TENDS TO ATTRACT STABLE PEOPLE
   B. LESS POPULATION DENSITY

2. A. S  B. M  C. S  D. M  E. S  F. S


4. (a)  (b)  (c)  (d)

5. A. NEW INDUSTRY IN TOWN
   B. PEOPLE LEAVING INNER CITY
   C. DESIRE TO BE IN A BETTER SCHOOL DISTRICT
   D. WANTING TO ESCAPE RACIAL, RELIGIOUS, OR SOCIAL INTEGRATION

6. A. LAND
   B. AIR
   C. WATER

7. A. WATER
   B. SEWER
   C. ELECTRICITY

8. A. CARPENTER
   B. PLUMBER
   C. BRICK LAYER
   D. ARCHITECT
   E. GLAZIER
   F. CARPET LAYER
   G. SHEET METAL WORKER
   H. IRON WORKER
   I. LANDSCAPER

9. NEW HOMES
   A. HAS CHOICE OF LOT LOCATION
   B. HAS CHOICE OF FIXTURES AND DECOR
   C. HAS CHOICE OF MODEL AND STYLE

   PRE-OWNED HOMES
   A. LANDSCAPING COMPLETED
   B. USUALLY LESS EXPENSIVE
   C. NEIGHBORHOOD MORE DEVELOPED
10. A. **THERE SHOULD BE SPACE PROVIDED AWAY FROM HOUSES AND STREETS WHERE A PERSON COULD THINK IN PEACE AND QUIET. (e.g. COMMON GROUND)**

B. **A BROOK OR STREAM COULD PROVIDE A RESTFUL SETTING. (e.g. MAINTAIN NATURAL TERRAIN AS MUCH AS POSSIBLE)**

C. **LEAVING ROOM FOR WILD ANIMALS WOULD ALLOW A PERSON TO WITNESS NATURE IN THE WAY IT WAS BEFORE THE SUBDIVISION WAS BUILT. (e.g. SANCTUARY)**

11. A. **COST OF LAND**

B. **AVAILABILITY OF LAND**

C. **COST OF DEVELOPMENT**

12. **FINISHED BASEMENT**

**REAR ENTRY GARAGE**

**TEACHER NOTE:** The answer herein provided are given only as a model for the type of answers which would be considered as acceptable. Your judgement should be the deciding factor in determining a satisfactory response. However, more assistance may be found in the teacher background of this unit.
INSTRUCTIONAL SEQUENCE
INTRODUCTION TO THE INSTRUCTIONAL SEQUENCE

The authors have attempted to write a unit that places most of the emphasis on educational activities. The students should be allowed to work either individually or in groups. Some of the activities lend themselves better to individual work and some to group work. The wording of the activities has been made vague intentionally. This allows several students to pursue the same activity using widely varying methods. With most of the activities we have included "notes to the teacher" on what these different methods could be. These notes are meant only to be a primer for the teacher to use with the student who is having trouble proceeding with his activity.

Several of the activities are designed in such a way as to back the students into satisfying the behavioral objectives. In other words, many times the method the student is using and the subjective information he is collecting is more important than the actual results of his research.

A classroom set of Student/Teacher Handbooks containing information will be available. Contact Central Office, ext. 79 for further information.
SUPER NOTE TO TEACHERS

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The video tapes of Doug James and Leonard Kiem will be on file in the Environmental Ecological Education office located at East Junior and should be reserved through the Environmental Ecological Education staff.

Because the video tapes are being prepared early in September it is advised that this unit not be presented first in the ninth grade sequence.
Note to teacher:

A. Teachers should realize that this sequence is only a guideline and is not to be considered a day-by-day approach. This is a six week unit and the activities are on-going for the total duration of the unit. For this reason it will be necessary for the teacher to implement the sequence according to what would be most beneficial to the situation.

B. When activities are distributed to students (to be distributed immediately after pre-test) the teacher may want to propose a contract approach with the students. Consider the number of activities required of all and determine the total number for student evaluation.

C. Plan a film program on basis of availability and/or where greatest need is shown in class. See St. Louis County Library and St. Louis County A-V catalogue for a resume of subject content and procedure for ordering the films listed in this unit.

D. Teacher should strongly encourage the students to utilize the Student/Teacher Handbook section which has been provided them. This section should be valuable reference for the student activities.

E. Although all students will have the entire list of student activities distributed to them, most of the activities will appear in their related place in the instructional sequence. This has been done as an aid to the teacher in relating certain activities to the particular sequence.

Sequence

Distribution of and administration of pre-test.
Distribution of Student Activities.

Background for Introducing the Activities

The following topics should be covered in your introduction to the activities:

1. The students may work individually or in groups depending on the activity chosen.

2. After deciding on the activity of their choice and planning a course of action, the students should discuss with the teacher how they are going to complete it and their method of reporting to the class.

3. Some of the activities will require more work outside of classtime than others. The student should be aware of this prior to choosing his activity.
4. The unit would seem to lend itself to some form of contract grading if the teacher desires to use this method. At any rate, the students should be informed of the grading method. The authors recommend that the teacher not use the pre-post test for evaluation purposes.

Concept #1

"No Room in the Suburbs" (16 mm, approx. 20 min., St. Louis Homebuilders Association) relates the problem of middle-income people being unable to obtain adequate housing, due to lack of middle-income homes.

Activities:

Investigate the reasons people move.

Several types of comparison studies could be made such as:

1) Multiple family versus single family dwellings.  
   30 to 40 thousand dollar subdivisions versus 70 thousand dollar subdivisions.

2) Do younger people move for the same reasons older people move.  
   (Age groups could be decided upon)

Make a listing of occupations which you feel would cause a family to move frequently. Devise a method of investigation that will verify the correctness of your list.

A result of this activity should be a listing of highly mobile occupations.

Test for "No Room in the Suburbs" (See appendix for copy of test to use to duplicate)
1. List five reasons why there is no room in the suburbs.
   a. lack of available land for housing
   b. housing costs too great for blue-collar and overall workers
   c. zoning laws favor low-density housing (single)
   d. housing shortage - lack of planning
   e. lack of good roads, water lines, sewer lines, utilities

2. In Pennsylvania County there were:
   (Circle those that apply)
   a. 200,000 families
   b. 180,000 families
   c. 1,000 farms
   d. 1,400 farms

3. What really is the CRISIS in the cities and the suburbs? (Circle those answers that apply)
   a. traffic problems
   b. old buildings
   c. housing shortage
   d. price boom in housing
   e. cost beyond the needs of average families

4. What constitutes an "average family"?
   Have an average income of $10,000 per year, two to three children, $25,000 home, and two cars.

5. What BASIC NEED is denied to American citizens? (Especially in counties?)
   a. Freedom
   b. Prosperity

6. What are the problems associated with cities and/or communities (counties - suburbs) today? Circle those answers which apply.
   a. population growth
   b. shrinking supply of land
   c. industrial growth
   d. lack of proper planning in these areas

7. Because of POPULATION DENSITY in cities, what has happened or resulted?
   Slums have developed. Those who could move to suburbs have. People in cities now drive to the county to work. Crime rate increase, housing shortage, poor housing.
8. Who today is really able to escape from the city? Circle one or more answers.
   a. 1/6 of the total population
   b. middle class workers - blue collar
   c. low income groups - overalls, below or above

9. How much money can wage earners REALLY afford for either RENT or MORTAGES for housing? Circle one.
   a. 100%  b. 75%  c. 50%  d. 25%  e. 15%

10. What PROBLEM seems to be of the GREATEST importance for county residents? Circle those that apply.
    a. schools of good standing  b. bicycles
    c. traffic jams  d. commuters that arrive early or leave late from work

11. What seems to be the "GREATEST" problem of County Industry? Circle one or more.
    a. a stable work force
    b. an available work force
    c. obtaining STABLE line workers.

    a. unavailability of necessary workers
    b. turn-over rate of workers
    c. absentee rate of workers

13. Multi-family or single-family dwellings ADD TO the tax base of a community. Circle one.
    a. multi-family dwellings  b. single-family dwellings

14. City populations tend to: circle one
    a. remain
    b. move into the suburbs
    c. leave the country

15. Why do young people tend to LEAVE communities in which they have been raised?
    Can't afford the kinds of housing they desire or need. Job scarcity.
Concept #1

"Green City" (16 mm, approx. 20 min., County AV or St. Louis County Library), develops the theme of preservation and fuller recreational and educational use of outdoor areas in the suburbs.

Have the students write a summary of the four major themes of the film. (Teacher note: see film summary below) students should be instructed to take notes and they should be informed of the summary that they will be expected to write)

Green City (Film Summary)

Activities: (Refer students to Student Handbook for readings)

Determine whether there is a relationship between the price of a section of land in Parkway and the types of residential development considered for it.

This information probably will have to come from several developers.

Design a subdivision to a desirable scale. On your tract develop both single and multiple family dwellings. Include roadways and landscaping in your project. Man's relationship to nature should be considered in your development.

This project could be a scale drawing or could entail several students working together on a three dimensional model. The following considerations could be included in the model:

1) street width
2) sidewalks
3) distance dwellings are placed from the street
4) recreational facilities (includes common ground)

The following films are available through the Cooperating School Districts of the St. Louis Suburban Area, Inc. These films may offer some suggestions to the youngsters in developing a working scale for his activity:

"Principles of Scale Drawings" 10 min. B-W
"Drafting Methods" 13 min. Color
ENVIRONMENTAL STUDIES - GRADE 9

THE GREEN CITY (FILM SUMMARY)

I

Farm lands are rapidly disappearing, the wildlife (plants and animals) are gone. First came the axe, then the saw, and now bulldozers that destroy the trees. Urban developments (mostly unplanned) spring up and replace the natural rural environment. These urban developments consist of paved land (roads, parking lots, side walks), crabgrass lawns that support wildlife in the form of Japanese Beetles (a harmful pest). No provision is made for natural beauty.

II

Land in urban areas is rapidly diminishing and is becoming scarce. Land resources are being threatened by developers of:

a. Home Subdivisions  b. Industrial Sites  c. Governmental Uses

Land developers threaten our environment:

a. parks - national, state, and local  
b. seashores - national, state, and local  
c. forests - national, state, and local  
d. rivers and lakes - national, state, and local

Land Users - make the public feel that use of the land for home or industrial use is in the public's own self interest. An uninformed public finds their arguments hard to resist since it satisfies their own selfish demands. No real planning is involved in most present land use practices.

III

The citizenary is the real villain - "Man is his own worst enemy" - not the developers of home or industrial sites. Economic Gains VS Land Use VS Public interests. People have divorced themselves from the land and nature because of economic priorities. Most home subdivisions are built as fast and cheap as possible with the idea of making a fast buck (profit motive) on the part of the developers. Developers supply the demands of the public for cheap housing, and this results in cheap unplanned subdivisions.

IV

THE GREEN SPACES MOVEMENT - The goal of this movement is to develop "Green Cities". These Green Cities are an attempt to combine the best of man and nature and leave the land as natural as possible. Houses can be built in natural settings at little added cost - planning is involved. Cities of the "future" need to acquire open, natural lands for parks to serve the needs of the urban dweller rather than permitting these lands to be developed into home
subdivisions and industrial sites. It has been noted that most public recreation lands are located where the people aren't. This limits the use of public recreation areas by the majority of people. Public recreation areas need to be near where the people live. The Green Spaces Movement is conservation directed. It is mainly concerned with protecting our natural environment. The "movement" wants to establish a balance between people and space and stop the present trend of "Urban Sprawl". An interested citizenary must get "involved" to protect our present public recreation areas. An interested citizenary should take steps now, while natural lands are still available, to acquire them for public use. This same public citizenary should demand planned development of home subdivisions and industrial sites. Such planning would prevent and avoid problems of: soil erosion, excessive population concentrations, urban blight, water pollution, air pollution, and lastly the destruction of our natural environment.

Concept #III

In class activity:

There are three phases to this sequence:

1. Handout "Directions for Computing Property Tax"
2. Handout "Student Worksheet"
3. Handout "Summation" sheets

All three phases are below. These are for teacher use only. Copies for students may be made from student copies found in the appendix.

Teachers should instruct the students by using the "Directions for Computing Property Tax."

Then the students should work on the "Student Worksheet" and the "Summation" sheet after sufficient instructions have been given. This should take 2-4 days.

Directions for Computing Property Tax

1. Compare the taxes paid to the school district from single dwellings vs. multi-family dwellings of similar size.

Formula for computing property tax:

Taxes are paid on 1/3 the real value of the property. Tax rate may vary from place to place. Tax rates for urban property may range from $5 - $8 per $100 of the real value of the property.

Example:

(a) The real value of a home is $30,000
(b) Taxes will be paid on 1/3 of this $30,000
$30,000 ÷ 3 = $10,000 taxable property
(c) The property owner must pay taxes on $10,000, which is the assessed valuation.
(d) Since the tax rate is paid per $100, determine the number of $100 in $10,000.
$10,000 ÷ $100 = 100

(e) The tax rate in this case is $5 per $100, or $5 \times 100

(f) The tax for this $30,000 home will be: $5 \times 100 = $500

Practice Problems:

A. A home has a real value of $60,000 and the tax rate per $100 is $6. Compute the taxes.
   $60,000 ÷ 3 = $20,000
   $20,000 ÷ $100 = 200
   200 \times 6 = $1,200

B. A home has a real value of $66,000 and the tax rate per $100 is $8. Compute the taxes.
   $66,000 ÷ 3 = $22,000
   $22,000 ÷ $100 = 220
   220 \times 8 = $1,760
STUDENT WORKSHEET

COMPARATIVE STUDY OF TAXES PAID BY SINGLE FAMILY DWELLINGS AND MULTIPLE FAMILY DWELLINGS

PROBLEM: A single family dwelling has a real value of $33,000. The tax rate is $8 per $100 assessed value. This a typical family with husband and wife and three children. The dwelling is situated on one-third acre. What is total tax paid?

a) $33,000 : 3 = $11,000
b) $11,000 : $100 = $110
c) 110 x $8 = $880

Total Real Value $33,000

PROBLEM: A subdivision consisting of ten (10) acres contains thirty (30) single family dwellings. Each family dwelling has a real value of $36,000. The average number of children in each family is two (2). What is the total tax paid by the occupants, if the tax rate is $8 per $100 assessed value?

a) $36,000 : 3 = $12,000 Total Real Value $1,080,000
b) $12,000 : $100 = 120
c) 120 x $8 = $960 per single dwelling
d) 30 single dwellings x $960
   $960 x 30 = $28,800
e) total taxes paid on 10 acres is $28,800

PROBLEM: A subdivision consisting of ten (10) acres contains 60 town houses (multiple family dwellings). Each town house has a real value of $36,000. The average number of children in each family is one. What is the total tax paid by the OWNERS of the town houses if the tax rate is $8 per $100 assessed value?

a) $36,000 : 3 = $12,000 Total Real Value $2,160,000
b) $12,000 : $100 = 120
c) 120 x $8 = $960 per town house
d) 60 town houses x $960
   $960 x 60 = $57,600
e) total taxes paid on 10 acres is $57,600

PROBLEM: A condominium is located on a five (5) acre tract of land. Sixty (60) family dwellings are situated in two apartment-type buildings. Each family dwelling is worth $21,000. Each building houses thirty (30) families. Each family (young married or old retirees) has .5 or 1/2 children per family. The tax rate is $8 per $100 assessed value. What are the total taxes paid by this complex?

a) $21,000 : 3 = $7,000 Total Real Value $1,260,000
b) $7,000 : $100 = 70 (projected value over 10 acres -
c) 70 x $8 = $560
   $2,520,000)
d) 60 condominiums x $560 = $33,600
e) total taxes paid on five acres is $33,600
SUMMATION

COMPARATIVE TAX ANALYSIS OF LAND USE
AND TYPES OF BUILDING PROJECTS

1. What was the acreage of:
   a. Subdivision with single family dwellings? 10 Acres
   b. Subdivision with multiple family (townhouse) dwellings? 10 Acres
   c. Complex consisting of condominiums? 5 Acres

2. What was the family size of:
   a. Subdivision with single family dwellings? 5 - husband, wife, 3 children
   b. Subdivision with multiple family (townhouse) dwellings? 2 children
   c. Complex of two condominiums? 2.5 - husband, wife, .5 children

3. List the amount of taxes paid by:
   a. Subdivision with single family dwellings? $28,800
   b. Subdivision with multiple family (townhouse) dwellings? $57,600
   c. Complex of two condominiums? $33,600

4. In the final analysis, based on land use, where was the land used to best advantage?
   Condominiums

5. What kinds of dwelling complexes really support the tax base of a community? Place your answers in descending order.
   a. Condominiums  b. Townhouses  c. Single family dwellings

6. Population density is a real factor as to where you decide to live. Given your "RATHERS" what type of dwelling place would you choose? Circle your choice.
   a. single dwelling  b. townhouse  c. condominiums (student choice)

7. In twenty-five words or less, give your reasons for your answer to question number 6 above.
   Any answer acceptable as long as the student can support the ideas he has given.
8. In your own opinion, who should pay the greater amount of taxes in a community? Circle one. (student choice)
   a. Single family dwellings with three children
   b. Townhouse family with two children
   c. Condominium residents (young married, old retirees) with .5 (1/2) children per family.

9. Review question 8 above, and give reasons why you decided on the answers you gave. Explain in detail.

   Any answer acceptable as long as the student can support the position he has taken.

10. Considering space, in your opinion, which development had the greatest potential for common ground. Circle one. (student choice)
    a. single dwellings   b. townhouses   c. condominiums

11. What reasons can you list for the basis of your answer in question 10 above?
    Be specific!!

   Townhouses would take less ground space as would condominiums. Common ground potential would be greatest in these two developments. A student might point out that some single family "cluster" dwellings in a subdivision could accomplish the same end.
Other Activities:

What position has been taken by the Parkway School Board on single family vs. multi-family dwellings?

- does price make a difference?
- has position changed over a period of years?
- does location make a difference?
- have studies been conducted which would affect the position?

Pick two comparable dwellings in a subdivision, one single family and one multi-family. Compare the two dwellings for square footage of living space and conveniences found in each.

Make an appointment with your town councilman, or alderman, and find out what his position is on zoning multi-family dwellings in your area. Visit a meeting of your local zoning commission. Discuss what you have found in terms of benefits to the community in considering single family dwellings and multiple family dwellings.

Compare the taxes paid to the school district from single family dwellings vs. multi-family dwellings of similar size.

- per school age child
- per acre of ground
- per total person, since adults are using schools more lately.

**Concept #IV**

Show slide presentation, "The Sensuous House." This presentation concerns the approach the media employs to appeal to the consumer purchasing a home, by the use of the "five senses" (taste, touch, smell, sound, and sight).

It may be worth the teacher's time to preview this presentation and prepare a possible checklist or critique.

Examine the advantages to a family in purchasing either a new or a pre-owned home.

This study could be conducted in either of the following ways:

1) Survey the neighborhood for families that have recently purchased homes. Compare their reasons for choosing either a new or a pre-owned home.

2) Discuss the advantages of each type of home with at least two real estate companies that specialize in pre-owned homes and two developers currently selling new homes.

It is hoped that as the students summarize their findings they will observe some form of economic, social, and aesthetic value in the listings they have completed.
The economic aspect of purchasing a new or pre-owned home should bring out some facts such as 1) pre-owned homes would offer a lower cost over some new homes, landscaping established, drapes and window coverings installed, assumption of cheaper loan rates, and so on. 2) A new home would offer a relative small upkeep for several years, some type of warranty against defects, opportunity for custom design with interior and exterior color and variations of floor coverings.

The social attributes for a pre-owned home would be an established neighborhood offering some background into property upkeep, religious influences, and racial integration. The new home may be in a subdivision that is totally new and no social scheme established. This is not to indicate that religious or racial segregation is desirable, but merely to indicate these aspects may be a buyer’s criteria in purchasing a home.

The pre-owned home and a new home may both offer many aesthetic values such as landscaping, color schemes and various modifications in wall and floor coverings. However, a new home may offer more variations due to the ecological and environmental awareness in the past couple of years.

* Refer students to Student/Teacher Handbook section.

**Concept #V**

Activities:

Make a historical study showing how an increase in population density has affected the use of your community’s natural resources.

Various natural resources suggest themselves to us, however there are probably many others that the students will think of.

water - St. Louis County Water Company
natural gas - Laclede Gas Company
petroleum - Shell Oil, Gulf, Mobil, Texaco, etc.
air pollution - St. Louis County Air Pollution Study
Optional: Teacher may want to discuss with students what they consider to be natural resources and also what resources may be available in this region.

Have students graph and compare population growth of the following: United States, Missouri, St. Louis Commuting Area, City of St. Louis, and St. Louis County. (See Table I, Population Growth - this should be duplicated and handed out to students - additional copy may be found in appendix.)
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<th>Population Change</th>
<th>U.S. Population</th>
<th>U.S. Population Change</th>
<th>Population Percent Change</th>
<th>U.S. Population Percent Change</th>
<th>City of St. Louis Percent Change</th>
<th>St. Louis County Percent Change</th>
<th>St. Louis Commuting Area Percent Change</th>
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Concept #VI

Video Tape, County Planning Commission on Zoning, presented by Doug James (tape available at Central Office, ext. 79). (Audio tape cassettes are also available at same location, subject matter is the same)

(See Student readings in Student/Teacher Handbook related to the various facets of the concept on zoning).

Activities:

Attend a zoning commission planning hearing for your local area. One or more of the following items should be considered while attending the zoning hearing:

a) Types of planning - note the developer's plans for land use and categorize into residential, commercial, or industrial.

b) Land use - note the use of land surrounding the tract under consideration; is the planned land use compatible with the surrounding area.

c) Density of population - does the planned use of land create any problems on existing facilities in the community such as highways, schools, etc.

d) Economics - does the plan offer an economical asset or deficit to the community?

e) Opposition - ascertain the position of the people who are opposed to the developer's plans. Is there opposition related to the land use, population density, or economics as related to the surrounding areas. If there is opposition for reasons other than those listed, be sure to include this in your notes.

It is conceivable that the student in the above activity could deal with only one aspect of the activity and still develop a comprehensive study.

12. As a result of having attended a zoning commission planning hearing do a follow up report on one of the following:

a) zoning -- a tool for population segregation

b) What is the role of the "silent majority in zoning change?"

c) Develop a local public reaction poll to the developments occurring in the planning commission hearing.

The primary theme in this survey would be for the youngsters to become aware of the existence of public apathy towards community involvement.

d) Investigate the role of the planning commission staff in relation to the hearing you attended.
Activities:

Design a house that would allow a person to relate with nature in a variety of ways. This could be either a drawing or a model. The slide sequence on "The Sensuous House" should provide adequate stimulus for the student.

Compare the ways that a person can relate with nature in at least two different subdivisions.

Comparisons could be made using photography (still or movie) or drawings. Other methods may suggest themselves to students.

In allowing ways for a person to relate with nature in a subdivision, one important aspect is variety. Compare different areas of a subdivision in terms of variety of ways a person has to relate with nature.

Comparisons of variety could include:

a) How many species of trees?

b) How many different insects?

c) How many different types of birds?

Pre-activity to Design and Build a House.

Have students complete Data Sheet Check Chart of Family Needs (an extra Data Sheet may be found in the appendix section of the unit).
DATA SHEET
CHECK CHART OF FAMILY NEEDS

LOCATION PREFERENCE

City (Urban)
Suburb
Subdivision
Country (rural)

TYPE OF HOME

Apartment
Ranch house
Split level
Townhouse
Duplex
Flat
One level
Two level
With basement
Without basement
Walk out
Other

ROOM PREFERENCES

Separate living room
Separate dining room
Living-dining room
Kitchen with snack bar
Family room
Number of bedrooms
Library
Dan
Hobby room
Utility room
Other

ENTERTAINING

Buffet suppers
Formal dinners
Small dinners
Backyard barbeques
Teas
Brunches
Other

MEALS WHERE SERVED

At dining room table
Snack bar - kitchen
Kitchen table
Elsewhere

WORKING HABITS

Works at home
Works occasionally at home
Never works at home

LEISURE HABITS

Painting
Ceramics
Gardening
Woodworking
Hi-fi
Television
Reading
Sewing
Photography
Cards or games
Music
Play instrument
Kind of instrument

FAMILY SIZE

Father
Mother
Children
Boys
Girls

SPORTS

Hunting
Fishing
Golf
Tennis
Bowling
Riding
Sailing
Dancing
Skiing
Water
Snow
Basketball
Softball
Baseball

REMARKS

NAME

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DESIGN AND BUILD A HOUSE

1. You have just identified the NEEDS of a family.

2. Now decide what kind of house you would like to have and draw up a floor plan for it.

3. After designing your home, you will be given $40,000 with which to build it - if you can! Directions:
   a. The given costs are only approximate, you may want to find real costs by interviewing a builder.
   b. Items that are necessary must be included in your home. Electrical wiring, and plumbing. You must have a kitchen and a bathroom.
   c. If you find you are spending too much money you can change your house plans to fit the budget of $40,000.
   d. You may subtract a room if you can prove it meets your family's needs.
   e. Landscaping is necessary if you buy a house on land without trees, optional if the land has trees.
   f. If you choose to live in the country you must determine the cost of land by multiplying the number of acres you want by $2,500. This land price assumes that your rural home is located near a large city. Also, a rural home will need a septic tank and a well in addition to the other utilities.

Cost of Constructing (Building) a Home

1. LAND IN DESIRABLE AREA
   a. 1/3 acre, without trees $2,500
   b. 1/3 acre, wooded 4,500
   c. 1/3 acre, wooded on lake front 6,000
   d. 1/2 acre, without trees 4,000
   e. 1/2 acre, wooded on river bluff 8,000
   f. Rural home site @ $2,500 per acre
      Indicate acreage (___) and compute cost
      TOTAL $_____

2. STRUCTURE: $600 times the number of rooms.
      TOTAL $_____

3. EXTERIOR BUILDING MATERIALS
   a. Brick - $330 times number of rooms
   b. Shingle - $165 times number of rooms
   c. Frame - $220 times number of rooms
   d. Stone - $330 times number of rooms
   e. Brick and frame - $275 times number of rooms
   f. Aluminum siding - $220 times number of rooms
      TOTAL $_____

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4. ROOF
   a. Cedar shingles - $220 times number of rooms
   b. Asphalt shingles - $110 times number of rooms

   TOTAL $

5. INTERIOR WALLS
   a. Plaster - $66 times number of rooms
   b. Wallboard - $44 times number of rooms
   c. Paneling - $93.50 times number of rooms

   TOTAL $

6. UTILITIES
   a. Electrical wiring - $132 times number of rooms
   b. Heating - $264 times number of rooms
   c. Air-conditioning - $176 times number of rooms
   d. Plumbing - $495 times number of rooms
   e. Septic tank (rural) - $1,100
   f. Well (rural) - $2,200

   TOTAL $

7. INSULATION
   a. Side walls - $1,000
   b. Ceilings - $750

   TOTAL $

8. LANDSCAPING: Trees and shrubs
   a. 1/3 acre, without trees - $330
   b. 1/3 acre, wooded - $110
   c. 1/3 acre, wooded on lake front - $110
   d. 1/2 acre, without trees - $495
   e. 1/2 acre, wooded on river bluff - $220

   TOTAL $

9. LANDSCAPING: Grass
   a. 1/3 acre sodded - $330
   b. 1/3 acre seeded - $165
   c. 1/2 acre sodded - $660
   d. 1/2 acre seeded - $330

   TOTAL $

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10. EXTRAS - OPTIONALS
   a. Fireplace(s) - $750 each
   b. Patio or deck - $660 each
   c. Swimming pool
      small - $5,500
      large - $8,800
   d. Garage
      1 car - $825
      2 car - $1,430
   e. Carport - $330
   f. Screened-in porch - $550
   g. Driveway
      Concrete - $770
      Blacktop - $550
      Gravel - $110
   h. Rear entry garage driveway
      Concrete - $1,540
      Blacktop - $1,100
      Gravel - $220
   i. With basement - $2,000
   j. Walk out basement - $2,500
   k. Finished basement (paneling, tiled floor) - $1,500

TOTAL $________
Activities continued:

**Field Trip - Subdivision**

Hand out to each student the Field Trip - Subdivision Data Sheet. This activity may be assigned as an individual or group - in class or out class activity. (Duplicate copy may be found in appendix)
FIELD TRIP - SUBDIVISION DATA SHEET

Name of Subdivision ___________________________  NAME________________________

Hour ______ Date ______

I. Observational Aspects
   A. Subdivision Characteristics
      1. Topography - lay of land
         a. Flat
         b. Flat-gently rolling
         c. Rolling-hilly
      2. Land Use
         a. Residential
            1. Single family
            2. Multi-family
            3. High-density
            4. Low-density
      3. Commercial Services
         a. Wholesale
         b. Retail
         c. Manufacturing
      4. Street Pattern
         a. Grid
         b. Regular
         c. Follows topography
         d. Irregular
         e. Other
            (Name or describe)
      5. General Appearance Condition
         a. Neat
         b. Average
         c. Below Average
         d. Other (Describe)
      6. Drainage
         a. Good
         b. Average
         c. Below Average
         d. Erosion absent
         e. Erosion present
         f. (Be prepared to discuss this item in your comments section.)
      7. Utilities to lot
         a. Electric
         b. Natural gas
         c. Bottle or tank gas
         d. Telephone (Evidence of)
         e. Water
         f. Sanitary sewers
8. Lot Characteristics
   a. Lot size - approximate
   b. Topography
   c. Landscaping (yes - no)
      1. Lawned (grass)
      2. Trees
         a. None
         b. 1 - 3
         c. 4 - 5
      3. Shrubbery
         d. Fenced (some - all)
   e. Drainage on lot
      1. Good
      2. Average
      3. Below average
      4. Very poor

9. Type of Building Structure
   a. Artificial materials
   b. Natural materials
   c. Brick
   d. Frame
   e. Combination of brick and frame
   f. Modular - pre-fab

10. Condition of Structure
    a. Well kept
    b. Average
    c. Ill-kept
    d. Dilapidated

11. Extent of structure
    a. Garages (1 or 2)
    b. Basement
    c. Patio
    d. Other (Describe)

12. Street Condition
    a. Good
    b. Average
    c. Below average
    d. Width
       1. Adequate
       2. Inadequate

13. Sidewalks
    a. Adequate
    b. Inadequate
    c. Access to home
    d. No access to home

14. Lawn Use
    a. Lawn (grass)
    b. Garden (flower or vegetable)
    c. Recreation
    d. Other
ADDITIONAL COMMENTS:

QUESTIONS:

1. Would you like to live in this particular subdivision? Give specific reasons!!

2. Give reasons why you would not like to live in this subdivision. Be specific!!

3. Environmentally was this land USED PROPERLY or MISUSED? Please be SPECIFIC.
Activities continued:

The Development of a Subdivision

Hand out to each student the Development of a Subdivision Data Sheet.

Teacher Note: It is recommended that the teacher preview this data sheet through discussion, before students actually involve themselves. (An extra data sheet may be found in the appendix section of the unit)
I. Subdivision
   1. General definition

   2. Local definition

   3. Type of dwellings

   4. Advantages to a community
      a. 
      b. 

   5. Name of subdivision

   6. Developer

   7. Builder

   8. Political jurisdiction

   9. Location

   10. Acreage

   11. Number of units

   12. Crafts, trades and professions
      a. 
      b. 
      c. 
      d. 
      e. 
      f. 
      g. 
      h. 
      i. 
      j. 

   38
13. Design of structure

14. Topography

15. Code used in zoning
   a. qualifications

16. General regulations for zone
   a. 
   b. 
   c. 
   d. 
   e. 

17. Services available from community.
   a. 
   b. 
   c. 
   d. 

18. Advantages to living in development
   a. 
   b. 
   c. 

19. Floor Plans
   a. 
   b. 

39
20. Features promoted by development
   a. ____________________________
   b. ____________________________
   c. ____________________________
   d. ____________________________
   e. ____________________________
   f. ____________________________
   g. ____________________________
   h. ____________________________

21. Community conveniences
   a. ____________________________
   b. ____________________________
   c. ____________________________
   d. ____________________________
   e. ____________________________

22. Recreational grounds; features
   a. ____________________________
   b. ____________________________
   c. ____________________________

23. Other ________________________
Activities:

The Bullfinch Problem
(Note: This activity has been designed as an in-class activity for use with the total class)

Hector Bullfinch is interested in developing a subdivision within the boundaries of the Parkway School District. Having never built in this area before, he was not familiar with the cost of installing utilities in St. Louis County. After surveying the various utility companies he found the following rates would apply: main sewer lines would come to $1200 per lot with an additional $3.50 per foot being added to connect each individual house to the main line; a water main would cost $400 per lot with $2.25 per foot added for each foot of water line to the individual house. The gas company reported that there would be no cost to him for installing a gas line as the price of the line is included in the hook-up fee the gas company charges its customers. Although it cost users $10 to have a telephone installed with a base rate of $12 per month not counting the additional cost of added telephones, the telephone company said it would not charge him either for installing a phone line in his subdivision. Mr. Bullfinch would have to pay $50 per lot for the installation of a main electric cable with an additional $2 per foot to hook up to the main line for each house. He figured his average house is 40 feet from the streets where all of the utilities will be located underground. What cost will Mr. Bullfinch have to add to the price of his average house to cover the cost of installing utilities?

Handout to each student a copy of The Bullfinch Problem.

Teacher note: For duplicating purposes use the copy of The Bullfinch Problem found in the appendix.

Suppose for some reason, only one of these utilities gas, water, electricity, and sewers could be installed in your home. Which utility would you choose and how would you operate your household without the remaining three?

* The student should analyze just which services provide luxuries and which have we all but come to rely upon as necessities. In analyzing his dilemma the possibility should be allowed for water to be brought in by bucket and waste removed as the buckets left. Wells and cisterns would also be permitted but the possibility of contamination must be considered. Also, some services can overlap in usage, for example electricity can heat, cool, cook, and provide entertainment; gas could provide heat, cool, cooking, and the power for a generator to provide electricity. The students ingenuity will be called upon to develop a workable household in this "rustic" setting.
Concept #IX

Activities:

Make a comparison of the cost of the various options that alter the price of a house (example would be a fireplace, dishwasher, patio, etc.,)

* Comparisons could be run on the following pairs:
  a) expensive vs. medium priced homes
  b) options in several similarly priced subdivisions
  c) features included in base price of similarly priced subdivisions
  d) features included in base price of differently priced subdivisions

Refer to Design and Build a House activity for costs, or determine actual costs through research.

Concept #X

Explore the job opportunities created by a multiple family dwelling that would not be created by a single family dwelling.

Research the variety of vocational opportunities that are associated with developing a subdivision. Pay special attention to those that have been created in approximately the last two decades such as technological advancement and labor management.

Investigate vocational courses available in the Parkway Schools and South County Technical School which would help to prepare a person for specific fields of work.

Investigate an occupation in the building trades from the standpoint of an individual entering that trade.

* a) type of trade such as unskilled, semi-skilled, skilled, etc.
  b) Training qualifications and length of training period.
  c) Life time opportunities after training in regard to steady employment, salaries, and promotions.
Teacher note: A slide presentation on Occupations and Careers in the Building Trade is available - contact Homebuilders Association for further detail.

Administer Pre-Post Test

Additional Ideas and Activities

Possible activities and resources that may be used will be found at the end of this unit on pages entitled, Environmental Resource Inventory. These inventory pages are arranged according to specific school sites, however, you will find that the idea or activity may apply to your building as well.
TEACHER BACKGROUND
TEACHER BACKGROUND

The modern American subdivision as we know it today is the resultant product of a conglomerate of ideas, attitudes, circumstances, and conditions. Because of the tremendous growth in the Parkway School District during the past ten years, subdivisions have radically altered not only the landscape, but the ecological factors of this area as well. Since it is so easy to take the existence of a subdivision for granted, many of our students possibly have never considered the planning that goes into a subdivision and the effect a subdivision can have on its surrounding community. One of the major goals of this unit is to impress upon the student that first of all today's subdivisions do fill a need and that secondly, through planning and scientific consideration of the environment, subdivisions can be ecologically sound and esthetically pleasing.

Although this unit is structured to a considerable extent to cover many aspects of subdivision planning and the ramifications a subdivision can have on it's occupants, your authors recognize that student and teacher interest and background could alter to some extent the format suggested. This is to be expected and is acceptable. We offer here an outline to be used as circumstances dictate.

VI.

Because every subdivision design is dictated by the zoning laws which are applicable to its construction, an understanding of the principles related to zoning is essential. Zoning laws are set up by the community fathers to protect the community and in the long run the citizens therein residing. Although individual wants must sometimes be discarded to the will of the majority, it must be remembered that zoning ordinances are flexible and applicable to change. Ordinances that at one given time seem adequate and acceptable may, due to changing times and community demands require re-evaluation. One of the most perplexing problems of city planners is to predict future trends and needs and then enact ordinances which will serve the needs of the community not only today but for some time in the future as well.

As related to the subdivision, zoning ordinances make demands on lot sizes, number of families per dwelling, distance of house from street, specifications for sewage and water control, as well as the infinite number of details which go into making a subdivision a desirable place to live.

Due to the highly technical nature of the wording used in zoning ordinances, the layman has a difficult time determining the intention written into these ordinances. Most students, therefore, would find little value in reading, verbatim, zoning ordinances as they are found in county or municipal statues. Nevertheless the student should be led to an understanding of the tremendous importance these laws have upon
the citizens of a community. For anyone interested in seeing how zoning ordinances are written as well as what they cover, a copy of "THE ZONING ORDINANCES OF ST. LOUIS COUNTY" has been placed in each Parkway Junior High School library.

Zoning disputes have been at the forefront of many court cases where zoning has been a tool used to bring about and maintain segregated communities. One way this is done is by restricting housing to high priced units which tend to discourage low income families from purchasing in the area. The same result is often accomplished by restrictive codes which prohibit the construction of multiph family dwellings. Both of these tactics when aimed covertly at blacks have led to national interest being spotlighted on this issue and hence considerable coverage by magazine and newspapers. The students should be able to find many examples of restrictive zoning in the media and because of the less technical nature of the articles, begin to grasp the importance zoning has on the lives of many people.

A profitable class discussion might result from asking the students what restrictions they feel should be placed on subdivision design. Eventually someone may suggest that each builder should be left on his own desires. The class would then hopefully go into the havoc this could create.

The legal body responsible for approving zoning changes in the unincorporated areas of St. Louis County as established by the County Charter is the St. Louis County Council. This council appoints the St. Louis County Planning Commission as its advisory committee. It is the Planning Commission staff which has the responsibility of investigating petitions for zoning changes which deviate from the zoning established in the County Charter.

Developers submit to the Planning Commission staff their intentions for a residential, commercial or industrial development. The staff evaluates these proposals as to their feasibility in consideration of the surrounding community, available utilities, and environmental requirements and suggests amendments to the developer's plan so as to make his proposal as sound as possible.

When a zoning change is required to implement a proposed development, the Planning Commission holds a public hearing where the petitioner presents to the Commission his proposed plan. Public reaction is invited to determine the local sentiment regarding the proposal and how they feel the development will affect the community. The Planning Commission takes the proposal under advisement and considers the merits of the development in light of the petitioner's presentation, the staff's recommendation, and the public reaction. The Commission submits to the County Council it's suggested disposition of the case. It is the Council that will approve or disapprove the requested zoning change with or without the endorsement of the Planning Commission. A noteworthy observation at this juncture might be to point out that the above procedure is implemented only when a zoning change is requested. If an area is already zoned at a rating acceptable to the developer his only obligation is to
conform to restrictions placed by the established zoning ordinance and build according to existing building codes.

Although the preceding outline is based specifically upon the procedures used in the unincorporated areas of St. Louis County, each municipality has a system of zoning review similar in design to the county. To determine the exact method of operation in a specific area the investigator would have to check with the proper authorities in the area concerned.

III.

In order for a contractor to be successful, the housing he builds must meet a need in the given community and must sell. Both multiple and single family dwellings have appeal, each with a clientele desirous of that particular housing. Some communities, through zoning, have decreed that multiple family housing is undesirable and therefore all but outlawed this type of construction.

Apartments, condominiums, town houses, all variations on the theme of multiple family dwellings, can have a decidedly positive influence upon a community. In order to be a viable entity, a community must make available to the public, accommodations suitable to many economic and social levels of society. Only a limited number of subdivisions can cater to high income families. Some provisions must be made to house middle income families and those families just getting started economically in order to ensure a balanced community. Multiple family dwellings are often the answer for people who have not established themselves economically to the point where they can afford the expense of buying a home. Apartment living is also desired for those families that have grown children and no longer wish to bother with the expense and trouble of maintaining a house and lot. (Use film: "No Room in the Suburbs!!")

Some communities feel that multiple family dwellings tend to create blight and lower surrounding land values. It is also felt by some that apartment complexes do not carry their fair share of the tax burden and other tax community services such as schools, parks, and shopping centers. It is agreed that some apartment systems place an added burden on school facilities. Studies have shown, however, that properly maintained apartment complexes can be an asset to a community both economically and socially. It must be remembered that these same units still supply tax money, often times to an extent in excess of what single family subdivisions would produce for comparable amounts of land area.

A new subdivision regardless of whether it be composed of single family or multiple family dwellings means a new score of customers for community businesses. A subdivision complex composed of 300 family units can represent over 1000 bodies that will be availing themselves of goods and services from which local businessmen will certainly reap a profit. Each person will have need of groceries; home furnishings; gasoline for their cars; and personal service such as barber and beauty shops, and doctors and dentists. In this way a new subdivision contributes to the local economy bringing in money and spurring future business developments.

II.

In planning a new subdivision, a developer must take into consideration the availability of land and the economics involved in developing a selected site. Considering that land prices in the Parkway district can run in excess of $20,000 per acre (which can add an additional $20,000 per acre) might make the cost of a finished house beyond the
reach of the market for which he is building. If indeed this is the case, a more economically feasible consideration might be the multiple family concept.

V. It must be remembered that land is one of the few items technology cannot manufacture. As the market for land increases, the price for remaining land resources increases also. More and more people continue to seek the "good life" offered by the suburbs. There is only so much land available and the most economical usage of remaining land resources must be carefully examined in order to provide maximum accomodations to the maximum number of people desiring such services.

There was a time when home builders were just that--home builders. Particularly in city environments such things as personal services, shopping facilities, and recreational needs were met by the city. If a resident had a need or desire to commune with nature, there were parks within or bordering the city to satisfy wandering spirits.

VII. Today the modern subdivision dweller desires immediate access to nature. Most people residing in the suburbs do not want the pollution, crime, and blight the city often represents. The suburbs are pictured as having the openness and fresh air of rural areas yet offering the facilities of urban living. As more people have availed themselves of the greenery the county represents, the less greenery the county has to offer. The subdivision's answer is to provide within the subdivision itself a means for it's inhabitants to relax in a natural setting.

The Planned Environmental Unit (PEU) is one example of this. In a subdivision which is zoned perhaps R-2 (meaning each lot will have 22,000 square feet of area) each lot, in actuality, has less area than specified. The deficiency in area of each individual lot is totaled with the deficiency of all the other lots in the subdivision and this amount of land is set aside either in one central location or in several smaller areas as common ground for the use of the subdivision residents. Although each individual lot is undersized, the total subdivision is in compliance with the specified zoning code.

VII. This common land then makes available to the subdivision residents a park-like atmosphere where many natural surroundings can be visited easily. Such items as hiking trails, ecological niches, ponds, and wild flowers are favored uses for common grounds. Recreational facilities are also planned in making swimming, tennis, playground equipment, and ball fields readily accessible to the residents.

The PEU concept offers the possibility of the best of two worlds: relatively inexpensive housing, yet a recreational and natural area within walking distance. Although this possibility does exist, some developers have interpreted the PEU concept in a way never intended. Large tracts of land are rarely without some type of natural deformity. These may be in the form of ravines, heavy concentrations of rock, creeks, or high hills. There exists the possibility that in planning common ground, a developer will cast a knowing eye on a topographical circumstance that would be difficult to reclaim for building purposes.
By calling this area the common ground for his development, the contractor has done himself a double service in fulfilling his obligation to set aside common ground and at the same time spare himself the difficulty of trying to develop difficult terrain. It is agreed that creeks, rocky areas and the like can be turned into highly desirable natural area. But when left in the raw, these areas may be just as valueless to the prospective user as it was to the developer.

Developers have accepted the idea that living is a many faceted experience. Providing just a house is no longer considered enough when prospective home buyers are evaluating living quarters. In providing these common grounds, subdivisions allow residents an opportunity to relate with nature and reassess their role in the larger community of nature itself.

People buy new houses for many reasons, some of these reasons are: need for more space due to increasing family size; location of place of employment; higher income allows more luxurious living quarters; a desire for the additional status a new home might bring; desire to locate in a better school district. For whatever reason or combination of reasons, thousands of families every year are in the market for new housing.

Assuming a family has decided upon single family housing, their need for making decisions is not yet over. A prime consideration is deciding whether to purchase a new or pre-owned house. Each type of structure has advantages. New homes offer the comfort of the most modern conveniences, a certain air of "newness", a choice of fixtures and color combinations, and the excitement of a new community with the prospect of growing with the development.

Pre-owned homes have selling points all their own as well. Pre-owned homes usually have been landscaped and have fully developed trees, there are those who feel older homes represent a quality of workmanship which cannot be found today, and an older home would probably be located in a stable community where sometimes generations of families have lived. The buyer of a second hand house can usually be assured that leaky basements have been fixed and generally the "bugs" have been ironed out of the house structure. Also optional features which might cost the buyer of a new home many thousands of dollars to add on to his price, might already be found in an older home.

Aside from their basic house most prospective home buyers consider several optional features which can radically change the price of their house by as much as $10,000. Items such as fireplaces, rear entry garages, walk out basements, patios, dishwashers, garbage disposals, and intercom systems are really not what might be termed as essentials but are conveniences which many prospective buyers feel make their home more aesthetically pleasing and livable.
When a prospective home buyer is examining homes in a subdivision, many aspects of the development may be taken for granted. The base price of a given house includes many items which are not necessarily related to an individual home. Services such as sewers, electric lines (often underground), gas connections, and streets all are part of the price of a house. When buying a subdivision home, the buyer is actually "buying into" the subdivision. The cost of utility services as well as common grounds and recreational facilities are distributed by the developer over all of the units in the subdivision. When advertisements proclaim the landscaping, open space, and amenities which a developer offers, it must be remembered that these items are not offered gratis, they are paid for by the home owner. This is why comparable homes in different developments can differ in price by $10,000 and more. The "good life" that is proclaimed available can often come with a very high price tag.

A subdivision being developed in a community offers the long range benefit of an expanded tax base, increase in community population, and a new market of customers for area businesses. A new subdivision also represents an immediate benefit to a community in the jobs created on the building site. Better than twenty building trades are represented sometime during the development of a subdivision. This list includes carpenters, electricians, plumbers, sheet metal workers, glaziers, masons, architects, painters, roofers, air-conditioning and heating installers, landscapers, terrazzo installers, floor coverers, iron workers, marble setters, and pipe fitters. For the young person interested in a trade, the housing industry offers a multitude of possibilities. Because the present building boom is forecasted to continue for years to come, an aspirant in this field would be well advised to contact the local affiliate of the trade of interest to see what background is considered desirable.
VOCABULARY
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AVERAGE INCOME - A national average of $10,000 per year for a family of five.

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PLANNED ENVIRONMENT UNIT (PEU) - A concept in subdivision design where lots zoned in a particular rating are built undersized with the accumulation of each lots deficiency being applied to ground made available to the entire subdivision often as a recreational resource. Other names which basically signify the same concept are: PUD (Planned Unit Development Procedure), RDD (Residentially Designed Development).

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Ten Commandments of the New Earth

July, 1970

"Missouri Conservationist"

STUDENT-TEACHER HANDBOOK ON SUBDIVISIONS

YOU shall live in harmony with all the earth and with every living thing.
YOU shall return to the earth all the organic treasures she freely gives you.
DO NOT put greed above duty, nor wealth above wonder.
DO NOT demand useless things or trade for unnecessary things.
EVERY man shall have his fair share of the earth and no more.

YOU shall fight to protect the earth; it is your home.
BE masters of technology and not its slaves.
YOU shall make beautiful and enduring whatever is to be made.
YOU shall keep faith with future generations and be wise guardians of their inheritance.
WHEN all this is done, come together with all your brothers and sing the joy of the earth.

These are the commandments of the New Earth, used by Environmental Teach-In Committee, Milwaukee.
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(Student) Books


*Lingenfelter, Mary Rebecca and Harry D. Kitson, Vocations for Girls, Harcourt and Brace Company, New York City, 1951.

*Splover, Sarah, Your Career If You're Not Going to College, Julian Messner, New York City, 1963.


* Student reference books may be found in the West Junior High School Library.

** St. Louis County Library
Periodicals


CONCEPT II
CONCEPT II

County To Study
Common Ground
Use In Subdivisions

By CARTER STITH
Of the Post-Dispatch Staff

At the urging of Councilman
Gerald A. Rimmel (Rep.),
Third District, the St. Louis
County Council and the County
Planning Department have
agreed to undertake a study of
the use of common ground in
subdivision developments au-
thorized by the council.

Under the county zoning ordi-
nance, developers of subdivi-
sions may apply for permission
for "planned environment
units" and "residentially de-
signed developments." If grant-
ed, the developer may reduce
the size of lots and dwelling
units in the subdivision with the
leftover land set aside as com-
mon ground.

The common ground is then
developed for park or recrea-
tional use by the residents of
the subdivision.

Rimmel pointed out to the
council that once the subdivi-
sion is inhabited, maintenance
and care of the common ground
is the responsibility of the trus-
tees. He suggested that the
council and department see
whether the common facilities
and grounds in existing subdivi-
sions have been kept up by the
trustees of the areas.

"The trustees may make an
assessment against the property
owners for the maintenance of
the common areas," Rimmel
said. "But we need to know
whether the trustees are able to
collect the assessment. If the
money isn't collected from the
residents, the trustees don't
have enough money to keep the
land up, and we find instant
blight."

Rimmel said that he was not
aware of any blighted subdivi-
sions of this type in the county
at this time, but "we have to
make sure we're not creating
something we can't control."

It may be high time for the
study. The planning depart-
ment was unable to give an estimate
of the number of planned envi-
ronment units and residencia-
dy designed developments that
have been approved since 1965,
when the county's master zon-
ing ordinance took effect. A
Post-Dispatch count shows that
in the first six months of 1973,
the commission has given a fa-
vorable recommendation to
nine such developments.
Housing Proposal For Northwest County Opposed

A proposal for the residential development of a tract of land in northwest St. Louis County ran into stiff opposition from some residents of nearby subdivisions at a recent hearing before the St. Louis County Council.

The 45-acre tract in question lies southwest of the interchange of Lindbergh Boulevard and Page Avenue. Levinson Homes, Inc. has petitioned the council for two minor zoning changes and for permission to develop 41.7 acres, zoned for 10,000 square foot single family homes, with 145 homes and a planned environment unit.

The oddly-shaped tract of land, accessible only from Schuetz Road, which borders the land on the south, resembles a short-sticked, short-bladed hockey stick. Using this analogy, the butt of the stick rests on Schuetz Road, with the shaft lying northward and the blade curving to the east.

The site is bounded on the north by a railroad line, Wagner Electric Company and undeveloped industrially zoned land. St. Richard’s Church and School on Schuetz Road border the southern portion of the eastern side of the tract, while north of the church, along the shaft and under the blade of the hockey stick, the property borders the Jewish Community Centers Association.

On the western border of the property, Graeler Park, a development of single family homes in 10,000 square foot residential zoning, lies against the hockey stick shaft near Schuetz Road.

At the tip of the hockey stick blade is an undeveloped tract zoned for multifamily residence.

Levinson Homes has submitted three petitions to the council. All were recommended for approval by the County Planning Commission. One petition asks that two acres in the northwest corner of the tract be rezoned from one acre residential to 10,000 square-foot residential, to "square off" the Levinson property.

A second petition asks that 3.7 acres, now zoned for 10,000 square foot development, be rezoned to non-urban. This land would be donated to the JCCCA, which it borders.

The third petition requests permission for a planned environment unit development in the remaining 41.7 acres, already zoned for 10,000 square foot residential single family homes.

Approximately 60 per cent of the land would be held as common ground. This would include the heavily wooded land bordering the industrial zoning and development, the flood plain land bordering a creek and ravine, and the area of the tract which borders Graeler Park.

One hundred and forty-five homes, placed on lots averaging 3600 square feet, would be placed on the remaining 40 per cent of the acreage in two "villages," separated by the portion of the common which borders Graeler Park.

The common land facilities would include a club house, swimming pool and open recreational field with a playground or sports field. The homes would sell for about $35,000.

Residents of nearby subdivisions objected that the densest development, zoned for a density of 3600 square feet, would be placed on the remaining 40 per cent of the acreage in two "villages," separated by the portion of the common which borders Graeler Park.

The common land facilities would include a club house, swimming pool and open recreational field with a playground or sports field. The homes would sell for about $35,000.

Responding to charges that the two-village development plan crowds the homes together, and that the Levinson plan calls for a lower density than the current zoning would allow.

The Levinson spokesman maintained that development of the flood plain would involve extensive, expensive grading and might well disturb the stormwater drainage of the area.

The area residents also contended that traffic from the homes would increase a bad traffic problem on Schuetz Road. However, it was noted that any development of the acreage would cause more traffic, and that the Levinson plan calls for a lower density than the current zoning would allow.

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The area residents also contended that traffic from the homes would increase a bad traffic problem on Schuetz Road. However, it was noted that any development of the acreage would cause more traffic, and that the Levinson plan calls for a lower density than the current zoning would allow.

"It is at the request of the residents of Graeler Park that we propose this area as common land," a Levinson spokesman said.

The Graeler Park Community
COUNTY COUNCIL

From page one

Association and the JCCA have endorsed the development plans. Councilman Gerald Rimmel, (Rep.) Third District, told the council that he had received two petitions from Graeler Park residents. The petition in favor of the Levinson plan was signed by 94 persons, the petition against was signed by 33.

Opponents of the development charged that it would "Scare the land and build a future slum." They alleged that the homes, a few of which would be built with slight overlaps of side walls, more closely resembled multifamily units than single family homes.

"Multiple, multiple, multiple... that word keeps coming up," the Levinson spokesman replied. "I repeat, these are single family homes...by the definition of the statutes, by the definition of the ordinances, by the definition of the ordinances, by the definition of the Planning Commission."

The council took the Levinson petitions under advisement after cautioning everyone that no decision would be reached for several weeks.
Almost everyone, at sometime in his life, is faced with the problems involved in the buying and selling of real estate, usually a home. For most people, this is the largest business deal ever undertaken and ordinarily follows long planning and saving. A mistake can be extremely costly and in some instances can undo a lifetime of effort. Buying a home involves many complex problems.

A complete understanding of all of the technical, legal and tax problems involved requires years of legal training. The following outline is intended to give the prospective purchaser a general idea of the problems involved in the purchase of a home.

THE CONTRACT TO BUY

When you have found the home you wish to buy, the real estate agent or owner will ask you to make an offer for it. This is done by signing what is often inaccurately called an "earnest money contract" or "earnest money receipt." Both the "earnest money contract" or "earnest money receipt" are actually legal contracts of sale. At the time you sign the offer to buy, a cash deposit known as "earnest money" is normally required; often it is as much as 5% of the purchase price. This money will be held by the realtor, the attorney or an escrow agent for the parties. Once this deposit is made and your offer is accepted by the seller, you are bound by the provisions of the sale contract. It is usually provided that if you are unable or refuse to purchase the property, your cash deposit is forfeited. However unless otherwise provided in the contract, the seller may require you to buy, or he may recover damages from you for breach of contract in addition to the forfeit of your cash deposit.

All of your rights are determined by your offer to buy, which when accepted becomes a binding contract to purchase. After all parties have signed this contract it is too late to change any of its terms except by mutual agreement. This sale contract is therefore of the greatest importance to you and must include all provisions designed for your protection.

The real estate agent serves a very useful function in the purchase and sale of real estate. Without his services as intermediary the arranging of the deal would prove burdensome to both parties. The attorney, too, has an important function in any real estate transaction: to see that the contract accurately represents the intentions of both parties and that the interests of his client are protected from the time of drawing the contract until the final closing and delivery of the deed. He should be consulted at the outset.

Before signing the offer to purchase, remember the following:
1. Once you have signed the "papers" and they have been signed by the seller, an irretrievable step will ordinarily have been taken. What may be done thereafter by your legal adviser to safeguard your interests will be greatly limited.
2. You are not unreasonable in asking that you be given time to determine the terms of the offer you desire to make.

TERMS OF THE CONTRACT

The contract of sale should provide for the delivery of the deed to the purchaser and the kind of deed, and the time of closing the transaction. This is necessary so that the purchaser and seller may remain obligated to complete the transaction during the time necessary to have the abstract continued and examined by an attorney or a report or binder issued for an Owners Title Insurance Policy, financing, and any other thing required by the contract.

Care should be taken to see that all the details are contained in the contract. Anything left out, even though agreed upon in discussion is unenforceable.

The contract of sale should crystallize all terms of the sale and answer these and other questions. What property both real and personal is to be conveyed? When is the purchaser to have possession? What kind of deed and what type of title evidence is the seller to furnish? If a loan is required, is the sale contingent on obtaining financing? How will taxes, rents, fire be paid? Have all of the income, gift or estate tax problems been considered?

DESCRIPTION OF PROPERTY

A precise description of the property to be sold is very important. Disputes often arise after the sale because of inaccurate or inadequate description of the property sold. Instances occasionally occur where after a sale, the purchaser builds a house, or moves into a house, to discover the corners or lot lines are not where he was shown them to be. This may cause the builder to build the house so that it encroaches on a neighbor's property, or on the street, or may violate building restrictions. It is very important that a survey be made by competent surveyors to locate the exact tract being conveyed.

Before signing any kind of a paper, you should be very sure that your property has access to utilities, is not burdened by the encroachment of some joint driveway use, location of utility easements, etc., nor occupied by someone who is not bound by the contract with the seller. You must take notice of what you can see, have learned from any source of information, or can find out, even though it might not be a matter of public record. This would apply to underground pipes, sewers, etc., as well as something on the surface. A buyer should NEVER sign an agreement for a conveyance "subject to easements and restrictions of record" until he knows what those may be and his lawyer has advised him of their significance.

PROOF OF SELLER'S TITLE

After the contract has been signed, the Abstract, which is a condensation or resume of the information found in the records of the Court House, should be continued to date or an Owners Title Insurance policy should be ordered. When the Abstract is continued or the title report or binder is prepared, it should be submitted to the purchaser's attorney.
for his examination. He can then be sure the terms of the contract will be complied with. If defects are revealed which must be corrected, these should be made under the direction of the purchaser's attorney.

OTHER PROBLEMS

An examination of an abstract will not reveal all problems, for there are hidden defects. Some of these are the marital status of the parties, undisclosed heirs, mental incompetence, forgery and fraud, or conveyance of title by minors. You can be protected against these by an Owners Title Insurance policy, which will protect you against loss arising from defect in the title as insured.

Other things which you must be watchful for are mechanic's liens and deed restrictions or zoning ordinances. An examination of title will show mechanic's liens for work done on the property within the preceding six months. If the house you are purchasing is new or if improvements have been made within six months, you should determine whether all contractors, subcontractors, laborers and suppliers have been paid. If these have not been paid, you should insist that the seller pay all such obligations and procure lien waivers before the sale is closed.

An examination of title does not inform the buyer of the terms of deed restrictions or zoning ordinances. It is important that these be determined by an examination of the deeds and the applicable city or county zoning ordinances by an attorney.

A policy of title insurance is intended to insure against loss if the ownership of the property is not as reflected by the policy. It is customary for the policy to state those matters against which the policy does not insure. The purchaser may want to consult his attorney as to whether the excepted matters are of sufficient importance so that the seller's title should be rejected.

In Missouri most contracts of sale call for a "merchantable or marketable" title to be conveyed. Also there are two types of Owners Title Insurance Policies issued, one insures that the title is merchantable or marketable, the other only indemnifies the owner against actual loss to him up to the amount of the policy, and does not insure him that the title is merchantable or marketable. You should consult with your attorney as to the type of policy you should require in your contract.

If the Abstract is used, the attorney will advise you of everything that the abstract shows.

CLOSING OF THE SALE

A statement of the sale may be prepared at the closing. It will show how the proceeds of the sale were disbursed. This statement should be examined to be sure it is in accordance with the contract.

Also at the time of closing all fire and extended coverage insurance policies should be examined if the seller is assigning his policies to the new owner, or new policies should be purchased.
HOW YOU SHOULD TAKE TITLE

The customary real estate contract provides how the deed is to be made. Whether you should take title in your name or in your name and your wife's jointly, involves many problems of which the following are examples. If the property is purchased in your name and in your wife's name and you are later divorced, each may be entitled to one-half interest in the property, without regard as to who may have paid the purchase price. If title is in your name alone and you die, probate proceedings must be had on your estate. In the event title is in your name and the name of your wife and probate proceedings would not be necessary insofar as your home is concerned. However, the first spouse to die cannot will any of this property to his heirs. Full title to the property goes to the surviving joint owner and a will naming other heirs to this property will have no effect. Joint ownership also often creates some rather complicated tax problems for the buyer.

TAX CONSIDERATIONS

Every sale and purchase of a home involves other tax problems for both the seller and purchaser. Proper handling of the transaction often results in substantial savings for both parties. Tax problems should be considered before you purchase a home and not afterward.

The above are but examples of the various problems generally involved in the buying and selling of any real estate. They are problems in which and for which lawyers are trained and as to which they can give proper advice. Your lawyer is a vital partner in the purchase of your home.

ADVICE ON BUYING A HOME

New York (UPI) - Two out of every three buyers select a used house - and the one out of three who buys a new house is likely to purchase one already built.

It is a choice each home buyer must make for himself, but whatever the choice, the Department of Housing and Urban Development has some advice in its new booklet, Wise Home Buying.

Whether one decides on a new or an older home, "Once you've found a house you like," HUD advises, "evaluate it carefully. You are buying the property 'as is' and you must literally live in as well as with your mistakes."

If it is an older home, HUD recommends a thorough inspection to disclose hidden defects and obvious remodeling needs--and suggests if one has any doubts at all, a $50 to $100 fee for professional inspection will be money well spent. Wiring, heating, plumbing--particularly plumbing that includes a septic tank--are areas where expert advice is particularly helpful.

However HUD warns, if an expert is called, first check his reputation and beware of unscrupulous operators who may justify their fee by exaggerating flaws that they may want to repair at inflated costs.
If it appears that repairs and improvements are needed, have a clear understanding as part of any purchase agreement as to what the seller will pay for and what you will have to be responsible for.

HUD suggests 10 areas that deserve special attention in older houses:

Termite infestation and wood rot. This calls for expert knowledge and is of extreme importance, especially in areas that have a history of infestation.

Sagging structure.

Inadequate wiring. Be sure wiring is in good condition, with adequate amperage and enough electric outlets.

Heating plant. Check the general condition of the system and get an estimate of how old it is and how long it can be expected to function.

Inadequate insulation.

Faulty plumbing. Try to check with the plumber who last serviced the house. Check for water pressure. If possible, choose a house connected to public sewer system.

Hot water heater. Check condition and capacity of system.

Roof and gutters.

Wet basements. A basement that's dry in summer can be a different story in spring. Check for signs of water around foundation walls.

Examine condition of outside paint or siding and the paint and paper inside. Be sure windows and doors operate and are in repair. Inspect floor and wall tile and fixtures. Determine if the house plan is, or can be made suitable for your way of living. Get all available instructions and warranties for equipment, names of service people.

With a new home, HUD notes, reliability of the builder is an important consideration.

A reputable builder is in business for life. Arrange to talk with people who are living in houses constructed by the builder you are considering.

And consider these points:

1. Be sure the contract is complete. There should be written agreement on all details of the transaction. Leave noting to chance, or oral agreement.

2. If new street paving, water, sewer lines are involved, know whether the buyer or the builder will pay. Check on charges for water and trash collection.
(3) Obtain a firm date for completion in the contract. Do not be afraid to check construction progress regularly.

(4) The day before one takes title, make a thorough inspection trip.

And remember, there is no such thing as the perfect house, new or old.
CONCEPT VI
If you want to construct an office building, develop a subdivision or build a service station in St. Louis County, the chances are about two to one that you'll deal with John R. Baggs's department.

Baggs is head of the County Department of Planning, the agency that studies and evaluates every request for a zoning change in the unincorporated area of the county. Despite the existence of 95 incorporated municipalities, about two thirds of the county land is unincorporated.

The 10-man current planning section of the department is in charge of preparing rezoning recommendations. "They deal with the daily planning, zoning and subdivision matters," Baggs said. "They look at the pattern of development in the area and its relation to land use and the needs of the area."

In 1965 the department received about 150 requests for zoning changes and developments. In 1968 the number soared to 250. This year about 180 are expected.

"1968 was a boom year for financing" he said. "Apparently many developers were winding up projects, and submitted plans for new ones. We don't expect that kind of rush again, but rather a steady flow of applications."

When the current planning section receives a request from an apartment developer for a zoning change, for instance to multifamily residential from single-family residential, the planners study the zoning of the surrounding area to see whether the change would be compatible.

The County Department of Highway and Traffic reports on roads in the area, recommending improvements that might be necessitated by traffic from the proposed apartments. The Department of Public Works is consulted about sewage, stormwater and drainage facilities. Sometimes a school district is consulted with respect to the number of school children who would be brought into the area.

The planners work with the County Planning Commission, a nine-member board appointed by Supervisor Lawrence K. Roos. The commission, which consists of three residents from incorporated areas and six from the unincorporated area, holds a public hearing on the zoning request.

A good many zoning changes generate some opposition. After both proponents and opponents of the change have spoken, the Planning Commission sends a recommendation to the St. Louis County Council.
For most zoning changes, that recommendation is the whole story. A Post-Dispatch survey showed that in 1971, every commission recommendation for denial of a zoning change was upheld by the council. Of 52 recommendations for approval, the council concurred in all but three.

The recommendations for denial are often based on one or more of the following considerations: "spot zoning" that is, for instance, a proposed commercial development in the midst of an area zoned for single family homes; anticipated traffic overload of nearby streets; limited access to the proposed development; the existence of similar facilities in the area; poor traffic patterns within the development or lack of adequate parking.

While the current planning section deals with zoning and land use in the unincorporated area, the four-man community services unit works with the municipalities.

"About two thirds of the county residents live incorporated rated areas," Baggs said. "These areas are facing the same problems as the city, though the problems aren't usually as acute or as rapidly developing."

Community services is available to study the present and potential use of a municipality's land or the future needs of the school system, to aid the municipality in working out a renewal plan or to give assistance in drawing up zoning ordinances.

About one fourth of the municipalities have some kind of master zoning plan. Bagg's department has helped prepare about a dozen of them.

In the past, most of the communities that have called on the community services section have been among the least affluent in the county: Kinloch, Wellston, Valley Park, Eureka and Times Beach. Federal grants have helped the department and communities in their planning efforts.

More recently, the county has been working on zoning ordinances for Margona and Bel Nor and a park study for Bel Ridge. Negotiations for work are under way with Woodson Terrace, Breckenridge Hills, St. John and Jennings.

"Very few municipalities can afford the services of a professional planner," Baggs noted. "Many of them have a planning commissioner or a planning board, but sometimes they need advice and expertise. That's where we come in."

Current planning, however, is not the whole story at the department of planning. Nine or 10 professionals work in the advanced planning section.

They're concerned with long-range planning beyond 10 years," Baggs said. From census figures and growth rates, they project the ultimate population of St. Louis County, and its distribution. They study present and future land development and long-range water and sewage needs, worry
about balancing open space with dense developments, and try to determine other future needs such as schools and highways.

A nine-part master zoning plan for the county is expected to chatter out of the county computer later this year or early in 1973. The last master plan, completed in 1962, is "way out of date"; Baggs hopes this one will last longer.

"Most long-range plans are based on population growth within a period of time, usually 20 years," he said. "We're basing ours not on time but on ultimate population.

"The 1970 county population was about 958,000. Most projections say that the county will have another 400,000 to 500,000 people within the next couple of decades or so. But we're not depending on that rate of development for the plan. Too many variables--technological changes, birth control, abortion, war--can affect population size."

Baggs is sure, however, that the county will grow, and it is that growth that the advanced planners are thinking about.

One important factor in advanced planning is land suitability. Of the approximately 215,000 acres in the unincorporated county, 60,000 acres are unsuitable for dense development because they are subject to flooding, or because of sink holes or impossibly rugged terrain.

Taking that into account, the section is trying to pinpoint areas that will be suitable for residential, commercial, industrial and recreational development--and to work these uses into a desirable settlement pattern.

Future transportation needs are another factor that must be anticipated.

"The more spread out a community is, without clusters or concentrations, the harder it is to justify good transportation to all areas," Baggs said. "So the good planning approach is to concentrate on developing good transportation in key corridors, which can carry more people with a lower cost."

Anticipating the needs of the future and trying to plan sensibly in the patchwork of St. Louis County's developed area is no easy task, but Baggs believes it is crucial.

"The county's growth is going to continue, he said. "But it's always easier to solve problems before they come up. Right now is the time when we have to plan a desirable pattern of dense development and open space, of residential, commercial, industrial and recreational.

"We have to develop and replace, preserve and conserve in a healthy balance."
ARTICLE VII

R-4 Planned Multiple Dwelling District Regulations

Section 1. The regulations set forth in this Article are the regulations in the R-4 Planned Multiple Dwellings and are established to provide an opportunity for modern and imaginative architectural design, site arrangement, and city planning for certain areas within the City of Ballwin suitable for multi-family development, other provisions of this Zoning Ordinance to the contrary not with standing. These areas shall be established by amendment to this ordinance by the Board of Aldermen after a report and recommendation is received from the Zoning Commission.

Section 2. Application for Planned Multiple Dwelling District
The owner or owners of any tract of land comprising an area of not less than ten (10) acres may petition the Board of Alderman for the establishment of the Planned Multiple Dwelling District. The application shall include the following:
   (1) Legal and general description of the area to be encompassed in said district.
   (2) Evidence of unified ownership or control of the area applied for.
   (3) Statement of petitioners experience and background in real estate development and residential of commercial construction, and
   (4) Preliminary site plan indicating the number and types of buildings, drainage, number of living units contemplated, topography, offstreet parking, utility easements and entrance and exit driveways.

Section 3. Approval of Final Development Plans
1. The final development plans contemplated by this article may be either the final development plans for the entire project or may consist of the final development plan of any particular phase, portion or section of the project.

2. Upon establishment of the Planned Multiple Dwelling District by the Board of Aldermen, the petition shall be refered back to the Zoning Commission by the applicant within one hundred eighty (180) days after the establishment of the Planned Multiple Dwelling District by the Board of Aldermen. The Zoning Commission shall recommend the approval or disapproval of the final development plan to the Board of Aldermen and shall refer such plan back to the Board of Aldermen for approval or disapproval.

3. Upon approval by the Board of Aldermen of the final development plan, three (3) copies thereof shall be filed with the City Clerk and a copy filed for record with the St. Louis County Recorder of Deeds.
4. No building permit shall be issued by the Building Commissioner for any structure in the project or any phase thereof that does not conform to the approved final development plan. During the course of construction, no changes shall be made in the final development plan unless approved by the Board of Aldermen.

5. If substantial work or construction is not started within one (1) year of the date of the approval, further building permits for the project shall be issued and the Board of Aldermen may move to rezone the property or any portion thereof to the zoning district classification that prevailed prior to the approval of the Planned Multiple Dwelling District.

6. The reissuance of building permits may be authorized and the time limitations specified in this section may be made by the Board of Aldermen for reason.

Section 4. Use Regulations: A building or premises shall be used only for the following purposes:
(1) Single family dwelling.
(2) Multiple family dwellings, row houses, and other group houses arrangements of attached or detached buildings.
(3) Golf courses, except miniature course and driving tees.
(4) Public and private not-for-profit libraries, parks, parkways, playgrounds, and swimming pools.
(5) The following commercial uses when located within a multiple family structure, provide these occupy not more than five percent (5%) of the total floor area of the structure, or if provided in a separate structure or structures of a multi-structure development, the floor area occupied by such commercial uses shall not exceed five percent (5%) of the total floor area of the multiple family structures within the development; and provided further that no displays are visible from the outside of the structure:
   (a) food or drug store
   (b) barber or beauty shop
   (c) self-service laundry facilities
   (d) restaurant
   (e) cigar or newspaper stand

Section 5. Height Regulations
No building shall exceed forty-five (45) feet in height nor contain more than four (4) stories; except, however, when the tract to be developed, as set out in the preliminary site plan abuts land which is not a right of way for an existing public street, no building may be erected along the public street, no building may be erected along the ten (10) foot perimeter, described in the Area Regulations, which exceeds twelve (12) feet high. A building may be erected one (1) additional foot in height over twelve feet for each foot by which the building is set back from the ten (10) foot perimeter, subject, however, to the over-all forty-five (45) foot height limitation.
Section 6. Area Regulations. 1. No building shall be erected nearer than ten (10) feet to the perimeter of the entire tract, as set out in the preliminary site plan; except, however, that no building shall be erected nearer than sixty (60) feet to the right of way boundary of any other public street.

2. For the purpose of interpreting and enforcing the yard requirements of this article, the entire area included within the R-4 Planned Multiple Dwelling District shall be considered as a single lot; more than one building or structure may be erected thereon, and the only front, rear and side yards, that need to be observed are those provided for in subsection 1 or Section 6.

Section 7. Intensity of Use

The tract of land approved by the board of Aldermen as Planned Multiple Dwelling District shall contain not less than two thousand (2,000) square feet of area for each dwelling unit.

Section 8. Parking Regulations

Off-street parking shall be provided at the rate of one and one half (1 1/2) parking units for each dwelling.

Section 9. Recreational Areas

Not less than fifteen (15) percent of the area of a Planned Multiple Dwelling District shall contain not less than two thousand with fifteen percent of the figure. It shall be developed by the applicant for recreational activities. Such recreational activities shall be available to and accessible to all residents of the project and shall consist either of ballfields, picnic areas, playgrounds, swimming pools or other similar types of facilities. The maintenance of the swimming pools or other recreational areas shall be the responsibility of the applicant.

* We feel that this section of the Zoning Ordinance is best in it's written form; therefore, this section has been quoted from the Ballwin Zoning Ordinance.

R-1 Single-Family Dwelling District Regulations

Use Regulations:

Business and Industry are specifically prohibited and a building or premise shall be used only the following purposes:

1) Single-family dwellings
2) Parks, playgrounds, and community buildings owned or operated by public agencies
3) Public libraries
4) Public schools, elementary and high, and educational institutions having a curriculum similar to that ordinarily given in public agencies.
5) Golf courses, except miniature courses and driving tees operated for commercial purposes
6) Churches
7) Accessory buildings, including private garages and uses customarily incident to the about uses, not involving the conduct of a business

8) Temporary buildings for uses incidental to construction work, which buildings shall be removed upon the completion or abandonment of the construction work

9) Church or public building bulletin boards not exceeding, and temporary signs not exceeding six square feet in area appertaining to the lease, hire or sale of a building or premises

**Height Regulations**

No building shall exceed thirty-five feet in height nor contain more than three stories, except as otherwise stated. Sometimes it may vary slightly.

**Area Regulations**

1) **Front Yard:**

The front yard of a single-family dwelling should have a depth of not less than forty feet. The exception to this is land lying along and adjacent to Manchester Road. The depth would have to be no less than sixty feet.

2) **Side Yard:**

There must be a side yard having a width of not less than ten feet on each side of every single-family dwelling. Driveways may be built and maintained within the side yard. Of course, the placements of driveways can be elsewhere. This is a matter of one's own preference.

3) **Rear Yard:**

The rear yard of a single-family dwelling must have a depth of not less than fifty feet.

4) **Intensity of Use of Lot:**

The intensity of use of lot must be an area of not less than twenty thousand square feet.

5) **Width of Lot:**

No buildings shall be erected on any lot having a width of less than one hundred feet at the street line. The exception to this rule is in cases of lots on curved streets and roads. In such cases, the lots must be one hundred feet in width at the building line.

6) **Dwelling Area:**

The dwelling area of a single story which is erected must be at
least one thousand, one hundred and fifty square feet on the ground story. It is essential that single-family dwellings must have a permanent roof, and a permanent enclosed and designed for year-round use by occupants. Without the above necessities, you would not be able to classify it as a single-family dwelling. The things which are not included in the minimum area are: porches, garages, carports, breezeways, and other adjacent structures.

R-2 Single-Family Dwelling

District Regulations

Use Regulations: Same as R-1
Height Regulations: Same as R-1
Area Regulations: Same as R-1
Width of Lot: 100 feet at street line
Dwelling Area: Same as R-1

R-3 Single-Family Dwelling

District Regulations

Use Regulations: Same as R-1
Height Regulations: Same as R-1
Area Regulations: Same as R-1
Width of Lot: 100 feet at street line
Dwelling Area: Same as R-1

COMMERCIAL DISTRICT REGULATIONS

Area C-1 on map

Use Regulations

1. The premises shall be used only for:
   1. Single family dwelling.
   2. Park, playground and community buildings owned or operated by any department of the City, County, State or Federal Government.
   3. Public library.
   4. Public schools, elementary and high, and educational institutions having a curriculum the same as ordinarily given in public schools.
   5. Golf course, except miniature courses and driving tees operated for commercial purposes.
   6. Church
   7. Ball park or athletic field including grandstand and stadium.
8. Bakery whose products are sold at retail on the premises.
10. Barber shop.
12. Business or commercial school.
13. Dancing or music academy.
15. Dressmaking or tailoring shop (employing not more than 5 persons.)
16. Dyeing, dry cleaning or laundry shop for the collection and distribution of clothes but not treatment thereof.
17. Florist shop.
18. Hospitals and clinics for animals, but not open kennels.
19. Lodge hall or club.
20. Messenger or telegraph service stations, telephone exchange or outdoor telephone booth.
22. Office, professional and business.
23. Painting and decorating shop.
25. Photographer, art gallery or artist or other similar studio.
26. Parking lots, multiple-level parking facility, or storage garage.
27. Plumbing shop.
29. Restaurant and cocktail lounge, when in conjunction with a restaurant business.
30. Retail rental self-service laundry shop or laundromat.
31. Retirement center or home where primary purpose is not geriatric care.
32. Sales of new motor-driven vehicles, including the outdoor display thereof, when in conjunction with the sale of new motor-driven vehicles by a factory franchised dealer.
33. Sales of used motor-driven vehicles, including the outdoor display thereof, when in conjunction with the sale of new motor-driven vehicles by a factory franchised dealer.
34. Sales or show room.
35. Shoe repair shop.
36. Show or display room for any products or merchandise not sold upon the premises.
37. Store or shop for the operation of a retail business.
38. Small warehousing and wholesaling establishment, but only when they are in the same building as a store where the same products are sold at retail on the premises and where there is adequate off-street loading and unloading space.
39. Tailor shop.
40. Undertaking establishment.
41. Upholstering shop.
42. Watch and jewelry repair shop.
43. Usual accessory uses and building incident to the above uses.
44. Service, cleaning or repair shops for jewelry, appliances, radios, television sets, other household items, shoes and wearing apparel.
2. Any building used primarily for any of the above enumerated purposes may have not more than forty percent of the floor area devoted to processing purposes incidental to such primary use; provided that not more than five employees shall be engaged at any time on the premises in any such processing or incidental use.

Height Regulations
No building shall exceed forty-five feet in height, except as otherwise provided.

Area Regulations
1. Front Yard: The front yard cannot have a depth of less than forty feet, except for land lying along or adjacent to Manchester Road which shall have a depth of not less than sixty feet.
2. Side Yard: A side yard cannot be less than 10 feet.
3. Rear Yard: The rear yard cannot be less than 25 feet deep, unless the lot is less than 125 feet in depth in which case it cannot exceed 20 percent of the depth of the lot.

SOURCE OF INFORMATION: "The Zoning Ordinance City of Ballwin, Missouri. Ordinance No. 557 - Article IX

ZONING REGULATIONS

Approval and Acceptance

All plats, plans and other materials asking for zoning must be filed with the Building Commissioner and Inspector, who then will present them to the Board of Aldermen and City Engineer for their consideration on the materials submitted.

Grading Improvements

Tree removal, grading or/and improvements shall not be started until the preliminary plat has been accepted. Approval of the preliminary plat is the authorization of the preparation of the final plat.

Final Plat

In submitting the final plat all of the following must be shown on the tracing cloth:

(1) The boundaries, the names of all proposed streets and their size, any public property and common grounds.
(2) All lines of all adjoining streets with all size measurements.
(3) All lot lines, building lines and easements and their dimensions.
(4) All dimensions for locating boundaries. All measurements should be in feet and decimals.
(5) All measurements for corner and streets.
(6) All monuments with their descriptions and elevations as to sea level.
(7) All okay's of the owner's and mortgagers accepting the plat.
(8) Certificate of title and divisions.

Improvements

Before the final plat of any subdivision is approved by the Board of Aldermen the owner must make and install all of the following improvements. A minimum amount of improvements must be made before the plat will be approved. The subdivider may have a security bond or surety bond approved by the Attorney of Manchester, which will insure to Manchester that the improvements will be made within two (2) years after the approval of the plat.

Private Parks and Open Spaces

Private parks and open space in addition to those proposed in the City Plan may be provided in the plat by the subdivider, subject to the approval of the Commission.

Streets

The location with, and typical cross section of all streets shall substantially conform to the City Plan and shall be designed to topographical and natural conditions, public convenience and necessity.

Streets shall have the following right-of-way, except as increased by the City Plan or varied in unusual circumstances by the Commission:

- Major streets: 80 feet minimum
- Collector streets: 60 feet minimum
- Residential streets: 50 feet minimum
- Minor streets: 40 feet minimum
- Frontage road: 50 feet minimum

Easements

Easements of not less than five feet in width shall be provided of each side of all rear lots and side lines where necessary.

Blocks

The length, width and shape of blocks shall be determined with regard to adequate building sites suitable to the needs and promises of the land shape.
Lots

All lots shall be designed to provide desirable building sites for the building that is to be placed on it. Consideration must be made as to the land topography, natural features, streets and land use.

Building Lines

Building lines shall be shown on all lots intended for residential use of any character and on non-residential use of any character and of all adjoining areas.

A minimum front building line shall be established on the basis of the type of street that it faces.

<table>
<thead>
<tr>
<th>Type of Street</th>
<th>Building line</th>
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<tbody>
<tr>
<td>Minor</td>
<td>20 feet</td>
</tr>
<tr>
<td>Residential</td>
<td>30 feet</td>
</tr>
<tr>
<td>Collector</td>
<td>40 feet</td>
</tr>
<tr>
<td>Major</td>
<td>50 feet</td>
</tr>
</tbody>
</table>

Maintenance of Common Facilities

Where the subdivision contains paving, sewers, sewage treatment plants, water supply systems, park area, a swimming pool, street trees or other physical facilities necessary to have maintenance employed. All grounds following these restrictions must have an agreement.

Street lights shall be installed along all Minor streets, Residential, and Collector streets.

<table>
<thead>
<tr>
<th>Type of Street</th>
<th>Minimum Pavement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minor street or Residential street having common open space on one side or with lots having at least 100 feet of width at the building line.</td>
<td>20'</td>
</tr>
<tr>
<td>Other Minor streets or Residential streets</td>
<td>26'</td>
</tr>
<tr>
<td>Major street or Collector street where no lots have direct access.</td>
<td>24' and 6' all-weather emergency shoulder on both sides.</td>
</tr>
<tr>
<td>Type of Street</td>
<td>Minimum Pavement</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Major street or collector street with lots having direct access.</td>
<td>36'</td>
</tr>
<tr>
<td>All Major streets and Collector streets for 200 feet from any intersection with a Major or Collector street.</td>
<td>36' - 40'</td>
</tr>
<tr>
<td>All Major streets and Collector streets are usually specified as:</td>
<td>20'</td>
</tr>
</tbody>
</table>

**ENFORCEMENT**

No plat of any subdivision shall be entitled to record in the County Recorder's office or have any validity until it shall have been approved in the manner prescribed.

Any person or persons firm association or corporation violates any of these regulations will be prosecuted as by law for the violation of ordinances of the City of Manchester, and upon conviction shall be punished by a fine of not more than five hundred dollars ($500).

Both Manchester and Ballwin have similar laws only stating them in different terms. Some of the regulations must be followed throughout the whole county.
<table>
<thead>
<tr>
<th>NO.</th>
<th>REQUEST</th>
<th>PETITIONER</th>
<th>APPROXIMATE LOCATION</th>
<th>NO. OF ACRES</th>
<th>COUNCIL DISTRICT</th>
<th>SCHOOL DISTRICT</th>
</tr>
</thead>
<tbody>
<tr>
<td>139-72</td>
<td>APPROVAL OF PETITION</td>
<td>St. Louis County Planning Commission</td>
<td>Pattonville R-3, C-5 to C-8</td>
<td>3</td>
<td>Pattonville R-3</td>
<td>Pattonville R-3</td>
</tr>
<tr>
<td>133-72</td>
<td>APPROVAL OF PETITION</td>
<td>Gerald Moss</td>
<td>E/Of Mikel Dr., N/Of Dorsett Rd.</td>
<td>1.8</td>
<td>W/Of Riverview Dr., S/Of Sepulveda Rd.</td>
<td>W/Of Riverview Dr., S/Of Sepulveda Rd.</td>
</tr>
<tr>
<td>143-72</td>
<td>APPROVAL OF PETITION</td>
<td>Banta &amp; Stude Construction Company, Inc.</td>
<td>Pattonville R-3, C-5 to C-8</td>
<td>3</td>
<td>Pattonville R-3, C-5 to C-8</td>
<td>Pattonville R-3, C-5 to C-8</td>
</tr>
<tr>
<td>141-72</td>
<td>APPROVAL OF PETITION</td>
<td>Texaco, Inc.</td>
<td>E/Of Mikel Dr., N/S Dorsett Rd.</td>
<td>4</td>
<td>W/Of Riverview Dr., S/Of Sepulveda Rd.</td>
<td>W/Of Riverview Dr., S/Of Sepulveda Rd.</td>
</tr>
<tr>
<td>140-72</td>
<td>APPROVAL OF PETITION</td>
<td>St. Louis County Planning Commission</td>
<td>Pattonville R-3, C-5 to C-8</td>
<td>3</td>
<td>Pattonville R-3, C-5 to C-8</td>
<td>Pattonville R-3, C-5 to C-8</td>
</tr>
</tbody>
</table>

For further information on the above items, see the attached notices. If you desire to review these applications, they will be on file in the offices of the Department of Planning, Administration Building, St. Louis County Government Center, 140 Central Avenue, Clayton, Missouri 63105.
The St. Louis County Planning Commission will hold a Public Hearing at 7:00 P.M. on Monday, October 9, 1972, in the New County Council Chambers, Administration Building, County Government Center, 41 So. Central Avenue, Clayton, Missouri 63105. The Planning Commission may recommend and the County Council may enact by ordinance a zoning district other than that requested in the petition, provided that the recommendation or ordinance is for a district classification of the same type as that requested by the petitioner. The following request will be considered at that time:

139-72 ST. LOUIS COUNTY PLANNING COMMISSION, 7900 Forsyth Boulevard, Clayton, Missouri 63105 - A request for a change of zoning from an R-8 500 sq. ft. Residence District to R-3 10,000 sq. ft. Residence District for a 15.0 acre tract of land located on the west side of Lindbergh and 1,950 feet, more or less, north of Schuetz Road. Purpose: To Return Undeveloped Property to R-3 Classification.
This was a "historical" first. A request for "de-zoning" or a request for a lower density zoning.

The 15 acre tract was part of a larger parcel proposed to be developed as a Planned Environment Unit (PEU). The original tract comprised 65 acres. 44 acres were zoned R-3 and to be developed with 145 single family homes; 15 acres (before the Commission under this petition) were zoned R-8 and to be developed with three 14-story multiple dwelling units, and 6 acres were zoned C-8 (Planned Commercial) and to be developed with a 300-unit hotel. The St. Louis County Council had directed the Planning Commission to hold a public hearing and consider a request to de-zone the 15 acres to a lower density because the original developer had not presented his final plan for approval within 160 days from approval and granting of the requested zoning nor had he begun "substantial construction" within a year as required by various ordinances relating to zoning. Mr. Wiswell of the Planning Department presented the above facts to the Commission.

In Opposition to the above request appeared Al Michenfelder, Attorney for Pan American Realty Company, the developer originally requesting the present zoning on the 65-acre tract. He said that the developer had been granted extensions for the presentation of a final plan until December 31 of this year. He said that the developer had not been able to obtain financing for the hotel or high-rise due to the fact that financing institutions had been hesitant to finance high-rise housing and that Lammert Field publicity (whether to move or not to move) had muddied the need for another hotel in that vicinity, as well as the completion of construction of the large Ramada Inn at Page & 244.

Mr. Michenfelder presented the architect who had been hired to redesign the project, eliminating the high-rise and hotel, as well as an officer of Mercantile Mortgage Company who indicated his firm would be interested in financing the project as redesigned. Questioning by the Commission showed that there was neither any definite designs made by the architect nor any firm commitment on the part of the financial institution to back the project.

Mr. Michenfelder indicated he felt that the Planning Commission would create a dangerous precedent if it de-zoned the tract because it would discourage developers in St. Louis County if it were shown that land could be de-zoned out from under them, so-to-speak, if they did not proceed quickly enough.

Mr. Wiswell of the St. Louis County Planning Department then said that although the Planning Commission had granted extensions, they had not been approved by the County Council. The Commission only recommended the extensions which had never been approved by the County Council.

The Planning Commission took the matter under advisement.
PUBLIC NOTICE

The St. Louis County Planning Commission will hold a Public Hearing at 7:00 P.M. on Monday, October 9, 1972, in the New County Council Chambers, Administration Building, County Government Center, 41 So. Central Avenue, Clayton, Missouri 63105. The Planning Commission may recommend and the County Council may enact by ordinance a zoning district other than that requested in the petition, provided that the recommendation or ordinance is for a district classification of the same type as that requested by the petitioner. The following request will be considered at that time:

140-72 TEXACO, INC., c/o Gene Zafft, 7777 Bonhomme Avenue, Clayton, Missouri 63105 – A request for a change of zoning from NU Non-Urban District to C-8 Planned Commercial District for a 1.5 acre tract of land located on the north side of Manchester Road and on the west side of Mason Road. Proposed Use: Service Station.
Mr. Gene Zafft, Attorney for the Petitioner, appeared and outlined the requested change of zoning. He said that the property in question sat about 4' to 5' above the grade of the road and would inquire extensive grading which would eliminate a present "blind spot" for motorists approaching this point. He said the proposed Queeny Park was not far distant, and once this was open, there would be a need for a full-service station at this location. He displayed a plan showing the location of the building on the lot, the curb cuts, the buffer area, screening, etc. He displayed a photograph of a like-station proposed to be erected here. He said that Texaco would be happy to comply with all requirements for service stations set out under C-8.

In Opposition, appeared J. L. Pierce, Attorney for 250 members of Parkchester, Inc. He said, in effect, it was the wrong place for a service station, would create traffic hazards and was too close to very expensive homes whose value would be depreciated by the location of a service station at this location.

Also in opposition appeared Richard Dunlop (former member of the Planning Commission) who said that he resided at 2045 Mason Road and that this was his home turf. He said the station would not needed and would be dangerous at this spot since cars were traveling an average, at least, of 50 mph on Manchester. He further stated that the grade was so difficult that lowering it would be an engineering miracle. In conclusion, he said he felt it was one of the worst spots for a service station he has ever seen.
The St. Louis County Planning Commission will hold a Public Hearing at 7:00 P.M. on Monday, October 9, 1972, in the New County Council Chambers, Administration Building, County Government Center, 41 So. Central Avenue, Clayton, Missouri 63105. The Planning Commission may recommend and the County Council may enact by ordinance a zoning district other than that requested in the petition, provided that the recommendation or ordinance is for a district classification of the same type as that requested by the petitioner. The following request will be considered at that time:

141-72 BRIGGS SERVICE, INC., c/o J. Anthony Dill, 8507 Gravois Road, Affton, Missouri 63123 — A request for a change of zoning from C-2 12,000 sq. ft. Shopping District to C-8 Planned Commercial District for a 0.98 acre tract of land located on the north side of Gravois Road and 1,450 feet, more or less, east of Sappington Road. Proposed Use: Auto Body Repair Services.
J. Anthony Dill appears as attorney for petitioner. Briggs service has been in business of auto rebuilding and repair in Sappington area since 1949. Since the Master Zoning Ordinance went into effect, they have continued operations as a non-conforming use. (This means that they could continue as is -- so to speak -- as long as they did not seek to add on or rebuild. At that time, they would have to obtain a change of zoning compatible to their operation, in order to be granted a building permit -- or they could not make any changes at all. In time, this way everyone will be brought into conformance with the Master Zoning Ordinance -- even pre-existing uses.)

Their tract of land is part of a shopping center zoned C-2. They request a C-8 zoning in order to erect a new building, after which they will tear down the old building. It will provide storage for automobiles to be repaired under ground (after the old building is torn down) and improve the appearance of the present premises, as well as permit them to continue in business as they have been doing for the last 23 years.

No one appears in opposition.
PUBLIC NOTICE

The St. Louis County Planning Commission will hold a Public Hearing at 7:00 P.M. on Monday, October 9, 1972, in the New County Council Chambers, Administration Building, County Government Center, 41 So. Central Avenue, Clayton, Missouri 63105. The Planning Commission may recommend and the County Council may enact by ordinance a zoning district other than that requested in the petition, provided that the recommendation or ordinance is for a district classification of the same type as that requested by the petitioner. The following request will be considered at that time:

142-72 GERALD MOSS, c/o F. William Human Jr., 130 South Bemiston Avenue, Clayton, Missouri 63105 – A request for a change of zoning from R-2 15,000 sq. ft. Residence District and FPR-2 Flood Plain R-2 15,000 sq. ft. Residence District to C-8 Planned Commercial District and FPC-8 Flood Plain C-8 Planned Commercial District for a 4.6 acre tract of land located on the south side of I-270 and 2,650 feet, more or less, west of Riverview Drive. Proposed Use: Dinner Theatre.
Mr. John King appeared as attorney for Gerald Moss, Petitioner, who wants to erect a dinner theatre on land presenting zoned R-2. This necessitates a change of zoning to C-8. Mr. Moss operates a "Barn Theatre" of this type in Ellisville. This theatre would be called the "Plantation" and would have a southern motif. Space would be provided for 264 cars -- figuring 4 people per car attending the dinner-theatre.

Mr. Moss feels that this is an appropriate location for such entertainment. It is to be located at the very end of a service road, and when questioned as to why he did not purchase an available tract at the intersection, he said he had tried, but the price was exhorbitant.

Because of the fact that there is a creek running along the boundary of this tract, the Waste Water Control requires an extensive study and plan as to how he would handle over-flow.

None in opposition.
The St. Louis County Planning Commission will hold a Public Hearing at 7:00 P.M. on Monday, October 9, 1972, in the New County Council Chambers, Administration Building, County Government Center, 41 So. Central Avenue, Clayton, Missouri 63105. The Planning Commission may recommend and the County Council may enact by ordinance a zoning district other than that requested in the petition, provided that the recommendation or ordinance is for a district classification of the same type as that requested by the petitioner. The following request will be considered at that time:

143-72 BANTA & STULTZ CONSTRUCTION CO., INC., c/o Donald Banta 4440 Woodson Road, St. Louis, Missouri 63134 -- A request for a change of zoning from C-5 1 Acre Extensive Sales Commercial District to C-8 Planned Commercial District for a 1.3 acre tract of land located on the north side of Dorsett Road and 250 feet, more or less, east of Mikel Drive. Proposed Use: Warehouse Facilities.
Homer Mastorakas, Attorney, appeared for petitioner. Banta & Strude are in the business of building fences, basically for homes, only. They wish to erect a warehouse-office facility. Mr. Mastorakas listed the surrounding and near-by land uses -- a lumber company, car sales, abandoned body shop, concrete company, ready-mix plant -- and said this proposition would not be incompatible. He said the warehouse would produce no traffic. That the only people at the plant would be one man in the warehouse, one girl in the office and the two owners intermittently through the week. It would be a low-profile building of concrete block covered with stucco and accepted with red cedar. He said the operation would be 8-hours a day, 5-days a week, and that there would be no noise at nights or over the weekend.

He displayed sketches of the proposed building and pictures of the lot as it is at present.

No one appeared in opposition.
The St. Louis County Planning Commission will hold a Public Hearing at 7:00 P.M. on Monday, October 9, 1972, in the New County Council Chambers, Administration Building, County Government Center, 41 South Central Avenue, Clayton, Missouri 63105. At that time the following amendments to the St. Louis County Revised Ordinance Chapter 1003, "The Zoning Ordinance of St. Louis County, Missouri," will be considered.

1. The amending of 1003.165 Supplementary Off-Street Parking Regulations by adding paragraph (7) to read as follows:

(7) All 90-degree off-street parking spaces shall be of a minimum of ten (10) feet in width and twenty (20) feet in length. Wheel stops shall be provided where necessary to ensure that parked automobiles will not overhang sidewalks and landscaped areas.

2. It is the intention of the St. Louis County Planning Commission to initiate certain amendments of the Zoning Ordinance of St. Louis County. Specifically, such amendments would repeal the present Section 1003.020 (Definitions) and the present Section 1003.107 (NU - Non-Urban District Regulations) and enact in lieu thereof new sections dealing with the same subject matters. Section 1003.020 and 1003.107 as revised, would contain the additional provisions set forth herein.

Subsection 3 of 1003.020 Definitions, (Definition 82, Specialized Private Schools) would contain the following wording:

An institution for students at the elementary, junior or senior high level with physical and/or mental characteristics that require specialized/individual instruction.

Subsection 3 of 1003.107, Conditional Land Use Development Permits, would contain the following new provisions:

Foster Homes for Handicapped Children
Specialized Private Schools

Subsection 5 of 1003.107, Lot Dimension, Lot Area and Yard Requirements, would contain one or both of the following new provisions:

Except as otherwise provided in this section, all conditional land uses in this district shall be situated or conducted on tracts of land at least five (5) acres in area, provided, however, that the Planning Commission, when approving a Conditional Use Permit for foster homes for handicapped children, not-for-profit private clubs and recreational land uses, including community centers, may allow the establishment of said foster homes for handicapped children, not-for-profit private clubs and recreational land uses, including community centers, on tracts of land less than five (5) acres where the developments and uses contemplated are deemed consistent with good planning practice, can be operated in a manner that is not detrimental to the permitted developments and uses of the district, can be developed and operated in a manner that is visually compatible with the permitted uses in the surrounding area, or
deemed essential or desirable to preserve and promote the public health, safety and general welfare of St. Louis County, and where the related parking needs, outdoor facilities, size of buildings and potential membership of said developments and uses are deemed consistent with the intensity of land use in the neighborhood of said uses and developments. Provided, however, that the minimum tract area for said conditional developments and uses shall not be less than the minimum tract area for dwelling units permitted in this district.

Specialized private schools may be permitted in any Non-Urban District under a Conditional Use Permit providing that they be located on a tract of land containing one (1) acre for each fifteen (15) pupils, but in no case less than five (5) acres, nor more than that required by the public school system land area requirements. Further, no buildings or activity areas should be located closer than the allowable setback from the property line in each given Non-Urban District.

Subsection 6 of 1003.107, Off-Street Parking and Loading Requirements, would contain one or both of the following new provisions:

Riding stables, kennels, veterinary clinics, logging operations, sawmills, public utility facilities, extraction of raw materials from the earth, feed or grain storage facilities, blacksmiths, salesrooms for commercial gardens, nurseries and greenhouses, penal institutions, airports and landing strips, not-for-profit private clubs and recreational land uses, retreats, rifle ranges, skeet shooting clubs, fairgrounds, foster homes for handicapped children, and specialized private schools shall provide sufficient parking areas for employees’ and visitors’ automobiles as to assure that no such vehicles need be parked on any street.
3. The repealing of Section 1003.113 "R 2" Residence District Regulations, paragraph 5, subsection 4 and enacting in lieu thereof a new subsection, dealing with the same subject and having the same number, which new section shall be as follows:

(4) Schools shall be situated on tracts of land providing areas not less than as set out in the following table:

<table>
<thead>
<tr>
<th>School Site Area Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of School</strong></td>
</tr>
<tr>
<td>Nursery or Day Nursery</td>
</tr>
<tr>
<td>Kindergarten (separate)</td>
</tr>
<tr>
<td>Primary</td>
</tr>
<tr>
<td>Junior High</td>
</tr>
<tr>
<td>Senior High</td>
</tr>
<tr>
<td>Collegiate</td>
</tr>
</tbody>
</table>

4. The repealing of Section 1003.115 "R-3" Residence District Regulations, paragraph 5, subsection 2 and enacting in lieu thereof a new subsection, dealing with the same subject and having the same number, which new section shall be as follows:

(2) Schools shall be situated on tracts of land providing areas not less than as set out in the following table:

<table>
<thead>
<tr>
<th>School Site Area Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of School</strong></td>
</tr>
<tr>
<td>Nursery or Day Nursery</td>
</tr>
<tr>
<td>Kindergarten (separate)</td>
</tr>
<tr>
<td>Primary</td>
</tr>
<tr>
<td>Junior High</td>
</tr>
<tr>
<td>Senior High</td>
</tr>
<tr>
<td>Collegiate</td>
</tr>
</tbody>
</table>

5. The repealing of Section 1003.121 "R-6" Residence District Regulations paragraph 5, subsection 5, and enacting in lieu thereof a new subsection, dealing with the same subject and having the same number, which new section shall be as follows:
(5) **Schools shall be situated on tracts of land providing areas not less than as set out in the following table:**

**School Site Area Requirements**

<table>
<thead>
<tr>
<th>Type of School</th>
<th>Minimum Acreage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursery or Day Nursery</td>
<td>15,000 sq. ft.</td>
</tr>
<tr>
<td>Kindergarten (separate)</td>
<td>1 Acre</td>
</tr>
<tr>
<td>Primary</td>
<td>5 Acres</td>
</tr>
<tr>
<td>Junior High</td>
<td>10 Acres</td>
</tr>
<tr>
<td>Senior High</td>
<td>20 Acres</td>
</tr>
<tr>
<td>Collegiate</td>
<td>10 Acres</td>
</tr>
</tbody>
</table>
CONCEPTS VI-VII
SUMMARY, AIR POLLUTION ORDINANCE -- ST. LOUIS COUNTY

1. Title

"St. Louis County Air Pollution Code."

2. Scope

Code is in effect in all unincorporated parts of St. Louis County as well as all incorporated cities, towns, and villages within St. Louis County limits.

3. Air Quality Standards and Air Pollution Control Regulations

The standards and regulations promulgated by the Air Conservation Commission of the State of Missouri and effective on March 24, 1967, are a part of the Code and constitute the air quality standards and air pollution control regulations for St. Louis County.

4. Division of Air Pollution Control Established

For the purpose of enforcement of the Air Pollution Code, an independent Division of Air Pollution Control, under the Department of Public Health, is established with a Director appointed by the Health Commissioner.

5. Director of Air Pollution Control -- duties:

-- shall include, but not limited to:

1. Supervise employees and operation of the Division
2. Investigate alleged violations
3. Inspect and observe conditions causing air pollution
4. Emergency abatement of violations with approval of County Supervisor
5. Make recommendations to Appeal Board with regard to variance applications
6. Collect and disseminate information and conduct education and training programs
7. Advise and consult with other agencies, industries, and interested persons and groups
8. Recommend amendments to this Code
9. Attend meetings of the Appeal Board
10. Issue permits and collect fees
11. Revoke or suspend operating permits or authority to construct
12. Such other specific duties as may be imposed by law or prescribed by the County Council, County Supervisor, or Appeal Board

6. Appeal Board Established

County Supervisor to appoint five (5) members, one member to be appointed Chairman. Board to meet at least once a month. Members to be compensated at the rate of $100 per month, Chairman, $125 monthly.

7. Duties of Appeal Board

-- shall include, but not limited to:

a. Review appeals
b. Grant, deny, or revoke variance applications and permits
c. Initiate investigations or violations of this Code
d. File annual report with County Council reviewing Board activities with recommendations

8. Board to consider appeals

Any person aggrieved by any decision, ruling, or order of the Director, may appeal to the Board.

9. Permits required

a. For constructing, altering, or replacing any article, machine, or equipment which when used may cause the emission of air contaminants.
b. For operating any new or existing article, machine, or equipment which may emit air contaminants. Permit to be effective from date of issuance unless revoked, suspended, or otherwise terminated.

10. Permits to be visibly affixed or placed

A permit to operate shall be mounted so as to be clearly visible within 25 feet of the equipment.

11. Permit to sell or rent

A permit must be obtained from the Director to sell or rent an incinerator used exclusively in a dwelling for not more than four (4) families.

12. Transfer

An authority to construct or permit to operate is not transferable.

13. General requirements for applications for authority to construct and operating permits

1. Application by owner or lessee
2. Application for equipment other than fuel or refuse burning equipment shall be filed at the Division.
3. Application for fuel or refuse burning equipment shall be filed at the Department of Public Works.
4. A separate application is required for each unit of equipment unless identical units are installed and operated in the same building.
5. Signature of applicant shall constitute an agreement that the applicant will assume responsibility.

14. Information required for Application for Permits

1. Each application to be accompanied by copies of the plans and shall clearly show and describe in detail:

a. equipment or control apparatus
b. equipment connected or attached to equipment covered by the application
24. Permit fees: schedule

1. If more than one (1) fee is applicable to the equipment, the governing schedule shall be one which results in the highest fee.
2. If a process is to be installed or altered which has a number of units of equipment, a separate fee shall be paid for each unit of equipment.

22. Permit fees: refund

If an application for a permit is withdrawn by the applicant, the fee shall be refunded.

23. Testing by order of the Board

The Director may file with the Board for its approval an order directing the owner, lessee, or permittee of equipment, suspected to be in violation of the Code, to conduct tests to determine whether the equipment is in violation.

24. Right of Entry -- Inspection

The Director or his agents may enter at all times, with reasonable notice, any private or public property for the purpose of inspecting or investigating any condition or equipment which the Director believes to be an air contaminant source. No person shall hinder, resist, interfere with or obstruct the Director or employee in carrying out any duty for the Director or Board.

25. Variations

The Appeal Board may grant variances in this Code whenever it is found that compliance with any provision of this Code will result in an arbitrary or unreasonable taking of property or in the practical closing and elimination of any lawful business.

26. Upset conditions, breakdowns, or scheduled maintenance

Emissions exceeding any of the limits of this Code as a direct result of unavoidable upset conditions or breakdown, or shutdown for necessary scheduled maintenance, shall not be deemed in violation provided they notify the Director within twenty-four (24) hours.

27. Air pollution nuisances prohibited

No Division employee shall disclose information concerning a secret process. Any Division employee disclosing such information may be fined up to $1000 or imprisoned in the County jail for a term of one (1) year, or both fine and imprisonment.

28. Penalties for violation

1. Conviction for violating or failing to comply with this Code shall be fined not more than $1000 or by imprisonment in the County jail, not to exceed one (1) year, or both.
2. Each day of violation constitutes a separate violation.

10. Allowable particulates from fuel burning equipment for indirect heating

Amounts range from .60 lbs. per million B.T.U. per hour input for 10 million B.T.U. input or less, to .18 lbs. per million B.T.U. for 10,000 million B.T.U. or more.

11. Hand-fired equipment prohibited

Three (3) years from date of ordinance or sooner if equipment is in violation of Code.

12. Particulate matter from industrial process

1. Measured by process weight (total weight of all material introduced into an operation).
2. Emission limitations range from .551 lbs. per hour for a process weight of 6,000,000 lbs., to .05 lbs. per hour for a process weight of 6,000,000 lbs.
33. No refuse to be burned in fuel burning equipment

34. Open burning restricted
   1. Open burning of refuse prohibited
   2. Salvage operations by open burning prohibited
   3. Disposal of trade waste by open burning prohibited
   4. Open burning of plant life prohibited
   5. Open burning of tree leaves prohibited after September 30, 1968, except in areas of low population density. Burning permitted only between the hours of 10:00 a.m. and 4:00 p.m.

35. Incinerators
   1. Emission of particulates limited to .2 grains per std. cu. ft., adjusted to 12% CO2 on incinerators with a capacity of 200 lbs. or more per hour, and .3 grains for units less than 200 lbs. per hour.
   2. All incinerators to be multi-chambered; existing single-chambered units to be replaced or rebuilt. Time schedule for compliance is established.
   3. Inciners to operate only between the hours of 10:00 a.m. and 4:00 p.m.

36. Visible air contaminants limitations
   1. Existing installations except incinerators -- Ringelmann No. 2 or darker, or equivalent opacity are in violation of the code.
   2. New installations and all inciners -- Ringelmann No. 1 or equivalent opacity.

37. Air-borne particulate matter
   No person shall cause or permit unnecessary amounts of particulates from becoming air-borne by: handling, transporting, storage, construction, repair or demolishing road, building, etc.

38. Restriction of SO2 from use of fuel
   1. After three (3) years -- 2,000 million or more B.T.U. per hour, 2.3 lbs. SO2 per million B.T.U. of heat input.
   2. December 1968 and January 1969 -- 2,000 million B.T.U. or less. 2.0% sulfur coal or fuel oil

39. Information on sale of fuels
   Fuel dealers will prepare delivery tickets in triplicate for each delivery of coal or fuel oil, showing buyer and seller and ash content for coal. One copy to seller, one copy to buyer, to be kept for one (1) year, and one copy to the Director if he requests it.

40. Certain coals to be washed
   After December 1, 1968, all coal containing more than 2.0% sulfur or 12% ash shall be cleaned by washing, unless it can be shown that emissions of SO2 will not exceed 2.3 lbs. SO2 per million B.T.U.

41. Settliable acids & alkaline restrictions
   Downwind side shall not exceed upwind side by more than five (5) dots per hour using specified fallout sampling dishes.

42. Emission of sulfur compounds restricted
   2,000 PPM by volume of SO2 from existing source or 550 PPM by volume of SO2 from any new source.

43. Odors
   All gases, vapors, and gas entrained effluents shall be incinerated or processed to control air pollution.

44. Visible contaminants from internal combustion engines
   Violation when visible for more than ten (10) consecutive seconds.

45. Land use and zoning
   Consideration of air pollution potential to be taken into account.

46. Gasoline storage
   1. 40,000 gallon tanks (new) must have a floating roof or vapor recovery system
   2. New 250 gallon tanks must have a permanent submerged fill pipe.

47. Circumvention
   No one is to use any method to circumvent any part of this ordinance.

48. Additional measures
   More restrictive measures may be applied where pollution sources are clustered.

49. Time schedule for compliance
   1. All new installations when placed in operation
   2. Existing installations, on September 24, 1967, or under a program and schedule as approved by the Director, or otherwise as regulated.
Ecology area proposed for new subdivision

By DEBORAH MANN
Globe-Democrat Staff Writer

"It seems as if Community Federal has unwittingly purchased the enchanted forest," Attorney Albert A. Michenfelder Jr., remarked in addressing the St. Louis County Planning Commission Monday night.

Representing the Community Savings Service Corp., Michenfelder requested that the planning commission change the zoning of a 116-acre wooded tract for single and multiple family construction on 10,000 square feet. At issue is dwelling units versus ecologically.

The Ferguson-Floissant School District wants to keep the area in its natural state, abundant with wildlife.

THE TRACT is located in an unincorporated area on Dunn Road east of Grandview Drive. It has been used as an ecology study laboratory by the Missouri Conservation Department as one of the most unique in the state with its gentle slope, open woods, heavily wooded areas and small stream all in a primitive, natural state.

Approval of the petition by the Community Savings Service Corp., a subsidiary of the Community Federal Savings and Loan Co., would permit Community Savings to shape the land for sale to builders, to further develop it into residential dwellings.

According to Michenfelder, Community Federal would retain "an ongoing interest" in the subdivision, but would use it only from the loans on the "Community Federal presently holds 60 percent of the loans in a similar subdivision.

IN CONCLUSION, Michenfelder said Community Federal was not aware of the special public interest in the tract and had no desire to interfere with such interests. He said the petition would be further investigated and reconsidered by the corporation.

A sample vote of 30 people voted against the petition.

A petition by John P. King, owner of a 18.2-acre tract located on Hageman Road at I-64, to rezone a 111.2-acre tract, has been met little opposition.

Mr. and Mrs. Robert Wolf, 1100 Nolan spoke in defense of their neighborhood, which would border the 320 proposed multiple family units petitioned by Volkswagen-Murphy Developments. The tract is located off Gravois and Sullivan Roads and has an average of 121.

Mrs. Wolf remarked, "I see no reason why we should be subjected to the city moving into our country."

THE LAST PETITION of the Monday night hearing was submitted by the Jones Co. It specified a tract which runs west and south of Airport Road, which would be the site of single family homes and condominiums if rezoned. The commission questioned the recreation facilities of the new project which would provide for a baseball diamond and playground, but no swimming pool.

The Planning Commission will decide to approve or deny the petition at its executive meeting, July 12.

Before the rezoning occurs the petition must be approved by the County Council. The council is not obligated to vote on the rezoning petition of the Planning Commission.
CAUSE FOR COMPLAINTS: Residents of the Timberlake Apartments in Kirkwood shown here have been complaining about the odor coming from the lagoon. Waste from a nearby subdivision apparently are draining into the lake. (Post-Dispatch Photo)

MSD Acting In Apartment Pollution Case
Provided by the St. Louis County Department of Highways and Traffic
WHAT YOU CAN DO ABOUT POLLUTION

With the environmental problems we already face in the United States, you no longer have to be a coal miner to have sooty lungs. Surveys show that some metropolitan dwellers breathe in pollution that is equal to smoking two packs of cigarettes a day.

Some scientists warn that the combination of air and water pollution, along with increasing population, food needs and power requirements, is rapidly driving us toward major disasters.

Faced with such awesome problems, what can each of us or our families do about our ecology and pollution problems? Here are suggestions offered by environmental scientists:

AIR POLLUTION

1. Don't smoke. Why inhale additional poison and add to the two-pack-per-day pollution you already may be getting?

2. Keep your home furnace clean, adjusted properly and operating efficiently.

3. Keep your automobile tuned for efficient combustion. Have the following checked periodically and adjusted or replaced: carburetor, fuel pump gaskets, timing, blow-by valves, fuel tank, filler tank cap gasket, oil filter, spark plugs, cooling system and air-pollution control devices.

4. Operate your automobile properly. Avoid quick stops and starts; avoid idling the engine when stopping for a long time; avoid racing the engine.

5. Use public transportation, ride a bike or walk when possible.

6. Gasoline-powered tools, such as lawn mowers and snow blowers, should be kept adjusted and in top condition. Use a hand mower if you have a small lawn.

7. Do not burn paper, trash or garbage.

8. Do not burn leaves or garden cuttings. Put in containers for pickup by disposal service. If you wish to compost the organic matter, avoid conditions for growth of fungi.

9. Store garbage and rubbish in a covered, watertight receptacle. Keep covered at all times.

10. Make sure that your garbage is ready for regularly scheduled pickup. Do not allow accumulation by forgetting to put the containers at the curb.

11. Household dust collected by mops or vacuum bags should be disposed into a receptacle to avoid dispersion into the air.
12. Apartment dwellers should carefully obey incinerator regulations concerning types of refuse and operating procedure.

13. Open areas in your yard should be put into lawn or artificial cover to minimize dust blowing.

14. Constantly check for ragweed growths and eradicate them. Cut all weeds before the ragweed season.

15. Keep your property clean, including sidewalks and curb areas.

16. Avoid outdoor spraying or spreading of chemicals such as insecticides, weedicides, lime or paint on windy days.

17. When having an outdoor barbecue, prepare the fire properly to avoid excessive smoking. Do not burn paper dishes, cups and refuse in charcoal burner.

18. Properly care for pets to keep animals healthy and to prevent spread of waste, hairs, etc.

19. Water and waste should not be allowed to accumulate and become stagnant.

20. Electric power is furnished in large part by burning coal or oil. Use less electricity and avoid wasting it--turn down your furnace thermostat when possible, and avoid unnecessary use of lights, air conditioning, TV, power appliances and equipment.

21. Avoid littering--especially don't dump fine debris such as shavings or dust into the open air. Put litter bags or containers in your car, den, meeting room, backyard, etc.

22. Carry out garbage on camp or hike trips for proper disposal if there is no acceptable way to dispose of it at the site.

WATER POLLUTION

1. Avoid wasting water; turn off faucet when through using water, don't flush toilet unnecessarily, fix leaks promptly.

2. Don't put heavy paper, clothes, rags, disposable diapers, grease and solvents into water disposal systems. These can disrupt disposal systems.

3. Use white toilet tissue--dyes pollute water systems.

4. Don't fertilize your lawn excessively--runoff following rains pollutes our streams and water table.

5. Use dishwashers and automatic washing machines as sparingly as possible, preferably for full loads.
6. Use detergents that are low in phosphates, which help algae and weeds grow in waterways.

7. Don't use full amounts listed on detergent boxes in dishwasher and clothes washer.

8. Help eliminate cesspools and septic tanks by voicing support of regional sewage-disposal systems.

9. Don't use local lakes, creeks or rivers for dumping cans, old tires, trash or cad animals.

10. Participate in local drives to clean up polluted waterways and haul junk out of rivers and lakes.

GENERAL

1. Do not use long-lived pesticides, such as DDT, Dieldrin, Aldrin, endrin, heptachlor, chlordane and lindane--they kill off wildlife and unbalance nature.

2. Plant trees and shrubs to attract birds, so less spraying of insecticides is needed.

3. Help with school programs to promote poster-making, literature distribution, assembly discussions and exhibits aimed at environment improvement.

4. Join a local antipollution group that will exert pressure on factory officials to avoid polluting the air and waterways, and on manufacturers to use reusable or recyclable packaging.

5. Become familiar with local pollution ordinances and don't hesitate to report violations to local officials.

6. Share your information about pollution with your friends, family and co-workers.

7. Write to state and Federal officials and legislators about:
(a) Enforcement of current pollution laws, and passage of new, stronger laws and stricter fines. (b) Prohibition of dumping raw sewage, oil, herbicides and garbage in all bodies of water, including the ocean.

8. Finally, have a permanent personal antipollution campaign. Remember, we all are contributors to the problem. That candy wrapper you drop on the sidewalk may be one of millions dropped that day if everyone else is as careless.

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BEHAVIORAL OBJECTIVE

3.  1. Make a chart listing two advantages to a community for the development of a multiple family dwelling complex or a single family dwelling complex.

4.  2. From the following list of possible advantages to an individual in selecting either single or multiple family dwellings, on your answer sheet put an "s" alongside the letter which corresponds to those advantages which would be for single family dwellings and a "m" alongside those advantages for multiple family dwellings:

   a) represents a sense of ownership
   b) eliminates the need for a large initial cash outlay
   c) provides income tax deduction
   d) means no lawn and building upkeep
   e) permits freedom of choice in remodeling and decorating
   f) safer parking conditions and more available space

7.  3. From the following list select five items which zoning laws affect in the development of a subdivision. On your answer sheet put an "X" alongside the letter which corresponds to your five choices:

   a) street width  f) provisions for sidewalks
   b) parking facilities  g) floor plan
   c) building materials used h) lot size
   d) architect i) landscaping
   e) height of structure j) provisions for utilities (sewer, gas, water, etc.)

10. 4. On your answer sheet circle the letter which corresponds to the person or company who is indirectly responsible for the cost of installing the various utilities in a subdivision:

   a) developer  b) builder  c) home owner  d) utility company

1.  5. List four reasons why people move into a given geographic area. (e.g. Parkway School District)

6.  6. List three natural resources that are used in greater amounts as the population of the community increases.

9.  7. List three important utilities which are vital to a subdivision.

12. 8. List nine vocational opportunities that are created during the development of a subdivision.
BEHAVIORAL
OBJECTIVE

5. Make a chart listing three advantages for purchasing either a new or a pre-owned home.

8. List three ways in which man's need to relate with nature could be considered in developing a subdivision.

2. List at least three major factors that are considered by a developer in acquiring land for locating a subdivision.

11. From the following list of home features, identify the two most costly OPTIONAL FEATURES to a prospective home owner. (Hint: some of the items are basic and others are optionals.)

   a) 2 bedroom home    f) finished basement
   b) 1 bathroom        g) single garage
   c) air conditioning   h) unfinished basement
   d) central heating    i) dishwasher
   e) garbage disposal   j) rear entry garage
RESOURCE MATERIALS

Books (Student)*


Lingenfelter, Mary Rebecca and Harry D. Kitson, Vocations for Girls, Harcourt and Brace Company, New York City, 1951.

Splover, Sarah, Your Career If You're Not Going to College, Julian Messner, New York City, 1963.


Books (Teacher)**


A General Land Use Plan, St. Louis County Missouri, Prepared for St. Louis Planning Commission, by Harland Bartholomew and Assoc., January, 1960 (To be revised by August, 1973).

The Challenge of Growth, A Study of Major County and Regional Park Needs, St. Louis County Planning Commission, July, 1965 (To be revised 8/73).

* Student reference books may be found in the West Junior High School Library

** Teacher reference books may be found in the St. Louis City Library.
Periodicals


PAMPHLETS

A Nature Center for Your Community, Joseph J. Shomon, 40 pages, $1, National Audubon Society, Nature Planning Division, 1130 Fifth Avenue, New York, N.Y., 10028.

***Planning and Other Services Offered by the National Center Planning Division, L1.

***A Green Island For Your Community, L2.

***Guidelines to Community Nature Center Development, L3.

*** These leaflets are free in quantities up through 10 copies each. For copies over that amount, there is a postage and handling charge, payable in advance, of $3 for each hundred copies or any fraction thereof. Titles may be mixed to take advantage of quantity rates on additional hundreds.

(National Audubon Society, See Above for Address)

National Wildlife Federation, 1971 EQ Index
Reprints may be obtained by writing to Educational Servicing, National Wildlife Federation, 1412 16th Street, N.W., Washington, D.C. 20036.

Guidelines for Citizen Action Environmental Problems
Information regarding reprints may be obtained by writing:
The Conservation Education Association, Box 450, Madison, Wisconsin 53701.

Environment. Subscription rates: One year - $10, Environment, P. O. Box 755, Bridgeton, Missouri 63044

Improve Your Environment, Fight Pollution With Pictures
Eastman Kodak Company, 343 State Street, Rochester, New York, 14650,
single copies $1, 2-9 copies 75¢, 10 or more 50¢.
FILMS

St. Louis County Library

Bulldozed America 25 min. B & W (city)*
Frank Lloyd Wright 30 min. B & W (city)*
Green City 23 min. C (city)*
Home Place 32 min. B & W (city)*
How to Look at a City 29 min. B & W
St. Louis--The Gilded Age 50 min. B & W
Secrets of St. Louis 45 min. B & W
Town Planning 15 min. B & W
The Twenty Fourth and Tomorrow 22 min. B & W

* City films are still ordered through county--allow an extra 3 days or so.

County Audio-Visual Cooperating District

Drafting Methods 13 min. C
Green City 23 min. C
Homes Around the World 11 min. C
Model Homes 30 min. B & W
Planning Your Career 15 min. B & W
Principles of Scale Drawings 10 min. B & W
Your Job: Finding the Right One 14 min. B & W

University of Wisconsin

16 mm film, "Cities of the Future"

University of Wisconsin
16 mm Film Library
Madison, Wisconsin 53706

FREE FILM

16 mm film, "In Pursuit of Happiness"

Modern Talking Pictures
210 South Jefferson
St. Louis, Missouri 63166
16 mm film, "Urbanization"

U.S. Bureau of the Census
Records Management Section
Jeffersonville, Indiana 47130

16 mm film, "No Room in the Suburbs"

Home Builder's Association of Greater St. Louis
Mrs. Margaret Nathe
(Phone 994-7700)
10104 Old Olive Street Road
St. Louis, Missouri 63141

A-V Tapes, Audio-Tapes, etc.

St. Louis Public Library
Main Branch
1301 Olive
St. Louis, Missouri 63103

microfilm, "The Urban Crisis"

(Home Builder's Association)
Use above address or phone and request the guest speaker; Mr. Morley Gluskoter

slide presentation on Occupations and Careers

phone 434-8412, ex. 79
Central Office
Parkway School District

slide presentation "The Sensuous House"

phone 434-8412, ex. 79
Central Office
Parkway School District

Video taped presentation of Doug James, St. Louis County Planning Commission
APPENDIX
1. Make a chart listing two advantages to a community for the development of a multiple family dwelling complex or a single family dwelling complex.

2. From the following list of possible advantages to an individual in selecting either single or multiple family dwellings, on your answer sheet put an "s" alongside the letter which corresponds to those advantages which would be for single family dwellings and a "m" alongside those advantages for multiple family dwellings:
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3. From the following list select five items which zoning laws affect in the development of a subdivision. On your answer sheet put an "X" alongside the letter which corresponds to your five choices:
   a) street width
   b) parking facilities
   c) building materials used
   d) architecture
   e) height of structure
   f) provisions for sidewalks
   g) floor plan
   h) lot size
   i) landscaping
   j) provisions for utilities (sewer, gas, water, etc.)

4. On your answer sheet circle the letter which corresponds to the person or company who is indirectly responsible for the cost of installing the various utilities in a subdivision:
   a) developer
   b) builder
   c) home owner
   d) utility company

5. List four reasons why people move into a given geographic area. (e.g. Parkway School District)

6. List three natural resources that are used in greater amounts as the population of the community increases.

7. List three important utilities which are vital to a subdivision.

8. List nine vocational opportunities that are created during the development of a subdivision.
5. Make a chart listing three advantages for purchasing either a new or a pre-owned home.

8. List three ways in which man's need to relate with nature could be considered in developing a subdivision.

2. List at least three major factors that are considered by a developer in acquiring land for locating a subdivision.

11. From the following list of home features, identify the two most costly OPTIONAL FEATURES to a prospective home owner. (Hint: some of the items are basic and others are optionals.)

   a) 2 bedroom home   f) finished basement
   b) 1 bathroom       g) single garage
   c) air conditioning  h) unfinished basement
   d) central heating   i) dishwasher
   e) garbage disposal  j) rear entry garage
PRE-POST TEST ANSWER SHEET

1. MULTIPLE FAMILY DWELLINGS
   A. USES LESS LAND
   B. PROVIDES MORE TAXES

2. A. S B. M C. S D. M E. S F. S


4. (a) (b) (c) (d)

5. A. NEW INDUSTRY IN TOWN
   B. PEOPLE LEAVING INNER CITY
   C. DESIRE TO BE IN A BETTER SCHOOL DISTRICT
   D. WANTING TO ESCAPE RACIAL, RELIGIOUS, OR SOCIAL INTEGRATION

6. A. LAND
   B. AIR
   C. WATER

7. A. WATER
   B. SEWER
   C. ELECTRICITY

8. A. CARPENTER
   B. PLUMBER
   C. BRICK LAYER
   D. ARCHITECT
   E. GLAZIER
   F. CARPET LAYER
   G. SHEET METAL WORKER
   H. IRON WORKER
   I. LANDSCAPER

9. NEW HOMES
   A. HAS CHOICE OF LOT LOCATION
   B. HAS CHOICE OF FIXTURES AND DECOR
   C. HAS CHOICE OF MODEL AND STYLE

PRE-OWNED HOMES
   A. LANDSCAPING COMPLETED
   B. USUALLY LESS EXPENSIVE
   C. NEIGHBORHOOD MORE DEVELOPED
10. A. THERE SHOULD BE SPACE PROVIDED AWAY FROM HOUSES AND STREETS WHERE A PERSON COULD THINK IN PEACE AND QUIET. (e.g. COMMON GROUND)

B. A BROOK OR STREAM COULD PROVIDE A RESTFUL SETTING. (e.g. MAINTAIN NATURAL TERRAIN AS MUCH AS POSSIBLE)

C. LEAVING ROOM FOR WILD ANIMALS WOULD ALLOW A PERSON TO WITNESS NATURE IN THE WAY IT WAS BEFORE THE SUBDIVISION WAS BUILT. (e.g. SANCTUARY)

11. A. COST OF LAND

B. AVAILABILITY OF LAND

C. COST OF DEVELOPMENT

12. FINISHED BASEMENT

REAR ENTRY GARAGE

TEACHER NOTE: THE ANSWER HEREIN PROVIDED ARE GIVEN ONLY AS A MODEL FOR THE TYPE OF ANSWERS WHICH WOULD BE CONSIDERED AS ACCEPTABLE. YOUR JUDGEMENT SHOULD BE THE DECIDING FACTOR IN DETERMINING A SATISFACTORY RESPONSE. HOWEVER, MORE ASSISTANCE MAY BE FOUND IN THE TEACHER BACKGROUND OF THIS UNIT.
Student Activities

Concept Number

I Investigate the reasons people move.

Several types of comparison studies could be made such as:
1) Multiple family versus single family dwellings.
2) 30 to 40 thousand dollar subdivisions versus 60 to 70 thousand dollar subdivisions.
3) Do younger people move for the same reasons older people move. (Age groups could be decided upon)

I Make a listing of occupations which you feel would cause a family to move frequently. Devise a method of investigation that will verify the correctness of your list.

II Determine whether there is a relationship between the price of a section of land in Parkway and the types of residential development considered for it.

II Design a subdivision to a desirable scale. On your tract develop both single and multiple family dwellings. Include roadways and landscaping in your project. Man's relationship to nature should be considered in your development.

III. Comparative Study of Taxes of Multi-family and Single-family Dwellings
   a. Directions for computing property tax
   b. Student Worksheet - Tax Study
   c. Summation of Tax Study

III. What position has been taken by the Parkway School Board on single family vs. multifamily dwellings?
   - does price make a difference?
   - has position changed over a period of years?
   - does location make a difference?
   - have studies been conducted which would affect the position?

III. Pick two comparable dwellings in a subdivision, one single family and one multifamily. Compare the two dwellings for square footage of living space and conveniences found in each.

III. Make an appointment with your town councilman, or alderman, and find out what his position is on zoning multifamily dwellings in your area. Visit a meeting of your local zoning commission. Discuss what you have found in terms of benefits to the community in considering single family dwellings and multiple family dwellings.
III. Compare the taxes paid to the school district from single family dwellings vs. multifamily dwellings of similar size.
- per school age child.
- per acre of ground.
- per total person, since adults are using schools more lately.

IV. Examine the advantages to a family in purchasing either a new or a pre-owned home.

Suggestion:
This study could be conducted in either of the following ways:
1) Survey the neighborhood for families that have recently purchased homes. Compare their reasons for choosing either a new home or a pre-owned home.

2) Discuss the advantages of each type of home with at least two real estate companies that specialize in pre-owned homes and two developers currently selling new homes.

V. Make a historical study showing how an increase in population density has affected the use of your communities natural resources.

water - St. Louis County Water Company
natural gas - Laclede Gas Company
petroleum - Shell Oil, Gulf, Mobil, Texaco, etc.

Population of St. Louis County:

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950</td>
<td>406,000</td>
</tr>
<tr>
<td>1960</td>
<td>703,000</td>
</tr>
<tr>
<td>1970</td>
<td>950,000</td>
</tr>
</tbody>
</table>
V. Graph and compare population growth of the following: United States, Missouri, St. Louis Community area, and St. Louis County. Ask teacher for Table I, Population Growth.

VI. Attend a zoning commission planning hearing for your local area. One or more of the following items should be considered while attending the zoning hearing:

a) Types of planning - note the developer's plans for land use and categorize into residential, commercial, or industrial.

b) Land use - note the use of land surrounding the tract under consideration; is the planned land use compatible with the surrounding area.

c) Density of population - does the planned use of land create any problems on existing facilities in the community such as highways, schools, etc.

d) Economics - does the plan offer an economical asset or deficit to the community?

e) Opposition - ascertain the position of the people who are opposed to the developer's plans. Is there opposition related to the land use, population density, or economics as related to the surrounding areas. If there is opposition for reasons other than those listed, be sure to include this in your notes.

VI. As a result of having attended a zoning commission planning hearing do a follow up report on one of the following:

a) zoning--a tool for population segregation

b) What is the role of the "silent majority in zoning change?"

c) Develop a local public reaction poll to the developments occurring in the planning commission hearing.

d) Investigate the role of the planning commission staff in relation to the hearing you attended.

VII. Design a house that would allow a person to relate with nature in a variety of ways.

VII. Compare the ways that a person can relate with nature in at least two different subdivisions.

Comparisons could be made using photography (still or movie) or drawings. Other methods may suggest themselves to students.
In allowing ways for a person to relate with nature in a subdivision, one important aspect is variety. Compare different areas of a subdivision in terms of variety of ways a person has to relate with nature.

Comparisons of variety could include:
a) How many species of trees?
b) How many different insects?
c) How many different types of birds?

VII. Complete Data Sheet - check chart of Family Needs. To be supplied by the teacher.

VII. Design and Build a House. Data sheets to be supplied by the teacher.

VII. Field trip - Subdivision Project data sheets to be supplied by the teacher. May be individual or group activity, in or out of school, on basis of student-teacher agreement.

VII. Development of a Subdivision within the Parkway School District. Data sheets to be supplied by the teacher. Student-teacher will get together and decide on how project should be developed and completed.

VIII. The Bullfinch Problem - an in-class activity, to be done by all students. Teacher will supply all information.

VIII. Suppose for some reason, only one of these utilities gas, water, electricity, and sewers could be installed in your home. Which utility would you choose and how would you operate your household without the remaining three?

IX. Make a comparison of the cost of the various options that alter the price of a house (example would be a fireplace, dishwasher, patio, etc.)

Comparisons could be run on the following pairs:
a) expensive vs. medium priced homes
b) options in several similarly priced subdivisions
c) features included in base price of similarly priced subdivisions
d) features included in base price of differently priced subdivisions
X. Explore the job opportunities created by a multiple family dwelling that would not be created by a single family dwelling.

X. Research the variety of vocational opportunities that are associated with developing a subdivision. Pay special attention to those that have been created in approximately the last two decades such as technological advancement and labor management.

X. Investigate vocational courses available in the Parkway Schools and South County Technical School which would help to prepare a person for specific fields of work.

X. Investigate an occupation in the building trades from the standpoint of an individual entering that trade.

a) type of trade such as unskilled, semi-skilled, skilled, etc.
b) training qualifications and length of training period.
c) life time opportunities after training in regard to steady employment, salaries, and promotions.
1. List five reasons why there is no room in the suburbs.
   a.
   b.
   c.
   d.
   e.

2. In Pennsylvania County there were: (Circle those that apply)
   a. 200,000 families  b. 180,000 families
   c. 1,000 farms     d. 1,400 farms

3. What really is the CRISIS in the cities and the suburbs? (Circle those answers that apply)
   a. traffic problems
   b. old buildings
   c. housing shortage
   d. price boom in housing
   e. cost beyond the needs of average families

4. What constitutes an "average family"?

5. What BASIC NEED is denied to American citizens? (Especially in counties?
   a. Freedom
   b. Prosperity

6. What are the problems associated with cities and/or communities (counties - suburbs) today? Circle those answers which apply.
   a. population growth
   b. shrinking supply of land
   c. industrial growth
   d. lack of proper planning in these areas

7. Because of POPULATION DENSITY in cities what has happened, or resulted?
8. Who today is really able to escape from the city? Circle one or more answers.
   a. 1/6 of the total population
   b. middle class workers - blue collar
   c. low income groups - overalls, below or above

9. How much money can wage earners REALLY afford for either RENT or MORTAGES for housing? Circle one.
   a. 100%  b. 75%  c. 50%  d. 25%  3. 15%

10. What PROBLEM seems to be of the GREATEST importance for county residents? Circle those that apply.
    a. schools of good standing  b. bicycles
    c. traffic jams  d. commuters that arrive early or leave late from work

11. What seems to be the "GREATEST" problem of County Industry? Circle one or more.
    a. a stable work force
    b. an available work force
    c. obtaining STABLE line workers.

    a. unavailability of necessary workers
    b. turn-over rate of workers
    c. absentee rate of workers

13. Multi-family or single-family dwellings ADD TO the tax base of a community. Circle one.
    a. multi-family dwellings  b. single-family dwellings

14. City populations tend to: circle one
    a. remain
    b. move into the suburbs
    c. leave the country

15. Why do young people tend to LEAVE communities in which they have been raised?
CONCEPT III
Compare the taxes paid to the school district from single dwellings vs. multi-family dwellings of similar size.

Formula for computing property tax:

Taxes are paid on 1/3 the real value of the property. Tax rate may vary from place to place. Tax rates for urban property may range from $5 - $8 per $100 of the real value of the property.

Example:

(a) The real value of a home is $30,000
(b) Taxes will be paid on 1/3 of this $30,000
   $30,000 ÷ 3 = $10,000 taxable property
(c) The property owner must pay taxes on $10,000, which is the assessed valuation.
(d) Since the tax rate is paid per $100, determine the number of $100 in $10,000.
   $10,000 ÷ $100 = 100
(e) The tax rate in this case is $5 per $100, or $5 X 100
(f) The tax for this $30,000 home will be: $5 X 100 = $500

Practice Problems:

(A) A home has a real value of $60,000 and the tax rate per $100 is $6. Compute the taxes.

(B) A home has a real value of $66,000 and the tax rate per $100 is $8. Compute the taxes.
STUDENT WORKSHEET

COMPARATIVE STUDY OF TAXES PAID BY SINGLE FAMILY DWELLINGS AND MULTIPLE FAMILY DWELLINGS

PROBLEM: A single family dwelling has a real value of $33,000. The tax rate is $8 per $100 assessed value. This is a typical family with husband and wife and three children. The dwelling is situated on one-third acre. What is total tax paid?

PROBLEM: A subdivision consisting of ten (10) acres contains thirty (30) single family dwellings. Each family dwelling has a real value of $36,000. The average number of children in each family is two (2). What is the total tax paid by the occupants, if the tax rate is $8 per $100 assessed value?

PROBLEM: A subdivision consisting of ten (10) acres contains 60 town houses (multiple family dwellings). Each town house has a real value of $36,000. The average number of children in each family is one. What is the total tax paid by the OWNERS of the town houses if the tax rate is $8 per $100 assessed value?

PROBLEM: A condominium is located on a five (5) acre tract of land. Sixty (60) family dwellings are situated in two apartment-type buildings. Each family dwelling is worth $21,000. Each building houses thirty (30) families. Each family (young married or old retirees) has .5 or 1/2 children per family. The tax rate is $8 per $100 assessed value. What are the total taxes paid by this complex?
SUMMATION

COMPARATIVE TAX ANALYSIS OF LAND USE AND TYPES OF BUILDING PROJECTS

1. What was the acreage of:
   a. Subdivision with single family dwellings? _________________
   b. Subdivision with multiple family (townhouse) dwellings? ______
   c. Complex consisting of condominiums? _______________________

2. What was the family size of:
   a. Subdivision with single family dwellings? _________________
   b. Subdivision with multiple family (townhouse) dwellings? ______
   c. Complex of two condominiums? _____________________________

3. List the amount of taxes paid by:
   a. Subdivision with single family dwellings? _________________
   b. Subdivision with multiple family (townhouse) dwellings? ______
   c. Complex of two condominiums? _____________________________

4. In the final analysis, based on land use, where was the land used to best advantage?
   ___________________________________________________________

5. What kinds of dwelling complexes really support the tax base of a community? Place your answers in descending order.
   a. ______________________ b. ______________________ c. ______________________

6. Population density is a real factor as to where you decide to live. Given your "RATHERS" what type of dwelling place would you choose? Circle your choice.
   a. single dwelling   b. townhouse   c. condominiums (student choice)

7. In twenty-five words or less, give your reasons for your answer to question number 6 above.
   ___________________________________________________________
8. In your own opinion, who should pay the greater amount of taxes in a community? Circle one. (student choice)
   a. Single family dwellings with three children
   b. Townhouse family with two children
   c. Condominium residents (young married, old retirees) with .5 (1/2) children per family.

9. Review question 8 above, and give reasons why you decided on the answers you gave. Explain in detail.

10. Considering space, in your opinion, which development had the greatest potential for common ground. Circle one. (student choice)
    a. Single dwellings  b. Townhouses  c. Condominiums

11. What reasons can you list for the basis of your answer in question 10 above? Be specific!!
CONCEPT V
<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
<th>Percent</th>
<th>Missouri</th>
<th>St. Louis Costing Area</th>
<th>City of St. Louis</th>
<th>St. Louis County</th>
</tr>
</thead>
<tbody>
<tr>
<td>1910</td>
<td>75,994</td>
<td>22.7</td>
<td>3.1</td>
<td>1.045,000</td>
<td>687,029</td>
<td>304,000</td>
</tr>
<tr>
<td>1920</td>
<td>91,972</td>
<td>20.0</td>
<td>3.2</td>
<td>1.199,000</td>
<td>772,897</td>
<td>386,000</td>
</tr>
<tr>
<td>1930</td>
<td>105,712</td>
<td>14.3</td>
<td>3.4</td>
<td>1.423,000</td>
<td>821,960</td>
<td>400,000</td>
</tr>
<tr>
<td>1940</td>
<td>123,663</td>
<td>8.3</td>
<td>3.7</td>
<td>1.562,000</td>
<td>816,048</td>
<td>416,000</td>
</tr>
<tr>
<td>1950</td>
<td>150,647</td>
<td>12.7</td>
<td>3.9</td>
<td>1.759,000</td>
<td>856,736</td>
<td>450,000</td>
</tr>
<tr>
<td>1960</td>
<td>170,384</td>
<td>13.1</td>
<td>4.2</td>
<td>2.075,000</td>
<td>856,000</td>
<td>460,000</td>
</tr>
<tr>
<td>1965</td>
<td>181,200</td>
<td>6.3</td>
<td>4.5</td>
<td>2,239,600</td>
<td>852,000</td>
<td>464,000</td>
</tr>
<tr>
<td>1970</td>
<td>219,503</td>
<td>10.3</td>
<td>5.2</td>
<td>2,513,400</td>
<td>846,000</td>
<td>475,000</td>
</tr>
<tr>
<td>1975</td>
<td>243,900</td>
<td>11.1</td>
<td>5.5</td>
<td>2,831,600</td>
<td>839,000</td>
<td>489,000</td>
</tr>
<tr>
<td>1980</td>
<td>272,674</td>
<td>11.8</td>
<td>6.0</td>
<td>3,195,100</td>
<td>852,500</td>
<td>504,000</td>
</tr>
</tbody>
</table>

*All U.S. figures.*

**Missouri is 1950 are based on highest and most recent of U.S. Bureau of Census estimates.*

***Percent of costing area U.S. population is based on St. Louis Metropolitan Area Transportation Study, using U.S. Bureau of Census projections for U.S. population.*

****City of St. Louis projections are those of St. Louis Metropolitan Area Transportation Study.*
CONCEPT VII
**DATA SHEET**

**CHECK CHART OF FAMILY NEEDS**

<table>
<thead>
<tr>
<th>LOCATION PREFERENCE</th>
<th>ENTERTAINING</th>
<th>LEISURE HABITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>City (Urban)</td>
<td><em>Buffet suppers</em></td>
<td><em>Painting</em></td>
</tr>
<tr>
<td>Suburb</td>
<td><em>Formal dinners</em></td>
<td><em>Ceramics</em></td>
</tr>
<tr>
<td>Subdivision</td>
<td><em>Small dinners</em></td>
<td><em>Gardening</em></td>
</tr>
<tr>
<td>Country (rural)</td>
<td><em>Backyard barbeques</em></td>
<td><em>Woodworking</em></td>
</tr>
<tr>
<td></td>
<td><em>Teas</em></td>
<td><em>Hi-fi</em></td>
</tr>
<tr>
<td></td>
<td><em>Brunches</em></td>
<td><em>Television</em></td>
</tr>
<tr>
<td></td>
<td><em>Other</em></td>
<td><em>Reading</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Sewing</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Photography</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Cards or games</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Music:</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Play instrument</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Kind of instrument:</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>WORKING HABITS</em></td>
</tr>
<tr>
<td></td>
<td><em>At dining room table</em></td>
<td><em>FAMILY SIZE</em></td>
</tr>
<tr>
<td></td>
<td><em>Snack bar - kitchen</em></td>
<td><em>Father</em></td>
</tr>
<tr>
<td></td>
<td><em>Kitchen table</em></td>
<td><em>Mother</em></td>
</tr>
<tr>
<td></td>
<td><em>Elsewhere</em></td>
<td><em>Children</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Boys</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Girls</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>SPORTS</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Hunting</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Fishing</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Golf</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Tennis</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Bowling</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Riding</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Sailing</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Dancing</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Skiing</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Water</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Snow</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Basketball</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Softball</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Baseball</em></td>
</tr>
</tbody>
</table>

**ROOM PREFERENCES**

|                     |         |         |
|                     | _Separate living room_ | _Hunting_ |
|                     | _Separate dining room_ | _Fishing_ |
|                     | _Living-dining room_ | _Golf_ |
|                     | _Kitchen with snack bar_ | _Tennis_ |
|                     | _Family room_ | _Bowling_ |
|                     | _Number of bedrooms_ | _Riding_ |
|                     | _Library_ | _Sailing_ |
|                     | _Den_ | _Dancing_ |
|                     | _Hobby room_ | _Skiing_ |
|                     | _Utility room_ | _Water_ |
|                     | _Other_ | _Snow_ |
|                     |         | _Basketball_ |
|                     |         | _Softball_ |
|                     |         | _Baseball_ |

**REMARKS:**
DESIGN AND BUILD A HOUSE

1. You have just identified the NEEDS of a family.

2. Now decide what kind of house you would like to have and draw up a floor plan for it.

3. After designing your home, you will be given $40,000 with which to build it – if you can! Directions:
   a. The given costs are only approximate, you may want to find real costs by interviewing a builder.
   b. Items that are necessary must be included in your home. Electrical wiring, and plumbing. You must have a kitchen and a bathroom.
   c. If you find you are spending too much money you can change your house plans to fit the budget of $40,000.
   d. You may subtract a room IF you can prove it meets your family's needs.
   e. Landscaping is necessary if you buy a house on land without trees, optional if the land has trees.
   f. If you choose to live in the country you must determine the cost of land by multiplying the number of acres you want by $2,500. This land price assumes that your rural home is located near a large city. Also, a rural home will need a septic tank and a well in addition to the other utilities.

Cost of Constructing (Building) a Home

1. LAND IN DESIRABLE AREA
   a. 1/3 acre, without trees $2,500
   b. 1/3 acre, wooded 4,500
   c. 1/3 acre, wooded on lake front 6,000
   d. 1/2 acre, without trees 4,000
   e. 1/2 acre, wooded on river bluff 8,000
   f. Rural home site @ $2,500 per acre
      Indicate acreage (___) and compute cost

      TOTAL $______

2. STRUCTURE: $600 times the number of rooms.

      TOTAL $______

3. EXTERIOR BUILDING MATERIALS
   a. Brick - $330 times number of rooms
   b. Shingle - $165 times number of rooms
   c. Frame - $220 times number of rooms
   d. Stone - $330 times number of rooms
   e. Brick and frame - $275 times number of rooms
   f. Aluminum siding - $220 times number of rooms

      TOTAL $______
4. ROOF
   a. Cedar shingles - $220 times number of rooms
   b. Asphalt shingles - $110 times number of rooms

   TOTAL $

5. INTERIOR WALLS
   a. Plaster - $66 times number of rooms
   b. Wallboard - $44 times number of rooms
   c. Paneling - $93.50 times number of rooms

   TOTAL $

6. UTILITIES
   a. Electrical wiring - $132 times number of rooms
   b. Heating - $264 times number of rooms
   c. Air-conditioning - $176 times number of rooms
   d. Plumbing - $495 times number of rooms
   e. Septic tank (rural) - $1,100
   f. Well (rural) - $2,200

   TOTAL $

7. INSULATION
   a. Side walls - $1,000
   b. Ceilings - $750

   TOTAL $

8. LANDSCAPING: Trees and shrubs
   a. 1/3 acre, without trees - $330
   b. 1/3 acre, wooded - $110
   c. 1/3 acre, wooded on lake front - $110
   d. 1/2 acre, without trees - $495
   e. 1/2 acre, wooded on river bluff - $220

   TOTAL $

9. LANDSCAPING: Grass
   a. 1/3 acre sodded - $330
   b. 1/3 acre seeded - $165
   c. 1/2 acre sodded - $660
   d. 1/2 acre seeded - $330

   TOTAL $

TOTAL $
10. EXTRAS - OPTIONALS
   a. Fireplace(s) - $750 each
   b. Patio or deck - $660 each
   c. Swimming pool
      small - $5,500
      large - $8,800
   d. Garage
      1 car - $825
      2 car - $1,430
   e. Carport - $330
   f. Screened-in porch - $550
   g. Driveway
      Concrete - $770
      Blacktop - $550
      Gravel - $110
   h. Rear entry garage driveway
      Concrete - $1,540
      Blacktop - $1,100
      Gravel - $220
   i. With basement - $2,000
   j. Walk out basement - $2,500
   k. Finished basement (paneling, tiled floor) - $1,500

   TOTAL $________
# FIELD TRIP - SUBDIVISION DATA SHEET

<table>
<thead>
<tr>
<th>Name of Subdivision</th>
<th>NAME</th>
<th>Hour</th>
<th>Date</th>
</tr>
</thead>
</table>

## I. Observational Aspects

### A. Subdivision Characteristics

1. **Topography - lay of land**
   - a. Flat
   - b. Flat-gently rolling
   - c. Rolling-hilly

2. **Land Use**
   - a. Residential
     1. Single family
     2. Multi-family
     3. High-density
     4. Low-density
   - b. Commercial Services
     - a. Wholesale
     - b. Retail
     - c. Manufacturing
   - c. Street Pattern
     - a. Grid
     - b. Regular
     - c. Follows topography
     - d. Irregular
     - e. Other
       - (Name or describe)

3. **General Appearance Condition**
   - a. Neat
   - b. Average
   - c. Below Average
   - d. Other (Describe)

4. **Drainage**
   - a. Good
   - b. Average
   - c. Below Average
   - d. Erosion absent
   - e. Erosion present
   - f. (Be prepared to discuss this item in your comments section.)

5. **Utilities to lot**
   - a. Electric
   - b. Natural gas
   - c. Bottle or tank gas
   - d. Telephone (Evidence of)
   - e. Water
   - f. Sanitary sewers
8. Lot Characteristics
   a. Lot size - approximate
   b. Topography
   c. Landscaping (yes - no)
      1. Lawned (grass)
      2. Trees
         a. None
         b. 1 - 3
         c. 4 - 5
      3. Shrubbery
      d. Fenced (some - all)
   e. Drainage on lot
      1. Good
      2. Average
      3. Below average
      4. Very poor

9. Type of Building Structure
   a. Artificial materials
   b. Natural materials
   c. Brick
   d. Frame
   e. Combination of brick and frame
   f. Modular - pre-fab

10. Condition of Structure
    a. Well kept
    b. Average
    c. Ill-kept
    d. Dilapidated

11. Extent of structure
    a. Garages (1 or 2)
    b. Basement
    c. Patio
    d. Other (Describe)

12. Street Condition
    a. Good
    b. Average
    c. Below average
    d. Width
       1. Adequate
       2. Inadequate

13. Sidewalks
    a. Adequate
    b. Inadequate
    c. Access to home
    d. No access to home

14. Lawn Use
    a. Lawn (grass)
    b. Garden (flower or vegetable)
    c. Recreation
    d. Other
QUESTIONS:

1. Would you like to live in this particular subdivision? Give specific reasons!!

2. Give reasons why you would not like to live in this subdivision. Be specific!!

3. Environmentally was this land USED PROPERLY or MISUSED? Please be SPECIFIC.
THE DEVELOPMENT OF A SUBDIVISION
WITHIN THE PARKWAY SCHOOL DISTRICT

1. Subdivision
   1. General definition

   ______________________________________________________________________

   2. Local definition

   ______________________________________________________________________

   3. Type of dwellings

   ______________________________________________________________________

   4. Advantages to a community
      a. 

      ______________________________________________________________________

      b. 

      ______________________________________________________________________

   5. Name of subdivision

   ______________________________________________________________________

   6. Developer

   ______________________________________________________________________

   7. Builder

   ______________________________________________________________________

   8. Political jurisdiction

   ______________________________________________________________________

   9. Location

   ______________________________________________________________________

   10. Acreage

   ______________________________________________________________________

   11. Number of units

   ______________________________________________________________________

   12. Crafts, trades and professions
      a. 

      f. 

      b. 

      g. 

      c. 

      h. 

      d. 

      i. 

      e. 

      j. 

   150
k. __________

1. __________

13. Design of structure ________________________

14. Topography ________________________________

15. Code used in zoning _________________________
   a. qualifications ______________________________

16. General regulations for zone
   a. ________________________________
   b. ________________________________
   c. ________________________________
   d. ________________________________
   e. ________________________________

17. Services available from community.
   a. ________________________________
   b. ________________________________
   c. ________________________________
   d. ________________________________

18. Advantages to living in development
   a. ________________________________
   b. ________________________________
   c. ________________________________

19. Floor Plans
   a. ________________________________
   b. ________________________________
20. **Features promoted by development**
   a. ____________________________
   b. ____________________________
   c. ____________________________
   d. ____________________________
   e. ____________________________
   f. ____________________________
   g. ____________________________
   h. ____________________________

21. **Community conveniences**
   a. ____________________________
   b. ____________________________
   c. ____________________________
   d. ____________________________
   e. ____________________________
   f. ____________________________
   g. ____________________________
   h. ____________________________
   i. ____________________________

22. **Recreational grounds; features**
   a. ____________________________
   b. ____________________________
   c. ____________________________

23. **Other** ____________________________
Just What is a Planned Environment Unit?

The diagram at the left portrays a 20 acre tract of land developed under the R-2, 22,000 square foot (one half acre) residential zoning category. One house is allowable on each half acre lot, and under regular zoning procedure, the tract is developed in rows.

The diagram at the right shows the same tract, developed under a PEU, planned environment unit plan. The same number of homes are constructed on the site, but the developer can follow the lay of the land, keeping wooded areas for parks and open space, which will be used as common ground under the direction of the subdivision trustees. The lot sizes for the homes may vary. Virtually all development in St. Louis County over the last several years has been under the PEU, which requires the builder to get a permit from the county council. Strict conditions and controls are imposed on the developer with granting of the permit.

PEU permits are granted for tracts of at least 20 acres. Similar permits called Residually Designed Developments, RDD, may be issued for smaller parcels. Another variation is the Density Development Procedure, DDP, which allows more flexibility than regular zoning, but less than the PEU. There are no conditions set, but the lot sizes cannot vary below the next zoning category.

Although the concept of the PEU is gaining acceptance in most municipalities as well as the county, and also nationwide, some charges are being made that developers are now starting to abuse the practice, by jamming homes together so as not to have to develop ground and add to the expense of their projects.
The Bullfinch Problem

Hector Bullfinch is interested in developing a subdivision within the boundaries of the Parkway School District. Having never built in this area before, he was not familiar with the cost of installing utilities in St. Louis County. After surveying the various utility companies he found the following rates would apply: main sewer lines would come to $1200 per lot with an additional $3.50 per foot being added to connect each individual house to the main line; a water main would cost $400 per lot with $2.25 per foot added for each foot of water line to the individual house. The gas company reported that there would be no cost to him for installing a gas line as the price of the line is included in the hook-up fee the gas company charges its customers. Although it cost users $10 to have a telephone installed with a base rate of $12 per month not counting the additional cost of added telephones, the telephone company said it would not charge him either for installing a phone line in his subdivision. Mr. Bullfinch would have to pay $50 per lot for the installation of a main electric cable with an additional $2 per foot to hook up to the main line for each house. He figured his average house is 40 feet from the streets where all of the utilities will be located underground. What cost will Mr. Bullfinch have to add to the price of his average house to cover the cost of installing utilities?