

MISSOULA COUNTY
COMPREHENSIVE PLAN

WYE/O'KEEFE CREEK AREA

WYE / O'KEEFE CREEK AREA

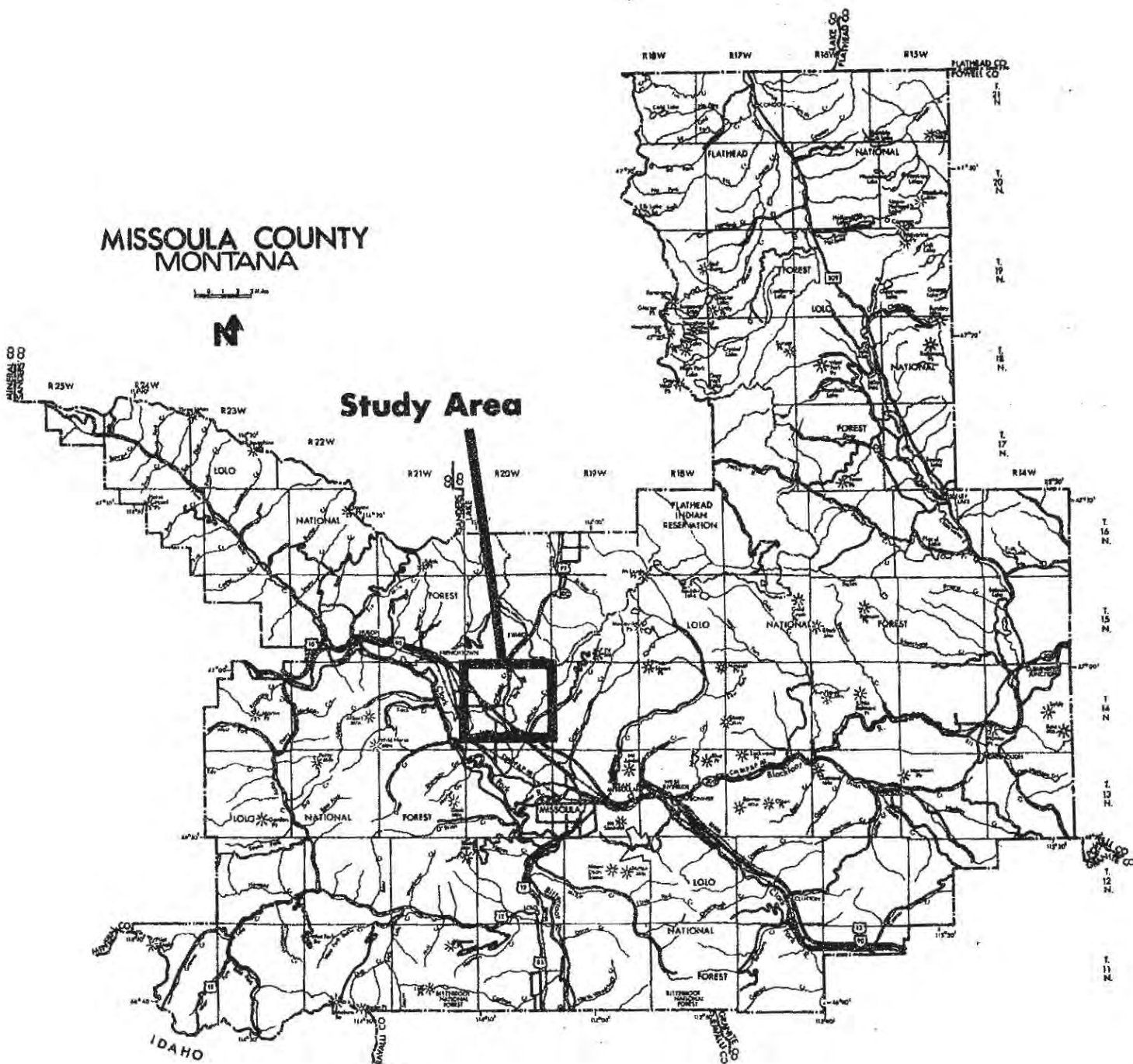
INTRODUCTION

MISSOULA COUNTY MONTANA

0 1 2 Miles



Study Area



Northwest of Missoula is an area surrounding the junction of U.S. Highways 10, 93 and Interstate 90, known as the "Wye". The study area is north of Interstate 90 Interchange and encompassing an area of approximately ten (10) square miles on either side of U.S. 93. (See map)

Recently an interest has been shown for development in the area. The development interests have prompted the County Commissioners to reconsider the Comprehensive Plan designation concerning the "Wye" area. A re-evaluation of the area has been done with consideration of alternative patterns of development.

The Comprehensive General Plan for Missoula County was adopted in 1975 to be used as the official guide for controlling the physical growth and development of the County for the period to 1990. While there must be a target date toward which the plan will aim, this must not be misconstrued as implying that conditions will not change during the planning period. In order for the plan to be an effective tool for accomplishing the goals and objectives, it must remain flexible enough to incorporate changing economic, social and political conditions.

There are four overall basic assumptions in the Comprehensive Plan which apply to the study area. They are as follows:

1. The Comprehensive Plan is to provide direction for the future development of Missoula County.
2. Public investment in facilities and services should be fully utilized before they are increased to serve new areas.
3. Economic and social well-being is tied to the quality of the natural environment, whether providing resources for jobs or sources of recreation.
4. The "rural ethic" is the basic foundation of the communities and has a significant impact on the life-style which many rural citizens treasure.

Within the Comprehensive Plan there are sets of goals and objectives that directly apply to any growth in Missoula County. Various land use goals advocated by the Comprehensive Plan would have a direct affect on any development in the "Wye" area. These policies are addressed in the Alternative Patterns of Development section of this document under the title of "Minimum Rural Development".

Goals and Objectives

Land Use:

1. Reduce conflicts between land use activities.
2. Promote landscaping that enhances visual amenities, soils, air and water quality, wildlife, and other environmental features.
3. Cluster low density residential developments to allow agricultural land to remain in production and enhance the rural character.
4. Encourage neighborhood commercial establishments near the population concentrations.
5. Make the public aware of any "social costs" of any significant economic development before it is undertaken.

Transportation:

1. Minimize development that requires construction of new local roads.
2. Require new development to improve access to a level capable of supporting projected traffic increases.
3. Limit collectors and arterials to no more than eight per side per mile for residential access.
4. Encourage no residential access onto collectors and arterials except through public streets.

Open Space:

1. New development should provide community recreation opportunities which meet the needs of all citizens in the community.
2. Develop rivers and lakes for public recreational use while protecting environmental quality and private property.
3. Establish standards for acquisition and development of parks and playgrounds.

Community Facilities:

1. Maintain an equal balance between demand and the capability of the County to financially support these facilities and services.
2. Utilize the present facilities to the maximum by joint use rather than expansion.
3. Encourage establishment of rural fire protection system.
4. Assess need for school expansion.
5. Preserve any historical heritage.
6. Bring the governmental decision making process to the rural community level for rural community problems.

SUPPLY AND DEMAND

The foremost question concerning the "Wye" area is whether development is necessary and beneficial for the County at this time. Currently according to the figures generated for the Frenchtown-Evaro Census Division, which contains the Wye area, and the Missoula Census Division, there appears to be an abundance of undeveloped land already designated residential. The study was done on a supply and demand basis and projected until the year 2000. Supply was determined by measuring the land designated residential and multiplying it by the number of allowable units under that designation. Demand was determined by the 1970 Census Data and the average projected population for 1980, 1990, and 2000 by the Bureau of Business and Economic Research. These figures were then divided by the national average of 2.89 persons per dwelling unit to determine total number of units demanded.

Assuming that some of the land designated residential is unsuitable for building because of various reasons, a 50 percent build-up of an area would be desirable before designating more land for development. As shown in the chart, neither the Frenchtown-Evaro Census Division or the Missoula Urban Division will be near the 50 percent build-up by the year 2000 with the present amount of land in residential designation.

FRENCHTOWN-EVARO CENSUS DIVISION (010)				MISSOULA (URBAN) CENSUS DIVISION (020)			
YEAR	SUPPLY	DEMAND	PERCENT BUILD-UP	YEAR	SUPPLY	DEMAND	PERCENT BUILD-UP
1970	4,164 units	418 units	10.4%	1970	98,199 units	15,821 units	16.1%
1980	4,164 units	660 units	15.9%	1980	98,199 units	21,867 units	22.2%
1990	4,164 units	815 units	19.6%	1990	98,199 units	26,871 units	27.4%
2000	4,164 units	978 units	23.5%	2000	98,199 units	32,086 units	32.7%

50% Build-up - 2,082
 75% Build-up - 3,123
 100% Build-up - 4,164

50% Build-up - 49,100
 75% Build-up - 73,649
 100% Build-up - 98,199

In conclusion, we can draw from this analysis that any substantial increase in residential land use designation in one area should be accompanied by a decrease in residential land use designation in another area in order to achieve the goals and objectives of the Comprehensive Plan as stated at the beginning of this document and in the adopted comprehensive plans of the City and County.

This trade-off of land designation with an increase in one area coupled with a proportional decrease elsewhere is necessary for the Comprehensive Plan to remain effective. If not done, the amount of developable land could become excessive. Figures for 1980 indicate 77.8% of the residential designated land in Missoula Census Division (urban area) is undeveloped while Frenchtown-Evaro Census Division has 84.1% of its potential residential land without development. An increase of these ratios would cause such a supply of land available for development that it

would render the Comprehensive Plan inoperative as a guide for growth. Development patterns that would be encouraged by an inordinate supply of residential land would be in direct conflict with the assumption of the Comprehensive Plan that, "Public investment in facilities and services should be fully utilized before they are increased to serve new areas". Haphazard development could spring up throughout the County causing an increase in the demand for services. Trying to provide roads, schools and other utilities and service to residential areas randomly developed would add an undesirable burden on the taxpayers.

The amount of land presently supplied for residential development is balanced with demand and should be maintained for reasons of conserving tax dollars and energy by maximizing the existing services and facilities. Effectiveness of the Comprehensive Plan relies solely on being able to direct and limit development to areas which are most beneficial to all citizens of the County.

NATURAL ENVIRONMENT

CLIMATE

There are three important temperature related factors concerned with farming. Date of last freeze will, with a few exceptions, determine planting. Length of freeze-free season affects selection of crops and date of first freeze can affect date of harvest.

These figures represent only a general guide and local topographic conditions may vary these general conditions considerably. The "Wye" area falls into the following general categories:

1. Average date of last freeze - May 25 to June 4
2. Average length of freeze-free season - 50 to 90 days
3. Average date of first freeze - September 2 to September 12

Table 1 gives a general idea of the mean temperature, total precipitation, and total snow for the "Wye" area.

MONTH	CLIMATE ¹ VALLEY AREAS GENERALLY 3190' AND LOWER		
	MEAN TEMP	TOTAL PRECIPITATION	TOTAL SNOW
January	21.8°F	1.08"	12.31"
February	27.5°F	.85"	9.1"
March	35.3°F	.88"	5.78"
April	44.7°F	1.03"	2.14"
May	52.9°F	1.75"	.71"
June	59.8°F	2.04"	.00"
July	67.8°F	.92"	.00"
August	66.1°F	.85"	.00"
September	56.1°F	1.20"	TRACE
October	45.1°F	1.04"	.62"
November	33.1°F	1.05"	4.99"
December	25.0°F	1.13"	10.15"
	44.6°F AVG.	13.82" PER YEAR	45.8" PER YEAR

Prevailing winds in the area flow into the valley and continue eastward toward the City of Missoula. Therefore, any heavy polluting development will add to the contaminants in the Missoula air.

VEGETATION

The "Wye" study area consists of grassland vegetation. Economically, grassland area probably ranks second in value to the forest zone. Most of the grassland is natural and is adapted to the low precipitation patterns of the valley bottoms found throughout western Montana. These grasslands provide grazing lands for ranches in the area, they also provide hay meadows.

In addition, grasslands provide an area of wildlife habitat. In the low areas, grasses may be replaced by swales if ground water levels are high.

Just as the vegetation of the area is related to the wildlife that is on it, it is also related directly to the land and can be thought of as a guardian of the land. Excessive loss of vegetation due to over grazing, logging, fire or development disturbances can have a far reaching effect on the economic base of the area.

Primarily the affect of vegetational loss is soil erosion. Loss in agricultural productivity is the intial consequence. The soil carried away due to erosion must be deposited in another area. First it finds its way into streams and rivers where it destroys the aquatic habitat of the area by laying down a fine silt, which covers aquatic insects. These insects serve as a primary food supply to other insects and native game fish populations.

Land related damage includes degradation of watersheds, which are important to man. Water shortages, caused by contaminated water works a hardship on every citizen. Loss of soil on the land leads to non-productive wildlife areas due to loss of vegetation.

WILDLIFE

Winter ranges for both deer and elk have their southern limits on the fringe of the Wye area boundaries. (See map) Winter range is that area which animals utilize during heavy snow months to derive their food supply. The ultimate size of any wild animal herd is directly proportional to the size and quality of their winter range, thereby acting as an integral part of nature's checks and balances. Those animals that cannot live through the lean winter months and compete for food at the lower elevations will not be able to reproduce the following spring. Generally, winter range is found on south and east facing slopes in the valley bottoms and foothills. Because most of man's habitation is also confined to the same valley bottoms, he begins to restrict the animals access to the necessary lands.

When a new development is proposed in an area suspected to be a winter range, a careful decision must be made in regard to this critical area. The amount of wintering range is limited, therefore we cannot assume that other areas are available. Development in the general vicinity will shrink the area of the wintering ranges whether it takes place in the actual range or not because the affects of man are felt beyond the physical boundaries of the development.

GEOLOGY AND SOILS

Information regarding the suitabilities and limitations for development imposed by the surficial geology in the 'Wye' area has been derived from studies by Geoplan and Dr. Robert Curry. Geoplan has recently completed geologic mapping and interpretations for the Northwest Missoula Quadrangle, which includes the area east of Highway 93. Dr. Curry produced a special mapping project for the 'Wye' area at the request of the staff. (See map)

The valley bottom which Highway 93 follows north from the Interstate is alluvium deposited in the recent quaternary age as river floodplain. This geologic unit, along with slightly older terrace alluvium, includes the largest area of developable lands. It also has the best agricultural soils in the "Wye" area. The major natural constraints to development relate to groundwater and whether adequate depth of soil exists above the water table to filter sewage effluent.

The low hills to the east of the valley bottom are comprised largely of Tertiary Basin Deposits. In the Butler Creek drainage is a large area of past and continuing landslide activity. Soil drainage in the Tertiary Basin Deposits is fair to poor, causing a limitation to development; the areas also have slope limitations, although some locations of suitable slope can be found.

The hills directly west of the valley bottom are a combination of Tertiary Basin Deposits and Glacial Lake Missoula Silts. Both of these units have fair to poor drainage. Occasionally, these deposits are overlain by Piedmont Alluvium of Quaternary or Tertiary Age. Drainage is generally good in this alluvium.

Across the north of the study area, older bedrock of the Precambrian Age underlies the soils. Steep slopes and poor permeability characterize these rocks.

A series of faults traverses the area parallel to the interstate highway, diverting the flow of groundwater and surface water along east-west lines.

HYDROLOGY

In order to outline water resource, water hazard and drainage conditions in the "Wye" area information prepared by the Department of Geology of the University of Montana was used. This data was primarily based upon geologic interpretation of existing geologic, hydrologic and pedologic information. (See map) Site specific studies would be needed to determine the capability of each site within the "Wye" area.

Percolation Hazard and Soil Limitations:

This mapping was done on the basis of geologic maps, soil surveys and topographic maps. It outlines areas where surficial geologic units and shallow bedrock present hazards to design of septic facilities and where land equilibrium with respect to surface erosion is such that additional soil compaction or restriction of natural infiltration is not advisable. Three classes are differentiated, based upon the outline of soil limitations used by the Soil Conservation Service of the U.S.D.A. (See Table I) The criteria used by the Soil Conservation Service for differentiation are different from those used herein in that in addition to the S.C.S. data, base ecologic data is also considered.

Class 1: Slight Hazards

These are areas underlain by permeable units to adequate depth to permit septic fields to function properly. They are also areas of deep enough groundwater to negate the probability that such resources will be polluted by use of septic fields as long as population density does not exceed standards established by the State Department of Health. There are several areas within the County where significant groundwater pollution has occurred in less than a decade as a result of densities exceeding the above-mentioned standards. Building sites in slight hazard areas should be less than eight percent to prevent polluted near-surface waters from flowing out upon the land surface during seasonally high groundwater.

Class 2: Moderate Hazards

These are areas where local geologic variability or topographic variability make it impossible to accurately represent local variation in percolation hazard at map scale. In some instances, insufficient soils or geologic data are present upon which to classify such variability. In all cases, this unit should be considered as one in which further detailed site work is necessary to prove suitability or non-suitability for septic field designs or surface permeability impairment. In general, these are areas of Tertiary bedrock units or Quaternary Lake Missoula

sediments that are locally impermeable and contain numerous lenses of silts or clay that will impede downward percolation of waste waters and will locally perch the groundwater tables. Geologic and soils mapping is not done to sufficient detail to delimit each of the lenses and thus local site surveys are required for adequate hazard consideration.

Class 3: Severe Hazards

These are areas where high groundwater tables (less than 48") at least seasonally and/or steep slopes (greater than 15 percent) and/or moderate to low infiltration rates and soil permeabilities make utilization of septic drain fields unwise. These are generally upland areas of hills and mountains with thin soils and shallow bedrock of low permeability. The steeper slopes create conditions where subsurface drainage will intersect the ground surface at least seasonally, thus defeating the filtering value of soils for sewage. Glacial tills with significant fine materials to impede infiltration and floodplain areas with high groundwater tables are also included in this category of hazard. Higher densities on Hazard Class 3 slopes will cause erosion through reduction in infiltration due to roading and other land uses.

Within the Class 3 area, small pockets of higher permeability soil materials may occur, such as along a portion of the TV Peak road east of Evaro Hill where a capping of Tertiary gravels is found. However, these are not suitable sites for large-scale residential use because these gravels serve as an aquifer and would be easily polluted by septic fields since their total volume is low and the gradients are steep.

Critical Recharge Areas:

Two types of areas are classed as critical recharge areas. These are areas where local and regional groundwater and surface water quality are subject to significant deterioration through either misuse of septic drain fields or through interception of downward percolating waters by local soil compaction or interception of snow-melt or precipitation. These areas are the floodplains and the Class 3 percolation hazard areas.

Hillslopes in conifer-forested regions of Hazard Class 3 comprise the dominant source of total runoff and thus the groundwater recharge for the area. Thus, these areas should be maintained in a condition so that precipitation will be yielded to the surface and subsurface drainage in a uniform and sanitary manner. Extensive construction, particularly roading, in these hazard zones will reduce the rate and quantity of infiltration of precipitation and snowmelt and thus cause a greater percentage of that moisture to become runoff. In the humid eastern U.S., critical recharge areas may include large bottomlands suitable otherwise for human occupation; but Montana is different in that it is so arid that these lands are not critical to recharge of groundwater. A single exception can be made to those bottomlands that are irrigated, but such irrigated recharge compromises an "addition" to the normal recharge

TABLE I.

Soil Limitation Ratings for Septic Tank Absorption Fields

ITEM AFFECTING USE	DEGREE OF SOIL LIMITATION		
	SLIGHT	MODERATE	SEVERE
Permeability class ²	Rapid ³ , moderately rapid, and upper end of moderate	Lower end of moderate	Moderately slow ⁴ and slow
Hydraulic Conductivity rate (Uhland core method)	More than 1"/hr. ³	1-0.6"/hr.	Less than 0.6"/hr.
Percolation rate (Auger hole method)	Faster than ³ 45 min./in.	45-60 min./in.	Slower than 60 min./in.
Depth to water table	More than 72 in.	48-72 in.	Less than 48 in.
Flooding	None	Rare	Occasional or frequent
Slope	0-8 percent	8-15 percent	More than 15 pct.
Depth to hard rock, ⁵ bed-rock, or other impervious materials	More than 72 in.	48-72 in.	Less than 48 in.
Stoniness class ⁶	0 and 1	2	3, 4 and 5
Rockiness class ⁶	0	1	2, 4, 4 and 5

<u>Slope Classification</u>	<u>Slope Categories Percentage</u>	<u>Degrees</u>
Slight	0- 5	0 ⁰ - 2.9 ⁰
Moderate	5-15	2.9 ⁰ - 8.5 ⁰
Moderately Severe	15-25	8.5 ⁰ - 14.0 ⁰
Severe	25+	14.0 ⁰ +

Suitability Standards by Classification

I. Slight - 0 to 5%

- A. All construction
- B. Recreation (organized games)
- C. All roads
- D. Agriculture

II. Moderate - 5 to 15%

- A. Construction sites (practical to 14 percent, when technology must be applied).
- B. Recreation (Bridle paths, two wheeled transport, snowmobiles, walking).
- C. Roads (to approximately 10 percent, depending on classification, construction, surface).
- D. Agriculture (S.C.S. recommends no cultivation over 12 percent).

III. Moderately Severe - 15 to 25 percent

- A. Construction sites (must be carefully examined to prevent degradation of soil, vegetation, etc.).
- B. Recreation (walking is strenuous).
- C. Roads (extreme requirements to assure proper utilization).
- D. Agriculture - NO. (Should be kept in woodland.)
- E. Septic tanks may only be possible with special engineering.

IV. Severe - 25 percent +

- A. Recreation - requires extreme exertion. Entire area should be retained in natural state.

¹J.M. Caprio Publication, published by Montana Extension Service.

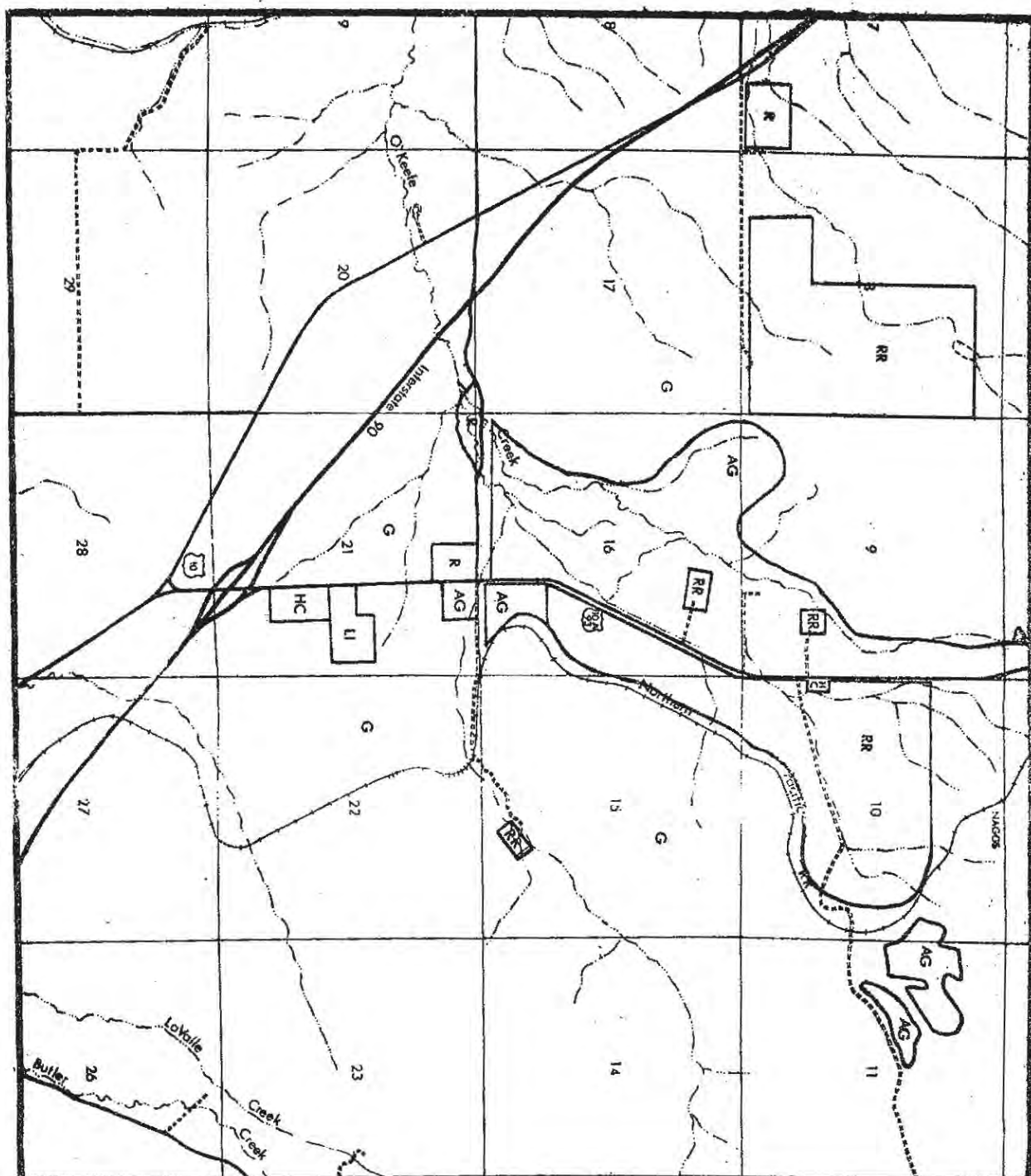
²Class limits are the same as those suggested by the Work-Planning Conference of the National Cooperative Soil Survey. The limitation ratings should be related to the permeability of soil layers at and below depth of the title line.

³Indicate by footnote where pollution is a hazard to water supplies.

⁴In arid or semi-arid areas, soils with moderately slow permeability may have a limitation rating of moderate.

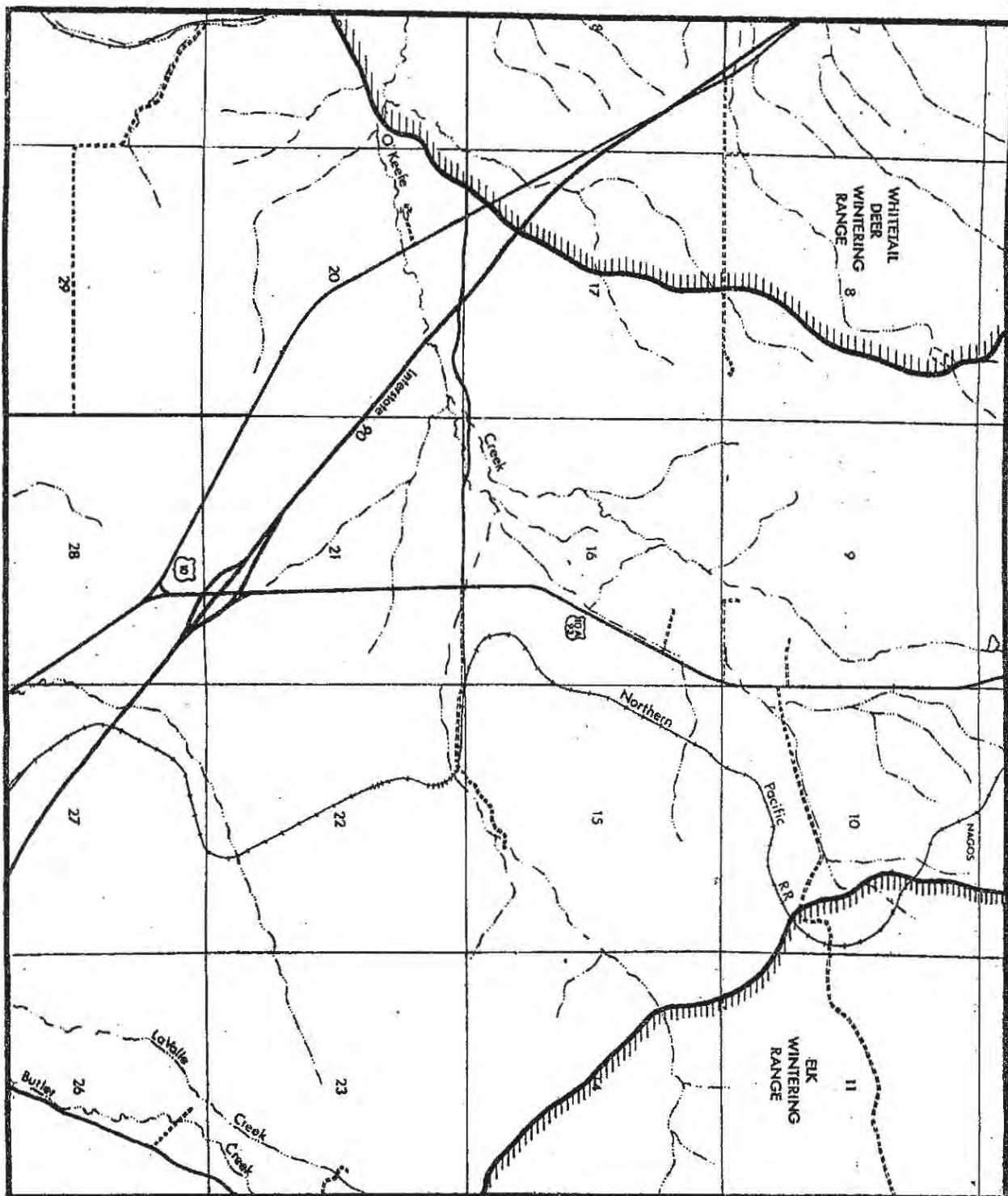
⁵Based on the assumption that tile is at a depth of two feet.

⁶For class definitions, see Soil Survey Manual, pp. 216-223.

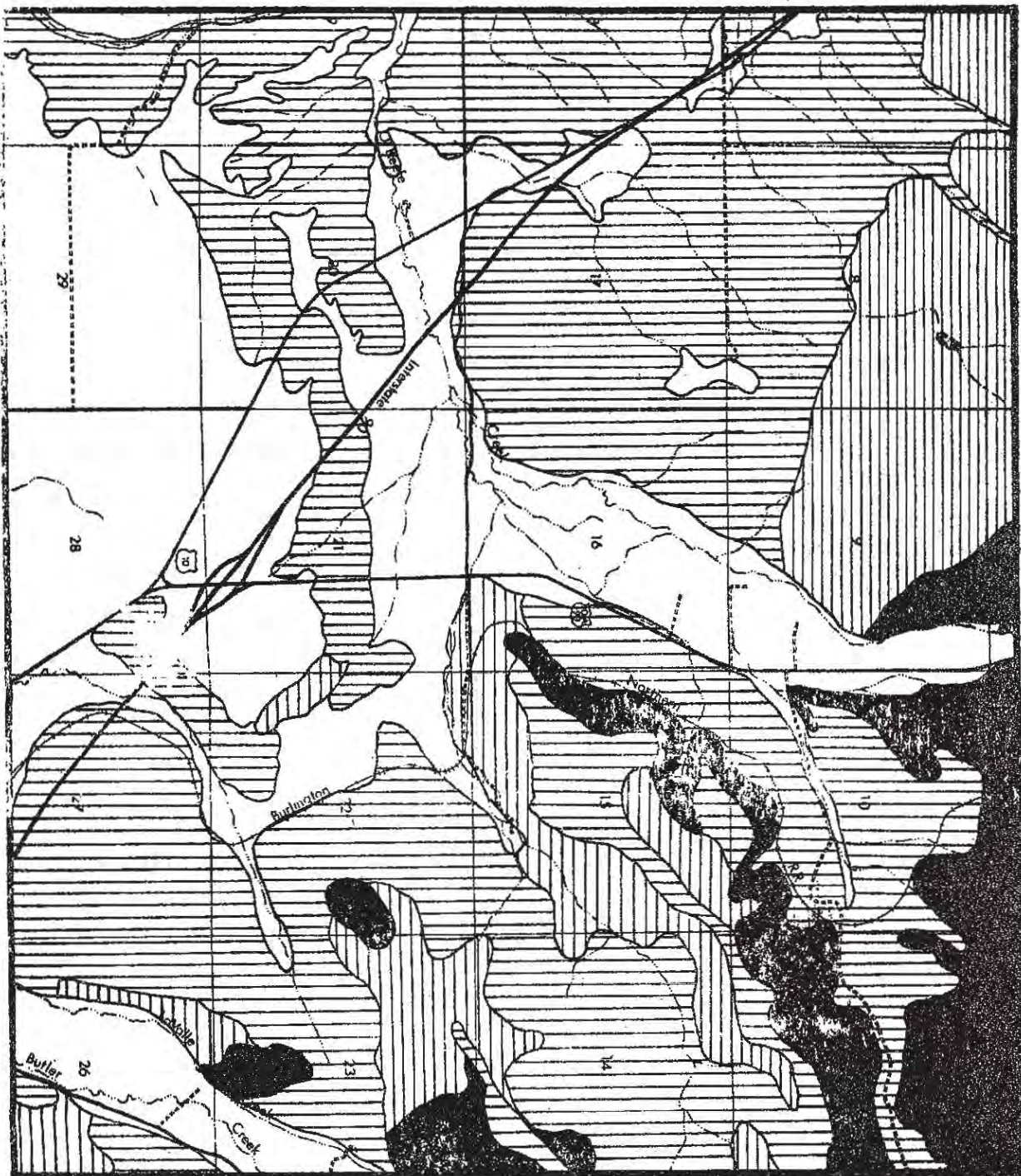


Land Use

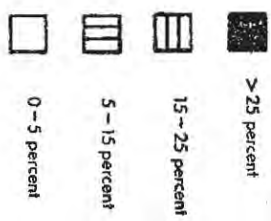
- RR RURAL RESIDENTIAL, FARM HOMES & RESIDENTIAL AT 1 PER 10 ACRES OR MORE - 408 acres
- R RURAL RESIDENTIAL, FARM HOMES & RESIDENTIAL AT 1 PER 10 ACRES - 50 acres
- HC HIGHWAY COMMERCIAL - 67 acres
- LI LIGHT INDUSTRIAL - 30 acres
- AG AGRICULTURE - 626 acres
- G GRAZING

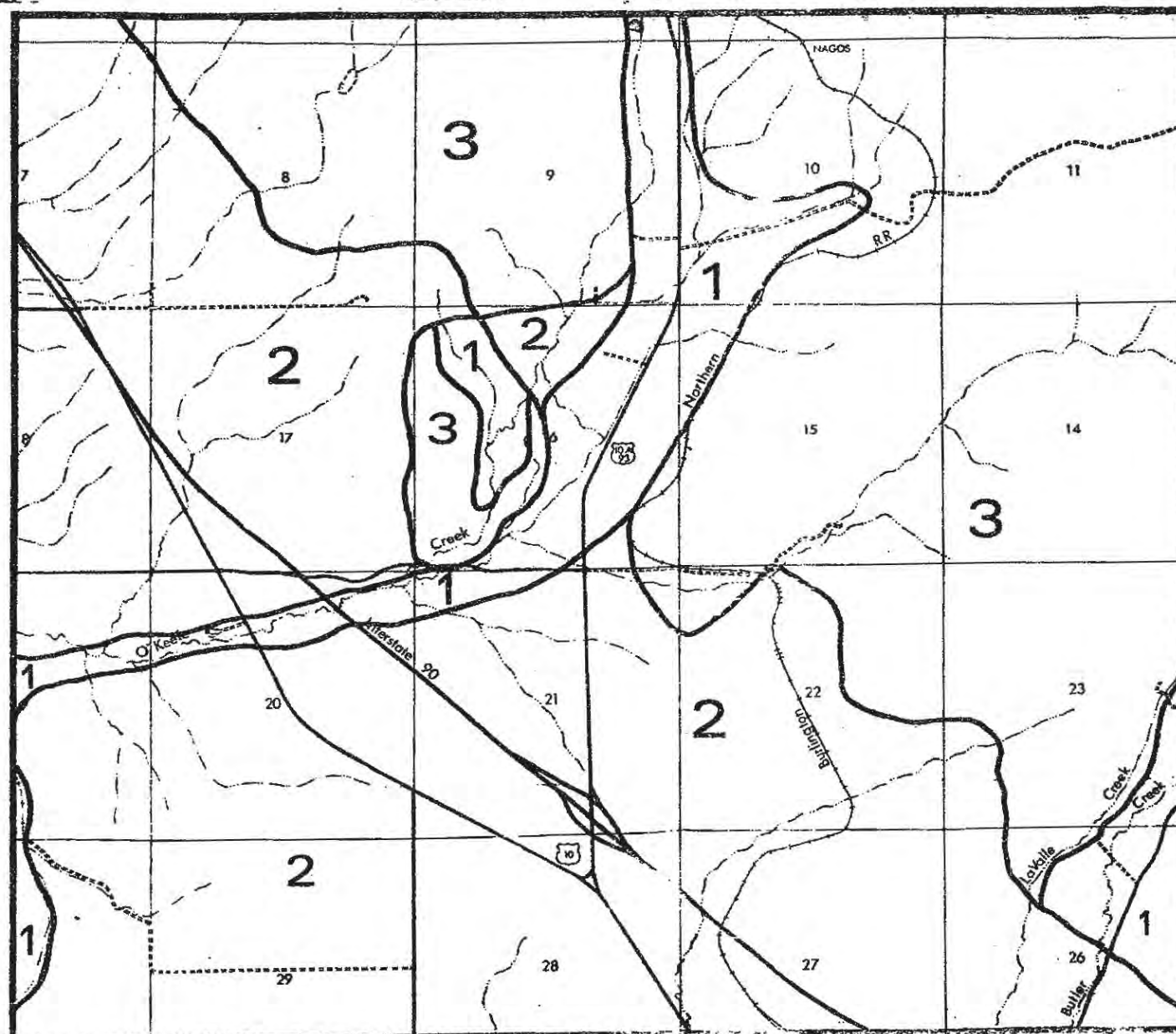


Wildlife



Slope Classes





Hydrology

- 1 - SLIGHT HAZARDS
- 2 - MODERATE HAZARDS
- 3 - SEVERE HAZARDS

MAN-MADE ENVIRONMENT

FIRE DISTRICT - POLICE PROTECTION

Fire protection in the Wye is for the most part under the jurisdiction of the Frenchtown Volunteer Fire Department. (See map) Presently their equipment consists of a 1968 Ford firetruck, an old Army 6 X 6 tanker, a 4 X 4 foam truck with a 250 gallon tank, and a Quick Response Unit (Q.R.U.). The southeastern one third of the area is without fire protection except for two businesses at the Junction of Highways 10 and 93. They have fire protection offered by the Missoula Rural Fire Department on a contract basis. Section 11, T14N, R20W, in the northeast corner of the area is the responsibility of the State Forest Service for fire protection.

Police protection is provided for the Wye area by the Missoula County Sheriff's Department. In 1979, the Sheriff's office hopes to have six officers on twenty-four hour duty for the entire County.

SCHOOLS

Within the boundaries of the Wye there are portions of three School Districts, #4, #20, and #40. (See map) The students of School District #4 attend Hellgate Elementary School and Hellgate High School. Presently the enrollment of the schools is 745 elementary students and 1,795 high school students. Ground has been broken for twelve additional classrooms for Hellgate Elementary to be completed before the beginning of the next school year, bringing the capacity to 1,000 students. Remodeling of Hellgate High will be completed by 1981, making room for 1,200 to 1,300 students. High school students in District #20 also attend Hellgate High School, while the Elementary students are bussed to DeSmet Elementary. The 1978 enrollment of DeSmet is 85 students. Recently under construction is a new building which will be able to hold 200 students when completed next year. Students in School District #40 attend Frenchtown Elementary and High School. Presently the Frenchtown schools have reached their capacity and if the same amount of increase in enrollment is experienced next year, as preceding years, the school will be required to go on split shifts. A bond issue has recently been passed and hopefully a building will be constructed by 1981, with a capacity for 500 high school students. The present 270 high school students will be moved out of the existing school. This will open up classrooms that will allow an increase in the present enrollment of 473 elementary school pupils.

UTILITIES

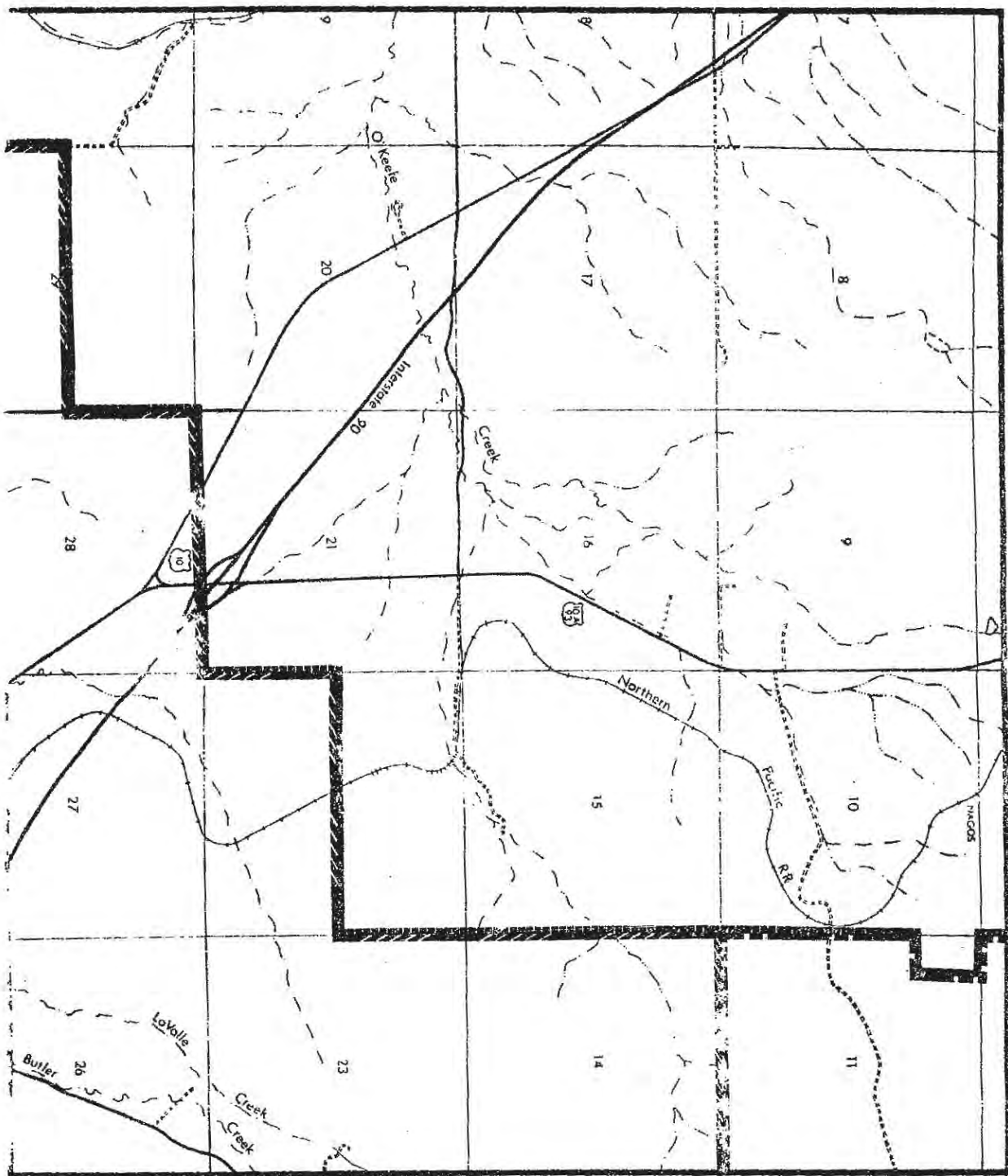
Two companies have utilities servicing the Wye area. (See Map ..) Missoula Electric Co-op, Inc. has branch lines serving all the residents in the area. These are 12 kilovolt lines and are tied in with the Montana Power Company system.

Montana Power also has a 100 kilovolt transmission line that crosses the area to serve the Hoerner Waldorf facility. An eight inch high pressure gas line lies to the south of the highway and serves a few businesses in the immediate Wye area.

TRANSPORTATION

North of I-90 in the Wye area is Federal Aid Primary 93 with an average paved width of 55 feet. The average traffic count on this State maintained road is between 3,200 to 4,000 vehicles, well under the capacity of 16,000 to 20,000 vehicles per day. Within the study area, the County maintains three gravel roads and two miles of paved road. Any new construction may have to be paved to comply with the air quality standards.

Burlington Northern tracks traverse the area running an average of nine trains a week. Any new track crossings would have to be evaluated by the Montana Highway Department on the basis of a hazard index. The hazard index is computed based upon train traffic, vehicular traffic and existing physical conditions. The adjusted hazard index takes into account the type of existing protection at the crossing.



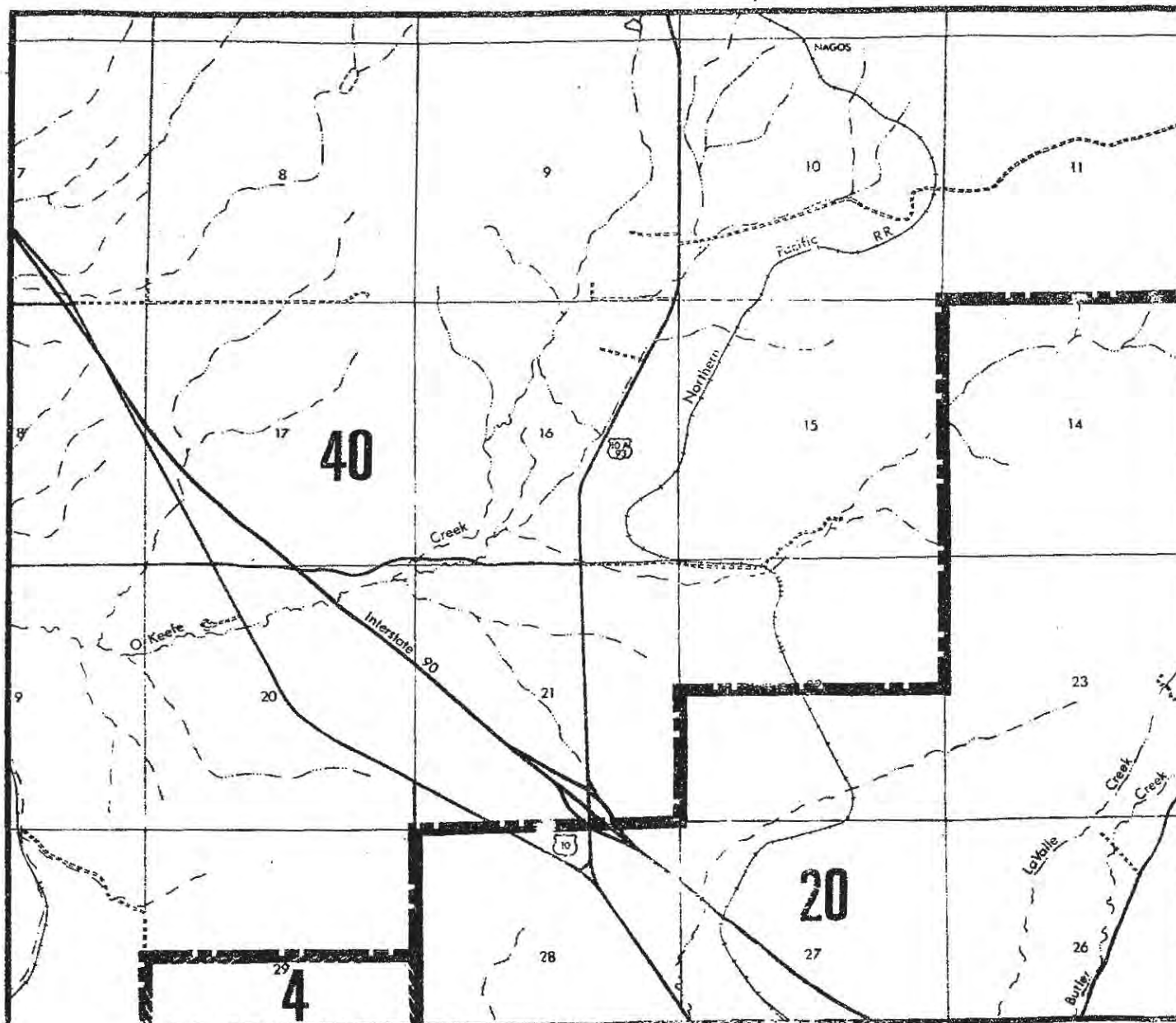
Rural Fire Districts

FRENCHTOWN

STATE FOREST SERVICE

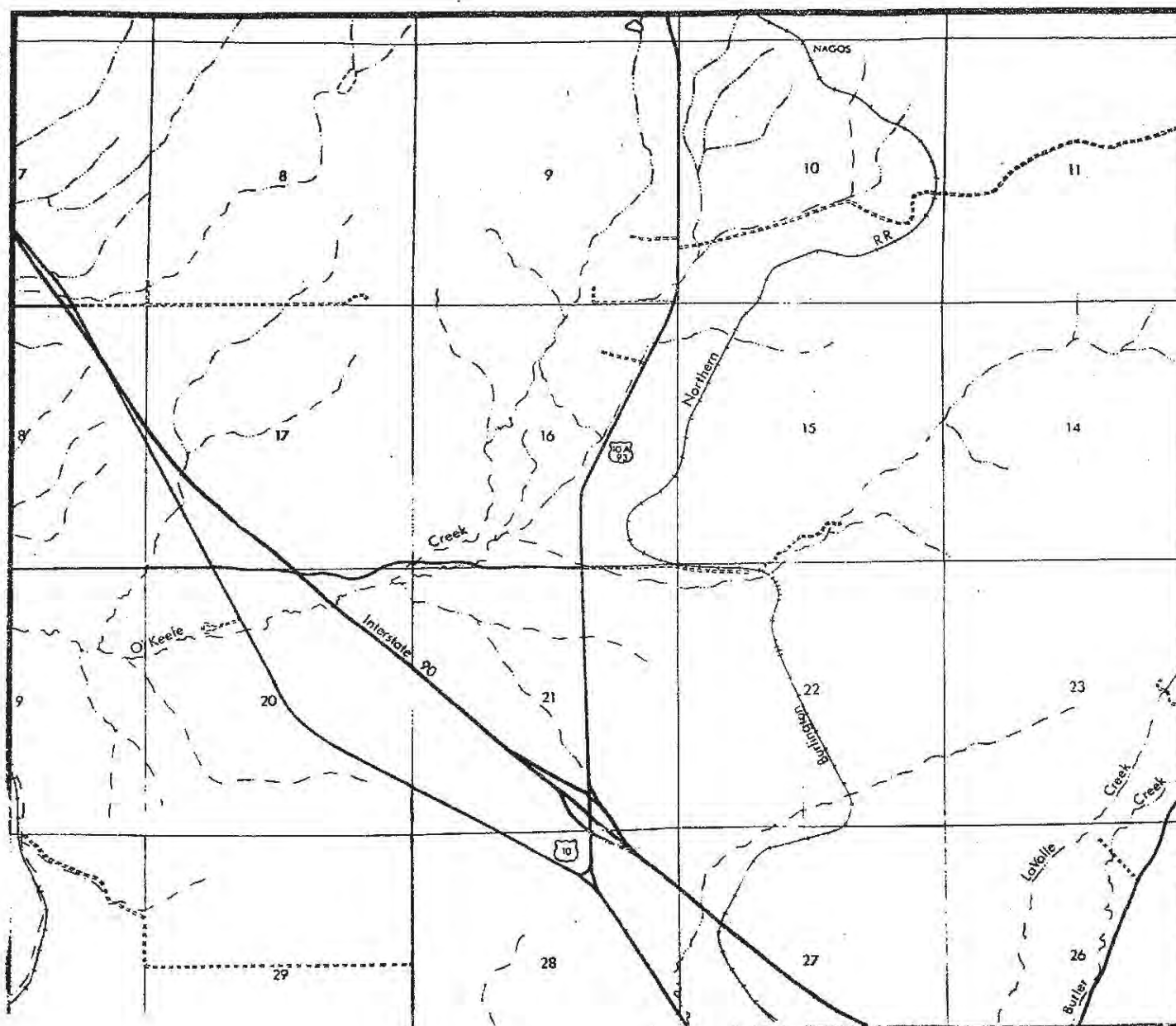
NO ONE

10 15 20 25



School Districts

- 4- HELLGATE ELEMENTARY
HELLGATE HIGH SCHOOL
- 20- DE SMET ELEMENTARY
HELLGATE HIGH SCHOOL
- 40- FRENCHTOWN ELEMENTARY
FRENCHTOWN HIGH SCHOOL



Transportation

INTERSTATE 90

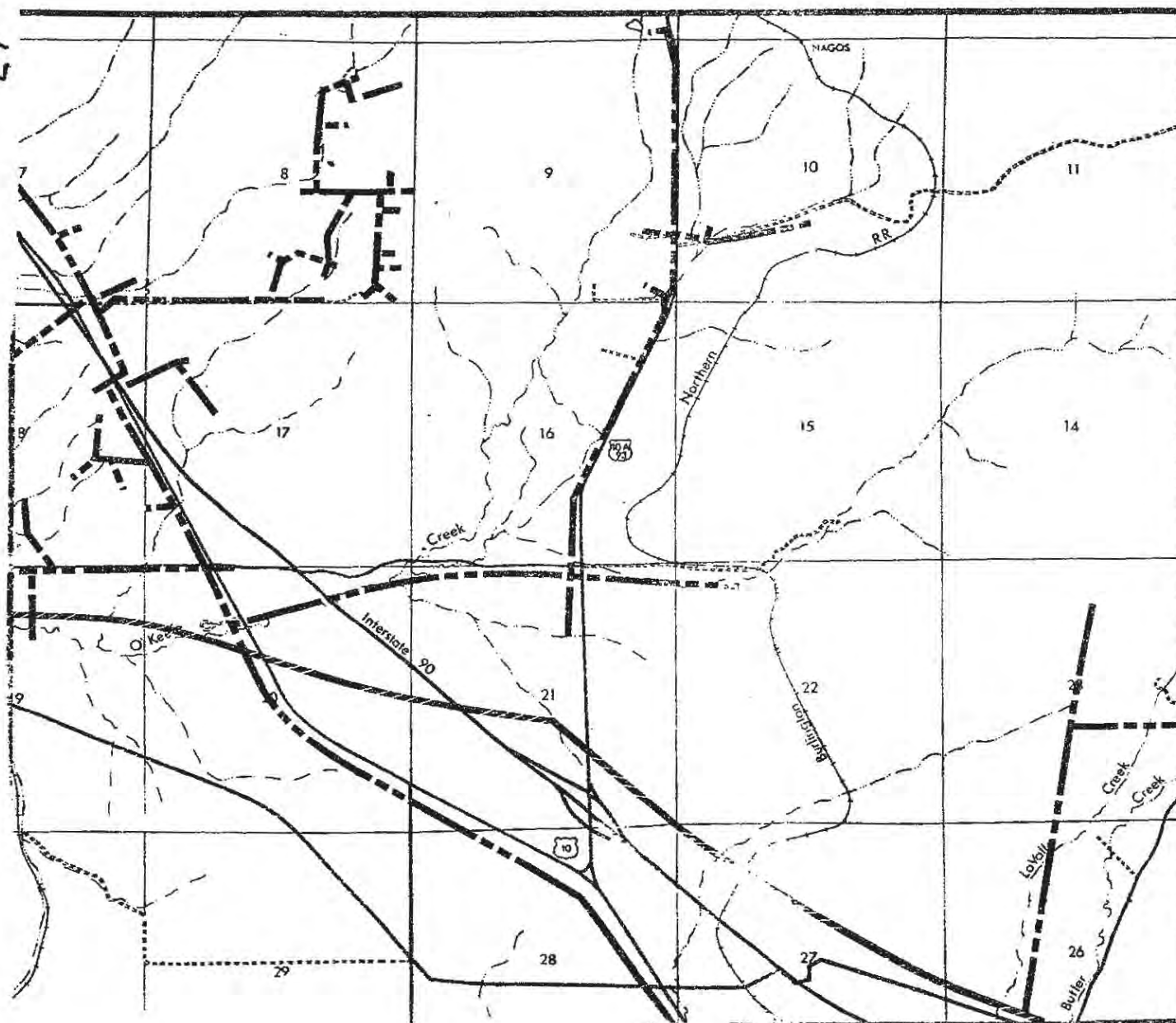
U.S. HIGHWAY 93 (FEDERAL AID PRIMARY 5)

U.S. HIGHWAY 10 (FEDERAL AID SECONDARY 474)

FRENCHTOWN CUTOFF

NUMEROUS UNPAVED COUNTY ROADS AND
PRIVATE DRIVEWAYS

BURLINGTON NORTHERN RAILROAD TRACKS



Utilities

- MISSOULA ELECTRIC CO-OP POWER LINE
- MONTANA POWER COMPANY POWER LINE
- MONTANA POWER COMPANY TRANSMISSION LINE (100 k.v)
- MONTANA POWER COMPANY - 8 inch GAS LINE (HIGH PRESSURE)

ALTERNATIVE PATTERNS OF DEVELOPMENT

Four different futures were considered when re-evaluating the "Wye" area. Trend Development, Transferable Development Right and Planned Community were the alternatives studied as well as Minimum Rural Development, which is continuing the implementation of the present plan for the area. All four patterns of growth were based on the following four criteria:

1. Basis of need
2. Public attitude
3. Impact on the natural environment
4. Impact on public health, safety and general welfare.

The basis of need for all alternatives has been addressed in the section entitled "Supply and Demand" in this report. Essentially, there is no justification expanding the amount of land for residential designation.

Public attitudes concerning the future of the "Wye" have to be clarified through open public hearings and written comments.

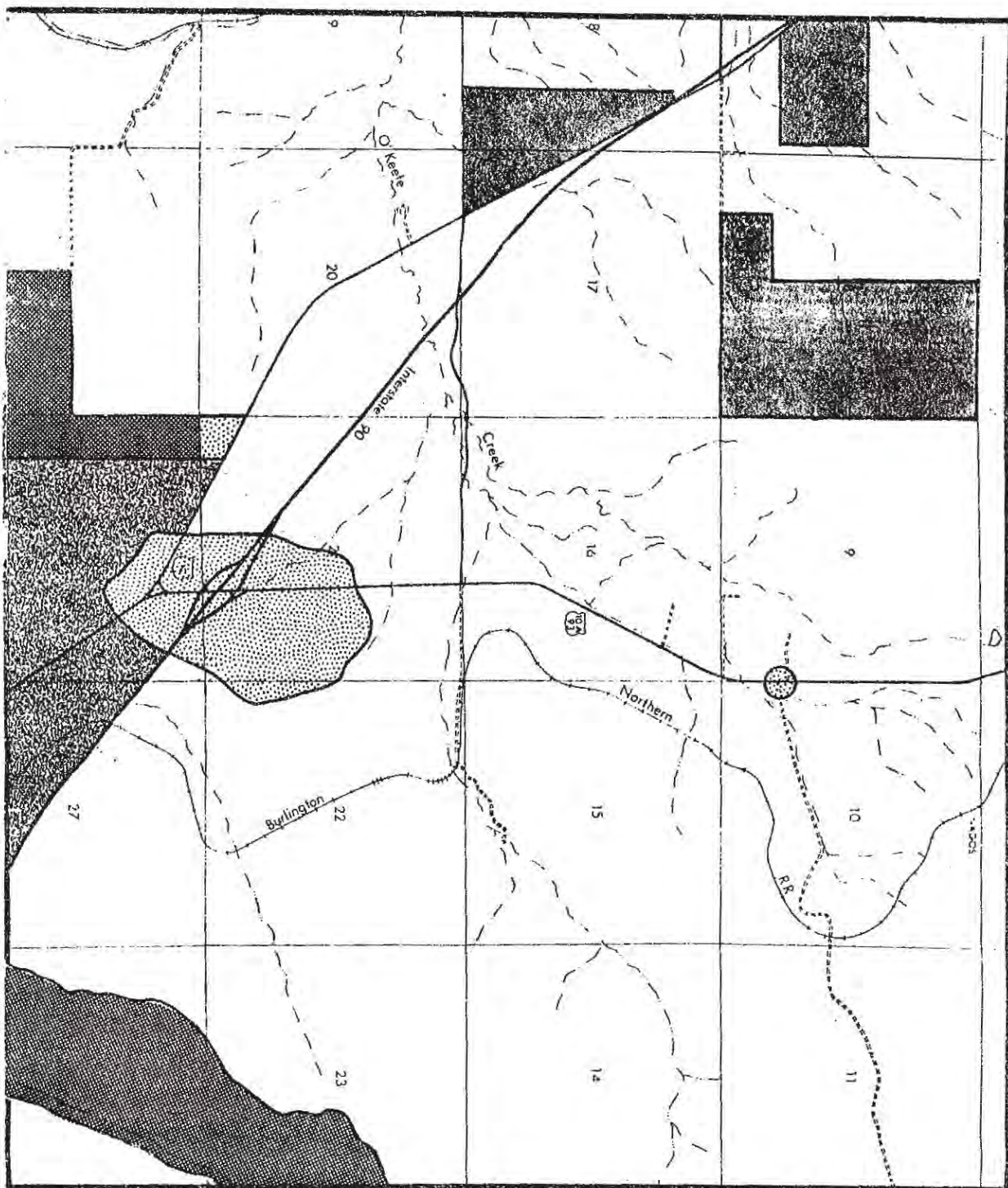
The impact on the natural environment and the impact on public health, safety and general welfare are addressed in an evaluation of each alternative growth pattern.

MINIMUM RURAL GROWTH





The minimum rural growth pattern would be a continuation of the present adopted plan. As stated in the plan, there are certain goals and objectives which are directly applicable to the "Wye" area. These goals, stated below, are used as guides for growth in Missoula County.

Development should be a logical expansion of a community to keep the expenditures for public services and facilities at a reasonable level while maintaining environmental quality. Low density development in the rural areas should be promoted to maintain the "rural ethnic" quality and minimize the effect on agricultural and timber lands. An economy should be developed in which legitimate needs and desires are satisfied, while making public a full accounting for all "social costs" of significant economic development.

According to the Comprehensive Plan, the land in the "Wye" is designated as Open and Resource land, with the exception of the commercial area in the immediate vicinity of the junction of I-90 and Highway 93 and the area around the campground, two miles north on 93. The plan recognizes the role natural resources play in the life of the citizens of Missoula County. One of its goals is to promote orderly development and protect the resources that stimulate this development. The designation of Open and Resource land is made to protect areas of important natural resource production and extraction (i.e. forestry and agriculture), to protect areas of natural hazard (i.e. steep slopes and floodways) and to reserve land for the future where development during the time frame of this plan would be premature and costly. While Open and Resource land is not a primary residential designation, residential development of not more than one dwelling per forty (40) acres would be in keeping with the intent of this classification. Minimum rural development would mean a continuation of the present development process in the area.



EXISTING PLAN

-  1 UNIT PER 10 ACRES
-  1 UNIT PER 5 ACRES
-  COMMERCIAL
-  LIGHT INDUSTRIAL

TREND DEVELOPMENT

The question of demand for development should be considered when evaluating the different alternative patterns of growth. Should the need for more development be demonstrated, trend development is one possible alternative growth pattern. This type of development has the most intensive land use near the core of an area. In a concentric pattern, the outlying land uses become less intensive. As the demand increases for more development, the boundary of the area is extended and the land use within the area is intensified. As long as demand for growth continues, land use can be designated to progressively higher density uses. This change in land use is done on an incremental basis. For example, going from a one unit per acre designation to two units per acre and ultimately changing to five units per acre twenty years later. This process is repeated as long as the pressure for growth continues.

Many problems are created by this type of development. Primarily it is not keyed towards the needs of the services. With the possibility of the population of an area doubling or tripling, many of the initial public services will not be capable of serving the increased population. Roads, sewers, water and power lines, and schools may be inadequate and have to be eventually improved or replaced. The area cannot be constructed with the future needs in mind because the limits to growth are unforeseeable.

Expensive and inefficient use of services and utilities can also be created by growth that comes in a scattered or shotgun pattern. Within the allowable area, haphazard growth spreads out development, consequently the public services also must be dispersed making an inefficient use of space and energy.

This uncontrolled growth leaves no focal point for the neighborhood, thus lacking a sense of community. Without the feeling of the community as a cohesive unit, the sense of pride in the community is absent. This sense of community encourages neighborhood participation for solving local problems and a general feeling of responsibility to the other residents.

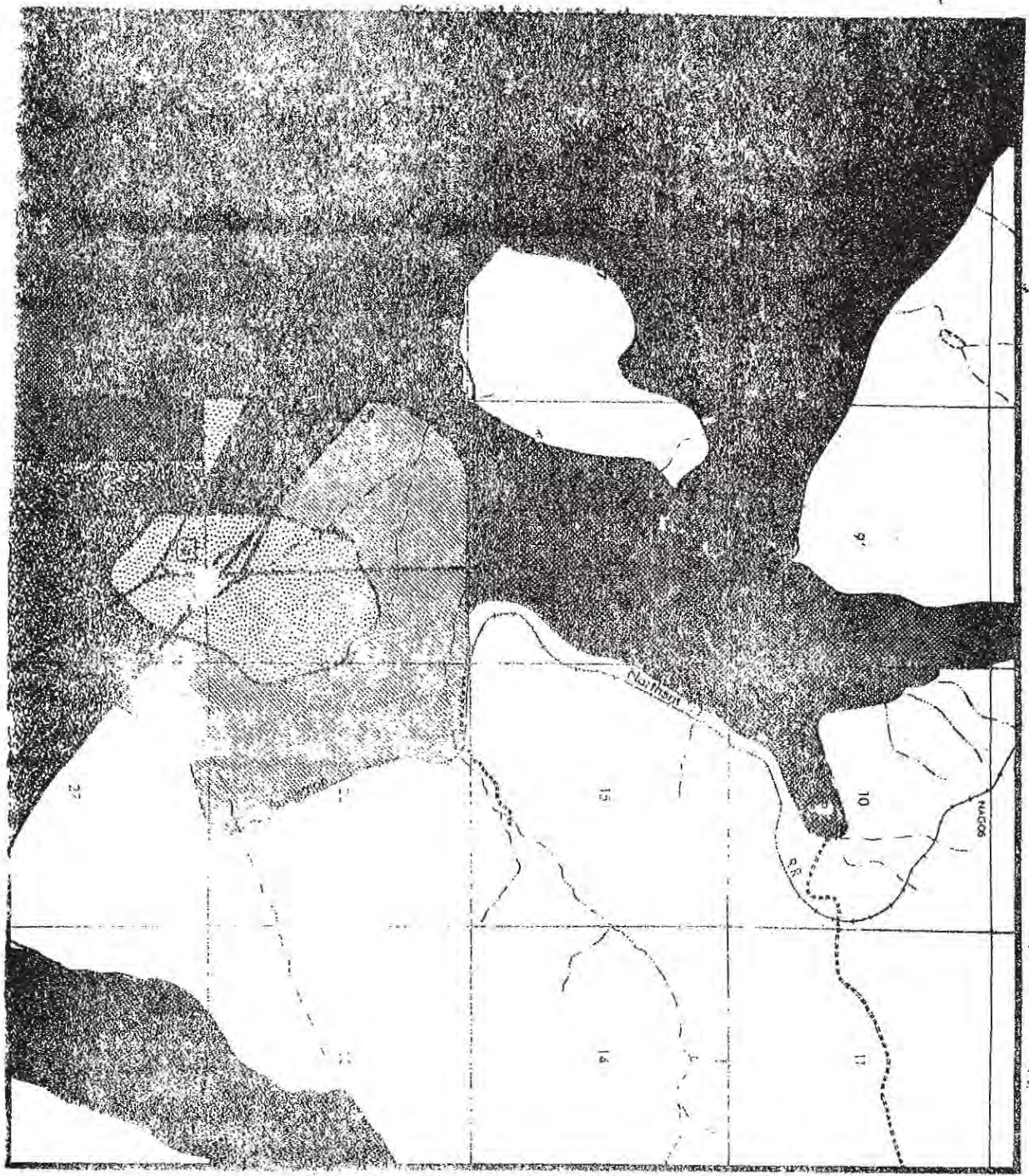
Local commercial services, such as neighborhood grocery stores, gas stations, and laundromats are not easily supplied when the development is spread out as trend growth tends to encourage. Growth in the Wye area would require the residents to commute to work and shopping. This could initiate a corridor development pattern with Missoula, which could eventually result in a radial pattern with fingers of growth reaching out into the countryside. The positive attribute of this type of growth is the ease in which it can address the change in market demands; but as pointed out, this change can result in costly growth.

The trend development in the Wye area would mean designating two units per acre around the central core or commercial area at the Interstate interchange with one unit per five acres along Highway 93 North. This pattern of land designation would keep the higher density close to the main roads and presently available utilities.

Estimations using these figures would mean an initial development with the potential of 1,280 units in the square mile around the commercial core. Along the highway, about $1\frac{1}{4}$ square miles would be designated for development with the potential for 800 residences. Growth in other areas could offer an additional 200-500 homes, depending on the designation.

Trend development, because of its lack of cohesiveness, has a higher impact on the environment. The scattering of developments demands an increase in roads and utilities whose construction and existence generally have negative affects on the natural vegetation and wildlife in the "Wye" area. Agricultural land in the valley would be the prime acreage for development thereby removing it from productivity.

Public health and safety concerning water and sewage would have to be determined for each individual site. Central sewer and water would be unrealistic until the late stages of development, in the interim alternate methods would have to be used. Dispersion of public services and utilities has been addressed previously. General welfare of the area would lack any sense of community, thereby reducing the opportunity to develop community facilities such as a commercial center, community center, churches and schools.



- 1 UNIT PER 10 ACRES
- 1 UNIT PER 5 ACRES
- COMMERCIAL
- LIGHT INDUSTRIAL
- 1 UNIT PER ACRE

TRANSFERABLE DEVELOPMENT RIGHTS (TDR)

Development Right Transfer has been employed in various forms for the preservation of historic buildings and ecologically sensitive areas since the mid-60's. Simply stated, TDR means that the right to develop is severed from one site and transferred to another. Instead of eliminating the potential for development by simple regulation, the right is transferred to another site where the owner may realize adequate compensation for his "loss".

Recently, in Missoula County, Development Right Transfer has been used to allow development of a portion of an ownership at higher density than is normally permitted in The Comprehensive Plan, while preserving the remainder of the ownership. This concept conserves utilities and services by limiting the extent of subdivided land, while leaving the remaining land as open space. In the future, the open space land may be allowed to be developed, as the Comprehensive Plan reflects changes in housing needs in the County. Grantland-Rankin and Hidden Heights are examples of subdivisions using TDR.

The TDR alternative outlined here for the Wye area extends the possibility of Development Right Transfer across ownership lines. Development rights become a commodity with an established value that can be applied to development within the designated district when the housing market provides a demand for those rights.

The legal mechanism for creating this TDR system would probably involve conservation easements applied to areas where development rights are removed and require a designated Transfer District where the increased density may be applied. The specifics of this system would provide the greatest incentives for removing the development rights from designated agricultural and Wildlife Conservation Districts and lesser incentives for removing them from Open and Resource Districts. The Development Transfer District would be able to accept increased development up to probably two units per acre.

The table below outlines some possible guidelines for development densities within the various districts.

	Development Transfer District	Open and Resource District	Agricultural and Wildlife Conservation District
Maximum Density without Transfer	1/40	1/40	1/40
Maximum Density with PUD (no transfer)	1/10	1/10	-
Maximum Density with Transfer	2/1	-	-
Maximum to be Transferred Out of district	-	(1/20)	(1/10)

It can be seen from the preceding table that there is some incentive for purchasing development rights (at one unit per 20 acres) from the Open and Resource District. A greater incentive (one per 10 acres) is shown for transferring rights from the Agricultural or Wildlife Conservation District.

There are two important aspects to consider in the TDR approach. First, the limits of the area within which transfers may occur becomes an important factor in the pattern of continued growth. If the TDR system is initiated, it should be uniform in establishing criteria for conservation districts and transfer districts throughout Missoula County. However, transfers should not be permitted between tracts that are at great distances from one another. Possibly school district boundaries should be used as the limit for transferring development rights.

A second consideration is that TDR will promote development in the Wye area by providing a means for higher density development in the vicinity of the highway interchange. The various TDR districts would overlay existing Comprehensive Plan designations and shorten the expected time frame for development in areas under development pressure.

Regarding environmental impacts, the TDR approach has many positive aspects. Preservation of prime agricultural land and wildlife habitat was the initial motivation for applying the TDR concept to land development. By transferring the right to develop away from agricultural, critical wildlife, or other lands with natural resource value, some degree of environmental resource enhancement can be obtained. Conservation easements will be applied to the land when the development rights are severed and the duration of these easements may depend on the degree of preservation needed. Conservation easements on open and resource land with no significant ecological value may be subject to future change as additional development rights are designated to the area through the Comprehensive Plan.

Effects of this proposal on groundwater will depend on the character of development allowed within the transfer district. Central sewer, which will be more feasible at the increased densities, will certainly decrease the possibility of groundwater pollution. However, if individual septic tanks are concentrated in an area of potential aquifer recharge, an adverse impact can be expected.

Energy efficiency is improved with the concentration of public services and roads. When comparing TDR with other development proposals in the Wye area, energy could be conserved by concentrating development in the transfer district. On the other hand, comparing TDR or any other development proposal for the Wye, with development that is contiguous to the limits of the City of Missoula, will show some inefficiencies in developing this satellite community.

Public services and community infrastructure will need to be expanded or redesigned to accomodate this new development. The question is whether other forms of development in other areas of Missoula County can accept new growth and development with less cost for installation and long-term maintenance of public services and facilities. The current Plan identifies areas for residential development in closer proximity to the urban center, and it was the intent of that Plan to minimize the costs of unconfined "leap-frog" development.

Regarding the effects on taxation, it is obvious that any development will increase the tax base, but whether that tax increase will cover the cost of providing increased services is a complex problem. In general, new residential development on the urban fringe does not pay for itself, unless it occurs in an area where the community infrastructure is already existing (e.g. the Orchard Homes area). Development design can, however, promote efficiency through minimizing the extent of roads and utilities required to serve residences.



PLANNED COMMUNITY

The overall intent of a Planned Community is to create the physical layout for a development that best promotes a desirable lifestyle.

Reinforcing common objectives is necessary in order for a community to evolve into a positive, pleasant and safe area in which to work, live and play.

The common goals that a Planned Community Development intends to create are:

1. An integration of the home with the other aspects of daily life (e.g. work, shopping, school and recreation).
2. A safe and healthy living environment for all ages, and income groups.
3. A feeling of identity and responsibility for all residents towards each other and the community.
4. Opportunities for social interaction, political participation and environmental sensitivity.

The physical structure of the community can be planned to reinforce the common objectives of building a pleasant, safe and orderly development.

A major reinforcement factor of a Planned Community is to instill in the residents a feeling of belonging and responsibility for the area. This feeling can be created by an environment within a community whereby the residents identify and feel an important part of that community. Human nature dictates that feelings of identifying and belonging to a community stimulate a responsibility to that community or the part of its residents. Therefore it is desirable to encourage designs that reinforce a feeling of identification and a sense of belonging.

It is still assumed that the family unit is the basic building block of a community. Tying the routine of a family's daily life together in a Planned Community promotes a unity of the family and of the community. Linking work places, schools and shopping areas with the home encourage the desired feeling of belonging and identifying with a community. This is sadly lacking in many communities today, with the family separating in the morning and each going their own way. Generally, jobs and shopping facilities are located across town, and often the schools are several miles away. Therefore, home becomes only a place to return to at night.

The days of the corner grocery store and neighborhood schools are rapidly disappearing. Work facilities located within walking distance are rare. Family picnics in the park or leisurely strolls down quiet streets have all but disappeared.

A Planned Community can reverse the trend by placing schools, jobs, neighborhood shopping facilities and parks for recreation close to home, usually within walking distance.

Social interaction is an important factor in creating a development that enables its residents to meet each other.

Presenting opportunities for peoples' paths to cross definitely enhances social interaction. Meeting at the neighborhood store, in the park, at the school or even on the way to work is a real possibility living in a Planned Community Development. Social interaction, however, is more than just exchanging pleasantries, although

that aspect should not be overlooked. Interaction among the residents inevitability leads to greater political participation and an increase in community activity.

For purposes of presentation, the Planned Community is broken down into five social units, placed on a graduated scale. This scale is on a hierarchical format with the smallest unit, the family, at the bottom, proceeding up through the cluster, neighborhood, district and finally to the community level. The basic unit, which is the family, is the building block on which the entire community is based. A family is defined as a single individual, a couple or a family that occupies its own dwelling unit. The dwelling unit may be a house, apartment, condominium, townhouse or any other variety of housing unit. Many policies of the Planned Community would serve to reinforce the family lifestyle.

The next step on the scale is the cluster, which is a grouping of three to twelve dwelling units. Within this grouping there should be commonality in design, structure type, size, ownership pattern and open space. Each cluster should provide pedestrian links to all dwellings within the cluster and the rest of the community as well. A small common green that can be used as a playground, a meeting place or a point of interaction should be conveniently located for all residents of the cluster.

The neighborhood unit is the level that provides the link between the cluster and the district. This unit is a grouping of three to twelve clusters in an area that should not be more than one-quarter mile wide and that is not dissected by major streets. A common green or park of at least 60,000 square feet should be provided as the focal point of the area. The clusters within the neighborhood should be connected by pedestrian links that provide easy access to the common green. Common greens would be the place of recreation and interactions among the neighborhood level. The neighborhood level should provide for some range of housing types and income levels. Limited work place opportunity could be available in some clusters within the neighborhood.

Districts are on the next level of the community structure scale. These are groupings of three to twelve neighborhoods that would roughly have a population of 5,000.

The district should be a well defined area. Delineation is by boundaries that separate that district from the rest of the community. These boundaries are usually either physical barriers such as major streets, railroads, or major utility lines or natural features, such as rivers, hills or forested areas.

The district is the level where it becomes feasible to have an elementary school. It is important that the school is not located more than one-half mile from any dwelling within the district. This is the maximum walking distance recommended for school age children. A safe pedestrian system needs to be incorporated linking the home with the school. A large park should be in conjunction with the school, allowing a place for the children to play and the adults to meet. As near as possible to the school, a district commercial center should be developed.

The district commercial center would replace the corner grocery store and the cross town drive to super market. Other district conveniences would be provided at this level, such as a drug store, laundromat, bakery, tavern and other various small scale services.

District work facilities should be on the edge of the district, preferably in conjunction with work facilities of nearby districts.

Within the district there should be bands of dwellings at progressively higher densities with the lowest density at the periphery of the neighborhood or furthest from the community core.

The community level is a contiguous combination of districts. Community level facilities offer mainly larger commercial services and more places of employment. As a community grows it should be done on an incremental basis by the district level. When a district nears 75 percent build-up another should be allowed to develop. Generally the higher density neighborhoods would be the commercial core of the entire community.

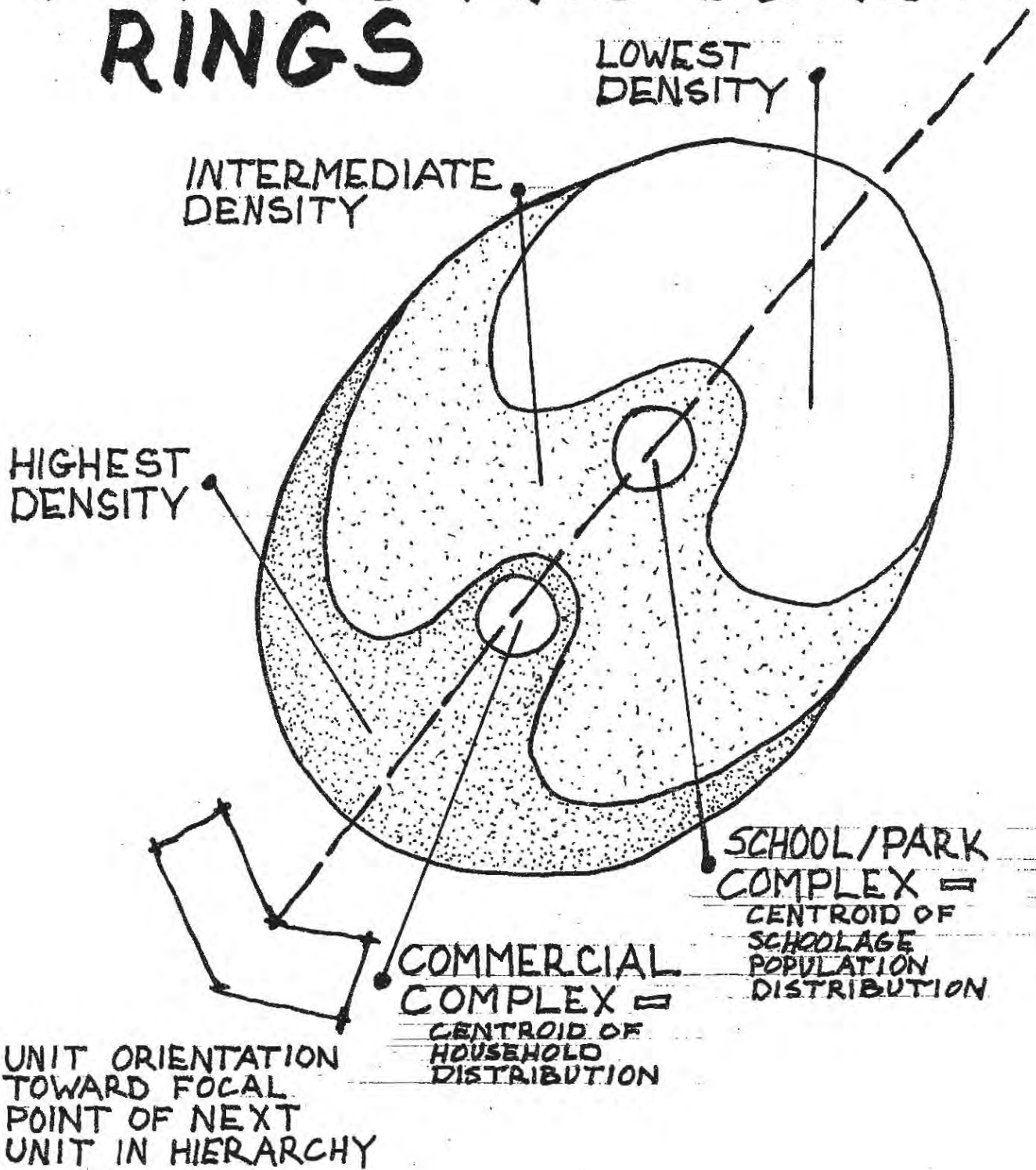
Standards were developed concerning land use, housing, transportation, environment and community facilities to serve as guidelines for a Planned Community. They also act as recommendations to allow transitional use of the land while the neighborhood is being developed.

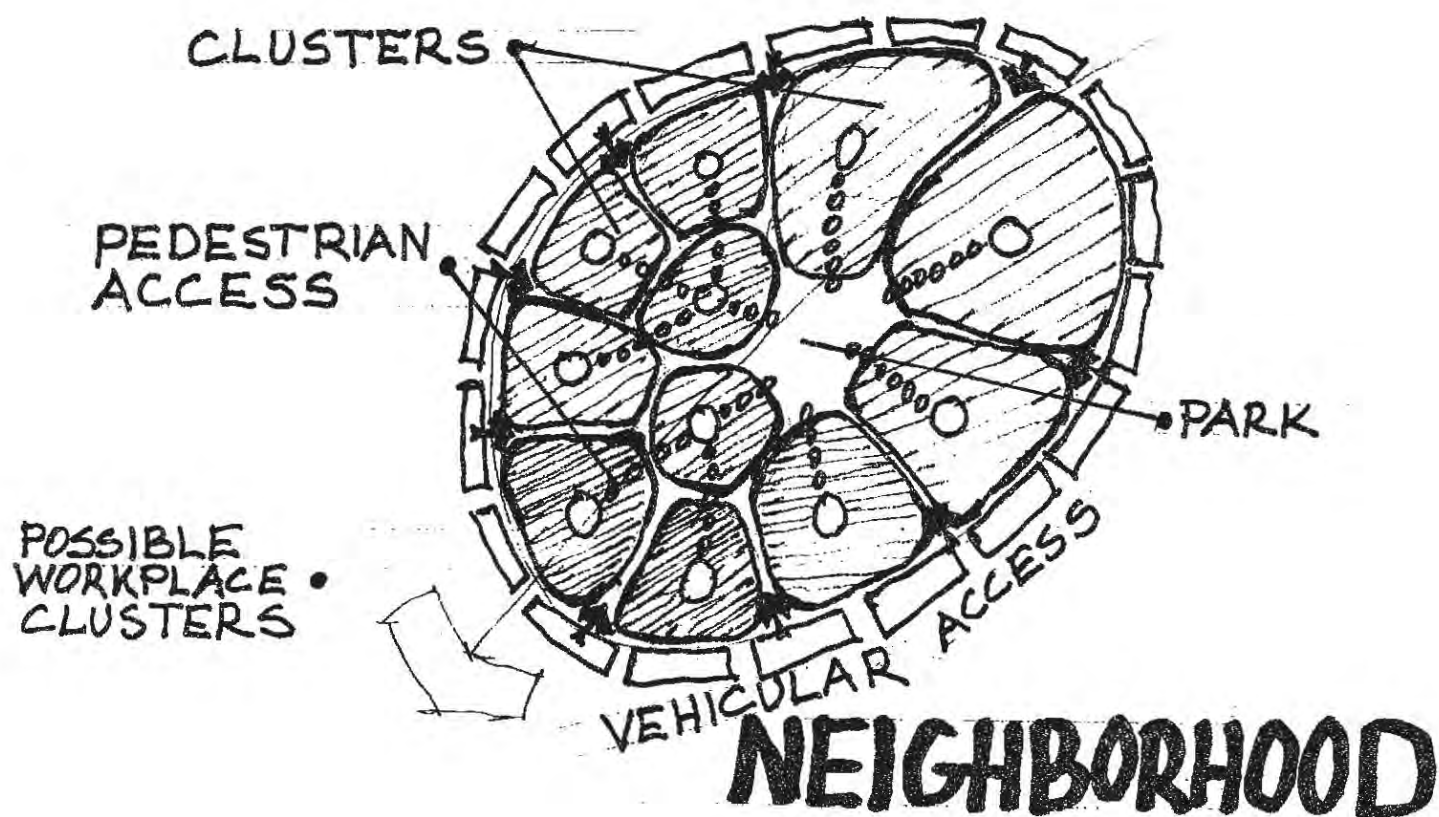
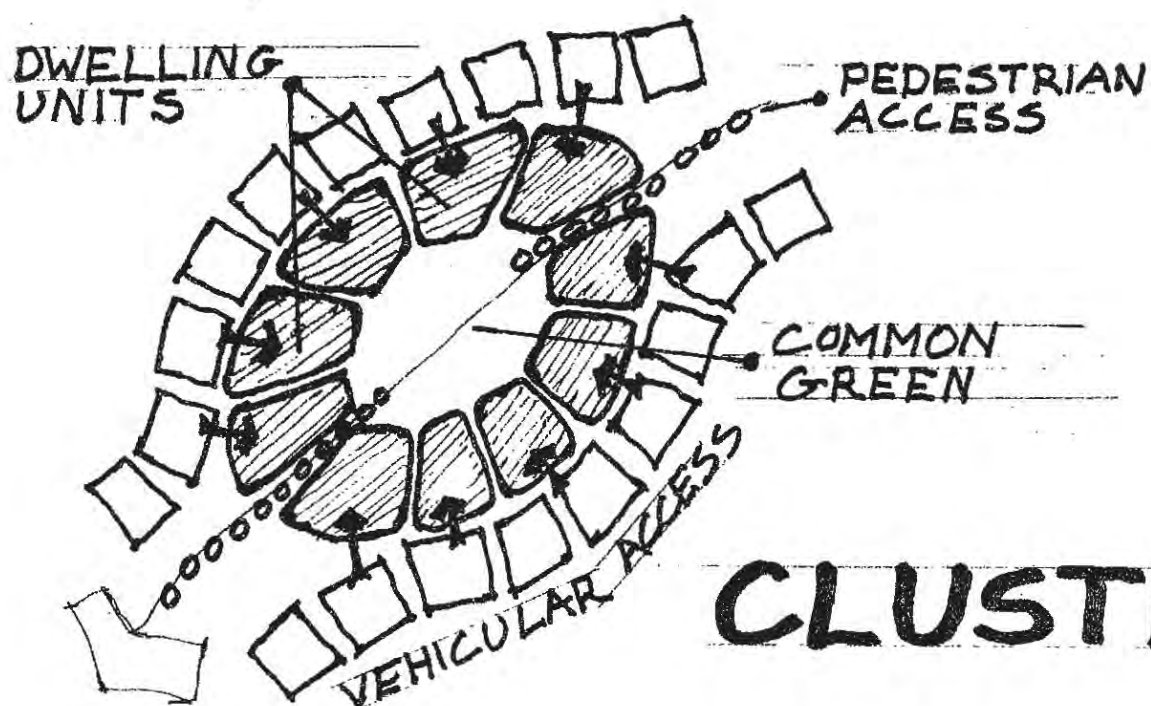
Transitional standards to allow the development of land from agricultural use to urbanized uses become a key element in promoting the planned community alternative. The transitional standards perform two major functions. In the absence of effective rural zoning, the standards should provide for a transition of agricultural land to large tract rural residential use with a minimum of conflict in governmental review, future land use opportunities, and environmental quality. By maintaining a minimal level of regulation the standards would have a greater chance of adoption while providing some review of development patterns in areas where conventional zoning has failed. The second role of the standards should be to promote the change in land use from rural residential uses to urban development forms. This facet of transitional standards should focus primarily on the developing districts, but may also be used in the rural areas as an alternative to large lot rural sprawl and as a mechanism to promote environment concerns.

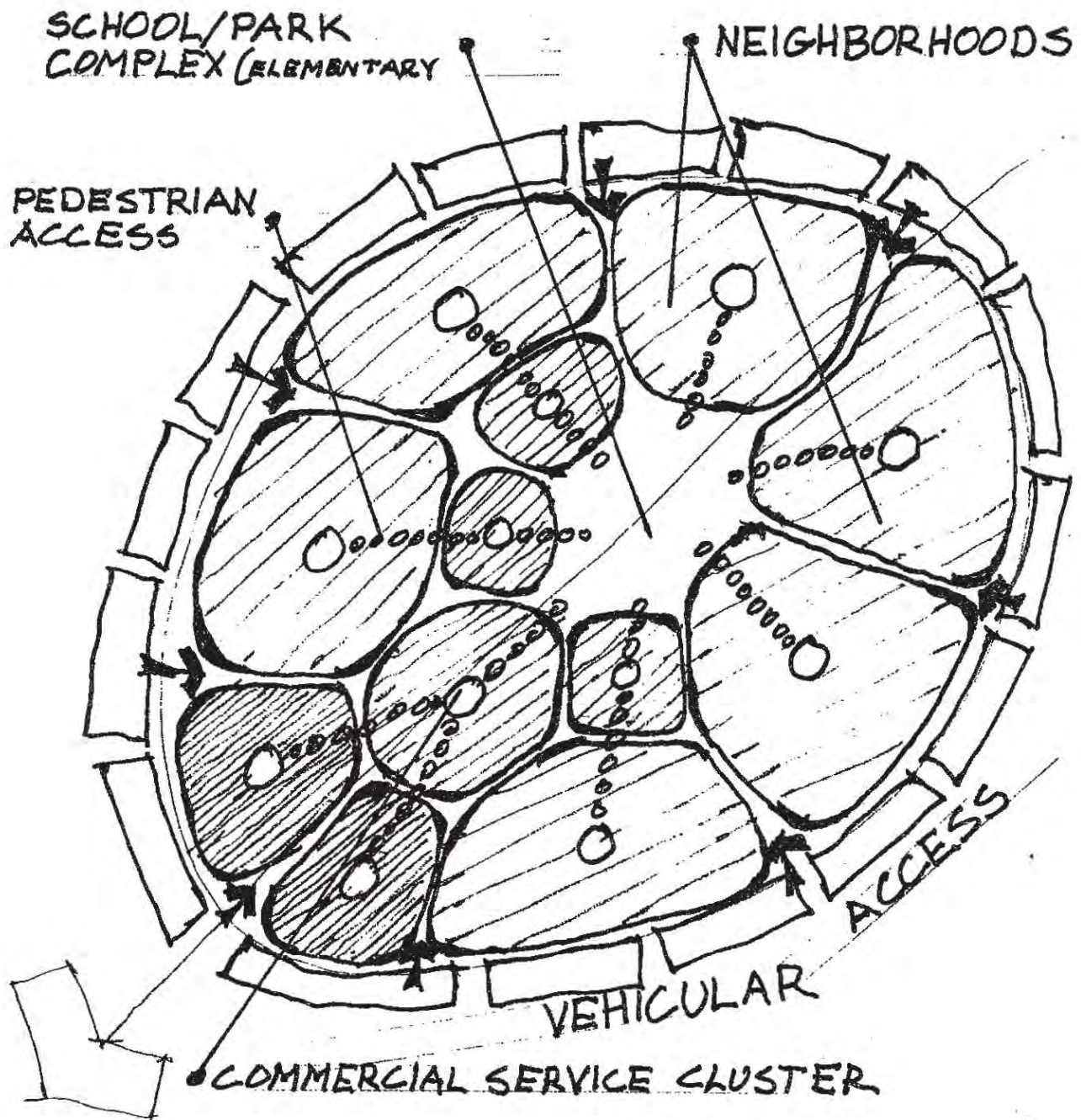
Rural transition standards should provide for the development of land up to a maximum density of one dwelling unit per five acres. In addition, rural transitional standards could provide for limited development at a maximum density of one dwelling unit per acre. The limitations of this later standard should address environmental concerns, need, impact on public services and facilities and impact on the designated districts and neighborhood units of the planned community.

Urban transition standards should provide for the development of the designated districts and neighborhood units from rural and large tract residential uses to urban forms. These would include higher density single family, multi-family, commercial and industrial work place uses, neighborhood commercial services, public services and transportation systems. The major concerns of these transitional standards should include preserving future development opportunities in order to achieve the preferred development pattern of a planned community.

CONCEPTS OF FOCAL POINTS AND DENSITY RINGS





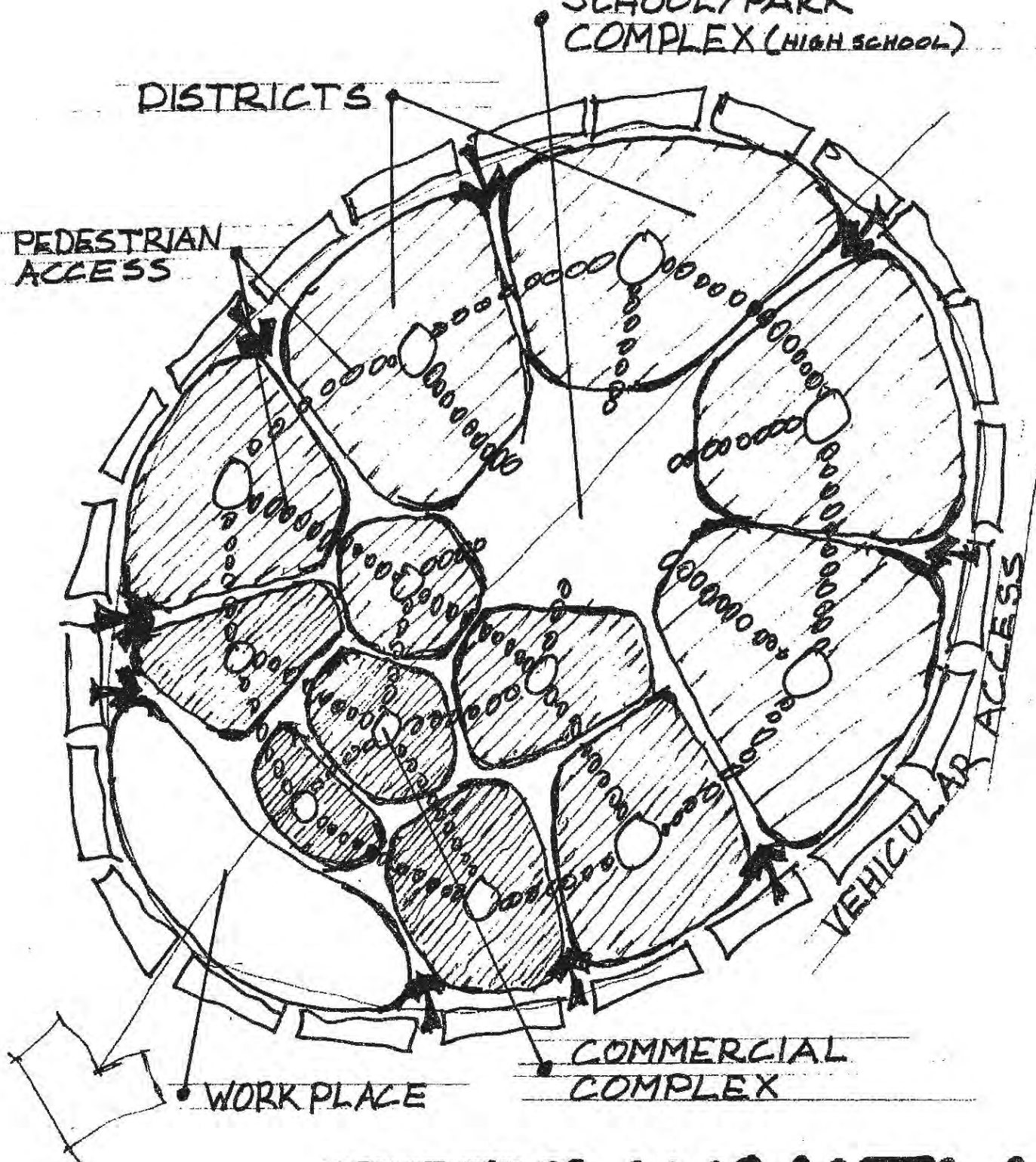


DISTRICT

SCHOOL/PARK
COMPLEX (HIGH SCHOOL)

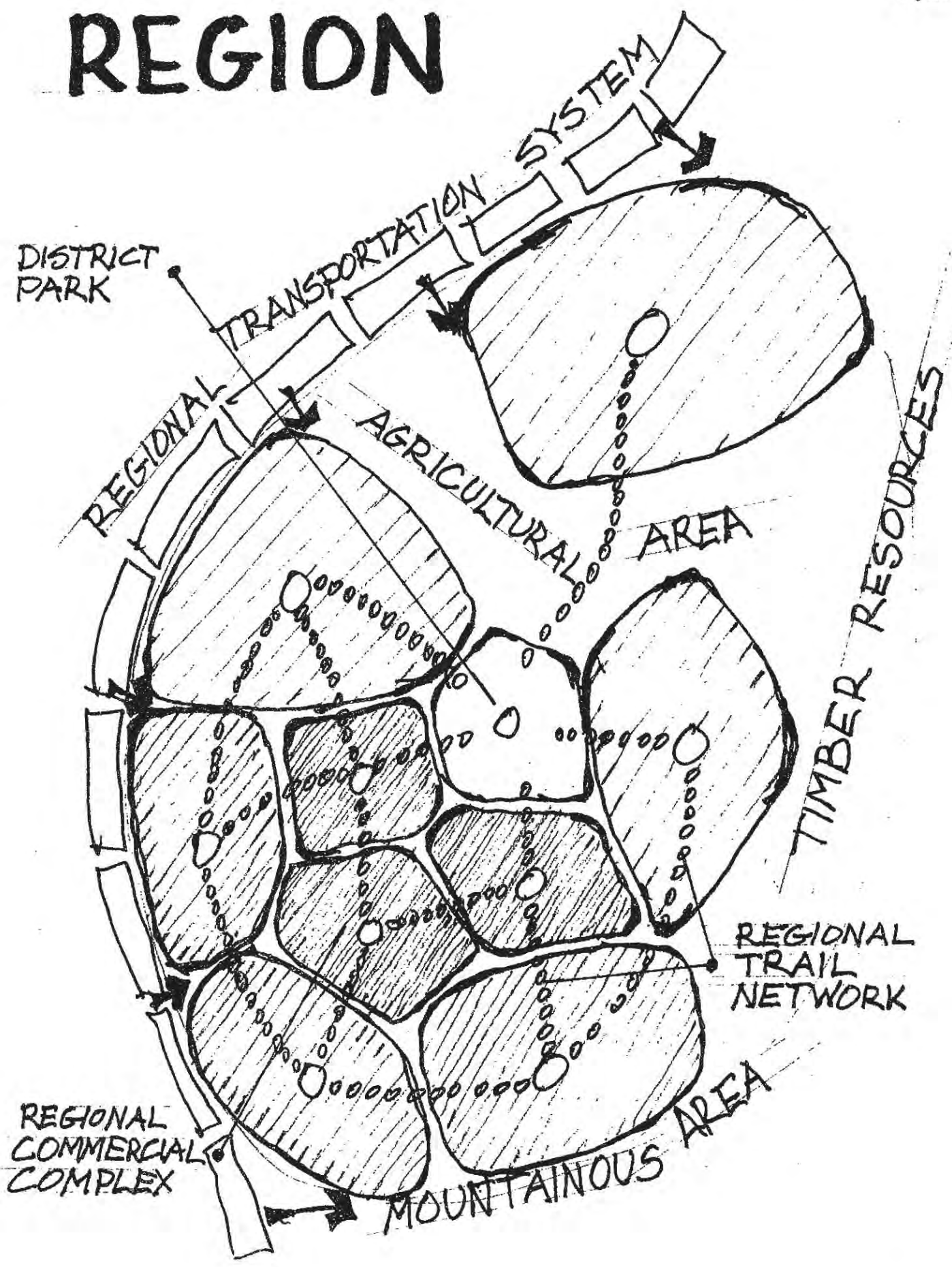
DISTRICTS

PEDESTRIAN
ACCESS



COMMUNITY

REGION



PLANNED COMMUNITY CONCEPT AT THE "WYE"

Development of the Wye area lends itself as opportunity to create a district that would fit into the Planned Community concept. Initially only one district would be planned; but, if the demand exists for additional district units they could easily be designed in conjunction with the first. The area for the first district would be one of approximately 600 acres located northeast of the junction of I-90 and U.S. 93. This area involves the eastern half of Section 22, the western one-third of Section 21 and small corners in the northeastern part of Section 28 and the northwestern part of Section 29 of T14N, and R20W.

Several reasons were considered for this specific area as the initial district development. One is that it is a well defined area. Burlington Northern railroad tracks form the eastern edge with Interstate 90 to the south and U.S. 93 to the west. The extension of the Waldo Williams road would create the northern boundary. Boundary delineation is essential in the development of an identifiable district. This area also offers many other advantages for a Planned Community development. Presently there are only a few landowners in the specific area making it much easier to undertake a large scale development. Also there are no existing residences and the only structures are the highway commercial and light industrial businesses located at the junction of I-90 and U.S. 93. These types of businesses could easily be incorporated into the Planned Community concept.

Other existing land uses in the area are of the marginal agricultural type, mostly livestock grazing land except for a few acres that are used to grow Christmas trees. Environmental affects of a development in the area would be fairly low. Preliminary studies indicate that the soil in the area is intermixed with clay, which has poor drainage qualities. This can create erosional problems and expensive soil situations requiring houses and roads to be built with a well drained sub-base and drainfields would have to be carefully placed. There are few creeks flowing in the area indicating that disruption of surface water could be minimal. The initial district would be well beyond the southern limits of the deer and elk wintering range causing virtually no affects on wildlife for the vicinity. Slopes in the area do not appear to present a serious problem with construction.

The Wye area itself encourages industrial and highway commercial growth because of excellent three-directional links via I-90 and U.S. 93. Businesses that require good transportation access are likely to be drawn toward the Wye.

An example of how the Planned Community could be applied in the Wye was developed. The concept would allow for areas immediately adjacent to the highways to be used for light industrial and highway commercial activities. Access into the neighborhood would be provided by a road off of the Waldo Williams extension and an entrance off of U.S. 93 entering into the center of the neighborhood. These streets would form a collector loop off which local cul-de-sacs and loop streets would branch. This would provide easy access yet minimize through traffic.

On either side of the main entrance off U.S. 93 would be a high density area, such as apartment houses, condominiums, or townhouses. These would be clustered in such a manner as to allow for individuality and open space between clusters and eventually have a density of between sixteen to twenty-five units per acre. Toward the interior of the district would be an area of medium density housing. This would consist of attached single-family and multi-family dwellings having a density of six to sixteen units per acre. Furthest east would be the area of low density single family units, with a density range of two to six units per acre. The school, park and district commercial sites would be located in the center of the district providing accessibility to all the residents.

Conceptually this area would evolve into the initial district cell for a Planned Community in the Wye area. As it neared 75 percent build-up, a second district would be allowed to initiate development. The obvious location for the next cell would be directly across U.S. 93. This triangle-shaped area would be bounded by U.S. 93, I-90 and Waldo Williams Road forming another identifiable district cell. The interior would be similar to the first district with a collector loop. Each district would have an elementary school within one-half mile of most of the dwellings and a convenient park and nearby employment possibilities.

The remaining lands within this drainage of O'Keefe Creek would be designated as Rural Transitional, with a maximum residential development of one dwelling unit per five acres. Limited development may be possible at a density of one dwelling unit per acre if the basis of need, environmental quality, impact on public services and facilities, and impact on the designated districts and neighborhood units are favorably addressed.

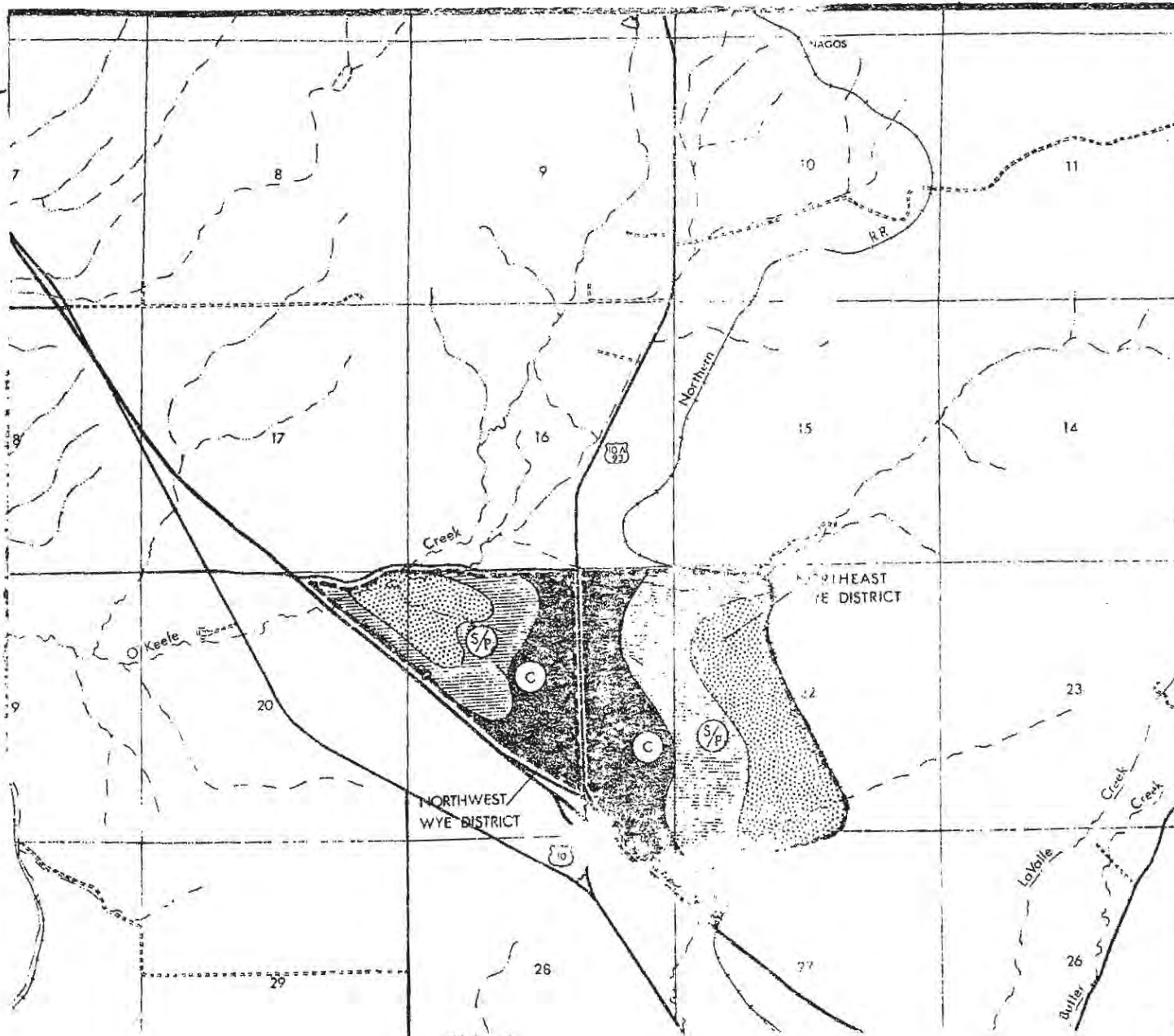
The concept behind the district unit development is to provide an area in which the resident develops a feeling of belonging, and the districts are grouped in a way as to provide a feeling of community unity. This identity with an area carries a feeling of responsibility and security which makes the development a more pleasant place to live.







Land Use

1. Rural standards to be observed to allow an economical redevelopment of rural parcels.
 - A. In rural areas all structures to be 50 feet from all property lines.
 - B. The dwelling and major accessory structure (i.e. well house, garage well and subsurface disposal system) to be located on a designated $\frac{1}{2}$ ($\frac{1}{4}$) acre building site.
 - C. Minimum lot size should be five (5) acres with reduced lot sizes maintaining a one dwelling per five (5) acre density allowed after special review.
 - D. Each lot should have a minimum utility road easement of 30 feet on all property lines except those adjacent to an approved public right-of-way.
 - E. Dwelling should be separated by 100 feet from any other dwelling to provide adequate fire protection.
2. Play ground size should be based upon projected use.

Playgrounds should be based on one acre per 100 potential elementary school children. They are active play areas designed to serve the five to 15 year old age group and family groups and should range in size from 3-7 acres.
3. School site size should be based on projected enrollment.
 - A. Elementary school sites should be approximately 7-18 acres
 - B. Junior high school (middle school concept) 18-32 acres.
4. Commercial area site should be accessible well spaced and have a size equatable to the projected population for that area.
 - A. As retail and personal services and business uses dependent on walking traffic, they shall be encouraged to group together, preferably within planned centers to maximize sales and pedestrian movement within the concentration.
 - B. District commercial areas should be three to eight acres in size, and they should be located $1\frac{1}{2}$ to 2 miles apart.

49A



-  LOW DENSITY
-  MEDIUM DENSITY
-  HIGH DENSITY
-  SCHOOL/PARK
-  COMMERCIAL
-  DISTRICT BOUNDARY

PLANNED COMMUNITY

Land Use

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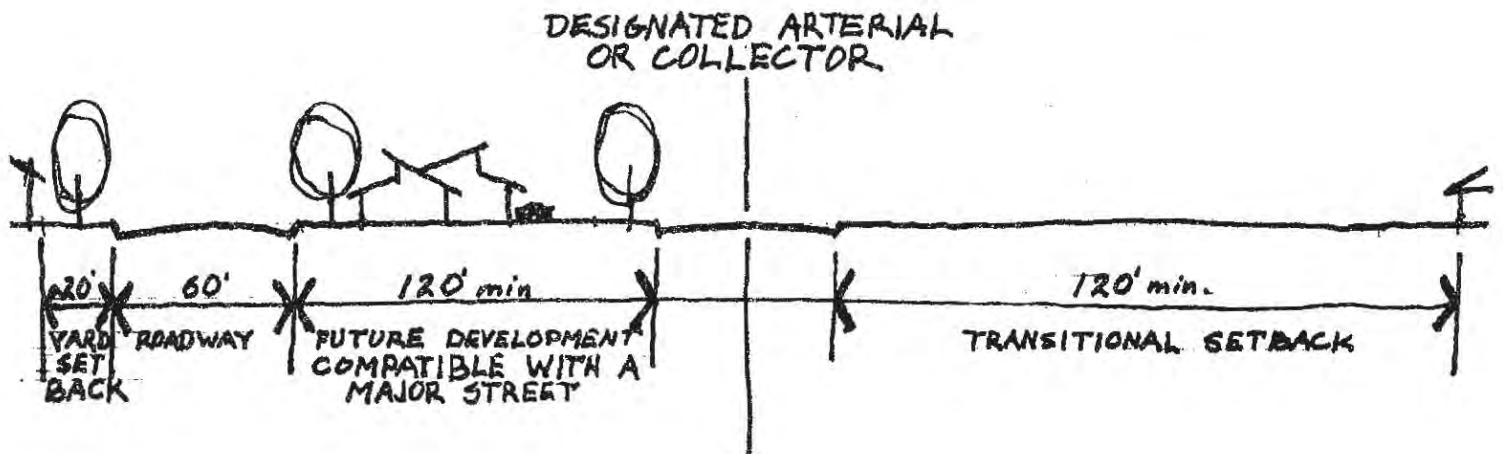
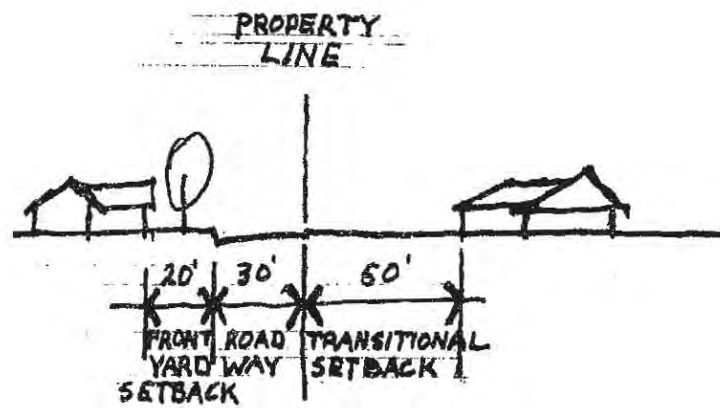
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 - A. Elementary school sites should be approximately 7-18 acres
 - B. Junior high school (middle school concept) 18-32 acres.

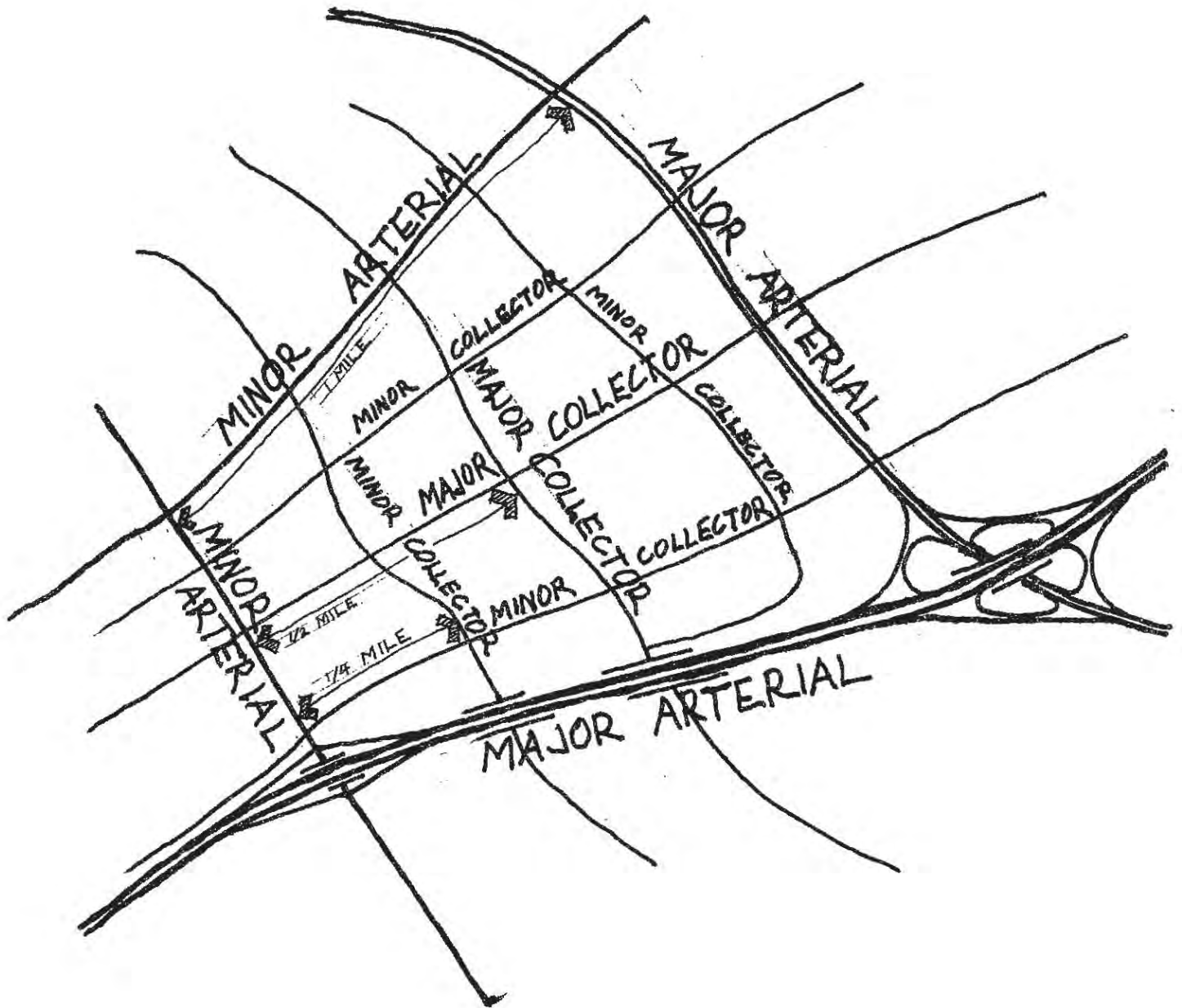
4. Commercial area site should be accessible well spaced and have a size equatable to the projected population for that area.
 - A. As retail and personal services are business uses dependent on walking traffic, they shall be encouraged to group together, preferably within planned centers to maximize sales and pedestrian movement within the concentration.
 - B. District commercial areas should be three to eight acres in size, and they should be located $1\frac{1}{2}$ to 2 miles apart.

Land Use Cont.

5. To promote the highest use of the land and limit the amount that can be used for parking.
6. Highest density residential uses to be transitional between non-residential uses (i.e. commercial, industrial, arterials) and lower density residential.
7. Middle density residential uses to be transitional between non-residential uses (i.e. commercial, industrial, arterials) and higher density residential and lowest density residential.
8. No dwelling to be constructed in conflict with the street systems, floodplains, or water courses.
 - A. Minimum setback from designated collectors or arterials should be 200 feet to allow for future redevelopment of the property adjacent to a major street.
 - B. No dwelling units to be located closer than 100 feet from designated water courses.
 - C. No dwelling to be located on the floodplains or within 75 feet of low-lands without delineation of floodplain.
9. Create a variety of work places and reduce the negative impacts of industrial uses by scattering industrial sites.
 - A. Place industry in ribbons between 200 and 500 feet wide forming boundaries between communities.
 - B. No industrial structure allowed within 100 feet of a residential use.
 - C. Break industrial lands into areas between 1-25 acres.



TRANSITIONAL STANDARDS



**CIRCULATION
PATTERN**

Transportation

1. All structures should have proper vehicular access based on approved governing body standards.
 - A. Access should allow for public street improvement and maintenance.
 - B. Access points should be minimized to promote safer streets.
 - C. Structure design should allow proper line of sight at intersections.

2. Access to individual structures should allow for redevelopment opportunities.

In rural and transitional areas structures should be set back 50 feet from property lines to allow for development of access along, such property lines.

3. Provisions of alternative forms of transportation should be made.
 - A. Local streets should allow for bicycle and pedestrian access where separate walkways are not planned.
 - B. Local street pattern should be designed in order to maximize development of bus stops at intersections, of pedestrian movement, and collectors and arterials

4. All structures should have proper vehicular access based on approved governing body standards.

5. Access and street improvement design should reflect safety, convenience, energy conservation, environmentally sensitive design, and alternative transportation opportunities.

6. Local streets serving individual structures should discourage through traffic and promote localized needs.

Transporation Cont.

7. Access onto collector and arterial will be controlled for reasons of safety and convenience.
8. Off-street parking within cluster areas is required.
9. Pedestrian walkways and bicycle access should be provided for all dwelling units (except in low density and rural areas)

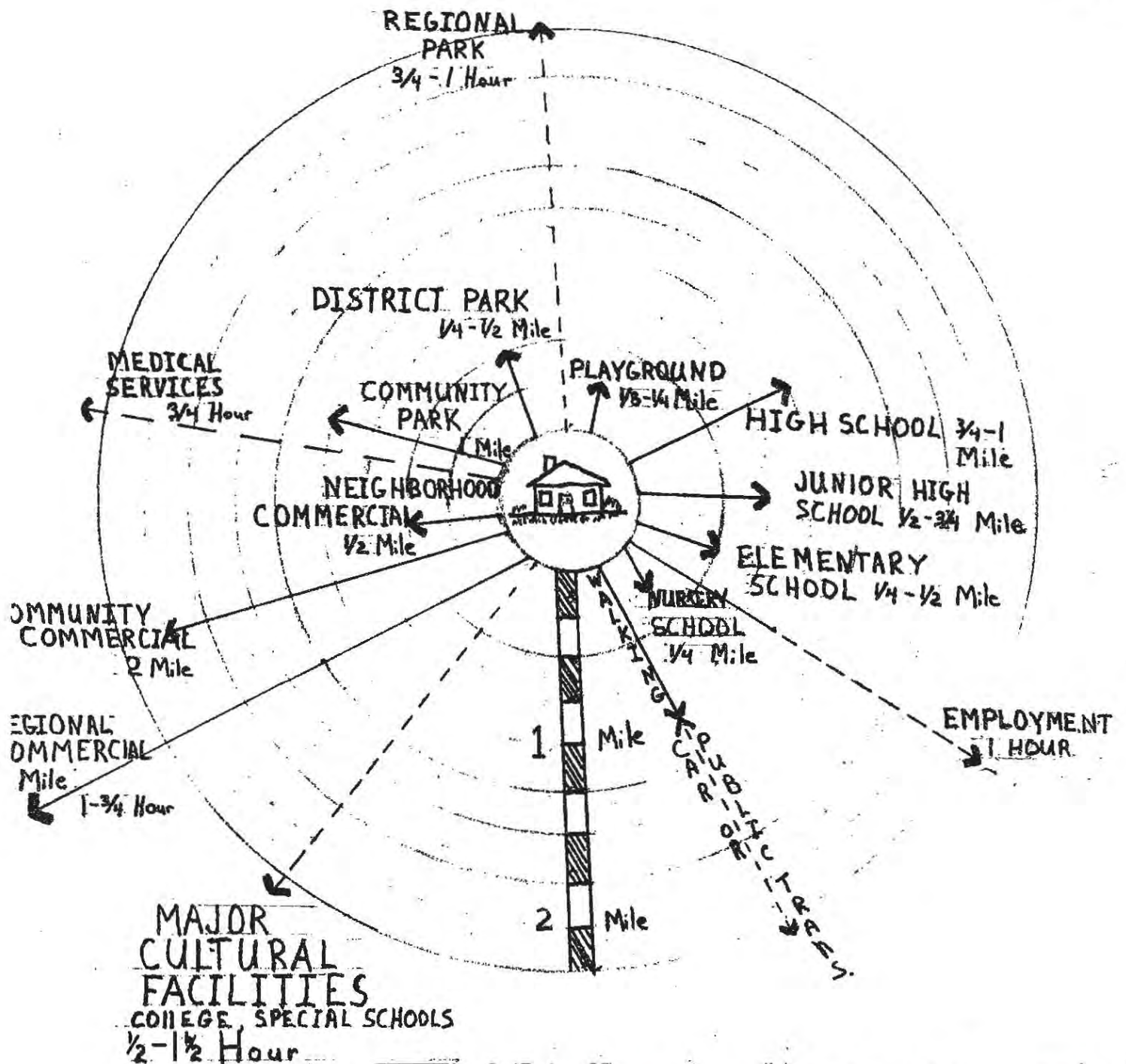
Pedestrian walkways should be separate from the street on collector and arterial streets for safety reasons.
10. Arterials cannot dissect districts.
11. Collector streets cannot dissect neighborhoods.
12. Street improvement design should reflect safety, convenience and energy conservation.
 - A. Intersections should be at near to grade and 90 degrees from each other as possible
 - B. Local roads should have a right of way width of between 48 feet and 60 feet.
 - C. Cul-de-sacs should not be longer than 600 feet and shall have a turnaround with an outside roadway surface diameter of at least 70 feet, unless a specific problem exists with the existing topography and circulation pattern.
13. Pedestrian crossings to be designated and chosen for safety and convenience.
 - A. All pedestrian crossings to schools, except for low volume local streets, to be grade separated or signalized.
 - B. Parking areas to be strategically located and well landscaped at the neighborhood level.
14. Collector streets should be located within districts where designed to distribute neighborhood traffic only and serve those facilities located within the district.

Transportation Cont.

- A. Collector streets should have a right-of-way width of 60 feet.
 - B. The right-of-way needed per moving traffic lane is 12 feet.
15. The secondary arterial should be located where it can collect and distribute traffic from major arterial streets to less important streets or directly to traffic destination.
- A. Arterials to have a right-of-way width of 80-120 feet.
 - B. Arterials should be located on district boundaries.
16. The major arterial should be located where it can collect and distribute traffic from freeways or expressways to less important streets or directly to the larger trade center, civic center or cultural center, industrial areas or passenger or freight terminals.
- Major arterials to have 120 feet of right-of-way.

Community Facility

1. All dwellings (except in rural areas) must be within the recommended response time and distance from the fire and police facilities.
 - A. All dwellings must be within 300 feet of a fire hydrant.
 - B. Maximum response time for a dwelling from a fire station is four minutes.
 - C. Maximum response time for a dwelling to be from police service is two and a half minutes.
2. Solid waste disposal, central sewer, central water and snow storage must be provided when a density of two dwelling units per acre is reached.
 - A. Sanitary and aesthetic containers must be met in regards to solid waste disposal.
 - B. Sewer and waterlines are to be located within the street right-of-way but not under the pavement when possible.
 - C. Storm sewers to be provided based on the natural topography of the land.
 - D. Water lines must have sufficient water pressure for fire protection.
3. Places for community activities to be held, neighborhood parks and school sites should be located within reasonable distances ($\frac{1}{4}$ to $\frac{1}{2}$ mile) of all dwellings in the neighborhood (except in rural areas).
4. Utilities are to be provided in the most accessible, aesthetic and environmentally sound manner.
5. Libraries, hospitals, and community centers to be provided for when a threshold population is reached.



MAXIMUM DISTANCES FOR COMMUNITY FACILITIES

Environmental

1. Encourage the preservation of the natural course for streams and drainages.
 - A. No dwellings with 200 horizontal feet on 10 vertical feet of any perennial stream within floodplain regulation.
 - B. Additional storm run-off must be retained on the development site or disposed of in an approved facility.
 - C. All non-point pollution should be controlled on site.
2. Encourage construction styles that conform with the existing topography.
 - A. Require a special design for the construction of structures on slopes over 15 percent.
3. Identify and reserve any substantial natural vegetation.
 - A. Vegetation that is critical for wildlife habitat or a visual amenity should be preserved
 - B. Minimize erosion by immediate planting of ground cover.
4. Maintain wildlife in its natural state.
 - A. No dwellings within one mile of a designated critical wildlife area.
 - B. Domestic animals should be kept under control.
 - C. Hire one animal control officer for each 10,000 of population.
 - D. Provide connecting open spaces to permit migration of wildlife.
 - E. Maintain diversity of vegetation which will serve as habits for wildlife.
5. Minimize the impact on the natural amenities, by a development conforming as much as possible to the surrounding area.

Preserve a belt of common land immediately besides the water courses.

Housing

1. To encourage local market areas, all dwellings (except in low density and rural areas) must be located within one half mile of a neighborhood commercial site.
2. All dwelling must be located on sites that are considered safe by slope and soil standards.
 - A. Dwelling must be located on land with slopes less than 25 percent.
 - B. Dwellings must not be located on land with an S.C.S. classification of one or two, without review or locational review.
3. All standards that allow for any federal funding must be met.
4. All dwelling units must meet the current housing codes.

Mobile homes must meet current American National Standard Institute regulations.
5. Children should live in the dwelling nearest the school.

Only one bedroom and efficiency units may be located more than one half mile from an elementary school.
6. An economic mix of housing which accurately reflects the current economic classes is required, at the neighborhood level.

7. Landscaping and preservation of the visual amenities must be incorporated into all multi-family developments.
 - A. The maximum limit for a residential structure is four stories high.
 - B. Landscaping is required for all multi-family structures and parking lots.
8. Provide opportunities for peoples paths to cross.
 - A. Initial associations for district residents will be organized.
 - B. Give at least 25 percent of the open useable land in housing clusters to common land which is easily accessible to the homes that share it.
9. Provide a site at the district level for a convalescent/nursing home and elderly housing in a convenient, accessible area in each neighborhood.
10. Housing clusters to be 3-12 units.
11. Encourage the utilization at local developers, contractors and materials, as long as they are competitive, and the conservation of existing structures.
12. Four and eight plex houses are encouraged in high density neighborhoods rather than large complexes.
13. Cluster public and quasi-public buildings.

IMPLEMENTATION

A Planned Community is by its very nature a controlled development. Each step or phase must meet the Planned Community standards in order for the area to develop in the desired manner. Existing regulations are not able to control such development. New zoning concepts would have to be created that specifically address the problems that will be created by the Planned Community. Breaking away from traditional development patterns will create transitional problems with land that is eventually to be used more intensely.

Upon adoption by the governing body, this plan becomes a statement of development policy and a guide for future land use and development. The plan is only as effective as the proper steps are taken to implement them. Implementation of the plan requires cooperation and coordination of private and public sectors to create a more desirable and healthy community. The following recommendations are structured as a means for implementing the plan. Community awareness about the plan, and a desire by the people to improve the quality of their community's environment are the most effective instruments of change and should underlie all of the following implementation recommendations.

1. Study and adoption by the County of a land use regulation designed to address the specific parameters of each district.
2. Adoption of a resolution requiring subdivision plats to conform to the provisions of the Comprehensive Plan.
3. Development of a community facilities element and a map officially locating the major facilities. Development of a capital budget plan and a capital improvement program for roads, sewer and water, schools, fire protection and for the acquisition and disposal of public land.
4. Institute an education program designed to inform prospective developers and residents of the regulations and factors effecting development within the planning areas.
5. Action to initiate equitable provisions for the presentation of prime agricultural operations. Investigation of a program to use conservation easements and transfer of development rights to protect the rural atmosphere and amenities of the County.
6. Further study in the area of public financing to guide and stimulate proper development according to the proposals of the plan.
7. Assist property owners and developers in the construction of innovative housing projects and development plans which preserve future development opportunities.
8. Restructuring governmental processes to provide for the initiation of decision making by citizen input, review, and comment, both at initial stages, and prior to resolution of problems on each level of community structure hierarchy.
9. Encourage new State legislation for more effective planning implementation.

