Alderwood Area

COMPREHENSIVE PLAN

A Portion of the Snohomish County Comprehensive Plan

Prepared by the
Snohomish County Planning Department

October, 1973
ALDERWOOD AREA PLAN
1973 - 1990

a portion of the snohomish county comprehensive plan

* DENOTES PLAN TEXT REVISED OR ADDED AT THIS LOCATION
BY PLAN AMENDMENTS ADOPTED IN 1986 BY COUNTY COUNCIL
ORDINANCES 85-123, 86-062 AND 86-072 (SEE APPENDIX C
FOR TEXT REVISIONS OR ADDITIONS).

Community Development Section
Snohomish County Planning Department
October, 1973

June, 1983 June, 1988
August 10, 1973

Board of County Commissioners
Snohomish County Admin. Bldg.
Everett, Washington 98201

Honorable Commissioners:

The Snohomish County Planning Department is pleased to convey to you this updated comprehensive plan for the Alderwood Planning area. As you may recall, the previous plan for this portion of the County was adopted in 1967, and was included as part of the Southwest Planning area. Strong community interest has provided the impetus for a plan that could deal more specifically with Alderwood's problems. This Alderwood Planning Area has thus been created to address this community apart from the remainder of Southwest County as its geography and concerns are confined and somewhat unique from those of surrounding areas.

The planning process which brought this plan into being has been long and frustrated with many delays. It has also revealed many community members who hold very divergent opinions regarding the appropriate land use allocations for the planning area. These philosophical differences have been so strong that they have created both a move to incorporate the area and a drive to have the area annexed to the City of Brier. However polarized the community member's views might be on the specific land use provisions of this plan, they are united on one crucial factor—the need for a strong and effective planning guide which will help the community to accommodate the pressures of growth and will, at the same time, maintain the rural character of the planning area. This plan if faithfully implemented is designed to provide that kind of a sound basis for decision making. The plan may also have the added benefit of mitigating some of the fears the community holds of comprehensive planning generated by experience with previous plans.

The basic organizational feature of this plan is the land use policy statements which enable the plan to be more consistently and easily applied to individual developmental problems at the time of rezone, subdivision, or special use hearings. These policy statements also serve to indicate how the County (and the Alderwood community) intends to achieve the goals and objectives it has adopted as a part of this plan. The combination of textual discussion and recommendations, plan maps and policy statements, make this plan unique.
None of the other area plans prepared prior to the adoption of this plan incorporate policy statements as one of the key elements of the plan. Therefore, the Alderwood Area Plan represents both an experiment in applied planning methodology and a new standard for comprehensive planning in Snohomish County. We trust that you as elected officials and decision makers, will find this plan both an innovative and helpful tool in your evaluations of future development occurring within the planning area.

In presenting this plan to the Board, we wish to thank the members of the Alderwood Community Council, the Alderwood Manor Improvement Association, and the many other community minded citizens who attended meetings and contributed both their time and ideas in the formulation of this plan.

Sincerely,

SNOHOMISH COUNTY PLANNING DEPARTMENT

George F. Sherwin, Jr., Director

GFS:WMP:1c
BOARD OF SNOHOMISH COUNTY COMMISSIONERS

N. Richard Forsgren, Chairman
Charles Hill
C. Earl Torgeson

SNOHOMISH COUNTY PLANNING COMMISSION

Jerald C. Tucker, Chairman
R. J. Dersham
Mrs. Georgia Blake
Russell Colvin
Robert E. Haggard
Thomas L. Kennedy
Carrol L. King
Donald Regan

SNOHOMISH COUNTY PLANNING DEPARTMENT

George F. Sherwin, Jr., Director
William M. Palmer, Assistant Director -
Project Manager

Participating Staff:

Howard E. Lovering* - Assistant Director -
Contributor
Gerard Duiker* - Senior Planner -
Contributor
Michael Cady - Associate Planner -
Graphics
James Fox - Planning Technician -
Graphics
J. Richard Jones - Planning Technician -
Graphics
Kalvin Holler - Planning Technician -
Graphics
Linda Cowardin - Secretary -
Contributor

*Resigned
# TABLE OF CONTENTS

## I. INTRODUCTION & SUMMARY

<table>
<thead>
<tr>
<th>SUMMARIZATION OF GOALS &amp; POLICIES</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESIDENTIAL</td>
<td>3</td>
</tr>
<tr>
<td>COMMERCIAL</td>
<td>4</td>
</tr>
<tr>
<td>TRANSPORTATION</td>
<td>4</td>
</tr>
<tr>
<td>COMMUNITY FACILITIES</td>
<td>5</td>
</tr>
<tr>
<td>ENVIRONMENTAL</td>
<td>6</td>
</tr>
<tr>
<td>ECONOMIC</td>
<td>6</td>
</tr>
</tbody>
</table>

## II. BACKGROUND STUDIES

<table>
<thead>
<tr>
<th>POPULATION &amp; ECONOMIC ANALYSIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>State, Regional &amp; County Population Growth</td>
</tr>
<tr>
<td>Alderwood Planning Area Growth</td>
</tr>
<tr>
<td>Household Size &amp; Composition</td>
</tr>
<tr>
<td>NATURAL FEATURES</td>
</tr>
<tr>
<td>Introduction</td>
</tr>
<tr>
<td>Geology</td>
</tr>
<tr>
<td>Soils</td>
</tr>
<tr>
<td>Stratigraphy &amp; Ground-water Resources</td>
</tr>
<tr>
<td>Topography &amp; Slopes</td>
</tr>
<tr>
<td>Vegetation</td>
</tr>
<tr>
<td>Drainage &amp; Drainage Ways</td>
</tr>
<tr>
<td>LAND USE</td>
</tr>
<tr>
<td>Introduction</td>
</tr>
<tr>
<td>Existing Land Uses</td>
</tr>
<tr>
<td>Zoning</td>
</tr>
<tr>
<td>Property Ownership</td>
</tr>
<tr>
<td>Circulation</td>
</tr>
<tr>
<td>COMMUNITY FACILITIES</td>
</tr>
<tr>
<td>Introduction</td>
</tr>
<tr>
<td>Schools</td>
</tr>
<tr>
<td>Parks, Recreation &amp; Open Space</td>
</tr>
<tr>
<td>Sewers</td>
</tr>
<tr>
<td>Solid Waste Disposal</td>
</tr>
<tr>
<td>Water Supply</td>
</tr>
<tr>
<td>Fire Protection</td>
</tr>
<tr>
<td>Libraries</td>
</tr>
</tbody>
</table>

## III. COMPREHENSIVE PLAN

<p>| INTRODUCTION                      | 43 |
|-----------------------------------|
| GOALS &amp; OBJECTIVES                | 44 |
| Snohomish County Development Goals | 47 |
| Alderwood Area Plan Goals         | 48 |
| PLAN CONCEPT - RESIDENTIAL COMMUNITY | 49 |
| Methodology                       | 50 |
| Plan Target Date                  | 52 |</p>
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAND USE PLAN</td>
<td>52</td>
</tr>
<tr>
<td>Residential Land Use</td>
<td>53</td>
</tr>
<tr>
<td>goals &amp; policies</td>
<td>58</td>
</tr>
<tr>
<td>performance criteria</td>
<td>59</td>
</tr>
<tr>
<td>Commercial Land Uses</td>
<td>61</td>
</tr>
<tr>
<td>major commercial areas</td>
<td>61</td>
</tr>
<tr>
<td>other commercial areas</td>
<td>64</td>
</tr>
<tr>
<td>commercial goals and policies</td>
<td>64</td>
</tr>
<tr>
<td>performance criteria</td>
<td>70</td>
</tr>
<tr>
<td>TRANSPORTATION PLAN</td>
<td>71</td>
</tr>
<tr>
<td>Goals &amp; Policies</td>
<td>74</td>
</tr>
<tr>
<td>Performance Criteria</td>
<td>74</td>
</tr>
<tr>
<td>COMMUNITY FACILITIES PLAN</td>
<td>76</td>
</tr>
<tr>
<td>Introduction</td>
<td>76</td>
</tr>
<tr>
<td>Schools</td>
<td>76</td>
</tr>
<tr>
<td>Parks And Open Space</td>
<td>77</td>
</tr>
<tr>
<td>Water And Sewer Facilities</td>
<td>77</td>
</tr>
<tr>
<td>Solid Waste Disposal</td>
<td>80</td>
</tr>
<tr>
<td>Fire Protection</td>
<td>80</td>
</tr>
<tr>
<td>Performance Criteria</td>
<td>81</td>
</tr>
<tr>
<td>IV. PLAN IMPLEMENTATION</td>
<td>83</td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>84</td>
</tr>
<tr>
<td>LEGAL CONTROLS</td>
<td>84</td>
</tr>
<tr>
<td>Zoning</td>
<td>84</td>
</tr>
<tr>
<td>Subdivision Control</td>
<td>84</td>
</tr>
<tr>
<td>CAPITAL IMPROVEMENT PROGRAMMING</td>
<td>85</td>
</tr>
<tr>
<td>PLAN REVIEW AND UPDATE</td>
<td>85</td>
</tr>
<tr>
<td>V. APPENDICES</td>
<td>86</td>
</tr>
<tr>
<td>APPENDIX A</td>
<td>87</td>
</tr>
<tr>
<td>APPENDIX B</td>
<td>90</td>
</tr>
<tr>
<td>APPENDIX C</td>
<td>99</td>
</tr>
</tbody>
</table>
I. INTRODUCTION & SUMMARY
Snohomish County, unlike other local jurisdictions which have one overall comprehensive plan, has been divided into twelve sub-planning areas of which the Alderwood Planning Area is one. Combining all twelve area plans provides the overall comprehensive development guide for the County.

Beginning in 1965, the first individual area plans were written. This was a planning staff effort and was accomplished on a limited budget. While these plans were not elaborate, they addressed the substantive issues of traditional comprehensive planning -- population, economics, land use, circulation, utilities, community facilities, and plan implementation. As is the case with most comprehensive plans, they require periodic updating in order to remain viable throughout the forecast period. The Alderwood Area Plan is the second area plan in the County to be updated.

The Alderwood Planning Area is situated in Southwest Snohomish County in the triangle of land formed by the Snohomish-King County line on the south, Interstate Freeway No. 405 on the east, and Interstate Freeway No. 5 on the west. Also contained within this triangular area, but not included in the planning area, are the cities of Mountlake Terrace and Brier. The planning area incorporates approximately 5,500 acres of land and is generally characterized by pockets of suburban residential development surrounded by large wooded areas and steep ravines.

The Alderwood Planning Area, because of its location in Southwest Snohomish County, is considered to be part of the urbanizing corridor extending north from Seattle. The urbanization process has converted a once rural area into suburban and urban communities. The Alderwood Planning Area is one such rural area which has experienced the impact of suburban growth. In 1960 there were only 5,800 people residing in the area. By 1968, there were approximately 9,000 people and by 1970, the population had increased to 14,000. Thus, in the ten years' time, the population had nearly tripled. The influx of 8,200 people into the area has placed heavy demands on a rural circulation system, created a need for urban types of community facilities and utilities, and threatened many of the environmental amenities inherent within the area.

Like many other areas experiencing rapid growth, the Alderwood Planning Area residents have recognized the need for a comprehensive plan which not only reflects their goals and objectives, but also provides realistic development guides. In 1966, an overall plan, the Southwest Snohomish County Area Comprehensive Plan was adopted. This plan contained provisions for both the incorporated and unincorporated lands in Southwest Snohomish County. The current Alderwood Planning Area was covered by this plan. In a short period of time, the Alderwood Planning Area residents concluded that the provisions of the Southwest Plan were not adequate to guide the growth in their area. Consequently, they organized their own community group, the Alderwood Community Council, and initiated the groundwork which ultimately led to the formulation of this plan.

This plan represents the culmination of an intensive and extended effort on the part of local citizens, community groups, and public officials to formulate a guide to the future development of the Alderwood Area and includes local desires within the context of County and regional policies. The strength of the
plan rests in its reflection of community needs, values, and aspirations, integrated with environmental, land use, transportation, and socio-economic determinants. These factors have been translated into goals, policies, and performance criteria against which development proposals can be evaluated.

Goal formulation is an integral part of the comprehensive planning process. It comprises the essential first phase in a series of core activities which are necessary to raise planning from the level of a technique to that of an important process concerned with both means and ends. The other related activities include planning coordination, plan formulation, and planning assistance and advice to other public agencies and various interest groups. Together they exhibit a basic concern for goals and values and the need for making basic choices. It is through the proper and sensitive use of these goals, policies, and performance criteria that the plan can effectively be utilized to direct growth over the next twenty years. The overall success of the plan will be dependent upon effective decision making and continued public support.

**SUMMARIZATION OF GOALS AND POLICIES**

In order to provide a convenient point of reference, the basic goals and policies developed in the plan elements are summarized on the following pages. Contained within the text are the supportive recommendations and development criteria intended to supplement and assist in their implementation. The goals and policies are as follows:

**RESIDENTIAL**

**GOAL:** Maintain a primarily residential character in the Alderwood Planning Area.

**POLICIES:**

1. Encourage single family development as the primary land use within the planning area.

2. Protect residential areas by limiting commercial development.

3. Encourage low density multiple family development in areas where there is major access and service of planned utilities.

4. Encourage planned residential solutions for development.

5. Encourage development compatible with the natural constraints of slopes, soils, vegetation, and drainage.

6. Encourage both urban and suburban residential development.

7. Encourage high density single family development in areas where there is major access, service of planned utilities, and compatible natural constraints in the area.

8. Encourage the up-grading or removal of dilapidated houses or structures.
COMMERCIAL

GOAL: Develop commercial uses which are appropriate to the scale of the area and the relationship to other business opportunities in Lynnwood and surrounding areas.

POLICIES:

1. Encourage commercial development which is based on convenience needs of the area residents.

2. Encourage the containment of development of commercial enterprises within areas where there is already a pattern of commercial development.

3. Commercial development should be predicated on the ability to control its impact on the predominately rural residential character of the Alderwood Area.

4. Encourage the service of utilities as a precondition for commercial development.

5. Discourage "piece meal" or strip commercial development along arterials.

6. Encourage the agglomeration of commercial land ownerships in specific locations, thus providing the opportunity for unified site development.

GOAL: Provide for a limited economic base within the Alderwood Planning Area.

POLICIES:

1. Encourage service and retail commercial employment opportunities.

2. Orient employment opportunities in the area towards serving the convenience needs of the area residents.

TRANSPORTATION

GOAL: Develop a balanced community transportation system which would include pedestrian, bicycle, and horse trail links in addition to efficient public and private vehicular transportation facilities.

POLICIES:

1. Make street improvements so as not to compromise any of the natural site attributes such as stands of trees, drainage ways, historic or landmark features; and major community facilities.

2. Encourage the development of pedestrian, bicycle, and horse trails consistent with the County's adopted trails plan.
3. Develop separated pedestrian and vehicular traffic facilities along established pedestrian and school bus routes.

4. Encourage the resurfacing of roads to maintain acceptable standards.

5. Control the location and number of access points to commercial establishments along 196th Street.

6. Promote improvements for major and secondary arterials which will improve the orientation and readability of the planning area.

7. Prevent establishment of any major or secondary arterials in the Scriber or Swamp Creek drainage ways.

COMMUNITY FACILITIES

GOAL: Encourage the provision of community facilities to shape future growth in a manner that is most efficient, economical and the least disruptive to the area.

POLICIES:

1. Provide utility facilities so as to respect the integrity of the existing land forms and drainage ways.

2. Consolidate the provision of utilities, wherever possible, into corridors where there are existing right-of-ways and easements.

3. Utilize surface runoff and storm drainage facilities in a manner that protects against the destruction of private property, the disruption of natural drainage ways, and the degradation of water sources and water quality.

4. Encourage the multiple use of school property for park and recreational needs.

5. Combine pedestrian walkways with the provision of community facilities wherever possible.

6. Encourage the location and development of parks and trails consonant with the recommendations of the County's Comprehensive Park and Trails Plan.

7. Discourage the indiscriminate juncture of sewer mains with the trunk sewer line in the Swamp Creek drainage way.

8. Encourage the location of sewer mains which are complimentary to the other factors of good land development; slope conditions, access, soil character, drainage, socio-economic environment, etc.
ENVIRONMENTAL

GOAL: Maintain and enhance the intrinsic land forms, water courses and vegetation condition within the planning area.

POLICIES:

1. Protect and maintain the natural slope, water, and vegetation conditions in the Swamp Creek, Scriber Creek, and other drainage ways to insure their continued role in the natural process.

2. Protect the valuable anadromous fisheries and other aquatic resources in Swamp Creek and its tributaries.

3. Protect against and eliminate the pollution of ground and surface water resources.

4. Encourage density of single family dwelling units compatible with the steepness of the slopes.

5. Discourage the continued use of land for single-family dwellings on septic tanks in those areas where soil and slope conditions are not suitable for such development such as in the Swamp Creek drainage way.

6. Retain the attractive wooded character of the Alderwood Planning Area by strictly limiting the cutting of trees and removal of ground cover.

7. Contain the impact of alterations of the natural site conditions which disrupt or over-burden natural systems, such as the drainage courses, within the boundaries of the site.

* ECONOMIC *

GOAL: Provide for a limited economic base within the Alderwood Planning Area.

POLICIES:

1. Encourage service and retail commercial employment opportunities.

2. Orient employment opportunities in the area towards serving the convenience needs of the area residents.
II. BACKGROUND STUDIES
POPULATION & ECONOMIC ANALYSIS

STATE, REGIONAL & COUNTY POPULATION GROWTH

The growth rate in Snohomish County during the last two decades has been extremely high compared to the overall rate of growth for the State and Central Puget Sound Region. Table 1 illustrates the population growth from 1950 to 1970 for the State, Region and County.

<table>
<thead>
<tr>
<th></th>
<th>1950</th>
<th>Percent Increase</th>
<th>1960</th>
<th>Percent Increase</th>
<th>1970</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>2,378,963</td>
<td>19.9</td>
<td>2,835,214</td>
<td>19.5</td>
<td>3,409,410</td>
</tr>
<tr>
<td>Central Puget Sound Region</td>
<td>1,196,172</td>
<td>26.5</td>
<td>1,512,979</td>
<td>27.9</td>
<td>1,934,628</td>
</tr>
<tr>
<td>Snohomish County</td>
<td>111,580</td>
<td>54.3</td>
<td>172,199</td>
<td>54.0</td>
<td>265,236</td>
</tr>
</tbody>
</table>

Source: Snohomish County Planning Department

Between 1960 and 1970, the Central Puget Sound Region gained 385,691 people, or 79.0% of the total population increase for the State. Snohomish County, the northernmost member of the Central Puget Sound Region, has experienced a population growth not equaled by any of the other counties in the State. Between 1960 and 1970, the population increased 54% for an average of 9,300 new residents each year.

The major growth spurt was from 1966 to 1969, when approximately 43,000 new people were added. Since 1950, two-thirds of the average annual population increase has been attributable to in-migration, while only one-third is a result of natural increase. Migration of this magnitude changes an area constantly, placing new demands on almost every segment of government and private enterprise.

The population growth in Snohomish County has been the result of two principal factors: First, the continuing northward pattern of suburbanization from the Seattle Metropolitan Area; and second, the location of the Boeing "747" facility at Paine Field as well as a general expansion of the local economy. Even with the present economic slowdown, there are strong indications of long range continuation of both these growth stimuli.

ALDERWOOD PLANNING AREA GROWTH

The population growth of the County has not been equally distributed. The suburban expansion has taken place primarily in Southwest Snohomish County. Approximately 22% of the total County population is concentrated within a short radius of Everett, the principal city, which had a population of 53,622 in 1970.
The shaded area outlined in Map 1A includes approximately 87% of the County's population in 1970. This north/south linear corridor is typical of the Puget Sound Region and in the future is expected to be even more densely settled.

Prior to 1960, the Alderwood Planning Area was rural in nature, containing only a small amount of suburban development. Table 2 shows population trends for the area from 1961 to 1970, and also illustrates the forecasted population for 1990.

**TABLE 2**

**POPULATION TRENDS**

**ALDERWOOD PLANNING AREA**

<table>
<thead>
<tr>
<th></th>
<th>1961</th>
<th>1970</th>
<th>1990</th>
</tr>
</thead>
<tbody>
<tr>
<td>Snohomish County</td>
<td>180,550</td>
<td>265,236</td>
<td>419,155</td>
</tr>
<tr>
<td>Southwest County - Everett Area</td>
<td>130,128</td>
<td>229,400</td>
<td>366,955</td>
</tr>
<tr>
<td>Alderwood Planning Area</td>
<td>5,818</td>
<td>14,000</td>
<td>20,000</td>
</tr>
<tr>
<td>Alderwood as % of County</td>
<td>3.2</td>
<td>5.3</td>
<td>4.8</td>
</tr>
<tr>
<td>Alderwood as % of SW County</td>
<td>4.5</td>
<td>6.1</td>
<td>5.4</td>
</tr>
</tbody>
</table>

Source: Snohomish County Planning Department

Population growth for the Alderwood Planning Area is not estimated to increase at the same rate as in the past for several reasons. The area is primarily a residential area, with a large lot development. Construction of homes in the area will be mainly completed on a one-lot basis, since land available or suitable for large subdivisions is generally scarce. Moreover, the Alderwood Community Survey results indicated that it is the general desire of the residents to keep the area as open as possible, with few multi-family dwelling units.

*HOUSEHOLD SIZE AND COMPOSITION*

Family size within the planning area, 4.12 persons, is higher than the County average household size of 3.3 persons. This above-average household size is related to the predominance of single family housing. The family size is expected to decrease by 1990, as some diversity of housing types, such as duplexes, apartments, etc., is introduced into the study area.

As social units, the families in the survey area appear normal. The Alderwood Community Survey indicated that 96% of the interviewed families had a male as the head of the family. The community survey revealed that a fairly high
number of people are employed in a managerial and professional capacity. Together with skilled workers, craftsmen and foremen, they constitute 62% of the occupation of heads of households in the Alderwood Planning Area.

TABLE 3
MAJOR OCCUPATION OF HEAD OF HOUSEHOLD

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Alderwood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clerical and kindred workers</td>
<td>40 = 4%</td>
</tr>
<tr>
<td>Managerial</td>
<td>143 = 15%</td>
</tr>
<tr>
<td>Professional</td>
<td>114 = 12%</td>
</tr>
<tr>
<td>Sales</td>
<td>72 = 7%</td>
</tr>
<tr>
<td>Semi-skilled workers, operatives &amp; laborers</td>
<td>114 = 12%</td>
</tr>
<tr>
<td>Skilled workers, craftsmen &amp; foremen</td>
<td>342 = 35%</td>
</tr>
<tr>
<td>Service workers</td>
<td>54 = 6%</td>
</tr>
<tr>
<td>Technical workers</td>
<td>53 = 5%</td>
</tr>
<tr>
<td>Housewife</td>
<td>11 = 1%</td>
</tr>
<tr>
<td>Student</td>
<td>7 = 1%</td>
</tr>
<tr>
<td>Retired</td>
<td>23 = 2%</td>
</tr>
</tbody>
</table>

HOUSING

TABLE 4
HOUSING UNITS BY STRUCTURE TYPE (COMMUNITY SURVEYS)

<table>
<thead>
<tr>
<th>Structure Type</th>
<th>Alderwood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Family Dwellings</td>
<td>915 = 94%</td>
</tr>
<tr>
<td>Duplex &amp; Apartments</td>
<td>46 = 5%</td>
</tr>
<tr>
<td>Other (Including Mobile Homes)</td>
<td>12 = 1%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>973 = 100%</td>
</tr>
</tbody>
</table>

(Existing in survey areas - based on responses)

TABLE 5
HOUSING UNITS BY STRUCTURE TYPE

<table>
<thead>
<tr>
<th>Structure Type</th>
<th>1975</th>
<th>1990</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Family Dwelling</td>
<td>2776</td>
<td>3940</td>
</tr>
<tr>
<td>Apartments (2-19 Units)</td>
<td>72</td>
<td>309</td>
</tr>
<tr>
<td>Apartments (20 Units)</td>
<td>30</td>
<td>69</td>
</tr>
<tr>
<td>Other (Including Mobile Homes)</td>
<td>281</td>
<td>397</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3159</td>
<td>4718</td>
</tr>
</tbody>
</table>

Source: Snohomish County Planning Department
ECONOMY

The economic base of Snohomish County has shifted since 1950 from agriculture and extractive industries to service-oriented and manufacturing industries. Lumbering, paper and allied products and agriculture led the County in employment until the mid-1960's. The subsequent establishment of the aerospace industry has radically altered the economic function of the County, and has been the major factor contributing to population growth. The County, once economically independent of the Central Puget Sound Region, has now become an integral part of the regional economy.

The economic characteristics of the Alderwood Planning Area are consistent with this general trend. Its growth as a residential community is reflected by its lack of employment centers and the commuting of residents to other communities for employment. The major categories of employment in the planning area are government, construction and service-oriented activities.

Table 6, shows those employment categories which presently exist within the study area by percent. These relative percentages are generally expected to remain stable through 1990, with the total employment increase from approximately 1600 to 2200. However, there is expected to be a decrease in employment in the Agriculture/Forestry/Fishing & Mining Category as the area becomes more urbanized. Government, the largest employer, consists largely of persons employed by school districts. The Edmonds and Northshore School District personnel account for 95% of the persons employed by government in 1970. According to the projections of the Snohomish County Planning Department, school employment is expected to maintain this level through 1975 and 1990.

TABLE 6
EMPLOYMENT BY CATEGORY IN THE PLANNING AREA

<table>
<thead>
<tr>
<th>Category</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture/Forestry/Fishing &amp; Mining</td>
<td>18%</td>
</tr>
<tr>
<td>Construction</td>
<td>22%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>2%</td>
</tr>
<tr>
<td>Transportation/Communication/Utilities</td>
<td>2%</td>
</tr>
<tr>
<td>Wholesale/Retail Trade</td>
<td>6%</td>
</tr>
<tr>
<td>Office/Services</td>
<td>6%</td>
</tr>
<tr>
<td>Domestic</td>
<td>8%</td>
</tr>
<tr>
<td>Public &amp; Quasi-Public/Public Recreation</td>
<td>6%</td>
</tr>
<tr>
<td>Government (Including Schools)</td>
<td>30%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Source: Snohomish County Planning Department

The fact that construction represents the second largest employment category, indicates that the nature of the planning area is changing due to the amount of building activity taking place there. Employment in this category is not expected to increase rapidly because of the type of construction operations taking place. With the exception of residential development of Queensborough,
most of the development takes place in small increments, i.e., parcels of between 1 to 20 acres. These small-scale construction operations are associated with the land ownership pattern within the planning area, which consists of many small parcels.

Employment in the wholesale/retail and offices/services categories is located predominantly along 196th Street SW, directly east of I-5 and along SR 527 leading into Bothell. Many of these uses are legally non-conforming at present, but nevertheless continue to thrive and provide employment for some 200 people.

The Alderwood Survey provided information on the work location of area residents. Table 7, shows the specific proportions of people working in various parts of the Seattle/Everett area.

In the Alderwood Planning Area, 38% of the people work within Snohomish County, including 23% in the SW Snohomish County Area and 15% in the Everett Area. The majority of residents work within King County, and specifically in the Seattle Area (downtown Seattle and Seattle Harbor) -- 35%.

### TABLE 7
LOCATION OF EMPLOYMENT OF HEAD OF HOUSEHOLD (COMMUNITY SURVEY)

<table>
<thead>
<tr>
<th>Alderwood Community Survey</th>
<th>Kenmore Community Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub Totals</td>
<td>Sub Totals</td>
</tr>
<tr>
<td>Alderwood Manor, Lynnwood, Mountlake Terrace or Edmonds</td>
<td>226 = 23%</td>
</tr>
<tr>
<td>Everett</td>
<td>144 = 15% 38%</td>
</tr>
<tr>
<td>Kenmore/Bothell N. Seattle/N. King County</td>
<td>155 = 16% 16%</td>
</tr>
<tr>
<td>Downtown Seattle</td>
<td>258 = 27%</td>
</tr>
<tr>
<td>South Seattle/W. Seattle/ Harbor Island</td>
<td>82 = 8% 35%</td>
</tr>
<tr>
<td>East of Lake Washington</td>
<td>45 = 5%</td>
</tr>
<tr>
<td>Renton/Kent/or Auburn Area</td>
<td>14 = 1% 6%</td>
</tr>
<tr>
<td>Other</td>
<td>49 = 5%</td>
</tr>
</tbody>
</table>

These economic characteristics reveal that the Alderwood Planning Area is primarily a residential community, most of whose residents travel outside the study area to work. The employment which is located within the area is mostly
related to the school districts. As population grows here, school employment can likewise be expected to increase. Additionally, increases in the wholesale/retail and office/services categories are projected to take place.

*  

NATURAL FEATURES

INTRODUCTION

Aside from the people and their activities, the landscape and all its peculiarities plays a substantial role in the land use planning process. The topography often determines where such basic facilities as water, sewer lines and roads are located, while the capability of soils further delineates the possible range of land uses. Land, while seemingly in over-abundance, is one of the few elements in planning that cannot be increased in quantity, nor can it be replaced.

To better understand this basic element of planning, the geologic history and makeup, slopes, drainage patterns, vegetation and soils are described, examined and their planning implications elaborated upon.

GEOLOGY (See Geology Map 2A)

The Alderwood Planning Area lies in the western third of Snohomish County, the Puget Sound lowland section, which is made up largely of unconsolidated deposits of glacial debris. This western section includes most of the County's population, industry, and farming. Physiographic features, i.e., Puget Sound, fertile river basins, and plateaus rising 200 to 600 feet above sea level are at least partially responsible for the development pattern visible in the County.

One of these plateaus is the Upland Plateau, which extends into Alderwood's Planning Area. The Upland Plateau has generally smooth and gently rolling surfaces and is bounded by the Snohomish River and Puget Sound, which determine the plateau's arc-shaped drainage divide that follows closely about its north, east and west edges. The undrained depressions in the thick mantle of Vashon glaciation fill, which underlies much of the plateau, have become lakes. These lakes, such as Silver and Thomas Lakes, north of the planning area, usually overflow slightly during the rainy season or exceptionally wet years, and are depleted considerably by evaporation each summer.

Geologic History

Pre-Tertiary Geology: The information on pre-tertiary geology is little understood at this time. However, during the Eocene epoch a thick layer (approximately 12,000 feet) of sandstone, shale, coals, and volcanic ashes accumulated on a slowly sinking coastal plain. The folding of the landscape occurred at the succeeding Miocene time. This Northwest folding was followed in the Pliocene epoch by the uplift of the Cascade and Olympic mountains. The main drainage patterns as known today evolved after the uplift had begun.
Tertiary Geology: During the succeeding Pleistocene age, marking the beginning of the Tertiary age, Puget Sound was partially covered by ice during successive periods of glaciation. There were at least three such periods of glaciation, during which many large scale topographic features such as Lake Washington and Lake Sammamish were formed. Approximately 14,000 years ago, the Vashon glacier started to recede, leaving vast quantities of glacial debris or Vashon "drift" behind.

Recent Geology: During the post-Vashon period, the alluvial pitting of valleys in the Puget Sound Basin took place, resulting in stream deposits up to 100 feet thick. The plateaus, including Upland Plateau, are generally composed of consolidated "hard rock" tertiary sedimentary rock, covered by unconsolidated rock deposits that sometimes extend many hundreds of feet below sea level. These unconsolidated deposits resulted from the Cascade Mountain erosion occurring during the Pleistocene epoch, and they contain much of the important ground-water of the County.

Surficial Geology

While it is interesting to understand how the planning area was formed, it is more important to describe the immediate subsurface formations which affect the ultimate usage of the land areas lying on the surface. There are only two predominate surficial geologic formations found within the planning boundaries. Glacial till, a compact concrete-like substance, is basically confined to the plateau areas described in the topography discussion. Esperance Sand Member, a coarse ground sand and gravel substance, occupies the remaining seventy percent of the planning area.

The presence of these two subsurface deposits has a direct affect both on ground-water resources and upon development potential of the surface land areas. Characteristics relating to ground-water will be discussed in the surface and ground-water subsection.

IMPLICATIONS FOR PLANNING - GEOLOGY

As was pointed out in the foregoing text, there are two basic deposit types found in the planning area; glacial till and Esperance Sand. These two materials affect environmental suitability in two ways: through their ability to hold or disperse ground-water and through their inherent engineering strength to support structures.

With respect to the latter, ground formations containing glacial till have good bearing strength and are capable of supporting most heavy structures. Esperance Sand, by contrast, has only moderate engineering strength and its bearing capacity is influenced greatly by the topographic features and the soil types laid on top of it.

While Esperance Sand Member may be limited in bearing capacity, in comparison to glacial till, it is much better for holding ground-water. The degree to which ground-water is contained and dispersed depends in part on the coarseness of materials and the amount of silt and clay mixed in with the gravel. Towards the southern part of the
planning area the clay and silt content is high and consequently septic tank sewage disposal systems perform very poorly. In the northern portion of the planning area, the sand member is much coarser with smaller amounts of silt and clay. Thus, this portion of the planning area generally has better percolation capabilities for septic tank sewage disposal than does the southern portion.

SOILS (See Map 3A)

Like the surficial deposits, soil types are found in two basic varieties: well drained soils underlain by compact glacial till and well drained soils underlain by loose porous glacial till and outwash material. Aside from these predominate types, there are a scattering of poorly drained mineral soils and organic soils. These latter two are found, as might be expected, at the lower elevations in the planning area.

The well drained soils underlain by compact glacial till lie in an area generally coincident with the till-covered Upland Plateau. Well drained soils underlain by loose porous glacial till and outwash comprise the remainder of soil types located on the slopes and in the lowland areas. In a similar manner to surficial geologic formations, surface soil types affect both the development potential of the land and surface and ground-water resources.

Soil Suitability

Soils are classified into broad categories according to drainage, underlying deposits and physiographic position.* The following soil types are found in the Alderwood Planning Area and portrayed on the soils map.

I. Well Drained Soils Underlain by Compact Glacial Till: Alderwood Series

The Alderwood Series is one of the most common of the upland soils in the study area. It generally consists of well drained gravelly loam and gravelly sandy loam underlain by compact or cemented glacial till, known as hardpan.

The soils are of an average productivity, and, when in the rolling phases, they are better suited to timber production than agriculture. For development purposes, the Alderwood Series is generally stable on level ground, but they are not suited for septic tanks. The hardpan underneath makes the soils well suited for engineering purposes.

II. Well Drained Soils Underlain by Loose Porous Glacial Till and Outwash Materials: Everett, Indianola, and Lynden Series

The Everett, Lynden and Indianola soils are composed of excessively drained gravelly loam combinations underlain by loose porous glacial till and outwash materials. The soils can generally be found in conjunction with the Alderwood soils throughout the rolling upland plateau.

Legend:

- Well Drained - Underlain by Compact Glacial Till
- Well Drained - Underlain by Loose Glacial Till and Outwash
- Imperfectly Drained Flood Plain
- Poorly Drained Mineral Soils
- Organic
- Miscellaneous Land Types

Soils

Alderwood Area Plan

MAP 3a
Suitability for development purposes ranges from excellent to fair, again depending on the makeup of the soil with Everett gravelly sandy loam rating excellent and Everett gravelly loam rating fair. All the soils are well suited for septic tanks, although less so on slopes. These series are very good engineering soils because of high shearing strength and load-carrying capacity.

III. Well Drained Soil Underlain by Glacial Lake Sediment: Kitsap Series

Kitsap soils are not widely found in the upland terrace of South Snohomish County. This soil series is well drained and has developed from fine textured sediments deposited in former glacial lake basins or ponded glacial waters. Kitsap soils are free of gravel, coarse sand or stone.

This type of soil has an average agricultural productivity, but is only moderately good for development, due to poor septic tank suitability. The Kitsap soil series is a poor engineering soil due to moderate-to-low shearing strength and load-carrying capacity. It is extremely susceptible to slides on steeper slopes.

IV. Imperfectly drained Soils Flood Plain: Snohomish Series

Snohomish loam is the only type of the Snohomish soil series found in the study area. The top soil layer is basically loam, but is relatively shallow, about six inches deep. Below the six inch level, it contains layers of sandy loam. These layers are underlain by peat stratifications ranging in depth from three inches in areas near lower slopes where they border on the organic soils to depths of more than forty inches on the upper slopes near the upland area. This soil occurs as a fringe on the outer borders of peat, where mineral soil washed from the uplands has covered the peat.

Although the Snohomish Series is among the most fertile type of soil, Snohomish loam is unsuited to accommodate urban and suburban development of almost any kind. It is also a poor engineering soil because shearing strength and load carrying capacity is low.

V. Poorly Drained Mineral Soils: Bellingham and Edmonds Series

The Bellingham and Edmonds Series developed because of poorly established drainage in flat glacial lakes and similar depressions. Bellingham soils are predominantly underlain by fine textured and relatively impermeable substrata through which water moves slowly; as a result both series may become "quick" when wet.

The Bellingham Series requires artificial drainage to rate very productive, whereas Edmonds soils are not productive and less important. For suburban development, the Bellingham Series rates poor and the Edmonds Series, good.
Both series are unsuited for septic tanks. As an engineering soil, both series are poor to fair. The shearing strength is low in these soils but, for example, the Edmonds Series has good load-bearing characteristics under conditions of well established drainage.

VI. Organic Soils: Carbondale, Mukilteo, and Rifle Series

Carbondale mucks, Mukilteo peat and Rifle peat are all classifications of organic soils, which differ in parent material, state of decomposition, content of mineral material and thickness of the organic layer over the mineral soil.

Carbondale muck is generally very well decomposed, and is found in poorly drained depressions and along the outer borders of stream bottoms. The water table is always high in undrained areas.

Mukilteo peat occurs mostly in basin-like areas having an outlet in which water frequently covers the surface after heavy rain.

Rifle peat occurs in small bodies in all parts of the County, consisting of a two inch layer of dark-brown forest litter, resting on a twenty inch layer of dark-brown rather mucky woody peat. The usefulness for agriculture is good only when artificially well drained. These series are generally poor for all phases of urban and suburban development unless excavated to the underlying hardpan.

VII. Miscellaneous Land Types: (Rough, Broken Land)

Rough broken land is one of several types of non-agricultural land. The soil materials are predominantly Alderwood and Everett gravelly sandy loam, usually covered with a one-half inch layer of organic material, over an eight inch layer of pale-brown gravelly sandy loams underlain by gray cemented glacial till.

This soil has little potential value for agriculture and all aspects of urban and suburban development, primarily because it only occurs on steep slopes above 25%.

**IMPLICATIONS FOR PLANNING - SOILS**

The soils in the Alderwood Planning Area are fair to poor for agricultural activities. Considering current pressures for suburban development, the land appears ready and suitable for conversion to such development depending on demand.

Soils found in the study area, particularly the Alderwood and Everett Series, are good engineering soils. These two series provide good sources for roadfill and have desirable shearing strength and load carrying capacity characteristics.
Only the Everett soil series appears well suited for residential development utilizing septic tanks, provided that low densities exist. The series can be found in a significant portion of the Alderwood Planning Area where several smaller areas have demonstrated problems with high water tables and poorly functioning septic tanks. The source of these problems most likely is the thick sequence of silt and clay in the underlying Esperance sand. (See "Stratigraphy & Ground-water Resources"). These layers of silt and clay not only prevent the drawing of water from the normally water rich Esperance sand, but also prevent normal percolation downward to ground-water reservoirs.

**STRATIGRAPHY & GROUND-WATER RESOURCES***

The plateaus, including Upland Plateau, are generally composed of consolidated "hard rock" tertiary sedimentary rock, covered by unconsolidated rock deposits that sometimes extend many hundreds of feet below sea level. The following three types of unconsolidated deposits resulted from the Cascade Mountain erosion occurring during the Pleistocene epoch, and they contain much of the important ground-water of the County.

Admiralty Clay: The unconsolidated deposits starting with the Pleistocene deposits are classified as Admiralty Clay and Vashon Glaciation. The Admiralty Clay is composed of mostly clay materials (without important quantities of ground-water) known to range from about 1,000 feet below to 200 feet above sea level. The water bearing beds or aquifers in this member are believed to be largely horizontal sand beds in which recharge and movement of water is restricted by the low permeability of the surrounding clay.

Esperance Sand: The prevailing deposits on top of Admiralty Clay are sand and fine gravel, considered to be part of later course-grained sediments of the Vashon Drift. This strata, referred to as Esperance Sand, ranges in thickness from 25 to 300 feet, and holds important quantities of ground-water. Particularly the sand unit is water bearing, and the ground-water reservoirs, perched on the almost impermeable Admiralty Clay beneath the plateau surfaces, make it particularly susceptible to development. These water reservoirs, or aquifers, in the Esperance, occur in lens-shaped bodies and are replenished by downward percolation of precipitation on the plateau surface. After this water reaches the ground-water, it moves slowly in a lateral direction to the spring discharges, from which, for example, North and Bear Creek derive much of their water. Large amounts of water also run off the till mantle. However, where this mantle is almost impermeable, recharge to the aquifer occurs by lateral percolation from the sides of streams, plateau slopes, or in areas where the till is absent.

In the vicinity of Alderwood Manor southward to the Sammamish River Valley, a thick sequence of silt and clay lies in the middle of the Esperance. Extraction of water from the sand member in that area is restricted to the sand above and below the clay, and as a result, the development of ground-water resources in the Alderwood Study Area is difficult.

Till: Often a mantle of ground moraine left by the melting of the Vashon Ice can be found over the Admiralty Clay and Esperance Sand Strata. This mantle, or till, is largely impermeable and is covered with 1 to 10 feet of soil and subsoil along the surface of the till. These soils form a slightly permeable zone which fill with water during the rainy season and partly dry out during the summer.

The till of the Vashon glaciation is a poor aquifer and sheds most of the precipitation through runoff. A small amount of water percolates irregularly into and through the till, or accumulates in the soil zones or on top, where it is tapped by a great many "hardpan" wells of small yield.

**STRATIGRAPHY AND GROUND-WATER RESOURCES - IMPLICATIONS FOR PLANNING**

Water yields in the Alderwood Planning Area are usually low and most of this area is serviced by municipal water. Consequently it is unfeasible for continued development to utilize existing ground-water resources. Moreover, as the development in this area increases, natural percolation to the ground-water resources will be reduced due to loss of natural landscape covering which in turn, results in larger runoffs from precipitation.

Knowledge of these drainage patterns also suggests the need to establish adequate drainage and sewer facilities in the planning area. Open space and creek valleys can be fitted to a trail or park system thereby preserving relatively small amounts of ground-water resources which do exist. In general, the ground-water resources can best be maintained by preventing development and overabundance of streets in natural ground-water recharge areas.

**TOPOGRAPHY & SLOPES (See Topography Map 4A and Slopes Map 5A)**

Generally, the terrain in the Alderwood Planning Area is rolling with a series of smaller plateaus, featuring small jogs toward the north, indicating the direction of the drainage. Approximately sixty-five percent of the planning area has a steepness of slope gradient of 7% or less. Lands with this slope gradient are basically flat and are generally found throughout the planning area.

Traversing from north to south is a ridge of high ground. This ridge reaches an elevation of 500 feet above sea level and is located just east of an imaginary line which would bisect the planning area into two right triangles. The top of the ridge forms a plateau, better known as the Upland Plateau in geologic terms, approximately two-thirds of a mile wide and two miles long. Sloping to the southwest and to the southeast, the elevation drops to 100 feet in less than a mile's horizontal distance. Along the west side of the plateau flows Swamp Creek. Swamp Creek originates north of the planning area at the outfall of Lake Stickney and flows south to the Snohomish-King County Line. Shortly after it enters the planning area, passing under the interchange where Interstate 405 joins Interstate 5, it divides the Upland Plateau into two parts.
Legend:

- 8 - 15% Slope
- 15% or more
- Creeks and Swamps

Slopes and Drainage

Alderwood Area Plan

MAP 5a
The smaller of the two plateaus lies north of 196th Street SW and basically is oriented at right angles to the predominate north-south ridge. These two land forms, plus a third plateau in the southeast corner, give the planning area its basic character.

Thirty percent of the planning area is comprised of sloping land with gradients varying between 8 and 15%. Land with these kinds of sloping conditions can be found in proximity to the Upland Plateau or in the vicinity of the other two smaller plateaus. The remaining ten percent of the planning area has slopes of 15% and over. Such steep sloped terrain is confined primarily to the west side of the Upland Plateau and throughout the course of Swamp Creek.

**TOPOGRAPHY & SLOPES - IMPLICATIONS FOR PLANNING**

Slope conditions will influence and/or limit the location of development according to the steepness of the slope gradient. For example, slopes with gradients of 0-7% are generally good building sites, slopes of 8-15% are moderately suitable for accommodating buildings and slopes exceeding gradients of 15% are only buildable in selected instances. In relating the slope gradient of land with its ability to be built upon, two other factors must also be considered: soil erosion and vegetative cover.

Slope gradients are basically flat and generally are not affected by either loss of natural protective cover or erodible types of soils. Fast water runoff from steep areas may in some instances cause localized flooding of the lowland areas, but fast water runoff usually occurs as a by-product of other topographic, soils and vegetative cover relationships.

Development on terrain with 8-15% slope conditions will likely experience problems with soil erosion if the vegetative cover is removed. Rapid storm water runoff may also be experienced if vegetation is removed or if there are no measures taken to control it.

On slopes of 15% or greater, the maintenance of vegetative cover is of critical importance to control soil erosion and fast storm water runoff. Therefore, if development is allowed to take place on such slopes, overall density will have to be limited and development controls applied to prevent soil erosion and fast storm water runoff.

**VEGETATION (See Map 6A)**

Three vegetative types have been mapped for the Alderwood Planning Area, agricultural, cultural, and natural. By far, the most prevailing type (an estimated seventy-five percent) is the natural vegetation. These areas
have either dense stands of second growth evergreen and deciduous trees or
a combination of a few trees and substantial undergrowth. Cultural vegetation
is found in those areas where there is predominate residential or commercial
development. It includes cleared areas which have not been replanted with
lawns, playgrounds, and gardens. The mapping of agricultural vegetation
delineates those land areas which contain meadows, pastures, and large culti-
vated areas. It does not necessarily describe lands which have an agricultural
use.

Due to the inclusiveness of the vegetation categories, it is not possible to
provide a detailed analysis of the various varieties of trees, shrubs, and
grasses. Rather, it is only possible to describe the developed and undeveloped
areas in terms of their predominate ground cover. While no species data
has been compiled, it is reasonable to state that most varieties of trees
and shrubs common to the northwest; Red Alder, Vine Maple, Poplars, Douglas
Fir, Salal, Spruce, Oregon Grape, etc., are found in the planning area.

**IMPLICATIONS FOR PLANNING - VEGETATION**

Vegetation and vegetative cover play a significant role in
the overall environment. It not only establishes the basis of
the eco-system which generates oxygen and sustains life, but
also has other important functions of stabilizing soil, har-
boring wildlife, providing wind barriers, retarding fast water
runoff from sloped areas, and lending an overall aesthetic
quality to the landscape. For planning purposes, these last
few functions are the most influential in making land use
determinations.

If the projections for future population are correct, then the
Alderwood Planning Area will experience the impact of an ad-
ditional 6,000 people. One of the ways that impact will be
experienced is through the conversion of undeveloped natural
vegetation areas to developed cultural areas. In order to pre-
vent the adverse effects of soil erosion, flooding, loss of
wind breaks, and loss of scenic character, it will be necessary
to preserve as many trees and shrubs as possible during
development. It will also be necessary to replant those areas
which are cleared so that a quality environment can be maintained.

**DRAINAGE AND DRAINAGE WAYS**

The study area lies wholly within the Cedar River Basin. The western portion,
along with part of Brier, is in the Swamp Creek Sub-basin, while the eastern
portion is mostly in the North Creek Sub-basin. Along Scriber Creek, a
tributary to Swamp Creek which originates in Lynnwood, several swampy areas
occur. Aside from a few low sections near I-5 and along creek beds, the land
is generally well drained and suited for development. These low areas are
small enough that unless they are designated and improved for recreational
purposes, developers would most likely attempt to reclaim much of the land for
residential or commercial purposes. Swamp Creek, besides being an important
drainage way, is also the spawning ground for a substantial commercial fisheries
resource including Coho Salmon, Steelhead, and Cut-throat Trout.
IMPLICATIONS FOR PLANNING - DRAINAGE AND DRAINAGE WAYS

Drainage ways are formed by the uplifted land forms through which water courses flow. Sloped areas adjacent to Swamp Creek are a critical element of this particular drainage way. The manner and rate at which water filters down to Swamp Creek is dependent to a large degree on the amount and type of vegetative cover. For the most part, the vegetation on the sloped areas adjacent to Swamp Creek is intact. There are two exceptions - the Bonneville Power Line and a sizable gravel pit located near Larch Way. These exceptions, however, do not destroy the integrity of the drainage way. The presence of commercial fisheries resources in the drainage way makes it doubly important to protect its integrity both in terms of water quality and vegetative cover.
LAND USE

INTRODUCTION

In the early 1960's the Alderwood Planning Area began a gradual transition to a suburban community. This transition was accelerated by the advent of Interstate 5, Interstate 405, the opening of the Boeing Plant, and the overall boom economy of the late 1960's. In comparison to the pattern of development which was taking place in Edmonds and Lynnwood, Alderwood Manor was still a rural community. This is not to overlook the influx of people moving into Alderwood; in that time period population rose from 5,818 in 1961, to 9,206 in 1968. More to the point - growth was limited because of the lack of utilities.

Prior to the advent of Interstate Highway 5, the Alderwood Area was a fairly representative example of a rural community. There were no significant concentrations of people, but rather a small farm atmosphere prevailed.

These farms were and are places where one might pasture animals but production farming was limited. As is typical of many rural areas in the County today, the area was served by narrow meandering roads. These were and are adequate for rural, low density development, but do not prove servicable for higher density suburban living patterns. The area also had none of the community services one comes to expect when an area experiences the onslaught of suburban expansion.

EXISTING LAND USES (See Map 7A)

The quantification of existing land uses in the Alderwood Planning Area points out decisively that most of the land is still undeveloped. Approximately two-thirds of the land is so classified. The following table indicates current land uses, based on information derived from census tract information which was distributed to sub-areas within the planning boundaries.

<table>
<thead>
<tr>
<th>TABLE 8</th>
<th>CURRENT LAND USES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>Manufacturing</td>
</tr>
<tr>
<td>Land</td>
<td>12%</td>
</tr>
</tbody>
</table>

-29-
Legend:

- Suburban Residential
- Urban Residential
- High Density Urban Residential
- Commercial
- Community Business
- Light Industry
- Schools
- Parks
- Undeveloped

Existing Land Use
Alderwood Area Plan
MAP 7a
According to the Alderwood Community survey conducted in the area under the auspices of the University of Washington's Bureau of Community Development, most of the existing residents cited the "rural and undeveloped" atmosphere as the reason for living in the area. Consequently, it is not too surprising to find that the largest category of developed land use is residential. The concentrations of development, as is evident from the land use map, are confined to the northern half of the planning area. The southern portion is expected to develop when sewers are available.

Existing commercial land uses consist of a small quantity of community serving businesses which are found principally on 196th Street SW between Interstate 5 and Filbert Road and along State Route 527 (Everett-Bothell Highway), between the Snohomish-King County line and the intersection of 527 and Interstate 405. In both instances, the commercial land uses are interspersed with large tracts of residential or vacant land. This kind of development pattern tends to set a precedent for "strip" commercial development suggesting that an infilling of vacant spaces produces the most logical form of development along these arterials. Besides the inefficient use of land, interception of arterial flows and higher utility costs which this type of commercial development produces, the area residents have overwhelmingly stated that strip commercial is not compatible with their desire to maintain the aesthetic qualities of the rural environment. Thus, in order to overcome the zoning precedent problems, and achieve community goals, commercial expansion will have to be controlled both with the cooperation of property owners and with the enforcement and implementation aspects of this plan.

**ZONING (See Map 8A)**

At present, the largest segments of the planning area are zoned Rural Residential 8400 and Rural Residential 12,500, which allow a minimum residential lot size of 8400 square feet and 12,500 square feet, respectively. Presumably, zoning is the most important tool to implement planning; however, the Southwest Snohomish County Comprehensive Plan, which was adopted in 1967, has already been contradicted by zoning decisions in the eastern and southern portions of the study area. In these areas, substantial sections have been rezoned to a higher residential density or more intensive use than that called for by the existing comprehensive plan. The advent of sewer trunk lines in these sections, and the concurrent assessments have been partially responsible for this break-away from the recommended densities.

Commercial zoning is limited to parcels along 196th Street SW, Larch Way, 228th SW/246th and SR 527 (Everett-Bothell Highway). With the exception of 196th Street SW and SR 527, the commercial zoning consists of the Neighborhood Business variety. Both of these main arterials have a mixture of Community Business and General Commercial zoning. In the case of SR 527, the zoning more closely follows the pattern of existing uses. By contrast, much of the land currently zoned Community Business and General Commercial adjacent to 196th Street, lies vacant. Of some thirty to thirty-five acres of land zoned for commercial, only 25% of it is actually used for business purposes. This instance of unused commercial land raises the question of how much land should be zoned for commercial use in the future. This is a question which cannot be answered solely within the context of the Alderwood Planning Area, as availability of commercial land in neighboring areas has a direct bearing on the overall need for additional lands in the Alderwood Planning Area.
Related to the amount of commercial zoning within the study area, is the fact that adjacent to it, in Lynnwood alone, 623 acres have been zoned for commercial use. If all this land were developed for commerce, there would be enough to serve approximately 155,000 people, more than double the population of the whole of Southwest County. This assumes that four acres of commercial land satisfies the neighborhood, community, general and freeway commercial needs of 1,000 persons.* Thus, the amount of land already zoned for commercial use on the perimeter of the planning area would appear to more than satisfy the needs of Lynnwood, Mountlake Terrace, Edmonds, Woodway, Brier, and the Alderwood/Kenmore area which have a combined population total of only 77,000 and a projected 1990 future population of 104,000. Based on these figures, extensive commercial development should not be necessary in Alderwood Planning Area.

PROPERTY OWNERSHIPS

While there are a few large tracts (20 acres or more) of land in the planning area, most of the planning area is comprised of small landowners holding tracts of less than 20 acres. As the area continues to develop, the small lot ownership pattern is becoming more common. Development on large tracts of land such as is possible in the more rural areas of the County, is limited in Alderwood Manor. Consequently, the Alderwood Planning Area will have a tendency to develop on a small lot basis.

CIRCULATION

The Alderwood Planning Area is bordered by Interstate 5 and Interstate 405. There is access to the area by way of I-5 exits off 44th Avenue W., and 196th SW, and there is presently only one interchange on I-405 in the Alderwood area, at the intersection of the Bothell-Everett Highway and I-405.

Most of the east/west traffic within the study area is carried by 196th SW and 204th Street SW (coming off 44th Avenue W.). These roads, although functioning as arterials, are not built to usual County arterial standards. Similarly, north/south traffic movement, carried by Poplar Way, Brier Road, Locust Way, and, to a lesser extent, Meridian Avenue, are considered by the County Engineering Department as substandard arterials. The function and design of these roads has been oriented to the collector streets variety and often the rights-of-way are such that widening of these roads will require additional acquisition of land in order to bring them up to County standards.

The following table indicates a series of traffic counts taken from the County Transportation Study on the roads which presently facilitate east-west and north-south traffic movement throughout the area.

An examination of Table 9 reveals that certain roads will experience substantial increases in traffic loadings. In the case of 196th SW between I-5 and Filbert Road and 240th Street SW between 61st Place NE and I-5, the increase in traffic

*King County Comprehensive Plan, 1969, page 65.

-33-
# TABLE 9

**TRAFFIC COUNTS - ALDERWOOD PLANNING AREA**

<table>
<thead>
<tr>
<th>Road</th>
<th>Intersecting Road/Freeway</th>
<th>Traf. Count* Cars/Day</th>
<th>Present Class</th>
<th>PROJECTIONS 1977</th>
<th>1990</th>
</tr>
</thead>
<tbody>
<tr>
<td>196th SW</td>
<td>I-5</td>
<td>12,700</td>
<td>Major</td>
<td>13,000</td>
<td>14,000</td>
</tr>
<tr>
<td>Filbert</td>
<td>Larch Wy</td>
<td>7,300</td>
<td>Major</td>
<td>7,400</td>
<td>8,000</td>
</tr>
<tr>
<td>204th SW</td>
<td>44th W.</td>
<td>7,500</td>
<td>Major</td>
<td>7,800</td>
<td>8,800</td>
</tr>
<tr>
<td>204th SW</td>
<td>W of Poplar</td>
<td>2,900</td>
<td>Major</td>
<td>4,800</td>
<td>6,800</td>
</tr>
<tr>
<td>204th SW</td>
<td>E of Poplar</td>
<td>3,000</td>
<td>Major</td>
<td>4,800</td>
<td>6,800</td>
</tr>
<tr>
<td>Larch Way</td>
<td>S of 204th SW</td>
<td></td>
<td>Secondary</td>
<td>2,700</td>
<td>4,700</td>
</tr>
<tr>
<td>Larch Way</td>
<td>E of Poplar</td>
<td>1,700</td>
<td>Secondary</td>
<td>2,300</td>
<td>6,800</td>
</tr>
<tr>
<td>Larch Way</td>
<td>E of Cypress</td>
<td>2,900</td>
<td>Secondary</td>
<td>2,300</td>
<td>4,200</td>
</tr>
<tr>
<td>228th SW</td>
<td>E of Locust</td>
<td>1,800</td>
<td>Major</td>
<td>5,700</td>
<td>9,200</td>
</tr>
<tr>
<td>228th SW</td>
<td>E of Meridian</td>
<td>2,500</td>
<td>Major</td>
<td>4,500</td>
<td>5,100</td>
</tr>
<tr>
<td>228th SW</td>
<td>E of SR 527</td>
<td>3,100</td>
<td>Major</td>
<td>3,200</td>
<td>7,300</td>
</tr>
<tr>
<td>240th SW</td>
<td>E of Meridian</td>
<td>2,000</td>
<td>Secondary</td>
<td>5,500</td>
<td>7,700</td>
</tr>
<tr>
<td>44th Ave W.</td>
<td>N of 212th SW</td>
<td>7,500</td>
<td>Major</td>
<td>7,800</td>
<td>8,800</td>
</tr>
<tr>
<td>Poplar Way</td>
<td>N of 204th SW</td>
<td>3,800</td>
<td>Secondary</td>
<td>6,000</td>
<td>8,000</td>
</tr>
<tr>
<td>Poplar Way</td>
<td>S of 204th SW</td>
<td>3,000</td>
<td>Secondary</td>
<td>3,200</td>
<td>7,000</td>
</tr>
<tr>
<td>Poplar Way</td>
<td>S of Larch Wy</td>
<td>3,000</td>
<td>Major</td>
<td>5,100</td>
<td>6,000</td>
</tr>
<tr>
<td>Locust Way</td>
<td>N of 228th SW</td>
<td>1,500</td>
<td>Secondary</td>
<td>2,900</td>
<td>5,200</td>
</tr>
<tr>
<td>Locust Way</td>
<td>S of 228th SW</td>
<td>2,800</td>
<td>Secondary</td>
<td>5,800</td>
<td>5,800</td>
</tr>
<tr>
<td>Locust Way</td>
<td>S of Lockwood Int</td>
<td>4,100</td>
<td>Secondary</td>
<td>5,100</td>
<td>6,000</td>
</tr>
<tr>
<td>Damson Rd</td>
<td>N of I-405</td>
<td>2,116</td>
<td>Secondary</td>
<td>2,800</td>
<td>4,700</td>
</tr>
<tr>
<td>Damson Rd</td>
<td>S of Logan Rd</td>
<td>1,358</td>
<td>Secondary</td>
<td>2,600</td>
<td>3,200</td>
</tr>
</tbody>
</table>

* Snohomish County Transportation Study, Alan M. Voorhees, 1972, pages 14 and 32.

*
will call for major route improvements - street widening and construction of new linkages. The County Transportation Plan suggests that these improvements occur in the 1972-1977 time frame. Budget priorities will dictate the actual timing, but it would appear that the recommended period of time will closely approximate the actual.

The Transportation Study recognizes that by 1990, there will be a need for route improvements on Locust Way, 240th SW, 212th, 228th, I-405, and I-5. Locust Way will require both widening and realignment between 240th SW and Filbert Road. In the 1972-1977 time frame, 240th will have to be improved to structio of new linkages. By 1990, 240th will have to be improved to arterial design standards (between Carter Road and SR 527). Between Larch Way and 44th Avenue W, there will be a new linkage constructed to be known as 212th. 228th, between Locust Way and 39th SE, I-405, and I-5, will all require expansion of roadways to accommodate the projected traffic.

COMMUNITY FACILITIES

INTRODUCTION

Community facilities are generally provided through public efforts to promote the public health, safety and general welfare of the citizenry. These facilities, which include schools, parks and open spaces, fire protection, libraries, plus water and sewer facilities, are vital to a community because they determine a significant part of the quality of life for the average citizen of the County.

The following sections review and analyze the existing community facilities in order to establish the basis of, and create a framework for, the Community Facilities Plan.

SCHOOLS

Overall Analysis

The Alderwood Planning Area is served by two school districts - Edmonds School District No. 15, and Northshore School District No. 417. The northern portion is part of the Edmonds School District, while the southern portion lies within the Northshore School District.

Presently, there are eight schools: four elementary schools and one junior high school in the Edmonds School District; two elementary schools and one junior high school situated in the Northshore School District. Edmonds School District No. 15 facilities are well distributed geographically, while the Northshore School District facilities are found close to the King-Snohomish County boundary line.

School facilities in the Alderwood Planning Area are relatively new as compared with the rest of the schools in Snohomish County. Of the eight schools, two were built between 1968-1969, four built between 1964-1966, and the remaining

-35-
two were built between 1961-1962. In the school year 1969-1970, the total enrollment of the schools was 4,853, of which 3,009 pupils attended elementary schools and 1,844 junior high schools. Due to a decline in enrollment, the 1972-73 school population was only 4,385. Elementary schools housed 2,795 students and the two junior highs comprise only 1,590 students. The senior high school students attend schools in both Edmonds School District and Northshore School District, the latter school is located outside the study area.

TABLE 10
EXISTING SCHOOL FACILITIES
OF THE PLANNING AREA

<table>
<thead>
<tr>
<th>Name of School</th>
<th>District</th>
<th>Grade</th>
<th>Enrollment</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alderwood Ele.</td>
<td>Edmonds</td>
<td>K-6</td>
<td>530</td>
<td>20,000 Cypress Way</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Alderwood Manor</td>
</tr>
<tr>
<td>Cypress Ele.*</td>
<td>Edmonds</td>
<td>K-6</td>
<td>486</td>
<td>21500 Cypress Way</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Alderwood Manor</td>
</tr>
<tr>
<td>Hazelwood Ele.</td>
<td>Edmonds</td>
<td>K-6</td>
<td>546</td>
<td>3300 - 204th SW</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Alderwood Manor</td>
</tr>
<tr>
<td>Hilltop Ele.</td>
<td>Edmonds</td>
<td>K-6</td>
<td>546</td>
<td>20425 Damson Rd</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Alderwood Manor</td>
</tr>
<tr>
<td>Crystal Springs Ele.</td>
<td>Northshore</td>
<td>K-6</td>
<td>627</td>
<td>21615 - 9th Ave</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Bothell, Washington</td>
</tr>
<tr>
<td>Shelton View Ele.</td>
<td>Northshore</td>
<td>K-6</td>
<td>606</td>
<td>SW 234th at 5th W</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Bothell, Washington</td>
</tr>
<tr>
<td>Alderwood Junior Hi.</td>
<td>Edmonds</td>
<td>7-9</td>
<td>798</td>
<td>20000 28th Ave W</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Alderwood Manor</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Bothell Washington</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td>4,385</td>
<td></td>
</tr>
</tbody>
</table>

* School Closed

Source: Edmonds School District and Northshore School District

The downturn in school enrollment can best be attributed to the recent decline in the local economy. However, future population projections which indicate that an additional 6,000 people will be living in the area by 1990, suggest that school enrollment will increase over the long term.

School Facilities - Edmonds School District No. 15

The following is an analysis of the school facilities in the planning area:

Alderwood Elementary School: The school was built in 1965 on a ten-acre site and has 20 regulation classrooms, one multi-purpose room, and one library. The school is designed for a capacity of 600 students. The play area occupies 4.5 acres and a parking area contains about 55 spaces on five acres of ground.
Cypress Elementary School: The school was built in 1962 on a 9.7 acre site and designed for a capacity of 600 students. The school includes 20 classrooms, one multi-purpose room and one library. There are 4.1 acres used for play area, and 53 parking spaces.

Hazelwood Elementary School: The total acreage of the site is ten and one-half acres. The school was built in 1966 and designed for a capacity of 600 students. The building space includes 20 regular classrooms, one multi-purpose room and one library. There are 4.3 acres used as play area, and 42 parking spaces.

Hilltop Elementary: The school was built in 1968 and is one of the newest in the Edmonds School District. The site is 10 acres in size and is situated at the intersection of Climax Road and 205th Street SW. The facility was designed for a capacity of 600 students. The building contains 20 classrooms, one multi-purpose room and one library. The play area occupies five acres. The school was first opened in the school year 1969-1970, with an enrollment of 490 students.

Alderwood Junior High School: The school was built on a 20.3 acre site in 1965. The building contains 26 regular classrooms, one gymnasium, one library, and several special classrooms. The school was designed for a capacity of about 900 students; the play area occupies 9.7 acres. The school's service area consists of about six elementary schools.

School Facilities - Northshore School District No. 417

Crystal Springs Ele. School: The school is situated on the southwest corner of the study area, against the south Snohomish County boundary line, and was built in 1961 and expanded in 1968 for a total capacity of 600 students. The school was built on a site of 8 acres, which is below the State minimum site standards. The play area occupies 2-1/2 acres. The building includes 20 classrooms, a library, and a multi-purpose room. In the school year 1968-1969, it had an enrollment of 589 students which decreased to 366 students in the following school year.

Shelton View Elementary School: The school was built between 1968-69. It is one of the newest elementary schools in the Northshore School District. The site is about 15 acres in size, and designed for a permanent capacity of about 600 students. There are 22 teaching stations, a library, and a multi-purpose room. The play area occupies about 3 acres. The school was opened in the school year 1969-1970, with an enrollment of 520 students. It is expected to increase to about 600 in the next school year (1973-1974).

Canyon Park Junior High School: The school was built on a 20 acre site in the southwest corner of the study area, near the King-Snohomish County boundary line in a lowland area. The school has 20 teaching stations, one gymnasium, one auditorium, one lunchroom, a library and a greenhouse. The play area
occupies 12 acres of the site, and there are 225 parking spaces. The school had an enrollment of 965 students in the school year 1968-1969, and 968 students in 1969-1970, whereas the planned capacity, including portable classrooms, is slightly over 900 students.

PARKS, RECREATION AND OPEN SPACE

A lack of adequate parks and recreation facilities exists in the Alderwood Planning Area. While presently much land is undeveloped, rapid suburbanization has dramatized the need for such public and private recreational facilities.

Recently, the County Engineering Department issued a trail permit to the County Parks Department for the use of an old road right-of-way (Larch Way) located along the west side of Swamp Creek. The second and only other site is an undeveloped former five-acre gravel pit transferred from the County Engineering Department to the County Parks Department. Although the two sites are located a short distance from each other, they are not connected and future connections would appear to be difficult because of the probable designation of Locust Way as a secondary arterial.

Aside from these two sites, other facilities are either privately owned, or operated by various schools. There is one privately owned gun range along 228th SW; other facilities, such as playgrounds, baseball fields, and basketball courts, are provided by schools as part of their normal program. Youth programs are sponsored by the Alderwood Boys Club on 28th Avenue W., south of 195th SW.

Presently, the County Parks Department is engaged in the acquisition of large areas of land in the outlying portions of the County. In several years, the priorities are expected to change to development of a trail and park system in the suburban section of the County.

Municipalities adjoining the Alderwood Planning Area have their own park programs, the most active one being in Mountlake Terrace.

Each of the surrounding communities has expressed interest in a South Snohomish County park and trail system, of which one of the key features is park and trail easements along creeks.

SEWERS

Sewer service in the study area is provided by the Alderwood Water District. In 1965, the Alderwood Water District agreed to accept the responsibility for providing sewers to the unincorporated areas within its boundaries. Shortly thereafter, a comprehensive sewerage plan was initiated for the major portion of the unincorporated areas of Southwest Snohomish County, including the Alderwood Area. The plan was prepared in cooperation with the existing local and County governments, and was completed in May of 1966.
<table>
<thead>
<tr>
<th>Municipality</th>
<th>Park</th>
<th>Number Of Acres</th>
<th>Number Of Developed Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lynnwood</td>
<td>Lynndale Park</td>
<td>33.5</td>
<td>3.5</td>
</tr>
<tr>
<td></td>
<td>Wilcox Park</td>
<td>7</td>
<td>7.0</td>
</tr>
<tr>
<td></td>
<td>Dale Way Park</td>
<td>7.2</td>
<td>7.2</td>
</tr>
<tr>
<td></td>
<td>Lynnwood Neighborhood Park</td>
<td>5.6</td>
<td>5.6</td>
</tr>
<tr>
<td>Mountlake Terrace</td>
<td>Terrace Creek Park</td>
<td>60</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Veterans Memorial Park</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Terrace Ridge Park</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Ballinger Lake Island Park</td>
<td>4.5</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>Access Park</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Jack Long Park</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Lake Ballinger Golf Course</td>
<td>45</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>(prop. park)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A portion of canyon land to</td>
<td>60 approx.</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>connect with Terrace Ridge</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>and Terrace Creek Parks</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(prop.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cedar Way Acquisition Park</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(prop.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Trails Park System along</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Swamp Creek and Shriber Creek adjoining Lions Creek along power line just outside Brier (prop. trail park)</td>
<td>500 to 900</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Brier Park Acquisition</td>
<td>12.5</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>Brier Play Field</td>
<td>1.0</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Source: Snohomish County Parks Department
In November of 1966, the voters within the District authorized the District to construct, operate and maintain a sanitary sewerage system, and issue bonds to a maximum of $9,650,000.

Some of the first facilities installed in the District were designed to meet immediate needs. Operating facilities now existing in the study area include service in the vicinity of Queensborough, located in the North Creek drainage basin to 180th SW. Facilities in the Swamp Creek and North Creek drainage basins collect and deliver their sewage to the METRO system in King County. A fee per household is charged by METRO for final treatment. Until such time that the major trunk facilities are in place, some of the existing facilities have components which are intended to be interim.

SOLID WASTE DISPOSAL

Disposal of solid waste in Snohomish County is accomplished primarily by dumping on land. Currently, 14 land disposal sites receive all the residential and commercial waste disposed within the County. Five sites are operated by the County and nine sites are operated by municipalities. Three additional sites are owned and operated by private individuals. These sites are allowed to accept only non-putrescible waste including industrial and demolition type wastes.

All of the sites in Snohomish County are considered to be sub-standard, although improved over previously uncontrolled burning dumps. Many of these existing sites have an anticipated life of less than five years.

Service areas of the existing sites vary substantially throughout the County due largely to operating policies. Several sites are not open to the public, some sites operate only a few days a week, some impose user fees and others are free. These inconsistencies in operating policy are reflected in the imbalance of service areas and varying levels of convenience for citizens.

No County or city dump sites are located within the Alderwood Study Area. With respect to distance and convenience, citizens in the Alderwood and Kenmore areas utilize the Everett Landfill, North King County Transfer Station, or the North King County Dump, near Cottage Lake. A round trip to the dump will vary between 10-24 miles, depending upon the origin of the trip in the study area, and the dump that is patronized.

Waste Collection

Refuse collection in the Alderwood Study Area is provided by two firms: 1) Sno-King Garbage Company, and 2) Northwest Garbage Company. Each company has a franchised service area, as defined by the Washington Utilities and Transportation System.

Customers in the Alderwood Area are classified as either residential or commercial. Collection service in unincorporated Snohomish County is not compulsory; therefore, service is a matter of convenience.
Each of the companies provide a full range of collection services. Collected refuse is disposed of at the Everett Landfill, or in North King County. A site at Kenmore is utilized for demolition debris only.

**WATER SUPPLY**

Water within the study area is supplied by the Alderwood Water District. Formed as a separate entity in 1931, the Alderwood Water District presently provides water to over 90,000 people in South County. The existing service area includes the incorporated cities of Lynnwood, Mountlake Terrace, Brier, Edmonds, (that area lying north of 220th Street SW, and east of 96th Avenue W.) and segments of unincorporated land.

The District has a 50-year contract with the City of Everett to purchase water from their main source of supply - Spada Lake, located in the Sultan Basin. Approximately 4 years of this contract are remaining and provisions stipulate a minimum supply to the Alderwood Water District of 15 million gallons per day.

The Alderwood Water District has water rights to approximately ten wells; however, only two are in working condition. The capacity of the two wells total 2.2 million gallons per day. One of the wells having a capacity of approximately 1.0 million gallons per day, is being utilized on a daily basis while the other well is on standby.

**Transmission and Storage**

From a 23 million gallon per day pumping station, located in Everett, water is transmitted through a 36" transmission supply line and a looped 30" transmission line to two 28 MG terminal storage reservoirs. Both of these storage facilities are located near 35th Avenue W, and 156th Street SW and serve as the system's main distribution center. Additional storage facilities within the service area include two terminal and four peak-demand reservoirs. Total combined storage in the district amounts to 66 million gallons.

**Distribution**

The water distribution system in the Alderwood area is operated and maintained by the Alderwood Water District. The majority of the water mains in the Alderwood Area are either good quality cast iron or ductile pipe. The older woodstave and steel water mains are gradually being replaced. Annually, $200,000 - $300,000 of replacement work is being done by the Water District in an effort to improve their facilities.

**FIRE PROTECTION**

Fire protection in the Alderwood Study Area is provided by three Fire Protection Districts: District No. 1, District No. 9, and District No. 10. District No. 1 operates and maintains four stations located in Alderwood Manor, Lake Serene Esperence, and Brier. Districts Nos. 9 and 10 maintain and operate one station located in Bothell.

*See Appendix*
The Brier Station is the only station completely manned by volunteers, whereas the other stations in Districts 1, 9 & 10, employ full time personnel with the assistance of volunteers. All three districts exercise mutual aid agreements between adjacent districts and cities for additional fire support.

LIBRARIES

Library service in Snohomish County is provided primarily through the Sno-Isle Regional Library system. The system serves the residents in both unincorporated and incorporated areas of the County through community libraries, rural centers and a Bookmobile service.

Communities that wish to participate in the Regional Library system and desire a community library, must provide the building, plus maintenance cost. Books, films, recordings, supplies and personnel salaries are supplied by the Regional Library Fund.

The North Creek Library, located just to the north of the Alderwood Planning Area, is relatively small, but appears to provide adequate service. For more specialized material, Alderwood residents can utilize the Lynnwood and Mountlake Terrace branch libraries. These libraries also participate in the Sno-Isle system and have larger collections.

With limited expansion of floor area and moderate increases of book stock, the existing library facilities are anticipated to be sufficient to serve the long-range needs of the Alderwood Planning Area.
III.

COMPREHENSIVE PLAN
COMPREHENSIVE PLAN

INTRODUCTION

Most if not all early comprehensive land use plans were formulated in order to provide a basis whereby the governing body could segregate land uses for zoning purposes. Over the years, comprehensive land use planning has been broadened in scope to include, in addition to land use, such concerns as utilities, parks, transportation, community services, and special design elements. These other elements proved to be so thoroughly interwoven in the fabric of the environment that land use or utilities or community services could not be planned for without examining the impact of one upon the other. The presence of sewer facilities, for example, would allow a higher order of residential development than if they did not exist. People located in an urban area will demand a more highly efficient circulation system than those who live in a rural area.

Because the scope of comprehensive planning has broadened, so too has the purpose of planning. Zoning changes very often result from comprehensive plan recommendations, but rather than zoning being the end product or the "justification" for planning, it has become one of several tools to implement a plan. The purpose of a comprehensive plan has the more important objective of providing a policy guide for community growth over time. This is the function of the Alderwood Area Comprehensive Plan.

Comprehensive planning fulfills its purpose when it provides a forum in which a community can make decisions about what it wants to become in the future. Once that determination has been made, then it is up to the community to determine what measures it must take in order to achieve its goals.

The planning process which has been inherent in the preparation of the Alderwood Area Comprehensive Plan is a good example of planning providing a forum for decision making. The community, as represented by the Alderwood Community Council, has worked very hard over the last three years to bring about this plan. Part of the planning process involved is making the community aware of the potentialities and constraints of both the physical and social environments which together make up the Alderwood Community. Many hours have been spent organizing and surveying the community to determine what needs existed in the area and what attitudes and opinions were harbored regarding overall community development. Emphasis has been on reporting process as this was the way in which the Planning staff was able to communicate the results of their work once the background information had been assembled. Upon the base of the survey documentation and stated goals, the Planning Department was able to prepare a plan for the Alderwood Area. Plan formulation, while normally accomplished in a few months, has taken approximately three years to complete. As the community residents are well aware, the extended period of time stems from the attempts to reach an acceptable plan proposal for the 196th Street SW area.

Unique to this effort has been the initiative taken by the property and business owners along 196th Street to have prepared at their expense a detailed comprehensive plan (called the Rupeik's Plan after the consultant who prepared it) for
the area 600 feet on either side of 196th Street from the freeway east to Filbert Road. Their plan was intended to supplement and refine the Planning staff's original proposal for 196th Street. In most circumstances where a general plan, such as the staff had prepared, is refined by a more specific plan, the detailed plan will take precedence over the general plan.

This was not the case with the 196th Street proposal. Soon after the Rupeik's Plan was completed, it became evident that there was a wide disparity of opinion among the Alderwood Community regarding the concept of commercial development for 196th Street.

Many viewed the strip commercial development pattern in nearby areas and were convinced that this should not be repeated along 196th Street in the Alderwood Planning Area. The property owners along 196th Street countered that they intended that the proposed commercial areas develop in a planned fashion with controls voluntarily applied to ameliorate the effects of business development. The situation was further complicated by the County Planning staff's position that the Rupeik's Plan had not been able to realistically verify the need for the amount of commercial land use shown in that proposal. For this and other reasons, the Planning staff then proceeded to prepare a compromise plan in an attempt to more realistically represent the market and to work out a land use scheme which would hopefully satisfy the concerns of most of the Alderwood Planning Area residents.

The compromise proposal served more to widen the opinion gap rather than to bring about coalescence and overall plan support. So divided in opinion was the community, that both a move to incorporate the area and a drive to annex the area to the City of Brier failed due to lack of community unity. In order to gain perspective on the community's situation, two things must be kept in mind. However divided the community may have been or may be on the issue of commercial development along 196th Street, there is overall support for the residential character of the remainder of the planning area. Secondly, resolution of the 196th Street conflict is only possible within the context of the Alderwood Community. This simply means that a mile long strip of land on either side of 196th Street cannot be planned or developed in isolation. It is an integral part of the community of Alderwood. To lose sight of this fact opens the door for continued division in the community.

The issue of what kind of commercial development will characterize the 196th Street area is still to be decided. The resolution may happen through Planning Commission action, restudy of the area by Planning Department staff, or by decision of the Board of County Commissioners. Whatever the forum, part of the discussion will have to center on the prospect of plan implementation. For many residents in Alderwood Manor, the implementation aspect of planning has been a disappointment. They were present in 1966 when the Southwest Snohomish County Area Comprehensive Plan was adopted; they later witnessed in little over a year's time, several rezones approved in contradiction to the adopted plan; they have witnessed high density residential subdivision take place in Alderwood Manor with septic tank sewerage disposal systems - and seen the results when the disposal systems failed. It, thus, would logically seem what the residents desire most is some guarantee that effective action will be taken to implement the "new plan". This is the objective, be it of 196th Street or the Swamp Creek Drainage Way preservation attempts.
A successful implementation phase depends on both the attitude of the decision makers and the involvement of the area residents. Conditions are different now than they were in 1967. There is, for example, a formally organized group -- the Alderwood Community Council -- which can represent the community in planning matters. Additionally, there is an awareness on the part of the decision makers that the Alderwood Community is vitally interested in comprehensive planning and its effects. Beyond these two essential ingredients is the current plan itself. It is different from the 1967 plan. Not only have the provisions been modified, but also the document is more precise. The inclusion of policy statements in support of stated goals provides a way to make the plan a more effective means by which development can be directed. With policy statements, the community and decision makers do not have to rely on the colors on a map, but can assess new proposals on the basis of performance criteria and goal achievement. How well this kind of plan will function is dependent on its ability to change over time and on its ability to stand the test of implementation. This, as mentioned above, depends on the involvement in the planning process of concerned citizenry and decision makers.
GOALS AND OBJECTIVES

Goals and objectives are the cornerstone of planning because they reflect the social and cultural mores of a society and what it sees as a desirable future. Such goals and objectives must guide actions and decisions, made over time, which are related to the comprehensive physical, social, and economic development of a planning area. In short, goals and objectives seek to answer the questions "planning for what?" and "planning for whom?" in the process of comprehensive plan development and the ensuing sequence of public and private decisions. These questions are at least partially answered by the Alderwood Community Council as they have taken the time to express their needs and objectives. Their concept of what Alderwood Manor should be over time is reflected as follows:

1. Living areas should be developed so that every citizen can live a full and productive life in a clean and decent environment.

2. Areas should be developed for those of modest income as well as the more affluent; for apartments as well as single-family residences; areas should also be provided for those who prefer a more rural setting.

3. Adequate provision for future growth and development must be made while at the same time minimizing the disruption of existing homes, schools and other public facilities.

Discussion: While growth appears inevitable, it can be controlled so as to preserve those values which create a healthy environment. Development which is merely expedient may not, in the long run, be the most desirable. Care must be taken to insure that new growth is not detrimental to existing areas or to long-term values. Means must be found whereby economic, social, cultural and physical growth can be accommodated, while at the same time, retaining an appreciation and a respect for our natural environment.

4. Citizen involvement in planning and development should be invited and encouraged.

With the exception of the fourth item, the objectives presented by the Alderwood Community Council are largely similar to the County Development Goals, adopted in 1968 by the Snohomish County Commissioners. The goals of the Community Council are not to be construed, however, as a mere duplication of words, but rather as a selective re-emphasis of those County goals which bear out the values of the residents in the council area. The County Planning Department has, in the meantime, attempted to address itself to the fourth goal, an example of which is this particular comprehensive plan.
SNOHOMISH COUNTY DEVELOPMENT GOALS

The overall County goals and policies which have been formally adopted by the County are:

1. A wide variety of living areas should be developed so that every citizen can live a full and productive life in a clean, decent environment.

2. The economic growth and prosperity of Snohomish County should be encouraged in a manner which will be of benefit to all of its citizens.

3. Adequate provision for future growth and development of the County must be made while at the same time minimizing the disruption of existing homes, businesses, industries, schools and other public facilities.

4. The magnificent natural beauty of Snohomish County must be recognized and preserved.

5. Development in Snohomish County should be such that public tax money is spent economically and wisely.

6. Every effort must be made to achieve cooperative coordinated development programs between the County and all the various municipalities within the County.

SNOHOMISH COUNTY DEVELOPMENT POLICIES

Specific County development policies to implement the above goals were adopted by the Board of County Commissioners on January 28, 1968:

1. The creation of well defined individual urban growth centers located throughout the County.

2. The urban growth centers should be encouraged to develop their own economic and employment base.

3. Transportation facilities should be designed so as to provide rapid, efficient inter-connections between urban growth centers.

4. Schools, parks, libraries, fire stations, and other public facilities must be designed so as to serve the basic land use plan.

5. The vast open land resources in Snohomish County located between urban growth centers should be preserved in a relatively open, uncluttered state.

6. Good quality agricultural land must not be allowed to continue to be converted to non-agricultural uses.

7. Pollution of our air, salt water, rivers, and streams must be prevented.
ALDERWOOD AREA PLAN GOALS

While it is the objective of this plan to reflect as much as possible the overall goals of Snohomish County, it is also necessary to plan for more specific goals germane to the Alderwood Planning Area. The following goals are ones which have been developed for Alderwood Manor as an outgrowth of the Alderwood Community survey and the Alderwood Community Council's formulated goals. In addition to these, other goals have been formulated, as a result of identified needs which became apparent in the background study analysis for this plan.

1. Maintain a primarily residential character in the Alderwood Planning Area.

2. Develop commercial uses which are appropriate to the scale of the area and the relationship to other business opportunities in Lynnwood and surrounding areas.

3. Develop a balanced community transportation system which would include pedestrian, bicycle, and horse trail links, in addition to efficient public and private vehicular transportation facilities.

4. Encourage the provision of community facilities to shape future growth in a manner that is most efficient, economical, and the least disruptive to the area.

5. Maintain and enhance the intrinsic land forms, water courses, and vegetation conditions within the planning area.

6. Provide for a limited economic base within the Alderwood Planning Area.

The differences and the similarities between the two sets of goals (the Countywide and Alderwood Area) is representative of the scope of each set of goals. That is, the differences reflect a community-wide residential set of values and aspirations, while the County goals must encompass all segments of society and its activities. The similarities, as stated before, indicate the agreement of the community residents with those County goals that appear to have expressed their visions of a desirable future. These then are the goals which the County will be utilizing to guide the plan implementation process for the Alderwood Planning Area.

PLAN CONCEPT - RESIDENTIAL COMMUNITY

The overall objective of this plan is to reinforce the basic rural residential characteristic that is currently inherent to the Alderwood Manor Planning Area. In order to achieve that objective within the context of this plan, it was essential that two things be accomplished. First, it was necessary to formulate goals and objectives which reflect to the best extent possible, the needs and the desires of the community residents. This was achieved by working closely with the Alderwood Community Council especially as they began to interpret the results of their community survey. The second task of the planning effort was to examine both the physical and land use characteristics and the socio-economic forces shaping the Alderwood Manor Community and interpret them in such a way that an effective decision making base could be built. The net result of these two efforts is what can be termed a Policies Plan.
It is expected that the development of policies will benefit both the citizenry of Alderwood Manor and the elected officials and staff charged with responsibility for implementing the plan. A few of the ways a policy plan assists decision makers is described in a book by William J. Goodman entitled *Principles and Practices of Urban Planning*, 1968:

"1. The essential and uncluttered character of policy statements facilitates public understanding and public participation in the planning program.

"2. The policy statements permit and encourage intimate involvement in the planning process by elected officials.

"3. The policies plan serves as a coordinative device bringing together under a single framework the diverse agencies that may have an impact on planning and development. In this respect, it is particularly useful in multi-jurisdictional areas such as Snohomish County.

"4. The policies plan provides an element of stability and consistency in the planning program in that it will not be made obsolete by changing conditions.

"5. This policies plan can be useful as a guide to the County Commissioners and local municipal legislative bodies responsible for adopting land use controls, to the County and local municipal planning commissions and boards authorized to administer the controls, and to the courts which must judge the reasonableness of the legislation and the fairness of its administration."

The inclusion of developmental policies within the context of this plan will, in the opinion of the planning staff, provide a way to bridge the gap between general goals and specific recommendations. In the past, the primary means by which goals and objectives were represented was by the graphic depictions on a plan map.

Whereas Comprehensive Plan Maps are essential to describe land use possibilities, they provide little to assist the decision maker in making determinations of developmental suitability. By incorporating plan policies into the context of the plan, there exists a more definitive basis for making land use judgements.

**METHODOLOGY**

Plan methodology in this case is the data interpretation process whereby plan policies are formulated. The discipline of the plan called for both the reporting of existing and anticipated future conditions and a discussion of what the implications and influences would be for future growth and development. For example, pertinent information relating to physical environmental factors was gathered regarding the soil types in the Alderwood Planning Area. This information was cross referenced with various land use types (see Appendix A) and the net result was soil suitability information. Such data was then interpreted in a predictive manner to suggest those areas which would be
suitable for accommodating development and those which would not. Similarly, "plan implications" were also derived for the land use and socio-economic aspects of the Alderwood Planning Area. The plan implications then provided the basis for the construction of developmental policies and recommendations for future action.

Part of any methodological approach to planning involves the making of assumptions which provide the basis of plan recommendations and policy formulation. The following is a list of the more important assumptions which guided the formation of this plan.

1. The overwhelming desire on the part of the residents of the Alderwood Planning Area regarding future growth is to maintain the residential land use patterns currently found in the planning area.

2. A balanced community does exist, but is found at the subregional level and therefore many community services and opportunities for employment are found outside, but adjacent to, the Alderwood Planning Area.

3. Considerations of environmental tolerability and capability should influence the decisions of where, what kind, and what intensity and when development can take place within the planning area.

4. Local resident orientation and allegience as well as geographic features determine the makeup of the Alderwood Community.

5. Consideration of constraints introduced by topographic, soil and manmade features will reduce community facility and services costs. Higher density areas have been established where these features imposed the fewest constraints.

6. The seemingly large amount of open space is susceptible to development.

7. There is a need for some street and road improvements in the planning area to facilitate both traffic circulation and visual orientation.

8. Residential development will be balanced by natural open space areas due to inherent topographic and site conditions.

9. There is a predicted future population for the Alderwood Planning Area of 20,000 people. Such a population level will mean the planning area can expect to be impacted by the location of 6,000 more people over the next 20 years.

10. There will be a need for additional community facilities including fire and police protection, schools, parks, etc., to meet the expected demand based on the influence of more people in the area.

11. Extensive sewer service will be present in the planning area, but will not occur until after 1978.
12. The location of existing and proposed regional commercial centers on the perimeter of the study area preempts the desirability and feasibility of another major commercial center within the planning area.

13. The western section of the planning area is now and will continue to be, part of the market area for commercial concentration in Lynnwood. The eastern and southern part, on the other hand, will be oriented more toward the commercial concentrations in Bothell and Kenmore.

14. The predominate type of commercial development desired on the part of the area residents is a neighborhood serving kind.

If, over time, these assumptions are not borne out, then it will be necessary to either amend or up-date the plan. In either case, the community sentiment should be assessed at the time of up-date or amendment to determine what, if any, changes in attitudes may have occurred.

* PLAN TARGET DATE *

The plan takes into consideration the growth which has been projected for the study area through 1990. These projections have been established by the Snohomish County Planning Department, in conjunction with other county background studies and analyses. Changes can be expected in many factors such as community goals and policies, public facilities, employment centers and/or family size.

Nevertheless, the Plan does represent a way in which growth, presently anticipated to occur between now and 1990, can be directed in order to achieve a desirable living situation in the future.

* LAND USE PLAN *

The land use plan element has the basic function of allocating residential, commercial, and community facility land uses throughout the Alderwood Planning Area. Land use distributions were made taking several factors into account. These factors include goals and objectives, environmental suitability, location of streets and arterials, land ownership, existing development patterns and population and economic forecasts. The overall concept guiding the apportionment of uses was that of land suitability. A serious attempt was made during the course of the plan preparation for the Alderwood Area to determine the extent to which the natural site conditions could accommodate new development. It was assumed that there would be new development and that it would have to be accommodated somewhere in the area. The question of where to direct new development proved to be best answered by studying first the environmental factors and evaluating the predictable relationships between these factors and new development. (See Appendix A for the analysis material.)

Experience with past development in the Alderwood Planning Area and other areas of the County has indicated that failure to consider land capability has brought about situations in which a whole community or the County is asked to bear the financial
burden of paying for various corrective actions necessitated by inappropriately located or premature development. There are many different examples which would illustrate this point, but perhaps two of the best are development which takes place on soils which have marginal or no septic tank disposal capabilities and development which occurs in the floodplain areas of rivers. Each year the costs of living with these mistakes continue to increase to the point where they are fast reaching the limits of what can reasonably be afforded by individual taxpayers or the units of local government.

Equally important in making land use allocations, is the aspect of the overall pattern of development. Experience has shown that where development occurs in a "leap frog" fashion, that is where some land areas are built up and others are left vacant in a more or less haphazard pattern, it is more difficult and expensive to service such areas with streets, roads, utilities and community facilities. In comparison, if the development pattern had occurred in a more uniform fashion through incremental extensions of the existing community, the provision of such facilities is less costly. To a large extent, the development of the Alderwood Planning Area typifies the leap frog suburban development extending north from Seattle. Given the expectation for continued growth in Alderwood Manor, land use patterns which are extensions of existing areas of development and which are located most appropriately, taking into consideration the environmental suitability factors, are the patterns of development which will be the least costly to provide with suburban and urban level services. Not only will the cost factors for providing utilities, roads, transportation, etc., be less costly, but there is also the probability that substantially more of the amenity factors of the environment can be preserved and thereby, make the Alderwood Planning Area a more desirable place to live. This, it must be kept in mind, is the dominate objective expressed by the area residents.

RESIDENTIAL LAND USE

Residential development in the Alderwood Planning Area is presently scattered, with some concentration occurring between 196th Street SW and Larch Way. Most homes are quite similar in character and residential areas are similar in design. Few apartment complexes are presently located in the study area.

Future expectations are that some apartments which are currently vacant will, in time, fill in with single family residences to provide a more uniform pattern of development. The impetus for this infilling will be the construction of sewer facilities. It should be noted, however, that even when sewers are brought into the area there will still be some parts of the planning area not served by sewers. The introduction of sewers into the area is not expected to be accomplished until after 1977. Should the construction of sewers occur before that time, it is still projected that two or three years will pass before there will be a substantial impact felt from the presence of sewer facilities. Many people believe that with introduction of sewers into areas developed at low densities, higher densities should logically occur. Whereas this assumption has some validity within the context of the Alderwood Area Plan, there are more basic considerations which call for development in this planning.
area to be directed on the basis of land suitability, community desires, and other major planning determinants. The addition of sewers augments land suitability in that it prevents land from being restricted by soils with poor septic tank disposal characteristics. Beyond that, the presence of sewers should be the determining factor.

**Suitability for Residential Development**

The plan's proposals for future residential development are based on soils data and its inter-relationship with the other environmental factors discussed in the background studies section of this plan. Interpretive soils information provides the foundation for determinations not only of suitability of land area for development, but also of the physical constraints and limitations which should be placed on any development within the planning boundaries.

Soils have been rated relative to their comparative suitability for suburban uses. By selecting sites on soils with the fewest limitations for designated uses, property losses, health hazards, and high construction costs may be minimized; likewise, erosion and sediment hazards may be reduced.

**Home Sites:** Soils with fewest limitations for homesites are very deep, well drained, permeable, nearly level to gently sloping, free from flooding, and with a low slide potential.

**Buildings:** The bearing strength of individual soils may vary significantly under different moisture conditions. The bearing value was rated for moist or wet conditions as applicable for a specific soil.

The slope gradient also has an effect on the stability of foundations and the cost of development, especially where the slope exceeds about eight percent. Additional engineering and foundation construction costs may be necessary to overcome slope limitations.

**Periodic flooding of home sites becomes a very serious health hazard, and even a hazard to life, as well as causing costly damages to homes. It is known that soils of bottom lands along streams are likely to be flooded - some often, others infrequently.**

**Landscaping:** Suitable soils will also enable the owner to beautify his property with vigorously growing plants. The choice of suitable grasses and shrubs that will grow well on wet soils is more limited than for the better drained soils.

**Septic Tanks:** A septic tank system for underground disposal of household sewage into the soil, consists of a septic tank and its filter field. Tile delivers the effluent throughout the filter field for aeration and disposal. The sewage undergoes an aerobic bacterial action in the septic tank, but requires further aerobic treatment in the soil of the filter field.
Soil factors which are considered in determining limitations for filter fields are: depth to seasonably high water tables; depth to impervious layers, such as bedrock or cemented glacial hardpan; flooding hazard or frequency; permeability of soil layers above hardpan or bedrock; slope of land; and texture of the soil into which the effluent will percolate. Soils with the fewest limitations for septic tank filter fields are those that are very deep, well drained, at least moderately permeable, nearly level, and not subject to overflow. Where septic tank filter fields are considered, it should be kept in mind that even though soils may be well drained, the iron contained in the soil may precipitate and clog the septic filter bed, making the system ineffective. Generally, not more than three homes per acre should be built where septic tanks are the means of sewage disposal. Even then, septic tank disposal systems are only interim solutions to sewage disposal problems. The above described effects have been summarized on the Home sites and septic map (see Map 9A).

In addition to the preceding map and discussion, all of the pertinent environmental effects for residential development have been combined and graphically depicted on the Limitations for Residential Development Map. (see Map 10A)

Residential Allocations

The residential land categories used in the Alderwood Area Comprehensive Plan are: Rural Conservation, Residential Estate, Suburban, Urban, and High Urban. These are categories of residential land use which are being used uniformly in other comprehensive plan revisions and updates throughout the County.

The various densities associated with each relate to population and economic expectations, to the natural and man-made features, ownership and land use patterns, anticipated layout of public utility systems, goals and desires of the County and the communities, accessibility to other points in the region and relationship to other proposed land uses.

The lowest density, Rural Conservation, allows a maximum density of one dwelling unit per 2.5 acres. As explained earlier, this density is proposed for those areas where the natural features either prevent full development, or where the area possesses exceptional recreational value to warrant the least possible development; as in the case of areas along creek beds. For example, many places on the plan are shown to be best suited for park development or left in their natural state as open space. It is the recommendation of this plan that should such areas not be purchased for parks or should the pressures of development be so great as to preclude land being left undeveloped, then this category of land use should be employed. The emphasis on the usage of this category for parks or open space land, is based on the natural site conditions of steep slopes, the preservation of the integrity of major drainage ways such as Swamp and Scriber Creeks, poor soil conditions, i.e., erodible, high water content, etc., and substantial vegetative growth, which call for great sensitivity in land usage, if developed at all.

This category was also used in those areas which have high noise levels such as the northern portion of the planning area where the two freeways converge. It is here that the natural vegetation conditions play an important role in
Legend:

- 0-8% Good Bldg. / Good Septic
- 15%+ Good Bldg. / Poor Septic
- 0-8% Unbuildable
- 8-15% Unbuildable
- 15%+ Unbuildable

Limitations for Residential Development

Alderwood Area Plan

MAP 10a
making the area an acceptable place to live. If the vegetation were removed as would be necessary at greater densities of development, it is expected that the noise levels would greatly increase and the area would be significantly imposed upon by the freeway noise.

The predominant category proposed in the Alderwood Planning Area is Residential Estate. This category specified a density of 1 to 2 dwelling units per gross acre. Generally this category was located in areas showing limitations for development, based on slope and soil capabilities.

Suburban Density allows 2 to 4 dwelling units per gross acre. This category was generally proposed for plateaus and land showing few if any limitations for development. Accessibility and land use and ownership patterns further helped to define these zones, particularly in the northeastern section of the planning area.

Urban sets forth residential densities of between 4 and 7 dwelling units per gross acre. This density indicates the highest single family classification to be utilized in the planning area. The land areas on which this density is situated are eminently suited for building, and the limited concentrations proposed would prevent excessive demands on public facilities while simultaneously giving definition to proposed community centers.

High Urban densities of between 7 and 12 dwelling units per acre are proposed in close proximity to commercial development. These low density multiple family areas are so located in order to minimize the impact of this higher development on other single family residential areas. The impact is expected to be minimized due to the adjacency to prime arterials and to the confinement in contained areas. This latter factor would enable utility distribution systems to be provided on a least-cost basis.

**Goals and Policies**

All of the above mentioned plan provisions fulfill the intent of the overall goal statement for residential development as stated in the goals section of this plan. Whereas the plan recommendations describe the fulfillment of the goal statement, the task that remains is to direct development in such a fashion that, over time, the basic plan concept is maintained.

**GOAL:** Maintain a primarily residential character in the Alderwood Planning Area.

**POLICIES:**

1. Encourage single family development as the primary land use within the planning area.

2. Protect residential areas by limiting commercial development.

3. Encourage low density multiple family development in areas where there is major access and service of planned utilities.
4. Encourage planned residential solutions for development.

5. Encourage development compatible with the natural constraints of slopes, soils, vegetation, and drainage.

6. Encourage both urban and suburban residential development.

7. Encourage high density single family development in areas where there is major access, service of planned utilities, and compatible natural constraints in the area.

8. Encourage the up-grading or removal of dilapidated houses or structures.

GOAL: Maintain and enhance the intrinsic land forms, water courses and vegetation condition within the planning area.

POLICIES:

1. Protect and maintain the natural slope, water, and vegetation conditions in the Swamp Creek, Scriber Creek, and other drainage ways to insure their continued role in the natural process.

2. Protect the valuable anadromous fisheries and other aquatic resources in Swamp Creek and its tributaries.

3. Protect against and eliminate the pollution of ground and surface water resources.

4. Encourage density of single family dwelling units compatible with the steepness of the slopes.

5. Discourage the continued use of land for single-family dwellings on septic tanks in those areas where soil and slope conditions are not suitable for such development such as in the Swamp Creek drainage way.

6. Retain the attractive wooded character of the Alderwood Planning Area by strictly limiting the cutting of trees and removal of ground cover.

7. Contain the impact of alterations of the natural site conditions which disrupt or over-burden natural systems, such as drainage courses, within the boundaries of the site.

* In addition to the policy statements, performance criteria are also included as part of the text which further define the intent and type of development constraints which, if applied, would assist implementation of the plan.

Performance Criteria

General Development:

1. Residential development should be encouraged to take place on plateaus and in areas of less than 15% slope.
2. Where possible, creeks, utility easements, etc., should be used as park strips and pedestrian walks. Parks and schools should be located next to these greenways so children can use the park strips as walkways to and from schools and parks.

3. Residential developments should be sited so as to take advantage of the natural features and provide adequate usable outdoor living space. Specifically, the natural variety offered by the landscape in the form of topographic variations, views, creeks and features, such as the stand of poplars south of 196th SW along Poplar Way, should be maintained.

4. Residential neighborhoods should be developed as a unit with natural boundaries (creeks, etc.) and man-made boundaries (freeways, major arterials, etc.) forming the physical limits. Locate schools, parks and other activity centers to function as neighborhood focal points to promote and foster socialization within the neighborhood.

5. Encourage innovation and experimentation to improve housing developments, subdivisions and residential land development patterns through the use of devices such as the planned unit development concept of development.

6. Residential areas should be buffered by landscaping, backup lots, open space, major streets, etc., to separate them from commercial areas.*

7. Design residential developments to avoid fronting on major and secondary arterials. The use of frontage roads, lots backing up to the thoroughfare, loop streets and cul-de-sacs should be encouraged.

8. Encourage the placement of underground utilities in new residential developments.

9. Relate the type and density of residential development and concomitant public improvements to soil capabilities.

10. Decrease residential densities as the slope increases above 8%, to avoid drainage, erosion and accessibility problems.

11. Locate multi-family residential (apartment houses) close to business, shopping, and transportation.

12. Provide ready access to major and secondary arterials for multi-family residential. Adequate arterial and collector streets should be constructed concurrently or exist prior to the development of multi-family residential areas.

13. Multi-family residential should be located close to arterials, but should not be strung along major streets as "buffers" to single family areas.

Mobile Home Parks:

14. Locate mobile home parks on or near arterials.

15. Design mobile home parks to be compatible with surrounding uses.*
COMMERCIAL LAND USES

Major Commercial Areas

There are no major shopping centers, such as those found in Lynnwood, presently existing within the Alderwood Planning Area. The community serving commercial uses which do exist are located primarily along 196th Street SW and along the Bothell-Everett Highway (SR 527). Given this existing pattern of development, the plan proposes to concentrate future commercial uses in these areas.

196th Street SW: The problems of commercial development occurring along 196th SW have already been mentioned, but because the development of this street is so crucial to the overall implementation of this plan, more emphasis is given to it as a commercial center than to any of the other areas within the planning area which are devoted to commercial land use. This is not to imply that other commercial developments will not have an impact on the community, but rather, their magnitude of impact will have substantially less effect on the other areas if they are developed as planned.

In the nearly three years since the proposed plan was first presented to the Alderwood Community, there has been only one area of substantial controversy - the proposed development of 196th Street SW. During the course of these years, five plan modifications have been drafted on the part of the Planning staff and the area residents in an attempt to resolve the multiple differences of opinion among the citizenry. As mentioned in the introduction to this section, the process of resolutions has not been easy, and the points of view have often been polarized. In late 1971 and 1972, movements to incorporate the planning area and to annex the area to the City of Brier were both begun and thwarted. Those issues having been laid aside, an opportunity was again open to pursue the conclusion of the comprehensive planning efforts.

A series of meetings were held in early 1973 to present and discuss a compromise solution for the future development of 196th Street (Plan Modification #3). The result of these meetings revealed that opinions held by community residents had polarized to the point that even the compromise solution as proposed by the Planning Department was not totally acceptable to any of the three factions represented in the community. However, in the interest of completing the comprehensive plan and concluding the long citizen involvement process, a decision was made to recommend the third plan modification for adoption. Prior to public hearing, however, the Alderwood Manor Improvement Association requested that they be allowed to prepare and submit at a public hearing, yet a fourth plan modification which better reflected that group's changed point of view. This fourth modification was also subject to the same analysis which had been undertaken for the other three modifications. Each plan was analyzed in light of the following four basic factors -- community support, impact on surrounding land uses, economic viability over the life of the Plan, and pattern of existing land uses. The conclusions drawn from this comparison indicated Plan Modification #3 still provided the best balance of land uses, further supporting the decision to proceed to public hearing.
Whereas, the Planning Commission concurred with the staff proposal, action was taken at the Board of County Commissioner's Hearing to prepare a fifth and final modification for the 196th area. Meetings were again held with area residents, and a plan was devised that represents the best compromise that could be achieved in view of the widely diverging opinions regarding the orderly development of 196th Street. The compromise plan was also acceptable to the Planning staff, and was the scheme agreed upon to be drafted into the overall plan for the Alderwood Planning Area.

Because the process of planning in the Alderwood Planning Area has been substantially dominated by the concern over the development of 196th Street SW, it is both appropriate and necessary to describe the various land use schemes which have been proposed for this sub-area of the planning jurisdiction. The following text and maps depict both the proposed alternatives and the scheme adopted by the County.

Modification #1. (See Map 11A)

The first County plan proposal called for a business center located north of Alderwood Elementary School, at the point along 196th Street where the commercial rezones had taken place to date, and additional commercial adjacent to the freeway. The two commercial centers were to be linked on the north side of 196th Street by low density (12 d.u./acre maximum) multiple family land use. In essence, the commercial area was to be the neighborhood serving in scale, recognizing that across the freeway in Lynnwood there were community serving commercial establishments already in existence, and a large major regional shopping center proposed. Whereas this modification recognized the realistic limits to commercial expansion, it proposed nothing to buffer the commercial areas from the residential areas.

Modification #2. (See Map 11B)

The second modification was prepared by the private planning consulting firm of Clark, Coleman & Rupeiks for a fee of $14,500 borne by the property owners and businessmen along 196th Street.

Their proposal called for the expansion of community serving commercial from the freeway east to Filbert Road, comprising an estimated 100 acres over a mile's distance. In addition to the proposed commercial, the concept also included an area of industrial park development, as well as buffer areas of multiple family development. Unique to this proposal was a development contract to be signed by the property owners along 196th Street. The contract would have provided both architectural and environmental controls. Although the plan proposal was well-documented, and reflected the property owners attitude toward commercial development, the plan was unacceptable to many area residents, as well as to the County Planning Department. Primary objections related to the excessive amount of commercial development proposed, and the cumbersome nature of the proposed contract from an administrative point of view.
Modification #3. (See Map 11C)

A third modification was prepared as a compromise between the first County proposal and the businessmen's plan. This plan cuts back the amount of the commercial proposed in Modification #2, and ties this commercial to a proposed Planned Community Business Zone. This modification is regarded to have both sensitivity to market forces, as well as necessary and appropriate environmental and aesthetic controls by applying the newly proposed Planned Community Business Zone to the commercial areas. It is also the recommendation of this plan to have the proposed single family and low density multiple family areas utilize a planned residential development approach. Through the use of open space and more flexible orientation of dwelling units, any effects due to location adjacent to a major arterial could be substantially minimized. This is the plan modification the Planning Staff believes will best control the development in the area.

Modification #4. (See Map 11D)

The fourth modification is one made by the business and property owners along 196th Street. This group has organized and is called the Alderwood Manor Improvement Association (AMIA). It was this group which utilized the consultant to do Plan Modification #2. Their new proposal is an attempt to eliminate the multiple family and industrial provisions of Modification #2, and proposes only Planned Community Business uses and General Commercial uses from the Freeway to Filbert Road.

Plan Proposal for 196th. (See Map 11E)

The Plan as finally conceived, is very close in scheme to Modification #4, with several important differences. The land lying east of 18th Avenue W and west of Filbert Road, is designated as Low Density Multiple Residential, due to the presence of these kinds of land uses in this area. The plan proposal also designates Planned Neighborhood Business for the triangle of land located between New Filbert Road and Old Filbert Road. Planned Community Business was indicated in Modification #4. Planned Neighborhood Business, however, was chosen in this instance due to the small parcel size and its inevitable non-conformity with Planned Community Business. The other area of substantial difference is the depth and extent of the General Commercial provisions on the south side of 196th, adjacent to the existing General Commercial and Community Business zones. General Commercial land use was expanded in this area to include currently non-conforming uses.

The intent of this plan proposal is to provide large contiguous areas where commercial development can occur on a least impact basis. Planned Community Business was selected as the appropriate kind of commercial due to the fact that it places the kind of controls and restrictions on commercial development which should make the effects of such land use less deleterious to surrounding single family areas. Secondarily, the concepts of planned business zoning will hopefully allow the area to be developed in a more unified fashion without the problems usually experienced through piecemeal and strip commercial development. It is also indicated by this plan, that where commercial abutts single family
areas, buffer strips will be established, thereby further controlling impact. This will happen either through the provisions of the Planned Community Business Zone or by establishment of the twenty-foot wide green belts called for by the plan text and map.

In view of the fact that the amount of land area shown as commercial far exceeds the current projections of commercial land use over the next twenty years (see background section - commercial), it is not envisioned that there will be any need to designate any other land area in this vicinity for commercial purposes. The areas shaded on the map should be viewed, consequently, as reasonably definitive limits for future commercial development.

Other Commercial Areas

Two other commercial locations in the planning area are designated to have something other than Neighborhood Business Commercial. Both of these occur along SR 527. At 240th SW, both Planned Community Business and Neighborhood Business Commercial are proposed. At 228th SW, Freeway Service Commercial is proposed due to the proximity to Interstate 405. In both instances, there are existing commercial land uses which the plan is structuring into more cohesive commercial sites.

In addition to the commercial areas abutting SR 527, there are several other neighborhood business areas proposed. In each instance where there is an area defined on the map, the intent is to provide for the convenience shopping needs of neighborhood residents. In no instance is it recommended that these centers would include more intensive commercial activities.

Commercial Goals and Policies

Like residential land uses, future commercial development proposals should be evaluated against goal and policy statements.

GOAL: Develop commercial uses which are appropriate to the scale of the area and the relationship to other business opportunities in Lynnwood and surrounding areas.

POLICIES:

1. Encourage commercial development which is based on convenience needs of the area residents.

2. Encourage the containment of development of commercial enterprises within areas where there is already a pattern of commercial development.

3. Commercial development should be predicated on the ability to control its impact on the predominantly rural residential character of the Alderwood Area.

4. Encourage the service of utilities as a precondition for commercial development.
Map 11d
Modification #4
5. Discourage "piece meal" or strip commercial development along arterials.

6. Encourage the agglomeration of commercial land ownerships in specific locations, thus providing the opportunity for unified site development.

GOAL: Provide for a limited economic base within the Alderwood Planning Area.

POLICIES:

1. Encourage service and retail commercial employment opportunities.

2. Orient employment opportunities in the area towards serving the convenience needs of the area residents.

Performance Criteria

The following performance criteria are intended to supplement and further define the above stated policies:

Major Commercial Areas

1. Commercial uses should be clustered or grouped into centers. Retail and personal services are dependent on pedestrian traffic; therefore, clustering or grouping of such uses is deemed desirable to maximize sales, encourage pedestrian movement between the uses and eliminate the conflict between pedestrian and automobile traffic.

2. While all commercial uses are encouraged to cluster or group, non-retail commercial, such as general commercial uses, should be discouraged from mixing within a retail core.

3. Locate all commercial uses adjacent to arterials so as to prevent excessive movement through neighborhoods.

4. Adequate off-street parking areas should be furnished by all commercial uses. Internal vehicular traffic circulation, where the size of the parcel(s) allows for such movement, is to be provided.

5. Buffer commercial uses from surrounding streets and uses by means of curbs, islands, landscaping, screening with vegetation, fencing and/or backup development.

6. Ample landscaping and trees should be used around and within commercial areas to soften and break up the monotonous and barren look of parking areas.

7. All commercial activities should be located, designed and regulated so as to benefit from the access afforded by arterials without impairing the efficiency or operation of these arterials. Where possible and desirable, frontage roads should be established as a private drive.
8. Locate commercial uses so as to provide safe and convenient access for its clientele. Intersections which have congestion problems and/or abrupt grade changes (such as the intersection of 196th SW - Poplar Way - Interstate 5 on-ramp) will be encouraged to be used for non-commercial uses.

9. Points of access should be located off an arterial, or sufficiently far away from the intersection to avoid friction and conflict with other traffic movement.

Other commercial Areas

10. Commercial uses typically found in a neighborhood and community should be clustered in centers, rather than spotted or strung along arterials.

11. Locate shopping centers, be it neighborhood or community, preferably on only one quadrant of an intersection. The other quadrants of an intersection can be, but should not necessarily be, developed for public or quasi-public uses, such as schools, churches, utility stations. The other quadrants are also well suited for other non-commercial uses (single family homes with backup lots or frontage roads, or apartments with access designed to avoid intersection congestion).

12. Encourage complementary commercial uses to locate around a shopping center if the roads can adequately handle the additionally generated traffic, and if controls are adequately enforced to prevent the commercial center and the complementary commercial uses from stringing along an arterial. Complementary uses might include professional and office uses, motels, etc.

13. Encourage churches, service clubs and other quasi-public uses to locate adjacent to commercial uses to share parking facilities and to help establish these areas as focal points.

14. Establish commercial centers as a comprehensive unit with adequate room for expansion where necessary, but with fixed limits for expansion.

15. Where a service station is part of a shopping center or other commercial development, it should be of compatible building materials, texture and design. Advertising should not infringe on surrounding areas.

16. Office and professional uses, if properly designed, may locate in any shopping center, preferably overhead other commercial establishments, so as to add variety of scale to the design of a commercial area.

TRANSPORTATION PLAN

It is not the purpose of this plan to duplicate the work of other planning studies. Therefore, the plan proposals for freeways and major and secondary arterials are not discussed here since they are thoroughly discussed in the Snohomish County Transportation Study. The primary emphasis here is with the effects of collector street improvements and with the construction of streets within subdivisions.

In order to better understand the functional aspects of a circulation system, the following hierarchical scheme is provided.
Freeways are designed specifically to provide for mobility. They have no direct land service function. Access is restricted to streets via interchanges, and generally to primary arterials only. Freeways serve through-traffic with long trip lengths traveling at high speeds.

Primary Arterial Highways and Streets have a main function of moving traffic but, unlike freeways, they have a secondary function of land access. Trip lengths on the system are medium to long. Major arterials expedite the movement of through-traffic to major traffic generators and collect and distribute traffic from freeways to secondary arterials, collectors, or directly to traffic destinations. Along primary arterials, choices between access (such as driveways or median openings) and capacity to carry traffic (through channelization or parking restriction) should generally be resolved in favor of traffic service.

Secondary Arterial Highways and Streets are similar to primary arterials, with a main function of traffic movement. Often the secondary arterial is established between primary arterials to reduce their traffic loads by accommodating trips of medium length. These secondary arterials also collect and distribute traffic from higher type arterial highways to collectors and local streets. They accommodate traffic from neighborhood to neighborhood and serve as secondary traffic generators. Although land access is a secondary function for secondary arterials, it should receive more consideration than is granted primary arterials.

Collector Highways and Streets serve a dual function by providing both land access and mobility. Trips made on collector streets are of medium length. Collectors serve as transition facilities, providing a medium level of traffic service between high and low level systems. Collectors also serve traffic within neighborhoods and serve neighborhood traffic generators. Access to land uses via collector streets (and via secondary arterials in part) is much more desirable than via primary arterials.

Local Roads and Streets serve as land access facilities. These facilities provide direct access to adjacent development. Trip lengths are normally short and traffic volumes are usually very light.

The proposed transportation plan attempts to reinforce the idea of providing access to the regional system of freeways, while preserving the residential nature of the Alderwood Planning Areas. For this reason, only one new major arterial is suggested to accommodate east/west movement, leading through part of Brier and the middle of the study area. It is a restatement of the proposed, but never implemented, 212th SW - Poplar Way - 228th SW arterial improvements proposed in the 1966 Southwest Area Plan.

The growing proliferation of cul-de-sac streets within the Alderwood Planning Area is developing into a serious problem. While this type of street layout offers maximum protection to residential areas from through traffic, it simultaneously creates a discontinuous traffic circulation system which potentially impairs response time of fire trucks, as well as general circulation. Therefore, the design of subdivisions must balance the private benefits of cul-de-sac against the public need of a proper circulation system.
GOALS AND POLICIES

GOAL: Develop a balanced community transportation system which would include pedestrian, bicycle, and horse trail links in addition to efficient public and private vehicular transportation facilities.

POLICIES:

1. Make street improvements so as not to compromise any of the natural site attributes such as stands of trees, drainage ways, historic or landmark features, and major community facilities.

2. Encourage the development of pedestrian, bicycle, and horse trails consistent with the County's adopted trails plan.

3. Develop separated pedestrian and vehicular traffic facilities along established pedestrian and school bus routes.

4. Encourage the resurfacing of roads to maintain acceptable standards.

5. Control the location and number of access points to commercial establishments along 186th Street.

6. Promote improvements for major and secondary arterials which will improve the orientation and readability of the planning area.

7. Prevent establishment of any major or secondary arterials in the Scriber or Swamp Creek drainage ways.

PERFORMANCE CRITERIA

GENERAL:

1. Design the transportation system to provide for the traffic demands generated by planned development.

2. Provide for greater operating speeds, increased safety, lower operating costs, and economy in new construction.

3. Design the transportation system to minimize through traffic in residential areas, disruptions to parks and recreation areas, air pollution, and the displacement of homes and businesses.

4. Coordinate the transportation system for the Alderwood Area Comprehensive Plan with the adopted Snohomish County Transportation Study.

MAJOR ARTERIALS:

5. Locate major arterials to form the boundaries of a community, neighborhood, business district, park or any other homogeneous area.

6. Encourage access to arterials from residential areas primarily via collector roads. Space intersections on the arterials at least 600 feet apart.
7. Utilize and design arterials so as to separate dissimilar land uses such as residential and industrial.

8. Locate arterials with a high degree of continuity with one arterial flowing into another arterial or freeway to ensure a smooth flow of through traffic.

9. Provide landscaped median strips adequate to accommodate left-turn lanes on four-lane major arterials. Also, separate major arterials and a frontage road by a landscaped strip.

MAJOR AND SECONDARY ARTERIALS:

10. Design the arterial system with traffic controls at intersections, channelized intersections, parallel service roads and/or internal local streets for adjacent commercial areas.

11. Design the secondary arterial to provide a link between residential areas and community centers of activity, such as neighborhood shopping areas, community recreation centers, etc.

12. Utilize arterials to form the boundaries of residential neighborhoods, thereby permitting through traffic to travel around and not through residential areas.

13. Eliminate traffic conflicts along arterials by the proper use of backup residential development, loop streets and collectors.

14. Provide walkways or sidewalks along all major and secondary arterials.

COLLECTOR STREETS:

15. Locate collector streets serving single-family areas so that they have widths sufficient for at least one lane of moving traffic in each direction and spaces at the curb for loading, unloading and access service.

16. Locate collector streets so that they provide a minimum number of intersections with the surrounding arterials. Such intersections should be at least 600 feet and preferably 1,000 feet apart.

LOCAL ACCESS STREETS:

17. Design local access streets to discourage their use by through traffic.

18. Local access streets should be short in length and intersect with other local streets and collector streets, but should not intersect with arterial highways.

19. Avoid street jogs with center line offsets of less than 150 feet.

20. Encourage variety in local access strip design, including loop streets, cul-de-sacs and modified grid patterns.

21. Avoid intersections with more than four legs, irregular "Y" type intersections where the legs meet at acute angles, and intersections adjacent to bridges and other obstructions that prevent clear visibility.
22. Design intersections between arterials and collector streets to include separate lanes for deceleration and free-flowing right turns off the arterial and onto the collector street.

23. Design streets to intersect at right angles. Sharp-angled intersections result in poor lot layout, are wasteful of land, and are dangerous because of lack of proper visibility.

* 

COMMUNITY FACILITIES PLAN

INTRODUCTION

Community facilities add another dimension to urban development through expenditures by public and quasi-public agencies for the purpose of preserving the public health, safety, and general welfare. These facilities are related to the needs created by the concentrations of people. Therefore, the land use and transportation plan are integrally related to the community facilities plan. The selective implementation of the community facilities plan by a system of priorities for public spending will help shape the pattern of growth proposed in the Alderwood Area Comprehensive Plan.

SCHOOLS

Additional school facilities are planned by both the Edmonds and Northshore School Districts for their respective jurisdictions. There are presently six elementary schools and two junior high schools located in the planning area. Two senior high schools, one junior high school and two elementary schools are located within one mile of the Alderwood Planning Area boundary. In addition to existing schools, three elementary schools and one junior high school are scheduled to be built in the planning area within the next ten years. Five additional elementary school sites have also been designated within a mile of the Alderwood Planning Area boundary.

The future school sites in the planning area are all owned by Northshore School District. They are:

Beckstrom Elementary School Site: This site is located between Highway 405 and Highway 527, at the South Snohomish County line; it is ten acres in size. The property was purchased in 1962, and the school is expected to be built in the near future.

Meridian Elementary School Site: This site, purchased in 1969, is located in the central portion of the planning area where no school facilities exist at present. The school will serve the central portion of the planning area within the Northshore School District. The site is 30 acres in size and the school is expected to be built in the next few years, possibly in combination with a junior high school.

Pontius Junior High School Site: This site is situated at the intersection of Meridian Avenue and 240th Street SW; it is about 10 acres in size and is easily accessible from the surrounding areas. This school is expected to be built in the near future.
PARKS AND OPEN SPACE (See Map 13A)

A general increase in production and personal income, and a reduced work week have resulted in additional leisure time for the average person. A large amount of this time is used for outdoor recreation. This type of recreation demand within the context of the community is usually met through the development of park land. Park facilities may vary from the highly groomed Little League ball fields to the relatively undeveloped scenic nature areas. Presently with the exception of the Youth Club property, a park site near 228th and Locust Way, and the various school grounds, there are no public park facilities within the Alderwood Planning Area. A major responsibility of the Alderwood Area Comprehensive Plan is to identify and encourage the development of potential park property. Park land designations are also utilized in this plan to preserve and protect the major drainage ways of Swamp and Scribe Creeks. The intent is that the property adjoining the creeks, due to its characteristics of steep slopes, forestation and sensitive soil base, will be used for passive recreation. Passive recreation is generally assumed to include hiking, bicycling, horseback riding, etc., but neither organized nor team sports. The former kinds of recreation activity would allow the drainage way to remain essentially in its natural state while still permitting the properties to be utilized to fulfill part of the outdoor recreation demand.

An examination of the plan map will reveal that a substantial amount of land is proposed to be developed for parks. It would be unrealistic to assume that all the land shown will be purchased for park purposes. Where not purchased, conversion of some of these lands to other uses may occur. It is the recommendation of this plan that on such land, if developed there be a density limitation of one dwelling unit per two and one-half acres.

The two and one-half acre density is considered necessary in order to preserve the integrity of the drainage way. If it becomes apparent that the drainage ways cannot be protected by allowing development at this density, more stringent restrictions may need to be applied.

WATER AND SEWER FACILITIES

In recent years, Snohomish County has experienced a dramatic increase in population. This growth has imposed on the County and its incorporated municipalities, the need to modernize and expand the urban services they provide. Sewer and water facilities especially have been and will continue to be important factors that influence development patterns. In support of the land use planning effort, Snohomish County intends to prepare and adopt water, sewage, surface drainage and solid waste functional plans as elements of its comprehensive planning.

Enabling Snohomish County to undertake this task, it has received an Urban Systems Engineering Grant, entitled WASH-USE-1, from the Department of Housing and Urban Development (HUD) for the purpose of developing countywide comprehensive plans for water distribution, sewage collection and treatment, solid waste disposal, and storm drainage. The study began in March of 1971, and is to be completed in August of 1973. During this time, the planning has been coordinated with both the incorporated and unincorporated areas of the County and adjacent counties where necessary.
Water

Although the WASH-USE-1 water plans are not complete, they essentially incorporate the Alderwood Water District plans in the planning area. These plans consist primarily of more storage capacity and an additional transmission line from the City of Everett. Adjacent to the two major reservoirs at 26th W. and 152nd SW are plans for one or two more water reservoirs. A 30" supply main is planned to intercept the 36" transmission main from the Everett Reservoir No. 3. It is anticipated that these facilities will be required to provide the necessary capacity to meet projected water demands in the District. The existing distribution lines in the Alderwood Planning Area appear to be adequately sized to handle present and future needs as prepared in the Alderwood Area Comprehensive Plan. The WASH-USE-1 project will also investigate water resources. The water resources element of the study will result in a plan that will designate future sources of water supply to serve the needs of an expanding countywide population.

Sewers

The Alderwood Planning Area has largely developed without a sanitary sewer system. Due to increasing suburbanization, the need for sanitary sewers is currently the most pressing problem in the community.

The Alderwood Water District received a planning grant from HUD to prepare design plans for sewer trunks in the Swamp Creek Drainage Basin. The study, which was completed in late 1971, provided design plans for the locations and sizing for trunk sewers, and further examined the approach to be taken for construction, financing, operation and maintenance of the facilities.

The realization of the Swamp Creek Sewer System would provide sanitary sewers to a large portion of the Alderwood Planning Area. Petitions have been circulated within a proposed ULID to obtain approval to construct the sewers. Approval has not been authorized by the property owners at this time. To a large extent, the construction of the sewer will depend upon the availability of state and federal grants to assist in defraying local costs. Areas developing in the vicinity of the existing North Creek trunk sewer should be encouraged to utilize that facility. Sewage from both the North Creek and Swamp Creek Sewerage systems, will continue to be transferred to the Metro System for treatment.

While it is the recommendation of this comprehensive area plan that sewers should be installed and utilized as it becomes financially feasible, it is also the purpose of this plan to direct development in such a manner that it will be least detrimental to the community and to the natural environment. The Swamp Creek sewer trunk line is one instance where installation of the trunk line could have very detrimental effects. Aside from the decided impact on the stream bed, fisheries resource, and other biological plant species, there will be a foreseeable demand for residential development in close proximity to the sewer trunk line. It is this "residual" impact which is of considerable concern.

The planning staff, in preparing the plan, is fully cognizant of both the probability and necessity of the Swamp Creek sewer trunk line and the economics involved in financing not only the major trunk, but also the interception lines. It has already been noted that the Swamp Creek drainage way has been planned as a park
or open space system; in lieu of complete purchase, development at very low densities is recommended. If the drainage way is to be protected, it will be necessary to channel the development which might normally occur in close proximity to the trunk line to the upper plateau areas. Indeed, this is the recommendation of the plan. In order to achieve this, it is the further recommendation of the plan that there be only limited selected points along the trunk line where it can be intercepted with laterals, and that these points be located in close proximity to areas where substantial dwelling unit densities are projected.

SOLID WASTE DISPOSAL

Discarded paper and tin cans, food waste, demolition debris, auto huiks, dead animals, street sweepings and leaves are examples of items commonly referred to as solid waste. The volume of these solid wastes is increasing at a rather alarming rate across the nation. Where and how to dispose of these wastes is a perplexing problem to countless cities and counties in the United States.

Snohomish County is yet another area where the problems of waste disposal have multiplied faster than the solution.

To alleviate what appears to be a crisis situation in the County, Snohomish County is nearing the end of a two year countywide solid waste planning program and is presently embarking upon an implementation program. The program involves a total reshaping of the County's approach to disposal operations. It involves the closure of eleven open dumps and three landfills, with the installation of three sanitary landfills strategically located in the County, supplemented by drop box convenience centers. The program also creates a single countywide disposal operating authority in the Snohomish County Public Works Department.

FIRE PROTECTION

In order to develop a plan for fire protection facilities, the existing system must be evaluated against the overall development pattern of the community and the explicit standards outlined by the American Insurance Association. Based on these criteria, examination of existing facilities in the Alderwood Planning Area illustrates deficiencies and provides a basis on which to plan for new facilities. Upon analysis, it would appear that the only area deficient in fire facilities is the southwest portion of the planning area. A new fire station is needed in this vicinity, but none is under consideration at this time by the involved fire districts.

Realization of this facility will provide adequate fire service in the planning area for proposed development through 1990.

GOALS AND POLICIES - COMMUNITY FACILITIES

GOAL: Encourage the provision of community facilities to shape future growth in a manner that is most efficient, economical and the least disruptive to the area.
POLICIES:

1. Provide utility facilities so as to respect the integrity of the existing land forms and drainage ways.

2. Consolidate the provision of utilities, wherever possible, into corridors where there are existing right-of-ways and easements.

3. Utilize surface runoff and storm drainage facilities in a manner that protects against the destruction of private property, the disruption of natural drainage ways, and the degradation of water sources and water quality.

4. Encourage the multiple use of school property for park and recreational needs.

5. Combine pedestrian walkways with the provision of community facilities wherever possible.

6. Encourage the location and development of parks and trails consonant with the recommendations of the County's Comprehensive Park and Trails Plan.

7. Discourage the indiscriminate juncture of sewer mains with the trunk sewer line in the Swamp Creek drainage way.

8. Encourage the location of sewer mains which are complimentary to the other factors of good land development: slope conditions, access, soil character, drainage, socio-economic environment, etc.

PERFORMANCE CRITERIA

Open Space: This listing of performance criteria does not include those standards being developed in technical studies for other community facilities.

1. Distribute open space throughout the urban area, using it to afford relief within the urban environment, to make accessible some of the scenic and vista lands, to help provide identity, and to provide adequate active and passive recreation areas.

2. Combine major open space elements by linking them to form visual and physical separations between major sectors of the urbanized area.

3. Link, whenever possible, open spaces created through the application of Planned Unit Developments and residential cluster zoning with parks and schools, to form a web of open space within the planning area.

Schools:

4. Locate school sites to be free from traffic hazards, incompatible land uses, and environmental nuisances, such as smoke, noxious odors, loud noises, and visual distractions.
5. Centralize school sites within their service areas.

6. Locate schools on sites that have favorable soil, drainage, and topographic characteristics for construction.

7. Locate schools in proper relationship to existing and proposed facilities and utilities of the community, including parks, libraries, streets, sewer and water lines, and the like.
IV. PLAN IMPLEMENTATION
INTRODUCTION

Implementation measures translate the comprehensive plan map and text into reality. The effectiveness of the decisions made about land use relationships hinges on the usefulness of the plan as a development guide to the various agencies and officials who are making development decisions daily. Implementation tools range from legal controls to cooperation between public, quasi-public and private agencies. Success of the implementation measures can only be gauged after a considerable number of years.

LEGAL CONTROLS

ZONING

Zoning is the official land use control, delegated to the County Commissioners by state law, to promote public health, safety, and general welfare. Zoning decisions by law, are to be based on the existing comprehensive plan and potentially represent the best assurance that the comprehensive plan will be effectuated. Recognizing the pitfalls of zoning, not only are development policies and performance criteria stipulated in the text of this plan, but also, it is the purpose of this section to indicate ways in which zoning can become a more effective implementing tool. The first way to achieve effective plan implementation is to utilize the goals, policies, and performance criteria in the adopted plan as the controlling factors in zoning decisions.

A second way zoning can become a more effective tool is to more fully involve the community in the decision making process. It has been the practice of the Planning Department over the last three years to notify the Alderwood Community Council of each zoning application made to the County involving the Alderwood Planning Area. The presence of this Council has provided the community with a formal body capable of speaking for many citizens at public hearings and thereby exert greater influence in the decision making process than could individual citizens alone. It is essential to maintain the interest and involvement of the community in land use decision making in order to insure the continued effectiveness of this process.

The third means to improve zoning as an implementation tool is for the County to immediately initiate rezone action upon adoption of the plan. This is a process which has been utilized to successfully implement the Marysville Area Plan and has worked effectively to prevent spotzonings in violation of the plan. Whereas it would not be the intent to rezone lands to commercial classifications due to the need for site plans and market justification, this kind of action would set the limits for commercial expansion and thereby better implement the intent of the plan.

SUBDIVISION CONTROL

Subdivision regulations pertain to the platting of the land and thereby have a substantial impact upon implementation of the comprehensive plan. Controls have been established for lot arrangement, road systems, provision of public facilities
and correlation with adjoining subdivisions as well as with other land uses. Once the decision is made to subdivide the land, subdivision regulations provide reasonable assurance for the orderly development of the land and provide an additional vehicle to implement many of the goals, policies and performance criteria of the plan.

CAPITAL IMPROVEMENT PROGRAMMING

Capital improvement programming is one of the most important techniques for implementing desires and needs for public facilities. Based on the community facilities element of the comprehensive plan, the capital improvement program addresses the financial resources for implementation over a practical intermediate planning period, generally recommended as six years. Based on best estimates of available revenue from various resources and real costs for acquisition and development of the needed facility, the capital improvement program becomes a prime tool for gauging the community’s commitment to and capacity for implementing the general desires and needs indicated in the comprehensive plan. Such a program has the following advantages: it focuses practical attention on community goals, needs and capabilities; it provides for the most efficient use of public funds; it provides a means of establishing community priorities; it provides a means of coordination with the related programs of other levels of government, and it enhances opportunities for participation in state and federal grant-in-aid programs. Capital improvement programming involves the following steps:

1. Preparation of a preliminary six year capital improvement program based on the comprehensive plan. This is done by establishing need priorities of the range of proposed projects, estimating costs of projects, estimating various sources of revenue, and establishing the practical six year program.

2. Review of the priority schedule and financial estimates with interested agencies, groups and the general public.

3. Consideration and adoption of program by the appropriate agencies.

4. Annual review and revision of the program to keep it current and meaningful.

If the program is updated annually, it will provide a valuable service to the County as a planning, programming, and budgeting technique by which the County can establish community facility needs, identify necessary projects to meet those needs, and allocate available financial resources to those projects over a specified period of time.

PLAN REVIEW AND UPDATE

Comprehensive plans are not static documents and are therefore subject to change. The impetus for plan modification generally results from unanticipated developments or changes in community attitudes or public policy. Plan changes should be made only after careful reevaluation of goals and policies. If the change of circumstances is so substantial that an amendment will not be adequate, then a complete plan update should be undertaken. It is critical to the integrity of the plan that modification not be used as a means to circumvent the plan’s intent and that changes, when made, only occur within the context of improving the entire plan. In order to insure that the plan is effectively current, the plan should be reviewed at least every two years by the Planning Commission.
V.

APPENDICIES
## Stability of Soils for Uses Cited

<table>
<thead>
<tr>
<th>Group</th>
<th>Soil Type</th>
<th>Slope</th>
<th>Buildings</th>
<th>Landscaping</th>
<th>Septic Tanks</th>
<th>Parks</th>
<th>Golf Courses</th>
<th>Sanitary Land Fill</th>
<th>Cemeteries</th>
<th>Sewage Lagoons</th>
<th>Industrial Small Farms &amp; Gardens</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>AG &amp; AGM</td>
<td>0–15%</td>
<td>B</td>
<td>A</td>
<td>D</td>
<td>A</td>
<td>A</td>
<td>D</td>
<td>C</td>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>AL</td>
<td>0–15%</td>
<td>B</td>
<td>A</td>
<td>D</td>
<td>A</td>
<td>A</td>
<td>D</td>
<td>C</td>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>AGB</td>
<td>15–30%</td>
<td>C</td>
<td>A</td>
<td>D</td>
<td>A</td>
<td>B</td>
<td>D</td>
<td>C</td>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>ALB</td>
<td>15–30%</td>
<td>C</td>
<td>A</td>
<td>D</td>
<td>A</td>
<td>B</td>
<td>D</td>
<td>D</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>II</td>
<td>EG</td>
<td>0–8%</td>
<td>C</td>
<td>C</td>
<td>A</td>
<td>B</td>
<td>B</td>
<td>A</td>
<td>A</td>
<td>D</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>EG</td>
<td>8–15%</td>
<td>C</td>
<td>C</td>
<td>B</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>D</td>
<td>D</td>
<td>D</td>
</tr>
<tr>
<td></td>
<td>EV &amp; EVM</td>
<td>0–8%</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>D</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>EV &amp; EVM</td>
<td>8–15%</td>
<td>B</td>
<td>A</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>C</td>
<td>C</td>
<td>D</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>EVB</td>
<td>15–30%</td>
<td>C</td>
<td>B</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>D</td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td></td>
<td>IS</td>
<td>0–8%</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>LN</td>
<td>8–15%</td>
<td>C</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>III</td>
<td>KS &amp; KL</td>
<td>0–8%</td>
<td>B</td>
<td>A</td>
<td>D</td>
<td>A</td>
<td>B</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8–15%</td>
<td>D</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>B</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
</tr>
<tr>
<td>IV</td>
<td>SO</td>
<td></td>
<td>D</td>
<td>C</td>
<td>D</td>
<td>D</td>
<td>B</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
</tr>
<tr>
<td>V</td>
<td>BC</td>
<td></td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
</tr>
<tr>
<td></td>
<td>EL &amp; ES</td>
<td>0–3%</td>
<td>B</td>
<td>B</td>
<td>D</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>B</td>
</tr>
<tr>
<td>VI</td>
<td>CM, CMH &amp; CMX</td>
<td></td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
</tr>
<tr>
<td></td>
<td>MP &amp; RP</td>
<td></td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
</tr>
<tr>
<td>VII</td>
<td>RB</td>
<td></td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
</tr>
</tbody>
</table>

**Note:**
Suitabilities for special uses are indicated:

- **A. Slight Limitations**
- **B. Moderate Limitations**
- **C. Severe Limitations**
- **D. Very Severe Limitations**
### SOILS DATA

<table>
<thead>
<tr>
<th>Identification</th>
<th>Location Features</th>
<th>Engineer Class</th>
<th>Miscellaneous Engineering Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of Soil</strong></td>
<td><strong>Texture</strong></td>
<td><strong>Physiographic Position</strong></td>
<td><strong>Relief</strong></td>
</tr>
<tr>
<td>Alderwood Gravelly Loam</td>
<td>Coarse</td>
<td>Uplands</td>
<td>Undulating Rolling</td>
</tr>
<tr>
<td>Alderwood Gravelly Sandy Loam</td>
<td>Coarse</td>
<td>Uplands</td>
<td>Undulating To Hilly</td>
</tr>
<tr>
<td>Everett Gravelly Sandy Loam</td>
<td>Coarse</td>
<td>Uplands</td>
<td>Undulating To Hilly</td>
</tr>
<tr>
<td>Everett Gravelly Loamy Sandy</td>
<td>Coarse</td>
<td>Uplands</td>
<td>Nearly Level To Rolling</td>
</tr>
<tr>
<td>Indianola Loamy Fine Sand</td>
<td>Moderate Coarse</td>
<td>Uplands</td>
<td>Rolling</td>
</tr>
<tr>
<td>Lynden Loamy Sand</td>
<td>Coarse</td>
<td>Terrace Like Position</td>
<td>Near Level To Undulating</td>
</tr>
<tr>
<td>Kitap Blt Loam</td>
<td>Medium Texture</td>
<td>Terrace Like Position</td>
<td>Undulating To Sloping</td>
</tr>
<tr>
<td>Snohomish Blt Clay</td>
<td>Fine</td>
<td>Depressions Bottom Land</td>
<td>Near Level</td>
</tr>
<tr>
<td>Bellingham Blt Clay</td>
<td>Fine</td>
<td>Upland Basins</td>
<td>Near Level</td>
</tr>
<tr>
<td>Edmonds Loam</td>
<td>Medium Texture</td>
<td>Depressions</td>
<td>Sloping Terrace</td>
</tr>
<tr>
<td>Edmonds Sandy Loam</td>
<td>Moderate Coarse</td>
<td>Depressions</td>
<td>Sloping Terrace</td>
</tr>
<tr>
<td>Carbondale Muck</td>
<td>Fine</td>
<td>Depressions</td>
<td>Near Level</td>
</tr>
<tr>
<td>Mukilteo Peat</td>
<td>Fine</td>
<td>Depressions</td>
<td>Near Level</td>
</tr>
<tr>
<td>Rifle Peat</td>
<td>Fine</td>
<td>Depressions</td>
<td>Near Level</td>
</tr>
</tbody>
</table>

Note: Soils Engineering Classification:
- #*: Granule soils of high bearing capacity.
- A*: Clay soils having low strength when wet.

Subsoil: 2'-30' below surface
Substratum: Up to 5' below surface
High: 2.5-5 in./hr
Moderate: 0.5-2.5 in./hr
Very Low: Less than 0.2 in./hr

High Moist Low Dry: High moisture content, low dryness.

Low: Least dense or weak soil type.

Subject To Flooding: High risk of flooding, heavy water infiltration.

May Be High: Indicative of high possibility for certain conditions or characteristics.

Very Low: Least possible or minimal occurrence.
#SOIL SUITABILITY
FOR WILDLIFE, FOOD AND COVER

<table>
<thead>
<tr>
<th>GROUP</th>
<th>SOIL TYPE</th>
<th>TREES</th>
<th>SHRUBS</th>
<th>FORBS</th>
<th>CULTIVATED</th>
<th>DEER</th>
<th>BIRDS</th>
<th>WATERFOWL</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>MO</td>
<td>SALAL</td>
<td>BRACKEN FERN</td>
<td>GRASSES</td>
<td>GOOD</td>
<td>PHEASANT</td>
<td>GROUSE</td>
<td>NOT</td>
<td>SOILS</td>
</tr>
<tr>
<td>II</td>
<td>EO</td>
<td>BLACKBERRY</td>
<td>BRACKEN FERN</td>
<td>PASTURE HAY</td>
<td>GOOD</td>
<td>GROUSE</td>
<td>COVES</td>
<td>NOT</td>
<td>LESS THAN 15% ON SLOPES</td>
</tr>
<tr>
<td></td>
<td>EVB</td>
<td>HUCKLEBERRY</td>
<td>SWORD FERN</td>
<td>SMALL GRAIN</td>
<td>GOOD</td>
<td>GROUSE</td>
<td>COVES</td>
<td>SUITED</td>
<td>15% OR OVER</td>
</tr>
<tr>
<td></td>
<td>EVM</td>
<td>DOUGLAS FIR</td>
<td>VINE MAPLE</td>
<td>VEGETABLES</td>
<td>GOOD</td>
<td>PHEASANT</td>
<td>GOOD</td>
<td>SUITED</td>
<td>15% OR OVER</td>
</tr>
<tr>
<td></td>
<td>IS</td>
<td>ELDERBERRY</td>
<td>TWINFLOWERS</td>
<td>VEGETABLES</td>
<td>GOOD</td>
<td>PHEASANT</td>
<td>Excellent</td>
<td>SUITED</td>
<td>15% OR OVER</td>
</tr>
<tr>
<td>III</td>
<td>KS</td>
<td>BLACKBERRY</td>
<td>GRAIN</td>
<td>FAIRLY GOOD</td>
<td>GOOD</td>
<td>PHEASANT</td>
<td>GROUSE</td>
<td>FAIRY</td>
<td>GOOD FOR FOOD</td>
</tr>
<tr>
<td></td>
<td>KL</td>
<td>CEDAR</td>
<td>SWORD FERN</td>
<td>SMALL GRAIN</td>
<td>GOOD</td>
<td>PHEASANT</td>
<td>GROUSE</td>
<td>FAIRY</td>
<td>GOOD FOR FOOD</td>
</tr>
<tr>
<td></td>
<td>S0</td>
<td>HEMLOCK</td>
<td>SMALL GRAIN</td>
<td>GOOD</td>
<td>PHEASANT</td>
<td>GROUSE</td>
<td>FAIRY</td>
<td>GOOD FOR FOOD</td>
<td>DRAINAGE GENERALLY REQUIRED FOR CULTIVATED USE</td>
</tr>
<tr>
<td>IV</td>
<td>BC</td>
<td>RED ALDER</td>
<td>OCEAN SPRAY</td>
<td>VEGETABLES</td>
<td>GOOD</td>
<td>PHEASANT</td>
<td>GROUSE</td>
<td>FAIRY</td>
<td>GOOD FOR FOOD</td>
</tr>
<tr>
<td></td>
<td>EL</td>
<td>HEMLOCK</td>
<td>BLACKBERRY</td>
<td>BRACKEN FERN</td>
<td>GOOD</td>
<td>PHEASANT</td>
<td>GROUSE</td>
<td>FAIRY</td>
<td>GOOD FOR FOOD</td>
</tr>
<tr>
<td></td>
<td>ES</td>
<td>DOUGLAS FIR</td>
<td>SNOWBERRY</td>
<td>GRAIN</td>
<td>WHERE</td>
<td>DRAINED</td>
<td>FAIRLY</td>
<td>POOR</td>
<td>GOOD FOR FOOD</td>
</tr>
<tr>
<td></td>
<td>SO</td>
<td>RED ALDER</td>
<td>OCEAN SPRAY</td>
<td>GRAIN</td>
<td>WHERE</td>
<td>DRAINED</td>
<td>FAIRLY</td>
<td>POOR</td>
<td>GOOD FOR FOOD</td>
</tr>
<tr>
<td></td>
<td>CM</td>
<td>CEDAR</td>
<td>OCEAN SPRAY</td>
<td>GRAIN</td>
<td>WHERE</td>
<td>DRAINED</td>
<td>FAIRLY</td>
<td>POOR</td>
<td>GOOD FOR FOOD</td>
</tr>
<tr>
<td></td>
<td>CMH</td>
<td>HEMLOCK</td>
<td>OCEAN SPRAY</td>
<td>GRAIN</td>
<td>WHERE</td>
<td>DRAINED</td>
<td>FAIRLY</td>
<td>POOR</td>
<td>GOOD FOR FOOD</td>
</tr>
<tr>
<td>VI</td>
<td>CMX</td>
<td>PINE</td>
<td>OCEAN SPRAY</td>
<td>GRAIN</td>
<td>WHERE</td>
<td>DRAINED</td>
<td>FAIRLY</td>
<td>POOR</td>
<td>GOOD FOR FOOD</td>
</tr>
<tr>
<td></td>
<td>MP</td>
<td>TIDAL MARSH</td>
<td>BLACKBERRY</td>
<td>GRAIN</td>
<td>WHERE</td>
<td>DRAINED</td>
<td>FAIRLY</td>
<td>POOR</td>
<td>GOOD FOR FOOD</td>
</tr>
<tr>
<td></td>
<td>RP</td>
<td>COVER</td>
<td>BLACKBERRY</td>
<td>GRAIN</td>
<td>WHERE</td>
<td>DRAINED</td>
<td>FAIRLY</td>
<td>POOR</td>
<td>GOOD FOR FOOD</td>
</tr>
</tbody>
</table>

SEE GROUP I
APPENDIX B

ALDERWOOD AREA PLAN: Response to "196th SW Development Plan"

The following comments and recommendations constitute a response to the "Alderwood Area Development Plan for 196th SW" prepared by Clark, Coleman and Rupeiks for a client group of property owners in that area. At the same time, recommendations are made in consideration of the larger Alderwood Planning Area in which the 196th SW subject area lies. It is intended that these recommendations will help resolve conflicting attitudes toward land use proposals along 196th SW to enable the adoption of the revised Alderwood Area Plan.

Planning Department Response to "196th SW Development Plan": The subject study was prepared by a private consultant for a client group of businessmen and property owners on 196th SW. This group had opposed the plan revision by this Department for 196th SW as included in the proposed revision to the Alderwood Area Plan. The detailed study, a somewhat unique step in the comprehensive planning process, was done at the expense of the subject client group and with the agreement of the Alderwood Community Council to take the time necessary to consider more detailed proposals for this critical area. The private consultant coordinated his efforts with the County Planning staff, entertained comments and suggestions, and presented his findings and recommendations to the staff as well as to a general public meeting of the Alderwood Community Council. As mentioned, such detailed analysis is not common to comprehensive planning for large areas, but it is a step that we must take more often if we are to successfully plan in urbanizing areas. It is to the credit of the client property owners that they would cooperate in a joint study, and to the consultant for his efforts at coordination with the staff.

Comments and Recommendations: The subject report proposed a development pattern for 196th SW different from that earlier proposed by this department. In making his proposal, the consultant described the natural features and physical configuration of the study area, analyzed growth patterns and prepared market area projections, proposed a development scheme, and recommended a technique for insuring quality in implementation of the proposed development over time. The proposed development plan is consistent with some important planning policies of the Alderwood Area; there are also areas of inconsistency that we hope to resolve in our following recommendations.

In brief terms, the consultant plan recommends considerably more commercial development along the 196th SW strip than the previous staff proposal. The staff proposal was for approximately 43 acres of commercial, and the consultant proposal has 98 acres including warehousing. The consultant's assumption is that the staff proposal, based on standard planning criteria employed on a general scale over a wide area, failed to recognize the unique market characteristics of the subject strip. The best way to respond to the 196th SW proposal is to discuss the summary conclusions on pages 2 and 3 of the report:

1. The study area is located at the HUB of the transportation system for Southwest Snohomish County, and further, by 1990, it will be approaching the population center of that region.

-91-
The subject area is served by a split interchange with I-5 that creates complex traffic patterns. It is not easy to pinpoint a gravitational transportation center with such a system. However, the population center is considerably west, traffic counts are higher there, and we have observed the major commercial development of Southwest County along 196th west of I-5. In fact, the population projections, as well as the confirmed development of the Alderwood Mall, indicate a development shift north from 196th in Lynnwood. Because the area west of I-5 is relatively mature, the comparative rate of future development of the Alderwood Area is expected to be higher. However, this does not indicate a dramatic shift of the population center eastward. Much of the area east of I-405 has rural half-acre zoning. The proposed Alderwood Area Plan recommends principally single family residential development as strongly urged by the residents. The higher densities in the unadopted General Land Use Plan -- which are quoted by the consultant -- will be revised in line with the present desires of Alderwood residents as reflected in the proposed Alderwood Area Plan.

2. Previous planning endeavors have utilized a "balanced land use structure" as the indice for determining future land requirements. This approach simply does not have application to the Alderwood-Lynnwood Area.

This conclusion is one repeated in the study to support arguments for an intensive commercial profile along 196th. We strongly caution against an abrogation of the "balanced land use" concept in the Alderwood Area Plan. It is not readily determined what the conclusion means in its explicit statement that balanced land use is not an applicable concept in the Alderwood-Lynnwood Area. If the statement intends that Lynnwood has a larger percentage of commercial land use than the average city, it is correct. Certainly, Lynnwood has one of the highest proportions of retail sales to population in the state. Lynnwood has the major shopping areas in Southwest Snohomish County. But, at the same time, Lynnwood has a range of land use. No city perfectly fits the standard apportionment of land uses -- residential, commercial, industrial, and other -- indeed, cities vary in their regional locations, their comparative features, and their particular goals and policies. At any rate, it does not follow that because Lynnwood has a proportionately high percent of commercial land use, that the Alderwood Area must also. In fact, the converse seems more logical. If focused on the immediate 196th SW area, this conclusion has more meaning. Any particular "micro" area within a region can have characteristics significantly different from the whole of the region. The arterial strip along 196th has existing commercial enterprises and zoning that constitute the major such uses in Alderwood. This does not preclude the concept of "balanced land use". It appears that what this conclusion indicates is that only commercial, industrial, and multiple residential uses are proper along 196th SW, and, in this way, eventually along any major arterial in the area. This reasoning is one of considerable experience and controversy. Based on the seemingly inexorable speculative land trading and "highest and best use" philosophy, no land along major arterials is suitable to any use but commercial or industrial. However, the cities in Southwest County, the County, the State Highway Department, as well as the complaints from the general public, tell us differently. The consultant's previous proposals in the adopted Southwest County Plan warned of the problems of overzoning commercial and indicated strip development along 196th SW stopping west of I-5. We recommend that "balanced land use" is still an important and
necessary concept for South County and Alderwood, and that special attention should be given to the speculative commercial trend along arterials. Importantly, we must determine where this commercial development is needed on 196th, where it is not needed, and, finally, where it will stop within the study area.

3. It has been established that there is a need for a community shopping center, highway-oriented commercial developments, and warehousing to serve Alderwood and surrounding areas.

This conclusion can be misleading as it stands. Does it conclude that there is an existing need for such development, to be located on the subject strip of 196th SW? This is not specifically borne out by the market analysis. If it concludes that there will be the need for additional community shopping, highway-oriented commercial, and warehousing in the Lynnwood-Alderwood Area -- at some location, or locations -- the report would seem to support it. The following are staff comments on the consultant market analysis that is advanced to strongly support proposed development.

*Throughout the analysis, we find it difficult to determine calculated need, because of the absence of Supply figures. Need is necessarily determined by subtracting Supply from Demand. Our legal advisor cautions us that he cannot readily see the consideration of Alderwood Mall in the analysis.

*The defined "Primary Trade Area" used for most of the commercial demand estimates seems to include substantial areas better served by existing Lynnwood shopping centers and the proposed Alderwood Mall.

*Accepting the retail sales demands and subsequent gross floor space needs possible in the subject area, the land area required for community business would still be within that amount proposed by this staff's previous plan. The space needs for "personal service and repair" and "general office space" projected by the consultant, could also be so accommodated.

*The argument for motel feasibility is generally supported by staff. Such facilities must be located with proximity of interchanges with the Interstate Highway System. However, there is competition from an existing motel site zoned at the 44th Avenue portion of the split interchange. We also question the southeast quadrant as the site that "has no peer in the immediate area". It seems that, based on access and visibility, the northeast quadrant is the better location.

*We question relegating 196th SW to the role of "highway-oriented development" presently played by U.S. 99. This actuality has been the cause for much criticism of the development pattern along 196th west of I-5; in fact, the consultant referred to this area as "garbage row". We strongly recommend against allowing the U.S. 99 development pattern to spread and become the idiom for all arterial development.

*There are no market figures included to justify the demand for "warehousing". We concur that such a use, properly treated, could be well situated in the area, probably in the northeast quadrant of I-5 and 196th SW as proposed by the consultant. However, this is a competitive allocation, as there are light industrial zones in Lynnwood, as well as a proposed industrial park in Mountlake Terrace. In the case of such a development, care must be given to protect residential areas, and to avoid congestion of arterial and interchange traffic patterns.
4. Through the use of a contract between the property owners and Snohomish County, there can be mutual assurance of high quality development standards.

The consultant's recommendation of a contract for development control was made with the initial recommendation of this staff. As a result of a legal opinion from the County Prosecutor and further staff analysis, we now recommend against such an instrument. The scale of development, length of project time, and multiplicity of property owners, create problems we hadn't envisioned. We heartily concur with the consultant recommendation that -- given proposed commercial development -- there must be strict development controls.

We recognize the weaknesses in the existing commercial zone classifications of the Snohomish County Zoning Code, realizing that the degree of control over development sought by the general citizenry and the County for properties along 16th cannot presently be satisfied by any of the zone categories. Thus, of necessity, control to this extent must come from either a new zone classification, such as a Planned Community Business Zone, or a contract agreement.

Some of the problems in contract implementation have been mentioned. The practical implications regarding smooth administration of such a contract over the many years of its effect are enormous. Suffice it to say that our experience with exceedingly simple contracts in comparison to the consultant's proposal makes us extremely hesitant to bind either the property owners or the County to such a document. The mere need for everyone, including present signatories, future buyers, sellers, present and future public officials responsible for administering and enforcing the contract, to be completely familiar with and understand all elements of the agreement is itself, in our opinion, prohibitive.

We would thus advise the writing and adoption of a new zone category that would satisfy the needs of the Alderwood community as well as many other areas of the County. We would propose that the general format of the presently existing Planned Neighborhood Shopping Center Zone be a guide. In brief, this zone requires submission of complete site plans showing land use, circulation, utilities, provisions to handle drainage, parking, landscaping and a discontinuance clause if the land is not developed. These plans must be approved by the Board of Commissioners and are absolutely binding on present and future owners of the properties involved. Our experience indicates that the administration of development is much more satisfactory to all parties involved if it can be handled within the framework of zoning.

The writing and adoption of a new zone category does take time. We would estimate that given the word to proceed, a minimum of one year would be necessary to adopt such a new zoning category. This period of time may sound extreme, but we must keep in mind that the time taken in writing and adopting such a zone category will likely save a great deal of frustration and time in the years to come. If this step is to be taken, we would recommend adoption of the comprehensive plan with the understanding that commercial rezoning would not be granted prior to the adoption of the new zone category. In the meantime, Planned Neighborhood shopping center and possibly industrial park zoning could be considered where applicable to the larger concept.
5. A strong indication of the unique characteristics of the area to draw commercial development is exhibited by the existing and proposed developments in the immediate area.

This conclusion seems to represent a circular logic. It appears that we might better say the converse: That the large existing and proposed commercial developments in Lynnwood preclude the need for such development in our study area. What the conclusion does emphasize, and what we all must concur with, is the fact that the large commercial rezones that have already occurred along the subject stretch of 196th are forcing the revision of the plan adopted in 1967. That plan proposed stopping commercial development west of I-5. However, we now have existing commercial development as well as the large zoned areas not yet developed. Our practical recommendation, which seems to have strong support from the Alderwood community, is to determine the best mix of uses on 196th SW, devise strict development controls, and to make strong planning statement on controlling the commercial spread along this arterial.

6. Within the fifteen minute driving range, it was estimated that in 1970, there were 262,000 persons with potential retail sales of $498,062,000. By 1990, the population will grow to 592,000 persons with a potential retail sales of $1,382,912,000. Within the primary trade area it was estimated that in 1970, there were 25,765 persons with potential retail sales of $47,721,887. By 1990, the population will grow to 45,813 persons in the primary trade area with a potential retail sales of $104,224,575.

7. The potential exists; it is now a matter of assembling the appropriate development mix and phasing actual construction with the growth of the market.

The staff recognizes the forces encouraging commercial development. Our concern is to assist adoption of an acceptable plan, analyze anticipated rezone requests based on that plan and future market demand, and with the help of the Alderwood community to recommend adequate development controls.

8. The recommendations contained herein are substantially in agreement with the County's General Land Use Plan. Certain minor adjustments may be necessary because this study has identified that it is not appropriate to consider that the study area is going to be developed according to a "balanced" land use concept.

We caution against the unqualified use of the General Land Use Plan. It is not an adopted document, and is presently undergoing revisions, including alternative changes recommended by the South County cities. That document will reflect the work we are presently doing in the Alderwood Area, which already has included substantially lower residential densities.

In addition to the above comments, there are several other considerations that are critical in development planning for 196th SW:

Sanitary Sewers: The development of 196th SW discussed has assumed sanitary sewer service. That service is not presently available. The area could be served by the City of Lynnwood with annexation, but this has not been proposed.
by the consultant or his clients. Alderwood Water District has the authority to provide such service and recently completed a feasibility study. Trunk service could be available by the mid-1970's. Lateral service to the subject properties would be convenient at that time. Assuming this optimistic schedule, there is a period of years before large scale rezoning would be necessary. However, because initial sewer feasibility and design has been predicated upon principally single-family development, we must agree upon a plan revision as soon as possible in order to allow Alderwood Water District to consider system design sizes adequate to accommodate loads from potential commercial and multiple residential areas.

Storm Drainage: A critical problem in the Alderwood Area is storm drainage and surface runoff, as has been very well pointed out in a letter from the Alderwood Community Council. The subject area lies in a sub-basin that is near saturation development in terms of the natural drainage system's ability to assimilate runoff. Neither Alderwood Water District nor Brier have storm drainage plans. Lynnwood has an ongoing storm sewer study to meet its own very critical needs as impacted by the Alderwood Mall complex.

It should be emphasized that storm drainage problems are incremental -- as the percentage of impervious surface area increases in a basin, the more rapid and complete the proportional water runoff. Because problems often occur downstream, it is hard to fix the blame, or expense, on the contributor. These drainage problems are of several kinds. The runoff increased by impervious areas becomes so complete that flooding and ponding occur downstream. Also, because the runoff is accelerated it has high enough energy to carry unusually large loads of debris, suspended matter, and nutrients into the water course, resulting in eutrophication and pollution.

There are several solutions to the storm drainage problem that we should consider:

A. As in the past, we can do nothing until serious problems occur. We then face extensive improvements at the general expense of the public. This is no longer an acceptable alternative.

B. We can attempt to restrict development to non-impervious construction which assures natural absorption. This, we all realize, has already been precluded to a large extent. However, the concept should not be discarded as overly idealistic. We can at least give attention to protection of natural vegetation and adequate setback from natural drainage ways.

C. We can encourage controlled development with surface drainage control provided at the point of development and at the developer's proportional expense. We recommend that this alternative has fair application and should be part of the development standards to be considered in the 196th SW area.

Snohomish County does not as yet, have a storm drainage plan. However, drainage is an element of the ongoing WASH-USE-1 project and in the next year we will have recommendations for the County role, which will give additional valuable information for development planning in the area.

Timing: We recognize several levels of timing in the Alderwood Area Plan process. Understandably, the community desires speedy adoption of the revised plan to afford land use protection. The existing plan has already experienced practical
modification through rezoning. Alderwood residents have indicated the concern to adopt a revised plan to avoid the continuation of spot rezoning. We concur with that concern. At the same time, due to lack of sewers and the extended time frame in the consultant's market study, we feel there is no urgent need for commercial rezoning. We feel there is adequate time to adopt the proposed Planned Community Business zone category, and to determine development controls, before there is a strong market demand for development. We recommend adopting the Alderwood Area Plan as soon as possible, but we do not feel that commercial rezone applications should follow at once.

Recommendations: Based on the foregoing remarks we make the following recommendations for planning and development of 196th SW portion of the Alderwood Planning Area.

1. We strongly urge that this plan recommendation -- or any modification -- be considered for implementation in a way that will insure adequate development controls to protect neighboring residences and the natural environment. Proposed commercial areas should be implemented by way of the existing Planned Neighborhood Shopping Center zone, or the proposed new Planned Community Business zone.

2. In order to assure the development controls desired by all, we recommend adopting a new Planned Community Business zone as discussed in previous remarks.

3. Proposed undeveloped single family residential areas should be developed under the Planned Residential Development zone existing. This would provide slightly higher densities while affording special design considerations and the provision of open space and buffers between mixed uses.

4. Our proposed land use development plan is as follows:

   a. East of 24th Avenue, we propose land uses similar to the consultant proposal. However, we recommend Low Density Multiple Zoning in all proposed multiple residential areas. This would allow 12 units per acre, with higher densities allowed under Planned Residential Development.

   b. Between 24th Avenue and 28 Avenue North of 196th SW, we recommend Low Density Multiple Residential development.

   c. South of 196th SW between 24th Avenue and 28th Avenue, we recommend an extension of the existing single family residential development.

   d. In the northeast quadrant of 196th SW and I-5, we recommend Planned Community Business. The consultant recommendation for Planned Industrial Park was originally supported by our staff. Indeed, we do believe that the warehousing use could be feasible in this area. However, we have no way of controlling the particular use under P.I.P.; very intensive industrial uses not consistent with the area could be developed under that zoning. Our present proposal could allow development of a motel if that proves competitive. If the warehousing facility does prove marketable, we recommend that this use could be accommodated by way of a contract.
e. West of 28th Avenue, south of 196th SW, we concur with the consultant's proposals.

f. West of Poplar Way and South of 196th SW, we recommend Low Density Multiple development consistent with the existing Southwest County plan.

5. We recognize that development of the area will take place over a long period of time, as the necessary utilities become available and the market emerges. We emphasize the need for careful development controls through the zones mentioned. We will need the continuing support of the Alderwood community, and the 196th business group, to properly implement the development of the subject area.

6. Finally, we strongly recommend the speedy adoption of the revised Alderwood Area Plan.
Sequence of Major Events

Draft Environmental Impact Statement issued
Final Environmental Impact Statement issued
Planning Commission Hearings:

County Council Hearings:
- Amended Ordinance 85-123 adopted
- County Executive vetoed Ordinance 85-123
- Veto overridden by County Council
- Council adopts Resolution No. 86-017 on traffic mitigation

Planning Commission Hearing on Council modifications
County Council Hearing on modifications
- Ordinance 86-062 adopted
- County Council Hearings on traffic mitigation

Council adopts amended Ordinance 86-072

Date:
- April 1985
- May 1985
- May 28, 1985
- June 19, 1985
- July 22, 1985
- December 10, 1985
- January 8, 1986
- January 22, 1986
- January 29, 1986
- February 26, 1986
- March 25, 1986
- July 2, 1986
- July 23, 1986
- August 25, 1986
- September 22, 1986
- October 8, 1986
- November 5, 1986
ALDERWOOD AREA COMPREHENSIVE PLAN AMENDMENT

Introduction:

The county periodically reviews its comprehensive plans to assure that plan assumptions are still valid in the face of changing conditions and shifts in community attitudes.

In August 1984, the County Council Land Use Subcommittee directed the Planning Division to reevaluate the comprehensive plan in the SR 527 corridor between I-405 and the King County line, located in the southeast portion of the Alderwood Area Comprehensive Plan. Figure A-1 shows the plan amendment area which consists of approximately 300 acres.

The impetus for this plan amendment was based on a number of factors. First, the Alderwood Area Comprehensive Plan was last revised in 1973 and is one of the county's oldest plans. Second, current population projections estimate that 47% more housing units will be needed in the planning area in 1990 than assumed by the 1973 comprehensive plan. Third, sanitary sewer mains have been extended into the northern part of the study area. Fourth, the comprehensive plan north of the study area will allow the development of industrial land and the creation of possibly 4,000 or more jobs by 1990. Fifth, traffic volumes on the study area's two arterial roads have been increasing at a faster rate than anticipated. Finally, several property owners within the study area have petitioned the County Council to change the comprehensive plan for the study area. They have requested that the plan designate more land for commercial uses.

The small area comprehensive plan amendment process is similar to a full comprehensive plan amendment except that it is less complex and requires less time to complete. It involves the collection and evaluation of background data, projections of demand forecasts, development of plan alternatives, and extensive public involvement. The end products of this process are a recommended plan amendment alternative, revisions to the plan text, and, in this case, a Draft and Final Environmental Impact Statement.

The public involvement process included a Planning Commission hearing to establish a study area boundary, two community workshops, several meetings with special interest groups, and the formal public hearings for the plan amendment before the Planning Commission and County Council.

The following are plan text revisions to the 1973 Alderwood Area Comprehensive Plan which were adopted by the County Council on January 29, July 2, and November 5, 1986. These revisions include the plan text as described in Appendix A of the Environmental Impact Statement (EIS) and as further modified on pages 4 and 5 of the Final EIS supplement, together with further amendments as recommended by the Planning Commission and County Council.
Plan Amendment
Adopted by County Council
ORD. NO. 85-123
1/29/86
ORD. NO. 86-062
7/2/86

Legend:
- Residential Estate, 1-2 du/ac
- Suburban, 2-4 du/ac
- Urban, 4-7 du/ac
- Multiple Residential, 12-24 du/ac
- Planned Neighborhood Business
- Planned Community Business
- Business Park, low density
- Public Facility
- Open Space Buffer
- Parks
- Site Sensitive Area

SR 527 / CANYON PARK
ALDERWOOD AREA COMPREHENSIVE PLAN AMENDMENT

Prepared by:
DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT, PLANNING DIVISION

Scale in feet: 0' - 1000' NORTH
LIST OF ALDERWOOD AREA COMPREHENSIVE PLAN TEXTUAL CHANGES

1. CHAPTER I. INTRODUCTION AND SUMMARY

Make the following changes to the summarized policies. Please refer to Chapter III of this plan amendment for an elaboration of these policy changes.

Pages 3 and 58. Revise Residential Policy number 3 to read as follows:

Encourage multiple family development in areas where there is major access, service of planned utilities, and proximity to a freeway interchange or employment center. Encourage low density multiple family development in areas where there is major access and service of planned utilities.

Pages 4 and 74. Amend the Transportation Goal as follows:

Develop a safe and balanced community transportation system which would include pedestrian, bicycle, and horse trail links in addition to efficient public and private vehicular transportation facilities.

Pages 5 and 74. Revise Transportation Policy number 5 to read:

Control the location and number of access points to commercial establishments along 196th Street, SR527, 228th Street SE between 9th Avenue SE and 19th Avenue SE, and 240th Street SE between 7th Avenue SE and SR 527.

Pages 5 and 74. Add a new Transportation Policy number 8 to read:

8. In the SR 527/Canyon Park plan amendment area, minimize and control the number and location of access points onto arterial streets from any development whenever possible, through the use of such access management techniques as consolidated driveways, interior circulation systems, frontage roads, raised medians, and via the establishment or use of collector and local streets. On principal arterials, access via private drives and local streets should be discouraged.

Pages 6 and 59. Revise Environmental Policy number 2 to read:

Protect the valuable anadromous fisheries and other aquatic resources in Swamp Creek and its tributaries, and in tributaries to North Creek.
Pages 6 and 59. Add the following policy to the Environmental Policies:

8. Designate environmentally sensitive areas with a "site sensitive" overlay in the SR 527/Canyon Park plan amendment area. Environmentally sensitive areas are defined as areas with slopes in excess of 25%, with wet and poorly draining soils, including peat soils, and along streams.

2. CHAPTER II. BACKGROUND STUDIES

Page 9. Add the following paragraph and table at the end of the Alderwood Planning Area Growth section:

The Puget Sound Council of Governments periodically revises its population forecasts to reflect changing conditions and demographic assumptions. The following table compares the original population and housing projections and assumptions made in 1973 to the current (1984) projections. Although the original and current 1990 population projections are remarkably close (4 percent decrease), there is a substantial increase in the number of anticipated dwelling units (46 percent). This increase in households is due to the expected substantial decrease in the average household size (see Table 2A).

**TABLE 2A**

1990 POPULATION GROWTH AND HOUSING NEEDS
ALDERWOOD PLANNING AREA

<table>
<thead>
<tr>
<th></th>
<th>1973 Plan Projection</th>
<th>1984 PSCOG* Projection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>20,000</td>
<td>19,170</td>
</tr>
<tr>
<td>Percent of County Population</td>
<td>4.8</td>
<td>5.7</td>
</tr>
<tr>
<td>Household Size (persons per hh)</td>
<td>4.12</td>
<td>2.77</td>
</tr>
<tr>
<td>Total households</td>
<td>4,718</td>
<td>6,900</td>
</tr>
</tbody>
</table>

*Puget Sound Council of Governments
Page 13. Economy Section. Add the following paragraph after the first full paragraph:

Four years after the adoption of the Alderwood Area Plan, the North Creek Area Comprehensive Plan designated approximately 240 acres for Business Park development at the junction of SR 527 and Interstate 405. In 1983, a plan amendment increased this Business Park designation to about 465 acres. This Business Park designation is contiguous to the southeast portion of the Alderwood Area Plan. By 1990, it has the potential to employ 4,000 or more persons immediately next to the Alderwood planning area. The Business Park developments will also induce additional local employment in service and retail commercial businesses.

Page 14. Add the following paragraph at the end of the Economy section:

The business park development located north of Interstate 405 along SR 527, along with other proposed and existing business parks in Bothell, will provide nearby employment opportunities for residents of the Alderwood Planning Area. These business parks will also attract new residents into the area due to the newly created employment opportunities. The population projections used to prepare the 1985 plan amendment in the SR527/Canyon Park area reflect the population growth potential generated by these business parks.

Page 33. Add the following paragraph at the end of the Zoning section:

An updated commercial land use analysis was prepared in 1984 for the study area along SR527 between I405 and the King County line. This analysis was prepared as a part of the SR 527/Canyon Park plan amendment study and is appended to the environmental impact statement associated with this study. In conclusion, this analysis states that there is sufficient vacant acreage for commercial development to 1990 in this corridor. However, the available land at SR 527 and 240th St. S.E. may not be suitable for freeway service uses or uses requiring large sites or sanitary sewers. The analysis suggests that a more suitable location for these uses is at the SR527/228th intersection because it is close to a major interchange, sanitary sewers are available, and ownerships are in fairly large lots.
Page 33 Insert the following sentence at the end of the first paragraph in the Circulation section:

For a discussion of traffic circulation in the Canyon Park plan amendment area refer to the Draft Environmental Impact Statement (DEIS) for this area prepared by the Snohomish County Planning Division, April, 1985.

Page 34 Add to Table 9, to the second column, a double asterisk after the words Meridian, SR 527, and Meridian to read as follows:

228th SE east of Meridian**
228th SE east of SR 527**
240th SE east of Meridian**

Add the following as a second footnote to Table 9:

**For a revised 1990 projection, see the Draft Environmental Impact Statement, SR 527/Canyon Park plan amendment area, Figure 3-6, prepared by the Snohomish County Planning Division, April, 1985.

Page 35 Add the following sentence after the first sentence of the last paragraph of the Circulation section:

Additional needed improvements are identified in the DEIS for the SR 527/Canyon Park plan amendment area, prepared by the Snohomish County Planning Division, April, 1985.

Page 35. Add the following sentence at the end of the Introduction section of the Community Facilities section:

An update of 1984 community facilities in the southeast portion of the Alderwood Area Plan is contained in the DEIS for the SR527/Canyon Park plan amendment area.

3. CHAPTER III. COMPREHENSIVE PLAN

Page 46. Add the following paragraph at the end of the Introduction section:

In 1985, the comprehensive plan for a small area in the southeast portion of the Alderwood Area Plan was amended. This plan amendment is shown in Figure A-1. The amendment resulted in an expansion of commercial uses at the intersection of SR 527 and 228th Street SE and in increased
residential densities around and south of this intersection, including multiple family residential uses. This amendment also changed or added some policies and performance criteria in the Alderwood Area Comprehensive Plan. These changes and additions were incorporated in the plan map and text.

Page 52. Add the following paragraphs at the end of the Methodology section:

Following is a description of changes in some of the above mentioned assumptions which resulted in the SR 527/Canyon Park amendment to the Alderwood Area Comprehensive Plan in 1986.

1. A recently approved business park adjacent to the plan area north of I-405 at SR 527 could be as a growth inducer in this area for more service oriented commercial uses.

2. As indicated by Table 2A in the Alderwood Planning Area Growth section, the substantial increase in housing need and smaller family size would suggest a greater need for housing types other than the predominant single family residences, such as duplexes and apartments. A likely location for these types of residential uses is on 228th Street SE at SR527 because: (1) sewers are available; (2) there is general community support for these uses at this location; (3) the location is in close proximity to the business park employment center and to freeway access; and (4) there is a general desire by these property owners to increase the development potential of their properties.

3. Presently, community oriented commercial uses are provided in the eastern and southern part of the Alderwood area plan by several community business centers in addition to Bothell and Kenmore. These include Canyon Park and Country Village, located in the Alderwood planning area, and at Thrasher's Corner and Woodinville, located outside of the planning area. An analysis of 1990 commercial land use needs for the Canyon Park/Country Village Shopping Center market area prepared by planning staff indicates that there is ample vacant commercial land in the present plan available for projected needs to 1990. However, the available vacant commercial land in the study area may not be suitable for some commercial uses due to a lack of utilities, access limitations, small lot ownerships, and distance from a major interchange. These limitations suggest a need for additional commercial land on the southern quadrants of the I405 and SR 527 interchange, which are generally unsuited to residential uses due to excessive traffic noise levels.
4. The proximity to a freeway interchange and recent zoning decisions by the Hearing Examiner would suggest that the most appropriate commercial designation is Planned Community Business on the southern quadrants of the intersection of I-405 and SR 527.

Page 55. Revise the first sentence of the first paragraph of the Residential Allocations section to read as follows:

The residential land categories used in the Alderwood Area Comprehensive Plan are: Rural Conservation, Residential Estate, Suburban, Urban, High Urban, and Multiple Family Residential.

Page 58. Add the following paragraph at the end of the Residential Allocations section:

Multiple Family Residential densities of over 12 dwelling units per acre are proposed on the south side of 228th Street in the SR 527/Canyon Park plan amendment area to help meet the demand for additional housing units. This area is located near a major employment center and freeway interchange to minimize its impact on the traffic system. Sewers are available and there is general community support for multiple family at this location.

Page 60. Add the following sentences to Performance Criterion number 6:

Encourage the use of natural buffers, a minimum of 25 feet in width, between abutting commercial and residential uses and between multiple family residential and single family residential uses. Existing mature trees should be maintained whenever possible and natural vegetation should be supplemented with additional plantings when necessary to avoid or minimize such impacts as light, glare, noise, and aesthetics.

Page 60: Add the following Performance Criteria:

16. Carefully analyze all development proposals in the Site Sensitive areas and insure that they are in conformance with the County's Slope policy.

17. In the SR 527/Canyon Park plan amendment area, encourage the use of planned residential developments in environmentally sensitive areas and adjacent to traffic corridors to cluster development in the least sensitive portions of a site.
18. The following measures should be incorporated into the site plan of any development on streams, wetlands, or waterbodies in the SR 526/Canyon Park Plan Amendment Area:

a. Avoid disturbance to streams or wetlands during construction activities.

b. Retain a 25 to 50 foot stream setback of undisturbed vegetation on Class II streams and a 15 to 30 foot setback on Class III streams measured from the ordinary high water mark depending on site conditions. (Note: see attachment to Letter 20 from Department of Public Works in the Final Environmental Impact Statement for map of stream classifications.)

c. Insure that adequate storm water detention and pollution control facilities are constructed to prevent increased flow and pollution in streams.

19. Larger residential developments in the SR 527/Canyon Park plan amendment area should provide sufficient public open spaces, parks, and playgrounds to serve the population in their development.

Page 64. Add the following paragraphs after paragraph 1 of the Other Commercial Areas section:

The SR527/Canyon Park Plan Amendment designates all four quadrants of the SR 527/228th Street SE intersection for Planned Community Business. The northeast quadrant is already zoned for Planned Community Business and has been partially developed as a shopping center. A site plan for more community business uses has been approved by the county on the undeveloped portion of the site. The Planned Neighborhood Business designation is applied to existing commercial uses in the southwest quadrant to ensure that any future development of the site coordinates internal circulation and access.

Three new commercial areas are added to the AACP by the SR 527/Canyon Park Plan Amendment: A 24-acre site north of 228th Street SE, west of SR 527, and south of I-405; an 8-acre site south of 228th Street SE and west of SR 527; and a 15-acre site south of 228th Street SE and east of SR 527. The Planned Community Business designation is applied to these areas to: (1) ensure that the sites are developed under a unified site plan that limits access and coordinates the internal circulation pattern, (2) ensure that environmentally sensitive features such as Perry Creek are adequately protected, and (3) recognize recent zoning trends in this area.
Due to the high traffic volumes expected, the entire 15-acre site southeast of the intersection should be developed under one unified site plan. This will ensure that internal circulation and access is coordinated. The minimum zoning area requirements of the Planned Community Business zone district make it necessary for the five smaller parcels in the northwest quadrant of SR 527 and 228th Street SE and the five parcels in the southwest quadrant of this intersection to be developed under unified site plans. However, it is preferable that all Planned Community Business parcels in the northwest quadrant of this intersection be developed under a unified site plan for the same reasons stated for the southeast quadrant. Access to Planned Community Business uses in this northwest quadrant should not be allowed from Ninth Ave. SE, which shall remain a residential street.

Page 70. Add the following sentences to Performance Criterion number 5:

In particular, commercial development on the southwest quadrant of I-405 and SR527 should be carefully screened from the rural residential uses on 9th Ave. S.E. Existing vegetation provides excellent natural screening and should be maintained and supplemented with additional plantings as necessary. Particular care should be given to blocking light, glare, and noise from commercial uses which could detrimentally affect an existing mink farm on 9th Ave. S.E. as long as it continues to operate at that location.

Page 71: Revise the introductory paragraph to the Transportation Plan section to read as follows:

It is not the purpose of this plan to duplicate the work of other planning studies. Therefore, the plan proposals for freeways and other arterials are not fully discussed here; they are thoroughly discussed in the Snohomish County Transportation Study and depicted on the Interim Arterial Plan map adopted by the County Council December 8, 1983. With the exception of arterials in the SR 527/Canyon Park plan amendment area, the primary emphasis here is with the effects of collector street improvements and with the construction of streets within subdivisions.

Page 73. Add the following description of the functional classes of streets after the Local Roads and Streets paragraph:

On March 5, 1984, the functional classification of streets was revised to conform to the Interim Arterial Plan adopted by the County Council on December 8, 1983. The revised version,
adapted from the Design Standards and Specifications of Snohomish County, follows:

FUNCTIONAL CLASSIFICATION

Principal Arterials - Formerly labeled as Primary or Major Arterials, the function of this class of arterial road is to expedite movement of traffic to and from major traffic generators such as regional and major community shopping centers and business districts, employment concentrations, and between communities. Principal arterials predominantly serve through trips with minimum direct access to abutting land.

Minor Arterials - Formerly labeled as Secondary Arterials, the function of this class of arterial road is to collect and distribute traffic from higher type arterial roads to the collector arterial and local road system, or directly to traffic destinations. Minor arterials serve significant traffic generators such as community business centers, schools, community centers, athletic fields, neighborhood shopping centers, major parks, concentrations of multi-family residences, offices or clinics, large hospitals, and traffic between neighborhoods within a community. Minor arterials serve a certain number of through trips and provide more direct land access than principal arterials.

Collector Arterials - The function of this class of arterial is to collect and distribute traffic from arterials to the local road system consisting of neighborhood collectors and local access roads as well as to provide direct land access. Collector arterials serve neighborhood traffic generators such as a small group of stores, schools, churches, club houses, small apartment areas, or small hospitals. Collector arterials usually provide more direct land access than the other arterial road classes.

Neighborhood Collector Street (60 ft. Right-of-Way) - Collectors provide for movement within the smaller areas which are often definable neighborhoods and may be bounded by higher class arterials. Collectors generally serve local traffic requiring direct access to abutting land uses and serve very little through traffic. Their function is a combination of traffic service and land service, serving about 350 dwelling units.

Two-Lane Local Access Street (60 ft. Right-of-Way) - Local access streets provide direct access to residential,
commercial, industrial or other abutting lands for local traffic movement and connect to neighborhood collector and/or arterial streets. Their function is to serve local traffic only. Normally a residential street serves more than 100 dwelling units.

**Two-Lane Local Service Street** (50 ft. Right-of-Way) - Local service streets provide direct access to residential land for local traffic and connect to neighborhood collector streets or local access streets. Their function is to serve local traffic only. A 50-foot right-of-way is a special consideration whereby service to less than 100 dwelling units is involved in a newly platted area.

**Private Access Road** - These privately owned streets provide for direct access to private land for local traffic movement and connect to a local public access, neighborhood collector and/or arterial road.

**Access Easement** - These provide access through private property for purposes of maintenance of off-street facilities.

Page 74. Revise Performance Criterion number 4 to read:

4. Coordinate the transportation system for the Alderwood Area Comprehensive Plan with the adopted Interim Arterial Plan.

Page 74. Add new Performance Criterion 4b:

4b. The adopted small area plan amendment requires land use oriented mitigation to help solve existing and projected transportation capacity problems at the intersection of SR 527 and 228th Street SE. This mitigation would include:

A. Allowing land uses that generate trips with peaking characteristics that cause lower evening peak hour traffic volumes. These land uses would disperse the traffic volumes more evenly throughout the day, thus helping the congested evening peak hour and maximizing the efficiency of the transportation system.

B. Alternatively, a land use which will generate significant peak hour traffic will be allowed only if traffic improvements are made to provide sufficient capacity to the transportation system so that other land uses generating lower evening peak hour traffic volumes could be developed.
These measures will be necessary in the northwest, southwest and southeast quadrants of SR 527 and 228th Street SE.

Page 74. Add Performance Criterion 6a to read:

6a. In the SR 527/Canyon Park plan amendment area, require access to arterials from residential areas primarily via collector roads. Space intersections on the arterials at least 600 feet apart.

Page 75 Add new Performance Criterion 12a:

12a. In the SR 527/Canyon Park plan amendment area, utilize landscaped median strips on four or more lane arterial streets not only to control and provide left turn access, but also to enhance and promote stability and permanence of adjacent residential uses.

Page 75 Add new Performance Criterion number 13a:

13a. In the SR 527/Canyon Park plan amendment area, eliminate traffic conflicts along arterials by the redesign or, where possible, the elimination of substandard intersections and by vacating dedicated, rights-of-way where alternative, less conflicting access is possible.

Page 75 Add new Performance Criterion number 13b:

13b. In the SR 527/Canyon Park plan amendment area, protect the traffic movement function of intersections of principal and minor arterial streets by prohibiting access points within 300 feet of the intersection whenever possible.

Page 75 Add new Performance Criterion 13c:

13c. Discourage direct access along SR 527 between I-405 and 228th Street S.E. On the west side, one access point, not closer than 300 feet from the intersection with 228th Street, limited to right-turn in right-turn-out, may be permitted if a subsequent project site plan and traffic analysis show that the level of service of this segment of SR 527 and intersections at I-405 and 228th Street will operate at an acceptable level of service.
Add the following new plan text immediately following Performance Criterion 23:

It is the county's expressed intent to require appropriate mitigation measures which will assure sufficient road system capacity at the intersection of SR 527 and 228th Street SE. Due to the limited capacity of the intersection, particular attention will have to be paid to operation of the intersection during the peak hour. Since trip generation and peak hour characteristics of non-through traffic vary with types of land uses, new developments at the intersection may have to be limited to land uses which will not use up all of the projected peak hour capacity. If not controlled, these developments could restrict the ability of others to develop in the area.

To accomplish the goals and objectives of the Alderwood Area Comprehensive Plan as amended, the following requirements should be met by developers in and adjacent to the amendment area who contribute additional traffic volumes to the intersection of SR 527 and 228th Street SE. These requirements are consistent with Title 26B of the Snohomish County Code and add a specific traffic forecast year and an emphasis on peak hour traffic characteristics.

1. The ultimate design of the intersection of SR 527 and 228th SE should not exceed the design proposed in the original Department of Public Works Design Report for 228th Street SE (22 approach lanes) plus a short right-turn lane for the west to northbound traffic.

2. Development in the three new commercial quadrants (NW, SW, SE) of this intersection should be limited to land uses which do not generate more than 23 trips per peak hour per acre.

3. This peak hour trip per acre limit does not imply any limits on off peak hour trip generation. Land uses in the PCB designated areas may exceed 23 trips per hour per acre during non-peak hours.

4. All developers in the amendment area will be asked to offer mitigation according to Title 26B. Road improvements would have to result in acceptable levels of service and would have to be consistent with the ultimate design for the intersection.
5. The method of mitigation would have to be consistent with Title 26B which allows master road improvement programs, road improvement districts, or developer financed improvements. Wherever possible, latecomer agreements should be used under authority given to counties in RCW 35.72.

6. Developers outside the plan amendment area should be subject to the same long-range (year 2000) projections and analysis which were performed for the Department of Public Works' TPE traffic study for this intersection. This requirement applies only if developments outside the plan amendment area have a comprehensive plan designation which is different from the one assumed in the SR 527/Canyon Park Plan Amendment Study and which would result in the generation of more trips than assumed during that study. It would also apply only if those developments contributed 10 percent or more of their site generated traffic to the SR 527/228th Street SE intersection.

Page 77. Add the following paragraph after the last paragraph of the Parks and Open Space section:

None of the areas designated for park development in the SR 527/Canyon Park plan amendment area have been developed as park sites. Neither the 1976 Park and Recreation Plan nor the 1985 draft Comprehensive Park and Recreation Plan have identified potential park sites in the amendment area. Therefore, the Park designated areas in and adjacent to the SR 527/Canyon Park plan amendment area are redesignated for residential development at a density compatible with surrounding land uses with a Site Sensitive overlay to insure that the environmentally sensitive features (wet soils, steep slopes and stream corridors) are protected.