

DOCUMENTS  
LOCAL

Tigard  
(1977)

# ENVIRONMENTAL DESIGN AND OPEN SPACE PLAN

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INTERAGENCY BUSINESS DIVISION

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TIGARD, OREGON



# CITY OF TIGARD

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The preparation of this report was financed in part through a comprehensive planning grant from the Department of Housing and Urban Development.

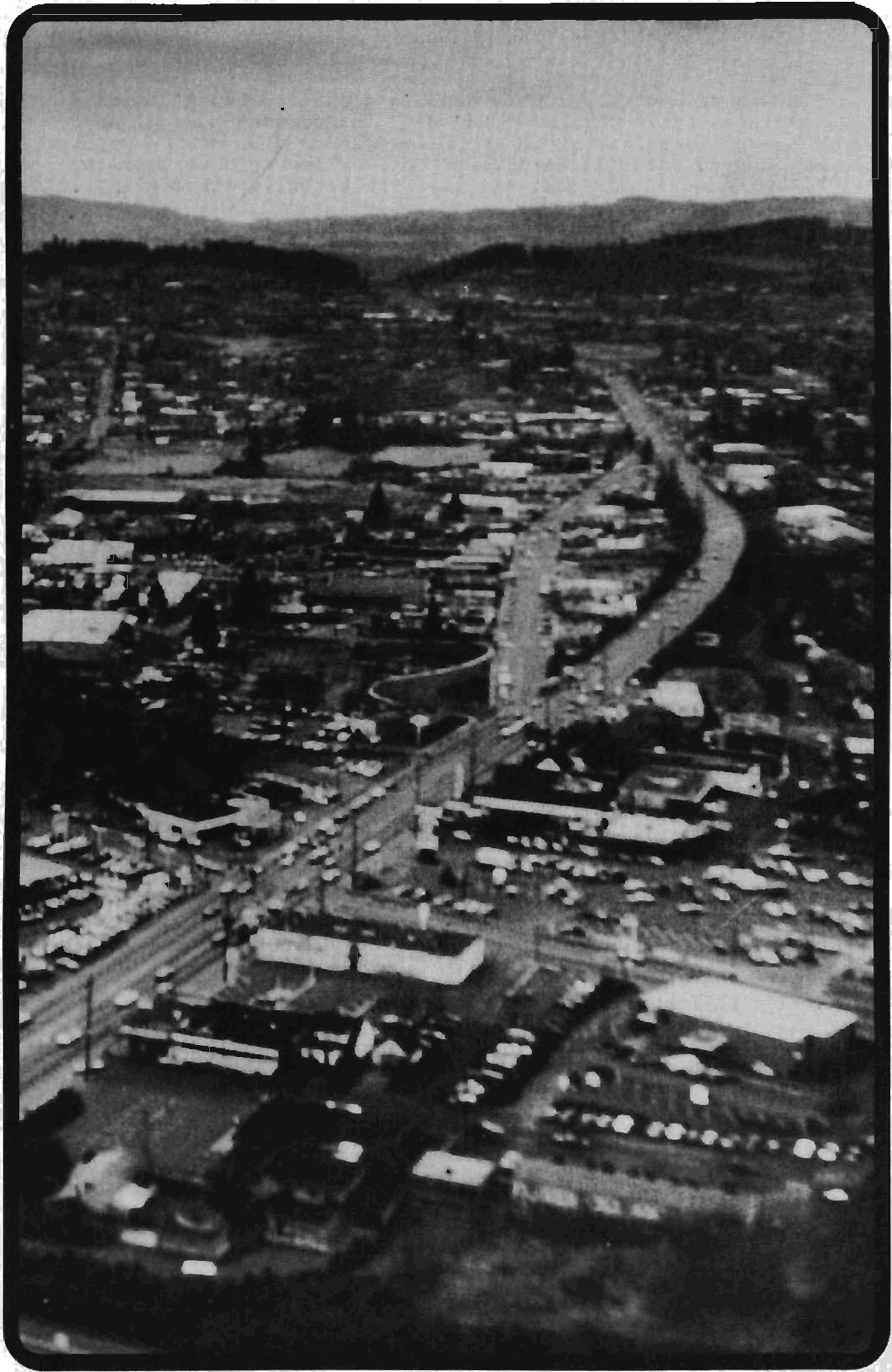
### PLAN STATUS

Adopted by the Tigard City Council August 8, 1977, Ordinance No. 77-70

BIBLIOGRAPHIC DATA SHEET		1. Report No.	2.	3. Recipient's Accession No.
4. Title and Subtitle City of Tigard Environmental Design and Open Space Plan			5. Report Date Prepared 7-27-77	
7. Author(s) City of Tigard, Planning Department			6.	
9. Performing Organization Name and Address City of Tigard P.O. Box 23397 Tigard, Oregon 97223			8. Performing Organization Rept. No.	
12. Sponsoring Organization Name and Address Department of Housing and Urban Development, 701 Program Administered by Executive Department, State of Oregon, 240 Cottage Street S.E., Salem, Oregon 97310			10. Project/Task/Work Unit No.	
			11. Contract/Grant No. 76-02-02	
15. Supplementary Notes Prepared by the City of Tigard, Planning Department, Assisted by the Tigard Park and Recreation Board as an element of the City's Comprehensive Plan.			13. Type of Report & Period Covered Final 6-1-76 to 5-31-77	
			14.	
16. Abstracts  This document presents three principal areas of emphasis; Environmental Protection and Preservation, the Environment as an element of Community Design, and Parks and Recreation. Each section defines development problems and proposes appropriate policies and implementation methods.  Population growth, existing and proposed land use, natural and man-made features, and development trends have all been taken into consideration in the process of formulating a plan to protect the environment and assure future open space and recreational opportunities.				
17. Key Words and Document Analysis. 17a. Descriptors  This document is an element of the Tigard Comprehensive Plan which, when completed, will consist of several major elements addressing and complying with the fourteen statewide goals set forth by the Land Conservation and Development Commission (LCDC). This report addresses goal numbers: 3, Agricultural Lands; 5, Open Space, Scenic and Historic Areas; 7, Natural Hazards; and 8, Recreational Needs. Special studies under these elements include population analysis, recreational needs assessment, existing and proposed conditions, buildable lands inventory, and city beautification.				
17b. Identifiers/Open-Ended Terms				
17c. COSATI Field/Group				
18. Availability Statement Limited Supply Write: City of Tigard P.O. Box 23397 Tigard, Oregon 97223			19. Security Class (This Report) UNCLASSIFIED	21. No. of Pages
			20. Security Class (This Page) UNCLASSIFIED	22. Price

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# I. INTRODUCTION

## INTRODUCTION

The roots of this document are planted in issues much broader than the title might suggest. In essence, it is a plan intended to preserve the natural characteristics and amenities of the Tigard Community, while simultaneously providing a sense of integrated community design. As a bonus for this method of planning, a usable network of open spaces for recreation and relaxation is identified and permanently set aside.

Growth in any community means a reduction of open space. Across the nation, houses are covering agricultural land, flood plains and wetlands are being filled and built on, and a multitude of unique natural features are being exploited and lost forever. At the same time, growing populations place an increasing premium on the preservation of these same resources. The loss of forest lands, scenic view, wildlife habitats, and increasing pollution adds emphasis to the need for preservation of our valuable resources.



These conflicts between growth and the environment are the result of the several components of urban development competing for the use of our land resources to suit their specific needs and desires. The basic conflict is between the individual land-use rights and the broader interest of the entire community. This is a major philosophical question for which there is rising pressure to resolve. Tigard and other local governments throughout the land are confronted with this issue on a daily basis. The solution undoubtedly lies in the recognition of the necessity for maintaining an equitable balance between the government's desire to protect the public interest and individuals', businesses', and corporations' wishes to use their land as they please.

This Plan recognizes the value of the natural environment and attempts to establish the degree of respect due the land. This

is accomplished through a process of using nature as the major guide to land development. In the following plan, nature's processes are used to determine policy direction to insure that continued development will be in harmony with the natural features of the community and in the best interest of all concerned.

The Plan policies are presented in three major sections. The first section, ENVIRONMENTAL PROTECTION AND PRESERVATION, deals with natural processes (storm water runoff, erosion, etc.). It also sets the framework for sections two and three. Using environmental criteria, section one establishes construction and location controls for all types of development. Specific areas such as flood plains, steep slopes and natural habitats are categorized as nondevelopable and set aside as permanent open space.

Section two, ENVIRONMENTAL COMMUNITY DESIGN, augments these controls by offering community design criteria for the purpose of integrating development with the physical features of the area. These criteria are centered primarily on the appearance of a structure and its relationship to topography, natural vegetation and surrounding land uses.

The third section, PARKS AND RECREATION, completes the package by formulating policies and standards to guide the development of a system of parks and open spaces aimed at maximizing recreational opportunity and aesthetic benefit to community residents. The open space system proposed by this Plan was generated by using the lands designated (from section one) as environmentally unsound for construction as its foundation. The majority of these unbuildable lands are along Fanno Creek and its tributaries and are referred to in the Comprehensive Plan as the Greenway System. In addition, the Greenway is augmented by specific sites selected for their environmental uniqueness (e.g., attractiveness, historic value and/or recreational potential). The individual components of the open space system are to be linked together for optimum accessibility, use, and enjoyment, by means of a network of pedestrian/bike paths.

Thus, the total package yields an integrated community design. The design ensures the continuance of natural cycles and enhances the visual attractiveness of the community. Simultaneously, the community benefits in several ways:

Psychologically, through retention of essential natural features which daily remind the individual of the delicate thread connecting each person's life to the natural order of things;

Sociologically, from expanded recreational opportunity allowing diverse community participation in outdoor activities, and through a community design that promotes community identity;

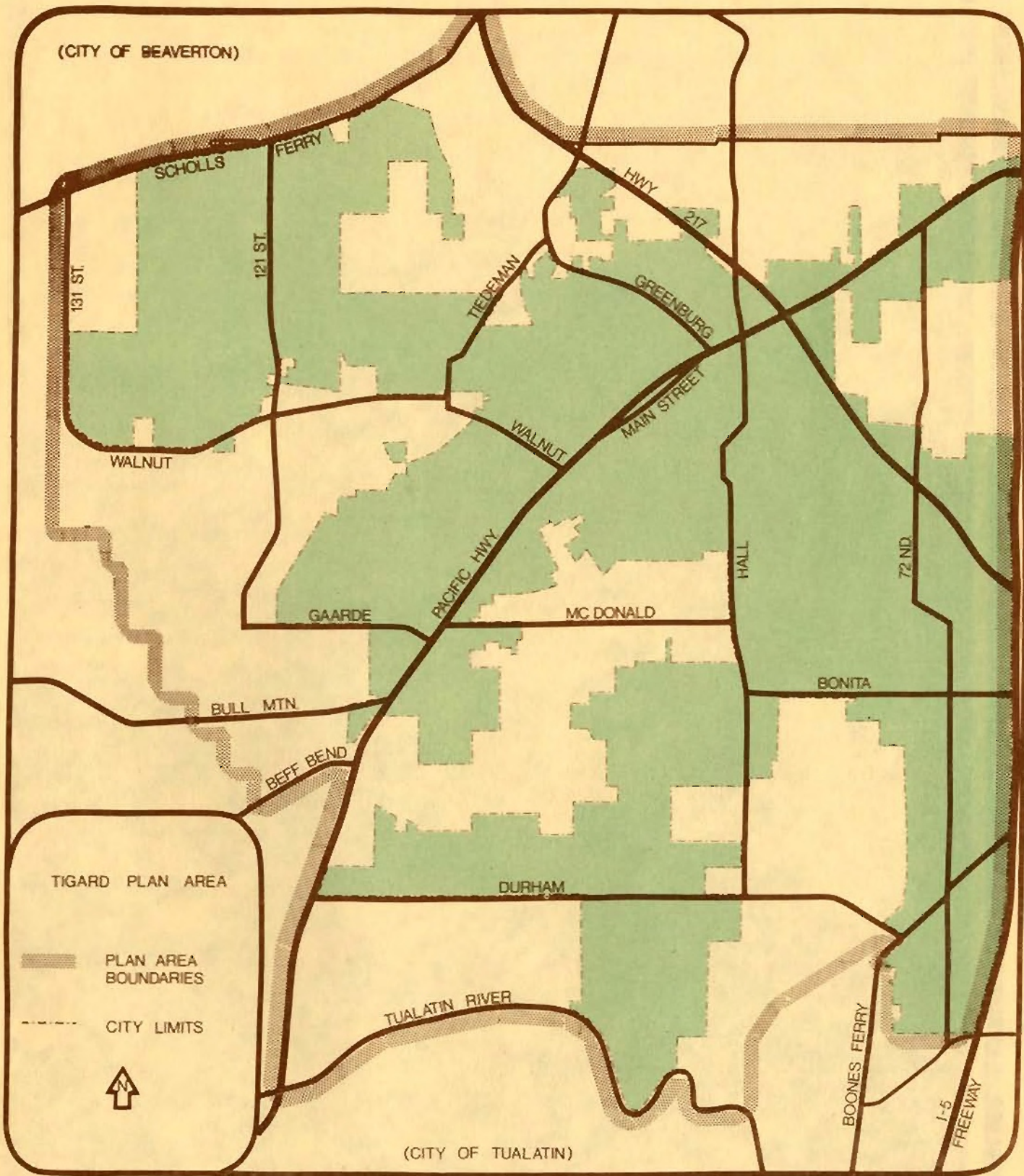
Personally, from increased health and safety derived from reduced air pollution (e.g., natural air purification of trees) and minimized potential for damage to property or loss of human

life, caused by natural hazards such as flooding and land slides;

And Economically, through efficiencies in supplying public services (police, fire, water) to a unified area, and from an enhanced city image promoting increased property values and attracting new employment in the form of commerce and industry.



(CITY OF BEAVERTON)



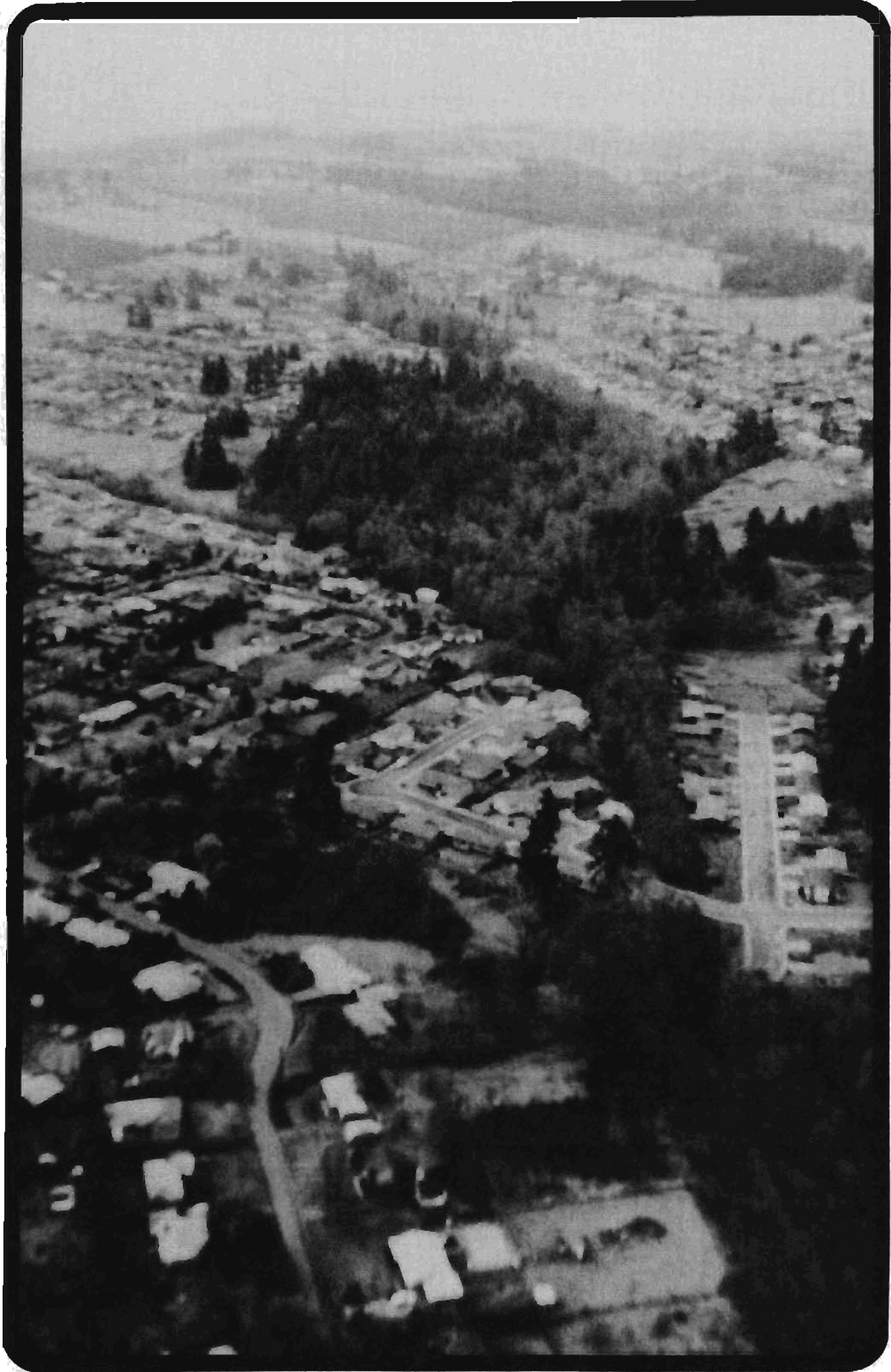
TIGARD PLAN AREA

PLAN AREA BOUNDARIES

CITY LIMITS



(CITY OF TUALATIN)



**II. THE TIGARD COMMUNITY**

## THE TIGARD COMMUNITY

### PLANNING AREA

The City of Tigard, once a farming community, is now essentially a residential suburb of Portland. It is situated in the southeast portion of Washington County abutting portions of western Clackamas and Multnomah Counties. However, in order to accommodate expected growth and to give consideration to areas directly influenced by the City, the plan area boundaries were drawn outside the actual city limits (see map page 4). The plan area is served by three major auto transportation routes, Pacific Highway, Highway 217, and Interstate 5. Two rail lines also serve the area.

### PHYSICAL SETTING

Tigard is located at the lower end of the Fanno Creek Drainage Basin which empties into the Tualatin River at the City's southern boundary. This location makes flooding a particular community concern which this plan addresses.

However, while Fanno Creek poses the threat of periodic flooding, it also offers the natural asset of a relatively undeveloped and heavily vegetated meandering course through the center of the community. This feature becomes even more attractive when the tributary streams are added, as they flow between gently rolling hills often covered with significant stands of timber. The major topographic relief in the plan area is in the western portion in the form of Bull and Little Bull Mountains. Elevations within the plan area range from 500 feet near the top of Bull Mountain to 110 feet at the Tualatin River. (See physical inventory maps.)



### DEVELOPMENT PATTERN

Since the early 1950's, the community has undergone, at an increasingly rapid rate, a transformation from rural to suburban land use. Development was uncontrolled and unplanned until the adoption of the 1971 Tigard Community Plan. The Community Plan

was the City's first attempt to counteract the unsightly strip commercial and disjointed residential sprawl of the 1960's.



Fortunately, since the Community Plan, more attention has been given to aesthetic design. Nevertheless, Tigard is left with an undesirable scar of strip commercial development along Pacific Highway. Early development also exploited the natural amenities of the community, inefficiently consuming land with little regard for natural processes or recreational space.

### COMMERCIAL/INDUSTRIAL DEVELOPMENT

The land use map (see Physical Inventory text) shows the majority of the commercial activity being centered on Pacific Highway with increasing development along Highway 217 and Hall Boulevard. The more intensive industrial uses occur west of Interstate 5, along 72nd Avenue and follow the Burlington Northern and Southern Pacific railroad tracks.

### RESIDENTIAL DEVELOPMENT

While scattered throughout the plan area, residential development is primarily west of Hall Boulevard and southwest of Highway 217. Multi-family units are generally located along major arterials, concentrated on Hall Boulevard, Pacific Highway, and Greenburg Road.

### SCHOOLS AND PARKS

There are eight schools located within the plan area. Among these there is one high school, two junior high schools and five elementary schools. The school district also owns additional land for future school sites. The City of Tigard presently owns five park sites (62.59 acres), some of which are not developed. With a present population of 11,058 there is approximately ten acres of park land per 1,000 people in the City (including usable school property). The City also has 42.17 acres of land dedicated by various developments for public or semi-public use. Much of this land lies in the flood plain, and is suitable for paths and non-intensive recreational use.

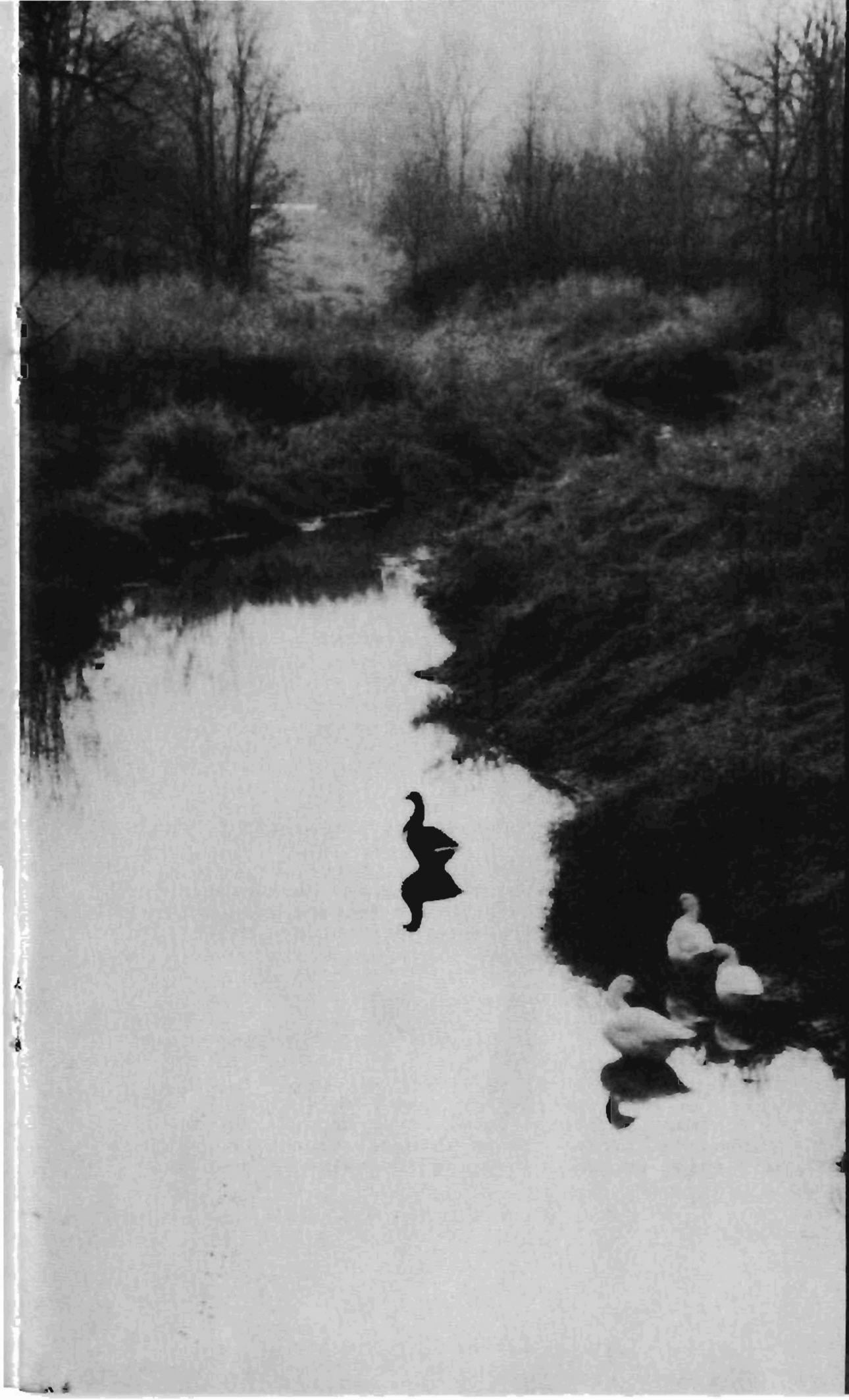
In spite of some negative circumstances, resulting from past development, Tigard has numerous advantages which, if properly addressed, allow for a smooth recovery from its unplanned history.

First on the list of attributes is the topography. The rolling terrain effectively hides the majority of Tigard's development. For instance, from I-5 relatively little development is visible, only limited industry. For the most part, Highway 217 is below grade, allowing only the very low areas along the highway to be seen. Most of these areas are presently undeveloped.

Pacific Highway is the primary problem from a community design standpoint. Even here, however, only the development directly adjacent to the highway is in the usual line of vision from the street. Supplementary to the topography is the abundance of natural vegetation located throughout the community. This vegetation quite often screens development in lower areas that would otherwise be visible from higher elevation.



Besides the screening of present development, there still remains several large undeveloped tracts of land, many of which are along Pacific Highway. Properly planned, development of these areas can greatly reduce the visual impact of continued growth. In addition, there are strips of land in public rights-of-way that can be landscaped to improve community appearance. A strong planning commitment and community cooperation can be invaluable toward mitigating the mistakes of the past while safeguarding the future.



### III. PLAN POLICIES

# 1. ENVIRONMENTAL PROTECTION AND PRESERVATION

## ENVIRONMENTAL PROTECTION AND PRESERVATION

GOAL: To protect and promote public health and safety, to regulate development in inherently hazardous areas, and to preserve environmental quality.

Even though Tigard has numerous ordinances and policies controlling development, the policies in this plan were developed as if no controls were presently in existence. This method was used to ensure a holistic approach to policy formulation, rather than a patchwork or bandage process.

People, and subsequently governments, face environmental problems as a result of activities that are either improperly located or otherwise contrary to natural processes. Nature offers a well balanced system of events--natural cycles. When these cycles are disrupted by human intervention, nature may react in an unforgiving manner.

In terms of developing the land for human uses, there are certain physical characteristics that limit the type and level of activity that can safely occur. These characteristics are referred to as natural hazards or physical limitations. There are three major development limitations which exist in the plan area. They are:

1. Flood Plains and Wetlands,
2. Runoff and Erosion, and
3. Soil Instability.

These are discussed in greater detail in the Technical Report Section.

Even though these limitations to building are characteristically separate, they are linked through the interrelated natural processes that create them. These interconnections are directly related to the roles of:

1. Geologic Deposits and Processes,
2. Water and the Hydrologic Cycle,
3. Soil Properties,
4. Slope, and
5. Vegetation.

In order to minimize potential development hazards due to physical limitations and hazards, these interrelationships require a program of coordinated control, ensuring the balanced continuation of nature's processes.

## PHYSICAL LIMITATIONS

The physical features which form the make-up of any piece of land have a direct relationship to the type and density of development which can be accommodated on that property (carrying capacity). Combinations such as steep slopes and unstable soils create severe development constraints (see Technical Report). Excessive development in such physically limited areas greatly increases the potential severity of landslide, earthquake damage, flooding, etc.

**POLICY 1.** *Designate areas of physical limitation (poorly drained, seasonally flooded, ground instability) and incorporate these designations in the city zoning ordinance and map, and develop graduated development restrictions according to the distinct characteristics of the constraints and anticipated limitations.*

## FLOOD PLAINS, WETLANDS, RUNOFF AND EROSION

Often in the past, development has occurred along streams and drainageways that are subject to periodic flooding. This reduces the natural capacity of the land to control runoff and erosion, and consequently increases the potential for flooding during times of peak rainfall.

Objectives: Using the detailed information gathered on flood plains, wetlands and areas of serious drainage problems, develop policies to:



1. Control development, and encourage nonintensive uses, in these areas.
2. Minimize the runoff-erosion impact of development on the surrounding area and downstream properties.
3. Emphasize the retention of a vegetation buffer along streams and drainageways, to reduce runoff and flood damage and provide erosion control.

In the process of evaluating the plan area for flood plains and wet lands, several informational problems were identified:



1. Discrepancies were found between calculated flood elevations and their demarcation on the official maps.
2. Vague delimitations of flood plains along Summer and Red Rock Creeks.
3. Lack of distinction between the floodway (area of fastest stream flow) and the flood plain fringe.
4. Lack of reliable hydrologic data regarding flood levels expected from future development.

In addition to these problems, there is the issue of the cumulative effect of development upstream of Tigard. Flood levels in Tigard will be substantially determined by the controls exercised over development outside the plan area (see Technical Report).

*POLICY 2. The City shall initiate a cooperative, interjurisdictional water shed, storm drainage and flood plain management study of the Fanno Creek basin, and establish restrictive interim standards for development until sufficient data is available to set standards at identified levels of adequacy. Interim standards shall limit the rate of runoff and erosion caused by a development both during and at completion of construction, as well as development in all flood plain and wetland areas identified in the physical inventory.*

The Fanno Creek drainage system includes numerous small water courses. The integrity of these natural drainageways is intrinsically connected to the system's capacity to reduce excessive runoff and subsequent flood levels. Often, however, developers alter these water courses to suit their development purposes, usually to provide more usable land. The resultant adverse impacts are detrimental to the entire drainage system.

*POLICY 3. The City shall restrict alteration of natural drainageways unless it can be demonstrated that the benefits are greater than the detrimental effects. Other jurisdictions in the Fanno Creek Basin shall be encouraged to do the same.*

Besides the basic need to control development in flood prone areas, it was found that public knowledge of flood plain hazards was lacking. Many of the obstructions previously placed in the

flood plain were the result of either ignorance or overly optimistic attitudes about potential flooding problems. These obstructions (e.g. Main Street Bridge) hinder the flow of high water and tend to increase flood levels.



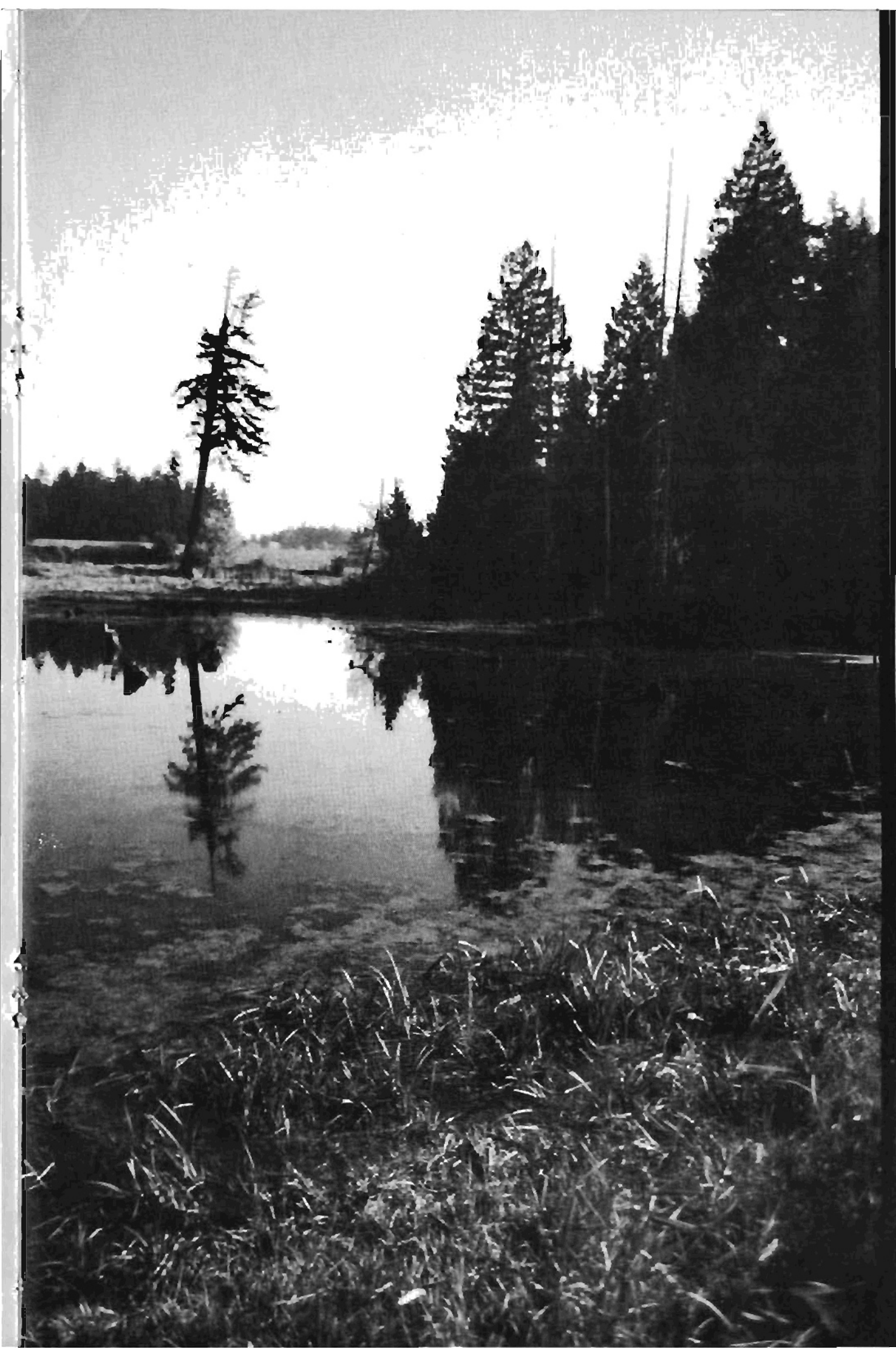
*POLICY 4. The City shall develop methods of removing and/or flood proofing major obstructions within the flood plain. The City should also consider methods of educating the public regarding the flood plain.*

Vegetation, without a doubt (see Technical Report), serves an essential function in the process of runoff and erosion control. Nonetheless, it is too often removed and replaced by buildings and asphalt.

*POLICY 5. The City shall adopt an ordinance to regulate the removal and/or replacement of existing natural vegetation in designated areas, e.g. flood plains, drainageways, areas of high visibility, unique habitats, or rare species. Significant trees or stands of timber shall also be protected.*

Proper administration of the above policies relies heavily upon the availability of adequate information upon which to assess the environmental impacts of a project. The development, which creates the need, should be responsible for providing the City with the necessary data for making sound decisions. The burden, after all, is on the applicant to prove that the project will not adversely affect the environment or create undue future liabilities for the City.

*POLICY 6. Require a site development report, e.g. hydrology, soils, geology, for major projects in designated areas; and a statement reflecting methods to be used to minimize the runoff erosion impact of the development on the surrounding area and downstream properties.*



## **III. PLAN POLICIES**

### **2. ENVIRONMENTAL COMMUNITY DESIGN**

## ENVIRONMENTAL COMMUNITY DESIGN

GOAL: To preserve areas and features of significant natural or scenic beauty. To enhance the opportunities for continued enjoyment of the natural environment of the community.

GOAL: To preserve and/or conserve renewable and nonrenewable resources. To protect and promote the ecology of the community and to discourage premature and unnecessary conversion of open space to urban uses.

This section serves as a manual for environmental community design. It proceeds beyond the neighborhood planning process by establishing environmental policies and techniques for accommodating the various types of land use proposed in each Neighborhood Plan. The guiding premises of this section are that site and building designs should allow for proper functioning of each element involved in a development project. Also, each development should be complementary to the community's natural attractiveness.

A review of the community's development history reveals the all too common occurrence of natural amenities being unnecessarily replaced by asphalt and buildings. The result has often been to increase flood potential while detracting from the pleasant atmosphere a primarily residential community should maintain. A community's design should be directly related to and easily identified with the function the community serves. While Tigard is fortunate to have a viable employment base in the form of industrial and commercial businesses, it is fundamentally a residential community.

A residential environment calls for a pleasant, relaxing atmosphere. The community design then, should include those aesthetic and natural features considered complimentary to a desirable living environment. One of the key features is the maintenance of a sense of openness. Open space not only provides visual relief but also recreational opportunity.

Therefore, one of the objectives of this section is to ensure that a full complement of open space, in both large and small reserves, is provided as future development occurs. Once again, nature provides the essential ingredients, as well as a development guide.

Fanno Creek and its tributary system provides an excellent opportunity for linear open space, linking the entire community together. (See Open Space Map.)



POLICY 7. *Retain the 100-year flood plain of Fanno Creek, its tributaries and the Tualatin River as an open preserve (Greenway). The Greenway shall be established as the backbone of the open space network and when a direct public benefit can be derived, i.e., adjacent residential development, the Greenway should be developed for passive recreation and pedestrian/bike travel.*



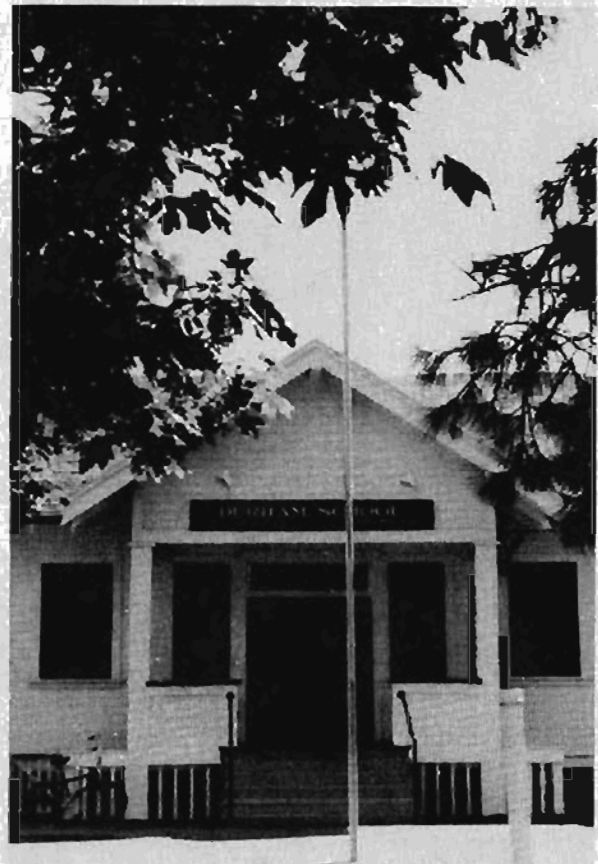
POLICY 8. *To augment the scenic benefit of the Greenway, the City should establish the major vehicular transportation routes as scenic or visual corridors. The Park Board should plan and initiate a program (through public and private cooperation) for corridor landscape preservation and/or improvement.*

The design of developments within the community can be regarded from two view points; the design of structures as they relate to site and function (architectural design), and their relationship to the surrounding area (community design). Both aspects are of equal importance.

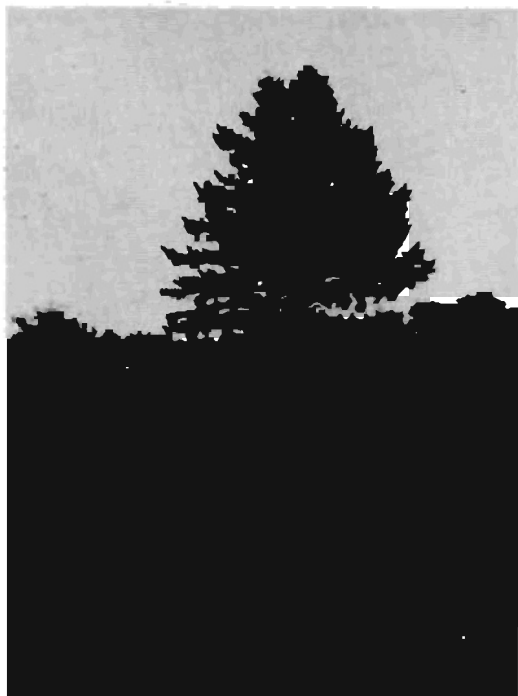
Good architectural design is necessary to provide visual variety and allow for individual identity. At the same time, good community design provides a sense of unity with other development while eliminating conflicting appearances.

**POLICY 9.** *In order to realize a sense of integrated community design, the design review ordinance shall be modified to include specified landscape objectives, emphasizing the incorporation of natural vegetation and unique topographic features in site design. Careful consideration should also be given to the 360°, 3-dimensional impact of a site and structure design.*

In considering the overall character of the community, it is important to look to the past. As a community develops it should not discard its past for the sake of the future. Historic features provide a link with the past and add character and variety to the community's design. Unfortunately, much of Tigard's heritage has already been lost to development with only a few distinct structures remaining. (See Technical Report.) There have been some extensive efforts by local citizens to document the history of Tigard for the enjoyment of future generations. Continuation of such efforts should be supported.



**POLICY 10.** *To preserve the community's history, an index of historic sites shall be developed and made available to the general public; a program shall be developed to acquire and/or restore a number of historic structures (through public and/or private effort) identified as significant. The City should also consider the development of, or preferably the renovation of, an historic structure as an historic museum or cultural center, meeting hall complex, i.e. Durham School.*

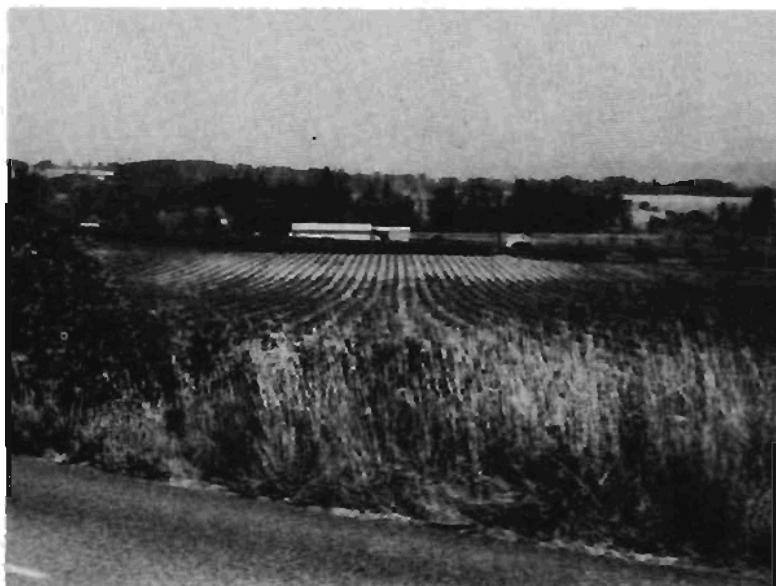


Tigard lies within the urban growth boundaries established by CRAG. Under these circumstances, preserving large tracts of farm land would place an unnecessary burden on the community to increase densities elsewhere to compensate for the loss of needed residential space. An additional consideration is that most of these remaining parcels are not large enough to be economically viable.

Another matter which requires attention as an element of environmental community design is the issue of farm land resources. Tigard's heritage is linked to its agrarian past and maintaining some record and vestiges of this disappearing history should be a community concern. In addition, farm land ties into the pattern of open space set forth in the community's design objectives.

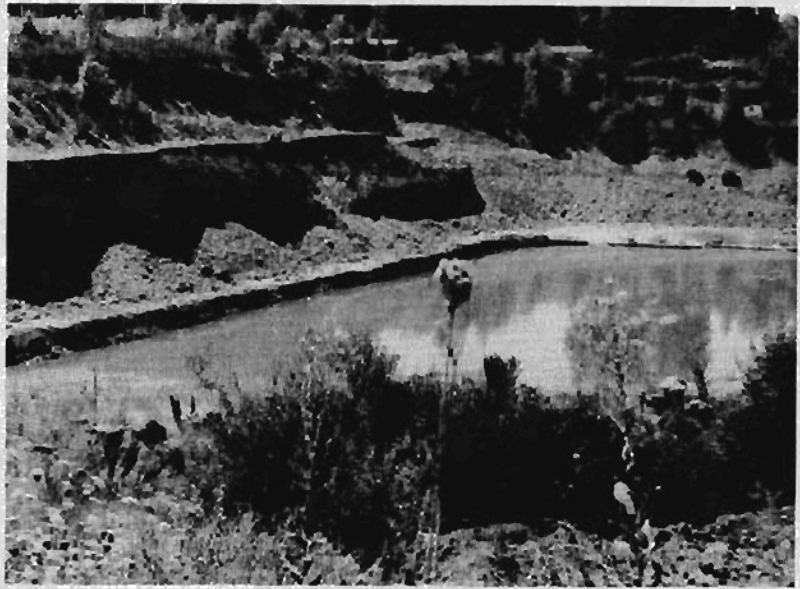
Until the early 1950's, Tigard primarily remained an agricultural community. However, since the conversion to suburban uses began, increasing amounts of farm land have been converted to other uses.

In evaluating the remaining agricultural land for potential preservation, it must be recognized that



Essentially, in a fast growing suburban community like Tigard, the issue of preserving farm land should be left up to the individual property owners.

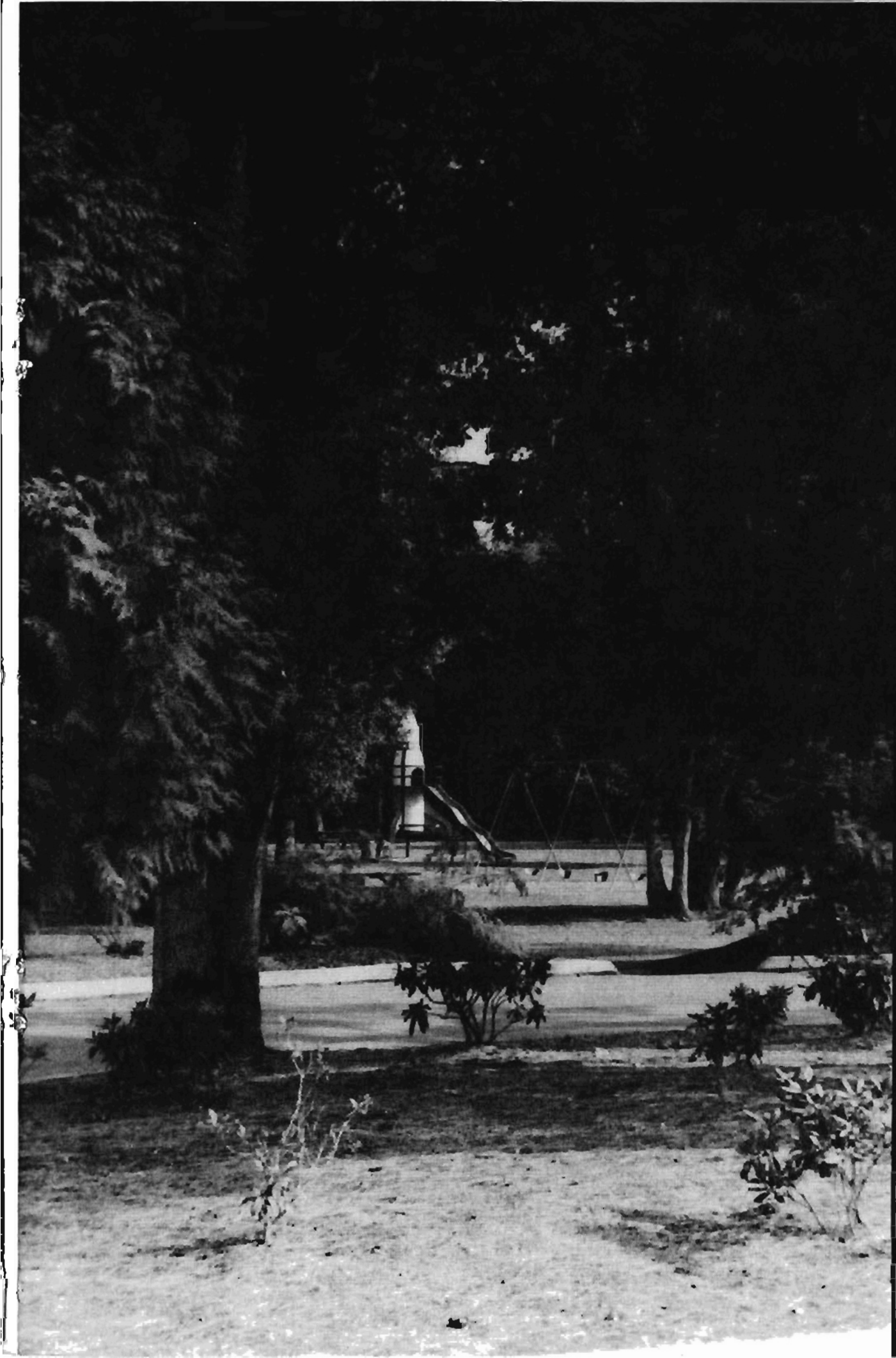
Another resource issue that can be related to community design is the extraction of sand and gravel deposits which are found in the plan area. For the most part, this resource is scattered in small deposits. Some, however, may be of sufficient size and quality to warrant future extraction.



The manner in which these areas are exploited and especially rehabilitated after extraction has both environmental and design implications. However, the environmental concerns can be addressed through proper design criteria.

*POLICY 11. If natural resource extraction is determined to be feasible, the City shall develop extraction and rehabilitation standards to minimize environmental problems and conflicts with adjacent land uses.*





### **III. PLAN POLICIES**

## **3. PARKS AND RECREATION**

## PARKS AND RECREATION

GOAL: To provide an adequate diversity and quantity of passive and active recreational opportunities for the community's residents.

Rapid growth in a community like Tigard tends to diminish the availability of land for recreational purposes. Increasing land values are a compounding factor and tend to inhibit acquisition of quality recreational land. Simultaneously, regional growth containment boundaries have been drawn, increasing the pressure for development inside the boundaries. Tigard is located within the growth containment area. Therefore, increased demands for development can be expected, resulting in even greater pressures to consume available open space.

While the supply of land decreases, the need for recreational space increases. An urgent need, therefore, exists to provide these facilities by devising a method for financing a land acquisition and development program that can compete with the pressures of development. Since new development will generate the increased demand, such a financing method must look toward this new development bearing its share of the financial responsibility.

In the process of planning for a park and recreation system, it is necessary to classify the individual components (neighborhood parks, greenway, etc.) which will or could comprise the park system. In addition, the establishment of a reasonable acquisition and development program requires a listing of priorities and minimum levels of service to be provided. The actual development of such a system requires relating the provision of facilities and services to the particular needs and recreation desires of the residents to be served.

**POLICY 12.** *Park classifications and standards shall be adopted and a program developed for acquisition and development of a park and open space system to ensure an adequate supply of usable open space and recreational facilities, directly related to the specific needs of the local residents.*

The following standards and policies are intended as guides for the development of a park system which reacts to development as it occurs and to the varied recreational needs of the City's residents. However, specific needs and desires differ from neighborhood to neighborhood. In addition, the needs of future

residents cannot be accurately projected. For these reasons, the park development districts (see Open Space Map) were established.

The districts were selected based on present development patterns, the selected park standards, and by using major streets as access barriers. They are not permanent and may be adjusted in the future if circumstances change. The purpose of the districts is to provide service areas where the amount and types of recreational facilities can be planned for and eventually provided based upon the specific needs of the people residing there.

#### PARK SYSTEM CLASSIFICATIONS

1. Mini Parks
2. Neighborhood Parks
3. Community Parks
4. Large Urban Parks
5. Regional Parks
6. General Open Space (Preservation Oriented - may be combined)
  - A. Scenic Pathways
  - B. Landscaped Areas
  - C. Natural Preserves
7. Water Oriented Sites
  - A. Fishing
  - B. Boating
  - C. Swimming
8. Special Use Areas
  - A. Play and Ball Fields
  - B. Courts (tennis, basketball)
  - C. Ranges (rifle, bow and arrow)
  - D. Swimming Pools
  - E. Trails
  - F. Sports Complex (two or more of the above)
  - G. Golf Courses
9. Cultural Facilities
10. Historic Sites
11. Activity Centers

#### PARK STANDARDS

In the following component standards the words Shall, and Should are used to denote a minimum desirable level of facilities that shall be provided, and an additional level that should be provided, if possible. The size and population figures act as a guide, but each park should reflect, in its size and design, the relationship between people, space and facilities the site is intended to offer.

The size and acres per 1000 population figures are set at an average desirable level for each component. The overall desirable level set by these standards is 10 acres per 1000 people which is approximately the present level provided within the

City. In combination, these standards constitute an ideal park system.

Basic Assumptions:

1. The Ideal Park System is intended to serve as a guide and will be used to evaluate decisions on the ongoing process of parks development. It will also serve as the basis for establishing a systems development program.

2. Due to economic constraints or population characteristics the Ideal may never be reached. However, policy decisions should be based on priorities that are economically feasible, but also directed toward the established Ideal System.

3. The assumptions, data, criteria and policies should be periodically reviewed to account for changes in circumstance.

The park acreage standards are set for lands available to the general public, and owned or otherwise controlled by the City or a cooperating public agency. They do not include:

1. Public school property (not available for active recreation).
2. Special areas (pathways, cemeteries, golf courses, etc.).
3. Private or voluntary agency lands and facilities.
4. Vacant undeveloped land not under ownership or control of the City.



# IV. PARK AND OPEN SPACE STANDARDS

## PARK AND OPEN SPACE STANDARDS

### 1. MINI PARKS

Purpose: To supply a minimum of park land to serve as a "Back Yard" for isolated areas or where density, lot size, and/or income conditions deny availability of such facilities; or where access to neighborhood parks is restricted; or to provide landscaped sitting areas in the commercial core of the city.

Size: 2500 sq. ft. to 1 acre

Acres/  
People: 1 acre/1000 people

Service  
Area: 1/4 mile radius

Location: Determined by need

Facilities/  
Activities: Play equipment, hard surface for wheeled toys, sand area, benches and tables and trash recepticals shall be provided. Benches, vegetation, and trash recepticals shall be provided in commercial area parks.

### 2. NEIGHBORHOOD PARKS

Purpose: To serve as the neighborhood center for active and passive recreation.

Size: 2 to 5 acres

Acres/  
People: 2 acres/1000 people

Service  
Area: 1/2 mile radius

Location: Should be centrally located and away from major thoroughfares. Easy visibility and access from surrounding residents and public right-of-way should be considered.

Facilities/  
Activities: Should be individually designed but shall provide open play areas, picnic area, drinking

fountains, and trash recepticals. Consideration should be given to provision of playground facilities, natural areas, fencing, lighting, irrigation and ease of maintenance. Additional facilities should be based on the recommendations of neighborhood residents and the City Park Board.

### 3. COMMUNITY PARKS

Purpose: To provide facilities which generally cannot be provided at the neighborhood level. To supplement facilities provided by junior and senior high schools and provide close at hand recreational space.

Size: 10 to 20 acres

Acres/  
People: 2.5 acres/1000 people

Service  
Area: 2 to 3 neighborhoods, 1 to 1.5 mile radius

Location: Should be central to the neighborhoods to be served and have direct access to major transportation thoroughfares and bike paths.

Facilities/  
Activities: Should be individually designed and shall provide ball fields, tennis courts, multi-use paved areas (basketball, volleyball), picnic areas and cooking facilities, open play areas, trails, restrooms, irrigation, trash recepticals, fencing, lighting, off-street parking, and an internal road system to allow for police surveillance. Should provide shelters, natural areas, and activity centers. Facilities available through adjacent schools will be included as part of the site requirements.

### 1. LARGE URBAN PARK

Purpose: To provide the residents of the greater community with an opportunity to get away from the noise and congestion of the city without traveling a great distance. To provide large areas for diverse activities encompassing passive and intensive uses.

Size: 50 to 150 acres

Acres/  
People: 5 acres/1000 people

Service  
Area: 5 mile radius

Location: Should be easily accessible by auto or transit. Ideally located with access for water activities. Local pedestrian/bike access shall be provided.

Facilities/

Activities: A large urban park shall provide regulation ball fields, picnic areas and cooking facilities, large open play areas, drinking fountains, restrooms, trails, trash recepticals, internal road system, off-street parking, landscaped areas, and irrigation. It should provide tennis courts, shelters, and natural areas.

5. REGIONAL PARKS

Purpose: To provide urban residents with an opportunity to get away from the noise and congestion of the city without having to travel great distance. To provide a large natural state area.

Size: 500 to several thousand acres

Acres/

People: 15 acres/1000 minimum people

Service

Area: An area which may cross county boundaries

Location: Dependent on available resources. Ideally adjacent to a lake or river.

Facilities/

Activities: Campgrounds, picnic and day use areas, natural areas, trails, restrooms, and parking shall be provided. Water-oriented activities should be provided. Extensive development may also be included (sports complex or coliseum).

6. GENERAL OPEN SPACE

(Preservation Oriented - Subcategories may be combined)

Purpose: To encourage access and use of areas of natural and scenic beauty at a level that affords protection of the various amenities of the area and provides a base for community identity.

Size: Community-wide overall; individual components variable as appropriate.

Population

Served: Variable, generally intended to benefit the entire community.



#### A. Scenic Pathways:

**Purpose:** To provide linear areas of natural and man-made beauty which will interconnect other members of the park system, schools, and other public places. To provide for conservation of scenic and natural areas, especially water courses and areas subject to flooding. To provide buffer areas along thoroughfares or between conflicting land uses. To give a feeling of general openness to the community.

#### Facilities/

**Activities:** Scenic ways shall provide trails or walkways and trash recepticals. The land shall be retained primarily in its natural condition along waterways and other areas of natural value. In areas where development has occurred, landscaping and design controls shall be applied. Additional landscaping should be provided along these corridors. Rest areas should be provided.

**Location:** Bordering waterways and areas subject to flooding, along transportation and utility corridors.

#### B. Landscaped Areas:

**Purpose:** To beautify areas not serving an actual park function but that would add to an atmosphere of open space.

#### Facilities

**Activities:** Facilities should be limited to walkways and sitting areas; trash recepticals should be provided.

**Location:** Along major transportation corridors and interchanges, commercial frontages, plazas, malls, and parking lots.

#### C. Natural Preserves:

**Purpose:** To preserve unique resources and to make natural values available for public education and enjoyment through visual contact or an on-site experience.

#### Facilities/

**Activities:** Natural preserve facilities shall include those to protect and enhance the site, such as protective fencing or guardrails, elevated walks, trash recepticals, and landscaping. Compatible activities would include walking, viewing, and nature study.

Location: Dependent on available resources.

#### 7. WATER-ORIENTED SITES

Purpose: To encourage access to and use of waterways. Sites may exist as individuals or as part of a multi-use park.

Facilities/

Activities: Appropriate uses would be swimming, boating, and fishing. Fishing access shall include trails and trash recepticals, if appropriate. Improvements shall include docks, rafts, parking, and trash recepticals.

Location: Dependent on available resources.

#### 8. SPECIAL USE AREAS

Purpose: To provide areas and facilities for activities usually requiring special facilities (e.g., courts and playfields). These special facilities generally restrict other uses on the same site. They can be supplied individually or in complexes incorporating two or more of the uses in this category and should be constructed at a park site.

Facilities/

Activities: Depends on opportunity being provided. For complexes, restrooms, and trash recepticals shall be provided. For playfields, ballfields, and golf courses, irrigation and trash recepticals shall be provided. Facilities such as rifle ranges are not likely to be provided within the community; however, programs should be provided to use facilities elsewhere. Parking shall be provided. Bleachers and lighting should be provided when appropriate.

Size: Depends on facility being provided and whether it is a complex or single facility. Courts and fields shall be regulation size for intended use.

Service

Area: Depends on activity and type of facility (e.g., complex or single) and the type of park it is located in.

#### 9. CULTURAL FACILITIES

Purpose: To provide a place in the community for formal or informal public gathering that will allow for increased cultural enrichment.

Facilities/

Activities: Cultural facilities may include plazas, malls, small parks, fountains, open-air/indoor theaters, and a library and meeting hall complex. Trash recepticals and benches shall be provided. For landscaped areas irrigation shall be provided. Larger facilities shall provide off-street parking.

Location: Depends on facility being provided. Malls and plazas should be placed in the commercial core or well developed areas. Larger facilities should be located away from congestion; a plaza can be incorporated into a larger facility or complex. Should serve the entire community.

10. HISTORIC SITES:

Purpose: To identify and preserve local historic sites and structures for enjoyment and education of present and future generations.

Facilities/

Activities: Historic sites shall be developed or incorporated in a development in a way that preserves the integrity of the site or structure. Interpretive signs and trash recepticals shall be provided. Parking, trails, picnic facilities, and protective fencing should be provided when feasible.

Location: Dependent on available resources.

11. ACTIVITY CENTERS

Purpose: To provide indoor areas for gatherings of local residents or special age groups of the city's population.

Facilities/

Activities: Could be for a specific age group (e.g., senior citizens or youths) or the entire community. Centers shall provide meeting rooms, kitchen or concessions, lounge, work rooms, restrooms, trash recepticals, off-street parking, and landscaped areas. Could be supplied in conjunction with a cultural center.

Location: Should be easily accessible to all groups intended to be served by the facility. Shall be located with a direct access by auto, transit or pathway.

## PARK DEVELOPMENT POLICIES

- POLICY 14. *Individual park sites, as defined by the parks and open space standards and classification system should be developed according to the following priorities:*
- A. *Facilities within a park will be adjusted to meet the needs and desires of the district residents and the characteristics of the site. Park and/or recreational facilities in greatest demand and least supply should receive the highest development priorities.*
  - B. *Parks should be planned to insure maximum benefit to the greatest number of local residents. For this reason, acquisition and development of community level parks should be given the highest priority.*
  - C. *Development of additional neighborhood parks will have a lower priority for public funding and are encouraged to be provided by the private rector within planned wit developments.*
  - D. *Mini parks have the lowest development priority and should be supplied at public expense only if an area is determined to be isolated from access to other parks, or where space is extremely limited.*
  - E. *Provision of regional park facilities will only be considered as an interjurisdictiona project; and should have a low priority unless unusual circumstances arise.*
  - F. *Cook Park should be considered a large urban park and should be fully developed before consideration is given to another facility of this classification. The expansion of this park will be a high priority.*
  - G. *Acceptance of any land dedicated for park purposes shall be based upon its usefulness and adaptability to the adopted park and open space system.*

- POLICY 15. *New developments shall be responsible for funding their share of new parks, based on an established acreage standard. The City shall, however, seek additional funds through public sources such as special levies and grants.*

POLICY 16. *Developers shall be given a choice of optional ways to provide open space based on the established park acreage standard. They can either:*

- 1. Contribute to the systems development fund in proportion to the established park acreage standard.*
- 2. Develop a portion of an existing park equivalent to the park acreage standard for their project.*
- 3. Develop a new park on site subject to the approval of the City.*

Density bonuses should also be considered for open space provided, which exceeds the park acreage requirements; but shall be granted according to the standards established by the separate neighborhood plans.

### COMMUNITY SCHOOLS

Tigard School District 23J owns large tracts of land within the plan area, some of which are slated for future development to meet increased demands. Schools are public facilities, and their buildings consume considerably less than the total acreage available. They also provide many recreational facilities such as gymnasiums, tennis courts, etc. For these reasons, they are an obvious source of additional open space and recreational opportunity.

POLICY 17. *The City shall work toward establishment of a cooperative arrangement with the school districts (community schools program) to ensure provision of adequate year round recreational programs and facilities, and to eliminate unnecessary overlap of facilities.*

Beyond having an adequate supply of land available, there is a necessity for continual parks planning and development as the demands for space increase. In conjunction with providing facilities there is mounting pressure for the provision of year round recreational activities. Unfortunately, the present city staff does not have time to devote to park development and recreational program planning. Therefore, it is important that adequate staffing be provided to assist the Park Board in the task of coordinating the planning and development of the City's Park and Recreation program. This is a continuing and complex assignment which should not be entrusted to a volunteer appointed body without qualified staff assistance.

## PEDESTRIAN/BICYCLE PATHWAYS

One of the most important factors to a successful park system is safe and convenient access to the various park sites. The City currently has a Pedestrian/Bikepath Plan (adopted in 1974) but path construction has been slow and seriously underfunded. This plan reemphasizes the need for the paths and recommends the system be provided in the following manner.

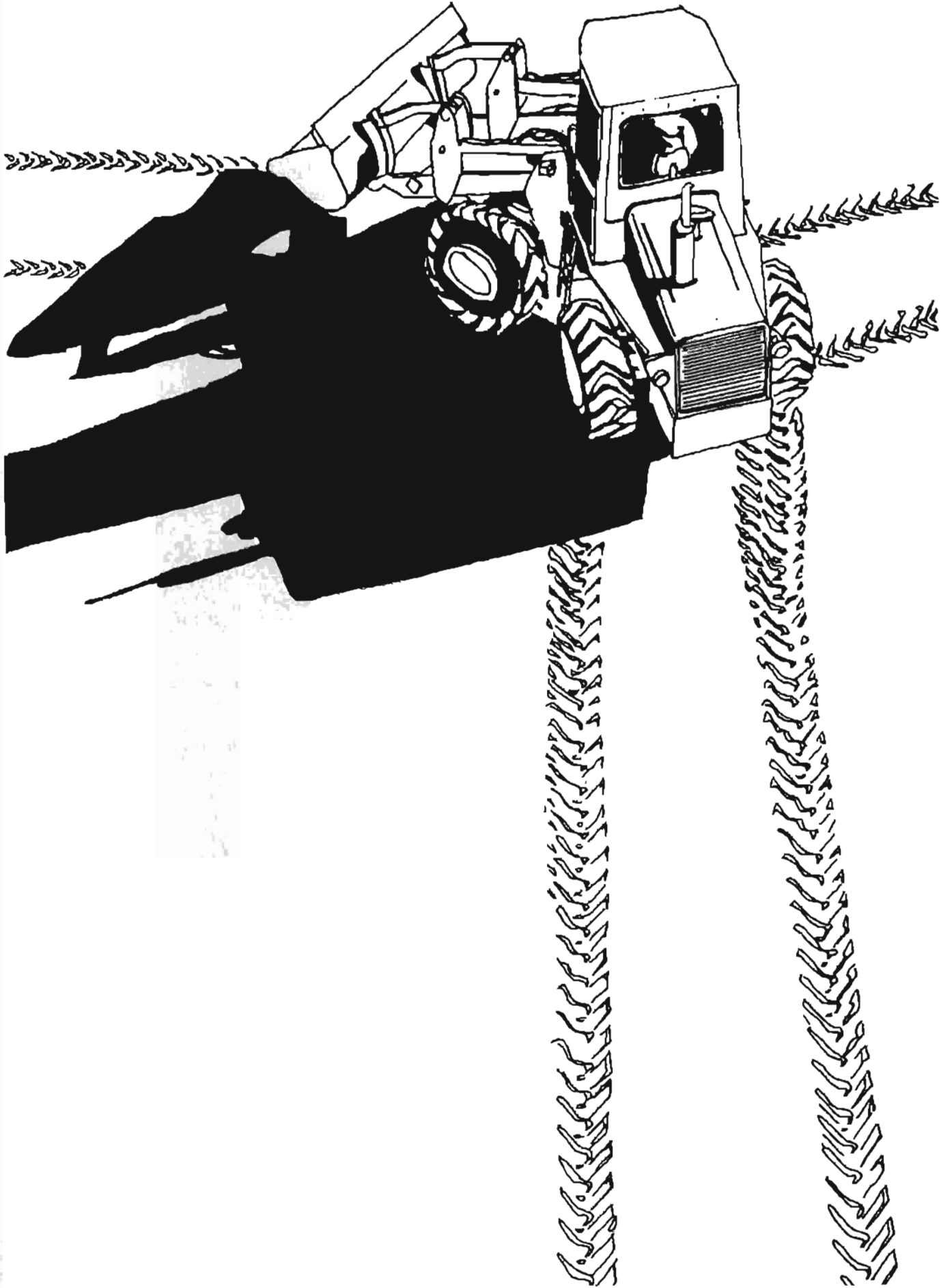
**POLICY 18.** *Safe and convenient pedestrian/bike routes shall be provided throughout the community. All major street construction or improvements shall be coordinated with the community pedestrian/bicycle path plan and facilities provided.*

**POLICY 20.** *The City should budget an adequate portion of public works or general account monies for path construction each budgeting year: and seek additional funds through grants, special levies and other sources.*

**POLICY 21.** *When land is developed and includes a designated pedestrian/bicycle path route, easements shall be granted to the City. In cases where development increases the need for the path, construction should also be required. When development occurs that is not on a designated bikepath route, but increases the need for a path, a contribution to a special bikepath construction fund should be sought.*

**POLICY 22.** *In areas where a path is routed through or adjacent to a residential area, the path and/or the buildings in the area should be situated in a manner to provide natural surveillance of the path. The number of entry points to the path should also be limited in these areas.*

In addition, It is recommended that a pathway and bridge be constructed allowing the linkage of Cook Park to Tualatin Park in the City of Tualatin. This would conform to the parks plan prepared by the City of Tualatin. It would also increase the potential for state and/or federal funding of such a project.



**V. RECOMMENDED IMPLEMENTATION**



## RECOMMENDED IMPLEMENTATION MEASURES

The most important element of this plan is a reasonable and effective method of implementation. It is not uncommon for well intended park and open space plans to be relegated to collecting dust on a shelf due to a lack of sound proposals for land acquisition and development. In addition, plans proposing strong implementation devices can fail in public hearings or as a result of court challenges because they may be judged inequitable and/or arbitrary in their manner of collecting fees and distributing benefits.

The major problems identified in other systems which have failed in court or through administration are:

1. No reasonable/direct connection between where money is spent and where it is collected; no benefit to those who pay.
2. Arbitrary site selection after money is collected.
3. Lack of equitable participation in payments, especially dealing with multi-family units versus single family and arbitrary level of fee assessed.
4. Legal challenges due to excessive front-end costs to developers.
5. Lack of administrative methods to insure park sites are preserved and charges are collected.
6. An additional problem Tigard has to face is the City/County jurisdictional split.

## GREENWAY/PATH SYSTEM

In addition to park land, this plan continues to support the greenway concept as a means of providing open space and protecting the natural drainage system. It establishes the greenway as the hub of the open space system. The greenway was originally proposed in the 1971 Community Plan, which established Fanno Creek and its major tributaries as a source of linear open space. It also proposed that the greenway system serve as a route for pedestrian/bicycle travel. In 1974 the City adopted the Pedestrian Bicycle Path Plan. The plan specified which portions of the greenway should function as actual pathways. The 1974 plan calls for paths along:

1. The entire length of Fanno Creek within the plan area,

2. Summer Creek from Tiedeman to S.W. 135th,
3. The watercourse that flows from Bull Mountain through Jack Park to Summer Creek, and
4. The watercourse that flows through the Genesis, Pathfinder area to S.W. Walnut Street.

Retaining the natural drainage system in its natural state will save the public many times the cost of a piped drainage system. At the same time, the areas listed above, as pathways, provide excellent opportunity for passive recreation and pedestrian/bike travel. Because this system will benefit all local residential properties, financing of its acquisition and development should come from all residential properties in the Plan Area.

Each new residential development should, therefore, share in maintaining the existing natural drainage system and also the responsibility to provide public access to and through the areas indicated as pathways. However, not every developable parcel contains flood plain property, and, for this reason, seeking greenway dedication from only those properties adjacent to a water course would not be reasonable. This plan, therefore, sets out a system whereby all land development would share in the financial responsibility of protecting the natural drainage system.

#### GREENWAY ACQUISITION AND DEVELOPMENT

It is proposed that the following financing method be established for the development of the greenway system. At the time of final plat approval of residential developments, a fair share fee will be assessed (\$/acre) for development of the drainage and pathway system. The fair share formula would be as follows:

$$A = P/D$$

A = Fair Share Assessment

P = Total Cost of Proposed Greenway Path System (see Technical Report)

D = Total Acres of Buildable Residential Land (see Technical Report)

Developments with portions of their property in the flood plain or a designated drainage/pathway may dedicate land and provide a portion of the pathway in lieu of the assessment. If more than the fair share is dedicated, the developer will be reimbursed for the excess. If less is dedicated, then a partial fee will be assessed.

This formula will ensure equal participation in greenway acquisition and development. It does not, however, provide sufficient funds for maintenance of the pathway system.

These funds can be provided by assessing a fee on all residents. The assessment to be designated as a public utility fee for maintaining the storm drainage/pathway system. The fee could be attached to the water bill to insure full participation in financing. This will, of course, be dependent upon satisfactory arrangements with the local water districts.

#### PARK LAND ACQUISITION PROGRAM

The acquisition and development of parks and recreational facilities will be funded by a System Development Charge which will be assessed on each new residential unit. The charge will be assessed at the time of issuance of the building permit. Dedication of land may be accepted in lieu of the fee provided that it meets the standards set in the plan for park sites and is approved by the Park Board.

The formula and procedures will be as follows:

1. Establish two park service districts using Pacific Highway as the boundary and assign an account to each district. Money received will be spent in the district it is collected from.
2. Identify a specific (most desirable) park site. Each site sized according to the standards set in the Plan. The location of each site will be determined by development patterns and the desires of the residents within the specific park district.
3. Establish an assessment based on the acres/population standard set in the plan (1 acre/100) and the average sale value of residential land in the Plan Area (updated annually). The charge per unit will be based on the average people per unit ratio (census tract data, updated annually). Dedications of the land will be considered in lieu of the fee.
4. Administrative procedures will be established to ensure collection of the system development charge at the time of issuance of each building permit for a dwelling unit and that no unsatisfactory land is accepted, through dedication, in lieu of the fee.
5. Arrangements should be made with the County for the collection of the system development charge in the unincorporated portions of the Plan area.

SYSTEM DEVELOPMENT CHARGE FORMULA

$$A \times P \times \$ = S$$

A = Park Acreage Standard

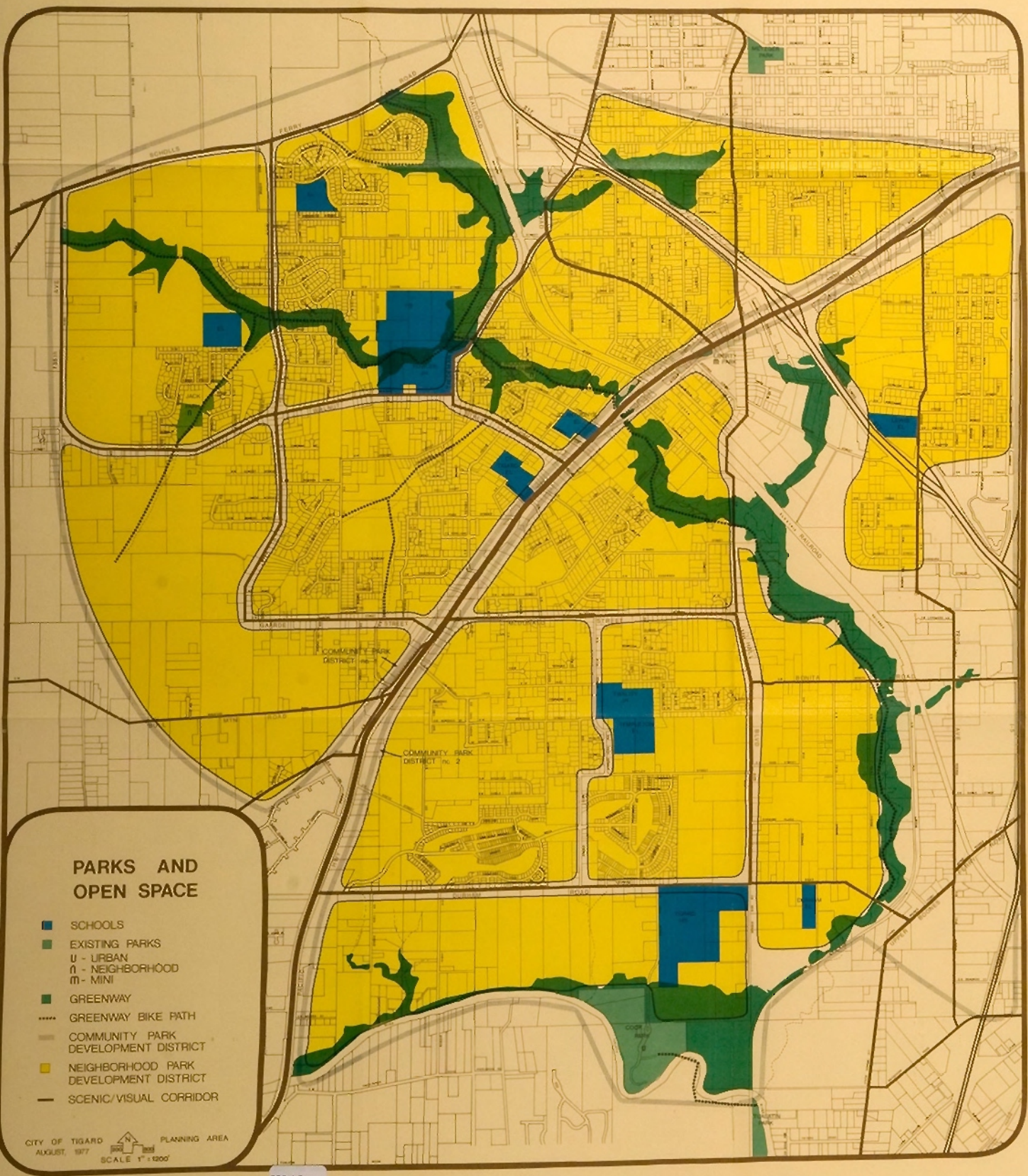
\*P = Average # of People per Unit

\*\*\$ = Average Sale Price of Residential Land

S = System Charge

\* Certified by PSU Center for population research.

\*\* Estimated by Washington County's Office of Assessment and Taxation.



**PARKS AND OPEN SPACE**

- SCHOOLS
- EXISTING PARKS
- U - URBAN
- ⌈ - NEIGHBORHOOD
- m - MINI
- GREENWAY
- ..... GREENWAY BIKE PATH
- COMMUNITY PARK DEVELOPMENT DISTRICT
- NEIGHBORHOOD PARK DEVELOPMENT DISTRICT
- SCENIC/VISUAL CORRIDOR

CITY OF TIGARD PLANNING AREA  
 AUGUST, 1977  
 SCALE 1" = 1200'

DOC-LC  
 TD  
 171.3  
 .072  
 TS34  
 1977



### FLOOD PLAIN AND WETLANDS

- 100 YEAR FLOOD PLAIN
- DRAINAGEWAYS and WETLANDS  
(groundwater seasonally within 1½ feet of the surface)

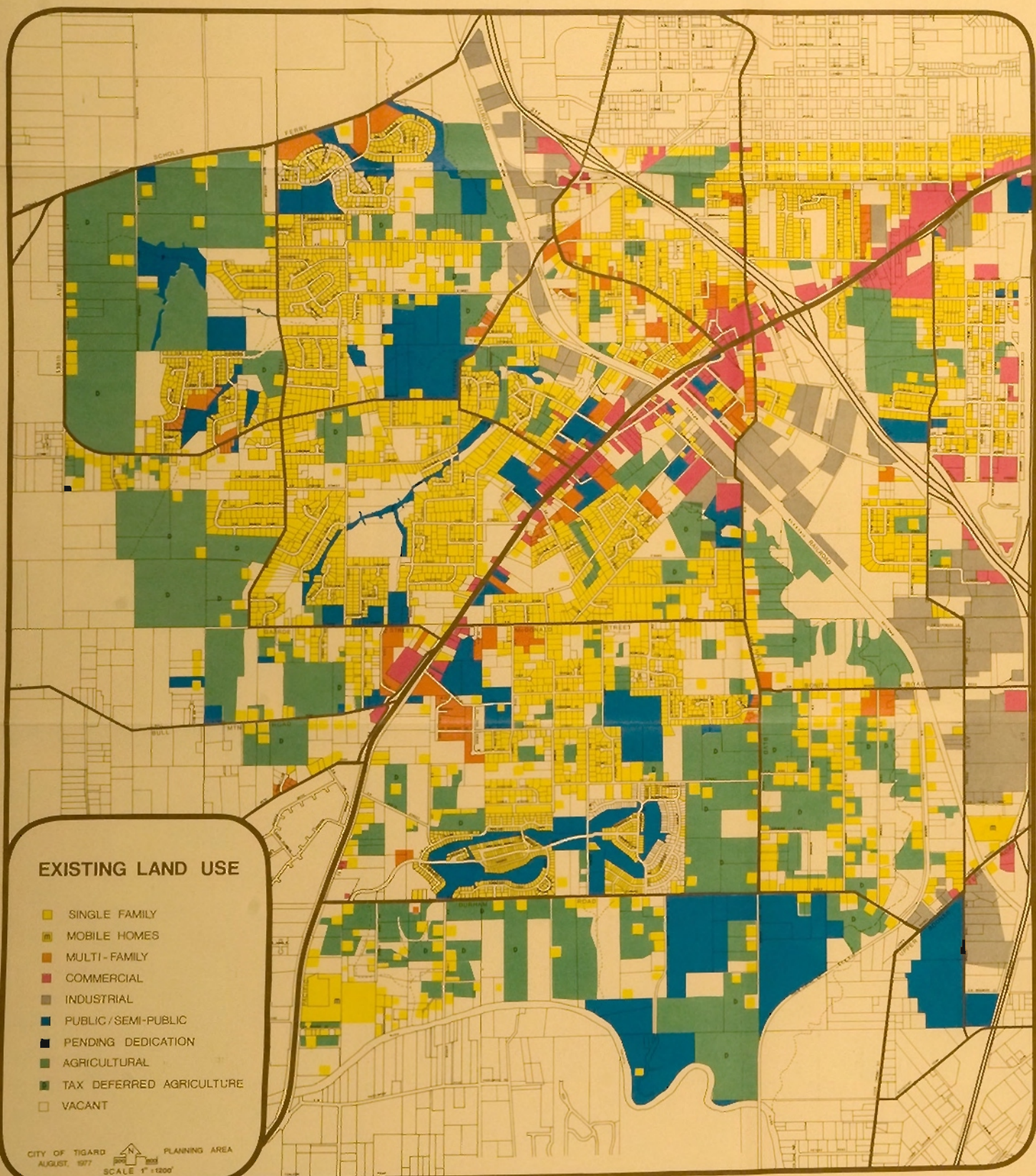
CITY OF TIGARD  
AUGUST, 1977

PLANNING AREA

SCALE 1" = 1000'

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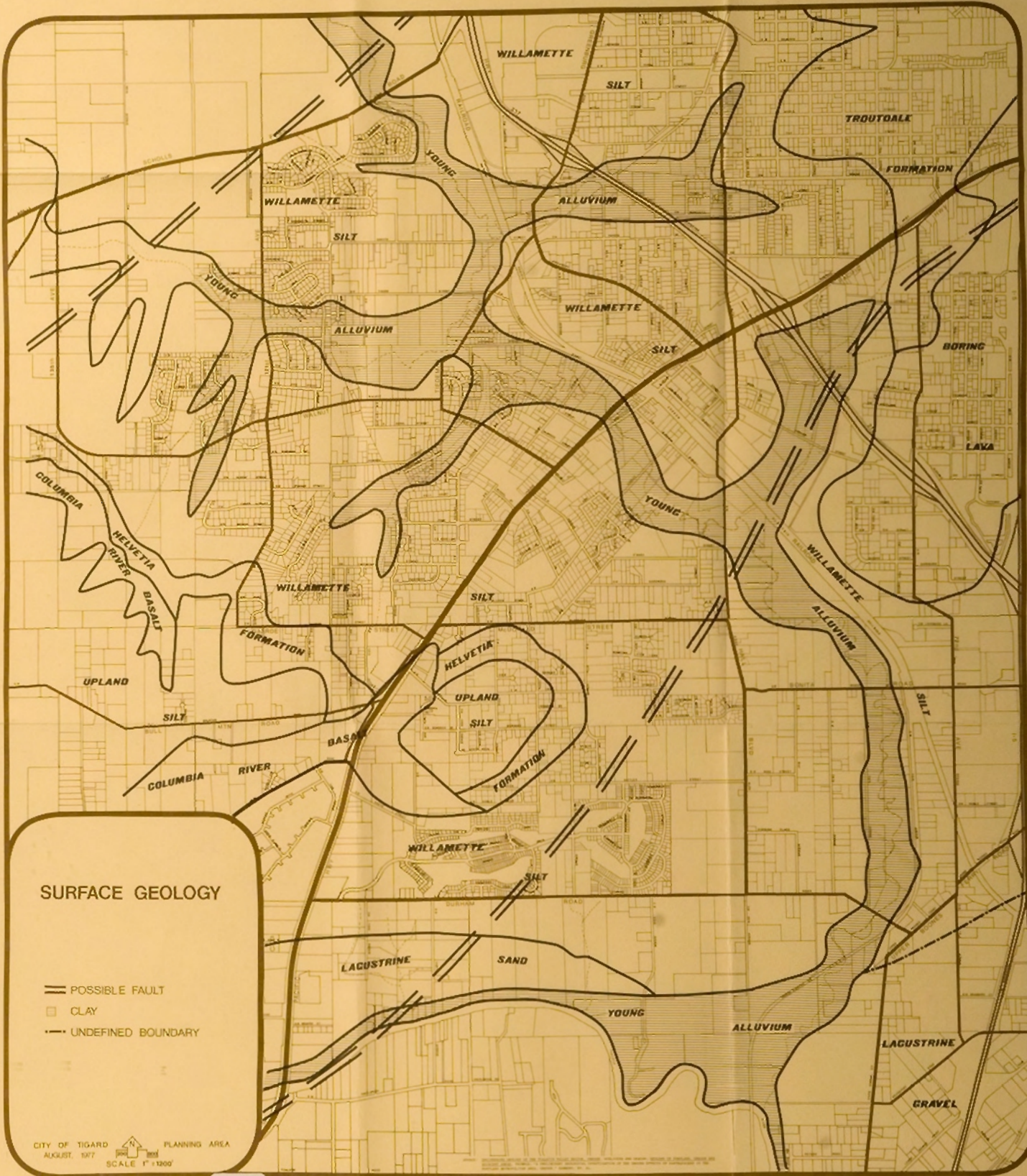
**EXISTING LAND USE**

- SINGLE FAMILY
- MOBILE HOMES
- MULTI-FAMILY
- COMMERCIAL
- INDUSTRIAL
- PUBLIC/SEMI-PUBLIC
- PENDING DEDICATION
- AGRICULTURAL
- TAX DEFERRED AGRICULTURE
- VACANT

CITY OF TIGARD PLANNING AREA  
 AUGUST, 1977  
 SCALE 1" = 1200'

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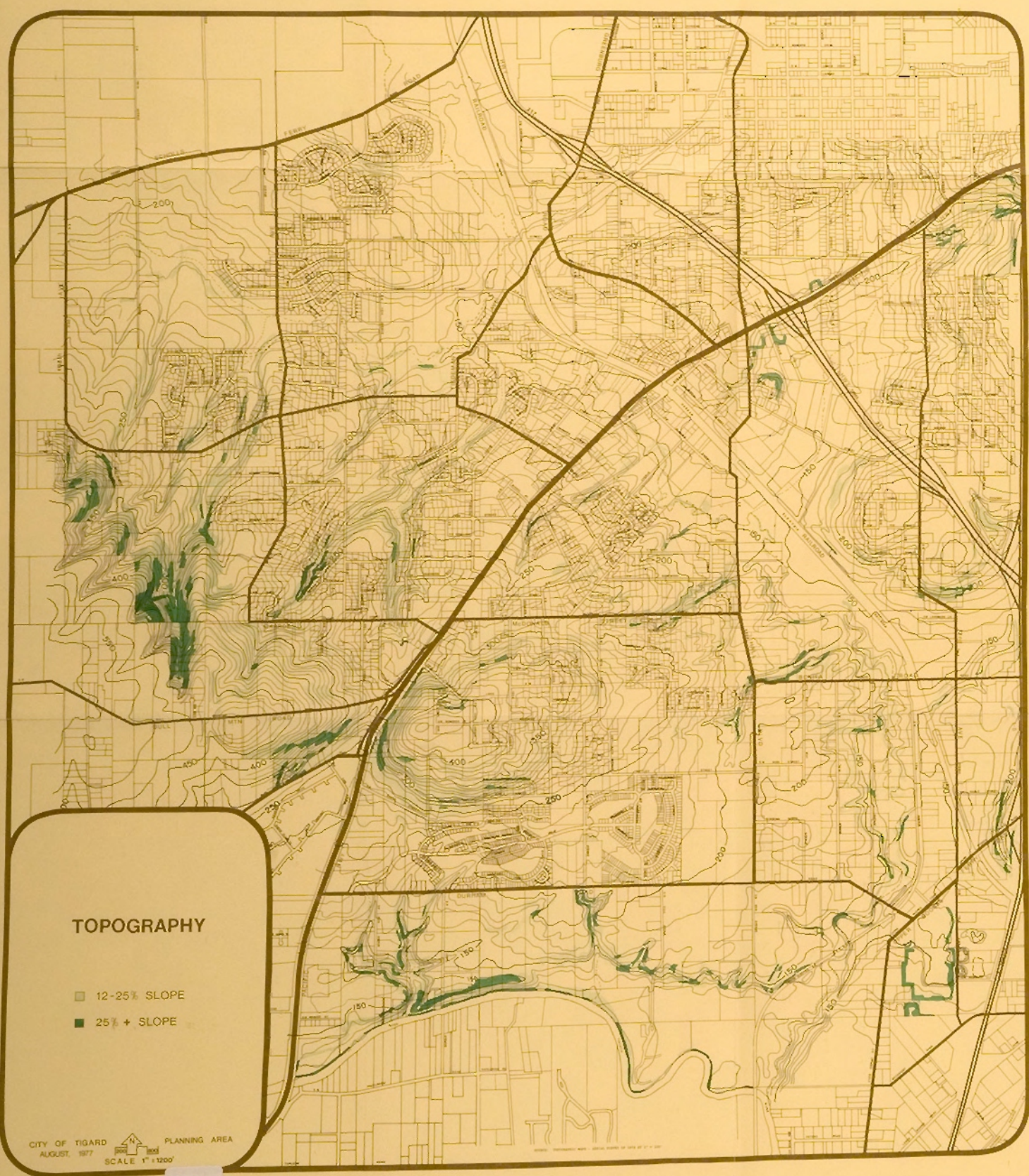
**SURFACE GEOLOGY**

- == POSSIBLE FAULT
- CLAY
- - - UNDEFINED BOUNDARY

CITY OF TIGARD PLANNING AREA  
 AUGUST, 1977  
 SCALE 1" = 100'

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 1977





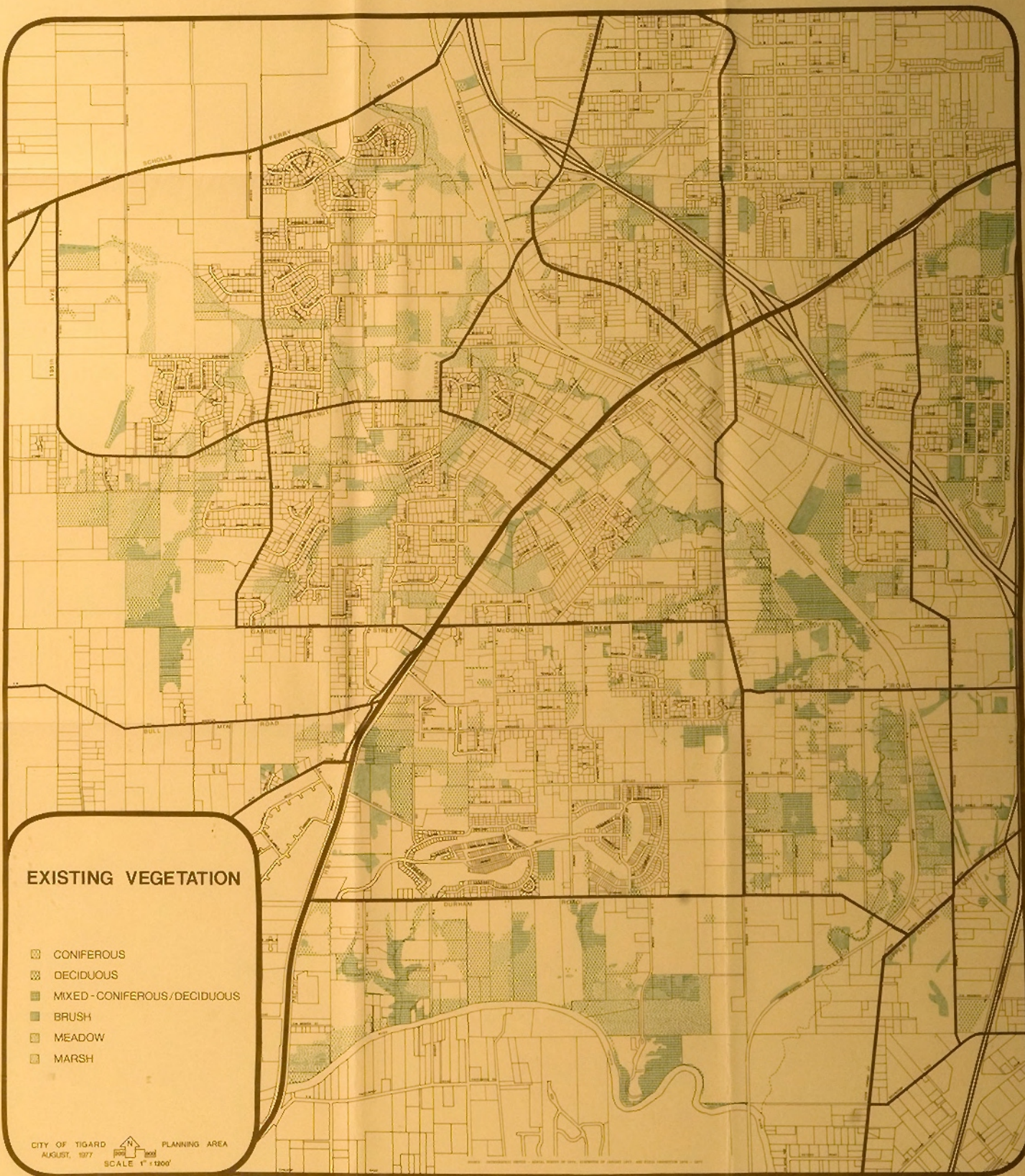
### TOPOGRAPHY

- 12-25% SLOPE
- 25% + SLOPE

CITY OF TIGARD PLANNING AREA  
AUGUST, 1977  
SCALE 1" = 1200'

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1977

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**EXISTING VEGETATION**

- ☐ CONIFEROUS
- ☐ DECIDUOUS
- ☐ MIXED - CONIFEROUS/DECIDUOUS
- ☐ BRUSH
- ☐ MEADOW
- ☐ MARSH

CITY OF TIGARD PLANNING AREA  
 AUGUST, 1977  
 SCALE 1" = 1300'

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 TD  
 171.3  
 .072  
 T538  
 1977