Northshore

Community Plan Update and Area Zoning

MAY 2 - 1994
DISTRICT 4

King County Planning and
Community Development Division

Northshore Community Plan

Update

Effective Date: February 11, 1993

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The Northshore Community Plan Update provides overall policy direction and specific area zoning to guide growth and development in Northshore for the next decade. The plan revolves around the following five themes:

Designate urban growth boundaries.

Urban development requires a full package of urban services. More people creates a demand for more schools, fire trucks, highways, and landfills. Bothell, Kenmore, Woodinville, Kirkland and Redmond are the urban centers of Northshore. This plan targets these centers for most new growth and establishes boundaries for their expansion. By directing growth within an urban growth boundary, urban services can be planned and provided and farmlands and rural lifestyles are protected from urban sprawl. This plan distinguishes between urban, rural, and resource areas, ensuring a diversity of lifestyle choices in Northshore.

Negotiate land use plans with neighboring jurisdictions.

Northshore blends with the communities of Kirkland, Redmond, Bothell, Kenmore, Woodinville, and Snohomish County. Each of these communities has a vision for the future. The Northshore plan weaves these visions together into a regional plan which shares common goals but protects the uniqueness of each community. Each community participated in detailed land use recommendations for the Northshore plan.

Define development in harmony with neighborhood character.

Northshore neighborhoods have mobile homes, horse pastures, basketball hoops, and suburban estates. Neighborhoods such as Kenmore, Juanita, Finn Hill, Kingsgate, Hollywood Hill and Wellington each have a unique character. New development should reflect these neighborhoods. Size, scale, building type, materials, and site design all affect how well development blends into a neighborhood. Northshore plan policies require King County to consider all these aspects in development review.

Permit new development only with necessary infrastructure.

Growth has rapidly outpaced the supply of roads, schools, and parks. Major transportation corridors such as SR-522 are overcrowded during commuting hours. Many schools have large classroom sizes. The status quo means these facilities continue to lag behind new construction. The Northshore plan mandates necessary infrastructure to serve development at the same time that the development is approved.

Restore natural systems.

Swamp, Juanita and Daniels Creek, the slopes of Norway and Finn Hill and the large Douglas Firs that shade many neighborhoods contribute to the beauty of Northshore and bring wildlife close to home. Buffers to streams, building setbacks, native growth easements and the protection of healthy trees will help maintain the health of natural systems and the natural character of Northshore. Restoration of these disturbed natural areas is critical. New resource management techniques and strong public education can restore the function of denuded environmental systems in Northshore, and protect the beauty of its slopes, trees and streams.

Introduction

Northshore is one of thirteen community planning areas in King County. Community plans present a blueprint for the area that will guide land use decisions and public spending for the next six to ten years. The policies in this plan implement and amplify the 1985 King County Comprehensive Plan, which is the overall land use policy plan for King County. Rapid growth in Northshore led the King County Council to initiate a plan update of the 1981 Revised Northshore Community Plan in July of 1988. This motion (#7239) established a Citizens Advisory Committee to make policy recommendations to King County as part of the update process. The Northshore Community Plan Update replaces the 1981 Revised Northshore Community Plan incorporating relevant goals, development guidelines and zoning from the 1981 Plan into the new plan update.

The Northshore planning area encompasses 39 square miles on the northeast shores of Lake Washington from the cities of Lake Forest Park, Kirkland and Redmond north to the Snohomish County line, as shown on the map, Northshore Community Planning Area. The planning area surrounds the cities of Bothell and Woodinville. In the 1980s Northshore experienced a high rate of growth. The residential population grew from 67,000 to 92,500 people, an increase of 41%. Approximately 53% of this growth occurred in the unincorporated areas of Northshore. In 1980, there were approximately 1,741 people per square mile, and in 1991 there were 2,340 people per square mile. The Bear Creek planning area to the east has grown by 71%, with significant growth also occurring in Bothell, Kirkland, Redmond and Woodinville in the 1980s, all of which have an impact on Northshore.

Roads and facilities in Northshore have struggled to keep pace with this new development. Many areas in Northshore already have an established development pattern. There are few large blocks of vacant land available for new growth. This 1991 Plan Update balances issues of growth, resource protection, public facilities and services, challenged by overburdened road infrastructure and only small, infill areas left for new development. The Plan Update breaks new ground in linking transportation and land use. Areas planned for growth cannot develop until transportation facilities are on line. All new growth must provide strong measures to encourage carpool and transit use. The Update directs new development to be designed in a manner that is compatible with surrounding neighborhoods. The plan distinguishes between urban, rural and resource areas protecting rural and resource lands from the impacts of urban growth.

King County Comprehensive Plan

The 1985 King County Comprehensive Plan is the umbrella planning document which guides all thirteen community planning areas in King County. The Comprehensive Plan designates King County lands as

urban, rural, transitional and resource or open space. The map, Comprehensive Plan Designations, shows how the Comprehensive Plan designated lands within the Northshore planning area.

Northshore was designated with Urban, Transitional and Resource areas. Urban areas are where most new housing and jobs will be located as well as where the most public spending for facilities and infrastructure necessary to accommodate growth. The western two thirds of Northshore is designated as Urban. Within the Urban area, the Comprehensive Plan recognizes the communities of Kirkland, Redmond, Bothell, Kenmore and Woodinville as Urban Activity Centers. These Activity Centers are where most commerce and transit will be focused, as well as higher population densities.

Transitional areas are areas that were characterized in 1985 by low levels of service and development when the Comprehensive Plan was adopted and may be suitable for either urban or rural designations. The Comprehensive Plan directs community plans to determine whether areas designated as Transitional are capable of supporting urban growth and should be designated Urban, are appropriate for a long-term rural uses and should be designated Rural or should remain Transitional for the 6-10 year life of the community plan. The eastern one third of Northshore was designated as Transitional.

Resource areas are lands which contain productive soils for farming or have value for forestry or mineral extraction uses. In Northshore the Sammamish Valley located between the Urban and Transitional areas, is designated as Resource Lands.

The Comprehensive Plan outlines broad policies on such topics as resource protection, urban development, coordination with cities and public facilities. The Comprehensive Plan directs more specific policy and land use planning to occur through the community plans. The Comprehensive Plan policies provide the basis for more specific policies tailored to Northshore developed through the plan update process. In addition to policies, community plans provide property specific zoning and development conditions, called P-suffix conditions. The 1993 Northshore Plan Update follows the guidance of the Comprehensive Plan. The Citizen's Advisory Committee spent much time examining the policies from the Comprehensive Plan and applying these policies to the specific circumstances in Northshore.

The County Council amended the Comprehensive Plan to reflect the land use decisions made by the community plan. As a result, the transitional areas were redesignated to urban and rural, a portion of the western Sammamish Valley side slope was redesignated from urban to rural, and a small area of non-agricultural resource land was redesignated to rural.

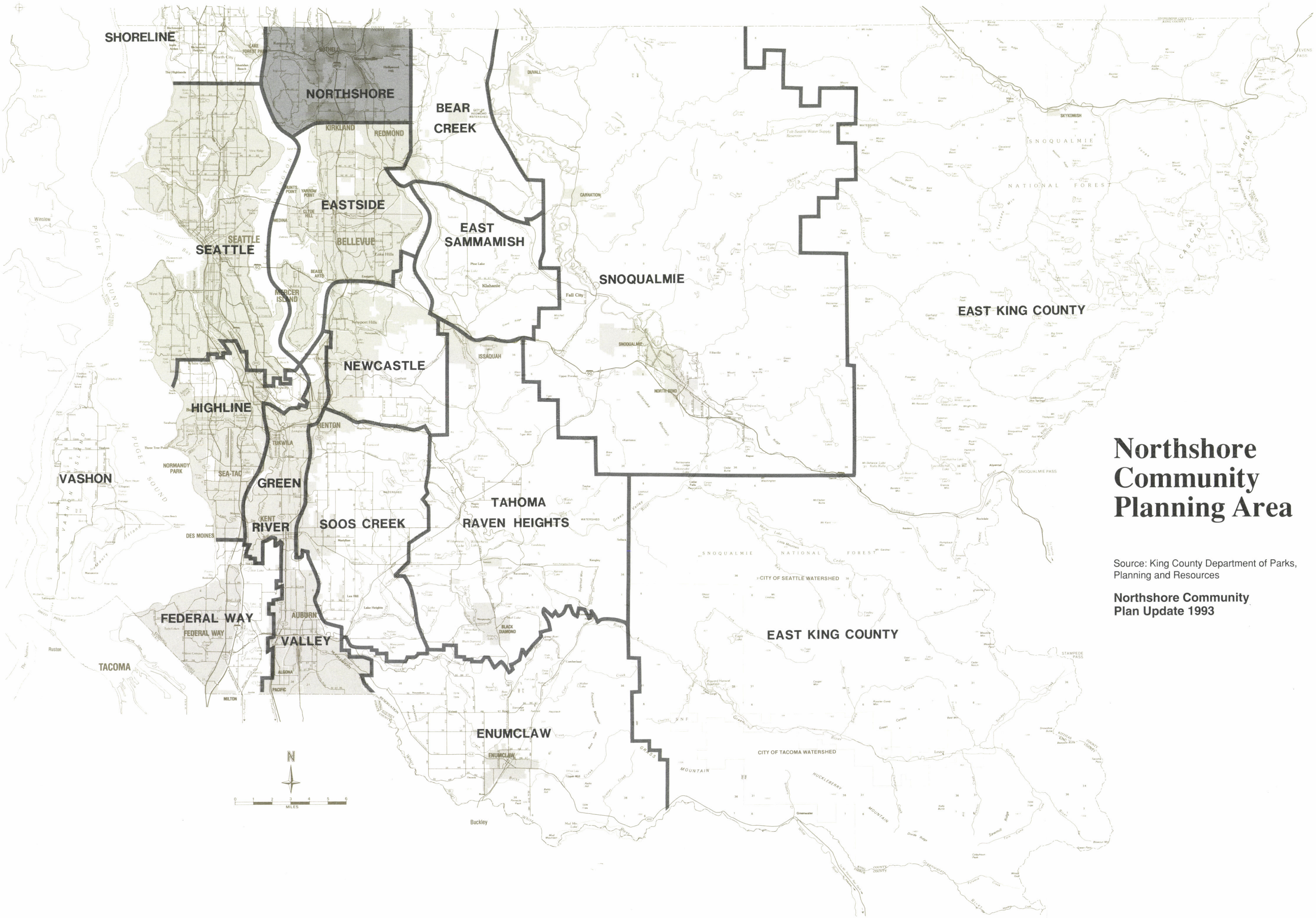
The Plan Update Process

Citizens Advisory Committee

King County Executive Tim Hill and the King County Council, appointed a Citizen's Advisory Committee (CAC) in 1988 to make recommendations to the County on proposed land use policies for Northshore. The Northshore CAC met for two years to formulate their recommendations for this plan. These recommendations were presented as policies in the Executive Proposed Northshore Community Plan Update, which was transmitted to the County Council for consideration. The policies would be used by King County to assess new growth and development in Northshore.

As part of the planning process, King County hosted a series of workshops to develop goals for the planning area. Members of the public attended the workshops and gave their input into the future of Northshore. The following goals were formulated from that process:

1. The provision of a variety of housing types in the Northshore Plan area is a high priority.



Northshore Community Planning Area

Source: King County Department of Parks, Planning and Resources

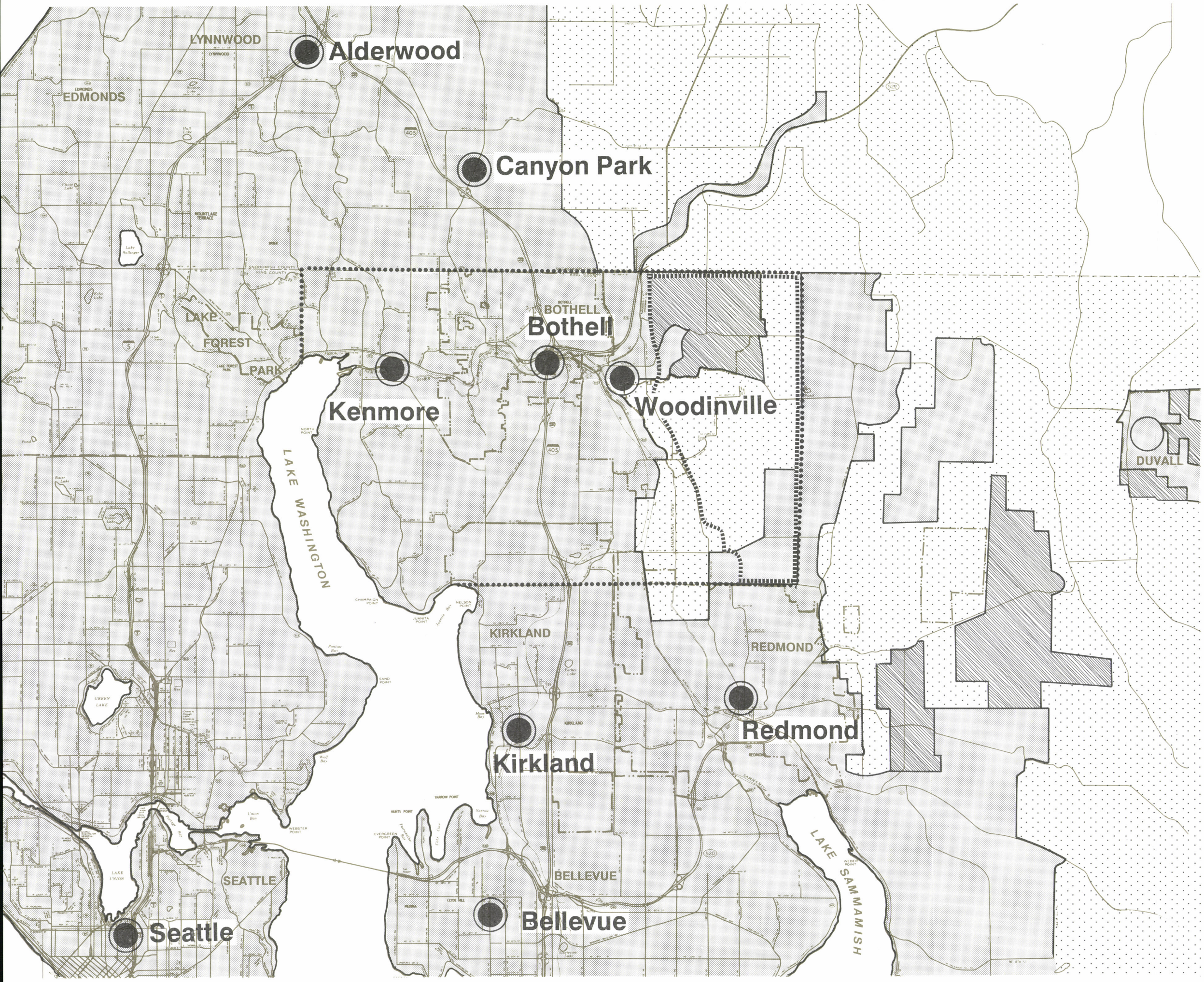
Northshore Community Plan Update 1993

Comprehensive Plan Designations

Surrounding Land Uses

- Urban Areas
- Future Urban Areas
- Rural/Resource Areas
- Employment Centers
- Rural Activity Center
- Transitional Area
  1985 King County Comprehensive Plan (Designations within this area are proposed in the Northshore Community Plan Update)
- Northshore Planning Area

Northshore Community Plan Update 1993



Northshore Community Planning Area

King County Planning and Community Development Division
1993

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2. The Northshore Plan Update emphasis of unique community characteristics of Northshore is important. Some of these characteristics are:

   - established residential neighborhoods
   - the agricultural lands in the Sammamish Valley
   - wooded slopes and significant vegetation
   - neighborhood commercial centers
   - historical and cultural resources
   - trails system throughout Northshore area
   - waterfront, stream corridors and wildlife habitat
   - tourism and recreational activities

3. The provision of a balance of jobs and shopping opportunities in the planning area is important to reduce the need for long commuter trips.

4. The recognition of unique environmental conditions warrants special consideration in addition to Countywide regulations.

5. Necessary public services must be available to serve anticipated land uses in the planning area, such as:

   - transportation systems
   - storm water facilities and systems
   - water and sanitary systems (includes septic systems where appropriate)
   - park and recreation services
   - schools
   - police protection
   - fire protection

The CAC met bimonthly with County staff to discuss the topics listed in this plan. The public was invited to comment at each meeting of the CAC. The meetings were chaired by an independent moderator who did not live in Northshore. The task of recommending policies to King County was a challenge. CAC members serving as volunteers were asked to balance differing goals, such as accommodating growth, with the desire to protect existing neighborhoods and alleviate traffic congestion. Often members of the public voiced frustration at the CAC meetings over issues related to growth and planning. The CAC did a tremendous job of considering all viewpoints and presenting King County with thoughtful recommendations on issues affecting their own living environment. The policies of this plan represent a consensus of CAC recommendations. Issues where consensus was not achieved or where the CAC recommendation diverged from the County are elaborated in Appendix One.

In addition, King County was assisted by a Technical Advisory Committee consisting of regional agencies such as METRO and the State Department of Transportation as well as other County agencies and representatives from the surrounding jurisdictions of Bothell, Redmond, Kirkland and Snohomish County.

King County wishes to thank the following Citizen Advisory Committee members for their commitment to the process.

Mary Peterson, Chair
Paul Konrady
Thomas Pendergrass
Nora Strothman
Gail Harrel

Karen McFadden
James Hudson
Heidi Jones
Karen Mack
Joseph Rees

Sally Hanson
David Huls
Al DeYoung
Kathy Marsh

Past Committee members included:

Arch Van Belle
James Labyak

Inventory and Analysis

Facts about the Northshore planning area are found in the 1981 Draft and Final Environmental Impact Statements prepared for the 1981 Revised Northshore Community Plan. Growth trends are presented in the King County Annual Growth Report. Current transportation and land use analyses are presented in the 1991 Draft Environmental Impact Statement and 1992 Final Environmental Impact Statement prepared for this plan update.

Development of Plan Alternatives

Following Comprehensive Plan guidelines, three land use alternatives were developed which met the Northshore goals articulated by the CAC but differed in their overall strategy for accommodating growth. Growth forecasts for Northshore projected by the Puget Sound Council of Governments (PSCOG) were utilized. Alternative 1, Urban Separators, accommodates most growth in urban centers and provides low density community separators in environmentally sensitive areas and resource lands. Alternative 2, Concentrated, focuses growth in Kenmore and Woodinville and in clusters along transit corridors. Alternative 3, Phased, phases growth by maintaining low densities in the eastern portion of the planning area in the short term and presenting options for future development in this area in the long term. All three of these alternatives accommodate the PSCOG 20-year population projection of 20,000 additional households. A brochure describing these alternatives and a questionnaire was mailed to all Northshore property owners to solicit their input. Areawide meetings were held to discuss these alternatives.

Preferred Land Use Alternative

Based on analysis and public input on the three alternatives, County staff and the CAC developed a hybrid of the alternatives as the Preferred Land Use Alternative. The CAC recommended policies which would guide land uses for the Preferred Alternative, which was presented in the Executive Proposed Northshore Community Plan Update. The major themes of this alternative are the designation of urban growth boundaries, coordination of land use recommendations with neighboring jurisdictions, directing new development that is in harmony with neighborhood character, permitting new development only when necessary infrastructure and services are available and restoring natural systems in the planning area to protect environmental ecosystems for the future. The Preferred Alternative does not accommodate as much growth as the three earlier alternatives, based on an analysis of land and infrastructure constraints. Two public workshops were held in September of 1990 to solicit public input on the Preferred Alternative and draft policies. Based on this input, staff recommended changes to the Preferred Alternative, as did the CAC. The CAC has supported the majority of the policies proposed to guide the Preferred Alternative.

The three original alternatives, the Preferred Alternative and the No Action Alternative (the 1981 Revised Northshore Community Plan) are all analyzed in the 1991 Draft Environmental Impact Statement (EIS). The EIS outlines the impacts of each alternative on Northshore and identifies mitigation necessary to offset these impacts.

Plan Adoption

The Executive Proposed Northshore Community Plan Update was transmitted to the County Council in April 1991. A special review panel of three Councilmembers was convened to do a detailed review of the Executive Proposed Plan. This Panel recommended the Plan be adopted, with many amendments, on September

30, 1992. The Plan was then approved by the full Council, with additional amendments, on January 19, 1993. The effective date of the Plan was February 11, 1993.

Implementation

The King County Executive, the County Council, the Zoning and Subdivision Examiner and all County departments will use the plan when making decisions about Northshore. The plan will guide how public funds are spent on roads, parks and other regional County facilities affecting this area. It will provide direction for local, state and federal agencies as well as private service providers on developing capital programs and spending plans for Northshore. It will guide the development of interlocal agreements between King County, Snohomish County, the cities, the state and METRO. These agreements will address regional issues affecting Northshore. It will establish standards and criteria for new development in the planning area, and provide a framework for growth for the next decade.

Chapter 1: Urban Growth Areas

The Northshore planning area encompasses 39 square miles including portions of the cities of Kirkland, Redmond and Bothell. Northshore experienced a high rate of growth and development in the 1980's. The residential population in the Northshore planning area grew from 67,900 to 92,500 people, an increase of 41%. Approximately 53% of this growth occurred in the unincorporated areas of Northshore. This growth led to an increase in population density of 36%. In 1980, there were approximately 1,741 people per square mile, and in 1991, there were 2,340 people per square mile.

As the Northshore area continues to attract residents to its livable communities, the challenge of the Northshore Community Plan is to accommodate these new residents and help create new communities while preserving the character and quality of life in existing communities. Designating urban growth areas is an important step in meeting this challenge. By identifying lands appropriate for future urban uses, and designating these lands as urban growth areas to be planned for future urban growth, the Northshore urban growth area policies aim to achieve the following goals:

- Prevent urban sprawl;
- Protect the environment; and
- Provide public services efficiently.

This chapter lays the policy foundation for directing future urban growth to the five Urban Activity Centers, including three cities, within the Northshore community planning area. The policies in this chapter implement the 1985 King County Comprehensive Plan and the 1990 State Growth Management Act as they relate to future urban growth. This chapter:

1. Identifies the urban growth area within the Northshore community planning area;

2 Establishes criteria under which lands within the urban growth areas are considered appropriate for annexation to a city or incorporation as a city; and

3. Creates policies and describes processes for transferring jurisdiction from King County to an annexing or incorporating city.

1990 State Growth Management Act

In 1990, Washington State adopted the Growth Management Act (GMA) to guide development in the state as it grows into the future. The GMA mandates comprehensive planning in counties, and all cities within these counties, with a large population or a rapidly increasing population, including King County. It requires all counties to classify and designate agricultural, forest lands and critical areas, and for all cities and counties to make their zoning consistent with their comprehensive plans.

The intent of the GMA is to encourage the conservation and wise use of lands through land use planning efforts coordinated between citizens, communities, local governments, and the private sector. The GMA sets broad parameters on how growth should be managed. It includes thirteen goals, seven of which are particularly relevant to urban growth areas.

1. Urban growth. Encourage development in urban areas where adequate public facilities and services exist or can be provided in an efficient manner.

2. Reduce sprawl. Reduce the inappropriate conversion of undeveloped land into sprawling, low-density development.

3. Public facilities and services. Ensure that those public facilities and services necessary to support development shall be adequate to serve the development at the time the development is available for occupancy and use without decreasing current service levels below locally established minimum standards.

4. Natural resource industries. Maintain and enhance natural resource-based industries, including productive timber, agricultural, and fisheries industries. Encourage the conservation of productive forest lands and productive agricultural lands, and discourage incompatible uses.

5. Open space and recreation. Encourage the retention of open space and development of recreational opportunities, conserve fish and wildlife habitat, increase access to natural resource lands and water and develop parks.

6. Environment. Protect the environment and enhance the state's high quality of life, including air and water quality, and the availability of water.

7. Citizen participation and coordination. Encourage the involvement of citizens in the planning process and ensure coordination between communities and jurisdictions to reconcile conflicts.

The GMA provides a policy framework and processes to implement goals related to growth and development and the provision of public services and facilities. The requirement to designate "urban growth areas" is an important tool in achieving the goals of the GMA. Counties are directed to designate, in consultation with the cities, urban growth areas sufficient to permit the urban growth projected to occur in the county for the next twenty-year period. Annexations of land outside these urban growth areas would be prohibited. These urban growth areas are to be reviewed every ten years.

The GMA defines urban growth as "growth that makes intensive use of land for the location of buildings, structures, and impermeable surfaces to such a degree as to be incompatible with the primary use of such land for the production of food, other agricultural products, or fiber, or the extraction of mineral resources. When allowed to spread over wide areas, urban growth typically requires urban governmental services." Cities must be included in an urban growth area, and urban growth areas may include more than one city. The only lands outside a city which may be included in urban growth areas are those which are already characterized by urban growth or adjacent to lands characterized by urban growth.

The GMA recognizes the crucial link between land use and capital facilities planning by requiring that land use and transportation planning be coordinated and supportive of mutual goals and that, within a six-year time frame, certain public facilities must be adequate for planned land uses. To achieve this linkage, the GMA directs that urban growth should be located first in areas already characterized by urban growth that have existing public facility and service capacities to serve such development, and second in areas characterized by urban growth that can be served by additional public facilities and services. These urban growth areas should include greenbelt and open space areas and public facilities and services to provide urban levels of service. It is appropriate that urban governmental services be provided by cities.

1985 King County Comprehensive Plan

The King County Comprehensive Plan (the Comprehensive Plan) is a blueprint for how land in the unincorporated areas should be used. It presents a vision of what the County should look like and how its resources should be distributed, and it gives guidance for achieving that vision. The Comprehensive Plan directs the County's zoning and other land use regulations in unincorporated communities.

Four of the goals of the Comprehensive Plan are particularly relevant to urban growth areas.

1. Guide population and employment growth to protect King County's natural beauty, open space, environmentally sensitive lands and historic features.

2. Indicate where growth can be accommodated and is desired, and encourage development in those areas.

3. Enable local governments to provide adequate and affordable public facilities and services, or to enable private provision of improvements, and to allocate their costs equitably.

4 Provide a framework for effective cooperation among King County residents and their government, cities, and other public agencies, and the private sector in addressing the many issues of managing growth responsibly.

Five major land use designations -- urban, transitional, rural, resource, and open space -- are used to describe and implement the Comprehensive Plan vision. Four of these land use designations are of major importance in identifying urban growth areas.

URBAN AREAS: Areas planned for growth at a range of residential densities, where urban public facility and service standards will apply. Most new housing and jobs will locate in urban areas, which include cities and urban activity centers, and this is where most public spending for facilities, services and open space will be focused, to assure livability and efficiency. The Urban Areas defined in the Comprehensive Plan are considered to be the long term limits for urban growth in King County.

RURAL AREAS: Development densities and service levels will remain low in these areas so that their primarily undeveloped and pastoral character and small farms may continue.

TRANSITIONAL AREAS: These are outlying areas which are physically suitable for either Urban or Rural development and which currently have very low service and development levels. Development densities will remain low, until either Urban services can be provided to serve Urban densities and additional land is needed to accommodate growth, or until a long-term Rural designation is applied.

RESOURCE LANDS: These are lands designated for long-term agricultural, forestry, and extraction of mineral resources. Lands designated as Agricultural Production Districts contain the County's best farm soils and most profitable commercial farms.

OPEN SPACE: These areas include existing public park and recreation areas and valuable scenic and environmentally sensitive areas throughout King County.

The Comprehensive Plan supports the goals of the GMA. Growth and development and the provision of urban services must be inextricably linked to preserve open spaces and rural and resource lands and to provide infrastructure -- transportation networks, sewage disposal, parks and recreation areas, and schools -- efficiently. The growth pattern envisioned by the Comprehensive Plan in urban areas consists of commercial and industrial activity centers and a diversity of residential areas.

The Comprehensive Plan provides policy guidance for the provision of public services and facilities, appropriate land uses, and the related issue of annexations or incorporations of urban or urbanizing areas. The Comprehensive Plan policies PI-302 and PI-303 instruct King County to work with the cities to focus growth within their boundaries and to support annexations or incorporations when consistent with King County policies. The Comprehensive Plan policies PC-204 and PC-114 direct King County to concentrate public facilities and services within urban areas and to preserve long-term rural areas with appropriate rural densities and public improvements.

Identifying Urban Growth Areas

Both the Comprehensive Plan and the GMA support a growth pattern which directs further growth to urban areas which are served by urban services and preserves and protects rural and resource lands. There is, however, a difference between the Comprehensive Plan's definition of urban and the GMA's definition of urban growth areas. The urban area designated by the King County Comprehensive Plan is considered to be the long term, unchanging boundary for urban growth in King County. It includes fully served urban areas, in addition to low density urban areas that are not currently planned for urban growth and services, but may be planned for urban growth sometime in the next 50 years based on regional growth management decisions.

The GMA links the designation of urban growth area to the provision of a full range of urban services. The public facilities and services to be provided to urban areas (which by definition are those lands within urban growth areas) include: streets, roads, highways, sidewalks, street and road lighting systems, traffic signals, domestic water systems, storm and sanitary sewer systems, parks and recreational facilities, schools, fire protection and suppression, law enforcement, public health, environmental protection and other governmental services. Urban growth areas are delineated within urban area, and are planned for the full range of urban services within the next 10-20 years.

According to the GMA, urban growth is to be encouraged within these urban growth areas. Since it is generally inefficient to provide sanitary sewer systems, sidewalks, and street lighting systems in low density urban areas, these areas are not planned for higher densities during this plan cycle and are not included within the urban growth areas.

The Comprehensive Plan encourages higher residential densities, an average of seven to eight dwelling units, in urban-designated areas where future growth will be directed, but it also recognizes that uniformly high densities are neither desirable nor feasible throughout an urban area. There may be environmental or service constraints which preclude higher urban densities, or the area may already be developed at low urban densities of one to three units per acre. Comprehensive Plan policies R-204 through R-207 state the conditions under which low densities are appropriate in urban areas, such as environmentally sensitive areas that present long term barriers to urban services, adjacent rural or resource areas or a small amount of vacant land that would preclude significant new development. The Comprehensive Plan further states that areawide public services, such a police and fire protection, for low-density urban pockets will usually meet urban service level standards, but on-site improvements such as utilities and local access streets will be

tailored to the low densities of development being served. The long term King County urban area does not include designated rural and resource lands. This urban area is distinguished on a Countywide basis from rural and resource land by the Urban/Rural line. The map, Comprehensive Plan Designations. Surrounding Land Uses, (see Introduction) shows the Countywide urban-rural Comprehensive Plan line as it affects Northshore.

E-1 **The Northshore Community Plan designates an urban growth area based on the following criteria:**

A. Rural and resource lands under King County's jurisdiction are not appropriate in urban growth areas and are excluded;

B. The land has the ability to support urban level population densities, development activity, and services in the future;

C. The land is located within the local service area for sewer and water provision;

D. The area has been designated as a potential expansion area by an adjacent city;

E. There are no major topographical or physical barriers to the extension urban services by the city; and

F. The areas discourage urban sprawl by including only lands needed to accommodate population growth at sufficient densities to provide a range of housing, support transit and allow economic provision of services.

The urban growth areas shown on the Urban Growth Areas map provide for long-term growth by the cities and should guide future land use and public facility planning efforts. The urban growth area designation shows area residents, developers, and other decision makers that King County and the cities consider these areas appropriate for eventual annexation or incorporation.

E-2 **The Northshore Community Plan Map 1 designates the Northshore Urban Growth Area. King County acknowledges that annexations will be appropriate when the provision of adequate infrastructure and services can be assured. Annexations should be reviewed to ensure that the goals of orderly and contiguous development and directing growth to existing incorporated urban areas are achieved. The cities of Bothell, Redmond, the future city of Woodinville and Kirkland in collaboration with King County and consultation with residential groups and special purpose districts within the Urban Growth Area, shall designate potential annexation areas.**

Both the GMA and the King County Comprehensive Plan stress the protection of rural areas and resource lands from encroaching urban development. The GMA encourages the conservation of productive agricultural lands, discouraging incompatible uses. The GMA requires King County to have a rural element of its comprehensive plan that includes areas not designated for urban growth and permits land use compatible with rural character. The King County Comprehensive Plan contains both Rural and Resource designations, as described on page 16. Chapter 2, Residential Development, designates several Rural designations in Northshore based on the criteria of the Comprehensive Plan. Chapter 6, Agricultural Lands, designates the Sammamish Valley as an Agricultural Production District, consistent with the Comprehensive Plan. The following policy reinforces the County's intent to maintain Rural and Resource lands outside urban growth areas.

E-3 **Areas designated as Rural and Agricultural Production District are not appropriate for municipal annexation, incorporation or urban growth.**

Annexation and Phasing

King County will provide or assure urban services at a feasible level for unincorporated urban areas, but the County cannot match the urban services provided by cities. The Comprehensive Plan encourages communities seeking higher service levels to annex to existing cities or incorporate as new cities.

Within designated urban growth areas, it is appropriate to phase annexations so that governmental services can be extended to the annexing area with a minimum of service disruption or adverse fiscal impacts to County and city residents. Phasing annexations encourages cities to grow and services to be extended in a deliberate, well-planned, and efficient manner. Phasing annexations also promotes more efficient use of land by encouraging infill development which, in turn, discourages urban sprawl and preserves open space.

E-4 **Lands within designated urban growth areas are appropriate for annexation to a city. Annexations shall be phased to allow efficient provision of necessary services. Annexations should be reviewed to ensure that the goals of orderly and contiguous development and directing growth to existing incorporated urban areas are achieved. King County will support annexation proposals that meet the following criteria and will oppose those annexation proposals that do not meet these criteria or are outside the designated urban growth area.**

A. **Urban level public services, including police and fire protection, schools, transportation, sewer, water and general governmental services, can be provided to annexing areas without a degradation in service levels to existing service areas.**

B. **The city has standards for levels of service, mitigation of adverse land use impacts, and environmental protection that are equal to or better than King County's standards.**

C **The annexation does not create pockets of unincorporated King County or special service districts that are difficult or inefficient to serve.**

D. **The city has adopted a sub-area land use plan for the annexation area.**

E. **The city has committed to provide a variety of residential development at urban densities.**

E-5 **To ensure the timely provision of adequate urban infrastructure and services, portions of the Northshore Urban Growth Area should be designated Growth Reserve with potential designations at higher urban densities. Proposals to actualize these potential designations should be reviewed to ensure that the goal of orderly and contiguous development would be furthered thereby.**

Annexations and incorporations in King County are reviewed by an independent boundary review agency, the boundary review board (BRB), per state statute RCW 36.93. There are two principal methods by which cities can annex unincorporated lands. Property owners in the proposed annexation area may petition the city for annexation or the residents in the proposed annexation area may request an election for annexation.

Under the petition method, property owners of 60% of the assessed property value in the proposed annexation area must sign the petition to annex. Using the election method, 10% of the residents, representing at least 20% of the number of voters who voted in the last election, must sign a petition to initiate annexation. A simple majority vote is required to approve the annexation. In either case, the petition is submitted to the annexing city for approval. If the city agrees to pursue the annexation, it is submitted to the BRB.

The BRB then has the authority to conduct a public hearing on the proposal and approve, deny or modify the boundaries only if jurisdiction is invoked by an affected jurisdiction, such as King County, or other eligible affected party. By designating urban growth areas in the community plan, the county and cities can identify boundary issues early and work towards a mutually satisfactory resolution before annexation requests are brought to the BRB.

Urban Separators

As growth continues in Northshore, an open space network can contain urban sprawl by permanently separating one city from another. These urban or community separators can also provide outdoor recreational opportunities, preserve open spaces, views, trees and other vegetation to help clean the air and purify the water, and preserve the historic settings of urban and rural life. Northshore urban separators include the Swamp Creek corridor, separating Bothell and Kenmore, and the Sammamish Valley and associated rural buffers, providing north-south separation the entire length of the planning area. Chapter 2, Residential Development and Chapter 6, Agriculture describe these separators in more detail.

The GMA requires counties and cities to identify open space corridors within and between urban growth areas. Open space corridors shall include lands useful for recreation, wildlife habitat, trails, and connection of critical areas such as wetlands. Open space can be valuable in preserving community character, to visually recognize community identity, and it should be considered in annexation proposals.

E-6 **Cities should include provisions for open spaces, and urban separators in annexation proposals.**

E-7 **Neighborhood goals which seek to preserve the unique characteristics of that neighborhood should be incorporated into cities' annexation proposals and proposals for urban separators.**

The City Of Bothell

The City of Bothell originated as a small mill town along the banks of the Sammamish River. Incorporated in 1909, Bothell grew over time into a bedroom community for the employment centers of Seattle and Everett.

In recent years Bothell has matured into a significant employment center in its own right, providing a location for such companies as the Seattle Times, Allstate, Precor, and Generic Software. Despite significant growth in the area, Bothell remains committed to retaining its small-town feeling, and has preserved a number of historic buildings as reminders of the community's roots.

The current population of Bothell is about 24,500 and its land area is approximately 11.6 square miles. Looking toward the future, the City has identified a Planning Area which encompasses 14.5 square miles, of which about 8.5 square miles are in King County and 7 are in Snohomish County.

The City of Bothell has adopted annexation and urban growth policies which are consistent with both the Comprehensive Plan and the GMA. The goals of Bothell's annexation policies are threefold:

1. Promote orderly growth;
2. Promote services; and
3. Maintain a sound fiscal position.

These policies recognize the linkage between the provision of urban services and annexation. Bothell's annexation policies direct the city to annex and extend services to areas where it is desirable to provide for growth and to avoid annexations and sewer extensions to areas where urban growth would be premature. These policies promote annexations in areas where Bothell can provide a higher level of service than King County or special service districts.

E-8 **King County and the City of Bothell recognize neighborhood parks are an urban service necessary within urban, developed portions of the urban growth area. As the ultimate purveyor of urban services, the City of Bothell has identified in the 1988 Bothell Comprehensive Parks and Recreation Plan the need for additional parks in portions of the Bothell planning area. Neighborhood parks shall be planned and provided as properties in the urban growth area annex, consistent with the Bothell Comprehensive Parks and Recreation Plan.**

Four areas adjacent to Bothell within the urban growth area warrant special consideration and additional policies to promote annexation.

The west slopes of Westhill, the north and east slopes of Norway Hill, areas east of the North Creek business park, and the area around the Northeast 160th Street interchange of I-405 are substantially less developed than are other unincorporated portions of the Bothell planning area. The lack of development is due to a lack of sanitary sewer service, the presence of environmental constraints and/or the desires of property owners. Since Bothell is the logical ultimate purveyor of urban services in these areas, further development within them should take into account service constraints of the City. The Northshore Community Plan designates these areas as growth reserve, with potential zones. The growth reserve should be removed only upon the provision of needed and appropriate urban services.

E-9 **Land located within the West Hill area lacks appropriate infrastructure for urban development and is physically constrained by slopes. These areas shall be designated growth reserve with potential designations of up to 8 units per acre. Actualization of the potential zoning is contingent on the following:**

A. **Provision of all needed and appropriate urban services, including sewers, either directly by the city or by contract with other service providers;**

B. **Adequate mitigation for impacts to transportation infrastructure and other services within the city and County.**

Two areas within the Bothell planning area, Norway Hill and the Juanita-Woodinville Way/I-405 interchange, do not yet have sewer service. The hilltop neighborhood of Norway Hill features steep slopes and erosive soils. This area has developed at a low density single family development pattern. King County and Bothell have identified the area around Juanita-Woodinville Way and I-405 interchange as an opportunity area for future residential development at urban densities based on available transit and vehicular access, proximity to urban services and lack of significant environmental constraints.

E-10 **The north and east slopes of Norway Hill have an established neighborhood character and limited future development potential. They are, therefore, designated low density urban, 1 - 3 homes per acre. King County recognizes that extensive steep slopes and erosive soils at the top of Norway Hill (above the 300 foot elevation mark) warrant lower residential densities.**

E-11 **The southeast slope of Norway Hill lacks appropriate infrastructure for urban growth and is physically constrained by slopes. This area shall be designated growth reserve with a potential designation of 3 units per acre. Actualization of the potential zoning is contingent on the following:**

A. Provision of all needed and appropriate urban services, including sewers, either directly by the city or by contract with other services providers;

B. Adequate mitigation for impacts to transportation infrastructure and other services within the city and County.

E-12 The land around the I-405 and NE 160th Street interchange is designated growth reserve with potential designations of 12 to 24 units per acre. These densities shall be achieved by a density step-down approach which places higher densities in the core and lower densities on the perimeter to maintain compatibility with adjacent neighborhoods. The City of Bothell recognizes the need for additional parks in the Norway hill subarea. New development should mitigate impacts of new residents or employees on existing park facilities. The opportunity to acquire land for and develop a community park of 10-20 acres in this area should be pursued. King County and the City of Bothell should work with site developers to reserve additional acreage for such a park, and to develop a public/private funding package for such a park. Future urban development should follow urban design guidelines, including the mitigation of visual and physical impacts related to the I-405 corridor, established by the City of Bothell. Actualization of potential densities is contingent upon the following:

A. A pedestrian circulation plan should be made prior to development which will provide pedestrian circulation through the area as well as direct linkages to the Brickyard Park and Ride.

B. Needed and appropriate urban services must be provided, either directly by the city or by contract with other service providers.

C. Project development on the west side of I-405 shall limit access to 112th Avenue NE. Applicants for development approval shall demonstrate that the proposed development would not result in traffic level of service (LOS) worse than LOS "d", or shall provide road improvements necessary to achieve an LOS "d" or better. Improvements necessary to achieve LOS "d" or better must be finalized through awarding of construction contracts concurrent with the date for final development approval by the City of Bothell.

D. Future urban development must address impacts to all other urban services such as fire protection, police protection and schools. A proposal to mitigate impacts to these facilities in the city and County must be accepted prior to final development approval.

E. Application of city road and development design standards, where city standards are more stringent than the County's.

F. Future urban development should protect sensitive areas on site consistent with regulations adopted by King County and the City of Bothell.

E-13 The undeveloped area to the south of METRO's Brickyard Park and Ride Lot should retain its office-only designation in recognition of its proximity to a major transportation corridor and the need for increased employment opportunity in proximity to planned high-density residential areas.

E-14 King County shall pursue an interlocal agreement with the City of Bothell that establishes standards for levels of service, mitigation of land use impacts, and environmental

protection for annexations. Protection of the environment equal to or greater than protection afforded under King County's jurisdiction shall be identified in the agreement.

E-15 **Areas adjacent to Juanita, Little Bear or Swamp Creeks as well as designated Critical Drainage Areas, Erosion Hazard Areas or Landslide Hazard Areas should be designated low density urban at a density of 3 units per acre to protect the natural resources that would be impacted by development there. In the event that subsequent change in the King County Code eliminates that zoning designation, these areas should convert to the closest lower density designation.**

The City of Redmond

The City of Redmond was incorporated in 1912 with a land area of less than one-third of a square mile. Until the 1950's, Redmond remained a small rural farming community of less than 600 residents. Today, it is King County's seventh largest city, with a land area of over 15 square miles and a population of over 40,000 people. In the last decade alone, Redmond increased its geographic size by almost two square miles and 16,000 people.

The land uses in Redmond vary from intensive commercial activity in the city center and the Overlake area to urban residential development to farms. The three intersecting valleys in and around Redmond, Bear Creek, Evans Creek, and the Sammamish River, create a visually interesting city, define neighborhoods, and add variety to the landscape.

The City of Redmond has a ten year growth boundary plan, which was being updated as the Northshore Community Plan was being developed, to implement its annexation policies. Two goals of Redmond's annexation policies are:

1. Create city boundaries that preserve the integrity of existing and planned neighborhoods and maintain logical service areas, and
2. Encourage interlocal cooperation in the management and control of land development.

E-16 **The area between NE 124th Street and NE 116th Street, between the Woodinville-Redmond Road and the eastern border of the planning area, is designated growth reserve with potential densities of up to 8 units per acre. Actualization of the potential zoning is contingent on the following:**

A. Provision of all needed and appropriate urban services, including sewers, either directly by the city or by contract with other service providers;

B. Adequate mitigation for impacts to transportation infrastructure and other services within the city and County.

Both the Comprehensive Plan and the GMA encourage the establishment of open space corridors along the boundaries of urban communities. The GMA permits cities to include greenbelts and open space areas. It also requires comprehensive plans to identify open space corridors, known as urban separators, within and between urban areas.

The area east of the Redmond-Woodinville Road to the section line between sections 25 and 26 and between Northeast 124th Street and Northeast 116th Street is within the Redmond urban growth area, and it is adjacent to the agricultural production district. This area is the gateway to Redmond from the Sammamish Valley, and it provides a transition between the urban land uses in Redmond and the resource and rural land uses in the Sammamish Valley.

This area should function as an urban separator. Consistent with the Comprehensive Plan policies RL-302 and RL-304, this urban separator will also buffer the agricultural production district from urban land uses which are incompatible with agricultural uses.

E-17 **Residential development south of NE 124th Street, within the area identified by Redmond as its proposed annexation area, adjacent to the Agricultural Production District shall be low-density, clustered, screened, and fenced to increase distance between housing and agricultural uses, and to discourage trespassing.**

E-18 **The remainder of the western half of the southeast quarter of Section 26, not designated Rural by Policy E-16 abuts Rural areas to the west and north. To provide a transition between those rural land uses and the higher density urban areas to the east and south, this area should be designated low density urban with development clustered away from the rural areas.**

Urban Activity Center Of Woodinville

The City of Woodinville voted to incorporate in November 1992. Formal incorporation of the City occurred on March 31, 1993. The City has 9,400 residents, with a total land are of 6.1 square miles.

Urban Activity Center Of Kenmore

The area known as Kenmore - bounded by 80th Avenue Northeast to the east, the Sammamish River to the south, the City of Lake Forest Park to the west, and Snohomish County to the north - includes approximately 3.5 square miles and 8,000 residents. It is a largely sewered area with a low urban density of approximately 2,280 people per square mile. It is anticipated that, during the life of the Northshore Community Plan, this area will achieve urban densities comparable to neighboring cities.

E-19 **The King County Comprehensive Plan designated Kenmore as urban. To ensure that the full range of urban services necessary to serve urban densities are provided to the residents of this area and that the area does not remain as an unincorporated urban island within King County, annexation or incorporation of this area would be appropriate and is consistent with the Northshore Community Plan.**

E-20 **The Northshore Community Plan recognizes the Swamp Creek basin as an environmentally sensitive area that has sustained repeated flooding impacts. If this area incorporates, densities and services should reflect the environmental sensitivity of the Swamp Creek Basin.**

City Of Kirkland

Kirkland, with a population of 41,400 in 1991, is the fifth largest city in King County and the thirteenth largest city in Washington. Kirkland encompasses 10.4 square miles, of which 4 miles are Lake Washington shoreline. Kirkland annexed several large communities in the 1980's, increasing its land area by 4 square miles and its population by 16, 470.

Kirkland was founded in 1888 by Englishman Peter Kirk, and the city was incorporated in 1905. Kirk founded the Moss Bay Iron and Steel Works of America and the Kirkland Land and Improvement Company to develop the city where his workers would live and trade. The land company originally platted the town to accommodate 50,000 people.

Housing is the primary land use in Kirkland, although the city supports a business base which includes retail, commercial, office, services, and light industrial businesses. Downtown Kirkland hosts a rich mix of boutique shops, art galleries, restaurants, and lake front park settings.

The city offers nineteen parks covering 250 acres, including seven waterfront parks, for relaxation and recreation. Nestled between the two largest wildlife habitats on Lake Washington, one can see a variety of waterfowl and shorebirds year round, including Canadian geese, mallards, and loons.

The majority of the land within the Kirkland urban growth area is developed at an urban land use pattern with urban services.

Implementing Annexations And Incorporations

Annexations and incorporations are a transfer of jurisdiction from County to city authority. Usually, the city will assume the provision of all urban services previously provided by King County. Sometimes, however, an incorporating city will want to contract for service provision with King County. In either case, the city and King County must work together to ensure a smooth transition to avoid service disruption to city residents.

The Comprehensive Plan policies PI-304, PI-305, and F-114 encourage city-county cooperation in the development of compatible land uses and service standards which would help ease the future transition from county to city jurisdiction in an area. The Comprehensive Plan policy F-113 acknowledges cities as the preferred service providers within future annexation areas and encourages the use of interlocal agreements to implement this policy.

E-21 **Pre-annexation planning agreements shall be negotiated between the County and the cities for proposed annexations of a significant size or nature.**

E-22 **Pre-annexation planning agreements shall address, at a minimum, the following issues in the proposed annexation area:**

- **A. Land use planning;**
- **B. Transportation planning and mitigation;**
- **C. Development standards and development review;**
- **D. Surface water drainage;**
- **E. Utilities planning and provision;**
- **F. Housing, including affordable and fair housing;**
- **G. Historic preservation;**
- **H. Parks, trails and open space; and**

I. **Environmentally sensitive areas including but not limited to steep slopes, bodies of water, flood plains, and wetlands.**

Intercounty Coordination

The GMA mandates that land use planning be compatible between neighboring jurisdictions, including counties. The Comprehensive Plans of counties and cities must be coordinated and consistent with the Comprehensive Plans of neighboring jurisdictions. Some issues affect broad land use areas, such as transportation networks or resource areas that cross jurisdictional boundaries.

The following policies direct regional action necessary to implement the GMA.

E-24 **King County, Snohomish County, the State, METRO, Snohomish Community Transit, the Cities of Redmond, Kirkland, Bothell, Lake Forest Park and the future City of Woodinville should work towards regional transportation solutions that affect Northshore. These parties should assess a range of strategies aimed at linking land use to infrastructure capacity, and encouraging other modes of travel in congested areas.**

E-25 **King County, Snohomish County, the City of Bothell and the future City of Woodinville should work on specific areas of mutual concern, such as the Swamp Creek and Daniels Creek drainage basins, the SR-527 transportation corridor, the proposed regional facilities of the University of Washington, and the future expansion of the City of Bothell.**

Chapter 2: Residential Development

Housing is a critical component of all community plans. It is the major use of urban land in King County. The King County Comprehensive Plan provides general policy direction related to housing development, as well as specific policies related to Urban, Transitional and Rural areas. The Comprehensive Plan directs the Northshore Community Plan Update to make decisions for Urban and Rural types of housing in the eastern portion of Northshore that was designated Transitional in the 1985 Comprehensive Plan. Major concepts from the Comprehensive Plan related to housing are:

- The Comprehensive Plan directs efficient use of land, public services and private improvements through the housing component of this community plan.
- The Comprehensive Plan calls for a wide variety of affordable housing choices including single family and multifamily housing at a range of densities and prices.
- The Comprehensive Plan calls for most residential growth to occur in Urban areas first, and in Transitional areas when services become available.
- The Comprehensive Plan calls for the protection of sensitive areas and resource lands from the impacts of residential development.

The Northshore Plan is responsible for balancing future housing needs with protecting both natural resources and the cultural environment of the neighborhoods we live in. The Puget Sound Council of Governments (PSCOG) has projected the need for approximately 18,000 additional households in Northshore by the year 2010. The planning process considered alternatives which would meet or exceed this projection, as well as the preferred alternative, which accommodated approximately 14,000 new households. The preferred alternative was developed by analyzing the carrying capacity of land and infrastructure in Northshore. Growth and development in the last ten years has dramatically altered Northshore's ability to accommodate growth. This chapter proposes accommodating new residential growth in line with the ability of local jurisdictions and the private development community to provide necessary services and infrastructure. The major concepts of this chapter are:

- Most new residential development should be concentrated in and adjacent to the Urban Activity Centers of Bothell, Kenmore and Woodinville, where developable land is available and where the most complete range of urban services can be provided.
- New multifamily development should be located in Urban, Community and Neighborhood Centers (described in Chapter 3, Commercial and Industrial Uses).

- New residential development should be designed to harmonize with surrounding areas, provide on-site recreational opportunities (multifamily development) and preserve large trees important to the character of the neighborhood.

- High density single family development should be encouraged as a means of providing affordable housing and accommodating growth that is compatible with neighborhood character.

Northshore has a diverse mix of housing types from compact housing in Kingsgate with varied lot sizes and apartments, to larger rural lots around Daniels Creek and Hollywood Hill. Five categories apply to residential development in Northshore:

1. Multifamily (12-24 units/acre) This designation is proposed in neighborhood centers, community centers and activity centers of Northshore based on the policies of this chapter, Chapter 11, Kenmore Activity Center and Chapter 12, Woodinville Activity Center.

2. Single Family Urban (3-8 density units/acre) This designation is proposed for the western two-thirds of the planning area that was designated urban in the 1985 Comprehensive Plan. These residential areas are currently served by urban services.

3. Future Urban (densities vary). This designation is proposed for tracts of land within urban growth areas which are partially developed or undeveloped, and are not currently served by the full range of urban services. Future urban areas are planned for urban residential growth when services are available, based on the policies and criteria of this plan.

4. Single Family Low Urban (1 unit per acre). This designation is proposed for Norway Hill, which does not have sewer service, has limited future development potential and is platted in a consistent one acre development pattern.

5. Single Family Rural (1 unit per 2.5 to 5 acres). This designation is proposed for areas that meet the criteria for a Rural designation established in the 1985 Comprehensive Plan. These areas will not receive urban services and are intended for long term rural uses.

These land use designations are depicted on the Land Use Map, located at the back of this plan.

Diversity

Maintaining the diversity of housing in Northshore is important. People have different housing needs and incomes at different times in their life. A retired couple on a fixed income may choose a very different type of dwelling than they did when they had three growing children and larger paychecks. Younger people who are renting and saving to buy a new home, have a need for smaller, less expensive single family housing. Since most of the Northshore planning area is already developed, vacant land for new residential development has increased in value, requiring new development to efficiently utilize existing land area. A diverse housing mix provides for a range of lifestyle choices and housing affordability, allowing people to grow old in the same area where they raised a family.

R-1 **The Northshore planning area should provide for a variety of housing types and lot sizes. These densities may be achieved through small and large lot single family development, town houses, duplexes, apartments and mobile home parks.**

R-2 **Residential land use designations should allow for development that will accommodate a range of incomes by providing for a range of housing types and cost.**

Transitional Areas from the Comprehensive Plan

The eastern third of the Northshore planning area was designated Transitional in the 1985 Comprehensive Plan. This Transitional designation was based on:

1. Rural or low density development
2. Natural features are capable of supporting urban development when services become available
3. There are no major barriers to providing urban services in the future at a reasonable cost.
4. The area is outside the Sewer Local Service Area
5. The area contains vacant land in parcels large enough to allow either future urbanization or long term rural densities.

Policy PC-106 of the Comprehensive Plan directs the community plan process to make decisions between future urbanization when services become available, or long term rural densities. The criteria outlined in the Comprehensive Plan necessary for a long term rural designation are:

1. Good opportunities exist for small-scale farming and forestry.
2. A Rural Area designation will help buffer nearby resource lands from conflicting urban uses.
3. There are major barriers to providing urban services at a reasonable cost.
4. Significant environmental constraints make the area generally unsuitable for urban development.

These criteria for Rural Areas designation were applied along the eastern boundary of the planning area, Hollywood Hill, portions of Leota-Wellington and along the borders of the Sammamish Agricultural valley. The criteria are reflected in the policies below.

Rural and Resource Areas

The Comprehensive Plan gives clear direction on the protection of resource areas. The Sammamish Valley is an important agricultural resource, containing productive agricultural soils. While new residents may enjoy the pastoral qualities of an adjacent farm, residential development and farming do not always mix. Farming requires noisy equipment, slow moving vehicles on roadways, sometimes at early or late hours, and noxious techniques such as crop spraying. New residents can inadvertently harass livestock, trespass or damage crops. The following policy establishes Rural areas adjacent to the Sammamish Valley Agricultural Production District. This Rural designation will reduce potential conflicts by limiting residential uses next to the Agricultural Production District.

R-3 **Land adjacent to the Sammamish Valley Agricultural Production District delineated on the Land Use Map is designated as Rural. To protect the agricultural district and to limit the potential for land use conflicts along the border of the Agricultural Production District, new residential development adjacent to the boundaries is limited to rural uses. King County should consider the enactment of a program to permit the transfer of development credits from these rural-designated properties to urban portions of Northshore and other portions of the county.**

R-4 **Lot clustering shall be utilized where possible when residential development abuts agricultural districts to provide an open space buffer between agricultural lands and housing, and to reduce potential land use conflicts.**

The Comprehensive Plan similarly directs the protection of sensitive areas through techniques such as lot clustering or lower density zoning depending on if the surrounding area is Urban or Rural.

R-5 **Identified sensitive areas shall be protected from residential development consistent with the King County Sensitive Areas Ordinance. The following techniques shall be applied through the Northshore Area Zoning:**

A. Low Density Zoning
B. Mandatory Clustering
C. Dedication of Sensitive Areas as a Sensitive Areas Setback Area.

Several important stream tributaries flow through residential areas in Northshore. Daniels Creek flows through a low density residential area formerly designated Transitional by the Comprehensive Plan. This plan, in tandem with a Comprehensive Plan amendment, converted the Transitional area to either urban or rural land uses, based on criteria listed on page 13. The Bear Creek Basin Plan (adopted in August 1992) recognized the importance of the regionally significant Cottage Lake Creek stream system. This recognition included a recommendation of rural zoning for all areas within 1/4 mile of the streams and wetlands included in this system. Additional field survey in 1992 performed after the Basin Plan was prepared in 1988 has documented that the #1-rated Big Bear Creek Wetland 10 extends much further west and north than what was mapped in the 1990 Sensitive Areas Map Folio. This new survey extends the wetland area almost to the two previously unmapped salmonid bearing tributaries of Cottage Lake Creek. The result of this new stream and wetland information is the extension of the Regionally Significant Resource Area (RSRA) boundaries further to the north and west into the Northshore Community Planning Area. The north and west boundaries of the RSRA would be in the vicinity of the roads mentioned above.

The intended result of the rural zoning is to minimize the effects of urban development on the functional and structural integrity of streams and wetlands within the Daniels and Cottage Lake Creeks sub-basins. By doing so, the mosaic of habitats that support various plant communities, fish, other wildlife, and good water quality can be maintained for many decades. In addition, the potential damage associated with pollution, flooding erosion and sedimentation can be greatly reduced.

Swamp Creek flows through the Urban area, and is surrounded by many more houses than Daniels Creek. Swamp Creek is designated Urban by the Comprehensive Plan, and currently features urban levels of development.

R-6 **The Cottage Lake Creek sub-basin is designated as Rural. To protect the Cottage Lake Creek sub-basin, new development shall be limited to rural residential use at a density of one home per 5 acres within a quarter mile of the ordinary high water mark of Daniels Creek and at a density of one home per 2.5 acres in the remainder of the rural designated portions of the sub-basin. King County should consider the enactment of a program to permit the transfer of development credits from these rural-designated properties to urban portions of Northshore.**

R-7 **Swamp Creek provides important wildlife habitat, and serves as an urban separator between Kenmore and Bothell. To protect the Swamp Creek corridor, no development should be allowed in the Swamp Creek floodplain. Residential development shall be clustered away from the tributary, as defined in the Northshore Area Zoning.**

R-8 **In recognition of the Countywide need to concentrate new urban growth and urban services in areas already characterized by urban growth, and limit growth in areas with limited infrastructure, Hollywood Hill and portions of Leota-Wellington delineated on the land use map are designated as rural residential, one unit per 2.5 acres. Because these areas are**

not planned for the full range of urban services, they are not included within the urban growth boundary defined in Chapter One of this plan.

Urban Residential Areas

Residential neighborhoods in the Urban area of Northshore require the full range of urban services. This includes water and sewer service, roads and sidewalks, schools, neighborhood parks, and transit. Many of these services are already provided. Some services, such as roads and schools traditionally lag behind new development. Other services such as sewers or convenient mass transit are not yet provided throughout the Urban area. The following policies differentiate between current Urban areas and Future Urban areas. The policies direct that services should not lag behind development, but be provided at the time that development occurs.

Another important directive of the Comprehensive Plan is to encourage higher residential densities in Urban areas to control public costs, support transit service, conserve energy and natural resources, reduce development pressure on Rural areas and Resource lands, and to provide more affordable housing choices. For these reasons, the Comprehensive Plan establishes a policy for new residential development in urban areas at average densities of 7-8 units per acre.

Many Northshore neighborhoods are already well developed. Only scattered vacant parcels exist. Some of these parcels may be suitable for higher density development. Criteria used in this plan to determine appropriate density ranges while striving to meet the Comprehensive density policies include: availability of developable land, age and condition of housing stock; surrounding uses; adequacy of public facilities and services; and continued neighborhood economic and social vitality.

R-9 **Compatible land use designations should be utilized by infill development in areas with an established land use pattern. Infill development at moderately higher densities should include features to enhance compatibility with existing residential neighborhoods.**

The prevailing residential land use pattern in the urban areas of Northshore is four to six homes per acre, a lower overall residential density that the Comprehensive Plan policy for new development. This policy establishes criteria for residential density ranges in the urban area. In areas where adequate services and facilities can be provided and where there are a minimum of environmentally sensitive lands, this policy targets the Comprehensive Plan policy of 7 to 8 units per acre. As described in Chapter 1, services must be available to serve new development at the time that development is approved. Developed areas and certain sensitive areas are recognized with appropriate densities.

R-10 **Residential neighborhoods within the urban area should be developed in an urban land use pattern. These neighborhoods should be planned for the full range of urban services.**

A. **Areas within the urban area that are not environmentally sensitive, have adequate public facilities and urban services, and are adjacent to a neighborhood collector or arterial street should be designated at densities of six to eight units per acre.**

B. **Areas within the urban area that are already platted and developed should be planned for the full range of urban services, and designated at densities of four to six units per acre.**

C. **Areas within the urban area that are environmentally sensitive, or where there are long term barriers to the provision of adequate urban services and facilities, should be designated at densities of one to four units per acre.**

R-11 **New development in residential neighborhoods shall disclose impacts to public facilities and services such as the transportation network, schools, fire and police protection through the State Environmental Policy Act (SEPA) process. The applicant must propose mitigation to offset identified impacts to these facilities and services prior to development permit approval.**

Future Urban Areas

Within the portion of Northshore designated by the Comprehensive Plan as Transitional, this plan must determine which areas will be appropriate for future urban development. Both the State Growth Management Act and the 1985 King County Comprehensive Plan give direction for this decision. (See Chapter 1, Urban Growth Areas for a complete discussion). Based on criteria, from the Comprehensive Plan described on page 33, the portions of the Transitional area that meet the criteria for Rural areas are delineated as Rural in policies R-3 and R-6. Areas that are not designated Rural or Resource are then considered to be Urban. Policy E-1 establishes criteria for areas within this Urban area that are appropriate for urban development within the next 10-20 years, based on a set of criteria. These areas are designated as Future Urban areas.

Approximately 300 acres in the Leota neighborhood has a varied lot pattern of larger lots, 2 to 10 acres in size. This area is within the City of Woodinville. Based on the criteria described in policy E-1, this area is delineated as a portion of the Urban Growth Area. The full range of urban services is not yet available to allow this neighborhood to develop at urban residential densities.

R-12 **The portion of Leota delineated on the Land Use Map as Future Urban will be within the City of Woodinville once the incorporation process is complete. Adequate urban infrastructure and services do not currently exist in this area. To prevent premature development at low urban densities that would limit the City's options for the meeting the requirements of the State Growth Management Act, the area is designated as a Future Urban Area. Until incorporation is complete, lands within this area should develop in a manner that will preserve the City's planning options.**

Urban High Densities

The Comprehensive Plan states that the most appropriate locations for higher density residential development, such as multifamily units, is in activity centers. Urban Activity Centers, where the greatest range of urban services can be provided, are appropriate for the highest density residential development (up to 48 units per acre). Community Centers are appropriate for mid to high range residential development (up to 30 units per acre). Neighborhood Centers are appropriate for the lower range residential development (up to 18 units per acre). These density ranges are guidelines. This plan determines the actual densities appropriate in the Urban Community and Neighborhood Centers of Northshore. These centers are defined in Chapter 3, Commercial and Industrial Development. Like single family development, it is necessary to have a full range of urban services available to serve new high density development.

R-13 **Urban high density land uses (greater than eight homes per acre) shall be located in the urban activity centers of Kenmore, Woodinville, Bothell, Redmond and Kirkland, as well as community and neighborhood centers identified in this plan. High density land uses maybe allowed outside the urban activity centers where it has been legislatively determined that it is consistent with existing neighborhoods and could be served by a full range of urban services.**

R-14 **Urban high densities can only be achieved when adequate services and facilities are available to serve the proposed development, as required in the policies of this plan.**

Design And Community

Northshore is a mature urban area, with an established character unique to each of its neighborhoods. Due to rapid growth in the early 1980s, most new development in Northshore is now infill development. The 1981 Revised Northshore Plan proposed numerous guidelines to direct development in a manner compatible with surrounding land uses. Development since the adoption of the 1981 plan has in many cases failed to achieve these goals of the 1981 plan. Many multifamily developments feature large parking lots which face pedestrian thoroughfares. Traffic from the developments has not been coordinated with pedestrian walkways, resulting in conflicts between pedestrians and cars from cars entering and leaving the site. The bulk and scale of these developments did not provide for a transition to adjacent residential uses of a lower intensity. Multifamily development has been one of the biggest planning issues for the Northshore CAC. The CAC and citizens repeatedly expressed disappointment in King County's ability to implement the guidelines of the 1981 Northshore Plan. Citizens and the CAC agreed that new multifamily development would be more acceptable to the community if it were designed in a manner that respected pedestrian circulation patterns and responded to the scale and intensity of existing development. The CAC has recommended policies which direct new development to consider size, scale, bulk, materials, style, site topography, sensitive features and existing vegetation. The following policies are necessary to ensure that new multifamily development reflects the established environmental and social character of Northshore neighborhoods.

R-15 **Northshore is an urban planning area with an established development pattern. Infill development has an impact on surrounding land uses, neighborhood character and pedestrian circulation. New development at urban high densities must integrate with the surrounding neighborhood. The following factors should be considered during the development review process in addition to other impact requirements. King County should exercise authority to implement the following design guidelines.**

A. **The architectural style, scale and building materials of new development should be compatible with those of the surrounding neighborhood. Building facades and rooflines should be modulated to approximate the building variation within the surrounding neighborhood.**

B. **New development should reflect the characteristics of the site. All new development must protect sensitive areas as required by King County Code. In addition, site design and layout should reflect the natural topography and vegetation, maximize solar access and energy conservation, and promote the circulation goals of this plan.**

Besides being part of an existing neighborhood, new development creates its own sense of community. Because apartments and townhouses usually don't have yards, children and adults need areas to recreate. The 1981 Northshore Plan recommended that 6.5% of the land area of each multifamily development should be reserved for recreation. This guideline was not carried forward into zoning, making it difficult to implement. Consequently, many multifamily developments in Northshore have developed without recreational features for adults or children on-site. A public safety hazard has resulted from children playing in parking lots or in the street. In addition, the 1987 Countywide Parks Needs Assessment has rated Northshore relative to other planning areas as having a less than proportionate share of sports, fields and last in the share of play areas and tennis courts. The Northshore CAC has strongly recommended that King County mitigate the impacts of these recreational needs in urban residential development. The CAC recommends that new residents should be provided with opportunities to recreate safely within their neighborhoods. Policy R-16 directs new development over fifteen units to incorporate a sense of community into the site design for the project. Fifteen units will have approximately fifty new residents.

R-16 **In order to provide for a sense of community and the recreational needs of new residents, new development of fifteen units or more shall include the following recreational features.**

A. **Passive open space that can function as a community common area. The incorporation of natural features existing on the site and orientation of new units to community common areas is encouraged.**

B. **Children's play area.**

Vegetation

Vegetation more than any other landscape feature shapes the character of Northshore neighborhoods. A plaque in Northshore's Denny Park identifies the largest Douglas Fir in King County. The neighborhoods of Juanita, Inglemoor, Finn Hill, Norway Hill, Hollywood Hill, Leota and Wellington are characterized by large stands of mature native evergreens. The 1981 Revised Northshore Plan recognized the importance of vegetation to ecological systems and neighborhood character of neighborhoods such as Finn Hill, Norway Hill and Hollywood Hill. Nonetheless, subdivision activity through the 1980s indicates that Northshore has experienced a loss of approximately 3,700 acres of mature vegetation since the adoption of the 1981 Northshore plan. Northshore CAC and citizens are concerned that this diminishing resource will be lost through the development process. The CAC has recommended that King County aggressively implement policies that will regulate the loss of mature vegetation in Northshore.

Additional care and site work is necessary to save trees during the construction process. However, newly planted vegetation cannot equal the screening, shade, form and character of the existing mature vegetation of Northshore. Of particular value are trees that are defined as "significant." These trees are usually over 30 years in age, measuring 8 to 12 "at breast height". Newly planted trees are typically 4-8 years of age, resulting in a lag period of 15-20 years before new plantings can equal the ecological characteristics of mature trees. King County does not currently have a Countywide clearing ordinance to regulate land clearing. Because significant vegetation in Northshore is a diminishing resource, contributes to the environmental quality of the area and is a distinct part of community character, this plan proposes the following policies to regulate the removal of significant vegetation during the development process. Special zoning conditions are necessary to ensure that the 3,700 acre loss of vegetation over the last decade is not repeated, and the remaining resources are carefully managed during the development review process.

In addition to retaining existing trees during the development process, site landscaping can assist in mitigating the impacts of trees and vegetation that are lost through construction, and the impacts of increased impervious surfaces. As noted in the King County Annual Growth Report, Northshore experienced the highest platting and residential development permit activity in all of King County during the early 1980s. Estimates show that impervious surfaces now cover an additional 1,800 acres since adoption of the 1981 Northshore Plan. Development in the planning area is now occurring on an infill basis. Residents and the CAC have stressed the need for improved vegetation as the planning area builds out. The CAC has recommended that the County examine landscaping standards for new development which softens the effect of impervious surfaces, offsets the loss of vegetation and habitat and respects the existing resources of the planning area.

Northshore has been heavily impacted by increased traffic, resulting in congestion and diminished air quality. Street trees can help offset the impacts of vehicle traffic and emissions by providing a visual buffer, oxygen exchange from the foliage, and physically separating traffic from pedestrian areas. The following policy directs protection of existing significant vegetation, development of landscape standards necessary for development in Northshore and the addition of street trees to all new development in Northshore. The

use of native plant material is encouraged to reduce water consumption and the need for expensive irrigation systems.

R-17 **Significant vegetation is a diminishing resource in Northshore and one that contributes to environmental quality, neighborhood character, and the quality of life. All new residential development shall retain significant existing vegetation as defined in the Northshore area zoning, and augment this vegetation with new landscaping. Native vegetation shall be utilized wherever possible. In addition, all new development shall provide street trees to augment the natural character of Northshore.**

Pedestrian Circulation

Neighborhoods developed on a grid system naturally had convenient pedestrian circulation, as blocks were interrupted regularly by cross-streets. From 1950's onward, subdivisions have been built with cul-de-sacs, curvilinear streets, and much larger blocks than in older grid patterns. Developments built on the newer pattern are not convenient to the pedestrian, because large blocks and cul-de-sacs often require a circuitous and lengthy journey to get from one point to another. As a result, people tend to drive rather than walk within residential areas. In the Northshore, most of the housing developments were built on the curvilinear, large block pattern, resulting in poor pedestrian circulation throughout the developed parts of the planning area. Mid-block pedestrian walkways, smaller block sizes, and fewer cul-de-sacs would result in better pedestrian circulation for the Northshore.

Another hindrance to the pedestrian is the lack of sidewalks and separated walkways in older neighborhoods and along arterial and collector roadways in Northshore. Many developments were built in the 1970's and earlier without providing sidewalks on main roadway frontages. As a result, these neighborhoods do not provide safe pedestrian access to nearby community facilities such as schools, businesses, park and rides, and bus routes. For example, 108th Avenue north of NE 132nd Street in front of the Helen Keller School is constructed with some shoulders, but an incomplete walkway system. 84th Avenue NE in the vicinity of NE 141st Street also has incomplete sidewalks by Henry David Thoreau School and the Finn Hill Park. In the Swamp Creek area north of Kenmore, pedestrian walkways are missing along portions of 73rd and 68th Avenues NE. Increased vehicular traffic has resulted in hazardous situations for pedestrians, particularly in these instances where sidewalks are incomplete. This plan pays particular attention to connecting new and existing development with other nearby neighborhoods, schools, bus stops, trails, and other features of the neighborhood.

R-18 **Along the perimeter of residential uses, landscaping is encouraged rather than fences, walls or other structures that impede pedestrian travel. If fences or walls are planned, breaks for pedestrians shall be included.**

R-19 **Neighborhood circulation is a critical component in the Northshore Community Plan. New development must provide pedestrian connections to off-site facilities such as existing trails, walkways, community facilities and services, transit, schools and surrounding residential neighborhoods. Major pedestrian and equestrian links are identified through P-suffix conditions. Pedestrian links should be provided internally in all new residential development. Bicycle and equestrian links should be provided where possible.**

R-20 **New residential development must provide access to transit and school bus stops. Urban high density development must provide a transit management plan which identifies transit options.**

Mobile Home Parks

Mobile home parks represent a viable housing option in King County. Development pressure throughout the region has forced numerous parks to close, displacing residents, and removing a housing alternative from the housing market. There are eight mobile home parks in Northshore, totaling approximately 400 spaces. Seven of these are in Kenmore, and one is in downtown Woodinville. All are pressured by surrounding land uses and intensification of the commercial areas of Kenmore and Woodinville. This plan protects mobile homes parks as an important part of the housing stock of Northshore. The following policy addresses these mobile home parks.

R-21 **The Northshore Community Plan recognizes the importance of existing mobile home parks in providing affordable housing options. Mobile home parks outside of the Woodinville and Kenmore commercial core areas are designated for mobile home park uses, and shall be zoned appropriately.**

King County shall continue to examine the feasibility of funding and developing a replacement mobile home park in north King County for displaced mobile homes on County-owned or privately owned sites.

King County should develop interlocal agreements with the cities of Bothell, Redmond and Kirkland for joint development of replacement parks to accommodate mobile home owners if they are displaced from mobile home parks within cities.

Chapter 3: Commercial and Industrial Uses

Economic prosperity is important for maintaining King County's high quality of life. Economic development provides necessary products and services, offers greater employment opportunities and generates a stable tax base. King County's role in economic development is to: 1) establish criteria for the location of commercial/industrial growth; 2) to ensure adequate public facilities and services are available to support that growth; and 3) to identify design standards for commercial, industrial and office development.

The 1985 King County Comprehensive Plan designates the cities of Bothell, Kirkland, Woodinville and Redmond, as well as the unincorporated area of Kenmore as Urban Activity Centers. These centers consist of concentrations of commercial and industrial uses of regional importance and will be the primary location for all new employment and residential growth in the Northshore area. The Comprehensive Plan encourages this growth to develop in a compact pattern to protect environmental and aesthetic quality, provide public facilities and services efficiently, and conserve energy through a balance of housing, jobs, and shopping and promote community diversity through an efficient use of land.

This community plan provides policies which direct future commercial and industrial development within the Northshore area. The plan designates community and neighborhood centers within Urban areas, specifies the boundaries of the Urban Activity Centers listed above and applies appropriate areawide zoning consistent with these policies. Chapter 10, Kenmore Activity Center and Chapter 11, Woodinville Activity Center provide detailed policies on these centers.

Although most commercial/industrial growth will locate within the Urban Activity Centers, some smaller concentrations of retail and commercial activities will locate in Community and Neighborhood Centers to serve nearby residents. Community centers are business districts which provide goods and services to several neighborhoods. Neighborhood Centers are small, conveniently located business areas that provide residents with goods and services for everyday needs within walking distance or a short drive of their homes.

CI-1 **Bothell, Kirkland, Redmond, Kenmore, and Woodinville are designated as the activity centers for the planning area. Industrial and major commercial activity should be directed to these activity centers.**

This plan links the amount of a land designated for commercial and industrial uses with planned population growth and necessary public services to serve new development. Some of the centers in Northshore are currently larger in acreage then recommended by the Comprehensive Plan. Compact growth in these centers is planned to reduce sprawl and encourage efficient use of land. This plan provides enough land for commercial uses anticipated over the next 6-10 years.

CI-2 **The expansion of retail/commercial space within unincorporated activity centers, community centers and neighborhood centers should be focused on redevelopment and mixed use development to encourage more cost-effective provision of public facilities and services, and efficient transit and pedestrian travel and to discourage inefficient use of valuable urban lands. Land devoted to commercial and industrial uses within these centers should not be expanded beyond the areas designated in this plan.**

Nearby activity centers were considered in determining the amount of additional commercial and industrial land needed in Northshore. Comparison goods are available at Alderwood Mall, Bellevue Square, Everett Mall, and Northgate. The cities of Kirkland, Bothell, Redmond, and Lake Forest Park all provide major shopping opportunities. Both Bothell and Redmond have recently proposed regional shopping centers. Towne Center in Redmond would consist of a 124 acre mixed use development including offices, additional retail detached from the shopping center, multifamily housing and public open space. The Truly property in Bothell would consist of 104 acres of mixed use including a major shopping center, motor inn, professional offices and multifamily, if developed.

With regard to office/business park development, the cities also provide substantial employment opportunities. The City of Bothell boasts several new business park developments along the I-405 corridors including the Koll Business Center, and Quadrant Business Park. North Creek Corporate Center is north of Bothell in Snohomish County. The City of Redmond has a larger industrial district within the Sammamish Valley and hosts several campus-like facilities such as Microsoft headquarters. Totem Lake in Kirkland offers regional office and retail services.

In addition to issues of size and location of commercial/industrial centers, their function (such as circulation) and appearance are also important. In particular, the Northshore area contains a considerable amount of strip commercial development. This occurs along major roadways where each business or development is oriented towards the road and is independent of adjacent businesses, instead of being focused at one intersection with other developments. These strip commercial districts often suffer from traffic congestion and business competition from shopping malls. They do not provide safe walking areas, forcing shoppers to get in their cars and drive to each different store.

This plan follows the Comprehensive Plan in encouraging compact design, improved pedestrian circulation, quality development, and better compatibility among land uses within and adjacent to commercial centers.

CI-3 **To ensure that activity centers are compact and conducive to pedestrian activity, further strip commercial development shall be prohibited. Commercial properties on the strip fringes of activity centers should be redesignated to multi-family or high density single family residential uses.**

Commercial Design

The advent of the automobile has created many commercial areas that are designed for cars and not people. This includes large parking lots with buildings set back from the road and large gaps between stores. Many stores actually have a blank wall to the street side with the front of the store facing the parking lot instead.

Simple site design techniques can make commercial areas more convenient for pedestrians and shoppers. Many of these techniques are patterned after old "downtowns" featuring a row of shops all facing the street.

CI-4 **Design and layout of new development in Northshore activity centers is a critical component of community character, pedestrian activity and urban vitality. Urban design components are integrated into new commercial and industrial development to achieve the following goals:**

A. **Promote the concept of a "center" through the use of common design themes such as street and landscape materials.**

B. **Accentuate the character of the area through the use of style and materials.**

C. **Emphasize pedestrian components and diminish adverse impacts of automobile access and circulation.**

D. **Encourage pedestrian shopping throughout the retail area.**

E. **Facilitate transit use as an integrated element in the activity center core.**

F. **Integrate urban open spaces for community use.**

The 1993 Revised King County Zoning Code provides a special district overlay for pedestrian oriented development to be used in urban centers. This district allows the development of common design standards to unite the center through the road, walkway, landscaping and streetscape pattern. It also creates standards designed more for people than cars, such as wider sidewalks and shops that face the street. Chapters 10 and 11, Kenmore and Woodinville Urban Activity Centers, explain the district in more detail.

Commercial areas have more paved surfaces than urban areas. This means more heat in the summer sun and more runoff from winter rains. Landscaping plays an important function in commercial areas to provide shade, areas where moisture can percolate into the ground, to soften the effects of buildings and to add variety and contrast to the urban environment.

CI-5 **To improve the appearance of the community, to enhance the natural environment and to encourage pedestrian activity, landscaping shall be required in all commercial/industrial developments to screen these uses when they abut or are visible from residential uses. Street trees shall also be required in all commercial/industrial developments.**

In addition, landscaping can screen commercial areas from nearby residents to increase privacy and decrease noise from the commercial activities.

Transportation

Commercial and industrial areas employ many residents of Northshore and surrounding areas. Chapter 4, Transportation, describes the transportation network in Northshore. Many roadways in Northshore will continue to be congested, even with planned improvements. To offset the impacts of congestion, employment centers need to work with King County and METRO to provide transit and carpool options. Transportation Demand Management Programs (TMP's) are ways of facilitating transit use and carpooling to and from work. Employers can provide transit options to employees ranging from subsidized bus passes to allowing a flexible work schedule to avoid rush hour traffic. Transportation Management Programs are a critical component to reducing roadway congestion in Northshore. The following policy outlines elements of TMP's that are implemented through special zoning conditions. These actions are necessary due to the severe roadway constraints in Northshore.

CI-6 **Medium and large scale commercial and industrial developments should implement a Transportation Demand Management Program. This Transportation Demand Management Program should include the following elements. Additional requirements may be identified through the development review process.**

A. **Distribute ridesharing and METRO transit information to tenants;**

B. **Provide flex-time information to tenants;**

C. **Provide secure, covered bicycle parking;**

D. **Provide preferential carpool/van pool parking locations; and**

E. **Provision of one free one-month METRO transit pass per employee or housing unit.**

Commercial and industrial areas must comply with the policies in Chapter 4, Transportation. Specifically, new commercial and industrial development must contribute to both building new roads and providing transit options to offset the impacts of more traffic.

Public Facilities and Services

All new development requires roads, utilities and infrastructure. The Comprehensive Plan directs new growth to assist in paying for these services. Commercial and industrial growth in Northshore must participate in the provision of these services so that current residents do not bear all the costs of growth.

CI-7 **Development of manufacturing, commercial, and office uses within the Northshore planning area should be permitted consistent with countywide regulations regarding the timely provision of adequate public facilities and services in order to reduce impacts on nearby residential areas.**

Industrial Areas

Northshore has two industrial areas which are located outside, but in close proximity to Urban Activity Centers: 1) Totem Lake area bounded by NE 124th St., Slater Ave. NE, NE 126th Place and Willows Rd.: and 2) Sammamish Valley area bounded by NE 145th St., Sammamish River, NE 173rd Place, and the railroad tracks to the west of SR 202. In general, these areas consist of light manufacturing uses such as marine supplies, printing, and light fabrication. Both of these areas are physically constrained by natural features such as the Sammamish River and steep slopes and potentially conflicting land uses like agriculture and residences.

The goal of the 1981 Northshore Plan was to encourage functional development of these industrial areas to serve a wide variety of industries consistent with good environmental planning. No further industrial encroachment was allowed on the Sammamish Valley floor, as other locations were determined to be more appropriate.

The Comprehensive Plan encourages industrial development to be grouped with similar or compatible uses in Urban Activity Centers to limit land use conflicts; improve traffic flow, safety and transit use; and the efficient use of public facilities and services. Separate industrial sites are permitted provided there are adequate facilities and services, mitigation for adverse impacts on adjacent land uses and the natural environment, and potential for these sites to create a core for a future Urban Activity Center.

The 1989 Economic Development Plan is a functional plan that implements the goals and policies of the Comprehensive Plan. This plan guides the County's economic activities and encourages economic growth

and diversity. It identified a shortage of vacant "high quality" industrial or business park land in northeast King County and recommended the following (Policy CD 9):

> "Community plans for the Northshore, East Sammamish and Bear Creek planning areas should provide for additional business/industrial park development in conformance with the following criteria:
>
> a. New sites designated for industrial use should include parcels of 20 acres or more and should be within new or existing activity centers. Where possible, an aggregation of at least 200 acres of land for business park uses is preferred to allow concentration of complementary businesses;
>
> b. Site plan and subdivision conditions should encourage retention of large parcels to allow business park development and should discourage speculative subdivision into small parcels;
>
> c. Sites designated for industrial and business park development should have primarily stable, well-drained soils on level or gently sloping topography (e.g., less than 15% slopes);
>
> d. Sewer, water, and communications services should be available or planned for the industrial or business park area;
>
> e. New site designated for industrial use should have convenient access to existing or planned freeways or major arterials; necessary improvement should be assured before development is approved;
>
> f. Capital improvement plans developed in conjunction with community plans on the Eastside should place a high priority on transportation improvements for existing, underutilized industrial areas;
>
> g. Plans and development conditions should encourage retention of site amenities such as water features and natural vegetation and should encourage high quality development."

Although Northshore is part of an industrial corridor stretching from Snohomish County, there is little opportunity to designate new additional business/industrial park land uses or establish new activity centers due to the lack of available, unconstrained urban land. In contrast, other community planning areas and cities have more potential land available to compensate for the deficiency in Northshore. The 1989 Bear Creek Community Plan recently designated a new activity center. The East Sammamish Community Plan Update also evaluates the ability of the area to accommodate future economic growth on the eastside.

CI-8 The industrial areas in Kenmore and Woodinville, on the west side of the Sammamish Valley, and adjacent to the City of Kirkland should not be enlarged beyond the size designated by this plan.

This plan focuses on more efficient planning of the lands currently designated as for industrial uses as a means of providing for increased economic growth of underutilized industrial areas. Redevelopment and intensification of industrial uses will result in more employees per acre of industrial land. 50 employees per acre is a target necessary to support transit use. Site intensification can therefore support transit options to alleviate congestion, consistent with policy CI-6.

Industrial Site Design

Industrial development requires good site planning if these areas are to be harmonious with the surrounding neighborhoods. The buildings used in industry can be relatively tall, large, and featureless, and the activities involved can be of a very intense nature, creating a number of negative impacts.

Several things can be done in industrial developments which soften their impact on the surrounding community and environment. For example, landscaping can buffer industry from roads or other adjacent uses. Landscaping can also be used to improve the environmental quality of industrial areas, and offset the impacts of impervious surfaces, vehicle emissions and industrial activities. Sensitive streams adjacent to industry which have experienced degradation can be rehabilitated to a more natural state. Provisions for easy pedestrian movement through industrial areas can be made. Uses can be limited to be more compatible with surrounding land uses.

Within Northshore, there are specific design considerations which will offset the negative impacts of industrial areas on their surroundings. Industrial development in the Sammamish Valley should be carefully designed to be compatible with the adjacent agricultural district. This includes considering the character of the agricultural area and the recreational uses within the valley. Maximum building heights for industrial buildings between the Tolt River Pipeline and NE 175th Street, and between SR-202 and the Sammamish River reduce the aesthetic impact to adjacent agricultural lands and to allow the agricultural lands to be seen from SR-202 in certain locations. The King County Parks Division has a Draft Regional Trail Plan which targets for the completion of trail acquisition along the Sammamish River. This trail completion is an important link in the Northshore trail system. The Northshore CAC strongly supports the completion of the Sammamish River Trail on the west side of the Sammamish River. The development review process for industrial properties adjacent to the Sammamish River on the river's south and west sides should strongly consider the King County Parks Department's Draft Regional Trail Plan for the completion of the Sammamish River Regional Park.

Several of the policies listed below can be implemented through existing County law. However, many of the policies, particularly those with specific design criteria, must be implemented through special P-suffix development conditions. The conditions are listed in the Northshore Area Zoning.

CI-9 **King County and METRO should coordinate bus pullouts on arterial roads adjacent to industrial property.**

CI-10 **Pedestrian movement through industrial properties and along adjacent roads should be encouraged. Existing or planned pedestrian corridors should not be eliminated by industrial development.**

CI-11 **When reviewing development permits in the industrial areas to the south and east of the Sammamish River, the Building and Land Development Division, in cooperation with the Parks Division, should consider measures for the completion of the Sammamish River Regional Park that are identified in the Draft Regional Trails Plan.**

CI-12 **Fish and wildlife habitat is a diminishing resource in Northshore. Stream bank rehabilitation, and protection of fish and wildlife habitat are important components of the King County Multi-objective River Corridor Management Plan currently under development. The findings of that Plan relative to stream bank rehabilitation and habitat improvements should be considered during the review of any new industrial development permit applications along the Sammamish River.**

CI-13 **Industrial lands along the Sammamish River should be compatible in uses and scale with adjacent agricultural and recreational areas. Building design for industrial properties east of SR 202 and across the Sammamish River from agricultural lands should be regulated through special zoning conditions to minimize land use impacts on the agricultural lands, and the Sammamish River Trail as well as to maintain views of the river and the agricultural lands from SR 202.**

CI-14 **Industrial properties adjacent to the Little Bear Creek should rehabilitate the stream and stream channel to a more natural state and take measures to fully mitigate any existing or potential water quality problems originating on-site through the development review process.**

CI-15 **Where appropriate, industrial properties north of the Woodinville-Duvall Road, east of the 140th Avenue NE and the Woodinville-Snohomish Road, and west of the 148th Avenue NE grid line should have a tree line around their perimeters, in order to contribute to environmental quality, and soften the land use impact of this substantial industrial area on the surrounding community.**

CI-16 **In order to visually screen SR 522 from the industrial area, industrial properties adjacent to SR 522 to the east should provide a landscape screen along the highway. This screen is necessary in locations where native trees do not already provide adequate screening.**

CI-17 **Industrial areas in the Woodinville activity center should incorporate special design criteria, so that the industry will better harmonize with other land uses in Woodinville. These criteria may include additional park, landscaping, or building standard requirements.**

Community Centers And Neighborhood Centers

The Comprehensive Plan states that the primary focus of new commercial growth is directed to Urban Activity Centers. However, smaller, more localized shopping needs are provided in smaller centers called Community Centers and Neighborhood Centers.

Community centers are the larger of the two, with a commercial core of 10-20 acres and a full mix of uses including retail stores, small scale professional offices multifamily housing and mixed use developments. They should be located approximately three miles from any Urban Activity Center (such as Kenmore, Bothell, Kirkland, Woodinville or Redmond), and served by the intersection of at least two principal arterials.

The Kingsgate and North Juanita commercial areas are the appropriate size, have a range of retail office and multifamily areas and are located to fit the definition of a Community Center. However, the commercial areas are already at the upper end of the size guidelines recommended in the Comprehensive Plan. Based on the Comprehensive Plan guidelines and the proximity of other retail areas, the commercial area should not be planned of expansion.

CI-18 **The Kingsgate Shopping Center is designated as a community center. Its size is limited to the area designated by this plan.**

CI-19 **The following location is redesignated to community business center:**

A. **Juanita-Woodinville Way/100 Ave. NE.**

This center should not be expanded beyond the size designated in this plan. Zoning should be applied to provide for commercial uses consistent with the shopping and residential needs anticipated in Community Centers.

Neighborhood Centers are the smallest type of commercial area described in the Comprehensive Plan. They are defined as having a commercial core of three to six acres, and offering local retail goods, small-scale professional offices and multifamily housing. They should be located one to three miles apart, and be served by the junction of two minor arterials. The Comprehensive Plan also describes design guide-

lines for Neighborhood Centers. Where possible, retail uses should be developed at one corner of a road intersection to allow better traffic flow and pedestrian travel. More retail uses such as offices and multifamily development should be located around the same intersection, but they may be at different corners.

There are nine small commercial centers in Northshore. They include a variety of uses such as convenience stores, restaurants, rides stores, gas stations, offices and multifamily units. Since much of the Northshore area developed before the 1985 Comprehensive Plan, many of those centers do not fit well with the Comprehensive Plan criteria relating to size, location, design and improvement standards. Some of the centers have an excess amount of land designated for commercial uses and little or no land designated for multifamily housing. Others are much smaller than recommended in the Comprehensive Plan, sometimes with only one store. Several of these commercial areas are in close proximity (less than one mile) from other commercial areas.

For these reasons, not all of the eleven commercial centers are designated as neighborhood centers. Vacant land at these centers will be planned for residential uses outlined in Chapter 2.

CI-20 **The currently built multifamily and commercial properties at the following locations are recognized at their existing developed size but are not designated as neighborhood centers as they do not meet the criteria outlined in KCCP policies C-401 and C-402:**

A. NE 193rd Street/56th Avenue NE

B. 168th Avenue NE/Woodinville-Duvall Road

The remaining seven centers are designated as neighborhood centers. Several of these had significantly more acreage designated for commercial uses than recommended by the Comprehensive Plan. The Northshore Area Zoning redesignates appropriate parcels to single and multifamily housing in these centers to bring these centers into conformance with the Comprehensive Plan.

CI-21 **The following locations are designated neighborhood centers:**

A. 68 Ave. NE/NE 170 St.

B. Juanita Drive/NE 122 Place

C. 116 Ave. NE/NE 160 St.

D. NE 145 St./148 Ave. NE (Hollywood Hill)

E. Juanita Drive/NE 153rd Place

F. Juanita-Woodinville Way/NE 145th Street

G. Juanita Drive/NE 141 St.

These centers should not be expanded beyond the size designated in this plan. New development in these centers should be architecturally compatible with the surrounding neighborhood. Special conditions should be developed to ensure compatibility with existing uses in the center and the surrounding neighborhood. Zoning should be applied which provides for commercial uses consistent with the local shopping and residential needs anticipated in Neighborhood Centers.

Chapter 4 Transportation

Introduction

Population in the Northshore area doubled from the 1970 to the 1980 census, and grew by 50% again in the 1980's. In addition to population increases, household travel patterns have increased from dual-career families. Most travel in Northshore, as in western Washington, occurs by car. The rise in the number of trips and distance of those trips, combined with the majority of drivers traveling alone has resulted in increased air pollution at peak travel periods, the loss of productive time and loss of energy resources from people spending more hours commuting.

Local and regional jurisdictions throughout the region have been coordinating on transportation issues, particularly in the last decade. Nonetheless, transportation facilities have lagged behind demand. The problem is not a local issue confined to Northshore. Northshore serves as the crossroads for two major state transportation corridors: State Route 522 which runs east/west from Kenmore through Woodinville towards Snohomish County, and Interstate 405, the major north/south interstate serving the eastside metropolitan area. An average of 60% of all traffic on these two roadways originates outside the planning area. Regional transportation issues relating to these two major corridors affect the quality of life in Northshore. This chapter addresses transportation issues within the planning area as well as Northshore's critical role in regional transportation decisions.

This chapter has several important components:

I. Policy Section. This chapter outlines policies related to transportation that will guide growth and development in Northshore. The policies are divided into the following subsections:

A. General Policies
B. Roadway Management
C. Transit/Ridesharing/Transportation Demand Management
D. Nonmotorized Transportation

II. Roadway Functional Classification. The 1987 King County Roads Standards classifies roads into groups according to various characteristics and functions. These functional classifications were updated in the King County Transportation Plan (1989), and applied to all public roads in the county.

III. Planned Transportation Facility Improvements. King County Department of Public Works Transportation Planning Section developed a travel forecast model which tested the land uses of this plan to determine

what impacts this plan will have on the existing transportation network. These travel forecasts were analyzed along with safety and operational considerations, nonmotorized needs, transit and high occupant vehicle facilities to develop a list of capital improvements. The Planned Transportation Facility Improvements identify roadway improvements necessary to serve the land uses anticipated by the plan.

IV. Transit and Ridesharing Facility Improvements. It will not be possible to build a roadway network large enough to serve single occupant vehicles only. Use of transit and ridesharing maximizes the capacity of roadways by accommodating more people in less vehicles. The Transit and Ridesharing Facility Improvements identify transit and carpool/vanpool improvements necessary to accommodate the anticipated travel demand on major travel routes.

V. Nonmotorized Transportation Facility Improvements. King County's RoadShare Program was established to effectively address the needs of nonmotorized transportation: bicycle, pedestrian and equestrian activity. A wide range of roadshare projects have been identified and are illustrated in this section. Attention to these needs is important in achieving a balanced transportation system.

Transportation is one of the most important land use issues for Northshore, and the most costly public investment that the county provides. Conflicts created by major transportation routes, land uses and a desired ease of travel can dramatically affect the quality of life in that area. Polices, road classifications and improvements identified in this chapter underscore King County's commitment to addressing urban transportation issues.

I. Policies

A. General Policies

Several important policy documents and laws affect transportation planning in King County:

The 1990 State Growth Management Act contains several important sections related to transportation planning. The Act requires County comprehensive plans to contain a transportation element that implements, and is consistent with the land use element. The transportation element must include:

- land use assumptions used in estimating travel;
- facilities and service needs including inventory and level of service standards;
- specific actions required to bring into compliance facilities below adopted standards;
- travel forecasts for at least ten years based on the land use plan;
- identification of system expansion needs, including an analysis of funding capability and a multiyear financing plan;
- intergovernmental coordination efforts including an assessment on impacts of the transportation plan on neighboring jurisdictions;
- demand management strategies.

The Act also requires a six year capital facilities plan, and provides options for local governments to impose impact fees tied to new developments.

The 1985 King County Comprehensive Plan provides overall guidance in the development of the Countywide transportation system. Some elements required by the 1990 State Growth Management Act are provided for in the County Comprehensive Plan. Other more specific elements are included in this Northshore Community Plan Update. The Comprehensive Plan emphasizes the provision of a balanced transportation system that provides for travel choices and mobility. It strongly encourages the development of transit options in areas that have an adequate population to support transit. Other important elements from the Comprehensive Plan include:

- General descriptions and design standards for roadway classifications;
- Guidance for the location of major transit facilities and appropriate levels of service in Urban and Rural areas;
- Policies that encourage pedestrian and bicycle travel;
- Guidance for the location of airports and aviation facilities.

The King County Transportation Plan (1989) is a functional plan implementing the Comprehensive Plan. Its purpose is to provide specific direction for the development and operation of necessary transportation facilities. The County Transportation Plan also defines arterial roadway classifications and applies these classifications to public roads.

The Northshore Community Plan takes direction from these laws and plans in striving for a balanced transportation system to address existing problems, and to tie future development to the provision of adequate transportation facilities.

T-1 **Transportation planning is a significant land use issue in the Northshore planning area. The Northshore Community Plan Update should plan for a balanced transportation system which addresses:**

A. regional and local transportation issues affecting Northshore,

B. developer participation in transportation improvements,

C. transportation corridors in which the costs, monetary and other, of increasing general capacity exceed the benefits, and

D. opportunities to reduce reliance upon the single occupancy vehicle while enhancing non-motorized transit and high occupancy vehicle travel.

Other agencies and surrounding jurisdictions are also addressing transportation issues. The Eastside Transportation Program is a planning effort involving King County, Snohomish County, the cities of Bothell, Kirkland, Redmond, Bellevue, Mercer Island, Renton, Woodinville and Issaquah, Washington State Department of Transportation (WSDOT), METRO, and the Puget Sound Regional Council. The planning effort was established to review regional traffic problems east of Lake Washington. METRO is developing a long-range transit plan to be completed in late 1993. The study assesses METRO's transit and rideshare service and facility needs through 2000. The WSDOT has formulated a Route Development Plan for SR-522 from I-5 to SR-9. They are also constructing high occupancy vehicle lanes in Northshore to complete the system on I-405. Snohomish County is developing a Snohomish County Tomorrow Plan addressing interagency transportation needs much like the Eastside Transportation Program effort. The City of Bothell is updating their transportation plan. Kirkland is developing a city transportation plan and has finished work on the Juanita Community Plan.

Analysis of regional travel demand and pattern of travel in Northshore and the rest of King and Snohomish counties shows a substantial amount of through-traffic in Northshore. Through-traffic is defined as vehicle trips with both an origin and a destination outside of the planning area. Roadways with significant through-traffic are I-405 (61%), SR-522 (50%), SR-202 (29%), Woodinville-Duvall Road (51%) and NE 124/NE 128 Street (60%). Percentages represent averages of the amount of traffic with both origin and destinations outside the planning area for the roadways during 1988 pm peak hours.

T-2 **King County, the Cities of Bothell, Kirkland, Lake Forest Park, Redmond, and Woodinville, the Washington State Department of Transportation, METRO, Snohomish County, special purpose districts, citizens and private developers should work together in defining, planning and implementing transportation improvements which accommodate planned land use and densities. Planning of new facilities and management of the transportation system should be coordinated with current and future needs of the adjacent Bear Creek and Shoreline planning areas, as well as adjacent jurisdictions. King County should work closely with these jurisdictions on regional transportation solutions addressing the significant pass-through traffic originating outside the Northshore area. King County should pursue interlocal agreements with Bothell, Kirkland Redmond and Woodinville to establish the appropriate level of service standards for areas within the potential annexation areas of the cities.**

T-3 **Recent federal highway legislation has provisions encouraging electronic toll projects. King County should consider implementing a congestion pricing strategy to include tolls during peak hours on congested roadways such as SR-522. An analysis of the potential for this strategy should include an examination of the available technology, available federal funding and the potential role of congestion pricing in King County's transportation strategy.**

B. Roadway Management

Roadway improvements are important in achieving a balanced transportation system but they alone cannot solve the congestion problem in Northshore. Topographic constraints, environmental considerations, citizen concerns, existing development, and financial resources all play a role in roadway construction. Limited funding sources has increased the importance of identifying funding priorities. In addressing these issues the County must identify ways to manage the roadway system. "Roadway management" as it is referred to here involves aspects of the roadway system such as identifying improvement needs for existing and new roads, priorities, timing of construction, design considerations, funding responsibilities and funding sources.

The activity centers of Northshore (Kenmore, Bothell, Woodinville, Kirkland and Redmond) are where the majority of new urban growth will be directed. The most transportation options can be provided in areas with the highest densities. The following policy establishes the relationship between these centers and transportation systems.

T-4 **The most intensive and highest density land uses in Northshore should be located in designated activity centers, community centers and neighborhood centers, to achieve the following:**

A. **Locating high traffic-generating uses in areas where there are alternative access routes.**

B. **Prevention of high density residential and intensive commercial "strip" development along the entire length of a roadway and focusing instead on the development of centers.**

C. Promotion of pedestrian and bicycle travel between residential areas and nearby places of employment, stores and services, thus reducing the number of auto trips.

D. Preservation, protection and potential enhancement of natural resources such as wooded slopes, waterways or wetlands that are crossed by or located near arterials and freeways, to maintain the scenic nature of these travel routes.

E. Distinct separation of activity centers to maintain a sense of community and a human scale to each center.

T-5 Residential lands within the urban growth area that lack committed roadway projects to solve existing congestion problems, and that are greater than ¼ mile walking distance of 5 peak hour transit runs, or are not located within an Urban Activity Center, are placed within an interim urban reserve. These residential lands should be zoned for urban development, with a growth reserve overlay.

By December 31, 1994, the Executive shall transmit a plan amendment study addressing, but not limited to, the following:

A. Timing of actualizing the underlying zoning designations of those areas receiving the growth reserve overlay;

B. Impacts of actualizing the underlying zoning designations of those areas receiving the growth reserve overlay;

C. Assessment of the need to apply minimum density requirements on the portions of the urban area which have outright zoning;

D. The extent of which development in the outright zoned urban areas has utilized the available density on environmentally unconstrained land and the ability and desire to landowners to develop their property;

E. The adequacy of transit and roadway infrastructure and mobility concurrency standards to absorb and mitigate the actualization of the interim growth reserve areas.

Development Mitigation

King County identifies the impact of new development on roadways by a measurement called Level of Service (LOS). The LOS is a qualitative measurement of how well traffic flows or the degree of congestion at a particular location, and is expressed by a letter from "A" to "F". Level of Service A represents free flowing traffic. Drivers are able to travel at or near posted speed limits with short and infrequent stops at signalized intersections. At LOS C traffic progresses through signalized intersections reasonably well, and, with timed signals on major arterials, stops are infrequent. At LOS D red light stops become more frequent, but most drivers will still make it through the intersection when the light turns green. At LOS E, however, drivers will have to stop at almost every traffic signal and will often wait through more than one green light cycle. At LOS F, drivers will have to wait through more than one green light cycle at each intersection, and delays become intolerable, forcing most motorists to seek alternate routes to avoid these LOS F locations. The map, Level of Service at intersections, shows LOS at selected intersections in Northshore in 1990.

The King County Road Adequacy Standards define a minimum LOS that must be maintained by new development in the County. Consistent with the State Growth Management Act, the County adopted what is called the Mitigation Payment System (MPS), a program that provides a method for funding transportation

improvements necessary to help pay for transportation improvements needed to accommodate new traffic. It is based on the principle that new development should pay a fair share of the roadway improvements necessary to accommodate the traffic increases it causes. Fees are proportional to the costs of the improvements that will accommodate the new trips. A computer traffic model is used to determine which roadway needs are affected by the new development. Fees collected from developers are combined with public funds to finance the needed transportation improvements. Fees can only be paid up to a point, however. If the model shows that the development will lower roadway standards below the minimum adopted standards of the King County Road Adequacy Standards, the project may be modified, phased or denied, or the roadway may be improved to at least the minimum standard.

The County Road Adequacy Standards are in the process of being revised. The policies of this plan follow the direction of the proposed revision to the Road Adequacy Standards. A problem exists when a new project proposes to locate on a road that is already at a LOS below the adopted County standards. State Route 522 through Kenmore is an example of such a roadway. Some roads can be improved to bring the LOS back into compliance with County standards. Other roads cannot be significantly improved to carry more traffic. These roads are considered to be at or near "ultimate design". SR-522 is at ultimate design for general purpose travel as well as being at LOS F in several locations. Roads that are at ultimate design cannot be widened due to unacceptable damage to existing development in the process of acquiring right-of-way, environmental damage, or cost-effectiveness over the long term. For roadways at ultimate design, only decreasing the number of cars on the roadway will help alleviate the detrimental effects of congestion. The best solution in these circumstances are solutions that facilitate transit or ridesharing.

The intersections and roadway segments in Northshore that are determined to be at ultimate design are called out separately in policy T-7. The following policies establish that all new development in Northshore must pay its fair share towards roadway improvements. Transit/ridesharing improvements will be required for all new development over certain thresholds. Transit and ridesharing improvements are critical for roadways that are at ultimate design. These policies spell out clearly the intent of King County to require mitigation or recommend denial of development proposals in the planning area to address the transportation dilemma in Northshore.

T-6 **All new development in Northshore should pay its fair share toward transportation improvements to help mitigate its impacts as identified through King County's Road Adequacy Standards, Mitigation Payment System, the State Environmental Policy Act and development review processes. King County should pursue other innovative funding sources for transportation improvements, while supporting cooperative efforts with other jurisdictions on multi-jurisdictional road improvements.**

T-7 **The SR-522 corridor west of I-405 is recognized as being at or above LOS F. Further general capacity improvements to significantly improve roadway LOS in this corridor do not appear feasible. The Northshore Community Plan recognizes that SR-522 congestion will continue and result in future LOS F conditions which exceed the adopted Road Adequacy Standards. A final decision on SR-522 "ultimate roadway section" will be determined as part of the State's route development plan process. In the event that an "ultimate roadway section" designation (by King County, WSDOT, and cities) is made for the SR-522 Corridor, new development which distributes traffic to SR-522 will be required to participate in the implementation of aggressive transit and transportation management measures including capital improvements.**

The SR-202 corridor from SR-522 to NE 175th Street is anticipated to be at or over capacity with roadway improvements at land use buildout of the Northshore Plan. A route development plan with ultimate roadway section should be completed by WSDOT in conjunction with King County. New development which distributes traffic to this corridor will be required to participate in aggressive transit and transportation demand management measures as described above.

Chapter 1, Urban Growth Areas, describes the concept of urban growth areas. Chapter 2, Residential Development, lists criteria that must be met before the 'future urban growth areas' can be activated. The following policy also applies to the 'future urban growth areas.' This policy will assure that road improvements are planned concurrent with rezoning of these areas for urban uses.

T-8 **Areas designated as "future urban areas," and areas that are currently urban that are designated with potential zoning according to the Northshore Area Zoning, cannot develop at potential higher densities or uses until financing is available for identified transportation facility improvements. The following criteria must be met:**

A. **For roadways with a level of service (LOS) E, or better at the time of development, new development should not create LOS worse than E. In addition to constructing necessary roadway improvements, new development should implement mobility options that encourage the use of transit, other high occupancy vehicles, demand management actions, access to transit and non-motorized modes of travel to alleviate roadway congestion. These standards shall be consistent with the requirements of the Commute Trip Reduction Act.**

B. **Roadway operations cannot be lowered to LOS F. The potential zoning cannot be activated until roadway LOS is projected at LOS E or better for all affected roadways except those outlined in policy T-7.**

Roadway Improvement Prioritization

The Comprehensive Plan directs public spending priorities for county roads:

1. Maintain/upgrade facilities necessary to serve existing development;

2. Upgrade facilities in Urban areas to support planned growth;

3. Provide facilities in areas where future growth is anticipated at appropriate standards for interim low densities.

The following policy follows the Comprehensive Plan direction on priorities for transportation system improvements.

T-9 **King County should emphasize operational and maintenance improvements within Northshore for safety and efficiency of existing roads (including traffic control and intersection modifications). These improvements should be assigned the highest priority for public spending. New construction or major widening of arterials should occur only when operational improvement can no longer provide adequate safety or service.**

Acquiring new right-of-way for roads in urban areas where land use patterns are already established is costly and disruptive. The following policy directs King County to focus in Northshore first on improvements within existing roadway corridors where right-of-way requirements would be less extensive then for new corridors.

Necessary right-of-way should be acquired at the earliest possible time, before increasing land values make costs prohibitive.

T-10 **King County should focus improvements in existing corridors in an effort to improve traffic circulation within those areas which are already experiencing significant traffic volumes. New transportation corridors should only be pursued when other alternatives are not physically, economically or functionally feasible. When new corridors are determined necessary, King County should emphasize identification and acquisition of right-of-way at the earliest possible time. Establishment of new rights-of-way and acquisition of additional rights-of-way in existing corridors should emphasize protection of natural systems and adequate buffering of existing and anticipated land uses. Potential zoning designations may be activated only on condition that the property owners provide right-of-way for adjacent streets that meets King County Road Standards. Design of roadway improvements should provide adequate storm water runoff treatment, particularly when adjacent to sensitive area buffers or the agriculture production district.**

Sammamish Valley

The Sammamish Valley is designated by the Comprehensive Plan and by this plan as an Agricultural Production District. The Comprehensive Plan gives direction on separate road standards for Urban areas and Rural/Resource areas. The King County Road Standards spell out these standards in more detail. State Route 202 cuts through the Sammamish Valley from Redmond to Woodinville. This route is an important north/south connector for the eastern portion of the planning area. The Planned Transportation Facilities Improvements Table at the end of this chapter identifies the widening of SR 202 and other roadways in the valley as necessary to maintain adequate traffic flow. The following policy directs this widening to be compatible with the agricultural character of the valley.

T-11 **Roadway improvements addressing the transportation needs in the Sammamish Valley from the south Woodinville bypass to Northeast 124th Street should carefully preserve the rural character of the valley as indicated by this and other adopted land use plans. Incorporating roadway design characteristics, such as open drainage swales, tree windbreaks and shoulders instead of curb and gutter, will enhance this rural atmosphere. Access from adjacent properties to the proposed Willows Road extension shall be discouraged. Where access is necessary from adjacent properties, access shall be consolidated.**

North/South, East/West Circulation

Topography, physical features such as the Sammamish River and I-405, and limitations such as existing development patterns have restricted travel options for east/west or north/south travelers. The 1981 Northshore Plan also noted this circulation issue, but proposed no roadway improvements to alleviate the problem. The following policy establishes the need for improved travel route options. This policy is implemented in proposed roadway projects listed in the Planned Facility Improvements Table at the end of this chapter.

T-12 **The Northshore Community Plan transportation element should improve motorized and non-motorized transportation circulation east and west across the I-405 corridor to provide relief in the congested Totem Lake and Kingsgate areas. The transportation element should also improve north/south across the SR-522 corridor from Bothell to Lake Forest Park.**

Access Along Arterials

On major roadways, the problem of traffic congestion is magnified by numerous access points from adjacent properties. For example, a separate driveway for every business along SR-522 would cause even more delays and potentially increase the number of accidents. The Comprehensive Plan gives direction on consolidating and limiting access points along principal and minor arterials. The following policy directs consolidation of access points along SR-522, and along other arterials that may suffer from frequent and closely-spaced turning vehicles.

T-13 **New development should be required to minimize and consolidate access points along all principal and minor arterials but especially along SR 522 and any new arterials that may be developed. King County, WSDOT and development proponents should place a high priority on consolidating existing ingress/egress points onto all arterials in Northshore. This effort should be coordinated with local businesses and property owners in conjunction with improvements to the arterial system and redevelopment of adjacent land parcels.**

Activity Center Circulation

Circulation in the activity center of Kenmore is critical. This activity center, along with Northshore cities, is where most intensive transit options will be located, as well as the greatest concentrations of retail and employment opportunities. A grid plan for Woodinville was established in 1987 by King County Ordinances. In Kenmore, a circulation study "Kenmore Traffic Circulation Study," was prepared for the Department of Public Works in 1989 and expanded in 1993 by the "Kenmore CDB Traffic and Access Study." Based in part on these studies, a local circulation plan has been developed. Chapter 10, Kenmore Activity Center, and Chapter 11, Woodinville Activity Center provide more detail on local circulation. The following policy indicates the County's intent to improve local circulation in the centers. The grid system in Woodinville and the local circulation plan developed for Kenmore will be implemented in part by property-specific p-suffix conditions.

T-14 **The Northshore Community Plan supports the construction of a grid system for the Woodinville Activity Center. King County should retain the currently established grid until the Woodinville incorporation is complete and work with the new city to ensure adequate circulation in and around Woodinville. The plan also supports the efforts to develop a circulation plan for the Kenmore activity center, consistent with policies in Chapter 10, Kenmore Activity Center.**

Neighborhood Circulation

Most residential neighborhoods are served by smaller streets defined as neighborhood collectors and local streets. (See Section II, Roadway Functional Classification for definitions of street hierarchies.) Residential development in Northshore has resulted in a pattern of subdivisions often connected only by local streets. In some cases, necessary streets are not in place at all. Problems of congestion and safety have resulted from increased use of local streets by commuters where neighborhood collectors are missing and adjacent arterials are congested.

Local streets are not designed to handle the additional traffic caused by an incomplete road system. In addition, local circulation becomes difficult for motorized and non-motorized traffic alike when adjacent developments do not have connecting local streets or neighborhood collectors. This situation creates circuitous routes for local residents and affects emergency response services. The King County Transportation Plan does not lay out neighborhood collector streets. Consequently, much development has occurred

without adequate planning for these streets. The Comprehensive Plan directs the County to develop local circulation plans as part of the community plan process. The following policies direct the County to identify missing portions of the roadway system and to plan for the completion of these missing roads by funding local circulation guides and requiring new development to participate in the completion of the neighborhood road system.

T-15 **King County should identify and complete any missing portions of the roadway functional classification including neighborhood collectors within the Northshore community. Local circulation guides should be prepared in growing residential areas to identify a compete transportation system for the areas.**

T-16 **King County should identify through the development review process impacts of new developments on existing local street systems and should have the developer participate in improving local circulation problems or missing roadway portions identified in the applicable local circulation guide or Northshore Community Plan. Where there is an identified need, new neighborhood collector streets or missing sections of existing ones should be provided on site by new development. Circulation patterns to be considered include pedestrians, equestrians, bicycling and motorized vehicles.**

Several barriers exist on public roads in Northshore. The location of identified barriers are shown on the map, Existing Street Barricades. Barriers are usually installed as a result of the public hearing process because existing neighborhoods fear new development will cause heavy volumes of speeding traffic on their streets. King County has concerns with the installation of barriers on public roads. Barriers impede local circulation, and can cause emergency vehicles to lose critical moments by being forced to take circuitous routes. Barriers also cause people to take longer routes through their own neighborhoods. Traffic volumes on neighborhood streets should be minimized by providing an adequate arterial system and dispersing travel from large areas on several neighborhood collectors. Speeding on neighborhood streets should be addressed with the Neighborhood Traffic Safety Program being jointly operated by the departments of Public Safety and Public Works. The following policies clarify the County's intent to use other solutions to cut-through traffic, and to limit further use of barriers in Northshore.

T-17 **King County should discourage external traffic from traveling through local access streets by making convenient neighborhood collector routes to provide the easiest access to the arterial system.**

T-18 **King County should discourage the use of barriers across access points for subdivisions and require thorough evaluation by the barrier proponent of effects on traffic circulation and emergency access needs.**

C. Transit/Ridesharing/Transportation Demand Management

Policies in this section focus on transit and ways to improve travel patterns, called transportation management. Transit and high occupancy vehicle (HOV) use reduces the number of vehicles on the roadway, which in turn reduces congestion and pollution. Fewer vehicles are the only solution on roadways which are already built-out to their ultimate design capacity. Policy T-7 calls out corridors in Northshore that are already at ultimate design. Transportation alternatives will be necessary in these corridors to avoid future gridlock. People will use transit and HOV options when they are convenient and competitive, or when roadways are so congested that transit results in a significant reduction in the time or cost of driving alone in the car. Transportation options in Northshore include bus, carpool, vanpool, bicycling and walking. Future options could include water transport across Lake Washington, and some form of high capacity transit.

Most transit service in Northshore is provided by METRO. METRO operates several transit routes and park-and-ride lots in the Northshore area.

Bothell and Kenmore are also served by the Snohomish County Public Transportation Benefit Area, commonly called Community Transit. This service connects the Bothell/Kenmore area with south Snohomish county.

METRO is also responsible for coordinating ridesharing services. METRO provides assistance to jurisdictions and private businesses on ridematching, park and pool, vanpools and subscription bus service. Several business parks in Bothell have transportation management coordinators who work closely with METRO in facilitating ridesharing for employees.

Transit options are a major element in decreasing roadway congestion. Current roadway conditions in Northshore necessitate a strong transit approach to new development. In 1990, ten intersections in the planning area are rated at Level of Service F, the lowest rating on a scale from A to F. Six intersections are at Level of Service E. As described earlier in this chapter, several roadways that are at LOS F are also at ultimate design and can no longer be improved for capacity purposes. State Route 522 in particular impacts travel patterns throughout the planning area. Transportation Demand Management is the only alternative to reducing congestion in corridors that are at ultimate capacity. The following policy stresses the importance of transit in Northshore, and outlines tools for better transit use.

T-19 **This plan identifies transit and transportation demand management (TDM) as critical components of a congestion reduction strategy for the Northshore planning area. Where possible, transit and TDM support should occur through consistent regulations and programs implemented countywide. Until such regulations and programs are implemented, these items should be implemented through P-suffix conditions. King County should work with transit providers, adjacent jurisdictions and private development to:**

A. Encourage commuters to use car/vanpool programs, public and/or private transit and non-motorized transportation as alternatives to the single occupant vehicle.

B. Develop ridesharing, transit use and incentive programs through the development review process and/or in accordance with state and local legislation for residential and commercial development.

C. Establish a better link between transit service and new development to facilitate transit use.

D. Encourage transit providers, paratransit operators and private purveyors to provide service for elderly, disabled, low and moderate income, youth, and other mobility-disadvantaged residents in the Northshore and surrounding community.

Transit Service

For transit to work, it must be efficient, convenient and competitive with the single occupant vehicle. Transit service can be improved by increasing the frequency of buses, providing more convenient bus stops for riders, increasing the safety of bus stops, and adding amenities ranging from covered shelters to adjacent shopping or convenience facilities. The Comprehensive Plan directs transit centers to be located in activity centers. Activity centers are where the most amenities will be located, as well as higher densities necessary to support transit service. Improved routes between Northshore and eastside locations will allow more residents to take the bus.

T-20 **King County should work with METRO to increase service frequency and Northshore-to-eastside routes while encouraging Northshore residents to take advantage of them. Service should be improved in the more developed portions of Northshore (such as Kenmore, Woodinville, Totem Lake and Juanita) by extending existing transit routes or creating new routes. King County should also work through METRO with Community Transit to achieve increased service from Northshore to Snohomish County.**

T-21 **King County should encourage and work with METRO and Snohomish Community Transit to establish one or more transit centers in the central Northshore area to facilitate transit options for local and through-traffic and to shift dependence away from automobile travel.**

Park-and-Ride/Rideshare

Park-and-ride and park-and-pool lots provide the best opportunities to increase ridesharing in the Northshore area. The Comprehensive Plan encourages the provision of these lots. It directs these lots to be provided near arterial access and close to the residential areas they may serve. Existing commercial and/or church parking areas are encouraged as joint use parking areas for park-and-ride and park-and-pool lots. The Comprehensive Plan puts a priority on providing these facilities in urban areas where land use densities will support facility investment.

T-22 **Additional park-and-ride lots should be located along major transit corridors and near areas where urban density residential development is planned in order to intercept trips close to their origin and to make use of effective transit/HOV facilities. Additional park-and-pool lot locations should be planned and implemented in low density neighborhoods as the need occurs to facilitate ridesharing where transit is not effective or efficient. Consideration should be given to utilizing park-and-pool lots as joint use lots.**

It is more cost-effective to upgrade existing lots than to create new lots. The following policy suggests the types of improvements to Northshore lots that would augment their use.

T-23 **Improvements to existing park-and-ride lots are encouraged to maximize their use. This includes improving facilities at the park-and-ride lots to include bicycle facilities, security, lighting, and lot expansion where appropriate.**

Rideshare programs connect people with similar commute patterns. Rideshare can be in the form of METRO or privately funded vans, or simply private cars with two to three or more riders, enabling the car to drive in designated High Occupancy Vehicle lanes. Public education is necessary to establish a rideshare program. Rideshare will be a critical element in alleviating congestion on Northshore roads. The following policy indicates King County support for rideshare programs. These programs can be required of major employers in the planning area.

T-24 **This plan strongly supports ridesharing for its ability to reduce traffic congestion in Northshore, and its benefits to air quality and the environment. King County, neighboring jurisdictions, the development community, and Northshore businesses should pursue active public education on the benefits of carpooling by assisting public transit providers and employers in providing information on carpool/vanpool services and in assisting in matching riders.**

High Occupancy Vehicle Facilities

High Occupancy Vehicle (HOV) lanes are provided on state highways by the Washington Department of Transportation. King County fully supports the HOV program, and is participating in studies to expand HOV uses on major arterials. The Eastside Transportation Program has made recommendations for HOV lanes in Northshore, including transit lanes on SR-522 and linking eastside activity centers with arterial HOV improvements. Currently, HOV lanes exist on I-405 north and southbound, south of Bellevue. A transit-only lane exists on westbound SR-522 from 73rd Ave. NE to NE 145th Street. The State is constructing HOV lanes on I-405 from SR-520 to NE 160th Street in both directions and has designed a transit lane eastbound on SR-522.

T-25 **Transit improvements and HOV treatments on I-405 and SR 522 should be given highest priority. This may include developer contributions to these improvements as part of the development review process.**

T-26 **The Northshore Community Plan encourages King County to work with public transit providers and WSDOT to develop transit and ridesharing road improvements such as bus pullouts, HOV lanes, HOV priority treatment at major intersections and preferential treatment of HOV's. The addition of HOV lanes and HOV priority provisions at major intersections on the arterial street system should be pursued as projects are identified.**

High Capacity Transit

The Northshore Community Plan supports the goal identified in the Eastside Transportation Program for High Capacity Transit (HCT) for regional coordination and development of an HCT system as a means of providing for long-range transportation needs. It recommends that eastside jurisdictions actively participate in the development of such system, integrated with the current transportation system. The Eastside Transportation Program's goal for HCT does not refer to a specific technology, but a service concept characterized by operation on exclusive right-of-way (lane, guideway or track) as an express service with infrequent stops. The Eastside Program recommends identification and preservation of necessary right-of-way as soon as possible.

T-27 **King County should support in the goals of the Eastside Transportation Program (ETP) continue its active participation in the program and consider the recommendations of the ETP Steering Committee. The County should work closely through the ETP with METRO, Snohomish Community Transit, WSDOT, and the cities of Bothell, Kirkland, and Redmond as well as Snohomish County in planning for HCT. This regional HCT system should be integrated with the planning for the rest of the transportation system serving the Northshore area. Planning for HCT should not detract from the immediate need for other high occupancy vehicle facilities and improvements in Northshore. King County should plan for the land use and infrastructure needs that will accommodate HCT as soon as the type and corridor location have been selected.**

Transportation Demand Management Ordinance

King County has adopted an ordinance on Commute Trip Reduction and is now working on a comprehensive transportation demand management policy. The policy would require developers and/or employers to reduce vehicle trips to their sites either by meeting a preestablished goal or by taking a certain set of actions. These actions may include site design criteria to enhance pedestrian, transit user and bicycle access, parking standards that favor HOV vehicles, flexible work hours and ongoing programs to promote travel alternatives for employees or residents. Policy CI-6 in Chapter 3, Commercial Development outlines Transportation

Demand Management actions for employers located in Northshore. These actions are needed in Northshore because congestion levels in the planning area already exceed adopted County standards. The following policy indicates support for the adoption of a Countywide ordinance in addition to the actions proposed in this plan. Specific conditions would be developed to implement this policy.

T-28 **The Northshore Community Plan supports development of a transportation demand management ordinance. Once adopted, the provisions of this legislation should be applied to appropriate properties within the planning area through the use of P-suffix conditions or in accordance with specifications of the ordinance.**

Pedestrian/Bicycle Access

Pedestrian amenities, especially pathways, are important in getting people to walk and ride the bus. Often transit access is blocked by fences or large parking areas with no delineated walkways. New development is often enclosed with fences that do not open onto nearby streets. METRO has indicated that openings every 600 to 800 feet are adequate to allow access.

As development occurs, it is necessary to plan new transit facilities and amenities into the infrastructure. New development can assist in the provision of these facilities to offset the impact of increased travelers. Items such as bus pullouts, bus shelters, lighted pathways, and connections should be considered by King County when evaluating the impacts of new development to the transit system.

T-29 **Public and private developments in Northshore that meet minimum thresholds shall provide public transportation facilities (such as bus pullouts, bus stop shelters and improving park and ride lots) as a condition of development approval. The County shall consult public transit providers during the permit process regarding existing and future routes near the site design considerations and the extent to which this policy is fulfilled. Design of parking facilities should encourage transit use and pedestrian access by locating building entrances and transit facilities near each other.**

T-30 **Development in Northshore should identify pedestrian/transit design considerations and provide access through barriers, particularly fences, that enclose developments and isolate them from transit routes and principal pedestrian pathways. The County shall consult public transit providers during the permit process regarding existing and future route near the site.**

D. Nonmotorized Transportation

Nonmotorized transportation (bicycling, walking, and equestrian) modes are identified in the King County Comprehensive Plan as integral elements in a balanced transportation system in King County. The Comprehensive Plan sets safety and accident prevention as primary considerations in planning for nonmotorized modes, and specifically cites the need to enhance the nonmotorized access to land uses such as schools, commercial areas, industrial/employment centers, and community activity centers.

In 1987, King County established the RoadShare Program in the Transportation Planning Section of the Department of Public Works. The RoadShare Program was developed to enhance the County's responsiveness to the needs of nonmotorized transportation in planning, program development, education, project design and research. RoadShare is developing a Functional Plan for Nonmotorized Transportation, which will replace and expand upon the 1974 King County General Bicycle Plan.

The following policies address general design and safety issues related to nonmotorized transportation.

T-31 **The design and development of transportation projects in Northshore should recognize and incorporate the role of non-motorized travel modes as a viable and legitimate element of the overall transportation system. Transportation projects in Northshore should accommodate the needs of non-motorized transportation by incorporating a network of facilities:**

A. Within the road right-of-way,

B. In an enhanced trail network, and

C. In improved design and review of development features which can improve non-motorized access and safety.

All new development shall include walkways and other facilities which encourage safe non-motorized circulation, enhance non-motorized access within the development and connect with off-site shopping, transit and community facilities. These requirements should be implemented through a combination of design review and development standard techniques.

T-32 **Safety and access are primary components in the development of a non-motorized transportation plan element in Northshore. Existing nonmotorized facilities should be examined for their ability to meet these policies, and improvements recommended to the existing system where necessary. New facilities should achieve safe and effective non-motorized design standards.**

Bicycle Transportation

Bicycling, in addition to being a source of recreation and fitness, is gaining new attention as an integral element of a balanced transportation system. The Seattle-King County region has among the highest rates of bicycle commuting in the nation, and has earned a reputation nationally for being an area "friendly" to the needs of bicyclists.

The region is noted for its development of a Countywide trails system. In Northshore, access to the Burke-Gilman and Sammamish River trails is an important element in recreational bicycling as well as in serving as a direct route to jobs and school. The Burke-Gilman serves as a primary commuting corridor for students, faculty, and staff at the University of Washington from throughout north King County, including Northshore.

Northshore is an area that is perennially popular for recreational cycling, owing to these trail facilities, proximity to lightly traveled country roads, and destinations such as Marymoor Park in Redmond and the wineries of the Sammamish Valley. Recreational cyclists often become bicycle commuters as they gain skill and confidence in traffic.

The bicycle can be an efficient alternative to the automobile for trips of between one and five miles distance, often competing successfully with the car in terms of travel time. More experienced cyclists will commute up to ten or twenty miles one-way on a regular basis. The bicycle is often promoted as an effective vehicle for access to Park and Ride lots as part of a "multi-modal" commute involving public transportation, or for errands not involving large baggage, such as a trip to an automated teller at a local bank.

On the road itself, the provision of adequate lane width to accommodate both cars and bikes is the most frequently cited need by bicyclist. Bike lanes, paved shoulders, or the addition of 2-4 feet of width to the

outside travel lane can provide enough room for safe riding. Signals which are accessible through either sensitive loop detectors or actuator buttons located near the edge of the road are examples of low cost improvements which benefit bicycling.

The following policy directs the County to enhance the design features and consideration of bicycles as a way of facilitating bicycle travel throughout Northshore.

T-33 **Transportation projects in Northshore should incorporate bicycle friendly design, utilizing a variety of design techniques appropriate to the particular project and right of way characteristics, including but not limited to bicycle lanes, wide outside travel lanes, paved shoulders, bicycle sensitive signal detectors, and appropriate signing.**

Existing bicycle facilities should be preserved or enhanced when general road improvements are made.

Secure parking for bicycles should be provided at activity centers throughout Northshore.

Pedestrian Transportation

Northshore's development into an urban area has had many ramifications for pedestrian safety and access. Similar to other suburban areas of unincorporated King County, residential development from previous decades has not always provided adequate pedestrian facilities such as sidewalks, separated crossings, or actuated signals. More significantly, as volumes of motorized traffic increased and capacity on existing roadways was reduced, wider roads were developed, effectively isolating pedestrians from one neighborhood to another.

Subdivision design has worked to provide disincentives to pedestrians. Many subdivisions exist where the only access to homes or businesses follows the road itself. Often a pedestrian must follow a circuitous route to get to an adjacent area, because no through-connection has been provided. An example of this is the lack of access from subdivisions to transit stops on adjacent arterials.

As is the case with bicycling, the Comprehensive Plan calls for the County to respond to the needs of pedestrians. In particular, residential development is emphasized as needing to provide safe access to community facilities, schools, libraries, parks, and shopping. Access to transit routes is also emphasized in the Comprehensive Plan for employment centers, residential and commercial development. The County addresses pedestrian issues in several ways. The development review process requires pedestrian needs to be examined according to the King County Road Standards and community plans. Special funds are given to the County through the School Pathways Fund, targeted for pedestrian improvements. The County has initiated a fund in the Capital Improvement Program for development of pedestrian facilities which don't qualify for the School Pathway Program.

While these programs address pedestrian uses, the urban development pattern in Northshore combined with heavy traffic loans on major roadways and numerous local roads has resulted in potential threats to public safety for pedestrians. Stronger design standards for new development, combined with a consistent approach to the urban design of activity centers are necessary to improve pedestrian circulation. Special attention should be paid to the access and safety requirements of youth and the elderly. The Northshore CAC strongly recommends policies that direct safe pedestrian connections for new development.

T-34 **Pedestrian uses are an important component of all new public and private development in Northshore. Special P-suffix conditions will require pedestrian circulation. Particular emphasis should be placed on:**

A. **Reducing pedestrian/motor vehicle conflict at activity centers such as schools, commercial centers, recreational facilities, transit facilities, and residential developments.**

B. **Handicapped accessibility of pedestrian facilities.**

C. **The removal of barriers to effective pedestrian circulation and access, such as those presented by freeways and interchanges.**

D. **All new development shall include walkways and other facilities which encourage safe pedestrian circulation, enhance pedestrian access within the development and connect with off-site transit, shopping and community facilities and other neighborhoods.**

Equestrian Activities

While it has been many years since the horse represented a major form of transportation in the Northshore area, equestrian activity has remained a key element in the identity of the Hollywood Hills neighborhood of Woodinville. The presence of two major county trails and numerous stables, arenas, and equestrian organizations serves to support this significant community of horses and riders.

Access to trails is the primary issue facing equestrians in Northshore. Private organizations such as the Hollywood Hills Saddle Club have purchased or obtained easements to a trail system, much of which feeds the Tolt Pipeline Trail. In areas where this trail system is incomplete, equestrians have traditionally used gravel or dirt road shoulders to complete links in the trail network. While riding on roads is not a preferred activity for most equestrians, in many areas it is necessary for access to homes, stables, arenas, and formal trails. There are several access points within the Hollywood Hills equestrian system in Woodinville which should be improved for safe equestrian use. Access to the Tolt Pipeline Trail at NE 155th St. and access to the Sammamish River Trail at NE 124th St., NE 145th St. and NE 171st St. should be pursued and improved.

Other areas identified by equestrians as being of interest for trail or facility development include the Swamp Creek open space area, the Leota/Wellington community, and 172 Ave. NE south to trails in and around the City of Redmond. The City of Bothell has developed a plan for equestrian trails although little of the plan has been implemented at this time.

Both the County Capital Improvement Program and the Transportation Needs Report have identified certain separated equestrian facilities to be incorporated in road projects throughout Northshore, primarily on neighborhood collector and arterial streets. Few facilities until now have been planned on the residential streets where most on-road riding currently takes place.

Development of privately owned property previously used by horseback riders has precluded many opportunities for trail development in the planning area. As a consequence, many riders are forced to use road shoulders within the neighborhood. Even on the trails, road crossings represent a significant risk to equestrians if appropriate signals, accessible actuator buttons, and warning signs are not in place. Grade separation should also be considered where issues of sight and stopping distance on the road, width of the road, average speed of traffic, and level of trail use are present.

The following policy recognizes the significance of the equestrian community within Northshore and encourages the County to maintain and enhance equestrian facilities. The Recommended Equestrian Facilities map shows planned improvements to the equestrian road and trails system, as well as desired links identified by the equestrian community.

T-35 **Safe equestrian access shall be preserved and/or enhanced within the road right-of-way within established equestrian communities in Northshore as identified on the Equestrian**

Facilities map. A widened gravel or dirt shoulder may be preserved or expanded as needed to enhance safe equestrian circulation within these communities. Such facilities and techniques should serve to maintain access to either the public or established private trails system in these areas.

If right of way, traffic volumes/speed, and user demand indicate the need, a separated parallel facility in the road right-of-way may be constructed outside of the ditch line, or as a trail on an independent alignment.

All roadside equestrian facilities should be coordinated with the off-street network to provide access and route continuity.

Identified equestrian trails on private property shall be preserved through the development process through P-suffix conditions.

Multipurpose Trails

The trail system of King County, including Northshore trails such as the Sammamish River Trail and the Tolt Pipeline Trail, has become one of the most popular of the parks facilities available to County residents. The linear nature of trails coupled with the destinations they serve makes trails both recreational and functional transportation links. Properly designed and located, separated trails can link major destinations, encourage nonmotorized commuting, and serve as open space and urban separators between communities.

The following policy encourages maintaining and enhancing the multipurpose trail system as a transportation option. Coordination on implementation of these projects will be emphasized between the Parks, Planning and Resource Department and the RoadShare Program in the Department of Public Works. Additional policies and discussion of Northshore trails is found in Chapter 8, Parks and Open Space.

T-36 **Multipurpose separated trails represent a transportation resource to the Northshore community. Opportunities for expansion to this system should be pursued, particularly if a proposed addition to the system would serve activity centers or destinations such as colleges and schools, commercial and industrial centers, recreational facilities, and residential developments.**

Linear rights of way such as utility corridors, abandoned railroad rights of way, and major limited access highways should be investigated for their potential to serve nonmotorized transportation needs through the inclusion of a separated trail facility.

Growth in trail usage should be addressed through a combination of increased enforcement and education efforts and a re-evaluation of trail design standards. Access to the trail system should be enhanced through the provision of increased parking at key access points.

II. Roadway Functional Classification

Public streets are classified into designations or groups having similar characteristics according to their functions related to mobility and land access. The purpose of this classification system is to provide for the redevelopment of access and circulation, to standardize road designs, and to provide a hierarchy for road funding. The classifications range from local access streets which directly access abutting properties to freeways which only serve vehicular traffic needs. Principal, minor and collector arterials serve varying

degrees of access and circulation needs. The functional classifications used in the adopted King County Transportation Plan are described below:

Freeway: A multi-lane, high speed, high capacity roadway intended exclusively for motorized traffic with minimal access controlled by interchanges and road crossings separated by bridges.

Principal Arterial: A highway connecting major community centers and facilities, often constructed with partial limitations on access and minimum direct access to abutting land uses.

Minor Arterial: A highway connecting centers and facilities within the community and serving some through traffic while providing more access to abutting properties.

Collector Arterial: A highway connecting two or more neighborhoods as well as carrying traffic within neighborhoods while serving very little through traffic, but providing high access to adjacent land uses.

Local Access: A residential street with generally one lane of traffic in each direction, featuring low speeds, high access (frequent access) and low traffic volumes.

The Arterial Functional Classification map illustrates the adopted roadway functional classification in Northshore. Classifications shown are based on the above criteria with regard to how the roadways function now and as expected with the proposed land use plan.

III. Planned Transportation Facility Improvements

The Northshore Community Plan Update contains a list of planned facility improvements as part of the plan's capital program. This list was developed from a variety of sources including public comment, studies, existing plans, safety concerns, and analysis of existing and future congestion. The adopted community plan list will be added to the King County Transportation Plan by amending the Transportation Needs Report (TNR). The King County Transportation Plan was adopted by the King County Council in 1989 and is one of the functional plans which carries out the policies established by the King County Comprehensive Plan. Transportation needs are updated Countywide each spring in the form of the TNR. Transportation needs are evaluated from throughout King County and rated according to several criteria. The ratings are based on a numerical score and placed in a range of high, medium and low priority.

A principal tool in implementing the planned facility improvements of a plan is the capital improvement program (CIP). The CIP describes the programming of funds for capital transportation improvements for the current year and planned spending for the following five years. Northshore transportation projects will be placed on the County CIP based in part on the TNR priority rating and in competition with projects throughout King County.

The Planned Transportation Facility Improvements Table and maps recommend projects which will be required to carry traffic within Northshore generated both by areas outside the planning area, and by the buildout of the Northshore land use plan. Projects indicate needs for both motorized and nonmotorized transportation. The table includes the street where the project is located, the limit, the priority, the 1993 King County costs only, agencies involved, whether or not the project is on the 1993-1998 agency CIP and the description of the project. Planned projects include the following categories:

New Construction and Major Widening

These projects include new road construction in new rights-of-way and widening of existing roads by a continuous left turn lane or two or more travel lanes. Construction of turn lanes at intersections are listed as intersection/operational projects.

Minor Widening and Reconstruction

These projects include shoulder paving, widening of narrow travel lanes and reconstruction to correct pavement deficiencies and safety problems.

Intersection/Operational

These projects include interchange improvements, intersection signalization, approach road reconstruction and realignment and signal interconnection projects.

Miscellaneous Projects

These project include paving shoulders for bicycle/pedestrian use, pathway/walkway facilities inside the roadway right-of-way for pedestrian/equestrian use, trail systems and roadway safety improvements.

Transit and High Occupancy Vehicle Projects

These projects include facility improvements such as high occupancy vehicle (HOV) lanes, transit centers and park and rides. Transit/HOV projects which are part of the larger roadway improvements are identified under that larger improvement category such as major widening.

Bridge Projects

These projects include the reconstruction, resurfacing, and new construction of roadway bridges and pedestrian/bicycle overcrossings.

Studies

Identify corridor needs where projects have not been defined or additional study is required to assess alternatives, cost and impacts.

Projects considered were identified from a number of sources including the Citizen's Advisory Committee process, public questionnaires and open houses, the King County Transportation Needs Report, the Eastside Transportation Program, input from other jurisdictions, and analysis of travel forecast modeling. The projects in the planned projects table are proposed to meet existing and anticipated needs of a balanced transportation system. It is important to implement these projects in order to have the transportation system in Northshore function in a safe and efficient manner in 2010. Improvements are planned to address safety concerns, complete missing links of the roadway system, encourage the use of alternative modes of travel, and add capacity to major travel corridors. This planned transportation system reduces congestion in many areas but does not eliminate congestion. Transit improvements are planned in corridors where congestion will continue.

Several key geographical areas require major transportation decisions over the next several years. Transportation improvements on State facilities will be critical to the mobility and efficiency of the transportation system. The Sammamish Valley, I-405, and SR-522 as well as Northeast 124th Street through Totem Lake, NE 132nd St, Juanita-Woodinville Way and Woodinville-Duvall Rd are major transportation corridors of con-

cern. Efforts to maintain the rural and agricultural environment in the Sammamish Valley will be determined by the extension of Willows Road, and major improvement north into Woodinville and south into Redmond. Whether the major improvements occur on the industrial west side of the Valley or on the agricultural/residential east side of the Valley will significantly affect the character of the Valley.

A significant amount of traffic is traveling through the Northshore planning area on I-405 and SR-522 to reach destinations outside Northshore. The ability of these corridors to handle this through-traffic as well as more localized traffic will have an effect on other arterials in Northshore. While major improvements on SR-522 are needed, there do not appear to be any long term improvements possible to solve traffic conditions throughout the corridor. The only viable option to alleviate the problem, but not solve it, are transit and ridesharing improvements. Major roadway and transit improvements have been identified in Kenmore to improve circulation through this area.

In the City of Woodinville, major improvements will be required on the Woodinville-Duvall Road east of the business district. Within the business district, the grid street system must be completed to address local traffic demand and relieve pressure on Northeast 175th Street, the main street of the City of Woodinville.

The Northeast 124th Street, Northeast 132nd Street, and Juanita-Woodinville Way corridors all will experience significant increases in traffic headed to commercial areas and the I-405 corridor. Major improvements have been identified for these key corridors. It is important to note that general capacity improvements alone will not be enough and that measures to accommodate traffic increases must include facilities/treatment for transit and ridesharing modes of travel.

IV. Transit and Ridesharing Facility Improvements

Transit, ridesharing and transportation demand management make up major components of the Northshore Community Plan transportation element. A strong program is essential to achieve a balanced transportation system and alleviate traffic congestion. In addition to the transit service and non capital intensive considerations such as ridesharing, preferential parking and flex time, a number of capital intensive features are significant to achieving a successful program. These facilities include an extensive amount of high occupancy vehicle (HOV) lanes, park and ride improvements, transit centers and operational improvements such as queue bypass at intersections for HOV's.

The following capital improvements are being recommended as part of the Northshore Plan transportation improvement package and are presented in more detail in the Recommended Transportation Facility Improvement Table. These projects are highlighted in the Planned Transit and High Occupancy Vehicle Facilities map.

Transit Centers:
- Bothell
- Kenmore
- Woodinville

New Park and Rides:
- Kenmore (replaces Northshore park and ride)
- North Woodinville
- South Woodinville/north Redmond

Expanded park and rides:
- Bothell
- Brickyard Road
- Kenmore
- Kingsgate

Construct High Occupancy Vehicle Lanes:

I-405
SR-522
68th Ave. NE
NE 116th Street
NE 124th Street
NE 132nd Street
Juanita-Woodinville Way

Transit/High Occupancy Vehicle que bypasses:

NE 116th St. @ I-405
NE 124th St. @ I-405
NE 160th St. @ I-405
NE 195th St. @ I-405
132nd Ave. NE @ SR-522
NE 195th St. @ SR-522

King County has worked with METRO on the development of the project list and will continue to work toward having METRO include the Northshore recommendations in their long range planning. METRO is involved in the Eastside Transportation Program along with King County and other Eastside jurisdictions. Some of the project recommendations have come from the Eastside Transportation Program. Others have come from a more localized analysis as part of the Northshore effort. These projects are aimed at achieving the State Growth Management Act goals and the King County Comprehensive Plan goals of an increased mode change from the single occupant vehicle to higher occupancy vehicles.

METRO is developing their long range transit plan. The plan is scheduled for draft report completion in late 1993. The transit plan is a program addressing future service and facilities improvement. It is a mix of bus, rideshare and commuter services plus a high capacity transit. King County will work with METRO to ensure service and facilities improvements within Northshore are implemented.

Table 1
PROGRAMMED AND PLANNED TRANSPORTATION FACILITY IMPROVEMENTS

Project #	Project and Location	Priority	Cost* 1994 (1000's)	Agency	Current CIP	Description
NEW CONSTRUCTION						
N-14	NE 137th St. Juanita-Woodinville Way to 100th Ave. NE	Medium	$562	King County		Construct new two lane roadway with curb, gutter, and sidewalk. Street trees and landscaping.
N-37	Woodinville CBD Bypass NE 175th St. to 140th Ave. NE			King County	Completed	Construct a 4 lane road plus turn pockets with curb, gutter and sidewalks. Traffic signals. Widen 140th Ave. NE to 5 lanes from NE 171st Street to NE 174th Street.
N-38	NE 195th St. NE 156 Ave NE to 166th Ave. NE	Medium	(City)	Woodinville		Construct roadway link (164th Ave. NE to 166th Ave. NE). Construct curb, gutter and sidewalk. Street trees and landscaping.
N-39	NE 195th St. (North Woodinville Bypass) 139th Ave. NE to 149th Ave. NE.			King County	Completed	Construct a new four lane arterial with curb, gutter and sidewalks. Traffic signals.
N-43	NE 128th St/124th Ave. NE 122nd Ave. NE to NE 132nd St			Kirkland Private	Completed	Construct new 2 lane roadway with turn pockets at intersections. Construct curb, gutter and sidewalk. Street trees and landscaping.
N-75.4	NE 132nd St. Extension 132nd Ave. NE to Willow Rd. Extension	Medium	$1,577	King County		Construct/improve two lane arterial plus two-way left turn lane. Construct curb, gutter and sidewalk from 132nd Ave. NE to 136th Ave. NE. Pave shoulder from 136th Ave. NE to Willows Rd. Striped & signed bicycle facility. Street trees and landscaping.
N-78.2	Willows Road Extension NE 124th St. to NE 132nd St.	High	$10,494	King County		Construct new four lane roadway with turn channels. Paved shoulder for bike and pedestrian use.
N-78.3	Willows Road Extension NE 132nd St. to NE 145th St.	High	$5,247	King County Woodinville		Construct new four lane roadway with turn channels. Median plus rural design features. Pave shoulder for bicycle and pedestrian use. Street trees and landscaping. Install signal at NE 132nd St. and at NE 145th St.

*** Cost is King County cost only.**
+ Regional Transit Project
NCA = No Cost Available

Table 1
PROGRAMMED AND PLANNED TRANSPORTATION FACILITY IMPROVEMENTS

Project #	Project and Location	Priority	Cost* 1994 (1000's)	Agency	Current CIP	Description
N-87.2	NE 185th St. 68th Ave. NE to 73rd Ave. NE	Low	$1,052	King County		Construct new two lane roadway with curb, gutter and sidewalk. Street trees and landscaping.
N-88	120th Ave. NE/NE 180th St., North Creek Parkway S. to 132nd Ave.	High	(Joint)	Bothell Private		Construct new 4 lane roadway and turn channel and curb, gutter and sidewalk. Widen curb lane for bicycle use. Improve existing roadway.
N-93	Woodinville Grid streets 133nd Ave. NE, 136th Ave. NE, 138th Ave. NE, 142nd Ave. NE, NE 172nd Pl., NE 177th St., NE 181st Pl., NE 183rd St., NE 186th St.	High	(Joint)	Woodinville Private		Construct new/improve existing road network to improve circulation in the Woodinville business district. Street trees and landscaping.
MAJOR WIDENING						
N-6.1	NE 181st St. 65th Ave. NE to 73rd Ave. NE	Medium	$814	King County		Widen for two lanes plus on-street parking. Construct curb, gutter and sidewalk. Street trees and landscaping.
N-7.2	68th Ave. NE NE 181st St. to NE 185th St.	High	$1,045	King County	Yes 100193	Construct two-way left turn lane and construct curb, gutter and sidewalk. Widen curb lane for bicycle use. Street trees and landscaping.
N-9.1	NE 175th St. 61st Ave. NE/SR 522 to 68th Ave. NE	High	$8,056	King County Private		Relocate intersection at 68th Ave. NE to the south and realign roadway. Emphasize south-to west through movement. Widen to 4/5 lanes. Reconstruct partial grade separated intersection at 61st Ave. NE and SR-522. Construct curb, gutter and sidewalk. Street trees and landscaping.
N-9.2	NE 175th St. 68th Ave. NE to 73rd Ave. NE	Medium	$843	King County		Relocate intersection at 68th Ave. NE to the south and realign roadway. Add two-way left turn lane and construct curb, gutter and sidewalk. Street trees and landscaping.

*** Cost is King County cost only.**
+ Regional Transit Project
NCA = No Cost Available

Table 1
PROGRAMMED AND PLANNED TRANSPORTATION FACILITY IMPROVEMENTS

Project #	Project and Location	Priority	Cost* 1994 (1000's)	Agency	Current CIP	Description
N-11.2	100th Ave. NE NE 139th St. to NE 145th St.	High	$2,802	King County	Yes 101791	Widen to 4/5 lanes with widened curb lane for bicycles. Construct curb, gutter and sidewalk. Intersection improvements at NE 145th St.
N-12	Juanita-Woodinville Way NE 100th Ave. NE to 145th St.	High	$3,609	King County	Yes 101991	Add two-way left turn lane. Construct curb, gutter and sidewalk. Widen curb lane for bicycle use.
N-13.1	NE 145th St. 100th Ave. NE to Juanita-Woodinville Way	Low	$1,136	King County		Add two-way left turn lane. Construct curb, gutter and sidewalk. Widen curb lane to provide bicycle facility. Street trees and landscaping.
N-15	NE 132nd St. 97th Ave. NE to 100th Ave NE			Private	Completed	Add two-way left turn lane, eastbound right turn and bike lane. Construct curb, gutter and sidewalk. Pedestrian crossing signals at school.
N-16	Juanita-Woodinville Way NE NE 145th St. to I-405	High	$5,289	King County Metro	Yes 100190	Final project elements, roadway width and required mitigation to be determined through the EIS process for the project. Construct curb, gutter and sidewalk. Upgrade traffic signal. Add traffic signal at NE 112th Street. Add northbound HOV treatment north of NE 112th Street. Incorporate noise treatment elements to reduce impacts to neighborhood. Provide stream enhancement.
N-17.1	116th Ave. NE NE 124th St. to NE 130th St.	High	(City)	Kirkland	Yes (City's)	Widen to 4/5 lanes. Construct curb, gutter and sidewalk. Improve sight distance at NE 128th Street. Street trees and landscaping.
N-19.2	NE 160th St. 116th Ave. NE to 124th Ave. NE	High	$2,976	King County	Yes 101391	Widen to 4/5 lanes. Construct curb, gutter and sidewalk. Striped and signed bikeway. Street trees and landscaping.

* Cost is King County cost only.
\+ Regional Transit Project
NCA = No Cost Available

Table 1
PROGRAMMED AND PLANNED TRANSPORTATION FACILITY IMPROVEMENTS

Project #	Project and Location	Priority	Cost* 1994 (1000's)	Agency	Current CIP	Description
N-19.3	NE 160th Street at I-405	High	(State)	WSDOT	Yes (State's)	Widen overpass to 5 lanes with curb, gutter and sidewalk. Rebuild signals.
N-20.1	Slater Ave. NE NE 116th St. to NE 124th St.	High	(City)	Kirkland		Add two-way left turn lane. Construct curb, gutter and sidewalk.
N-22	156th Ave. NE Woodinville-Duvall Road to NE 190th St.	High	(City)	Woodinville		Add two-way left turn lane. Widen curb lane for bicycle use. Construct curb, gutter and sidewalk. Improve sight distance and safety. Street trees and landscaping.
N-28.1	NE 124th St. - Phase II 132nd Pl. NE to SR 202	High	$9,895	King County	Yes 100389	Widen to 4/5 lanes with westbound HOV lane. HOV lane will be used as a joint use bicycle facility. Construct curb, gutter and sidewalk. Pave shoulders from Willows Road to SR 202. Reconstruct signals at 132nd Ave./Pl NE, Willows Road and SR 202. Construct equestrian pathway within road right-of-way on northside of NE 124th St. from SR 202 to Sammamish River Trail. Street trees and landscaping.
N-28.2	NE 124th St. 124th Ave. NE to 132nd Pl. NE	High	(City)	Kirkland	Yes (City's)	Widen to 4/5 lanes plus HOV treatment. Bicycle facility linking commercial and residential areas to Sammamish River Trail and bike lanes on Willows Road.
N-30.1	NE 124th/128th St. SR 202 to Avondale Road	Medium	$4,670	King County		Widen to 4 lanes with turn channels with striped and signed bicycle facility. Provide separate equestrian facility within road right-of-way. Street trees and landscaping.
N-33.2	140th Pl. NE NE 171st St. to NE 175th St.			King County	Completed	Widen to 4/5 lanes. Construct curb, gutter and sidewalk. Add pedestrian crossing signals. (Included in N-37.)

* Cost is King County cost only.
\+ Regional Transit Project
NCA = No Cost Available

Table 1
PROGRAMMED AND PLANNED TRANSPORTATION FACILITY IMPROVEMENTS

Project #	Project and Location	Priority	Cost* 1994 (1000's)	Agency	Current CIP	Description
N-35	Woodinville-Duvall Rd. NE 190th St. to Avondale Rd.	High	$11,521	King County Woodinville		Widen to four lanes plus turn channels at intersections. Pave shoulders. Provide separate equestrian facility within road right-of-way. Construct bikeway on road shoulders.
N-44	120th Ave. NE (Brickyard Road) NE 160th St. to Woodinville Dr.	Medium	$520	Bothell King County	Yes (City's) (County) 101894	Reconstruct roadway and add turn channels to support new development. Construct curb, gutter and sidewalk. Widen curb lane for bicycle use. Street trees and landscaping.
N-45	124th Ave. NE NE 132nd St. to NE 169th St.	High	$4,404	King County Woodinville		Add two-way left turn lane or turn channels where needed. Construct curb, gutter and sidewalk. Develop striped and signed bikeway to NE 160th St. linking with NE 132nd St. bikeway. Street trees and landscaping.
N-46.1	I-405 SR 520 to SR 522	Medium	(State)	WSDOT		Construct 1 general traffic lane in each direction.
N-46.3	I-405 SR 522 to SR 527	Medium	(State)	WSDOT		Construct 1 general traffic lane in each direction.
N-47	124th Ave. NE NE 85th St. to NE 116th St.	High	(City)	Kirkland		Add two-way left turn lane. Bike facility. Construct curb, gutter and sidewalk.
N-48	140th Ave NE/Woodinville-Sno. Rd. NE 175th St. to SR 522	High	(Joint)	Woodinville Snohomish Co.		Widen to 4/5 lanes with widened curb lane for bicycles. Construct curb, gutter and sidewalk. Signalization where needed. Improve railroad crossing with rubber matting. Streeet trees and landscaping.
N-49	SR 202/160 Ave. NE NE 90th St. to NE 124th St.	High	(Joint)	Redmond WSDOT		Add two-way left turn lane.

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Table 1
PROGRAMMED AND PLANNED TRANSPORTATION FACILITY IMPROVEMENTS

Project #	Project and Location	Priority	Cost* 1994 (1000's)	Agency	Current CIP	Description
N-52.1	Juanita Drive 93rd Ave. NE to NE 133rd Pl.	Medium	$5,056	King County		Add two-way left turn lane or turn channels where needed. Street trees and landscaping.
N-52.2	Juanita Dr. NE NE 153rd Pl. to NE 170th St.	High	$4,573	King County		Add two-way left turn lane. Construct curb, gutter and sidewalk. Striped and signed bikeway. Street trees and landscaping.
N-54	Juanita Dr. NE 93rd Ave. NE to 98th Ave. NE	High	(City)	Kirkland		Add two-way left turn lane. Construct curb, gutter and sidewalk. Striped and signed bikeway.
N-61.1	132nd Pl/Ave. NE NE 124th St. to NE 132nd St.	High	$3,004	King County	Yes 100187	Widen to 4/5 lanes. Construct curb, gutter, sidewalks and bicycle facility.
N-61.2	132nd Ave. NE NE 132nd St. to NE 143rd Pl.	High	$1,813	King County	Yes 100291	Add two-way left turn lane. Striped and signed bicycle lane. Construct curb, gutter and sidewalk. Street trees and landscaping.
N-68	NE 120th St/ 132nd Ave. NE NE 70th St. to Slater Road	Medium	(Joint)	Kirkland Redmond		Add two-way left turn lane. Identify and develop appropriate bicycle facility to promote safer north/south access.
N-71.2	SR 527 SR 522 to 228th St. SE	High	(State)	WSDOT		Widen to 4/5 lanes with paved shoulder or curb, gutter and sidewalk. Provide bicycle facility.
N-75.2	NE 132nd St. 100th Ave. NE to 116th Ave. NE	Medium	$1,389	King County Metro Kirkland		Add two-way left turn lane or turn channels and eastbound HOV treatment. Intersection/operational improvements. Retain westbound bicycle facility and joint use of HOV lane. Street trees and landscaping.
N-75.3	NE 132nd St. 116th Ave. NE to 132nd Ave. NE	High	$1,389	King County Metro Kirkland		Add two-way left turn lane or turn channels with possible westbound HOV treatment from 124th Ave. NE. Retain eastbound bicycle facility and joint use of HOV lane. Street trees and landscaping.

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Table 1
PROGRAMMED AND PLANNED TRANSPORTATION FACILITY IMPROVEMENTS

Project #	Project and Location	Priority	Cost* 1994 (1000's)	Agency	Current CIP	Description
N-77	96th/100th Ave. NE/Waynita Way NE NE 145th St. to Sammamish River Bridge	High	(City)	Bothell Private		Reconstruct roadway and add two-way left turn lane. Construct curb, gutter and sidewalk. Striped and signed bicycle facility.
N-78.4	Woodinville-Redmond Rd. (SR 202) NE 145th St. to NE 127 Pl. NE	Low	(State)	WSDOT Woodinville		Widen to 4/5 lanes. Rural design from NE 173rd Place to the south. Street trees and landscaping.
N-78.5	NE 173rd Pl. (SR 202) 127th Pl. NE to 131st Ave. NE	Low	(State)	WSDOT Woodinville		Widen to 5 lanes. Install signal at Woodinville Drive/ 127th Pl. NE. Construct curb, gutter and sidewalk. Street trees and landscaping.
N-84.2	NE 124th St. 100th Ave. NE to 116th Ave. NE			Kirkland	Completed	Widen to 4/5 lanes with curb, gutter and sidewalk.
N-99	Willows Road Redmond Way to NE 124th St.	High	(City)	Redmond		Widen to 4/5 lanes plus northbound HOV treatment. Retain bike facility.
N-100	120th Ave. NE NE 195th St. to 240th St. SE	Low	(Joint)	Bothell Snohomish Co.		Add two-way left turn lane. Construct curb, gutter and sidewalk.
N-101	Beardslee Boulevard NE 187th St. to I-405 Interchange	Medium	(City)	Bothell		Widen to 4/5 lanes. Construct curb, gutter and sidewalk.
N-107	NE 116th St. SR 202 to Avondale Rd.	Medium	$1,590	King County Redmond		Add two-way left turn lane.
N-112	East Riverside/Woodinville Dr. 108th Ave. NE to 127th Pl. NE	Low	(Joint)	Bothell Woodinville		Add two-way left turn lane or turn channels where needed. Street trees and landscaping.

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Project #	Project and Location	Priority	Cost* 1994 (1000's)	Agency	Current CIP	Description
MINOR WIDENING						
N-10	65th Ave. NE/Old Mill Road SR 522 to NE 175th St.	High	(NCA)	Private WSDOT King County		Evaluate roadway realignment to align Old Mill Rd, with 65th Ave. NE. or offset improvment for circulation and safety needs. Major improvement in conjunction with Premix site redevelopment and NE 175th St. realignment (N-9.1). Intersection improvement at SR 522 and install signal when warranted.
N-18	90th Ave. NE NE 134th St. to NE 138th Pl.	High	$650	King County		Widen travel lanes. Construct curb, gutter and sidewalk for safety.
N-21	NE 192nd St. 73rd Ave. NE to 80th Ave. NE	Low	$695	King County		Widen travel lanes. Improve shoulder for nonmotorized use. Create neighborhood pathway system within roadway right-of-way using soft surface materials to improve equestrian/pedestrian access.
N-33.1	140th Ave. NE/Pl. NE - Phase I NE 150th St. to NE 171st St.	High	$844	King County	Yes 101091	Pave shoulders.
N-33.4	148th Ave NE - Phase II NE 145th St. to NE 150th St.	High	$545	King County	Yes 100391	Pave shoulders. Channelization at NE 145th St. (SR 202) and 148th Ave. NE.
N-34.1	NE 171st St. 140th Ave. NE to NE 155th Pl.	Medium	(City)	Woodinville		Reconstruct roadway. Pave shoulders. Provide separate equestrian facility.
N-34.2	NE 175th St./NE 172nd Pl. NE 155th Pl. to Du Rocher Rd.	Medium	$2,645	King County		Reconstruct roadway. Pave shoulders. Provide separate equestrian facility.
N-58	124th Ave. NE/NE 173rd Pl. NE 169th St. to SR 202	Medium	(City)	Woodinville		Realign and widen exisiting lanes. Pave shoulders.

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PROGRAMMED AND PLANNED TRANSPORTATION FACILITY IMPROVEMENTS

Project #	Project and Location	Priority	Cost* 1994 (1000's)	Agency	Current CIP	Description
N-80	NE 141st St. Juanita Dr. to 84th Ave. NE	Low	$1,944	King County		Widen curb lane and stripe for bicycle use. Construct curb, gutter and sidewalk for continuity/safety needs.
N-84.1	93rd Ave. NE/ NE 124th St. Juanita Drive to 100th Ave. NE	Medium	(City)	Kirkland		Reconstruct roadway. Construct curb, gutter and sidewalk.
N-86	108th Ave. NE NE 141st Pl. to Juanita-Woodinville Way NE	Medium	$923	King County		Reconstruct and widen two lane roadway. Construct curb, gutter and sidewalk.
N-98	NE 155th St. (Arrowhead Dr.) 62nd Pl. NE to 61st Pl. NE	Low	(Private)	Private		Reconstruct shoulders. Construct walkway/pathway.
INTERSECTION/OPERATIONAL						
N-7.4	68th Ave. NE at NE 181st St.	High	$864	King County		Realign intersection to eliminate off-set and provide direct east-west flow.
N-13.2	100th Ave NE at NE 145th St.	High	$471	King County	Yes 101791	Install traffic signal and channelization. (See also N-11.2)
N-19.3	NE 160th Street at I-405	High	(State)	WSDOT	Yes (State's)	Widen overpass to 5/6 lanes with curb, gutter and sidewalk. Rebuild signals.
N-20.2	Slater Ave. at NE 120th St.	High	(City)	Kirkland		Install traffic signal.
N-23	73rd Ave. NE at NE 181st St.	High	$787	King County		Provide channelization. Improve pedestrian facilities.
N-24	84th Ave. NE at NE 138th St.	Medium	$300	King County		Channelization on NE 138th St. and on 84 Ave. NE. Construct curb, gutter and sidewalk at intersection and the approaches.

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Project #	Project and Location	Priority	Cost* 1994 (1000's)	Agency	Current CIP	Description
N-25	NE 128th St. at 120th Ave. NE			Kirkland	Completed	Install traffic signal.
N-29	172nd Ave. NE at NE 128th St.			King County	Completed	Reconstruct intersection and channelization. Install traffic signal.
N-31	SR 202 at 148th Ave. NE	High	$149	WSDOT King County	Yes (State's)	Reconstruct intersection and channelization. Install traffic signal. (See also N-33.4)
N-32	NE 146th Pl at 155th Ave. NE	Low	$383	King County		Realign intersection. Improve sight distance. Pedestrian and safety improvement.
N-46.2	I-405 at NE 116th St.	Low	(State)	WSDOT		Add westbound to southbound loop ramp to the interchange.
N-50.1	Woodinville-Duvall Road at 156th Ave. NE	High	(City)	Woodinville		Intersection/operational Improvements. Extend hill climbing lane and improve turn channel.
N-50.3	Woodinville-Duvall Road at 168th Ave. NE	Low	(City)	Woodinville		Intersection/operational Improvements. Add turn channels.
N-51	SR 522 61st Ave. NE to 80th Ave. NE	High	(Joint) (NCA)	WSDOT Private King County		Limit left turns, consolidate access for enhanced traffic flow. Construct curb, gutter and sidewalk. Construct median where appropriate.
N-53.1	Juanita Dr. at 76th Pl. NE (Holmes Pt. Drive and NE 122nd Place)	Medium	$329	King County		Realign intersection to eliminate offset. Improve sight distance. Install traffic signal.
N-55	68th Ave. NE at NE 170th St.	Medium	(NCA)	WSDOT King County		Coordinate traffic signals from NE 170th St. to SR 522. Intersection channelization improvements.

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Project #	Project and Location	Priority	Cost* 1994 (1000's)	Agency	Current CIP	Description
N-63	SR 522 at 83rd Pl. NE	High	$51	WSDOT King County		Traffic signal. Turn channels. Transit/HOV improvements.
N-64	SR 522 at 80th Ave. NE	High	(State)	WSDOT		Upgrade traffic signal. Transit/HOV improvements.
N-65	SR 522 at 68th Ave. NE	High	$189	King County WSDOT		Reconstruct Intersection. Turn channel, south leg. Add northbound travel lane to north leg.
N-66	73rd Ave. NE at SR 522	High	$531	WSDOT King County		South leg: widen, restripe to three lanes with Northbound right-turn lane. North leg: Restripe for exclusive south-bound left-turn lane. Construct curb, gutter and sidewalk. Upgrade traffic signal.
N-71.1	SR 527 at SR 522	High	(Joint)	WSDOT Bothell		Improve intersection; add eastbound thru lane; allow direct access to the south at Bothell Landing Center.
N-72	SR 202 (131st Avenue NE) NE 173rd Pl. to SR 522	High	(State)	WSDOT		Traffic signal coordination when warranted.
N-74.2	Simonds Road at NE 155th St.	High	$300	King County	Yes 101592	Intersection realignment with entrance to Inglemoor High School. Install signal.
N-75.5	NE 132nd St. 100th Ave. NE to 132nd Ave. NE	Medium	$393	King County Kirkland		Coordinate signals.
N-76	I-405/NE 124th St. Interchange I-405 to Kingsgate Way NE			WSDOT Kirkland	Completed	Reconstruct interchange.
N-79.1	NE 132nd St. at 108th Ave. NE			King County	Completed	Install signal with channelization.
N-79.2	NE 132nd St at 116th Way NE	High	$190	King County Kirkland		Intersection improvements. Add right- turn lane onto 116th Way NE.

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Project #	Project and Location	Priority	Cost* 1994 (1000's)	Agency	Current CIP	Description
N-79.3	NE 132nd St. at 120th Ave. NE			Kirkland	Completed	Intersection improvement. Install traffic signal.
N-83	NE 124th St. at 164th Pl. NE	Medium	$267	King County		Install turn channels and safety improvements.
N-96	76th Ave. NE at NE 163rd St.	Low	(Private)	Private		Intersection/operational Improvement.
N-103	I-405 at NE 195th St.	High	(Joint)	WSDOT Bothell		Reconstruct interchange ramps, widen bridge and install traffic signals.
N-104	SR 522 at NE 195th St.	Low	(State)	WSDOT		Complete north half of interchange; adding northbound on and southbound off ramps. Provide HOV treatment.
N-106	Woodinville-Snohomish Rd at NE 190th St.			King County	Completed	Install signal and realign intersection. Railroad crossing improvement.
N-109	Woodinville-Snohomish Rd. at NE 200th St.	Medium	(City)	Woodinville		Install traffic signal.
MISCELLANEOUS						
N-4	Missing Link Trail Tracy Owens Park to 80th Ave. NE			King County	Completed	Construct completion of Burke-Gilman Trail link with Sammamish River Trail.
N-6.2	NE 181st St. 62nd Ave. NE to 65th Ave. NE	Medium	(Private)	Private		Construct curb, gutter and sidewalk.
N-26	84th Ave NE NE 124th St. to Simonds Road	High	$787	King County		Pave shoulders and provide walkway continuity. Pedestrian safety issues.
N-27	NE 143rd Pl. 132nd Ave. NE to SR 202	Low	(City)	Woodinville		Pave shoulders for pedestrian/bicycle use.
N-33.3	Woodinville-Snohomish Rd./SR 202 NE 124th St. to NE 145th St.	High	(State)	WSDOT		Add turn channels where needed. Pave shoulders.

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Project #	Project and Location	Priority	Cost* 1994 (1000's)	Agency	Current CIP	Description
N-36	132nd Ave /130th Pl./130th Ave. NE NE 182nd Pl. to County Line	Low	(Joint)	Bothell Woodinville		Pave shoulders for pedestrian/bicycle use.
N-40	80th Ave. NE SR 522 to County Line	Low	$165	King County		Pave shoulders for pedestrian/bicycle use. Provide separate equestrian facility.
N-41	73rd Ave. NE NE 192nd St. to NE 205th St.	Low	$98	King County		Construct walkway/pathway for pedestrian use. Provide separate equestrian facility. Pave shoulders.
N-42	NE 132nd St./87th Ave NE 84th Ave. NE to NE 134th St.	Medium	$156	King County		Pave shoulders for pedestrian/bicycle use.
N-53.2	NE 122nd Pl. /NE 123rd St. Juanita Drive to 84th Ave. NE	Medium	$272	King County		Pave shoulders - link to Juanita Drive bikeway for pedestrians and bicyclists.
N-56	108th/112th Ave. NE Riverside Dr. to NE 164th Pl.	Medium	$946	Bothell King County		Reconstruct and pave shoulders to provide space for slow moving uphill cyclists.
N-57.1	88th Ave. NE NE 180th St. to County line.	Low	$196	King County Bothell		Pave shoulders to provide connection to Bothell bicycle facilities and the Burke-Gilman/Sammamish River Trail corridor.
N-57.2	83rd Pl. NE SR 522 to 88th Ave. NE	Low	$272	King County		Pave shoulders for safer uphill bicycle/pedestrian route to Bothell West Hill from the Burke-Gilman/Sammamish River Trail on the west.
N-59	68th Ave. NE/NE 202nd St. NE 185th St. to 61st Pl. NE	Medium	$536	King County		Create neighborhood pathway system within road right-of-way using soft materials to improve equestrian/pedestrian access.
N-60	156th Ave. NE NE 190th St. to County line.	Low	(City)	Woodinville		Reconstruct and pave shoulders for bicycle/pedestrian safety.

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Project #	Project and Location	Priority	Cost* 1994 (1000's)	Agency	Current CIP	Description
N-73	61st Ave. NE SR 522 to County line	Medium	(NCA)	King County		Remove pavement buttons, develop striped and signed bike lanes for safety. Feeder route to the Burke-Gilman Trail.
N-74.1	Simonds Road 200' west of 100th Ave. NE	Low	$65	King County		Construct walkway/pathway for pedestrian use.
N-74.3	Simonds Road Juanita Dr. to 100th Ave. NE	Low	$114	King County		Pedestrian improvements. Add striped and signed bicycle facility for safety.
N-81	North Creek Trail Sammamish River Trail to NE 195th St.	High	(Joint)	Bothell Private		Construct new trail connection from existing Sammamish River Trail to business park/employment center bicycle/ pedestrian facilities in North Creek Valley and Snohomish County system.
N-85	Hollywood Hill Loop Pathway System NE 160th St., 156th Pl. NE, 160th Pl. NE, 168th Ave. NE, NE 143rd St., 155th Ave. NE/NE 153rd St., 158th Ave. NE	Low	(NCA)	King County		Complete neighborhood pathway system within road right-of-way using soft surface materials to improve equestrian/pedestrian access.
N-87.1	NE 185th St. 66th Ave. NE to 68th Ave. NE	Low	(Private)	Private		Construct curb, gutter and sidewalk.
N-89.1	172nd Ave. NE NE 116th St. to NE 138th St.	Low	$214	King County		Create neighborhood pathway system within road right-of-way using soft surface materials to improve equestrian/pedestrian access.
N-89.2	164th Ave. NE/167th Ave. NE 172nd Ave. NE to Woodinville-Duvall Road	Low	$105	King County		Create neighborhood pathway system within road right-of-way using soft surface materials to improve equestrian/pedestrian access.
N-89.3	Du Roche Road 172nd Pl. NE to Woodinville-Duvall Rd.	Low	$153	King County		Create neighborhood pathway system within road right-of-way using soft surface materials to improve equestrian/pedestrian access.

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Project #	Project and Location	Priority	Cost* 1994 (1000's)	Agency	Current CIP	Description
N-89.4	176th Ave. NE, Woodinville-Duvall Rd. to NE 195th St.	Low	$105	King County		Create neighborhood pathway system within road right-of-way using soft surface materials to improve equestrian/pedestrian access.
N-89.5	168th Ave. NE NE 143rd Pl. to approximately NE 140th St.	Low	$89	King County		Create neighborhood pathway system within road right-of-way using soft surface materials to improve equestrian/pedestrian access. Equestrian trail access. (Sunrise)
N-90	NE 195th St. 166th Ave. NE to 176th Ave. NE	Low	(Joint)	Woodinville Private		Create neighborhood pathway system within road right-of-way using soft surface materials to improve equestrian/pedestrian access.
N-94	98th Ave. NE NE 116th St. to NE 120th Pl.	Medium	(City)	Kirkland		Pedestrian crossing signals.
N-126	71st Ave. NE (approximately) NE 181st St. to SR 522	Low	(Private)	Private		Dedicated pedestrian pathway.
N-129	NE 175th St. 131st Ave. NE to 140th Ave. NE	Low	(City)	Woodinville Private		Construct landscaped median as appropriate.
TRANSIT/HOV						
N-T6.1	Bothell Transit Hub	High	(Metro)	Metro RTP +		Construct new transit hub in Bothell.
N-T6.2	Kenmore Transit Hub	High	(Metro)	Metro RTP +		Construct new transit hub in Kenmore CBD.
N-T6.3	Woodinville Transit Hub	High	(Metro)	Metro		Construct a new transit hub and provide bus layover space at the existing Park & Ride lot.

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N-T12.1	I-405 SR 520 to NE 195th St.	High	(State)	WSDOT	Yes (State's)	Construct northbound & southbound HOV lanes. Install ramp metering and queue bypass at interchanges.
N-T12.2	I-405 NE 195th St to I-5 (Swamp Creek)	Medium	(State)	WSDOT		Construct northbound & southbound HOV lanes. Install ramp metering and queue bypass at interchanges.
N-T16	North Kirkland/Totem Lake HOV Corridor Study	High	(Joint) (NCA)	Metro WSDOT King County Kirkland		Corridor study to determine feasibilty of HOV treatment on arterials between NE 132nd St. and NE 116th St.
N-T17	NE 124th St. HOV Corridor Study	High	(Joint) (NCA)	Metro Kirkland King County WSDOT		Corridor study to determine feasibilty of HOV treatment on NE 124th St. and Slater/NE 116th St. between I 405 and Willows Rd. To be done in conjunction with NE 124th St. corridor improvements.
N-T22	New Woodinville Park & Ride Lot	Medium	(Metro)	Metro		Study feasibilty of siting and constructing a new lot in north Woodinville.
N-T23	New Kenmore Park and Ride Lot	High	(Metro)	Metro		Relocate existing Northshore lot within Kenmore CBD possibly south of SR 522.
N-T29	Expand Park & Ride lots: Bothell Kenmore Kingsgate Brickyard Road	Medium	(Metro)	Metro		Provide additional parking stalls and facility improvements.
N-T31	High Capacity Transit Station Location Study I-405 corridor	High	(Joint) (NCA)	Metro RTP + King County Kirkland WSDOT Bothell		Siting analysis for determining where major access points will be located for future high capacity transit.

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N-T51	SR 522 NE 145th St. to 96th Ave. NE	High	(State)	WSDOT		Provide eastbound & westbound HOV improvements.
N-T54	NE 116 St. 98th Ave. NE to I-405	High	(Joint)	Metro Kirkland		Provide eastbound HOV treatment. Joint use as bicycle lane.
N-T70	68 Ave. NE Simonds Road to SR 522	High	(NCA)	Metro King County		Study feasibility of northbound HOV treatment.
N-T72	NE 124th St. I-405 to 124th Ave. NE	High	(Joint)	Metro Kirkland WSDOT		Add westbound HOV improvements.
N-T73	SR 202 Transit/HOV study NE 175th St. to SR 522	Medium	(Joint) (NCA)	Metro WSDOT King County Woodinville		Corridor study to determine feasibility of HOV treatment along SR 202 and Woodinville CBD.
BRIDGE						
N-62	Kenmore Bridge 68th Ave. NE xing Sammamish River			King County	Completed	Resurface two parallel bridge structures. Improve railings and curb.
N-67	SR 522 Pedestrian overcrossing east of 73rd Ave. NE	High	(Joint)	Metro WSDOT		Pedestrian overcrossing for access to Kenmore Park and Ride lot.
N-82	I-405 Overpass at NE 140th St. or NE 145th St.	Low	$617	King County WSDOT		Pedestrian/bicycle bridge over I 405.
N-91	Lower Swamp Crk Br.:5015 NE 175th St. at 80TH Ave. NE	High	$656	King County		Replace bridge.

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N-108	SR 522 West of 68th Ave. NE	High	(Joint) (NCA)	Metro WSDOT King County Private		Pedestrian bridge over SR 522. Access to transit hub and mixed use area.
STUDY						
N-19.1	South Woodinville CBD/I-405 Access 124th Ave. NE to Woodinville CBD	Low	(City)	Woodinville		Conduct corridor study for feasibility and route location.
N-33.5	Woodinville-Redmond/148th Ave. NE NE 124th St. to NE 171st St.	Low	(NCA)	King County Woodinville		Construct frontage road where appropriate, for agricultural purposes, to limit thru traffic conflicts, to limit access and improve safety.
N-69	Kenmore CBD Recirculation			King County	Completed	Analysis to determine area circulation, project feasiblity and identify future right-of-way.
N-75.1	NE 132nd St. 100th Ave. NE to Willows Rd Extension	High	$59	King County Kirkland		Feasibility study for widening to 3 lanes plus possible HOV treatment.
N-78.1	Willows Road/NE 132nd St. Extension	High	$300	King County Woodinville		Conduct study to determine new feasibility/needs for road alignment.
N-95	Hollywood Hill Neighborhood Circulation Study. 148th Ave. NE/ Woodinville-Redmond Rd., NE 124th/ 128th St., Avondale Rd., NE 171st/175th St.	Low	$56	King County		Establish neighborhood circulation guide.
N-97	Wellington Neighborhood Circulation Study. County line, Woodinville-Duvall Rd, 156th Ave. NE, 182nd Ave. NE	Medium	$35	Woodinville King County Snohomish Co.		Establish neighborhood circulation guide.

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N-102	SR 522 I-5 to SR 9				Completed	Conduct Route Development Plan.
N-105	West Kenmore SR 522 to NE 193rd St.	High	$28	Lake Forest Pk. King County		Circulation/neighborhood traffic control study.
N-T16	North Kirkland/Totem Lake HOV Corridor Study	High	(Joint) (NCA)	Metro King County WSDOT Kirkland		Corridor study to determine feasibilty of HOV treatment on arterials between NE 132nd St. and NE 116th St.
N-T17	NE 124th St. HOV Corridor Study	High	(Joint) (NCA)	Metro King County Kirkland WSDOT		Corridor study to determine feasibilty of HOV treatment on NE 124th St. and Slater/NE 116th St. between I 405 and Willows Rd. To be done in conjunction with NE 124th St. corridor improvements.
N-T31	High Capacity Transit Station Location Study I-405 corridor	High	(Joint) (NCA)	Metro RTP + King County WSDOT Kirkland Bothell		Siting analysis for determining where major access points will be located for future high capacity transit.
N-T73	SR 202 Transit/HOV study NE 175th St. to SR 522	Medium	(Joint) (NCA)	Metro WSDOT King County Woodinville		Corridor study to determine feasibility of HOV treatment along SR 202 and Woodinville CBD.

*** Cost is King County cost only.**
+ Regional Transit Project
NCA = No Cost Available

V. Nonmotorized Transportation Facility Improvements

Nonmotorized considerations and improvements are an important part of the transportation system in Northshore. Three figures illustrate improvements to the transportation system addressing bicycle, pedestrian and equestrian concerns. Projects identified emphasize bicycle and pedestrian improvements in conjunction with road improvements. These projects are described in the Planned Transportation Capital Improvements Table.

The identification of nonmotorized needs for the Northshore Community Plan comes from a number of different sources, including bicycle and equestrian clubs, interested citizens, and input received at Northshore open houses. Additionally, the King County RoadShare program has been collecting information on roadway conditions which affect bicycle safety and access as a component of an on-going mapping process. The Eastside Transportation Program identified bicycling system needs which were incorporated into their Recommendations Report. These needs are integrated into the planned projects in the Northshore Community Plan.

Chapter 5 Utilities and Services

Utilities are necessary for all types of development. Roads, sewage disposal, water, electricity, energy sources and telephone are examples of utilities required for modern living. Many of these utilities, such as sewage disposal and water supply, must be carefully regulated to protect public health and safety. Service needs vary with different levels of development. Urban areas require a far greater range of services than rural and resource areas. These include such things as increased fire and police protection, more schools and parks, increased maintenance of public roads, transit, surface water management, and increased human services. Utilities and services should be planned at levels appropriate for the land uses anticipated by this plan. This chapter outlines policies for design, development and location of necessary utilities and services as well as appropriate levels of service.

The 1990 State Growth Management Act (GMA) lists adequate provision of public facilities and services necessary to support development as one of the 12 primary goals of the GMA. The GMA directs that urban growth areas be planned for the full range of urban facilities and services and that rural and resource areas should be planned for appropriate utilities and services based on anticipated growth. The GMA states that cities are the appropriate purveyor of urban governmental services such as those listed in the previous paragraph. The GMA also requires utility comprehensive plans, such as sewerage general plans, be consistent with land use plans.

The 1985 King County Comprehensive Plan provides a framework for Countywide facility and service planning. The Comprehensive Plan is similar to the State Growth Management Act in directing services and utilities to be provided at levels appropriate for planned growth in urban and rural areas. The Comprehensive Plan states that costs should be kept as low as possible for new facilities. To do this, extension of utilities should be paid for primarily by those who benefit, should avoid reducing service levels to existing communities and should be timed to both prevent problems before they require a remedy and to avoid premature excess capacity. Facility planning should be linked to land uses outlined in community plans.

Utilities

The Comprehensive Plan prefers sanitary sewers in urban areas (with certain exceptions specified in policy F-314) and designates via the Sewerage General Plan the areas appropriate for sewer service through the sewer "Local Service Area" (LSA). The LSA is a geographical area within which sewers are allowed. Sewers are not permitted outside the LSA. The Comprehensive Plan would allow septic tanks when they adequately treat wastewater or when continued low densities support their long term use. In rural areas, the Comprehensive Plan foresees continued use of septic tanks.

The following policy directs regional utility and service providers to plan for the full range of services and utilities in urban areas, and to avoid environmental degradation when planning for new utilities.

U-1 **King County and affected utility service providers should plan for the urban growth areas to have urban levels of utility service.**

U-2 **Utilities should be designed, located, and constructed to avoid sensitive environmental areas. Any exceptions to this policy shall be consistent with the Sensitive Areas Ordinance.**

Water Service

The entire Northshore area, with the exception of limited areas within the southeast portions of the planning area, is within the service areas of Class 1 water systems of Woodinville and Northeast Lake Washington Water Districts. Class I water systems are those with 100 or more customers. This plan acknowledges these county-approved service areas and supports new development in these service areas to be served by these purveyors. Class I water systems provide stable water supply, ensuring high quality drinking water with enough flow to meet fire protection standards in urban areas.

U-3 **All of the Northshore planning area is designated a water service area and is within the east King County critical water supply service area. Any new development within the planning area should be required to be served by public water systems as defined by WAC (248.54) and provided for consistent with the coordinated water system plan for the area.**

U-4 **The existence of public water service in designated rural areas shall not result in or be justification for higher residential density than anticipated by the Northshore Plan. Therefore, in designated rural areas, water purveyor comprehensive plans must:**

A. **Design system improvements for a rural level of service consistent with the design standards of the East King County Coordinated Water System Plan, and**

B. **State that such expansion shall not require increased densities to finance planned facilities.**

Increased densities in designated rural areas would not be consistent with the State Growth Management Act or the Comprehensive Plan. To be consistent with state and regional policies, water purveyors should explicitly state that water service is intended to serve only development levels anticipated in the Northshore Plan. Facility design should reflect rural residential densities in these areas.

The County's Utilities Technical Review Committee will review water system comprehensive plans and recommend to the County Council whether these plans meet this policy as well as any other criteria contained in this plan affecting the expansion of public water systems into rural areas.

Wastewater Disposal

Wastewater treatment is generally provided from two sources: public sewers and individual septic systems. It is generally recognized that densities of three units per acre and greater are necessary to support public sewer systems. In addition, sewers are considered to be part of the appropriate package of services in higher density urban areas. The Growth Management Act directs incorporated areas to provide all urban services. Sewer service is an important urban utility that is anticipated within the Urban Growth Areas.

Servicing sewers in lower density areas can be very expensive. Therefore, sewers should be planned only for the anticipated urban growth areas.

When in areas outside the local service area an on-site sewage disposal system fails, and actions to restore the system are impossible, extension of sewer lines to the affected property should be permitted. However, the extended lines should not serve properties other than those with system failure.

U-5 Public sewers are the preferred method for wastewater treatment in urban growth areas.

The Sewer Local Service Area (LSA) is established by the 1979 King County Sewerage General Plan. The 1981 Northshore Plan delineated an LSA boundary for Northshore. Northshore Plan Update modifies the LSA boundary to match the Urban Growth Area boundary defined in Chapter 1. It will replace the LSA established in the 1981 Northshore Plan and amend the Sewerage General Plan. The map, Proposed Water and Sewer Local Service Areas, shows the boundaries for water and sewer service.

The following policy acknowledges environmental constraints that preclude sewer service in certain areas within the LSA. Sewer service is anticipated everywhere else within the LSA.

U-6 The Northshore Plan recognizes certain areas within Norway Hill areas that are within the local service area as unsewered, due to severe environmental constraints such as steep slopes, and erosive soils, conditions. These areas should be allowed the continued use of on-site systems, if soil conditions permit.

U-7 If sewer lines are extended to the Swamp Creek area, they should be designed and located to avoid impacts to environmentally sensitive areas such as floodplains, and stream crossings should not be allowed.

U-8 In accordance with Northshore policy R-8, King County recognizes on-site wastewater disposal systems as the permanent means to wastewater disposal in low density urban areas (areas of one d.u. per acre) and rural and resource areas. No extensions of the sewer local sewer area (LSA) should be permitted in these areas, unless the stipulations of policy U-9 are met.

U-9 If on-site sewage disposal system failures occur in urban areas located outside the sewer local service area or low density urban areas within the local service area of Northshore Community Plan, septic tank management and/or alternative methods of sewage disposal shall first be considered. If these alternatives are not feasible and a sewer tight-line must be placed through a low density urban area, sewer service shall be geared to only serve the specific problem area which has experienced failures in existing disposal systems and King County shall prohibit any other connections within the low density urban area.

Services

Services include schools, fire and police protection, transit, recreational programs, solid waste disposal, health care, daycare, and human services. Some of these services are provided by government, others by private purveyors. The Growth Management Act requires urban levels of service in urban areas. The Act begins to define urban services that are appropriately provided by cities. This has stimulated regional discussions about service provision. Local and regional jurisdictions are in the process of assessing which services can most efficiently be provided at a regional (Countywide or several counties) level and which services are more efficient and effective at the local (citywide) level. Regional services could include transit

and regional sewage management, health services, solid waste disposal, courts and jails, property assessment, tax collections and elections. Local services could include garbage collection, street lighting, police and fire services, local parks and land use controls (such as zoning and development standard) within municipality limits.

The Growth Management Act authorizes local jurisdictions to require impact fees for parks, open space, recreation facilities, school facilities and fire protection facilities so long as these facilities are addressed by a capital facilities element of a comprehensive land use plan. System improvements required of new development must be reasonably related to that development and are limited to a proportionate share of costs. Services that are not provided by the County have their own comprehensive and capital improvements plans. These are noted for each service.

While this plan does not propose policies to guide all services in Northshore, these services complement and reinforce land use decisions. Important services are highlighted below:

School Service

Two school districts serve Northshore. The Lake Washington School District (#414) covers the southern half of the planning area, as well as the cities of Kirkland, Redmond and portions of the Bear Creek planning area to the east. The Northshore School District (#417) includes the northern half of the planning area, Bothell and portions of the Bear Creek planning area. (See the Map, School and Fire Districts.) Both school districts have experienced dramatic enrollment increases in the 1980s. In 1988, Lake Washington School District had approximately 20,000 students. By the year 2000, the District anticipates upwards of 35,000 students. Northshore School District had approximately 15,000 students in 1988, and anticipates slightly over 30,000 students by the year 2000. Of the nineteen school districts in King County, Lake Washington School District is the second largest (Seattle School District is the largest), Northshore School District is the fourth largest district in the County.

Both the Northshore and Lake Washington School Districts anticipate a shortfall of funds necessary to house projected student increases. In order to address this problem, which exists in other school districts in King County, the King County Council passed a school mitigation ordinance in January, 1991. This ordinance requires new single and multi-family housing to pay a fee to the school district to offset the impacts of new students generated by the development. If the school district will not have the capacity to accommodate the new students generated by a given proposal, King County may deny the development. This ordinance will assure that the impacts of new developments on school system capacities will be minimal. This plan fully supports the school mitigation ordinance.

U-10 **This plan supports a school mitigation system which requires new development to offset the impacts of new students on the existing school system.**

Fire Protection

Northshore is served by Fire Districts #16, #42 and #36, and the Kirkland Fire District. The Districts do not respond to calls solely by geographic boundaries, but by a response system established through the 911 program.

Police Protection

Police service in Northshore is provided by the King County Sheriff. The Northshore area is served by precinct number two, located at 18118 73rd Avenue N.E. in Kenmore. Precinct two has a minimum of six cars in the field at all times, with more available during high demand periods. The cities of Bothell, Kirkland, and Redmond provide their own police coverage.

Library Services

Library service is provided in King County by the King County Library System, which is an independent public agency operated as a special purpose district of the County. The System provides service throughout the County, with the exception of the City of Seattle. Following is a list of libraries and their features serving the Northshore area:

Kenmore Library 2,100 square feet, located at 18138 73rd Avenue in Kenmore.

- 24,000 items in collection

Bothell Library 10,000 square feet, located at 9654 NE 182nd Street in Bothell.

- 90,000 items in collection
- meeting room available for public gatherings
- this library is planned to be rebuilt by 1995 as a regional library, with 25,000 square feet of floor area and a large reference section, providing a library anchor for the northeast Eastside area.

Kingsgate Library 10,000 square feet, located at 12315 NE 143rd in the Kingsgate Community Center.

- 92,000 items available

Traveling Library Center (T.L.C.)

- mobile library service available for shut-ins, retirement homes, and other people or organizations which have difficulty getting to libraries.
- service available by calling 684-6666.

All libraries, including the Traveling Library Center, have access to the entire King County Library System, which holds over two million items.

Solid Waste Disposal

Garbage disposal in King County is coordinated by the King County Department of Solid Waste. Collection services are contracted to Sno-King Disposal, which takes solid waste to the Cedar Hills landfill in Renton. Transfer stations, which accept large amounts of solid waste from individuals, are located at Northeast 60th

Street and 116th Northeast in Kirkland (Houghton Transfer Station) and North 165th and Meridian North in Seattle (First Northeast Transfer Station).

The Department of Solid Waste completed a Solid Waste Comprehensive Plan in 1990 which guides garbage disposal and recycling service planning. The Plan identified a need for a transfer station within or close to the Northshore planning area, because transfer facilities serving the Northshore are currently operating above their designed capacity.

Curbside recycling is provided, along with normal garbage pick-up, by Eastside Disposal. Recyclable items may also be taken to recycling pick-up stations. These are located at the following locations:

Recycle America Recycle Center
6225 223rd St. SE
Woodinville, WA 98072
(in Snohomish County)
accepts newspaper, cardboard, plastic bottles, glass, and aluminum

Arrow Metals Corp.
6014 273rd Place SE
Woodinville, WA 98072
(in Snohomish County)
accepts all types of metals

Northwest Wood Recycling/North
7601 222nd Avenue SE
Woodinville, WA 98072
(in Snohomish County)
accepts clearing debris, stumps, and brush

Pacific Topsoils
14002 35th Avenue SE
Bothell, WA 98012
(in Snohomish County)
accepts yard and garden waste and some other materials

Recycling bins are also located at both the Houghton and First Northeast transfer stations.

Human Services

Human services are provided by the Federal and State governments, King County, and numerous non-profit organizations. The range and depth of services provided are extremely wide. For example, the King County Department of Human Services has programs for child care, extension education, veterans, women, work training, youth, mentally ill, the aging, the developmentally disabled, substance abuse, and public defense. The Crisis Clinic, a non-profit United Way Agency that has been operating in the King County area since 1964, has a community information line that provides information on services provided by 2400 human service agencies and organizations. Specific questions on services can be answered by them at 461-3200 or 1-800-621-4636.

Health Care

Affordable health related services are available to the residents of the Northshore area. The Community Clinic in Bothell, an independent non-profit agency, provides low cost health care on a sliding scale based on income and need. The Seattle-King County Health Department has several programs located in the

Northshore area. Women, Infant and Children (WIC) provide health assessment, nutrition education, referrals and supplemental food to pregnant and breast-feeding women, infants and young children. Public health nurses provide home visits to pregnant and parenting families. Health assessment and monitoring, medication review, nutrition counseling and foot care is provided at the Northshore Senior Center in Bothell. Health education, screening and nurse/nutritionists consultation is available to the child day care facilities. Other Health Department services, located at other sites are available to residence of Northshore. They include services regarding AIDS, child health clinic, child birth classes, dental care, environmental health services, family planning and sexually transmitted disease clinic, immunization clinic, maternity screening clinic, and parenting education groups.

Regional and Local Parks

Regional and state parks are provided by the Washington State Parks and Recreation Commission. Regional and local parks are furnished by the King County Parks Division. Parks are discussed in Chapter 8, Parks and Open Space. This plan provides a Capital Improvement list for regional parks. Local parks are also provided by the incorporated cities of Bothell, Kirkland, Redmond and Lake Forest Park.

Recreational Programs

Recreation programs and facilities are available to residents year-round throughout the Northshore community. Classes, leagues, and special events for preschool through senior adult participants are offered for art, sports, health, fitness, and outdoor recreational interests, and are held primarily at neighborhood schools and parks.

Northshore parks with shelters available for reservation by individuals and groups include Kenmore's Rhododendron Park, and Juanita Beach, O.O. Denny, and Juanita Creek Parks in Juanita. (These sites accommodate groups up to 100). Gold Creek Lodge in Woodinville offers a rustic indoor environment with lobby/meeting room, kitchen, and sleeping lofts.

For program or scheduling information, call King County Park's Northshore/Shoreline Recreation District at 296-2976.

Corrections Facilities

Inmates convicted with less than a year sentence for non-Federal crimes are held at the King County Correctional Facility in downtown Seattle. King County is currently seeking a site for an additional jail. Inmates convicted with greater than a one year sentence for a non-Federal crime are placed in one of many State facilities throughout the state. Federal prisoners are held in one of many Federal correctional facilities.

Roads

Public roads are provided by King County Public Works and the Washington State Department of Transportation. Within the Northshore area, State Routes 522 and 202 and Interstate 405 are operated by the State, and the remainder of the public roads are operated by King County. Facilities and improvements are discussed in Chapter 4, Transportation.

Transit

Transit services to the Northshore are provided by METRO and Community Transit of Snohomish County. This plan identifies transit improvements linked to the Northshore Land Use in Chapter 4.

Surface Water Management

The King County Division of Surface Water Management regulates stormwater drainage quantity and quality throughout the County, by establishing stormwater detention requirements on new developments and by constructing regional detention facilities in areas where drainage problems exist in built areas. Surface Water Management also provides floodplain management, including in the Sammamish River Valley.

Water

Water is supplied to the Northshore area by the Seattle Water Department's Cedar and Tolt River watersheds. Water is carried to the area by the Tolt River Pipeline No. 1 and the Tolt Eastside Supply Line. The water is then distributed by the Northeast Lake Washington Sewer and Water District and the Woodinville Water District. District boundaries are shown on map, Water and Sewer Local Service Areas.

Sewer

Sewage service to the Northshore area is also provided by the Northeast Lake Washington Sewer and Water District and the Woodinville Water District. The areas where sewer service may be provided are determined according to the policies of this plan and the King County Comprehensive Plan and are delineated on the map, Water and Sewer Local Service Areas. Sewage from each system discharges to regional METRO trunk lines, ultimately arriving at the Seattle West Point and Renton treatment plants.

Electricity

U-11 **Recognizing electric utilities' State-regulated "public service obligation," the State's Procedural Criteria for utilities elements of comprehensive plans, Growth Management Act requirements for including the location and capacity of existing and proposed electrical lines in utilities element, and the need for timely inter-jurisdictional coordination in the planning and provision of electrical service, the Northshore Community Plan recognizes existing electrical facilities and anticipates that proposed facilities will be considered as part of a Countywide review of utility facilities and corridors.**

Electrical power is supplied to the Northshore area by Puget Power, which is currently planning to accommodate the future growth of the Northshore area. Puget Power has prepared and submitted an attached map and written description of existing facilities within the Northshore subarea and a list of projects in progress and prepared for the area to 2020, which are part of the company's "King County GMA Electrical Facilities Plan," December 1992. All proposed and in-progress projects described herein shall be subject to normal review at time of development.

Existing Electrical Facilities Inventory

Unincorporated Areas:

Transmission Substation: None

Distribution Substations: Kenmore, Inglewood, Lake Leota

Transmission Lines (230kV):
(SCL) Bothell-Sammamish
Puget Power owns, operates and maintains this line
(SCL) Maple Valley-SnoKing #1
Seattle City Light owns, operates and maintains this line

(SCL) Maple Valley-SnoKing #2 - presently de-energized
Puget Power leases this line from Seattle City Light

Transmission Lines (115KV):
Beverly-Kenmore, Beverly-Cottage Brook, Cottage Brook-Wayne, Sammamish-Inglewood, Halls Lake Tie, Sammamish-Vitulli

Transmission Lines (Below 115kV): None

Incorporated Area (Bothell - Northshore portion):

Distribution Substations:
North Bothell, Vitulli, Wayne, Norway Hill

Transmission Line (230kV):
(SCL) Bothell-Sammamish
Puget Power owns, operates and maintains this line
(SCL) Maple Valley-SnoKing #1
Seattle City Light owns, operates and maintains this line
(SCL) Maple Valley-SnoKing #2 - presently de-energized
Puget Power leases this line from Seattle City Light

Transmission Lines (115KV):
Beverly-Kenmore, Beverly-Cottage Brook, Cottage Brook-Wayne, Sammamish-Vitulli

Transmission Lines (Below 115kV): None

Other Utilities with Electrical Facilities in Bothell:

Seattle City light
Snohomish County PUD

Incorporated Area (Kirkland - Northshore Portion)

Distribution Substations: Juanita

Transmission Line (230kV):
(SCL) Maple Valley-SnoKing #1
Seattle City Light owns, operates and maintains this line
(SCL) Maple Valley-SnoKing #2 - presently de-energized
Puget Power leases this line from Seattle City Light

Transmission Lines (115KV):
Sammamish-Inglewood

Incorporated Area (Redmond - Northshore portion)

Distribution Substations: Totem

Transmission Line (230kV):
(SCL) Bothell-Sammamish

Puget Power owns, operates and maintains this line

Transmission Lines (115kV):
Sammamish-Vitulli

Incorporated Area (Woodinville - Northshore portion)

Distribution Substations: Hollywood

Transmission Lines (115kV):
Beverly-Cottage Brook, Cottage Brook-Wayne

Chapter 6: Agricultural Lands

Productive farmland is an irreplaceable and limited resource in King County. Less than 50,000 acres remain in agricultural production in the County. In the Northshore planning area, the Sammamish River Valley contains 1,150 acres of some of the County's richest soils and prime agricultural land. Agricultural uses include commercial food, horticultural crops, and livestock pasture.

The Sammamish River Valley was first farmed by settlers in the early 1900's. The lowering of Lake Washington and the creation of the Ballard Locks in 1912 exposed more fertile riverbottom lands for crop production.

Farming was a predominant lifestyle in the Sammamish Valley until the 1950s. The combination of an ever-growing population in the Puget Sound area and the growth in suburban development, development located outside urban areas, has resulted in the conversion of many acres of Sammamish Valley farmland to residential and commercial uses. Due to its characteristics and location, a relatively small agricultural area located between the rapidly growing urban areas of Redmond, Woodinville, and Bothell, it is anticipated that the pressure for conversion of the farmland in the Sammamish River Valley to non-farm uses will continue to increase in the future.

King County residents have consistently supported efforts to preserve farmlands for their aesthetic, environmental and historic value as well as the economic value of locally grown crops, dairy products and livestock. There are three policy and regulatory documents which are particularly relevant to the preservation of agricultural lands:

- 1979 Farmlands Preservation Program
- 1985 King County Comprehensive Plan
- 1989 Resource Area Zoning Program

The map Agricultural Production District shows the boundaries of these plans and programs.

1979 Farmlands Preservation Program

In 1979, King County voters approved a $50 million bond sale to finance the purchase of the development rights of voluntarily offered farmland threatened by encroaching urbanization. The primary goal of this program was to preserve for agricultural uses much of the remaining high quality farmland in King County. It was never the County's goal to preserve each acre of eligible land. Instead, the goal was to preserve a

"critical mass" of farmland, in large, relatively contiguous blocks, enough land so that the local agricultural infrastructure of farm suppliers and marketing outlets would be assured of an economic base for continued operation.

The land included in the Farmlands Preservation Program remains in private ownership, but development of the land is limited by restrictive covenants contained in the deed to the property. These covenants remain with the land when the property is sold, bequeathed to heirs, leased or annexed by another jurisdiction, thus assuring that the resource will remain available for agricultural purposes in perpetuity.

The limitations established by the covenants include the following:

- The land is restricted to only agricultural or open space uses, although there is no explicit requirement that it be continually farmed nor any limitation on the type of farming conducted.
- The number of dwelling units allowed on the land is permanently restricted, generally to one dwelling per 35 acres.
- Subdivision of the preserved properties is also limited to creating no parcel smaller than 10 acres in urban areas or 20 acres in rural areas.
- Development on protected lands is restricted to ensure that at least 95 % of the land remains open and available for cultivation.

At the program's end in 1986, the development rights for about 734 acres in the Sammamish Valley and 79 acres in Kenmore had been purchased. These Northshore farmlands represent 6.4% of the farmland development rights purchased Countywide.

1985 King County Comprehensive Plan

One of the goals of the Comprehensive Plan is to "conserve natural resource lands for long-term agriculture, forestry and mining." The primary strategy for achieving this goal is to designate resource management districts, and to plan for land uses within and adjacent to the districts that will be compatible with and prevent disruptions to resource industries such as farming and forestry. The inclusion of resource lands in Countywide districts reduces the points of contact and conflicts with non-resource uses.

The Comprehensive Plan policy RL-101 sums up the intent of the resource land designation.

> RL-101: King County should conserve farmlands, forest lands and mineral resources for productive use by designating Resource Lands where the principal and preferred land uses will be commercial resource management activities. Land uses adjacent to designated Resource Lands should be designed and sited to ensure compatibility with resource management.

"Agricultural production districts" (APDs) were designated and mapped in the Comprehensive Plan to include a predominance of lands which meet the following criteria:

- Soils are capable of productive agriculture (Class II and Class III soils);
- Land is cleared and undeveloped;
- Parcel sizes are predominantly 10 acres or larger; and

- The land is currently used, or has historically been used, for agriculture.

APDs are intended to be long-term designations, changed only through amendments to the Comprehensive Plan.

King County's best farm soils and most profitable commercial farms are usually found in contiguous blocks with few non-agricultural uses. These areas present the fewest land use conflicts for agriculture, contain agricultural support activities, and provide the best environment for farming in King County. Some undeveloped parcels with good soils or active individual farms are also found outside these districts, surrounded by non-resource land uses, but contributing to community diversity. King County focuses its strongest efforts to conserve lands within designated APDs where continued agriculture is most likely, but also encourages and supports agriculture outside of APDs where possible.

Agriculture is most productive in large agricultural communities where neighbors support agriculture and where labor, farm supplies and market systems for farm products are available. Agriculture can conflict with urban development, unless both land uses are carefully managed, as urban residents may trespass, damage crops and animals, and may object to the noise of farm animals and machinery, or farm odors. By establishing APDs, potential land use conflicts can be limited to the district boundaries, and adjacent land uses can be planned to reduce problems for agriculture.

1989 Resource Area Zoning Program

The purpose of the Resource Area Zoning Program was to implement those policies of the Comprehensive Plan which pertain to forestry and agriculture through the use of adopted forest resource and agricultural resource zoning. These new zones reflect the intent of the Comprehensive Plan to reduce the land use conflicts that often occur between resource land uses and other more intensive land uses, such as suburban residential development. This is accomplished through the establishment of large minimum lot sizes, careful designation of permitted land uses, and the use of buffer areas to help negate nuisance and trespass claims against both the resource land owner and adjacent land owner.

The agriculture zone implemented policies calling for preservation of the remaining agricultural land in King County. The zone has two minimum lot sizes to reflect the needs of different types of agricultural operations. A 10 acre minimum lot size is used in areas dedicated to the raising of crops, while a 35 acre lot size is used in areas where the dominant agricultural activity is raising livestock. The agricultural zone allows a range of activities compatible with agriculture, including processing and retailing of agricultural products and supplies, as well as residences for farmland owners and workers.

In the Northshore planning area, the Resource Area Zoning Program applied agricultural zoning to only a portion of the Sammamish Valley which was designated an Agricultural Production District in the 1985 Comprehensive Plan. Many of the these agriculturally zoned parcels have had their development rights purchased by King County and the application of the agriculture zoning does not affect the covenants and terms of the sales. The other properties included in the resource area zoning were considered suitable primarily for the cultivation of crops.

Preservation Of Farmlands

A-1 **Consistent with the covenants and restrictions attached to their deeds, lands with development rights purchased under the King County Farmlands Preservation Program should have an agricultural zoning designation that retains large parcels of 10 acres.**

A-2 **Lands located within the agricultural production district that were included in the 1989 Resource Area Zoning should retain an agricultural zoning designation of one home per 10 acres or greater.**

Situated among urban and rapidly urbanizing lands, agricultural uses in the Sammamish River Valley must be protected from intrusion by incompatible land uses. The Comprehensive Plan policy RL-302 states that land uses adjacent to APDs should be designated to minimize conflicts with agriculture.

The Comprehensive Plan policies reinforce the need to reduce the contact between rural area residents and agricultural activities. Nearby residents and domestic pets may trespass and damage crops and animals. Residents often object to the noise of farm activities, the smells of animals, or farming methods such as spraying. The conflict between residential and agricultural uses is well documented. The State of Washington has passed a "Nuisance Law" which indicated that if residential uses locate next to existing farm uses, the farm uses have a right to continue. Although this legislation establishes the legal priority of agriculture, it often does not reduce the conflict between the two uses. By establishing APDs, potential land use conflicts can be limited to the areas around the district boundaries. These areas can be planned to reduce problems for both land uses. Clustering residential lots, screening, and building set backs are recommended to further reduce potential conflicts between uses.

A-3 **To minimize potential conflicts between residential land uses and agricultural activities, new residential development adjacent to Agricultural Production District boundaries should be limited to land use designations at rural densities consistent with policy R-3. Subdivisions in these areas should be designed and sited to reduce potential conflicts between housing and agriculture, and to discourage trespass.**

Recreation Lands In The Agricultural Production District

The Comprehensive Plan recognizes the potential incompatibility of parks within an APD by discouraging the location of parks within an APD. Parks and farms are not necessarily good neighbors, since park users can trespass and damage crops, animals, and farm equipment. Recreation near and within APDs can, however, be planned to prevent trespass. Both private and public parks currently exist within the Sammamish River Valley APD. The benefits of these parks include open space, increased recreational opportunities, and creation of a buffer between farmlands and suburban development.

Past development pressures have resulted in the development of a number of parks on lands with prime agricultural soils. The privately owned Gold Creek Park (approximately 25 acres) provides swimming, fishing, horseback riding, tennis and other recreational facilities. The King County Council recognized this historical use and deleted the property from the APD recommended by the Resource Area Zoning Program. Three other parks exist within the general APD boundaries including a golf driving range and two soccer fields. The use of these lands as parks retains the fertility of the soils, and this land should be returned to agricultural production if these fields are retired from recreational use.

A-4 **New recreational facilities shall not be permitted within the Agricultural Production District. Completion of the Sammamish River Trail and expansion of existing recreational facilities shall be allowed. Any expansion of existing recreational facilities should be consistent and compatible with the long term preservation and protection of agricultural uses within the Agricultural Production District. Any such expansions shall be reviewed pursuant to a Conditional Use Permit.**

Commercial, Industrial and Tourism-Related Impacts

At the neck of the Sammamish Valley, along NE 145th St, the Hollywood Hill Neighborhood Center, several industrial properties and the Columbia and St. Michelle Wineries abut or are in close proximity to the Agricultural Production District. Tourism uses that are related to agriculture, such as wineries, are supported by this plan. Other commercial and industrial uses provide local goods and services for the agricultural area and surrounding residents. Policy A-5 limits residential uses next to the Agricultural Production District to rural residential uses. The following policies establishes use limitations, development review and buffers for non-residential uses adjacent to the Agricultural Production District. These policies also apply to other lands adjacent to the Agricultural Production District in Woodinville and at the southwest and southeast borders of the Valley.

A-5 **Nonresidential uses adjacent to the Agricultural Production District which are not related to agriculture should be limited to protect the integrity and character of the agricultural area. P-suffix conditions for these adjacent uses shall establish development criteria, limit uses that are not compatible and establish buffers adjacent to agricultural lands.**

A-6 **The importance of wineries and similar agriculturally related tourist uses within the Sammamish Valley is recognized. Wineries are complementary to agricultural uses; however, they contain a manufacturing component which does not conform to the criteria for lands within the Agricultural Production District. Therefore, new wineries should be located outside the Agricultural Production District, and within industrial areas. Expansion of an existing winery onto adjacent Rural-designated lands within the APD may be appropriate if found to be compatible with the long-term protection of agricultural uses within the APD. Any such expansion shall be reviewed pursuant to a Conditional Use Permit.**

Infrastructure In The Agricultural Production District

The Comprehensive Plan gives direction about the types and location of infrastructure that is located within and adjacent to an APD. The goal is to design necessary and appropriate public services and utilities within and adjacent to an APD to prevent negative impacts on agriculture and to maintain farmland acreage.

Given the very limited amount of agricultural land in King County, public road and utility projects must be designed and routed to maintain maximum farm acreage within districts, and to prevent disruption to agriculture. Roads that have adequate shoulders and signs to protect farm equipment from faster vehicles, for example, reduce conflicts with agriculture. Utilities in APDs are sometimes needed for the planned agricultural land uses, but the associated costs and impacts of utilities designed for urban uses may interfere with agriculture. Utility district annexation proposals, including water, wastewater, and drainage must therefore ensure that levies, assessments and services are consistent with preservation of long-term agriculture.

A-7 **Infrastructure expansion within the agricultural production district should be limited to existing corridors. Exceptions may occur when such actions are consistent with King County Comprehensive Plan policies governing the extension of public services and facilities within agricultural production districts.**

Chapter 7 Natural Resources

Natural resources in Northshore are affected by human activities. Direct impacts to water resources include the removal of streamside vegetation, siltation from poor construction techniques and pasture management, introduction of toxic materials from spills or runoff from treated areas, and introduction of fecal material from livestock and pets. Direct impacts also come from people trampling vegetation during recreation and from disposal of trash such as old appliances in stream and wetland areas.

Physical change in upland areas also contributes significantly to the degradation of natural systems in Northshore. Clearing land for construction and alteration of plant communities through livestock grazing reduces wildlife populations and habitat. Clearing and the creation of impervious areas where the water cannot infiltrate stream through the soil increases flooding, surface water runoff and erosion rates. It decreases bank stability, decreases summer stream flow levels, increases water temperatures in streams and alters the natural rate of introduction of organic material into the water. These changes result in loses to fish populations and other aquatic organisms through reduction in the amount of food and shelter, as well as through the creation of inhospitable conditions such as increased temperatures and reduction of dissolved oxygen.

The King County Comprehensive Plan emphasizes protection of environmental quality through all aspects of planning and development. Important concepts include:

- Development should be prevented on lands where development activity would pose a hazard to life, property, important ecological functions or environmental quality;
- Water quality should be protected and enhanced;
- Corridors adjacent to rivers, streams and lakes should be protected with buffers wide enough to maintain the natural functions of these systems;
- Wetlands should be similarly be protected with buffers;
- Development should be directed away from floodplain areas;
- Fish and wildlife habitat should be preserved through acquisition, incentives and other techniques;
- Ground water quality should be protected from pollution.

The State Growth Management Act (GMA) also addresses environmental protection. Planning goals of the GMA require protection of critical areas and resource lands. The GMA requires King County and its cities to adopt development regulations protecting designated critical areas and resource lands. Critical areas are defined as wetlands, areas with a critical recharging effect on aquifers used for potable water, fish and wildlife habitat conservation areas, frequently flooded areas and geologically hazardous areas. Resource lands include timber, mineral and agricultural lands. King County has classified and regulated critical areas through adoption of the 1990 Sensitive Areas Ordinance and classified and regulated resource lands through the 1989 Resource Area Zoning. Designation of critical areas occurred through the 1990 Sensitive Areas Folio and the 1991 Wetlands Inventory. Designation of resource lands also occurred through the Resource Area Zoning.

King County and its cities also adopted the Joint Regional Strategy in late 1990, in order to cooperate in the implementation of the GMA within the County. The strategy calls for coordination in the identification of and development of regulations for resource lands and critical areas. A joint county-city technical forum was established in early 1991 to address issues of mutual concern in the classification and regulation of resources lands and critical areas, particularly when they cross jurisdictional boundaries.

This chapter addresses specific resource issues in the Northshore planning area. These policies supplement Countywide efforts such as the 1990 Surface Water Design Manual and the 1990 Sensitive Areas Ordinance (SAO). While the SAO provides extensive guidance for managing human interaction with natural systems, it does not address all of the resource issues in Northshore. The Northshore resource policies focus on rehabilitation of damaged natural systems, impacts of domestic and farm animals, clearing and grading of natural vegetation, wildlife protection and development regulations for specific sensitive areas in Northshore. The map, Streams, Floodplains, Wetlands and Erosion Hazard Areas illustrates identified sensitive areas in Northshore.

Overview

Northshore natural systems include fish and water resources of the Sammamish River, Little Bear Creek, Daniels Creek, Swamp Creek and Juanita Creek as well as numerous smaller drainages emptying into these rivers or into Lake Washington. Many of these water resources have been impacted by ongoing development activities. Bank clearing has destroyed habitat and the resulting lack of large vegetation has lead to erosion and elevated water temperatures, resulting in a large decrease in the number of fish inhabiting Northshore streams.

Steep slopes characterize the western edge of the planning area along the shores of Lake Washington, the sideslopes of Norway Hill and the hillsides to the east and west of the Sammamish Valley. Many of these slopes contain glacial deposits of loose, gravely or sandy soil that compacts poorly and erodes quickly when in contact with surface water runoff. The most erosive soils in Northshore require special construction techniques to avoid dangerous landslide occurrences and the rapid formation of gulleys. In some cases, no construction at all may be feasible without threatening the stability of the hillside.

Wildlife areas include the floodplains of Swamp Creek in Kenmore which contains one of four known heron rookeries remaining in King County. Small mammals inhabit the large remaining forested areas such as Saint Edward's Park, Denny Park and Gold Creek Park.

The following policy reinforces King County's intent to assure ongoing protection of sensitive areas and natural systems.

NR-1 **King County should prevent development on lands where it would pose a hazard to life, property, important ecological functions or environmental quality. Due to severe natural constraints, steep or erodible slopes, wetlands, wetland buffers and stream corridors should remain undeveloped and undisturbed.**

Clearing And Erosion Control

The cutting of merchantable timber requires a forest practice permit from the State Department of Natural Resources (DNR). In areas where long term forestry will continue, such as in the Forest Production Districts of Snoqualmie, Tahoma and Enumclaw, there are permit requirements for replanting cleared areas. In Northshore, where the land use will be changed from forestry to some other use such as residential housing or pasture, state law requires the landowner to file a Class IV General permit which clearly indicates that the land will be removed from forest production. In areas that are cleared without a Class IV General permit, replanting is required and the County is empowered to refuse all permits for a period of up to six years.

When a Class IV General permit is filed, state law allows the County to be lead agency for all decisions regarding the State Environmental Policy Act (SEPA). The County can require protection of sensitive areas, through the authority granted by SEPA and the Forest Practice Act, and attach binding requirements and conditions to the Forest Practice Permit issued by DNR. These requirements would include setbacks from sensitive areas and their buffers. Because the Forest Practice Act is primarily aimed at regulating activity in commercial forest areas that are expected to remain as forest indefinitely, it allows removal of trees within stream and wetland buffers and on steep slopes. In non-forest areas, removal of vegetation within these buffers can result in significant direct and cumulative impacts.

Within areas covered by the Counties Shoreline Master Program, the County has additional opportunities to manage forest activities through the shoreline permit process.

NR-2 **King County should not permit vegetation removal under a Class IV General Forest Practices application or under a Class III FPA in shorelines of the state until stream corridors, wetland buffers, slope setbacks and other environmentally-sensitive areas are mapped and their protection assured. No clearing should be allowed in the sensitive areas or their buffers.**

In undeveloped areas, the vegetation of the native forest provides a tremendous amount of surface water management control. Rain is soaked up by the layer of decaying vegetation (called duff) on the surface of the soil and slowly sinks into the groundwater aquifers or travels along, near the surface, appearing long after the rainfall event as stream flow. The living vegetation of the forest also stores large quantities of water within the plants themselves. In addition to slowing and holding water runoff, the undisturbed vegetation provides a great deal of erosion protection to the soil. Clearing and grading of the vegetation eliminates these functions, and leaves the area susceptible to damage from surface water runoff and erosion. Clearing also produces cumulative impacts to the groundwater recharge rate and can affect critical summer low flow volumes in streams.

The Northshore area has been heavily impacted from clearing and grading operations. Examples include on the hillsides above Lake Washington, Juanita Creek and small unnamed tributaries such as the tributary located near the Juanita-Woodinville Road and 112th Ave. NE. The Northshore CAC recommends that King County develop regulations for clearing and grading activities in Northshore that will limit the environmental degradation that has resulted in the planning area from grading activities. The following policy proposes regulating clearing and grading during the rainy winter months to mitigate impacts to Northshore tributaries and natural systems.

NR-3 **The Northshore area has experienced ongoing environmental degradation from clearing operations. Clearing as part of site preparation should be limited to roads and drainage facilities until building construction permits are approved. Cleared areas should be revegetated or protected from erosion within 15 days. Clearing should not be allowed during fall and winter October 1 through March 31.**

Under present conditions, sites are often completely cleared very early in the development process, sometimes long before there are any building permits issued for a site. During the time between clearing and site development, substantial erosion and sedimentation can occur. Until there is a need to remove the existing vegetation for construction, the forest should remain in order to protect surface and ground water quality, and to provide wildlife habitat. When construction does occur, the surface water management facilities should be installed first, in order to control the increased surface water flows that will occur when the site is cleared.

NR-4 **Protection of natural vegetation coverage at levels sufficient to moderate surface water runoff and erosion and to protect the integrity of stream channels should be required through special zoning requirements, critical drainage basin requirements, or Countywide ordinance. When revegetation is required, appropriate native vegetation should be used.**

NR-5 **Clearing and grading operations should be kept to a minimum during development. When grading does occur, topsoil should be stockpiled and reused on site.**

Floodplains

The Sammamish River was channelized in the early 1900's, shortly after the lowering of Lake Washington. A local drainage district was formed to straighten and deepen the Sammamish River channel and to dry out adjacent wetlands for agricultural purposes. These agricultural lands were subjected to annual flooding from spring runoff. Congress began funding flood control studies in 1944, although the U.S. Army Corps of Engineers did not complete the river channelization to reduce flooding until 1966. Most flooding was alleviated, making way for urban development which was accompanied by increased runoff volumes, peak flows and reduced flood storage areas. Wildlife habitat loss due to the channelization has been profound. The lack of significant vegetation, elimination of pools and riffles through dredging, and removal of snags and siltation from tributary streams has lead to a lack of spawning and rearing areas, and dangerously high water temperatures that impair salmon migration. Fish kills have occurred in years of severe drought when water temperatures elevate even higher due to decreased water depth.

The King County Surface Water Management Division (SWM) is in the process of preparing a Multi-Objective River Corridor Plan for the Sammamish River. Multi-Objective River Corridor Management is a concept for looking at rivers, their floodplains and associated riparian vegetation to accomplish a range of uses such as flood control, water quality, farming, recreation, open space or wildlife habitat. The Multi-Objective Plan will identify appropriate areas within the Sammamish River corridor to reintroduce habitat elements that were severely destroyed over the last half century, and to analyze a range of land uses in the floodplain of the Sammamish River.

NR-6 **Riparian vegetation along the Sammamish River should be reestablished through bank rehabilitation, bioengineering techniques, and through aquatic habitat enhancement projects.**

Watershed Basin Planning

The Basin Planning Section of the King County Surface Water Management Division prepares plans for watersheds which include technical recommendations regarding land use impacts to the basin. The Bear Creek Basin Plan includes the Daniels Creek Basin, located in the eastern portion of Northshore. The basin plan calls out Daniels Creek as a Locally Significant Resource Area. A large number of salmonid fish travel through Daniels Creek, which empties into Cottage Lake. Cottage Lake Creek features diverse species and habitat, such as freshwater mussels and is designated as a Regionally Significant Resource Area by the Basin Plan. The basin plan calls for rural residential land uses and densities in the Daniels Creek Basin in order to minimize urban impacts on this resource.

NR-7 **The Daniels Creek sub-basin, identified as a locally significant resource area in the Proposed Bear Creek Basin Plan, should be protected through the adoption of rural densities.**

In preparation for the Basin Plans, basin reconnaissance work was conducted throughout King County in 1987. Reconnaissance Report #10 provides baseline analysis on conditions within the Sammamish River basin. The Sammamish River basin covers 26 square miles, forming a 14-mile connection between Lake Sammamish and Lake Washington. Approximately two-thirds of the basin is in the Northshore Community Planning area. The basin is characterized by numerous small sidehill drainages which flow onto the Sammamish River floodplain. A Sammamish River Basin Plan, which would more thoroughly research the characteristics of the Sammamish River Basin, is anticipated in 1993. In the interim, Reconnaissance Report #10 provides a technical overview of the watershed characteristics of the basin and existing water quality, habitat and erosion problems.

NR-8 **Until such time as the Sammamish River Basin Plan is adopted, special attention should be given to the Reconnaissance Report #10 during the development review process. The Northshore Community Plan should be amended, if analysis through the Sammamish River Basin Plan indicates a need to modify adopted land uses in order to protect water resources of the Sammamish Basin.**

Erosive Slopes

The unique geologic history of the Northshore area has resulted in some hillsides of the area having a very high risk of large scale erosion and ravine formation. In these areas there are layers of sand and gravel, often with glacial till over them and silt or clay below them. Once exposed to surface water these sand layers erode extremely rapidly, resulting in the movement of tons of material and the rapid formation of large ravines or gulleys. Undercutting of roads and structures by ravines, and burying of roads and property at the bottom of the hills from deposition of the eroded sand, can cause substantial property damage. While the SAO (which prohibits development on slopes of 40% or greater) and the Drainage Manual (which require detention of surface water runoff) both address surface water and erosion problems, neither are sufficient to adequately protect against the rapid and destructive erosion events these conditions can produce. Special drainage conditions tailored to specific soil conditions found in the Northshore planning area are necessary to protect public safety and avoid significant property damage due to undercutting and erosion. The map Erosion Problem Areas highlights areas requiring special retention/detention requirements in Northshore.

NR-9 **Unique geologic conditions in Northshore have resulted in hillsides that have a high risk of large scale erosion. Current County regulations are not adequate to mitigate the impacts of development in these Erosion Problem Areas. Increased on-site retention/detention requirements in areas draining over steep and erosive slopes should be adopted and implemented as special zoning requirements.**

Stream and Wetland Protection and Rehabilitation

As described in the introduction to this chapter, streams in Northshore have been heavily impacted by human activity. Streams and wetlands provide important functions that protect water quality, control surface water runoff, and provide habitat to fish and wildlife populations. The 1990 SAO provides protection to streams and wetlands through requirements for buffers and through limitations on the types of alterations that can occur within these sensitive areas and their buffers. Much of the damage that has already occurred in Northshore make the SAO, alone, insufficient to ensure the long-term ecological health of these streams and wetlands. Rehabilitation is a key component in ensuring continued viability of these resources in Northshore. However, protection of undisturbed stream corridors and wetlands is critical to retaining the resources that still exist.

NR-10 **Wetlands, streams, and other sensitive areas important for control of surface water runoff should remain undisturbed, or rehabilitated if they have already been degraded by human activity or grazing animals.**

NR-11 **A stream corridor wide enough to maintain the natural biologic and hydraulic function of streams in the Northshore planning area's drainages should be preserved in all development proposals by use of native growth protection tracts or other appropriate mechanisms. The natural drainage systems of the Sammamish River, Swamp, Juanita, Daniels, Little Bear, North, and other area creeks should be restored, maintained, and enhanced to protect water quality, preserve existing aquatic habitat, reduce public costs and prevent environmental degradation.**

NR-12 **Zoning, special zoning conditions, and development regulations should be used to assure the continued viability and health of the Northshore planning area's stream systems and the fisheries and wildlife resources dependent on them.**

New development can be planned to avoid impact to natural systems. Frequently new development is required to "mitigate" impacts by providing additional measures to restore the natural balance.

NR-13 **Public improvements and private developments should not alter natural drainage systems without mitigating measures which eliminate increased risk of flooding and erosion, negative impacts on surface and ground water quality, reductions in ground water recharge, and loss of aquatic of riparian habitat.**

A key to successfully restoring habitat and wildlife value of stream is preservation or reintroduction of streamside vegetation. This is particularly important in urban areas where the increased amount of impervious surfaces causes storm water to reach streams more quickly. The rapid runoff of surface water to stream channels increases the streams peak flow, accelerating erosion and sedimentation of stream banks. The primary goals of stream restoration are to reduce stream bank erosion to reduce sedimentation in downstream areas, to provide cover and food for fish, to shade the stream and keep the temperatures cool, to improve wildlife habitat and to maintain a natural community amenity. Rehabilitation plans usually contain a combination of tall trees to provide shade, overhanging vegetation to shade and cover fish and a variety of native streamside plants offering diverse habitat and bank stabilization to control sedimentation to downstream areas. Rehabilitation plans will vary based on the particular stream and surrounding conditions.

NR-14 **New development should rehabilitate degraded wetlands, stream channels and stream banks in the Northshore planning area's drainages to prevent further erosion and water quality problems. Where conditions permit, the banks and channels should be restored to a natural state.**

Wildlife Habitat

Wildlife and wildlife habitat continue to be destroyed by land use activities that do not take into account wildlife potential in urban areas. Selecting certain species of wildlife for protection is a complex and controversial topic. The Washington State Department of Wildlife has defined unique and significant wildlife habitat types for the state of Washington.

NR-15 **Unique or significant wildlife habitat and corridors connecting important habitat areas should be identified and preserved. Development proposals should identify unique and significant wildlife habitat areas on or nearby the site and ensure that buildings, roads, and other features locate on less sensitive portions of the habitat. These considerations may result in a reduction of density from that otherwise allowed by zoning.**

One such unique wildlife habitat area is known to exist in Northshore. A heron rookery containing an estimated 20 active Great Blue heron nests is located on the north side of the Kenmore Park-and-Ride between 80th Avenue NE and 73rd Avenue NE. This heron rookery is one of only four identified rookeries in King County. The Great Blue heron is a protected species classified by the State as a Species of Concern. State management guidelines prescribe buffers around rookeries and feeding areas. The State Department of Fish and Wildlife is on record as advocating the protection of this important wildlife habitat area. Other wildlife species that are known to use this habitat area include the Common Merganser, Red-tailed Hawk, Bald Eagle, Belted Kingfisher, Cormorant, Canada Goose and Mallards. This wildlife area is of regional significance. It is important as a migration stop and for waterfowl nesting. Development activity is a significant threat to the protection of this important resources. Special conditions are necessary to ensure the protection of heron rookeries and feeding areas in Northshore.

NR-16 **The heron rookery and feeding areas of Northshore are wildlife areas of regional significance. The Great Blue Heron has been identified by the State of Washington as a Species of Concern. The heron rookery and feeding area located in the Swamp Creek and Sammamish River wetland systems, the shoreline of Lake Washington, and wetlands within the heron's feeding range are designated as a natural resource protection area. Special zoning conditions are necessary to ensure the protection of the rookeries and feeding areas.**

Groundwater

Groundwater is an important resource often overlooked because it is not visible. Ground water provides drinking water for many residents in Hollywood Hill. Ground water is connected to surface water streams and rivers. It is critical in providing water flow in these streams during dry summer months. Protection of ground water requires providing for recharge of surface water to the ground water aquifers, and protecting the quality of water that is recharged. The Redmond Ground Water Management Program was established in 1988. The program has identified the status of regional ground water resources. The program will provide specific recommendations on the long-term protection of ground water in the Northshore area.

NR-17 **Ground water recharge areas shall be identified and protected when sufficient information is available.**

Public Access

The State Shoreline Master Program regulates development activity in shoreline areas of waters of the state. In Northshore, Lake Washington and the Sammamish Rivers are classified as waters of the state, requiring a Shoreline Substantial Development Permit for most new construction within 200 feet of these waterbodies. Public access is one of the major goals of the State Program. This plan supports public access to waters of the state in appropriate areas, such as in large development or redevelopment proposals on Lake Washington or the Sammamish River.

NR-18 **Public access to waters of the state should be aggressively pursued during the Shoreline Management Program permitting process.**

Chapter 8: Parks and Open Space

The value of parks and open space was stressed by Northshore residents throughout the development of this plan. Northshore varies from urban areas with more urban park facilities, such as Log Boom Park and the Burke Gilman Trail in Kenmore, to the larger lot residential areas of Hollywood Hill characterized by horse trails.

Northshore has park and trail facilities of regional significance, such as the Burke Gilman and Sammamish River Trails and St. Edward's State Park on the shores of Lake Washington. Community and neighborhood parks are smaller parks like Swamp Creek Park and Kingsgate Park.

Funding for parks planning in Northshore must compete with requests from all other community planning areas. Analysis of the planned growth anticipated through this plan update shows parks needs in Northshore over the next ten years.

This chapter outlines policies to guide additional open space acquisitions, and recommendations for needed parks capital improvements to support the anticipated growth in residential population.

Comprehensive Plan

The 1985 King County Comprehensive Plan recognizes the importance of parks and open space through fundamental goals calling for protection of King County's natural beauty, open space and environmentally sensitive features, maintenance of a quality living in King County, and the provision of adequate and affordable public facilities and services, including park and recreation facilities.

The Comprehensive Plan defines open space as lands which provide scenic amenities, are physically suitable for recreation or are sensitive lands which are protected by sensitive areas regulations. Comprehensive Plan policies PC-112 and PC-113 state that the County should maintain an open space system to preserve natural amenities and provide recreational needs for the residents.

The Comprehensive Plan presents specific policies on the County's parks and open space system, with an overall intent of preserving open space opportunities in designated Urban areas and in areas that are planned for future urban growth:

Policies E-201 and E-202 define a large variety of lands to be preserved for park and open space purposes including lands that provide multiple benefits for such elements as active and passive uses, scenic vistas and fish and wildlife habitats.

Policies E-203 and E-204 address public involvement in the process of identifying regionally significant parks as well as local open space needs.

Policies E-205 through E-211 outline a variety of tools that can be utilized in the preservation of open space such as regulations, easements, private ownership of park lands, incentives, dedications, fee-in-lieu of programs, trades and land purchase.

County funding for parks and recreation facilities is allocated through the Capital Improvements Program portion of the annual King County budget. This plan provides a set of policies and an analysis of park, recreation and open space facilities needed to serve the existing and future residents of Northshore. It will be utilized each year during the development of the Capital Improvement Program. The Northshore projects will be evaluated against parks needs in all thirteen of the community planning areas of King County.

Existing Recreational Facilities

Northshore residents use recreational facilities in Bothell, Kirkland, Redmond, Snohomish County and eastern King County as well as the facilities in Northshore. Following is a list of regional parks in the area including school district facilities, and facilities in Bothell and Redmond. Major public parks are shown on the map, Public Parks and Open Space. Private parks are shown on the map Private Parks.

King County Parks

132nd Square 9.4 acres 132nd Ave. NE and NE 132nd
2 softball/baseball fields
1 football/soccer field
picnic tables
play area

Basset Pond 32 acres undev. NE 165 and 179 NE

Big Finn Hill 202 acres NE 132 to Denny Park
1 softball/baseball field

East Norway Hill 26 acres 124 Ave. NE and NE 155 St.
1 soccer field

Edith Moulton 23 acres 108 Ave. NE and NE 187 Pl.
Picnic Area

Gold Creek Lodge 38 acres 16020 148th Ave. NE Woodinville
Picnic Area

Inglemoor Park 9.6 acres 88th Ave. NE/Simonds Rd.
Baseball and soccer field

Juanita Beach 29 acres 9703 Juanita Dr. NE, Kirkland
2 softball/baseball fields, 2 tennis courts, swim beach, concession, Fishing, Picnic Area, Play area

Juanita Heights 3 acres Undev. Approx. NE 124 St and 89 Pl. NE

Juanita Shop .5 Ac. Juanita Dr. and 93 Ave. NE, Kirkland

Juanita Triangle .5 acre undev. Juanita Dr. and 76th Pl. NE

Kenmore 9.6 acres 6910 NE 170 St. Bothell
Picnic area

Kenmore Logboom 16 acres SR 522 @ 60 Pl. NE
Fishing, picnic area, play area, boat moorage

Kingsgate 6 acres NE 140 St and 116 Ave. NE
Trails

Lake Washington Pool .5 acre 17525 NE 104, Redmond

Mark Twain 6.8 acres 132 Ave. NE @ NE 107 St.
Play area

Moorlands 2 acres 84 Ave NE S of NE 155
2 softball/baseball fields
1 football/soccer field

Northshore Athletic Fields 20 acres NE 145th and Woodinville-Redmond Rd.
5 softball/baseball fields

Northshore Pool .5 acre 9815 NE 188th St., Bothell

O.O. Denny 37.5 acres Holmes Pt. Dr @ NE 124 St., Kirkland
Picnic area

Sixty Acres 60 acres NE 116 St and Sammamish River
12 football/soccer fields

South Norway Hill 9.8 acres 124 Ave NE and NE 145

Swamp Creek Wallace 17 acres 68 Ave. NE and NE 195 St
Trails

Waterford Park 4.2 acres adjacent to the Sammamish River Trail in Woodinville

West Hill 7.6 acres NE 195 St near 85 Ave NE

Windsor Vista .5 undev 110 Ave NE and S of NE 145 St

Bothell Facilities

Blyth Park 38.2 acres 16950 W. Riverside Dr.
Play area, Picnic area, Trails

Park at Bothell Landing 2.5 acres 9919 NE 180th
Northshore Senior Center, Bothell Historic Museum, Play area, Picnic area

Sammamish River Park 33 acres 17995 Ave. NE
Trails

North Creek Valley 14 acres No. Crk. Prkway/Sno Co. Line
4 multipurpose fields, trails

Brackett's Landing 11101 NE 174th
Picnic area, play area

Conifer View Park 1.4 acres 9055 NE 195th
Picnic area, play court

Royal Oaks Park 2 acres 20144 - 106th Ave. NE
Play area, play court

William Penn Park 2.75 acres 19900 - 100th Ave. NE
Playfield, picnic area, play area

Westhill Sports Field 7.5 acres 19417 - 88th Ave. NE
5 soccer fields, par course

Mary Murphy Mem. Park .5 acre 18630 Bothell Way NE
Picnic Area

Triangle Park Main St./Bothell Way

Kirkland Facilities

Juanita Bay Park 65 acres 106 & Market Street
Picnic area, wildlife habitat, walking paths

Houghton Park 3.8 acres Lake Wash. Blvd & NE 60th
Picnic area, play area, boat ramp/dock

Waverly Park 2.8 acres Waverly Way and 6th Ave. W

Marsh Park
Marina Park
David E. Brink Park
Kiwanis Park
Street End Park
10th Ave. S. Park
Peter Kirk Park
Everest Park
Crestwood Park
100th Street Park
Forbes Creek Park
Terrace Park
13th Ave. Park

Highlands Park
Reservoir Park
Tot Lot Park
Mark Twain Park
Kirkland Watershed
Yarrow Bay Wetlands
Peter Kirk Pool

Redmond Facilities

Anderson Park 2.8 acres 7802 - 168th NE
Play area, outdoor stage, cabins, picnic area

Farrel McWhirter Park 68 acres 10400 - 192nd NE
Horse arena, barnyard, play area, trails, connection to Puget Power Trail

Firioto Park 2.5 acres Avondale Road at Bear Creek Village
Horseback riding, children's fishing area

Grasslawn Park 28.5 acres 7031 - 148th NE
3 softball fields, 1 sand soccer field, 6 tennis courts, 8 basketball hoops, children's play area, fitness trail, picnic areas

Jonathan Hartman Park 40 acres 17300 NE 104th
5 softball fields, 1 soccer/football field, tennis courts, 4 basketball hoops, play area

Arthur Johnson Park 15 acres 7901 - 196th NE
1 ball field, fishing area, nature trail, arboretum

Luke McRedmond Landing 2.5 acres 15811 Redmond Way
Canoe launch, fishing area, picnic area, connection to Sammamish River Trail

Meadow Park 5 acres 10710 - 160th NE
Pickleball/basketball court, play area, picnic areas, fitness trail

Nike Park 5 acres 17207 NE 92nd
1 pickleball/basketball court, play area, picnic area, nature trails

Reservoir Park 2 acres 16317 NE 95th
3 tennis courts

Spiritbrook Park 2 acres 6500 - 151st NE
1 practice ballfield, play area, picnic area

Westside Park 6.4 acres 3810 - 156th NE
1 practice ballfield, play area, picnic areas, connection to Bridle Crest Trail

State of Washington

Bridle Trails State Park

St. Edward's Seminary

Department of Game Boat Launch Ramp Sammamish River/68th Ave. NE

Lake Washington School District Facilities

Robert Frost Elementary, 11801 NE 140th
Soccer/baseball fields, playground equipment
Juanita Elementary, 9635 NE 132nd
Baseball and softball fields, playground equipment
Helen Keller Elementary, 13810 - 108th NE
Soccer/baseball fields, playground equipment
John Muir Elementary, 14012 - 132nd NE
Soccer/baseball and softball fields, playground equipment
Carl Sandburg Elementary, 12801 - 84th NE
Soccer/baseball, and softball fields, playground equipment
Henry David Thoreau Elementary, 8224 NE 138th
Soccer/baseball and softball fields, playground equipment
Finn Hill Junior High School, 8040 NE 132nd
Soccer/baseball and softball fields
Kemiakin Junior High School, 14111 - 132nd NE
Soccer/baseball, and softball fields
Juanita High School, 10601 NE 132nd
Soccer/baseball and softball fields

Northshore School District Facilities

Arrowhead Elementary School, 14925 - 67th Ave. NE
Baseball/soccer field, baseball field, playground equipment
Cottage Lake Elementary School, 15940 - 192nd Ave. NE
Baseball/soccer fields, playground equipment
Hollywood Hill Elementary School, 17110 - 148th Ave. NE
Baseball/soccer field, playground equipment
Kenmore Elementary School, 19121 - 71st Ave. NE
Baseball/soccer field, playground equipment
Maywood Hills Elementary School, 19510 - 104th Ave. NE
Baseball/soccer field, playground equipment
Sunrise Elementary School, 14075 - 172nd Ave. NE
Baseball/soccer field, playground equipment
Wellington Elementary School, 16501 NE 195th St.
Soccer field, playground equipment, baseball/soccer field
Westhill Elementary School, 19515 - 88th Ave. NE
Baseball/soccer fields, playground equipment
Woodin Elementary School, 12950 NE 195th St.
Baseball/soccer fields, playground equipment
C.O. Sorenson School, 13209 NE 175th St.
Baseball/soccer fields, playground equipment
Kenmore Junior High School, 20323 - 66th Ave. NE
Football/baseball/soccer/softball fields, tennis courts, running area
Leota Junior High School, 19301 - 168th Ave. NE
Football/baseball/soccer/softball fields, tennis courts, running area

Northshore Junior High School, 12101 NE 160th St.
Football/baseball/soccer/softball fields, tennis courts, running area
Bothell High School, 18125 - 92nd Ave. NE
Football/baseball/soccer/softball fields, tennis courts, running area
Inglemoor High School, 15400 Simonds Rd
Football/baseball/soccer/softball fields, tennis courts, running area
Woodinville High School, 19819 - 136th Ave. NE
Football/baseball/soccer/softball fields, tennis courts, running area

Privately-owned facilities

Columbia Winery, 14030 NE 145th St.
Picnic area
Gold Creek Tennis and Sports Club, 15327 - 140th Pl. NE
Pool, golf driving range, jogging track
Gold Creek Equestrian Center, 16528 - 148th Ave. NE
Stables, riding arena
Inglewood Country Club, 6505 Inglewood Rd. NE
Golf course
Ste Michelle Winery, 14111 NE 145th St.
Picnicking, landscaped park, outdoor concerts
Wayne Golf Course, 16721 - 96th Ave. NE
Golf course
10 community stables

Parks and Recreation

The following policies are to serve as guidelines for park acquisition and development during the life of this community plan. The policies emphasize the need to provide a variety of recreation facilities as well as preserve the unique natural features of Northshore. The plan calls for early priority and the acquisition of park sites while land is still available.

P-1 **Park and recreation facilities should be provided which are designed and located to serve a broad spectrum of the Northshore population and which will preserve and protect unique natural features where possible.**

P-2 **Park and recreational facilities should adequately support the existing and projected growth in the planning area. In particular, when allocating funds for the Northshore planning area, King County should give high priority to recreation facilities to meet this existing and projected demand. Development of active recreation sites should be encouraged.**

P-3 **The allocation of resources for traditional park and recreation facilities for the Northshore planning area should place early emphasis on the acquisition of land for park sites while it is still available. Property should be sought in locations which are not currently served by existing facilities. Prospective sites should contain substantial areas of well-drained level ground suitable for development of active recreation facilities such as athletic fields, tennis courts, and other similar facilities.**

P-4 **Level of funding should at all times be sufficient to assure adequate maintenance of existing park and recreation facilities.**

Trails

Trails are an important asset in Northshore. Trails serve as both recreational facilities and transportation routes for a variety of groups such as hikers, joggers, horseback riders, bicyclists, naturalists and bird watchers. They also provide viewpoints and links between scenic areas. Trail development and acquisition requires planning for safety, diversity of users and locations. The Comprehensive Plan supports the development of bicycle and pedestrian systems as alternative transportation options as well as for recreational purposes. Chapter 4, Transportation discusses bicycle and pedestrian travel in more detail.

Northshore features trail linkages of regional significance. The Burke-Gillman Trail runs for 2.5 miles through Northshore. The Sammamish River Trail, 10 miles in length, connects the Burke Gilman out of Seattle with the Sammamish River Valley and terminates at the City of Redmond. Both of these trails are paved, multipurpose trails. The Tolt Pipeline trail covers 12 miles of varied terrain that is used by hikers and bikers. This trail is a utility easement owned by the City of Seattle.

Sammamish River Trail 346.5 acres Redmond to Bothell

Tolt Pipeline Trail 93 acres Bothell to SR 203

Horseback trails are an important part of the trail system in Northshore. Particularly on Hollywood Hill, horseback riding trails are used by many horse owners. The King County Executive Horse Council is a nonprofit organization that has published a King County Trail Guide which included equestrian trails in Northshore. Major equestrian trails are delineated on the Equestrian Facilities map.

The following policies provide direction for the continued planning, acquisitions and development of a communitywide trails system in Northshore.

P-5 **Trail opportunities should be available to a wide range of users, should be developed to safely accommodate different users and should avoid disruption of environmentally sensitive areas. King County should put a high priority on the acquisition and development of the regional trail system linking the Northshore planning area to other parts of the County.**

P-6 **A community wide trail system for pedestrians, equestrians, and bicyclists should be developed. This trail system should connect regional trails with local trails and walkways.**

P-7 **The establishment and design of a community oriented local trail system should include: routes which connect residential areas with recreation areas including parks and open space; routes which provide access to public shoreline areas; routes which incorporate views and other special features of scenic, historic, or architectural interest; and routes which provide access to and connect schools and activity centers.**

P-8 **Right-of-way or easements along utility corridors, abandoned railroads, and other former transportation corridors are potential trail corridors and should be pursued by the county for future.**

New development can facilitate or obstruct the use of local trails. Often informal trails can be improved by new development in the vicinity. More commonly, a locally used informal trail or connection will be obliterated by new construction. King County can require new development to dedicate land for trails if an impor-

tant trail corridor exists on the site, or if the property is at a key access point. The following policy will be implemented through p-suffix conditions attached to the zoning.

P-9 **When the development of properties occurs in the Northshore planning area, public access or easements should be required to complete the development of a local trail system. Adequate right-of-way should be provided for trail use. To ensure that the provision of trail corridor right-of-way does not result in a reduction in the number of permitted building lots, the area within the trail right-of-way, not otherwise credited as part of a road right-of-way dedication, should also be credited toward the lot area of any proposed development. Trails should connect to existing and proposed schools, parks, riding stables, recreation areas and neighborhoods.**

Coordination is critical in the development of a trail system. The Burke Gilman trail passes through the jurisdictions of Seattle, Lake Forest Park, King County and Bothell. Jurisdictions must work together to complete missing links in existing or planned trail systems.

P-10 **King County should work closely with other jurisdictions and public agencies to seek appropriate trail links between elements of the open space system including, but not limited to the Burke-Gilman Trail, Sammamish River Trail, and the Tolt Pipeline Trail.**

The Sammamish River trail is unique in offering access to the Sammamish River for water sports such as kayaking, canoeing or fishing. The following policy recognizes this opportunity along the Sammamish River trail.

P-11 **Existing public access points to the Sammamish River should be maintained and additional access points provided or acquired and developed to ensure the use of this river as a trail corridor and fishing area.**

Open Space

Comprehensive Plan policies discussed in the introduction to this chapter are implemented by the King County Open Space Plan. The Open Space Plan identifies opportunities for open space protection in King County. It contains recommendations for both immediate actions and long-term strategies. This included the 1989 Open Space Bond proposal resulting in the voter approved purchase of important open space lands in the County. Long term strategies include the development of programs to provide tax incentives, development incentives, easements and less-than fee interests to increase the opportunities for open space protection.

The Open Space Plan focuses on lands providing open space attributes that include wildlife habitat, shoreline access, scenic resources and greenbelts in addition to active and passive recreation areas and trails. Northshore open space lands identified for acquisition in the 1989 Open Space bond includes the Burke Gilman Trail missing link, portions of the Swamp Creek corridor in Kenmore and the Hollywood Hill Trail link within the Sammamish River Trail system. Other acquisitions important to Northshore are Norm's Resort on Cottage Lake, Bothell Landing in Bothell, and Juanita Bay in Kirkland.

P-12 **The Northshore Plan should support the goals and recommendation policies of the Open Space Plan as well as the protection or preservation of the open space sites proposed for acquisition by the Open Space Bond.**

P-13 **Consistent with the King County Open Space Plan, the County should encourage establishment of an open space system in Northshore and give priority to protecting shoreline access, wildlife habitat and scenic vistas.**

P-14 **Undeveloped properties in King County ownership shall be retained to preserve open space and future park opportunities within 1/4 mile of residential development. In addition, land exchanges with other public agencies should be considered in order to preserve open space and future park opportunities.**

Coordination

Residents of Northshore are likely to use and enjoy park, open space and recreational facilities that lie within the boundaries of surrounding jurisdictions just as residents of these jurisdictions are likely to use the variety of facilities available in the unincorporated areas. Cooperation between different park service providers can maximize public benefits by avoiding duplication and providing a wide variety of new recreational opportunities. For example, school sites can provide local active recreational sites with coordinated use between school children and the community. King County has entered into a number of joint use agreements with School Districts for shared use of both school and county facilities.

P-15 **King County, Bothell, Kirkland, Redmond, school districts and other agencies should coordinate the development of park and recreation facilities to avoid duplication of facilities and services and maximize recreational opportunities at all levels. King County may seek to involve youth and adult sport organizations as partners in the selection, acquisition and development of park and recreation facilities serving their needs.**

P-16 **King County should transfer ownership of county-owned property located north of NE 145th, south of 148th Street, west of 124th Avenue NE and east of 119th Avenue NE to the cities of Bothell and Kirkland in order to preserve it for park and open space purposes.**

P-17 **King County Park Division as a public service should coordinate and assist Northshore Park and Recreation Service Area (PRSA) governing board in providing leisure time activities and recreational facilities.**

Additional strategies may be identified and pursued to encourage private sector involvement in the provision of park, open space and recreation facilities. A variety of partnerships could be formed to acquire, develop, operate and maintain park and recreation facilities.

P-18 **Consistent with the King County Open Space Plan, the County should encourage use of various mechanisms to provide and protect parks, open spaces and trails.**

Development Review And Private Sector Involvement

P-19 **King County should encourage private sector involvement in the provision of public recreation facilities.**

P-20 **As a condition of development, park, open space and trail mitigation should be required of all development except individual single family residential building permits. Adequate park, open space and trails facilities should be identified and provided concurrent with development.**

P-21 **In addition to required mitigation, the County should include provisions for lot clustering, density bonuses and other incentives to developers who preserve valuable open spaces and trails.**

Both the Comprehensive Plan and the Open Space Action Plan identify strategies for meeting open space needs of new residents moving into the area. Strategies include:

Lot Clustering: Lot clustering can be utilized adjacent to existing open space, or to create new open space on a development site. The advantage of lot clustering is that a concentrated amount of land can be enjoyed by numerous residents, either by augmenting existing open space or creating new open space for the use of residents of new development.

Open Space Linkage: New development can provide simple connections to existing parks, schools or open areas by providing connections such as crosswalks, trails or openings in property edges for new residents to safely get to these facilities.

Density Bonuses: Density bonuses involve giving bonuses to new development that provides additional open space, park or recreational facilities beyond the amount required to mitigate the impacts of that development. Standards must be developed to guide the additional facilities that are allowed and the bonus earned for each facility.

Transfer of Density Credit: This tool involves allowing certain target properties, called "sending sites" to transfer the density yield to a targeted urban area, called "receiving sites". A Transfer of Density Credits Program allows the development of urban separators, by transferring density from areas that have potential for buffers or open space corridors, and concentrating these densities in urban areas where services are available.

Several strategies are possible to encourage private sector involvement in the provision or development of park land. This should include both residential and commercial development. Parks in residential areas add to the quality of life and contribute to property values. The advantage of parks to the business communities is increased public exposure and local improvements which enhance the quality of the business area.

Parks Needs Assessment

The King County Division of Natural Resources and Parks completed a Countywide Parks Needs Assessment in 1987. This assessment measured acreage and relative distribution of traditional active, park and recreation sites within the County by planning area. The needs analysis compared each planning area to adopted County standards (K.C.C. 20.12.090) for traditional active as well as comparing the planning areas to each other. In comparison to County standards, Northshore was rated as moderately deficient. Based on comparisons to other planning areas, Northshore has a slightly greater than proportionate share of park acreage and a proportionate or greater share of parks development facilities. The planning area has a less than proportionate share of lighted football/soccer fields and lighted softball/baseball fields and rated last in the share of play areas and tennis court facilities.

King County Park standards used in this needs assessment provide information on the location, service area, size and amount of land needed to fill the park needs of a community. Based on the potential Northshore population of approximately 104,000 residents in the year 2010, King County standards identify a need for between 773 and 810 total acres of traditional park land in Northshore, based on 100% buildout of undeveloped and partially developed land in the planning area. (The Draft and Final Environmental Impact Statement prepared for this plan assess potential park needs based on different buildout scenarios). These park acreages will be most needed in the areas of urban population concentration. This includes a majority

of the planning area, with particular focus on activity centers such as Kenmore, Bothell and Woodinville, north of Kirkland along the I-405 corridor, and the Redmond urban growth area.

There are currently approximately 539 acres of County park land in Northshore with 378 of these as traditional active park lands. The remaining 161 acres are considered natural resource areas that are generally undeveloped or are part of the Sammamish River and Tolt Pipeline trails and not available for active recreation. The needs assessment indicates a need for an additional 395 to 542 acres of traditional park land to serve projected populations.

P-22 **Established low urban densities on Norway Hill should be maintained. View corridors should be preserved to provide scenic vistas in urban King County. The scenic recreational use of the hill (rural roads, hiking trails) should be preserved and improvements made for future parks and to bike and hiking trail connections to the Tolt Pipeline and Sammamish River Trails.**

Magnolia Dairy Farm

The Magnolia Farm was purchased under the 1987 King County Farmlands Preservation Program. The farm is unique in that it is separated from other Northshore agricultural properties purchased in the program located in the Sammamish Valley. (See Chapter 6, Agricultural Lands). This farm is near the city of Bothell in a designated urban area. The development rights are protected in perpetuity, presenting an opportunity for school children to learn about farming and farm animals.

Chapter 9: Cultural Resources

Introduction

This chapter establishes policies and guidelines for cultural resource management in the Northshore planning area. It makes special recommendations beyond the scope of the community plan. Cultural resources are those aspects of a community which create a sense of local identity and history, enhance quality of life, and otherwise enrich the lives of residents and visitors through the arts and humanities. Historic resources are non-renewable; they embody the unique heritage and evolution of particular places. Thoughtful management of cultural resources may contribute to economic development and moderate some of the harmful effects of rapid development. Planning for cultural resources may include expanding cultural programs, preserving historic buildings and landscapes, protecting prehistoric artifacts and places of legend, developing arts and humanities facilities, encouraging expression of diverse ethnic traditions, and supporting cultural activities for children and youth.

Through the Cultural Resources Division, the King County Arts Commission and King County Landmarks Commission administer programs associated with arts and heritage in the Northshore planning area. Background on these programs is provided in the first part of each section, followed by specific policies to guide future management of cultural resources.

Overall Objectives

The policies, guidelines and special recommendations in this chapter strengthen the general land use concepts of the Northshore Community Plan. Appropriate facilities and programs for arts and heritage activities are essential to healthy communities. Art in public places contributes to the aesthetic environment and enriches the lives of residents. Protecting historic agricultural buildings, landscape features, landmarks, architecture and other tangible associations with events and persons significant in local history maintains the community's connections with its past and provides a continuing sense of place.

Existing County Policies

Comprehensive Plan

The policies in this chapter supplement broad policies of the King County Comprehensive Plan. The Comprehensive Plan contains a chapter on historic resources, which includes policies to guide historic preservation efforts. One goal of the Comprehensive Plan is to preserve community diversity, including features that reflect King County's history. Preservation of historic resources maintains aesthetic and cultural diversity and preserves continuity with the historic and prehistoric past. Historic resources can be objects, structures, buildings, sites, and districts of historical significance. They may include historic residences and commercial buildings, sites of historic events, and other buildings, districts and landscapes with cultural, architectural, engineering, geographic, archaeological, or traditional ethnic interest and importance.

The King County Comprehensive Plan does not directly address the need for arts facilities and programs or the aesthetic environment of the area. However, an update of the Comprehensive Plan currently underway will rename and expand the chapter on historic resources to include the scope of both programs administered by the Cultural Resources Division (the Arts Program and the Historic Preservation Program).

Functional Plans

Other King County plans and ordinances provide guidance for arts activities and the protection of historic and prehistoric resources in King County. The 1990-1993 Percent for Art Program Plan (1990) sets priorities for expenditure of money set aside for art under the 1% for Art Ordinance. Most ordinances affecting the arts are codified in KCC 2.48. The Heritage Resource Protection Plan (1985) and the Landmarks Commission Six-Year Workplan (1989) are functional plans that provide a framework for survey and research efforts, establish a context for decisions on landmark designations, and set budget and work priorities for the Historic Preservation Program. Most ordinances directly affecting historic preservation and archaeology are codified in KCC 20.62.

The King County Cultural Resources Division is developing a Cultural Resources Functional Plan to guide planning for arts and heritage programs throughout the County. The plan will include many elements which will affect arts and heritage activities in the Northshore area.

Arts Program

Issues And Problems

The Northshore School District has been a leader in providing arts and cultural programming for the planning area. School district facilities provide most of the venues for visual and performing arts activities; competition for space is increasing. Gymnasium at Bear Creek, Eastridge, Fernwood, Frank Love and Hollywood Hills Elementary Schools have small stages for performances. Inglemoor and Bothell High Schools each have Little Theaters seating 150. The Woodinville High School Auditorium seats 628. Availability of school facilities for performances and rehearsals is limited. School District facilities are most easily available for special events co-sponsored by the District with the community, state or local arts commission, such as the Seattle Symphony performance which took place last year at Woodinville High. Other facilities include the Northshore Multi-Service Center has an auditorium seating 600, a stage, and a floor suitable for participatory dance. The Gold Greek Lodge in Woodinville is a quasi-rustic facility with a multi-purpose area appropriate for visual art classes, but not acoustically fit for performances.

The School District brings in touring visual arts exhibits from the State, County and the Smithsonian. Exhibition space is inadequate: the Ricketts Auditorium in the Northshore Administration Building and the Bothell Library facility offer limited space. Local businesses provide for some overflow but do not have adequate facilities. The new Northshore Senior Center, to be completed in late 1992, will have space for exhibitions local student art work and may accommodate occasional small performances. Although the community is interested in a public performing arts facility in Northshore, recent efforts have focused on Bellevue. Siting for a new community college in the Northshore area is currently being explored. The college may provide exhibition and performance space opportunities.

With assistance from the State Arts Commission, the School District has planned art installations in every new and renovated school facility over the past 15 years. Many County-funded public art projects have also been developed in Northshore. In 1989, Thompson Brennan created a sculpture for the exterior of the King County Police Shooting range in Kenmore, using reconfigured weapons obtained by the County police in the line of duty. This project received positive national attention. A painting by Northwest artist Guy Anderson hangs in the Bothell Library, and a sculpture by Rita Kepner is featured at the Kenmore Library. Both works are on semi-permanent public display and were purchased through the County's 1% for Art Program.

A major new artwork is under design for the new public health clinic in Northshore, also supported by the County's 1% for Art Program. Artist Stuart Nakamura has been selected to create a unique play sculpture for the children's waiting area of the clinic. Completion is scheduled for 1993. Northshore has organized a beautification committee and is anxious to pursue additional public art projects in collaboration with King County and other public and private agencies.

Arts organizations in Northshore are few in number. The Bothell Arts Council has existed for many years but its activity is inconsistent, primarily producing an annual summer art fair. The School District trains a corps of 200 "art docents" to work with children in elementary schools. The District also works closely with the King County Parks Division to provide after school art and drama classes in ten elementary schools. The Seattle Children's Theatre provides theater arts instruction for junior- and senior-high aged students through the schools. The Chamber of Commerce works with local community and business leaders to produce an annual Summer Outdoor Concert Series (June through August at the Park in Bothell Landing). This is extremely successful and well-attended; financial support for the series no longer requires government funding.

Strategic planning underway in the Northshore area emphasizes enhanced cultural learning. Planning includes school curricula and involves business leaders, parent groups and community organizations. Most cultural activity is organized around events rather than as part of a long-range effort for environmental enhancement or permanent aesthetic amenities.

Historic Preservation Program

Issues And Problems

There are sixty-five historic resources in the Northshore planning area which are currently listed on the King County Historic Resources Inventory. Thirty-four are within the Cities of Bothell, Kirkland and Redmond, and twenty-nine are in unincorporated King County. Of the thirty-one resources under the County's jurisdiction, only four, the Thomsen Estate, the Hollywood School, and the Hollywood Farm/Stimson House (at the St. Michelle Winery) have been designated as County Landmarks.

Historic resources are vanishing rapidly in the Northshore area due to demolition, extreme alteration and deterioration. An inventory update conducted in August, 1989, revealed that only twelve of the original

twenty-nine inventoried properties remain eligible for Landmark designation in addition to the four which have been designated as landmarks. These potential Landmarks are shown on the map at the end of the chapter.

Archaeological resources in the Northshore area have not been comprehensively surveyed, evaluated or protected. Only one site in the unincorporated part of the Northshore planning area is listed on the State Inventory of Archaeological Sites. No local jurisdictions have programs or staff to comprehensively identify and protect archaeological resources. The State Office of Archaeology and Historic Preservation has one staff archaeologist for the entire state.

The Cultural Resources Division has completed an inventory of existing heritage facilities in all planning areas of the county and is assessing their adequacy. The assessment will identify needs for additional or alternative facilities as well as upgrading existing ones. A facilities assessment will identify needs for upgraded, alternative or additional facilities.

Cultural Resources Goals

Inventory, Analysis and Nomination

CR-1 **King County should conduct a survey of existing cultural facilities throughout the county, including the Northshore area, to assess their condition, level of use, need for expansion, and feasibility of providing additional facilities. Planning for new community college facilities in the area should respond to needs for additional arts and heritage facilities.**

CR-2 **Historic and archaeological resources not previously identified in Northshore should be surveyed. These resources should be added to the Historic Resources Inventory and considered with other inventoried properties for acquisition as open space or for other public uses. King County should coordinate preservation of historic resources located in urban growth areas with the cities of Bothell, Kirkland and Redmond and the future City of Woodinville.**

CR-3 **The Community Plan should identify historic resources listed in the King County Historic Resource Inventory (HRI) and at the time of development, consideration will be given to protecting their historic characteristics. As of the date of map preparation, all properties shown on the "Historic Resources" map are considered potentially eligible for Landmark designation.**

The King County Historic Preservation Program maintains an inventory of over 1000 historic resources located throughout the County. The identification of historic and archaeological resources is an ongoing process. Resources are added to and deleted from the inventory over time. Development proposals for resources listed on the inventory are circulated to the King County Historic Preservation Officer for review and comment. Potential historic resources to be considered for inclusion in the inventory are:

- Inglemoor Country Club Clubhouse
- Log Cabin Apartments, Kenmore
- Tavern (next to Ste. Michelle/Columbia Wineries)

Archaeological resources have not been comprehensively identified. Records exist for three sites in Northshore, two in Bothell and one in the unincorporated area.

CR-4 **Special effort should be made to involve property owners when identifying and nominating historic resources for landmark status.**

Property owners should be involved with the County in all aspects of the historic preservation process. Ideally, there should be a partnership between the property owner and the County in the inventory, protection and landmark designation of historic resources. King County Code permits the designation of historic landmarks with or without property owner consent. In the Northshore planning area, County efforts to preserve historic resources should involve property owners wherever possible.

CR-5 **King County should pursue interlocal agreements with all cities and appropriate Indian tribal organizations in the planning area. The Cities of Kirkland and Redmond do not have historic preservation programs. The City of Bothell has its own state-certified historic preservation program and is responsible for administering historic resources within its boundaries. Agreements with Kirkland and Redmond would make it possible for the Landmarks Commission to identify and protect historic and cultural resources within the participating jurisdictions and their spheres of influence.**

King County may enter into interlocal agreements with other jurisdictions to further its historic preservation goals. Continued protection for historic resources should be integrated into planning for urban fringe areas and recognized in annexations.

CR-6 **Historic resources that meet the criteria for County Landmark status should be nominated for designation. The King County Landmarks Commission, community groups and concerned individuals should initiate nominations.**

Identified historic resources eligible for designation as King County Landmarks (see map) will be nominated by King County as time, staff, budget and other priorities allow. Historical societies, other groups and individuals are encouraged to submit nominations to the Landmarks Commission for review and possible designation.

Preservation Strategies

CR-7 **The preservation, restoration and adaptive re-use of historic, archaeological and other cultural resources in the Northshore planning area is encouraged, in order to maintain the character of the community and to preserve tangible reminders of the area's history.**

This policy provides general direction for heritage preservation in the planning area.

CR-8 **King County encourages local historical and arts organizations to work with the cities of Bothell, Kirkland, Woodinville and Redmond, and citizens in the unincorporated area of Northshore to interpret and preserve their heritage and to promote the arts and humanities in the community.**

King County's cultural resource programs work best in tandem with existing historical and arts organizations. The County can incorporate interpretive and arts programs into parks; a focus on the area's heritage and arts should be encouraged. King County can research and implement incentives for development which fosters arts and heritage resource protection, including enhancement of facilities and programs.

CR-9 **Additional property owner incentives and regulations should be developed to protect and preserve County Landmarks and other identified historic resources. In addition to continuing current assistance efforts, incentives employed should include the use of existing grants and new grants from Hotel-Motel revenues to preserve eligible resources.**

Technical assistance from County staff and other sources should be expanded and made more widely available.

Historic resources have value and convey history within an appropriate setting and environmental context. Without sensitive mitigation, new land uses and intensive development have adverse effects on historic resources. In addition to appropriate site planning and design, protection can include retaining historic landscape features such as orchards and fields to serve as buffers, cluster development which leaves historic resources intact, and a variety of other incentives and controls such as transfer of development rights and density bonuses. The Landmark Commission can designate significant lands and landscape features along with historic buildings and structures to ensure review of future development proposals and site modification.

CR-10 **King County encourages the preservation of historic resources that meet the criteria for County Landmarks or for the State or National Registers of Historic Places. This can be accomplished through zoning, special conditions, development regulations, and other governmental regulation and action.**

CR-11 **Development of properties in the vicinity of potential or designated historic sites should preserve the aesthetic and visual integrity of the historic resource through the use of landscape buffers, setbacks, and other means identified through the environmental review process. King County should establish procedures to ensure that the impacts of nearby projects upon a historic resource are considered during development review of those projects.**

Parcels with inventoried historic and archaeological resources will be identified with a P-suffix in County land development data files. They will be protected through review, comment and mitigation for development proposals which would affect them. Any actions which would disturb archaeological resources require prior notification of the County Historic Preservation Officer and the State Office of Archaeology and Historic Preservation. Both the County and the State must approve such actions. Any archaeological resources discovered during site development review or construction activity are also subject to this requirement.

CR-12 **Development of public facilities, particularly parks, open space lands and trails, should be coordinated with and contribute to the preservation, restoration, and use of heritage and cultural sites and the establishment of interpretative centers in the Northshore area.**

Historic resources on County-owned land, particularly park lands, can contribute to recreation and cultural enrichment of the public. Many buildings and structures can be adapted to serve new functions, such as picnic shelters, information centers, or concession stands. Other historic resources can be interpreted for the enjoyment and education of public.

The Cultural Resources Division offers technical assistance to individuals and organizations in the arts and preservation communities throughout King County. The County's Arts and Landmarks Commissions can provide technical assistance to local historical organizations and museums to help with establishing goals, maintaining and managing collections, and developing community support for arts and preservation activities.

Program and Implementation Strategies

CR-13 **King County should continue to provide arts and culturally-based services to the Northshore area through its existing programs, and should provide technical assistance for locally-generated arts programs.**

King County can continue to develop 1% for Art projects throughout the county, with special priority given to unincorporated areas and areas which have been previously underserved, such as the Northshore area. The King County Arts Commission encourages residents of the Northshore area to participate in the percent for art idea bank in order to foster more projects in the area.

King County can encourage and provide assistance for developing long range cultural program planning for the Northshore area following development of the countywide Cultural Plan. Such planning can include recommendations for facilities development, expansion of local and regional arts- and culture-related legislation, enhancement of local arts-in-education programming, and forecasting economic impacts of cultural programming on tourism. A community arts council could be formed to assist in this process and to represent the diverse and separate communities in the Northshore area.

CR-14 Public awareness and appreciation of the benefits of historic preservation should be increased through outreach and educational programs. Use of interpretive signs, roadside markers and other accessible public information on local history and historic resources should be encouraged.

Informational materials and markers inform residents and visitors about the history and historic resources of the Northshore area. Increased awareness is necessary to encourage residents to protect historic resources in their community.

The Historic Preservation Program makes available slide shows on local history, technical assistance presentations and papers, technical assistance to local museums and historic societies, and publishes the Community History Newsletter. Local historic societies and other groups are encouraged to develop interpretive materials and programs. The Historic Preservation Program may also provide grants and technical assistance for such projects.

Additional outreach programs could also be developed. Workshops and other public presentations could be included in the yearly work plan and budget for the County's Historic Preservation Program. King County could conduct "how-to" workshops and distribute technical and educational information on local architectural styles, methods for researching historic buildings, and techniques for restoration, rehabilitation and protection of structures, landscapes and archaeological resources.

CR-15 Historic resources and arts and cultural programs should be incorporated into economic development and tourism activities in the Northshore area. Measures should include restoration and reuse of historic buildings, protection of scenic quality in historic farming areas, and historic mainstreet restoration in small communities.

Historic resources play a major role in recreational tourism, for example. Informational materials and markers highlighting Northshore history could attract visitors and spending to the area. Public art , arts facilities and arts programming are also amenities attractive to new businesses and to visitors.

NORTHSHORE HISTORIC RESOURCES INVENTORY
(Potential and current King County Landmarks)

0039 Hollywood School (KC Landmark, WA State Register) - 1912
14810 NE 146th Place, Woodinville

0061 John and Anna Wold Homestead - 1890's
14008 100th Avenue, Bothell

0084 Hollywood Farm (KC Landmark, National Register, WA State Register) - 1913
14111 NE 145th Street, Woodinville

0090 Ivar Larsen Home - 1922
16504 112th Avenue NE, Bothell

0099 Woodinville Memorial Park - 1888
NE corner of NE 175th Street and 132nd Avenue NE, Woodinville

0183 Paradise Lake Cemetery - 1895
Paradise Lake Road, Woodinville

0185 Johann Koch Blacksmith Shop - early 1900's, 1924
13123 NE 175th Street

0186 De Young House - 1930
14121 NE 171st Street, Woodinville

0187 Jesse Brown House - 1900
17025 Woodinville-Redmond Highway, Woodinville

0188 Stimson-Moore House - 1917
15844 NE 145th Street, Woodinville

0191 Anderson-Carlberg Farm (former KC Landmark, demolished 1993) - 1887-88
15321 West Hollywood Drive, Woodinville

0379 Miller Log House - c. 1907
16017 Juanita-Woodinville Highway

0388 St. Edwards Seminary - 1931
Juanita Drive NE, on 145th Street

0392 Charles Thomsen Estate (KC Landmark) - 1927
7330 NE 170th Street, Kenmore

0796 Boyer Farmhouse
20210 156th Avenue NE, Woodinville

0831 Kenmore Bridge (KC Bridge #1071A) - 1938, 1970
on Juanita Drive, over Sammamish River, approximately NE 174th Street

Chapter 10: Kenmore Activity Center

History of Kenmore Area

The history of Kenmore is short but varied. Prior to the arrival of white settlers, the marshy wetland areas at the mouth of the Sammamish River were popular for duck-hunting with Native Americans. Around the turn of the century, a log mill was started, which was purchased in 1903 by John McMasters, a Canadian. This mill consisted of the millhouse, cookhouse, bunkhouse, and workers shacks. Since Mr. McMasters hometown in Canada was called Kenmore, he named the area around his mill Kenmore. In 1913 a red-brick road linking Seattle and Bothell was completed, bringing the first growth to Kenmore. After World War I small tracts of land were sold, and homes began to be built. A store and gas station were completed in 1919. In 1934 the two lane brick road was removed and a four-lane highway completed, moving Kenmore towards its current state.

Kenmore in 1993

Kenmore today is a bustling commercial, industrial, and housing center, providing services to the residents in the immediate area as well as to pass-through commuters on their way to Bothell, Inglewood, Woodinville, and other locations. The center is in a unique location, being reasonably close to the major Eastside cities, Seattle, Everett, and the Highway 527 high technology industry corridor. The actual size of the center, defined on the Kenmore Preferred Land Use Alternative Map, is quite large, with approximately 500 acres.

The major feature in Kenmore is State Route 522. SR-522 runs from Seattle to the Town of Snohomish, and carries a heavy load of commuter traffic moving from the Eastside to Seattle and visa-versa. This corridor is discussed in detail in Chapter 4, Transportation. Congestion levels on this corridor are expected to continue, even with substantial circulation improvements planned for the Kenmore area. Within Kenmore, SR-522 is five lanes wide, and cuts almost directly through the middle of town, running east to west. Because of SR-522's width and location, it forms a substantial visual and physical barrier, making vehicular movement across SR 522 difficult, and crossings on foot or by bike nearly impossible, effectively splitting Kenmore in two. The presence of SR 522 has made the center highly dependent on the automobile. The center has developed as a strip running along SR 522 from east to west, lacking a true center. Because SR 522 and other factors encourages use of automobiles, vast amounts of parking have developed in Kenmore, accentuating the feeling of domination by the automobile. Finally, automobile traffic on SR 522 has resulted in a large number of signs and billboards being located within Kenmore, contributing to a feeling of automobile orientation.

While Kenmore's physical orientation to the highway may detract from the center's image and function, several important positive components exist. The presence of Lake Washington, the Sammamish River, and the Swamp Creek, all of which either border or run through Kenmore, each provide a marine, aquatic and wetland focus to Kenmore which few communities can claim. Several mobile home sites within the center provide for affordable housing which is close to transit stops, shopping and community facilities. The Burke-Gilman regional trail runs directly through town, adjacent to SR 522. This trail allows residents to walk, run, or bicycle to the surrounding area, and for people to visit Kenmore easily.

Relationship to the 1985 King County Comprehensive Plan

The 1985 King County Comprehensive Plan designates Kenmore an Urban Activity Center. Urban Activity Centers are intended to be the primary commercial and industrial centers in the County, and are to be located throughout the County to provide employment, shopping, and services close to residential areas. A full range of land uses are acceptable in Activity centers, including offices, retail and wholesale businesses, industry, and housing. This variety of land uses, which are to be built in a compact development pattern, allows businesses to locate near supporting businesses, provides for people to walk from their home to shopping, parks and work, reducing the need for driving, encouraging mass transit service and keeping the activity center a lively place in the daytime, evenings and weekends.

The size and mix of uses in each urban activity center varies depending on locational constraints and market conditions. The Comprehensive Plan directs community plans to establish the size and mix of uses for urban activity centers. The factors to be used in making this determination include:

- regional and local needs and constraints
- provision for the opportunity for a local balance of jobs and population, in conjunction with other nearby activity centers.
- complementing land use plans for Urban Activity Centers nearby.

This chapter provides a policy foundation to guide future development and improvement in Kenmore, following the guidance provided by the Comprehensive Plan, while considering the specific potentials, constraints, and nuances of Kenmore and its surrounding area. The map, Kenmore Activity Center Proposed Land Use, illustrates the land use recommendations of this chapter.

Based on the discussion above, the following two policies provide general direction for the growth of Kenmore.

K-1 **King County should encourage a diversity of uses within the Kenmore Activity Center to enhance employment, housing, commercial, and recreational opportunities, and to facilitate transit.**

K-2 **Public and private sector development in Kenmore should be directed to encourage pedestrian activity, increase a sense of identity for Kenmore, reduce its reliance on the automobile, and to enhance its marine orientation and to encourage a shift in individual travel patterns towards transit and carpooling.**

Designated land uses are mapped at the back of the plan.

Commercial and Industrial Development

In Kenmore, there currently is an excess of commercially designated land when compared to the Comprehensive Plan guidelines. The Comprehensive Plan recommends that only 10 to 30 acres of land in Activity Centers of Kenmore's site be provided for retail use. Under the zoning provided in the 1981 Revised Northshore Community Plan, as many as 120 acres could be used for retail space. As of 1990, large amounts of commercially designated land are vacant in Kenmore and much of the developed commercial land is of low intensity, indicating commercial and retail land in excess of market needs.

K-3 **The amount of commercially designated land should be reduced in Kenmore to achieve a higher intensity of use and compact development, consistent with the King County Comprehensive Plan.**

As mentioned above, commercial development in Kenmore is sprawled out along SR-522, a commercial strip which detracts from Kenmore's image and makes it difficult to determine where Kenmore starts, where it ends, and where its center is. The intersection of 68th Avenue N.E. and SR-522 is the primary intersection in Kenmore and is geographically close to its physical center. This intersection is designated as a symbolic center for Kenmore.

K-4 **New commercial development should be centered around the 68th Avenue N.E./SR 522 intersection. Existing commercial properties east of the general vicinity of 73rd Avenue NE and west of the general vicinity of 65th Avenue NE should be encouraged to convert to multifamily housing. Commercial sprawl along SR 522 should be discouraged.**

No current plans exist for Kenmore to incorporate. Over time, it is likely that Kenmore will become an incorporated city to provide local governmental services. Kenmore is already developed at an urban land use pattern, and is within the Northshore Urban Growth Area. To provide future civic needs, a specific area of offices should be located near the commercial center and adjacent to existing, established public facilities.

K-5 **Office uses should be designated across from the Kenmore Library, fire department, and park and ride and the King County police station, at the intersection of 73rd Avenue N.E. and N.E. 181st Street.**

Industrial businesses in Kenmore give it a strength and vitality that many centers do not have. The seaplane harbor and boat marina in particular provide a clear marine orientation. However, much of the industrial land designated by the 1981 Revised Northshore Community Plan is underutilized or vacant. Substantial amounts of industrial land adjacent to Lake Washington and the Sammamish River are used for storage. This underutilized land which is adjacent to the water but is not water-oriented should be redesignated for other uses which will take advantage of the unique aquatic area. Mixed use development would allow a variety of uses to occur near the waterfront. This is discussed further, in the mixed use section of this chapter.

K-6 **Industrial properties adjacent to Lake Washington and the Sammamish River within the Kenmore center should be encouraged to convert to mixed uses. Water dependent uses should remain such as the marina and sea plane harbor.**

K-7 **The commercial and industrial-designated properties south of SR 522 where it intersects with 68th NE are appropriate for mixed use development. Until all impacts of such a large scale development adjacent to a congested intersection and the Sammamish River can be addressed as defined in Policy K-11, the properties should receive designations that will permit continuation or expansion of existing uses.**

Multifamily housing is considered a key element of Urban Activity Centers in the Comprehensive Plan. The Comprehensive Plan suggests that the size and mix of uses in each center by based on regional and local

needs and constraints. Kenmore presents opportunities for multifamily housing which will be an asset to the community. Marginal businesses operating along SR-522 are encouraged to convert to multifamily housing as are vacant or underutilized commercial uses outside of the commercial core. Increasing the population within the activity center supports pedestrian activities, transit and carpooling. Defining the commercial core with a pedestrian oriented fringe of apartments and condominiums will give Kenmore a new identity which is less dependent on the automobile.

New multifamily housing will not be an asset unless a pedestrian environment is provided, increased traffic is mitigated transit options are planned, and the bulk and scale of new housing adjacent to single family residences is regulated. The Kenmore Design Study, attached to this plan, outlines development requirements to ensure that a pedestrian environment is strengthened as Kenmore develops. Strong traffic and transit mitigation measures are required for new apartments in Kenmore, as explained in Chapter 4, Transportation, and required in the Northshore Area Zoning. The bulk and scale of apartments in relation to existing development is also regulated through the Area Zoning. A transition between the commercial core and the single family residential areas lying outside of Kenmore is accommodated by locating the highest multifamily densities adjacent to the commercial properties and decreasing densities adjacent to residential areas.

K-8 **Multifamily development at densities of up to 48 units per acre should be located in close proximity to the pedestrian oriented commercial/office core. Densities should decrease to provide a transition to nearby single family residential areas.**

On the periphery of the multifamily and commercial property zoned in the 1981 Revised Northshore Community Plan are several large or vacant single family residential properties. These have been redesignated for low-density multifamily residential use.

K-9 **Parcels which are vacant or developed without a consistent single family pattern, are adjacent to the Kenmore Activity Center, and were designated for single family use under the 1981 Northshore Plan, are redesignated as low density multifamily housing, to provide a transition consistent with policy K-8.**

Seven mobile home parks exist in Kenmore. These parks are all located reasonably close to shopping, bus routes, restaurants and community facilities.

K-10 **The commercial core of Kenmore, where redevelopment at high residential densities in mixed use projects is sought, is not an appropriate long-term location for mobile home parks. Existing parks within the pedestrian overlay district should continue until those properties are redeveloped. If the property is proposed for redevelopment, the County should require relocation assistance as permitted by RCW 59.21 and develop a relocation assistance program containing the following elements:**

A. **Options for relocation funding, and**

B. **Options for new mobile home sites, including potential new park development. New sites should be:**
1. **within 15 miles of Kenmore;**
2. **within an urban area and compatible with surrounding land uses;**
3. **rented for no more than average market pad rent based on U.S. Department of Housing and Urban Development fair market rent for mobile home parks, and**
4. **close to shopping and within ¼ mile of public transit.**

Mixed-Use Development

Mixed-use development is a simple concept which has been used for centuries. Mixed-use development places housing near office and retail uses, often in the same building. By providing home, workplace, and the retail and service centers in one general area, residents are able to function without an automobile on a daily basis. Mixed use developments increase a sense of community because different needs are met in the same geographical areas. Whereas the pattern in suburban areas is often that the office and retail areas are alive during the day and the residential areas are alive in the late afternoon and evening, mixed-use areas feature activity around-the-clock.

Kenmore has unique opportunities for mixed use development. South of SR-522 and close to 68th Ave. NE, several large lakefront parcels designated for industrial and commercial uses in the 1981 Northshore Plan are underutilized or vacant, serving as storage areas for other industrial uses. Waterfront land offers views, water access and a marine orientation desirable for residential, commercial and office uses. This area is adjacent to SR-522, a major transportation route to Seattle. It is also adjacent to the Burke-Gilman trail, providing bicycle and pedestrian access. The waterfront orientation offers the potential for future ferry access across Lake Washington directly to the site. Since the area serves as a crossroads for different transportation types, the opportunity exists to develop a transit hub serving these transportation alternatives. The transportation alternatives, and the availability of shopping, recreation and services within walking distance; will allow new residents to rely less on the automobile.

New mixed use development could provide public benefits and amenities. Increased shopping and recreational opportunities, public access to the shoreline, pedestrian connections to other parts of Kenmore and the opportunity to live close to employment and shopping opportunities are examples of the public benefits of mixed use development.

Commercial and industrial uses in existence at the time of plan adoption on these waterfront parcels should be allowed to continue until mixed use redevelopment occurs. However, redevelopment of these properties as new commercial or industrial development would not be consistent with the policies of this plan for several reasons:

- Commercial and industrial development has the potential to generate significant amounts of traffic. Items 1 and 2 on the following page describes the extreme transportation constraints in the Kenmore area. No new development should be permitted until a package of improvements and funding have been identified, as defined in Items 1 and 2.

- Provision of housing is a critical issue in this plan. The Northshore CAC has recommended policies directing most new residential growth anticipated for Northshore to activity centers such as Kenmore. Commercial or industrial development of these sites will greatly reduce the amount of residential development proposed for Kenmore.

- Commercial and industrial development increase the amount of commercial land in Kenmore. As described earlier in this chapter, Kenmore already contains more commercial land than recommended by the Comprehensive Plan. In addition, policies of this chapter concentrate commercial activity at the intersection of SR 522 and 68th Avenue NE. More commercial/industrial development in Kenmore would be inconsistent with the guidelines of the Comprehensive Plan and this Plan Update.

- The Northshore CAC recommended policies that direct public open space and shoreline access as a primary component of mixed use development in Kenmore. A mix of housing, commercial and office uses would bring human vitality to these public areas. Open spaces adjacent to industrial development in particular would not be as pleasant as those created through mixed use development.

Several outstanding issues must be resolved before mixed use development can occur in Kenmore:

1. Circulation through the intersection of SR-522 and 68th Ave. NE affects all through traffic in the area. Level of Service (LOS) at this intersection is F. This intersection cannot be improved to bring the LOS back into compliance with adopted County standards. SR-522 in Kenmore is recognized to be at "ultimate design." Roads that are at ultimate design cannot be widened without significant destruction of existing development and potential environmental damage because the land around the roadway is already developed and/or contains natural features. King County recognizes that while some improvement to adjacent roadways is possible, congestion below County thresholds is likely to continue on SR-522.

   The King County Department of Public Works has identified potential transportation improvements which will facilitate traffic flow in Kenmore. Preliminary transit improvements have also been identified. The transportation P-suffix conditions in this package identify ways to mitigate transportation impacts as a result of mixed use development on the Pre-Mix site. The level of acceptability cannot be based on current County standards due to the ultimate design characteristics of the SR-522 roadway described above. Completion of the Transportation/Circulation Master Plan is necessary to update and clarify mitigation measures when a more detailed development proposal is submitted.

2. While King County has identified several road projects in Kenmore which may alleviate transportation delays, some of these projects are not currently on the King County Capital Improvements List. A complete funding package must be developed to target public and private commitments for the construction of necessary improvements. This package should include phasing of new development in sequence with the road improvements.

3. In addition to road improvements, a strong emphasis on transit must be included in the mixed use proposal. Congestion in the 522 corridor is a disincentive to single car drivers. An on-site METRO transit facility should be developed to take advantage of current and future travel options. METRO should participate in analyzing travel options in the 522 corridor.

4. Pedestrian linkages are critical to connecting new mixed use on the south side of SR-522 with downtown Kenmore on the north side of the highway. Substantial pedestrian linkages must be provided to connect the development with the existing business district. This includes connections across SR-522.

5. The shorelines of Lake Washington and the Sammamish River have been severely damaged by industrial activities in Kenmore. Redevelopment of waterfront properties should include restoration of these shoreline areas. Off-site provision of a wildlife enhancement project should also be examined. Redevelopment must also conform with the requirements of the 1990 Sensitive Areas Ordinance.

6. These shorelines are important water features for all Kenmore residents. Redevelopment of shoreline properties must include public access, viewpoints and open space to shorelines. Impacts to view corridors from elsewhere in Kenmore should also be assessed.

7. Waterfront mixed use development has the potential to affect the balance of affordable housing in the Kenmore area. Impacts to affordable housing must be assessed and mitigated. Consideration should be given to mitigating these impacts off-site in the Kenmore vicinity.

This plan supports the concept of mixed-use development in Kenmore. All of these issues must be addressed before specific mixed use projects can be approved. Redevelopment in this area prior to resolution of this issues would be premature. The following policy identifies the issues which mixed use development must address through land use and development review:

K-11 **This plan supports a Mixed Use Development Area in Kenmore. Issues identified in this plan must be addressed before Mixed Use development can occur. The Mixed Use**

Development Area is designated Industrial/Commercial, Potential Mixed Use. Mixed Use development shall meet the following conditions before redevelopment can occur:

A. Provide pedestrian linkages into other parts of Kenmore.

B. Provide for easily accessible transit hub, and a strong transportation demand management program that facilitates transit use.

C. SR-522 through Kenmore is currently at LOS F and at ultimate design. Further study is necessary to determine if potential roadway and transit improvements will be sufficient to mitigate roadway congestion to acceptable levels. Therefore, prior to the actualization of any potential zoning on the site, a plan amendment study shall be completed by the Executive and transmitted to the Council 90 days after the applicant submits its transportation analysis to King County. The study should identify acceptable congestion thresholds based on aggressive transit solutions. King County will determine if potential transit and roadway improvement will be sufficient to meet new transit thresholds. If it is determined that transit and roadway improvement will be sufficient to meet transit thresholds, the new development shall pay a pro-rata share towards these improvements including both roadway and transit capital projects. New development may occur only when transportation impacts are adequately mitigated.

D. Provide for substantial public access to and use of the Lake Washington and Sammamish River waterfront.

E. Contribute to any Kenmore business improvement district.

F. Mitigate for impacts upon affordable housing, as determined by King County.

G. Provide for community open space.

H. Provide for fish and wildlife enhancement.

I. Mitigate for impacts to the shoreline edge through riparian vegetation enhancement.

J. Provide for easily accessible public viewpoints and project view corridors.

K. Provide for convenient pedestrian access from the development to link to nearby park facilities.

L. Development shall provide for thorough environmental review, which should include analysis of available water-based industrial land in the region to support this type of use.

Design and Development Guidelines

As part of the Northshore Community Plan Update, a separate study was undertaken to prepare development and design guidelines for the commercial areas in the Kenmore urban activity center. The purpose of the study was to translate the community's design goals and policies for the Kenmore center into site-specific development conditions and other actions that together serve as guides to future development. The design goals and policies for the Kenmore center seek to encourage pedestrian activity, increase a sense of identity for Kenmore, reduce its reliance on the automobile, and enhance its marine orientation.

K-12 **The Kenmore Urban Design Study provides guidelines for future development to enhance the aesthetics, and build on the character and function of Kenmore. The following elements from the design study should be implemented through zoning P-suffix conditions, the King County Capital Improvement Program and any other identified methods.**

- **A. Identification of the most desirable placement and orientation of new buildings to improve overall pedestrian activity and improve the aesthetics of the center.**
- **B. Location of pedestrian linkages to allow maximum mobility and enjoyment of pedestrians in Kenmore.**
- **C. Identification of potential parks, plazas, and public green spaces which enhance the aesthetics and character of Kenmore.**
- **D. Specific identification of linkages to the Burke-Gilman Trail.**

K-13 **Identifying features such as banners should be installed along the Burke-Gilman Trail through downtown Kenmore to increase Kenmore identity.**

A full description of the Kenmore Urban Design Study is included in Appendix 2. The study is summarized below.

Waterfront Mixed-Use Development

The area located south of SR-522 provides unique opportunities for mixed-use residential, commercial retail and office uses. Policy K-11 outlines the issues that proposed mixed-use development must address through the land use and development review process. They include pedestrian linkages into other parts of Kenmore, provision of a transit center, traffic mitigation, provision of public access to Lake Washington and the Sammamish River waterfront and other community open space, off-site fish and wildlife and riparian vegetation enhancement, and provision of public viewpoints and view corridors.

Kenmore North Pedestrian Oriented Area

The area situated around N.E. 181st Street is designated as a pedestrian area, with the overall design goal of promoting future development that contributes to pedestrian-friendly "village" setting, perhaps with symbolic ties to Kenmore's historic past as a "mill town".

The pedestrian area is implemented through P-suffix conditions These conditions include the prohibition of certain auto-oriented uses such as gasoline stations and drive-through banks/restaurants, reduction of front and side setback requirements; provisions that require landscaping, signage and public space that promote the pedestrian-orientation of the District; and restrictions on the number of vehicular access points provided as part of any new development.

Civic Center and Office Core

The area located around the existing police/fire department, library and park-and-ride lot is envisioned as a pedestrian oriented civic/office core. Guidelines include the provision of pedestrian linkages between individual developments, development of a civic square around the intersection of N.E. 181st Street and 73rd Avenue N.E., and potential expansion of the park-and-ride lot to provide community parking.

"Central Focus" Pedestrian Linkage

The intersection of SR-522 and 68th Avenue N.E. is the central point in the Kenmore center. The design objective is to provide a key pedestrian linkage between north and south Kenmore near this intersection, with the preferred improvement being a pedestrian overpass. In addition, physical improvements, including special lighting, towers/arches, flags and/or special paving patterns, are recommended for this area as a way of creating a symbolic central focus identity for the Kenmore center.

Other Key Linkages

Several key pedestrian linkages are recommended for improving pedestrian access and circulation in the Kenmore center. They include:

- Improved pedestrian crossings of SR- 522 at the intersections of 80th Avenue N.E. and 65th Place N.E. These intersections could include signage and other design elements to signify the eastern and western gateways for the Kenmore center.
- Improvements to the right-of-way along 68th Avenue N.E. and 73rd Avenue N.E. to provide a strong pedestrian linkage to the Kenmore commercial core from the residential areas to the north. These improvements include signage, street trees and other landscaping.
- Creation of a dedicated pedestrian pathway mid-block between 68th Avenue N.E. and 73rd Avenue N.E. to provide an additional north-south linkage to and from the Kenmore center.

Transportation

Traffic is a major issue in Kenmore. SR-522 is highly congested during rush hour, with as much as 70% of the traffic originating outside Northshore. Policy T-7 recognizes the congestion levels along SR-522 are likely to continue, even with programmed improvements. King County intends to take aggressive steps towards providing travel alternatives through this corridor. Lifestyle changes will be necessary for residents who wish to avoid long waits in their cars. Because of this congestion, through movement and ingress/egress from the highway is difficult. King County has completed a traffic study of Kenmore, the "Kenmore Central Business District Traffic and Access Study." This study has identified several remedies for traffic problems in Kenmore.

K-14 **Remedies for traffic congestion, in Kenmore including those identified in the Kenmore Traffic Circulation Study, should be aggressively pursued by King County. King County and METRO should work together to provide travel options in Kenmore linked to land use.**

K-15 **New development areas designated with potential higher land uses should not be permitted to develop until traffic improvements are scheduled which reduce traffic congestion within the Kenmore center, consistent with Northshore Plan policy T-7.**

Natural Features

Residents and visitors to Kenmore enjoy a variety of natural features, such as scenic vistas and waterways, that contribute to the physical beauty of the area and help shape the community's identity. While some features provide recreational opportunities, others are fragile environments and must be protected.

K-16 **New developments adjacent to Lake Washington, the Sammamish River, Swamp Creek, and other sensitive areas should be designed and sited to protect these features.**

Chapter 11: The Urban Activity Center of Woodinville

History of Early Woodinville

The first settlers of the Woodinville area were George Rutter Wilson and Columbus Greenleaf, who arrived in the area and staked land claims in 1870. In 1871, Susan and Iner Woodin, after whom Woodinville is named, staked a claim at the bend in Sammamish River where Woodinville is currently located. The Woodins came to Woodinville from Seattle's first tannery.

The Woodin family opened a store in their house, as well as holding church services and school there. Numerous homesteaders began settling in the area, and by late 1880's a rail line ran through the village, providing additional mobility to its residents. Logging was the main industry in the area. By 1909 Woodinville had two sawmills, two shingle mills, several stores, a hotel, a railroad station , a school, a blacksmith shop and a small school desk factory.

Woodinville in 1993

Present-day Woodinville is a moderate sized Activity Center which serves as a residential and more predominantly commercial hub for residents in the Leota, Wellington, and Hollywood Hill, North Bear Creek and South Snohomish County. Woodinville also contains a substantial amount of industrial property on its north and south peripheries, providing a small regional employment base.

Woodinville has many attributes which give it a distinctive character. Its location at the head of the Sammamish Valley provides a substantial visual and social link to the agriculturally-oriented activities of the Valley. A regional horticultural nursery is located in Woodinville, drawing residents from around the Puget Sound. The Sammamish River and the Sammamish River Trail run through the west end of town, giving Woodinville a degree of recreational and pastoral character. NE 175th Street, the main street which runs east-west through the center of town, has planters, street trees, and sections of brick sidewalks which provide the basis for a pedestrian-oriented downtown.

Many pedestrian opportunities in Woodinville have not yet been realized. Visual and physical linkage to the Sammamish River and Trails are minimal. Pedestrian mobility is fragmented in many areas due to numerous driveway curb cuts bisecting pedestrian sidewalks. The Woodinville Design and Development Guidelines suggest improvements to pedestrian access that will take advantage of Woodinville amenities.

After a vote in November, 1992, Woodinville incorporated as a city on March 31, 1993.

Relationship to the 1985 King County Comprehensive Plan

The King County Comprehensive Plan identifies "urban activity centers" as the primary locations for commercial and industrial development in King County. The Comprehensive Plan calls for the location of urban activity centers throughout King County to provide employment, goods and services close to where people live. Land uses appropriate in urban activity centers include: retail, offices, commercial and industrial uses, and housing. This variety of land uses, located in a compact development pattern, allows businesses to locate near supporting business, reduces the need for vehicle trips, encourages mass transit service, and keeps the activity center a lively place in the daytime, evenings, and weekends.

The size and mix of uses in each urban activity center varies depending on locational constraints and market conditions. The Comprehensive Plan directs community plans to establish the size and mix of uses for urban activity centers based on several factors, including:

- amount of residential development planned for the surrounding area;
- existing and planned transportation network;
- interests' of local residents;
- character of the community; and
- existing and future availability of public services and facilities.

This chapter lays the policy foundation for the future development of the urban activity center of Woodinville. This chapter establishes policies to:

- Encourage the efficient and intensive use of existing commercial and industrial sites;
- Encourage the accessory development of residential uses, including mixed-use developments, to achieve a workable jobs/housing balance;
- Promote pedestrian and bicycle linkages within downtown Woodinville and from the downtown area to adjacent residential neighborhoods;
- Improve vehicle access and circulation in the Woodinville business district;
- Protect and enhance natural features and resource lands in and adjacent to Woodinville; and
- Enhance aesthetics within downtown Woodinville.

W-1 **King County should encourage a diversity of uses within the Woodinville Activity Center to enhance employment, housing, commercial and recreational opportunities.**

Designated land uses for the center are mapped at the rear of the plan.

Commercial and Industrial Development

The commercial development in urban activity centers usually includes retail development to serve the nearby communities. Allocation of excessive land to retail use, however, can result in low density develop-

ment and vacant parcels which creates a development pattern that is not conducive to pedestrian circulation or mass transit and does not make full use of public investments in infrastructure, such as roads and utilities.

Neighborhood and community businesses make up a large portion of the existing land uses in the Woodinville activity center. Under the 1981 Northshore Community Plan, almost 95 acres of land was zoned for business uses in Woodinville; this is twice the 10-50 acres of retail core recommended for urban activity centers by the Comprehensive Plan. This excess supply of commercial land has contributed to the "strip development" with an automobile orientation, along NE 175th Street and SR-522. The Northshore Community Plan Update focuses on encouraging more efficient use of existing commercial lands through redevelopment and intensification of uses rather than designation of new commercial sites.

W-2 **In order to maintain the residential character of Woodinville and encourage more efficient and intensive use of the existing commercial, manufacturing and office areas, commercial development should be concentrated along NE 175th Street between 131st Ave. NE and 140th Ave. NE. Commercial development beyond this area should be discouraged with the exception of the existing commercial development located along Bothell-Woodinville road in an area known as old Woodinville.**

Many service providers, such as doctors, dentists or insurance agencies have offices in Woodinville. These uses should be near commercial uses to encourage pedestrian activity and facilitate travel between retail and offices.

W-3 **To provide for pedestrian- and transit-oriented high-density employment uses, office uses should be designated close to the commercial core within the general vicinity of 140th Avenue NE and NE 181st Place, 140th Avenue NE and NE 171st Street, as well as along Bothell-Woodinville Road.**

Woodinville residents and business people expressed a desire to maintain Woodinville character. Most buildings in the commercial core are under three stories in height. The following policy directs new development to maintain the scale of the existing downtown.

W-4 **Building heights in the Woodinville activity center should be limited to three stories maximum.**

Residential Development

One of the key objectives of the Comprehensive Plan is to direct employment and population growth to the cities and urban activity centers. Comprehensive Plan policy R-103 states the preferred direction of residential development in King County.

R-103 King County should encourage most new residential development to occur in Urban Areas, in locations where facilities and services can be provided at the lowest public cost. Urban Areas should have a variety of housing types and prices, including mobile home parks, multifamily development, townhouses, and single family development.

The Comprehensive Plan's urban activity center policies call for a workable balance of jobs and housing within urban activity centers such as Woodinville. Specifically, multifamily housing and mixed-use developments can contribute to this jobs/housing balance.

Existing multifamily housing in Woodinville is located primarily in the north, southwest, and southeast edges of the downtown area. Development of parcels zoned for multifamily residential use has occurred fairly recently, and the area zoned for this use in the 1981 Northshore Community Plan is close to buildout.

W-5 **The current balance between multifamily and commercial land uses should be modified to reduce the commercial area and increase the amount of multifamily housing, for greater consistency with the King County Comprehensive Plan. Multifamily development at densities of 18 units per acre should be located within the pedestrian oriented commercial/office core.**

The following policy provides for a transition between more intense uses in the downtown core and surrounding residential areas.

W-6 **Building heights and densities for both commercial and residential uses in the activity center should be required to step down to provide a transition to adjacent single family areas.**

There is a substantial amount of land, to the north and south of downtown Woodinville, zoned for industrial uses which is not yet developed. Lands designated for industrial uses can support an increase in industrial activity through redevelopment and intensification of the land. Chapter 3, Commercial and Industrial Areas discusses industrial land within the planning area.

The following policy recommends redesignating certain industrial properties within the Woodinville core to multifamily housing to achieve a more balanced mix between multifamily, industrial and commercial lands in Woodinville.

W-7 **Those properties in Section 10 that are east of the Woodinville-Snohomish Road and north of NE 175th St and that were designated Industrial by the 1981 Northshore Community Plan, should be redesignated to multifamily housing.**

The Comprehensive Plan recognizes the need to provide a variety of housing types to meet a variety of housing needs. The Comprehensive Plan allows multifamily housing for the elderly population at densities higher than permitted in surrounding development because it generates less traffic than comparable housing for the general population.

W-8 **Densities of 24 units per acre should be allowed for low income elderly housing projects when consistent with the criteria of the King County Housing Assistance Plan and other applicable King County land use policies.**

There is an existing mobile home park on a site designated by the 1981 Northshore Plan for multifamily development. This park houses approximately 100 mobile homes. Park residents have a sense of community, and they enjoy easy access to the retail services and offices in downtown Woodinville. This neighborhood also provides affordable housing for a large elderly population on fixed incomes. The new Woodinville South Bypass Road will run along the southern border of this mobile home park. In addition, ongoing commercial development in Woodinville could affect the quality of life for mobile home park residents. Closure of the park would displace many residents who may have difficulty relocating their mobile homes.

W-9 **While the Canterbury Estates Mobile Home Park provides affordable, attractive housing, its existence within the an urban activity center is not consistent with KCCP policies CI-201 and R-202B which call for higher density residential uses within activity centers. The property should retain its multi-family designation and be permitted to develop at the same density as abutting multi-family designated lands. If the property is proposed for redevelopment, the County should require relocation assistance as permitted by RCW 59.21 and develop a relocation assistance program containing the following elements:**

A. **Options for relocation funding, and**

B. **Options for new mobile home sites, including potential new park development. New sites should be:**

1. **within 15 miles of Woodinville;**
2. **within an urban area and compatible with surrounding land uses;**
3. **rented for no more than average market pad rent based on U.S. Department of Housing and Urban Development fair market rent for mobile home parks, and**
4. **close to shopping and within ¼ mile of public transit.**

Mixed-Use Development

Mixed-use development combines commercial and residential uses. Typical commercial uses include retail and office activities. The benefits of mixed-use developments can include: closer proximity between work and home; efficiency in providing public services and facilities; a reduction in individual vehicle usage; and added vitality in the downtown. Comprehensive Plan policies CI-221 through CI-225 provide guidance for mixed-use developments to avoid conflicts between commercial and residential uses.

W-10 **Mixed use developments will enhance the Woodinville Activity Center by providing convenient living environments and strengthening retail businesses. Mixed use developments which combine housing with office or commercial uses in the same structure or on the same site should be encouraged within the Woodinville activity center. Such developments shall meet the following criteria:**

A. **Provide pedestrian linkages between the two uses;**

B. **Implement the Woodinville grid system;**

C. **Provide additional amenities such as usable public space and landscaping beyond that required by KCC 21.51;**

D. **Locate close to public transit; and**

E. **Provide both off-street and on-street parking that does not disrupt pedestrian access to commercial uses**

W-11 **Mixed use developments should be permitted within the commercial area of the Woodinville Activity Center. Within multifamily areas, mixed use should be optional subject to conditions designed to ensure compatibility with residential activity. In order to maximize the opportunities for mixed use developments, only those commercial activities having impacts that are clearly incompatible with the objective of creating a higher-density pedestrian-oriented community should be prohibited in mixed use developments.**

Pedestrian and Bicycle

The Comprehensive Plan recognizes pedestrian and bicycle travel as viable and energy-efficient transportation systems. Comprehensive Plan policy F-234 directs that safe and convenient pedestrian and bicycle

access should be provided between residences and nearby schools, parks, business areas, and transit routes. County standards for pedestrian and bicycle facilities should be applied consistently and equitably to all developments.

W-12 **Public and private sector development in Woodinville should encourage pedestrian activity, reduce reliance on the automobile, and strengthen Woodinville's identity as a lively, pedestrian-oriented urban center closely linked to nearby farmlands, recreational facilities and natural areas.**

W-13 **Development of improved access and linkages between the Woodinville Activity Center, the Sammamish River Trail, other trails and residential neighborhoods should be encouraged.**

W-14 **Pedestrian and bicycle linkages are encouraged and should be planned. There should also be a link for equestrian use from Hollywood Hill and NE 171st Street to the Sammamish River Trail in the vicinity of the south CBD bypass.**

Design and Development Guidelines

As part of the Northshore Community Plan Update process, a separate study was undertaken to prepare design and development guidelines for the commercial areas in the Woodinville urban activity center. The purpose of the study was to translate the community's design goals and policies for the Woodinville center into site-specific development conditions and other actions that together can serve as guides to future development. The design goals and policies for the Woodinville center seek to enhance pedestrian access and circulation, encourage the use of transit, and improve aesthetic quality. The County Council did not adopt P-suffix conditions to implement the design and development guidelines. In order for these design concepts to be implemented, a regulatory mechanism (such as P-suffix conditions) would need to be adopted.

W-16 **The Woodinville Design Study identifies strategies for improving the appearance of Woodinville, building upon the positive elements of its existing character and improving its function as the primary shopping area for surrounding neighborhoods. This plan supports the following elements from the Woodinville Design Study to be implemented through zoning, P-suffix conditions, the King County Capital Improvement Program, and any other identified methods.**

A. **Location of pedestrian linkages to allow maximum mobility and enjoyment for pedestrians in Woodinville.**

B. **Identification of potential parks and public green spaces which enhance the aesthetics and character of Woodinville.**

C. **Specific identification of linkages to the Sammamish River Trail.**

A complete version of the Woodinville Urban Design Study is included in Appendix A. The study is summarized below. The guidelines mentioned in the study are not regulatory in nature.

Pedestrian Oriented Area

The development and design guidelines center around the concept of a pedestrian oriented area. If adopted, this area would encompass all properties designated as commercial or mixed-use within the area bounded by 140th Avenue N.E., Woodinville-Snohomish Road N.E., and the proposed south bypass road. The overall design objective of the pedestrian district is to create a physical setting that promotes walking rather than driving as the primary mode of circulation.

The Revised King County Zoning Code contains new provisions called special district overlays. These overlay districts allow modifications of regular zoning conditions in order to carry out comprehensive and community plan policies for areas with unique characteristics. The pedestrian overlay district is designed for activity centers where pedestrian uses are to be emphasized. This overlay district is a tool that could be used to implement the design guidelines in Woodinville.

A major component of the pedestrian district in the Woodinville center is the classification of existing and proposed roadways into three types. Type "A" streets are designated as the primary pedestrian routes in the center. Type "B" streets are designated as secondary pedestrian routes, while Type "C" streets are assigned as primary vehicular routes. Certain design guidelines outlined for the District differ according to what type of street they front.

The pedestrian oriented area design guidelines include prohibition of certain auto-oriented uses such as gasoline stations and drive-through banks/restaurants, reduction of front and side setback requirements, restrictions on the amount of required off-street parking and use of surface parking lots, provisions for landscaping, signage, and public space that promote the pedestrian-orientation of the District, and restrictions on the number of vehicular access points on pedestrian-oriented streets provided as part of any new development.

Green Gateway Design Concept

A conceptual design plan is proposed for the western part of the activity center with the objective of physically enhancing the main entrance to Woodinville and providing a pedestrian-oriented identity to the area. Guidelines include physical improvements to Memorial Park and the Sorenson School/playfields, establishment of view corridors and public access along the east side N.E. 175th Street in order to provide physical and visual access to the playfields and Sammamish River, development of a new park with parking along the Sammamish River Trail near N.E. 175th Street, and creation of additional pedestrian linkages between the trail and the commercial district.

Woodinville-Duvall Road as "Main Street"

The south bypass road, when completed, will redirect a substantial amount of through traffic away from N.E. 175th Street. As a result, there will be a prime opportunity for transforming N.E. 175th Street into a major pedestrian corridor for the Woodinville Center. The guidelines encourage pedestrian circulation along N.E. 175th through the reduction and/or elimination of building setback requirements, restrictions on the number of driveways provided as part of new development, landscaping of median (current turn lane) with left-turn pockets at key intersections, and sidewalk landscape/signage improvements.

Mini- or Pocket Parks

A series of small parks or public plazas are envisioned throughout the activity center as a way of providing public open space. These spaces would supplement the existing open spaces such as the Sorenson School ballfields and Memorial Park.

New Grid System

The new grid system should reinforce the pedestrian orientation of the activity center. Roads are classified as primary pedestrian streets, secondary pedestrian streets, and primary vehicular streets. The design of pedestrian streets should include wide, landscaped sidewalks, on-street parking, and two lanes for traffic. Development standards could be adopted which reinforce the pedestrian orientation of these streets through elimination of building setbacks, restrictions on the number of driveways, and requirements for ground floor retail space.

Vehicle Circulation

Successful urban activity centers need convenient vehicle access, circulation routes, and parking. Vehicle circulation in the Woodinville activity center is hampered by two factors. There is a significant amount of through traffic, mostly commuters, on NE 175th Street which is the main commercial thoroughfare, and an incomplete street network serves the commercial core.

Grid streets were established in Woodinville by King County Ordinances #8115, 8075, 8070, 8144, 8074, 8071, 8114, 8073 and 8072. The development of the grid system will provide alternative routes for downtown traffic and establishing a pedestrian circulation system along the grid pattern.

W-17 **To improve circulation in the central business area, the Northshore Community Plan supports completion of the north and south bypass system, and the development of a Woodinville grid system upon completion of a reassessment of the currently established grid.**

Woodinville is served by public transit, including a park and ride facility for commuters. A principle thrust of the Comprehensive Plan is to encourage development patterns that support mass transit which in turn will provide better service to planned growth. In addition to increasing the efficient supply of mass transit, future development should encourage transportation demand management strategies that reduce the demand for private vehicle usage.

W-18 **The Northshore Community Plan supports the study of existing and future parking demand, supply and management in the Woodinville business district, including opportunities for shared parking or reduced parking combined with transit availability. Consideration should be given to maintaining and improving the existing Metro park and ride on 140th Ave. N.E. including a possible second level. Metro should also consider locating a second park and ride on the fringe of the business district.**

Natural Features

Residents and visitors to Woodinville can enjoy a variety of natural features, such as scenic vistas and waterways, that contribute to the physical beauty of the area and help shape the community's identity. While some features provide recreational opportunities, other are environmentally fragile and must be protected.

W-19 **Natural features within the Woodinville Activity Center such as scenic vistas, waterways (i.e., Little Bear Creek and the Sammamish River) and adjacent agricultural resource lands should be protected and enhanced. New development and redevelopment of existing sites containing sensitive areas shall mitigate impacts from the proposal.**

See Chapter 7, Natural Resources for detailed policies concerning resource issues in the Northshore community planning area.

Community Facilities

The Comprehensive Plan seeks to preserve a sense of history. Preservation of historic sites maintains aesthetic diversity and links us to the past. New uses can maintain the value of historic sites.

W-20 **Sorenson School should be designated a community facility and recognized for its historical significance and potential use as a community center or civic center.**

Northshore Area Zoning

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I. Introduction

Background

The Northshore Area Zoning consists of text and official zoning maps for the unincorporated lands contained in the Northshore Community Plan Update study area (usually referred to as the "Northshore planning area"). The Northshore planning area is bounded by Lake Washington and 56th Avenue NE on the west; NE 132nd, 124th and 116th Streets on the south; approximately 180th Avenue on the east; and the Snohomish County line on the north. The Cities of Bothell, Kirkland, Woodinville and Redmond border or are within the planning area's boundaries.

The area zoning maps and text apply the land use policies and designations of both the Countywide 1985 King County Comprehensive Plan and the Northshore Community Plan Update to land in the Northshore planning area.

Area Zoning Definition and Scope

Area Zoning implements the policies recommended and adopted in the Northshore Community Plan Update. Area zoning is initiated by King County to adopt or amend zoning maps to implement Community Planning policies on an areawide basis. The procedure is comprehensive in nature, and deals with natural homogeneous communities, distinctive geographic areas and other types of districts having unified interests within the County. Area zoning uses zoning classifications to apply the land use policies of the King County Comprehensive Plan and the Northshore Community Plan to land in the planning area (KCC 20.08.030). Area zoning is submitted to the King County Council for review at the same time as the community plan (KCC 20.16.100).

The Northshore Area Zoning converts the Northshore Community Plan's land use designations and policies into zoning classifications on specific properties, with additional areawide or site-specific development conditions. Development conditions are applied to affect lands by using a "P-suffix" on the zoning map after the zoning designation (e.g., A-R 5-P), in accordance with KCC 21.46.150 through .200. The Area Zoning consists of amendments to King County's official zoning maps in the Northshore planning area, referenced land use policies which determined what zone was applied to the land, and text containing any special development conditions which apply to that land. The Area Zoning maps and text together constitute an "official control", as defined in KCC 20.08.140, and regulate the use of land.

How To Use This Document

This Northshore Area Zoning is an overview of the zoning changes, overall zoning map and areawide development conditions. Information on site-specific zoning and P-suffix development conditions is available through the Department of Development and Environmental Services.

Chapter II. Area Zoning and Land Use Summary

This chapter describes the major zones applied in the Northshore Area Zoning and lists the policy basis from the Northshore Community Plan Update for these zones. P-suffix development conditions that are part of the zone are covered in the following chapter. Additional policies from the Northshore Community Plan Update may apply to these zone designations. The Area Zoning Map is found in the sleeve in the back of this document.

Urban Residential Areas

RS-5000-P (Residential Single Family - 5,000 square foot lot size)

This zoning implements the following proposed Northshore Community Plan Update policy:

R-10 **Residential neighborhoods within the urban area should be developed in an urban land use pattern. These neighborhoods should be planned for the full range of urban services.**

A. **Areas within the urban area that are not environmentally sensitive, have adequate public facilities and urban services, and are adjacent to a neighborhood collector or arterial street should be designated at densities of six to eight units per acre.**

B. **Areas within the urban area that are already platted and developed should be planned for the full range of urban services, and designated at densities of four to six units per acre.**

C. **Areas within the urban area that are environmentally sensitive, or where there are long term barriers to the provision of adequate urban services and facilities, should be designated at densities of one to four units per acre.**

RS-5000 zoning has been located where substantial areas of re-subdivideable lots exist on arterial or neighborhood collector roadways. "Substantial areas" are defined as two or more acres of reasonably contiguous land. The two acre figure may be reduced if the land is adjacent to a school or other community facility. "Re-subdivideable land" was determined based on the following criteria:

1. Lot shape.
2. Location of house or other building on the lot.
3. Age and condition of existing housing/building stock.
4. Relationship of lot shape and house location to neighboring properties.
5. Location of the property on a neighborhood arterial or collector.

RS-7200-P (Residential Single Family - 7,200 square foot lot size)

This zoning implements the following Northshore Community Plan Update policies:

R-9 **Compatible land use designations should be utilized by infill development in areas with an established land use pattern. Infill development at moderately higher densities should include features to enhance compatibility with existing residential neighborhoods.**

R-10 **Residential neighborhoods within the urban area should be developed in an urban land use pattern. These neighborhoods should be planned for the full range of urban services.**

A. Areas within the urban area that are not environmentally sensitive, have adequate public facilities and urban services, and are adjacent to a neighborhood collector or arterial street should be designated at densities of six to eight units per acre.

B. Areas within the urban area that are already platted and developed should be planned for the full range of urban services, and designated at densities of four to six units per acre.

C. Areas within the urban area that are environmentally sensitive, or where there are long term barriers to the provision of adequate urban services and facilities, should be designated at densities of one to four units per acre.

RS-15,000-P (Residential Single Family - 15,000 square foot lot size)

This zoning implements the following Northshore Community Plan Update policy:

R-10 **Residential neighborhoods within the urban area should be developed in an urban land use pattern. These neighborhoods should be planned for the full range of urban services.**

A. Areas within the urban area that are not environmentally sensitive, have adequate public facilities and urban services, and are adjacent to a neighborhood collector or arterial street should be designated at densities of six to eight units per acre.

B. Areas within the urban area that are already platted and developed should be planned for the full range of urban services, and designated at densities of four to six units per acre.

C. **Areas within the urban area that are environmentally sensitive, or where there are long term barriers to the provision of adequate urban services and facilities, should be designated at densities of one to four units per acre.**

SC-P (Suburban Cluster, one unit per acre) - This zoning implements the following Northshore Community Plan Update Policies:

E-17 **Residential development south of NE 124th Street, within the area identified by Redmond as its proposed annexation area, adjacent to the Agricultural Production District shall be low-density, clustered, screened, and fenced to increase distance between housing and agricultural uses, and to discourage trespassing.**

E-18 **The remainder of the western half of the southeast quarter of Section 26, not designated Rural by Policy E-21 abuts Rural areas to the west and north. To provide a transition between those rural land uses and the higher density urban areas to the east and south, this area should be designated low density urban with development clustered away from the rural areas.**

SE-P (Suburban Estates - one unit per acre) This zoning implements the following Northshore Community Plan Update Policies:

E-10 **The north and east slopes of Norway Hill have an established neighborhood character and limited future development potential. They are, therefore, designated low density urban, 1 - 3 homes per acre. King County recognizes that extensive steep slopes and erosive soils at the top of Norway Hill (above the 300 foot elevation mark) warrant lower residential densities.**

R-10 **Residential neighborhoods within the urban area should be developed in an urban land use pattern. These neighborhoods should be planned for the full range of urban services.**

A. **Areas within the urban area that are not environmentally sensitive, have adequate public facilities and urban services, and are adjacent to a neighborhood collector or arterial street should be designated at densities of six to eight units per acre.**

B. **Areas within the urban area that are already platted and developed should be planned for the full range of urban services, and designated at densities of four to six units per acre.**

C. **Areas within the urban area that are environmentally sensitive, or where there are long term barriers to the provision of adequate urban services and facilities, should be designated at densities of one to four units per acre.**

U-6 **The Northshore Plan recognizes certain areas within Norway Hill areas that are within the local service area as unsewered, due to severe environmental constraints such as steep slopes, and erosive soils, conditions. These areas should be allowed the continued use of on-site systems, if soil conditions permit.**

The RS-15,000-P zone has been designated for large-scale environmentally sensitive areas, such as the Swamp Creek drainage and the steep slopes surrounding the Finn Hill/Inglemoor/ Juanita/Kingsgate plateau. These sloped areas are also designated as Erosion Problem Areas. Erosion Problem Areas in Northshore have unique soil conditions that cause increased erosion potential. Densities must be

limited and special detention requirements must be followed to protect downstream development in these areas. (see map, Special Detention/Retention Requirements)

GR-5 (Growth Reserve) Interim Urban Reserve Overlay

This zoning implements the following Northshore Community Plan Update policy:

T-5 **Residential lands within the urban growth area that lack committed roadway projects to solve existing congestion problems, and that are greater than ¼ mile walking distance of 5 peak hour transit runs, or are not located within an Urban Activity Center, are placed within an interim urban reserve. These residential lands should be zoned for urban development, with a growth reserve overlay.**

By December 31, 1994, the Executive shall transmit a plan amendment study addressing, but not limited to, the following:

A. Timing of actualizing the underlying zoning designations of those areas receiving the growth reserve overlay;

B. Impacts of actualizing the underlying zoning designations of those areas receiving the growth reserve overlay;

C. Assessment of the need to apply minimum density requirements on the portions of the urban area which have outright zoning;

D. The extent of which development in the outright zoned urban areas has utilized the available density on environmentally unconstrained land and the ability and desire to landowners to develop their property;

E. The adequacy of transit and roadway infrastructure and mobility concurrency standards to absorb and mitigate the actualization of the interim growth reserve areas.

This designation was applied as an overlay on residential zoned properties in the planning area.

GR-5-P (Growth Reserve)

This zoning implements the following Northshore Community Plan Update Policy:

R-12 **The portion of Leota delineated on the Land Use Map as Future Urban will be within the City of Woodinville once the incorporation process is complete. Adequate urban infrastructure and services do not currently exist in this area. To prevent premature development at low urban densities that would limit the City's options for the meeting the requirements of the State Growth Management Act, the area is designated as a Future Urban Area. Until incorporation is complete, lands within this area should develop in a manner that will preserve the City's planning options.**

This zone designation is recommended within the urban growth area for areas that are not yet served by the full range of urban services or where a combination of partially developed or undeveloped lots equaling at least 20 acres exists. This zone designation ensures that these areas will be maintained in a low density development pattern until adequate facilities and services are available to serve anticipated urban densities. Urban densities anticipated by this plan are established in policies E-12 through E-22. These densities will be ratified by interlocal agreements between King County and each city. Annexation is required to achieve urban densities in these future urban areas.

GR-5-P Potential RS-5000-P, GR-5-P Potential RS-7200-P, GR-5-P Potential RS-15,000-P, GR-5-P Potential SC-P, GR-5-P Potential RM-2400-P, GR-5-P Potential RD-3600-P, GR-5-P Potential RM-1800-P, BC-P Potential RM-1800-P (Growth Reserve - 5 acre lot size, Potential Residential Single Family - 5,000, 7,200, 15,000, and 35,000 square foot lot sizes and Multifamily 18,000, 2,400 and 3,600 square foot lot size, Community Business, Potential Multifamily 1800 square foot lot size.)

This zoning implements the following proposed Northshore Community Plan Update policies:

E-1 **The Northshore Community Plan designates an urban growth area based on the following criteria:**

A. **Rural and resource lands under King County's jurisdiction are not appropriate in urban growth areas and are excluded;**

B. **The land has the ability to support urban level population densities, development activity, and services in the future;**

C. **The land is located within the local service area for sewer and water provision;**

D. **The area has been designated as a potential expansion area by an adjacent city;**

E. **There are no major topographical or physical barriers to the extension urban services by the city; and**

F. **The areas discourage urban sprawl by including only lands needed to accommodate population growth at sufficient densities to provide a range of housing, support transit and allow economic provision of services.**

E-2 **The Northshore Community Plan Map 1 designates the Northshore Urban Growth Area. King County acknowledges that annexations will be appropriate when the provision of adequate infrastructure and services can be assured. Annexations should be reviewed to ensure that the goals of orderly and contiguous development and directing growth to existing incorporated urban areas are achieved. The cities of Bothell, Redmond, the future city of Woodinville and Kirkland in collaboration with King County and consultation with residential groups and special purpose districts within the Urban Growth Area, shall designate potential annexation areas.**

E-9 **Land located within the West Hill area lacks appropriate infrastructure for urban development and is physically constrained by slopes. These areas shall be designated growth reserve with potential designations of up to 8 units per acre. Actualization of the potential zoning is contingent on the following:**

A. **Provision of all needed and appropriate urban services, including sewers, either directly by the city or by contract with other service providers;**

B. **Adequate mitigation for impacts to transportation infrastructure and other services within the city and County.**

E-11 **The southeast slope of Norway Hill lacks appropriate infrastructure for urban growth and is physically constrained by slopes. This area shall be designated growth reserve with a potential designation of 3 units per acre. Actualization of the potential zoning is contingent on the following:**

A. Provision of all needed and appropriate urban services, including sewers, either directly by the city or by contract with other services providers;

B. Adequate mitigation for impacts to transportation infrastructure and other services within the city and County.

E-12 The land around the I-405 and NE 160th Street interchange is designated growth reserve with potential designations of 12 to 24 units per acre. These densities shall be achieved by a density step-down approach which places higher densities in the core and lower densities on the perimeter to maintain compatibility with adjacent neighborhoods. The City of Bothell recognizes the need for additional parks in the Norway hill subarea. New development should mitigate impacts of new residents or employees on existing park facilities. The opportunity to acquire land for and develop a community park of 10-20 acres in this area should be pursued. King County and the City of Bothell should work with site developers to reserve additional acreage for such a park, and to develop a public/private funding package for such a park. Future urban development should follow urban design guidelines, including the mitigation of visual and physical impacts related to the I-405 corridor, established by the City of Bothell. Actualization of potential densities is contingent upon the following:

A. A pedestrian circulation plan should be made prior to development which will provide pedestrian circulation through the area as well as direct linkages to the Brickyard Park and Ride.

B. Needed and appropriate urban services must be provided, either directly by the city or by contract with other service providers.

C. Project development on the west side of I-405 shall limit access to 112th Avenue NE. Applicants for development approval shall demonstrate that the proposed development would not result in traffic level of service (LOS) worse than LOS "d", or shall provide road improvements necessary to achieve an LOS "d" or better. Improvements necessary to achieve LOS "d" or better must be finalized through awarding of construction contracts concurrent with the date for final development approval by the City of Bothell.

D. Future urban development must address impacts to all other urban services such as fire protection, police protection and schools. A proposal to mitigate impacts to these facilities in the city and County must be accepted prior to final development approval.

E. Application of city road and development design standards, where city standards are more stringent than the County's.

F. Future urban development should protect sensitive areas on site consistent with regulations adopted by King County and the City of Bothell.

E-16 The area between NE 124th Street and NE 116th Street, east and between the Woodinville-Redmond Road and the eastern border of the planning area, is designated growth reserve with potential densities of up to 8 units per acre. Actualization of the potential zoning is contingent on the following:

A. **Provision of all needed and appropriate urban services, including sewers, either directly by the city or by contract with other service providers;**

B. **Adequate mitigation for impacts to transportation infrastructure and other services within the city and County.**

R-10 **Residential neighborhoods within the urban area should be developed in an urban land use pattern. These neighborhoods should be planned for the full range of urban services.**

A. **Areas within the urban area that are not environmentally sensitive, have adequate public facilities and urban services, and are adjacent to a neighborhood collector or arterial street should be designated at densities of six to eight units per acre.**

B. **Areas within the urban area that are already platted and developed should be planned for the full range of urban services, and designated at densities of four to six units per acre.**

C. **Areas within the urban area that are environmentally sensitive, or where there are long term barriers to the provision of adequate urban services and facilities, should be designated at densities of one to four units per acre.**

RD-3600-P, RT-3600-P (Residential Duplex - 3,600 square foot lot size, Residential Townhouse - 3,600 square foot lot size)

This zoning implements the following Northshore Community Plan Update policies:

R-13 **Urban high density land uses (greater than eight homes per acre) shall be located in the urban activity centers of Kenmore, Woodinville, Bothell, Redmond and Kirkland, as well as community and neighborhood centers identified in this plan. High density land uses maybe allowed outside the urban activity centers where it has been legislatively determined that it is consistent with existing neighborhoods and could be served by a full range of urban services.**

K-3 **The amount of commercially designated land should be reduced in Kenmore to achieve a higher intensity of use and compact development, consistent with the King County Comprehensive Plan.**

K-8 **Multifamily development at densities of up to 48 units per acre should be located in close proximity to the pedestrian oriented commercial/office core. Densities should decrease to provide a transition to nearby single family residential areas.**

K-9 **Parcels which are vacant or developed without a consistent single family pattern, are adjacent to the Kenmore Activity Center, and were designated for single family use under the 1981 Northshore Plan, are redesignated as low density multifamily housing, to provide a transition consistent with policy K-8.**

W-5 **The current balance between multifamily and commercial land uses should be modified to reduce the commercial area and increase the amount of multifamily housing, for greater consistency with the King County Comprehensive Plan. Multifamily development at densities of 18 units per acre should be located within the pedestrian oriented commercial/office core.**

W-6 **Building heights and densities for both commercial and residential uses in the activity center should be required to step down to provide a transition to adjacent single family areas.**

RM-2400-P (Residential Multiple Family Housing - 2,400 square feet of lot area per dwelling unit)

RM-1800-P (Residential Multiple Family Dwelling - 1,800 square feet of lot area per dwelling unit)

This zoning implements the following Northshore Community Plan Update policies:

R-13 **Urban high density land uses (greater than eight homes per acre) shall be located in the urban activity centers of Kenmore, Woodinville, Bothell, Redmond and Kirkland, as well as community and neighborhood centers identified in this plan. High density land uses maybe allowed outside the urban activity centers where it has been legislatively determined that it is consistent with existing neighborhoods and could be served by a full range of urban services.**

K-3 **The amount of commercially designated land should be reduced in Kenmore to achieve a higher intensity of use and compact development, consistent with the King County Comprehensive Plan.**

K-4 **New commercial development should be centered around the 68th Avenue N.E./SR 522 intersection. Existing commercial properties east of the general vicinity of 73rd Avenue NE and west of the general vicinity of 65th Avenue NE should be encouraged to convert to multifamily housing. Commercial sprawl along SR 522 should be discouraged.**

K-8 **Multifamily development at densities of up to 48 units per acre should be located in close proximity to the pedestrian oriented commercial/office core. Densities should decrease to provide a transition to nearby single family residential areas.**

W-5 **The current balance between multifamily and commercial land uses should be modified to reduce the commercial area and increase the amount of multifamily housing, for greater consistency with the King County Comprehensive Plan. Multifamily development at densities of 18 units per acre should be located within the pedestrian oriented commercial/office core.**

CI-3 **To ensure that activity centers are compact and conducive to pedestrian activity, further strip commercial development shall be prohibited. Commercial properties on the strip fringes of activity centers should be redesignated to multifamily or high density single family residential uses.**

RM-900-P (Residential Multiple Family Dwelling - 900 square feet of lot area per dwelling unit.)

This zoning implements the following Northshore Community Plan Update policies:

E-13 **The undeveloped area to the south of METRO's Brickyard Park and Ride Lot should retain its office-only designation in recognition of its proximity to a major transportation corridor and the need for increased employment opportunity in proximity to planned high-density residential areas.**

CI-20 **The following locations are designated neighborhood centers:**

A. 68 Ave. NE/NE 170 St.

B. Juanita Drive/NE 122 Place

C. 116 Ave. NE/NE 160 St.

D. NE 145 St./148 Ave. NE (Hollywood Hill)

E. Juanita Drive/NE 153rd Place

F. Juanita-Woodinville Way/NE 145th Street

G. Juanita Drive/NE 141 St.

These centers should not be expanded beyond the size designated in this plan. New development in these centers should be architecturally compatible with the surrounding neighborhood. Special conditions should be developed to ensure compatibility with existing uses in the center and the surrounding neighborhood. Zoning should be applied which provides for commercial uses consistent with the local shopping and residential needs anticipated in Neighborhood Centers.

K-8 Multifamily development at densities of up to 48 units per acre should be located in close proximity to the pedestrian oriented commercial/office core. Densities should decrease to provide a transition to nearby single family residential areas.

Rural Residential Areas

AR-2.5-P (Rural area - 2.5 acre lot size)

This zoning implements the following Northshore Community Plan Update policies:

R-3 Land adjacent to the Sammamish Valley Agricultural Production District delineated on the Land Use Map is designated as Rural. To protect the agricultural district and to limit the potential for land use conflicts along the border of the Agricultural Production District, new residential development adjacent to the boundaries is limited to rural uses. King County should consider the enactment of a program to permit the transfer of development credits from these rural-designated properties to urban portions of Northshore and other portions of the county.

R-4 Lot clustering shall be utilized where possible when residential development abuts agricultural districts to provide an open space buffer between agricultural lands and housing, and to reduce potential land use conflicts.

R-6 The Cottage Lake Creek sub-basin is designated as Rural. To protect the Cottage Lake Creek sub-basin, new development shall be limited to rural residential use at a density of one home per 5 acres within a quarter mile of the ordinary high water mark of Daniels Creek and at a density of one home per 2.5 acres in the remainder of the rural designated portions of the sub-basin. King County should consider the enactment of a program to permit the transfer of development credits from these rural-designated properties to urban portions of Northshore.

R-8 **In recognition of the Countywide need to concentrate new urban growth and urban services in areas already characterized by urban growth, and limit growth in areas with limited infrastructure, Hollywood Hill and portions of Leota-Wellington delineated on the land use map are designated as rural residential, one unit per 2.5 acres. Because these areas are not planned for the full range of urban services, they are not included within the urban growth boundary defined in Chapter One of this plan.**

NR-7 **The Daniels Creek sub-basin, identified as a locally significant resource area in the Proposed Bear Creek Basin Plan, should be protected through the adoption of rural densities.**

The King County Comprehensive Plan emphasizes the need to create land use patterns that minimize conflict between agricultural areas and adjacent land uses. By providing a rural residential land use adjacent to the agricultural areas, the amount of traffic and human activity that may conflict with farming practices will be reduced.

AR-5-P (Rural area - 5 acre lot size)

This zoning implements the following proposed Northshore Community Plan Update policies:

R-3 **Land adjacent to the Sammamish Valley Agricultural Production District delineated on the Land Use Map is designated as Rural. To protect the agricultural district and to limit the potential for land use conflicts along the border of the Agricultural Production District, new residential development adjacent to the boundaries is limited to rural uses. King County should consider the enactment of a program to permit the transfer of development credits from these rural-designated properties to urban portions of Northshore and other portions of the county.**

R-6 **The Cottage Lake Creek sub-basin is designated as Rural. To protect the Cottage Lake Creek sub-basin, new development shall be limited to rural residential use at a density of one home per 5 acres within a quarter mile of the ordinary high water mark of Daniels Creek and at a density of one home per 2.5 acres in the remainder of the rural designated portions of the sub-basin. King County should consider the enactment of a program to permit the transfer of development credits from these rural-designated properties to urban portions of Northshore.**

NR-7 **The Daniels Creek sub-basin, identified as a locally significant resource area in the Proposed Bear Creek Basin Plan, should be protected through the adoption of rural densities.**

Agricultural

A-10 and A-35 (Agricultural - 10 and 35 acre lot size)

This zoning implements the following Northshore Community Plan Update policies:

A-1 **Consistent with the covenants and restrictions attached to their deeds, lands with development rights purchased under the King County Farmlands Preservation Pro-**

gram should have an agricultural zoning designation that retains large parcels of 10 acres.

A-2 **Lands located within the agricultural production district that were included in the 1989 Resource Area Zoning should retain an agricultural zoning designation of one home per 10 acres or greater.**

Commercial

B-N-P (Neighborhood business)

This zoning implements the following Northshore Community Plan Update policies:

CI-19 **The currently built multifamily and commercial properties at the following locations are recognized at their existing developed size but are not designated as neighborhood centers as they do not meet the criteria outlined in KCCP policies C-401 and C-402:**

A. **NE 193rd Street/56th Avenue NE**

B. **168th Avenue NE/Woodinville-Duvall Road**

CI-20 **The following locations are designated neighborhood centers:**

A. **68 Ave. NE/NE 170 St.**

B. **Juanita Drive/NE 122 Place**

C. **116 Ave. NE/NE 160 St.**

D. **NE 145 St./148 Ave. NE (Hollywood Hill)**

E. **Juanita Drive/NE 153rd Place**

F. **Juanita-Woodinville Way/NE 145th Street**

G. **Juanita Drive/NE 141 St.**

These centers should not be expanded beyond the size designated in this plan. New development in these centers should be architecturally compatible with the surrounding neighborhood. Special conditions should be developed to ensure compatibility with existing uses in the center and the surrounding neighborhood. Zoning should be applied which provides for commercial uses consistent with the local shopping and residential needs anticipated in Neighborhood Centers.

This zone provides for neighborhood commercial uses which are compatible with the size and scale of the neighborhood centers and surrounding residential neighborhoods.

B-C-P (Community Business)

This zoning implements the following Northshore Community Plan Update policies:

CI-1 **Bothell, Kirkland, Redmond, Kenmore, and Woodinville are designated as the activity centers for the planning area. Industrial and major commercial activity should be directed to these activity centers.**

CI-2 **The expansion of retail/commercial space within unincorporated activity centers, community centers and neighborhood centers should be focused on redevelopment and mixed use development to encourage more cost-effective provision of public facilities and services, and efficient transit and pedestrian travel and to discourage inefficient use of valuable urban lands. Land devoted to commercial and industrial uses within these centers should not be expanded beyond the areas designated in this plan.**

CI-18 **The Kingsgate Shopping Center is designated as a community center. Its size is limited to the area designated by this plan.**

CI-21 **The following location is redesignated to community business center:**

A. Juanita-Woodinville Way/100 Ave. NE.

This center should not be expanded beyond the size designated in this plan. Zoning should be applied to provide for commercial uses consistent with the shopping and residential needs anticipated in Community Centers.

C-G-P (General Commercial)

This zoning implements the following proposed Northshore Community Plan Update policies:

CI-1 **Bothell, Kirkland, Redmond, Kenmore, and Woodinville are designated as the activity centers for the planning area. Industrial and major commercial activity should be directed to these activity centers.**

CI-2 **The expansion of retail/commercial space within unincorporated activity centers, community centers and neighborhood centers should be focused on redevelopment and mixed use development to encourage more cost-effective provision of public facilities and services, and efficient transit and pedestrian travel and to discourage inefficient use of valuable urban lands. Land devoted to commercial and industrial uses within these centers should not be expanded beyond the areas designated in this plan.**

Industrial

Current M-L, M-H and M-P zones from the 1981 Northshore Area Zoning have been carried forward in designated industrial areas to allow established industrial uses to continue. The following policies apply to these zones.

M-L-P (Light Manufacturing)

This zoning implements the following Northshore Community Plan Update policies:

CI-1 **Bothell, Kirkland, Redmond, Kenmore, and Woodinville are designated as the activity centers for the planning area. Industrial and major commercial activity should be directed to these activity centers.**

CI-8 **The industrial areas in Kenmore and Woodinville, on the west side of the Sammamish Valley, and adjacent to the City of Kirkland should not be enlarged beyond the size designated by this plan.**

M-P-P (Manufacturing Park)

This zoning implements the following Northshore Community Plan Update policies:

CI-1 **Bothell, Kirkland, Redmond, Kenmore, and Woodinville are designated as the activity centers for the planning area. Industrial and major commercial activity should be directed to these activity centers.**

CI-8 **The industrial areas in Kenmore and Woodinville, on the west side of the Sammamish Valley, and adjacent to the City of Kirkland should not be enlarged beyond the size designated by this plan.**

CI-11 **When reviewing development permits in the industrial areas to the south and east of the Sammamish River, the Building and Land Development Division, in cooperation with the Parks Division, should consider measures for the completion of the Sammamish River Regional Park that are identified in the Draft Regional Trails Plan.**

CI-14 **Industrial properties adjacent to the Little Bear Creek should rehabilitate the stream and stream channel to a more natural state and take measures to fully mitigate any existing or potential water quality problems originating on-site through the development review process.**

M-H-P (Heavy Manufacturing)

This zoning implements the following Northshore Community Plan Update policies:

CI-1 **Bothell, Kirkland, Redmond, Kenmore, and Woodinville are designated as the activity centers for the planning area. Industrial and major commercial activity should be directed to these activity centers.**

CI-8 **The industrial areas in Kenmore and Woodinville, on the west side of the Sammamish Valley, and adjacent to the City of Kirkland should not be enlarged beyond the size designated by this plan.**

Properties recommended for industrial zoning in this plan have established industrial uses. This zoning will allow continued industrial activity in Northshore.

Mixed Use

MP-P Potential BRC-P, CG-P, Potential BRC-P (Industrial, Potential Mixed Use, Commercial, Potential Mixed Use)

This zoning implements the following Northshore Community Plan Update policies:

K-11 **This plan supports a Mixed Use Development Area in Kenmore. Issues identified in this plan must be addressed before Mixed Use development can occur. The Mixed Use Development Area is designated Industrial/Commercial, Potential Mixed Use. Mixed Use development shall meet the following conditions before redevelopment can occur:**

A. **Provide pedestrian linkages into other parts of Kenmore.**

B. **Provide for easily accessible transit hub, and a strong transportation demand management program that facilitates transit use.**

C. **SR-522 through Kenmore is currently at LOS F and at ultimate design. Further study is necessary to determine if potential roadway and transit improvements will be sufficient to mitigate roadway congestion to acceptable levels. Therefore, prior to the actualization of any potential zoning on the site, a plan amendment study shall be completed by the Executive and transmitted to the Council 90 days after the applicant submits its transportation analysis to King County. The study should identify acceptable congestion thresholds based on aggressive transit solutions. King County will determine if potential transit and roadway improvement will be sufficient to meet new transit thresholds. If it is determined that transit and roadway improvement will be sufficient to meet transit thresholds, the new development shall pay a pro-rata share towards these improvements including both roadway and transit capital projects. New development may occur only when transportation impacts are adequately mitigated.**

D. **Provide for substantial public access to and use of the Lake Washington and Sammamish River waterfront.**

E. **Contribute to any Kenmore business improvement district.**

F. **Mitigate for impacts upon affordable housing, as determined by King County.**

G. **Provide for community open space.**

H. **Provide for fish and wildlife enhancement.**

I. **Mitigate for impacts to the shoreline edge through riparian vegetation enhancement.**

J. **Provide for easily accessible public viewpoints and project view corridors.**

K. **Provide for convenient pedestrian access from the development to link to nearby park facilities.**

L. **Development shall provide for thorough environmental review, which should include analysis of available water-based industrial land in the region to support this type of use.**

Current uses existing on these sites will be permitted until redevelopment occurs. See Chapter Three P-suffix Development Conditions for guidelines and restrictions on current uses.

RM-2400-P Potential BC-P* (Residential Multifamily - 2400 square feet of lot area per dwelling unit, Potential Mixed Use)

This zoning implements the following Northshore Community Plan Update policies:

W-10 **Mixed use developments will enhance the Woodinville Activity Center by providing convenient living environments and strengthening retail businesses. Mixed use developments which combine housing with office or commercial uses in the same structure or on the same site should be encouraged within the Woodinville activity center. Such developments shall meet the following criteria:**

A. Provide pedestrian linkages between the two uses;

B. Implement the Woodinville grid system;

C. Provide additional amenities such as usable public space and landscaping beyond that required by KCC 21.51;

D. Locate close to public transit; and

E. Provide both off-street and on-street parking that does not disrupt pedestrian access to commercial uses

W-11 **Mixed use developments should be permitted within the commercial area of the Woodinville Activity Center. Within multifamily areas, mixed use should be optional subject to conditions designed to ensure compatibility with residential activity. In order to maximize the opportunities for mixed use developments, only those commercial activities having impacts that are clearly incompatible with the objective of creating a higher-density pedestrian-oriented community should be prohibited in mixed use developments.**

Chapter III. P-Suffix Development Conditions

The Northshore Community Plan Update calls for protection of important features of the planning area, and improvements to areas that have been degraded by human activity. This includes protection of natural systems and wildlife areas, retention of existing vegetation, preservation of equestrian and multipurpose trails, the Sammamish Valley and historic resources of Northshore. Plan policies direct further action on the design of multifamily development including circulation, recreation facilities and overall compatibility with adjacent land uses. Improved vehicular and pedestrian circulation is called for throughout the planning area. Increased transit use is highlighted in congested corridors. Urban Activity Centers are planned for pedestrian amenities and urban design features. These actions are necessary because of the unique land use and environmental circumstances of the Northshore planning area.

To implement the policies of the Northshore Plan, conditions of site plan approval are applied to all properties in the Northshore planning area. These conditions are designated by a "P" suffix attached to the zone symbol for each zoning designation.

The P-suffix conditions adopted to implement the Northshore Community Plan are outlined below. Following the outline is the P-Suffix Conditions Matrix showing where each P-suffix condition applies. An index map shows the location of P-suffix conditions which are applicable to specific areas of Northshore. Please note that this index map does not reflect the P-suffix conditions which are applicable throughout the planning area. These areawide conditions are described in the P-Suffix Conditions Matrix.

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Northshore P-Suffix Conditions Matrix

P-Suffix	Applicable Applicable Zone	Applicable Geographical Area	Development Permit
Natural Systems			
A. Special Stormwater Retention/ Detention Requirements	All zones	Areas shown on map	Permits requiring storm-water detention.
B. Seasonal Clearing Restrictions	All zones	Planning area	Development permits
C. Natural Resource Protection Area	All zones	Areas shown on map & formal subdivision permits	Building permits, PUD's, short
Landscaping			
A. Street Trees	All zones except agriculture.	Planning area	Commercial permits; PUD's short and formal subdivisions.
B. Significant Vegetation Retention	All Zones	Planning area	Commercial and grading permits, PUD's formal subdivisions.
Development Review: Commercial, Industrial and Multifamily Residential Areas			
A. Bulk/Scale Design Controls (Multifamily)	RD-3600-P, RT-3600-P, RM-2400-P, RM-1800-P, RM-900-P	Planning area	Commercial permits
B. Community Features (Multifamily)	RD-3600-P, RT-3600-P, RM-2400-P, RM-1800-P, RM-900-P	Planning area	Commercial permits
C. Pedestrian Circulation (Multifamily)	RD-3600-P, RT-3600-P, RM-2400-P, RM-1800-P, RM-900-P	Planning area	Commercial permits
D. Transportation Demand Management Program	RD-3600-P, RT-3600-P, RM-2400-P, RM-1800-P, RM-900-P, BN-P, BC-P, BR-C-P, CG-P, M-L-P, M-P-P, MH-P	Planning area	Commercial permits
E. Kingsgate Fire Flow Requirements	All commercial and multifamily zones	Areas shown on map	Commercial permits
Development Review: Single family Residential Area			
A. Pedestrian Circulation (Single Family)	RS-5000-P, RS-7200-P, RS-9600-P, RS-15,000-P, SC-P SE-P, AR-2.5-P, AR-5-P, GR-5-P	Planning area	PUD's and formal subdivisions
B. Transportation Demand Management Program (Single Family)	RS-5000-P, RS-7200-P, RS-9600-P, RS-15,000-P, SC-P SE-P, AR-2.5-P, AR-5-P, GR-5-P	Planning Area	PUD's and formal subdivisions
Transportation			
A. SR-522 Access Restriction	All zones	Areas shown on map	Development permits
B. Kenmore and Woodinville ROW Dedication/Improvements	All zones	Areas shown on map	All permits except residential
C. Neighborhood Collector Improvements	RS-5000-P.	Planning area subdivision permits	PUD's; Formal and short

* The Northshore P-suffix conditions matrix is designed to assist in determining the applicability of P-suffix conditions. Where questions arise about P-suffix applicability, P-suffix text and maps shall prevail over the matrix.

P-Suffix		Applicable Applicable zone	Applicable Geographical Area	Development Permit
Kenmore Activity Center Design Review				
A.	Pedestrian Oriented Area	All zones	Areas shown on map	Development permits
B.	Office/Civic Core	BC-P	Areas shown on map	Development permits
C.	Pedestrian Linkages	All zones	Areas shown on map	Development permits
D.	Office Only Requirements	BC-P	Areas shown on map	All permits
E.	Residential Only Requirement	RM-900-P	Areas shown on map	All permits
F.	Kenmore Pre-Mix Site	BR-C-P	Areas shown on map	All permits
Sammamish Valley Design Review				
A.	Sammamish River Industrial Design Requirements	ML-P	Areas shown on map	Commercial permits
B.	Hollywood Neighborhood Center Design Requirements	BN-P, RM-2400-P	Areas shown on map	Development permits
C.	Sammamish River Valley Access Restriction	All zones	Areas shown on map	Development permits
D.	Agricultural Impact Areas	MP-P	Areas shown on map	PUDs; Short & formal subdivisions, commercial permits
E.	Recreational Policy	All zones	Northshore Community Plan Update Map: Equestrian Facilities	PUDs; Short & formal subdivisions, commercial and residential permits.
Historic Preservation		All zones	All properties, and abutting properties shown on map	Development and land use permits
Commercial Use Limitations - North Juanita		BC-P	Areas shown on map	All permits
Site Specific Conditions		varies	Properties shown on zoning map; tax lots and conditions listed at end of chapter.	Varies

Natural Systems

A. Special stormwater retention/detention requirements

To implement policy NR-9, the following P-Suffix condition applies:

1. The following enhanced drainage conditions shall apply to all areas as shown on the map, Special Stormwater Retention/Detention Requirements map. More stringent regulations may be required through administrative rules.

    a. Stormwater release rate shall be at 70 percent of the predeveloped 2-year/24-hour release rate for design storm events up to and including the 100-year/24-hour design storm event.

    b. A drainage control system, as approved by DDES, shall be installed prior to any unrelated land clearing, vegetation removal, site-grading, road construction or utility installation. Only those activities associated with pre-development exploration, such as surveying and performance of soil tests and limited clearing and grading associated with construction of drainage facilities, will be permitted prior to construction of the drainage control system.

    c. In those situations where features of the drainage system or subsequent development make installation of the final drainage system impossible, a phased drainage control plan shall be developed. This phased plan shall provide the level of retention-detention set forth the applicable detention standard for the entire site at all times.

B. Seasonal Clearing Restrictions

To implement policies NR-3 and NR-5, the following P-Suffix conditions apply:

1. Seasonal restrictions. Clearing and grading shall not be permitted between October 1 and March 31. All bare ground must be fully covered or revegetated between these dates.

2. Exemptions. The following activities are exempt from the clearing and grading seasonal restriction:

    a. Emergencies that threaten the public health, safety and welfare.
    b. Routine maintenance of public agency facilities
    c. Routine maintenance of existing utility structures as provided in the Sensitive Areas Ordinance, K.C.C. 21.54.030.D.
    d. Clearing or grading where there is 100 percent infiltration of the surface water runoff within the site in approved and installed construction-related drainage facilities.
    e. Clearing or grading where all state water quality standards are met including turbidity. SWM shall develop an administrative process before such exemptions are allowed.
    f. Landscaping of single-family residences.
    g. Class II and III forest practices.
    h. Quarrying or mining within sites with approved permits.
    i. Clearing or grading for utility hook-ups on approved residential and commercial building permits.
    j. Completion of any final clearing/grading work for construction activities that meet all applicable permit conditions and best management practices for a period of time, not to exceed two weeks in the month of October if dry weather conditions are present.

C. Natural Resource Protection Area

To implement policies, R-7, NR-8, NR-12 and NR-16 the following P-suffix conditions apply to new developments in the areas shown or described on the Natural Resource Protection Area map.

1. Swamp Creek Floodplain

Commercial permits or permits for new residences shall require the 100-year floodplain of Swamp Creek to be placed in a Sensitive Areas Setback Area. New formal subdivisions in the Swamp Creek Floodplain areas shown on the Natural Resource Protection Area map, shall place the 100-year floodplain of Swamp Creek in a Sensitive Areas tract, to be dedicated to the homeowner's association. Determination of the floodplain shall be done for each permit application. Determination shall be based on an actual field survey, using floodplain elevations provided by the US Federal Emergency Management Agency (FEMA).

All developments in RM or RD zones shall provide an interpretive sign that provides information about Swamp Creek and its wildlife, biological, and hydrological functions. Said sign shall be adjacent to the fences at the floodplain edge and be subject to review and approval of Environmental Division ecologists.

The 100-year floodplain area may not be used in the computation of site densities.

2. Swamp Creek Heron Habitat

To provide habitat for herons, an additional 50 foot buffer on each side of the required sensitive area buffers is required in short and formal subdivisions along the tributary to Swamp Creek upstream of 192nd Street within the Swamp Creek Heron Habitat area as shown on the Natural Resource Protection Area map. This 50 foot buffer shall be planted with dense native plant materials to discourage human intrusion into feeding or nesting and roosting areas. Plantings shall be reviewed and approved by DDES. This additional 50 foot buffer may be used in density calculations. If conformance with this requirement would result in an unbuildable lot, then development siting shall be done in consultation with Environmental Division biologists and be reviewed and approved by DDES.

3. Sammamish River Corridor Habitat

Within the Sammamish River Corridor Habitat area as shown on the Natural Resource Protection Area map, short subdivisions, formal subdivisions, and commercial permits must conduct special wildlife studies to identify Great Blue Heron nesting, roosting, and feeding areas of the site. These studies shall be done by a wildlife biologist. Any feeding habitat identified on-site must be designated as a Sensitive Areas setback area and an additional 50 foot buffer on each side of the Sensitive Areas Setback Area shall be established. Use of the 100-year floodplain for computation of site densities shall be consistent with the Sensitive Areas Ordinance. The additional 50 foot buffer may be used to calculate site densities. The additional 50 foot buffer shall be planted with dense native plant material to discourage human intrusion into floodplain and feeding areas.

2.
Natural Resource Protection Area

Condition 1 - Swamp Creek Floodplain

Condition 2 - Swamp Creek Heron Habitat

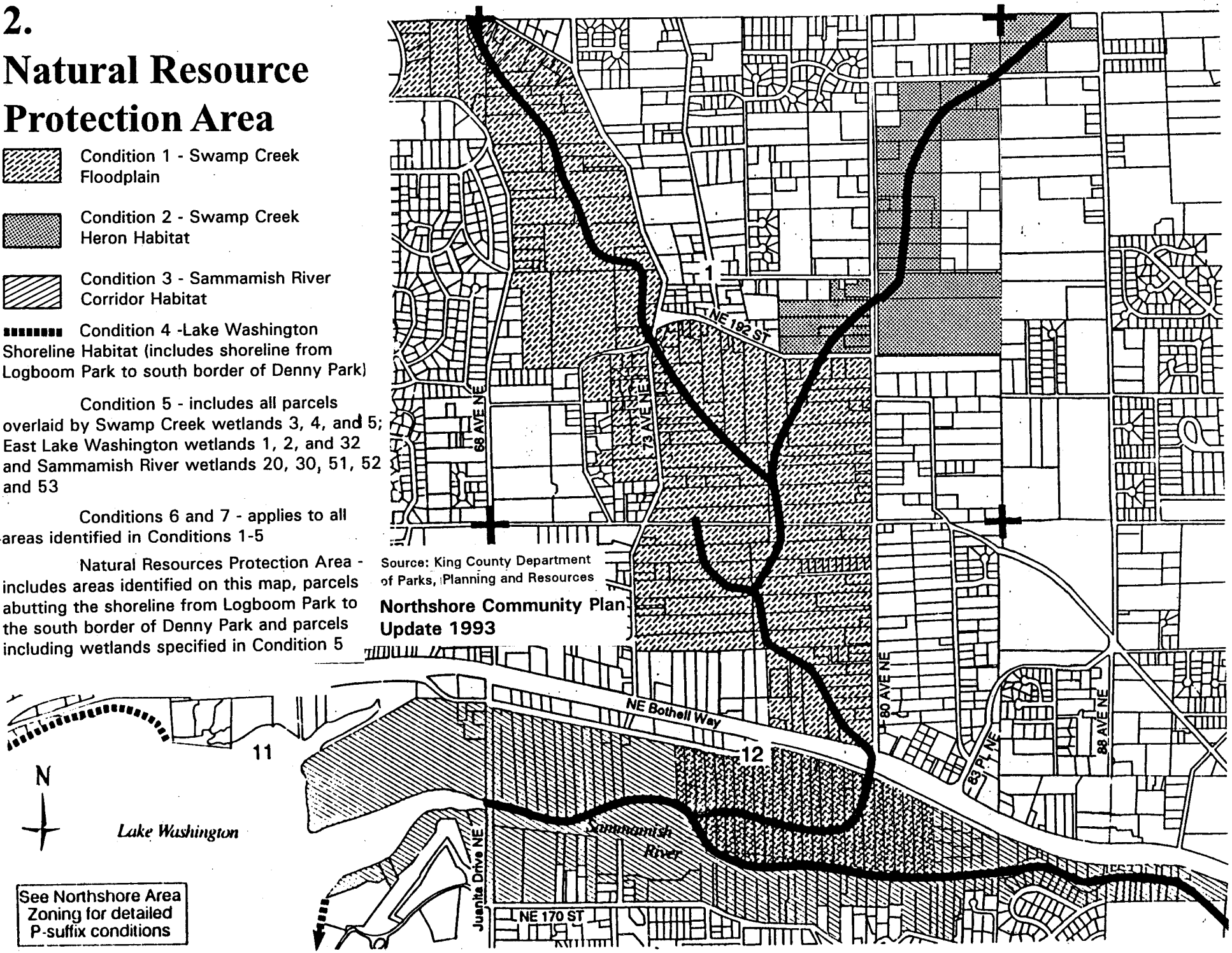
Condition 3 - Sammamish River Corridor Habitat

Condition 4 -Lake Washington Shoreline Habitat (includes shoreline from Logboom Park to south border of Denny Park)

Condition 5 - includes all parcels overlaid by Swamp Creek wetlands 3, 4, and 5; East Lake Washington wetlands 1, 2, and 32 and Sammamish River wetlands 20, 30, 51, 52 and 53

Conditions 6 and 7 - applies to all areas identified in Conditions 1-5

Natural Resources Protection Area - includes areas identified on this map, parcels abutting the shoreline from Logboom Park to the south border of Denny Park and parcels including wetlands specified in Condition 5



Source: King County Department of Parks, Planning and Resources

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See Northshore Area Zoning for detailed P-suffix conditions

4. Lake Washington Shoreline Habitat

Along the shoreline of Lake Washington identified as Condition 4, Lake Washington Shoreline Habitat, on the Natural Resource Protection Area map, all short subdivisions, formal subdivisions, and PUDs shall provide a 50 foot buffer in addition to required shoreline setbacks. This additional 50 foot buffer may be used in density calculations. Dense plantings of native plant materials shall be provided and are subject to review and approval by DDES.

5. Wetlands Habitat

Short subdivisions, formal subdivisions, and commercial permits adjacent to wetlands identified as Condition 5 on the Natural Resource Protection Area map, shall provide an additional 50 foot buffer around the wetland. This additional 50 foot buffer may be used in density calculations. Dense plantings of native plant materials shall be provided and are subject to review and approval by DDES. If conformance with this requirement would result in an unbuildable lot, then development siting shall be done in consultation with Environmental Division biologists and be reviewed and approved by DDES.

6. Rookeries

There shall be a 660 foot radius buffer maintained around the periphery of Great Blue Heron rookeries in the Natural Resources Protection Area. A rookery and its buffer shall be designated as Sensitive Areas Setback Area, excepting existing structures and paving. Human access shall be restricted under nest trees from February 15th to July 31st. Access may be restricted with fencing and signage, or dense plantings with native plant materials and signage.

7. General

New docks, piers, bulkheads, and boat ramps constructed within the Natural Resource Protection Area must mitigate for loss of heron feeding habitat by providing enhanced native vegetation adjacent to the development or between the development and the shoreline. Bulkheads should be buffered from the water's edge by enhanced plantings of native vegetation.

Landscaping

A. Street Trees

To implement policy R-17, the following P-suffix condition applies to all PUDs and commercial and subdivision permits until such time as equivalent or more stringent Countywide regulations are adopted:

On all public streets which are either created as part of or are on the perimeter of a commercially permitted development permit or short or formal subdivision, street trees shall be provided in accordance with the following specifications:

1. Trees shall be planted in accordance with Drawing 23 of the King County Road Standards.

2. One tree shall be provided on both sides of residential and commercial access streets for every 30 feet of access streets contained within the development. One tree shall be provided on the improved side of the roadway for every 30 feet of residential and commercial access streets on the perimeter of the development, where the development is required only to improve only part of the full roadway section. The trees shall be evenly distributed throughout access streets in the development, taking into account driveways, intersections, etc. The requirement for street trees on access streets does not

apply to public parks. Street trees planted back of sidewalk may be included in the calculation for the required number of trees in perimeter buffers.

3. One tree shall be provided on both sides of arterial roads for every 40 feet of arterial roadways contained within the development. One tree shall be provided on the improved side of the roadway for every 40 feet of arterial roadway on the perimeter of the development, where the development is required only to improve part of the full roadway section. The trees shall be evenly distributed throughout arterial roads of the development, taking into account driveways, intersections, etc..

4. On arterial roadways and residential and commercial streets, only trees on the list of approved street trees, as provided by DDES, may be planted.

5. A street tree plan shall be provided by the developer in order for DDES to determine if the above requirements will be met. The plan is subject to the review and approval of DDES.

6. Planted trees shall be healthy. Deciduous trees shall have a minimum trunk diameter of one and three-quarter inches at the caliper at time of planting; evergreen trees shall be a minimum of four feet tall at time of planting.

B. Significant Vegetation Retention

To implement policy R-17, the following P-suffix condition applies:

Significant trees shall be retained on grading permits, formal subdivisions and multifamily, commercial, industrial or institutional developments as follows until such time as equivalent or more stringent countywide regulations are adopted.

a. All significant trees located within required perimeter landscaping area;

b. Five percent of the significant trees in the remaining site area including Sensitive Area Setback Areas, of a commercial or industrial development;

c. Ten percent of the significant trees in the remaining site area including Sensitive Area Setback Areas, of a formal subdivision, or institutional development;

d. Ten percent of the significant trees on individual lots for single detached dwelling, if any portions of such lot contains erosion hazard areas.

e. Utility developments shall be exempt from the tree retention requirements of this chapter;

f. Fifty percent of the significant trees within sensitive areas or surface water management bio-filtration system areas may be used to satisfy the tree retention requirement;

g. Except as provided in subsection H, significant trees to be retained shall not include significant trees that are:

   (1) Damaged or diseased;
   (2) Safety hazards due to potential root, trunk or limb failure.

h. At the discretion of King County, damaged or diseased or standing dead trees may be counted toward the significant tree requirement if the applicant demonstrates that such trees will provide important wildlife habitat.

1. Significant tree retention plan. A tree retention plan shall be submitted concurrent with a grading or building permit or preliminary subdivision application, whichever is reviewed and approved first. The tree retention plan shall consist of:

   a. A tree survey that identifies the location, size and species of all significant trees on a site. The tree survey:

      (1) Shall not include significant trees that are:
         (a) Damaged or diseased;
         (b) Safety hazards due to potential root, trunk or limb failure.
      (2) May be conducted using standard timber cruising methods to reflect general locations, numbers and grouping of significant trees.
      (3) Shall show the location and species of each significant tree of 18 inches or greater in diameter, regardless of survey method used.

   b. A development plan identifying the significant trees that are proposed to be retained, transplanted or restored.

   c. For subdivisions with individual lots containing erosion hazard areas, the face of the plat map shall further stipulate for such lots that development plans consistent with KCC 21.14.130. are to be submitted by each lot owner at the time of development, if lot clearing is to be deferred until individual lot development occurs.

2. Incentive Criteria for retaining significant trees. Each significant tree that is retained and located outside of the area for perimeter landscaping, sensitive areas and Sensitive Area Setback Areas, and that meets one or more of the following criteria may be credited as two trees in complying with the retention requirement of this chapter:

   a. Exceeds 60 feet in height or 24 inches in diameter;

   b. Located in groupings of at least five trees with canopies that touch or overlap;

   c. Provides energy savings through winter wind protection or summer shade due to their location relative to buildings;

   d. Belongs to a unique or unusual species of native or non-native tree not usually found locally; or

   e. Are located within 25 feet of any required Sensitive Area Setback Area.

3. Protection of Significant Trees. To provide the best protection for significant trees:

   a. No clearing shall be allowed on a site until approval of tree retention and landscape plans.

   b. A limit of disturbance generally corresponding to the drip line of the significant tree shall be identified during the construction stage with either a:
      (1) Temporary five-foot high fence, or
      (2) Line of five-foot high, orange colored two-by-four inch stakes placed no more than ten feet apart.

   c. No impervious surfaces, fill, excavation, or storage of construction materials shall be permitted within the area defined by such fencing or stakes.

d. A rock well shall be constructed if the grade level around the tree is to be raised by more than one foot. The inside diameter of the well shall be equal to the diameter of the tree trunk plus five feet.

e. The grade level shall not be lowered within the larger of the two areas defined as follows:
   (1) The drip line of the tree(s), or
   (2) An area around the tree equal to one foot diameter for each inch of tree trunk diameter measured four feet above the ground.

f. Alternative protection methods may be used if determined by the manager to provide equal or greater tree protection.

g. If significant trees as described in KCC 21.14.160.A and B were previously located in a closed, forested situation, an adequate buffer of smaller trees shall be retained or replaced on the fringe of such significant trees.

4. Restoration of significant trees. When the required number of significant trees cannot be retained, significant trees that are removed shall be restored with:

   a. Transplanted significant trees;

   b. New trees measuring three inch caliper or more at a replacement rate of one and one-half (1.5) square inches for every one square inch of basal area; or

   c. New trees measuring less than three inch caliper at a replacement rate of two square inches for every one square inch of basal area.

5. Performance bonds or other appropriate security (including letters of credit and set aside letters) shall be required for a period of one year after the planting or transplanting of vegetation.

6. Definition of significant tree:

   Significant tree: an existing healthy tree which, when measured four feet above grade, has a minimum diameter of:

   a. Eight inches for evergreen trees,
   b. Twelve inches for deciduous trees, or
   c. A grouping of 3 or more existing trees, each having a diameter of at least 3" measured at 4' above grade, may be substituted for each required significant tree.

Development Review: Commercial, Industrial, And Multi-family Residential Areas

A. Bulk/Scale Design Controls

To implement policy R-15, the following P-suffix conditions shall apply to all properties zoned RT-3600-P, RD-3600-P, RM-2400-P, RM-1800-P or RM-900-P until such time as equivalent or more stringent Countywide regulations are adopted.

1. Roofline variation: Developments shall provide roofline variation according to the following standards:

a. The maximum roof length without variation shall be 30 feet;

b. The minimum horizontal or vertical offset shall be three feet;

c. The minimum variation length shall be eight feet;

d. Roofline variation shall be achieved using one or more of the following methods:
   (1) Vertical off-set in ridge line;
   (2) Horizontal off-set in ridge line; or
   (3) Any other technique that achieves the intent of this section and approved by the Building Services manager.

2. Building facade modulation: Developments shall provide building facade modulation on facades facing abutting streets or properties with a single family residential zone. The following standards shall apply:

   a. The maximum wall length without modulation shall be 30 feet;

   b. The minimum modulation depth shall be three feet; and

   c. The minimum modulation width shall be eight feet.

3. Parking Orientation: At least one row of buildings shall front the street; parking is not permitted on the primary street frontage for the project proposal.

4. Height Modulation: Second stories are set back from the street and from adjacent single story development in residential zones a minimum of 15 feet.

B. Community Features

Recreational Facilities:

To implement policy R-16, the following P-suffix conditions apply until such time as equivalent or more stringent Countywide regulations are adopted:

All multifamily development permit applications over 15 units shall provide a fenced play area on-site. This play area shall be a minimum of 1,000 square feet in developments with 15-30 units; 1,500 square feet in developments with 30-60 units; and 2,000 square feet in developments of greater than 60 units. Play areas should meet Consumer Products Safety Standards for equipment, soft surfacing, and spacing.

C. Pedestrian Circulation

To implement policy R-19, the following P-suffix conditions apply to all multifamily residential zones, (RT-3600-P, RD-3600-P, RM-2400-P, RM-1800-P and RM-900-P), until such time as equivalent or more stringent Countywide regulations are adopted.

1. All new multifamily development must provide sidewalks abutting roads. Site-specific area zoning may delineate additional requirements.

2. All new multifamily development must provide for internal pedestrian circulation through the site including pedestrian connection walkways from the street to the main building entrance (or entrances,

if more than one) and to the community facility (if present). Pedestrian connections must be separated from the roadway through the use of one of the following:

a. Grade separation;
b. Planting beds; or
c. Cover structure for the walkway
(striping or change in surface texture do not alone provide sufficient separation, but may effectively complement one of the above).

3. For development over 15 units, internal connections to on-site recreational features such as community clubhouse, pool, play area, sport court, passive open space or common area is required from each building. This can be achieved through a combination of grade separation, planting beds, covered walkway, change in surface texture or striping. Striping alone shall not be allowed when connecting to children's play areas.

4. When a multifamily development of 15 units or more is located within a given distance of a community facility (criteria listed below), the development shall provide a pedestrian connection off-site to that facility. The connection may utilize existing off-site sidewalks, cross walks, or delineated walkways in completing the links, but under all circumstances, complete pedestrian links to these facilities shall be provided. Connections shall consist of sidewalks, gravel or paved walkways, or shoulders separated from the roadway by a vertical curb. Use of additional measures such as pedestrian traffic signals may be required at the discretion of DDES.

a. A public school or institute of higher education is located within 1/2 mile of the site.

b. Community businesses are located within 1000' feet of the site.

c. Community facilities such as churches, parks, trails, governmental services, daycare and other are located within 1000' feet of the site. Access shall be coordinated with entries to parks and public facilities.

d. Existing bus stop, park & pool, or park & ride lot is located within 1000' of the site.

D. Transportation Demand Management Program

To implement policy T-19, the following P-suffix conditions shall apply until such time as equivalent or more stringent Countywide regulations are adopted.

All new commercial and industrial developments that are in B-N-P, BC-P, BR-C-P, C-G-P, M-L-P, M-P-P, and M-H-P zoned areas and all new multifamily housing developments that are in RD-3600-P, RT-3600-P, RM-2400-P, RM-1800-P, or RM-900-P zoned areas that generate more than a minimum number of peak hour, peak-direction trips, shall develop a Transportation Demand Management (TDM) plan. Until superseded by provisions of a future revision to King County's Road Adequacy Standards, that minimum number shall be 10 trips. The required TDM plan shall include the following elements:

1. An overall site plan that addresses public transportation needs and facilitates employee and resident access to transit and ridesharing.

2. A parking management plan for commercial sites that includes:
   a. carpool and vanpool parking with convenient access to building entrances.
   b. secure covered bicycle and motorcycle parking with convenient access to building entrances.

3. Prominent and permanent display of commuter information to explain transit, ridematch, and carpool commute opportunities available to the site. The display shall be installed prior to issuance of the building certificate of occupancy. Display design shall be subject to the transit provider approval. Up to date transit and rideshare information should be provided by the building owner in conjunction with the transit providers on an ongoing basis.

4. Other programs and activities necessary to reduce Single Occupancy Vehicle (SOV) trips to and from the site such as a free one month, one or two zone transit pass, shall be provided for each new employee or residential unit at the time of building occupancy. Responsibility for distribution of the passes shall rest with the building owner.

In addition to meeting the above requirements, all new developments that are in B-N-P, BC-P, BR-C-P, C-G-P, M-L-P, M-P-P, and M-H-P zoned areas and all new developments that are in RM-2400-P, RM-1800-P, or RM-900-P zoned areas that generate 30 or more peak hour, peak direction trips shall provide for the following transit-related facilities, if deemed appropriate by the transit provider and by King County Public Works:

1. Landing pads and shelter footings at nearby bus stops, if appropriate.

2. Paved pedestrian walkway connecting bus stop and major buildings.

3. Bus pull-out, if required for layover or safety reasons.

The transit provider and King County shall consider the proximity of the site to existing transit routes, the potential for future new routes or reroutes being located close to the site, safety, and other pertinent factors when evaluating the need for the bus stop improvements listed above.

E. Kingsgate Fire Flow Requirement

To implement Policy U-1, the following P-suffix applies to all properties in the area shown on the Kingsgate Fire Flow Requirements map.

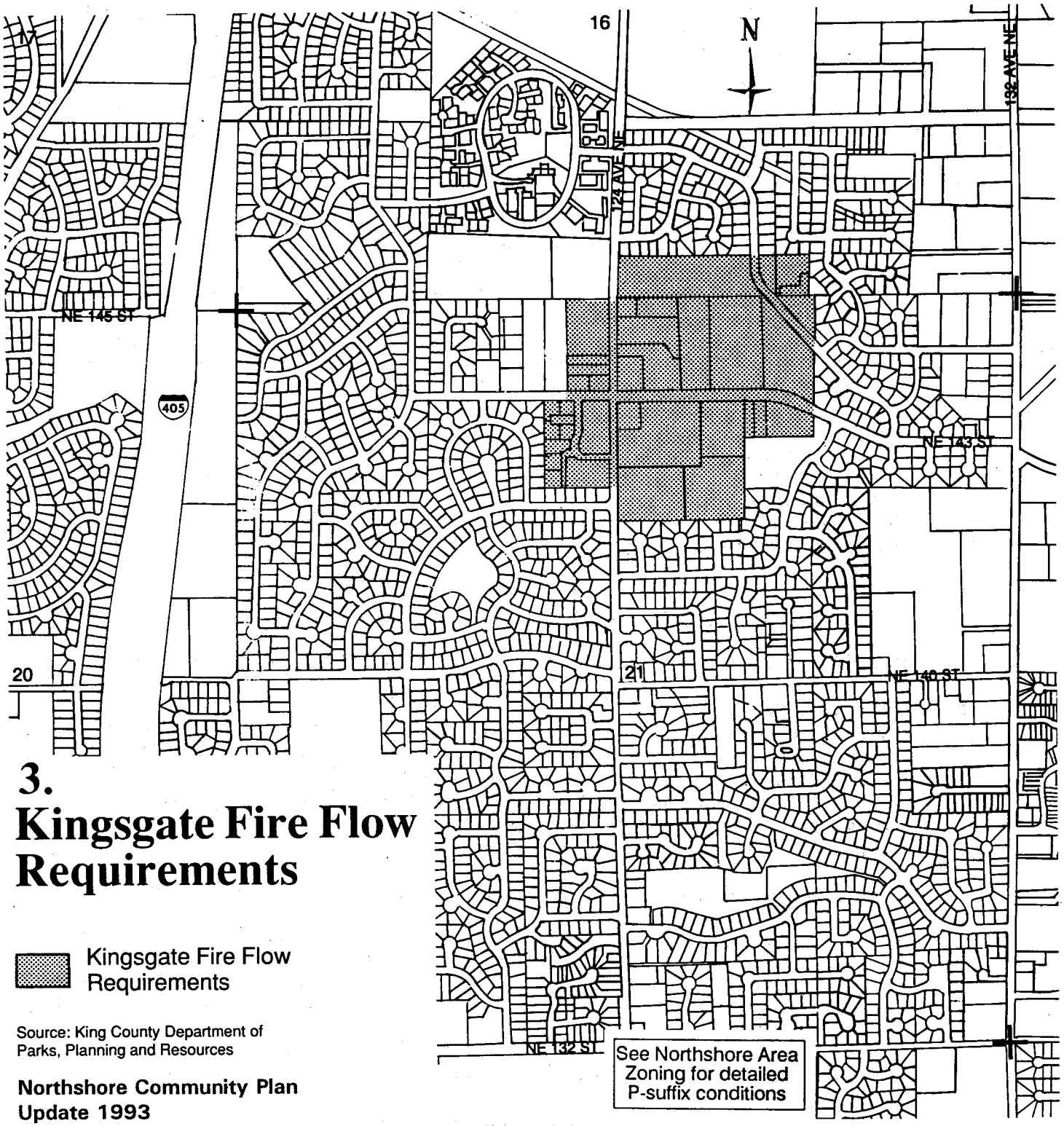
All commercial permits shall meet the fire flow requirements of the public water provider.

Development Review: Single Family Residential Areas

A. Pedestrian Circulation

To implement policies R-19, T-34, and P-7, the following P-suffix conditions shall apply until such time as equivalent or more stringent Countywide regulations are adopted:

1. In all new residential PUDs and formal subdivisions, pedestrian walkways from the interior of the plat to the perimeter shall be provided at average 350 feet intervals on the plat perimeter. DDES shall review the proposed locations of the walkways to determine if they will provide for maximum pedestrian circulation, and may require them to be moved if appropriate.



3. Kingsgate Fire Flow Requirements

Kingsgate Fire Flow Requirements

Source: King County Department of Parks, Planning and Resources

Northshore Community Plan Update 1993

Walkways are not required in those locations where in one continuous length of the plat boundary, there are 250 feet of uses on either side of the boundary which should not be accessed by pedestrians, or cannot be, due to physical constraints. The following are examples of such uses:

- pedestrian-prohibited highways and freeways;
- sensitive areas where development would not be or is not permitted to occur;
- established residential development which does not have pedestrian connections at the plat boundary and which is unlikely to redevelop in the next 20 years;
- railroad right-of-way; and
- power sub-stations.

Walkways may either be street sidewalks/walkways or pedestrian walkways between lots or tracts. Street sidewalks/walkways shall be built to the King County Road Standards.

2. In addition to providing walkways to the perimeter of the subdivision, formal subdivisions shall provide for internal plat circulation by achieving the following criteria:

   Internal blocks of lots which have a perimeter of 1000 linear feet or greater (excluding cul-de-sacs) shall have a walkway bisecting the block at its proximate center.

   Walkways required by the above conditions shall be placed in tracts which shall be owned by a homeowners' association for the subdivision, or held in undivided interest by the subdivision lots. The walkway tract shall be ten feet in width. The walkway tract shall be fenced by a 3 or 4 foot high green or black chainlink, or wooden split rail fence. The walkway itself shall be 5 feet wide and paved. These physical standards may be modified on a site-specific basis by DDES if good reasons can be demonstrated. An easement for pedestrian movement shall be conveyed to the public at large for easement.

   The area of the walkway tracts may be included in calculating the average lot area of the subdivision.

   This P-suffix requirement is in addition to the open space requirement of K.C.C. 19.38.

3. When a subdivision of 15 lots or more is located within a given distance of a community facility (criteria listed below), the development shall provide a pedestrian connection off-site to that facility. The connection may utilize existing off-site sidewalks, cross walks, or delineated walkways in completing the links, but under all circumstances, complete pedestrian links to these facilities shall be provided. Connections may consist of sidewalks, gravel or paved walkways, or shoulders separated from the roadway by a vertical curb. Use of additional measures such as pedestrian traffic signals may be required at the discretion of DDES.

   a. A public school or institute of higher education is located within 1/2 mile of the site.

   b. Community businesses are located within 1000' feet of the site.

   c. Community facilities such as churches, parks, trails, governmental services, daycare and other are located within 1000' feet of the site. Access shall be coordinated with entries to parks and public facilities.

   d. Existing bus stop, park & pool, or park & ride lot is located within 1000' of the site.

B. Transportation Demand Management Program

To implement policy T-19, the following P-suffix condition is required:

All new PUDs and formal subdivisions shall provide for the following:

1. The site plan shall: a) provide for public transportation needs and b) facilitate homeowner access to transit.

2. Dissemination of transit/ridesharing information to new homeowners. A free one month, one or two zone transit pass shall be provided to homeowners at the time of occupancy.

In formal subdivisions generating 30 or more peak hour, peak direction trips, the following transit-related facilities shall be provided, if deemed appropriate by the transit provider Metro or its successor agency and by King County Public Works:

1. Bus stop landing pad.
2. Bus stop shelter footing.
3. Bus pull-out, if required for layover or safety reasons.

Transportation

A. SR 522 Access Restriction

To implement policy T-13, the following condition applies to new developments on properties fronting on SR 522, which are shown in the SR-522 Access Restriction area on the Kenmore Right-of-Way Dedication, SR-522 Access Restriction map.

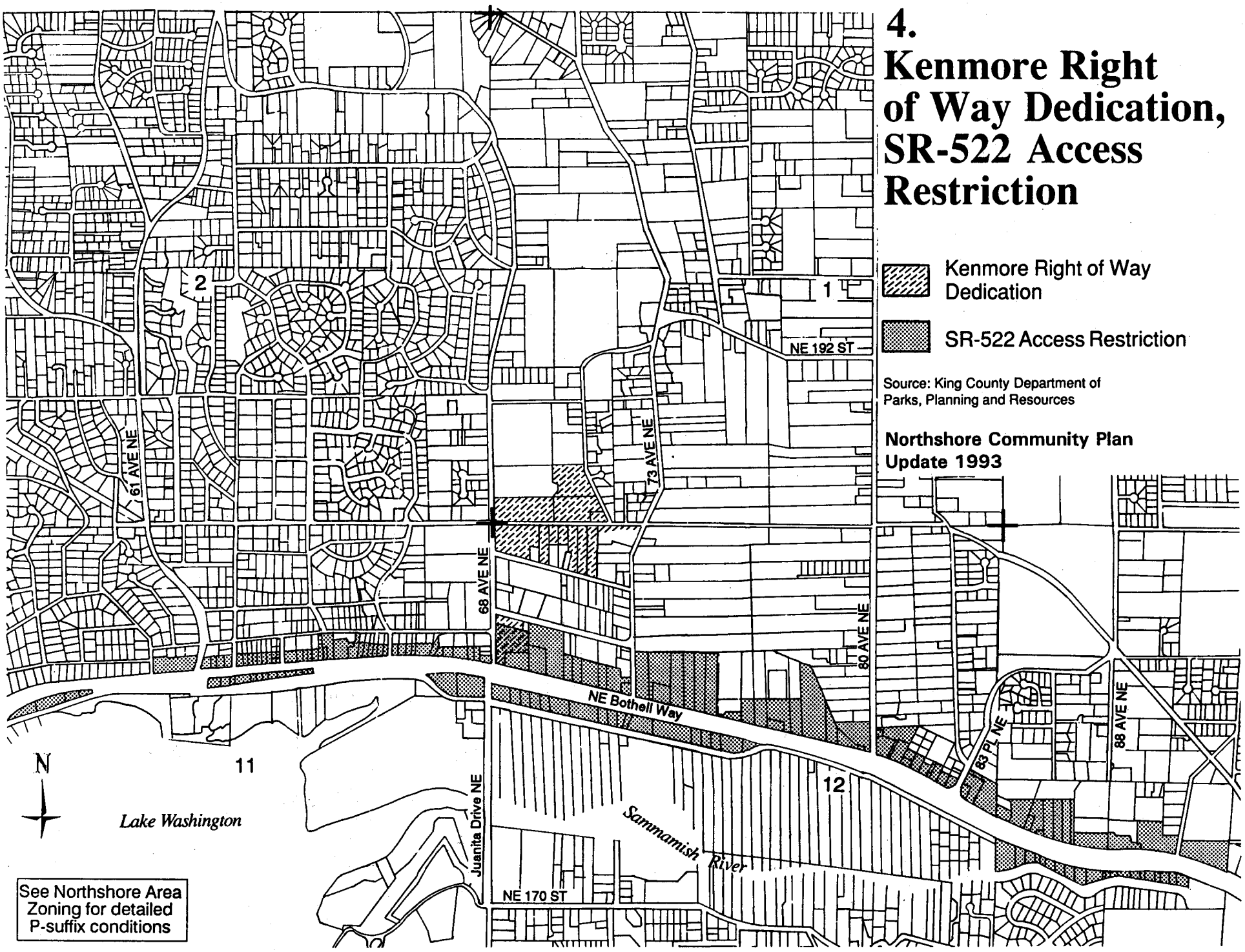
Access to SR 522 shall be kept to the minimum amount reasonable for adequate vehicular circulation. Where possible, access points to SR 522 of adjacent properties shall be consolidated. If the property fronts on a side street(s) as well as SR 522, the primary site entrance should be on the side street. Access restrictions are subject to approval by WSDOT.

B. Kenmore and Woodinville Right-of-Way Dedication and Roadway Improvements

To implement policy T-16, the following P-suffix condition applies:

As a condition of approval for any short subdivision, formal subdivision, land use or commercial permit, properties containing rights-of-way established by King County Ordinances 8115, 8075, 8070, 8144, 8074, 8071, 8114, 8073, and 8072 shall improve the right-of-way as required by the County Road Engineer, based on the expected level of roadway classification, as defined by the King County Road Standards, King County Transportation Plan and the Woodinville Urban Design Study (attached to this plan).

4. Kenmore Right of Way Dedication, SR-522 Access Restriction



Additional right of way alignments in Woodinville beyond those established by ordinance have been identified through the community planning process. They are shown conceptually on the Woodinville Design Requirements map and are labeled "Woodinville Right-of-Way Alignment". These streets shall be in a 60-foot public right-of-way and improved to the design standards shown in the Woodinville Urban Design Study and to the requirements of the King County Road Engineer. The actual roadway alignment may be varied slightly from that shown on the map if necessary for design or traffic safety considerations.

Development and land use permits on tax lots 005 and 0079, in STR 11-26-4, tax lots 0457, 0453, 0451, 0423, 0425, 0606, 0663, 0480 and 0475 in STR 12-26-4, and tax lots 0046, 0078 and 0167 in STR 1-26-4 shall meet the following P-suffix condition (Applicable tax lots show in the Kenmore Right-of-Way Dedication area on the Kenmore Right-of-Way Dedication, SR-522 Access Restriction map.):

The development shall dedicate and build NE 185th Street to collector arterial standards on the property frontage.

C. Neighborhood Collector Improvements

To implement policy R-9, the following P-suffix condition applies to all properties zoned RS-5000-P.

Any PUD, subdivision, or short subdivision of property zoned RS-5000-P shall improve adjacent streets to applicable King County Roadway Standards. In addition, all formal subdivisions in the RS-5000-P zone of greater than 15 lots which do not take direct access to an arterial roadway must be serviced by a neighborhood collector street from the site of the subdivision to an arterial. Where sub-standard, neighborhood collector street must be improved by the developer to meet minimum construction standards contained within the current King County Roadway Standards, including variance provisions. Streets trees shall be provided on all improved roadway sections, in accordance with the Street Trees P-suffix condition found in this Area Zoning.

Kenmore Activity Center Design Review

A. Pedestrian Oriented Areas

To implement policies CI-4, K-2, and K-12, P-Suffix Conditions are attached to all properties shown in the North Pedestrian Oriented Area and Mixed Use Pedestrian Oriented Area on the Kenmore Pedestrian Oriented Areas and Design Requirements maps A and B. These conditions apply to the Mixed Use Pedestrian Oriented Area only as part of a mixed use development. For purposes of specifying conditions and guidelines in the areas, NE 181st Street is designated as a primary pedestrian street. The routes shown in the Mixed Use Pedestrian Oriented Area are designated as primary pedestrian routes. If special district overlays - pedestrian oriented commercial development conditions are adopted by the County Council they shall apply to these areas.

The following conditions apply to all areas within the North Pedestrian Oriented Area and the Mixed Use Pedestrian Oriented Area, unless otherwise specified in the language of the specific condition:

1. Permitted Uses

- Permitted uses shall include those uses permitted in the various zones within the Pedestrian Oriented Areas, except the following:

  a. Gasoline service stations
  b. Drive-through restaurants or banks

c. Retail nurseries
d. Car washes
e. Stores with outdoor storage exceeding 1000 square feet.

Along the primary pedestrian street, the sidewalk frontage shall be constructed in such a way as to accommodate retail office or service uses. Retail, office, service, and residential uses only are permitted fronting the sidewalk.

2. Building Development

Orientation on Site

- For properties with frontage on a primary pedestrian street and primary pedestrian routes, the following building setback requirements shall apply:

  Street Setback: maximum of 5 feet; larger setbacks shall be allowed if arcades, streetside outdoor cafes, patios, parks, plazas, or other public spaces are provided along the street.

  Interior Setback: minimum side setbacks are waived.

- For properties with frontage on a primary pedestrian street or route, the primary ground floor building entrance should orient to either the street or public spaces such as plazas, arcades, and parks.

- For development located on primary pedestrian streets or routes, a minimum of 75% of the street or route shall be fronted by buildings. This standard may be varied only for rear building access.

- Public pedestrian access to the rear of buildings shall be provided a minimum of every 300 feet of street frontage.

Street Facade Requirements

- The building facade of ground floor retail uses that front the street or route shall include windows and overhead protection. The use of blank walls (such as undecorated concrete cinder block) without facade ornamentation is not permitted along primary pedestrian streets or routes.

- Building materials such as brick, masonry, glass, tile, stone, or wood is required on the building facade. Sheer, uninterrupted glass curtain walls and all mirrored glass is not permitted.

3. Parking

Amount and Location

- Parking shall be located in the rear of buildings that front primary pedestrian streets or routes. Any parking which cannot be accommodated in the rear of the building may be provided on the side of the building.

- On-street parking shall be provided along the primary pedestrian street.

Design

- All parking areas that front sidewalks shall be screened by a streetwall and landscaping

4. Pedestrian Circulation

- Pedestrian walkways shall be provided in accordance with the Development Review: Commercial, Industrial, and Multifamily Residential Areas - Pedestrian Circulation section of this Area Zoning. Walkways to abutting properties shall be provided at the rear of buildings.

5. Landscaping and Public Amenities - North Pedestrian Oriented Area Only

- All properties that front primary pedestrian streets must provide sidewalk landscaping and other amenities (street furniture, special lighting) in accordance with the general guidelines found in the Kenmore Urban Design Study. Site specific design of the sidewalk and landscaping detail shall be subject to the approval of King County.

- All properties shall provide interior or exterior public space(s) in an amount that covers no less than 5% of the site area (excluding area for pedestrian walkways). Individual public spaces shall be a minimum of 1000 square feet, and at least one half of the required space shall be provided in one defined area. A clear, visible pedestrian route shall be provided from the open space area to adjacent primary pedestrian streets. Public spaces may consist of parks, plazas, arcades, or other pedestrian oriented amenities. Public spaces shall include seating, landscaping, works of art, fountains, or other aesthetic pedestrian-oriented features.

- For properties with less than one acre of site area, two alternatives shall be permitted in lieu of providing the minimum public space requirement:

  a. A park acquisition fee may be paid, with the amount of payment calculated in accordance with Chapter 21.12.260 of the proposed King County Zoning Code.

  b. Adjacent property owners may enter into a joint agreement to provide the minimum public open space through clustering buildings and/or parking within multiple sites. Under such an agreement, the minimum public open space requirements shall be 5% of the combined site area.

- Standard landscaping requirements as found in the County Code are hereby waived.

6. Vehicular Access and Circulation

- No driveways shall be provided on primary pedestrian streets, unless alternative access to the site is unavailable, in which case a maximum of one access point per site is permitted, which shall provide for joint access with adjacent properties. (This condition applies to North Pedestrian Oriented Area only)

- On primary pedestrian streets, if an adjacent property has made provision for a shared vehicle entrance, the development shall use the shared access. New developments adjacent to vacant or underdeveloped land shall provide for interior vehicular connections to the adjacent property. (This condition applies to North Pedestrian Oriented Area only)

- The on-site vehicular circulation system should contribute to pedestrian movement and safety by including all of the following items that are feasible, considering the overall design of the development:

  - Pedestrian crosswalks at key crossing areas
  - Tight turning radii that reduce vehicular speed (This condition applies to North Pedestrian Oriented Area only)
  - Signage that clearly communicate the location of vehicular and pedestrian zones.

- Designated passenger drop-off areas
- Parking on interior roads, to slow down vehicular traffic

B. Office/Civic Core

A key element of the civic/office core concept is the development of a public plaza adjacent to the intersection of 73rd Avenue N.E. and N.E. 181st Street (all four quadrants) that will provide a pedestrian focal point for the office core.

To implement policies K-12 and K-5, and the office/civic core design concept, the following P-suffix condition applies to all properties in the Office Only Requirement area on the Kenmore Pedestrian Oriented Areas and Design Requirements - Map B.

> Public open space and related improvements as generally described in the Kenmore Urban Activity Center Design and Development guidelines shall be provided as a condition of approval of any development permit. Site specific design of the open space is subject to the approval of King County.

C. Pedestrian Linkages

To implement policies P-7, P-10 and K-12, the following P-suffix conditions apply to the below referenced properties, which are shown on the Kenmore Pedestrian Oriented Areas and Design Requirements - map A.

1. Improvements to the public right of way on 68th Avenue N.E. and 73rd Avenue N.E. (Area labeled Kenmore Pedestrian Linkages - Area A):

   Landscape and pedestrian improvements shall be made within the public right-of-way, in accordance with the general standards established in the Kenmore Urban Activity Center Design and Development Guidelines Study, as a condition of approval of any development permit. Site specific design of the improvements is subject to the approval of King County

2. Dedicated and improved pedestrian right-of-way between 68th Avenue N.E. and 73rd Avenue N.E. (Area labeled Kenmore Pedestrian Linkages - Area B):

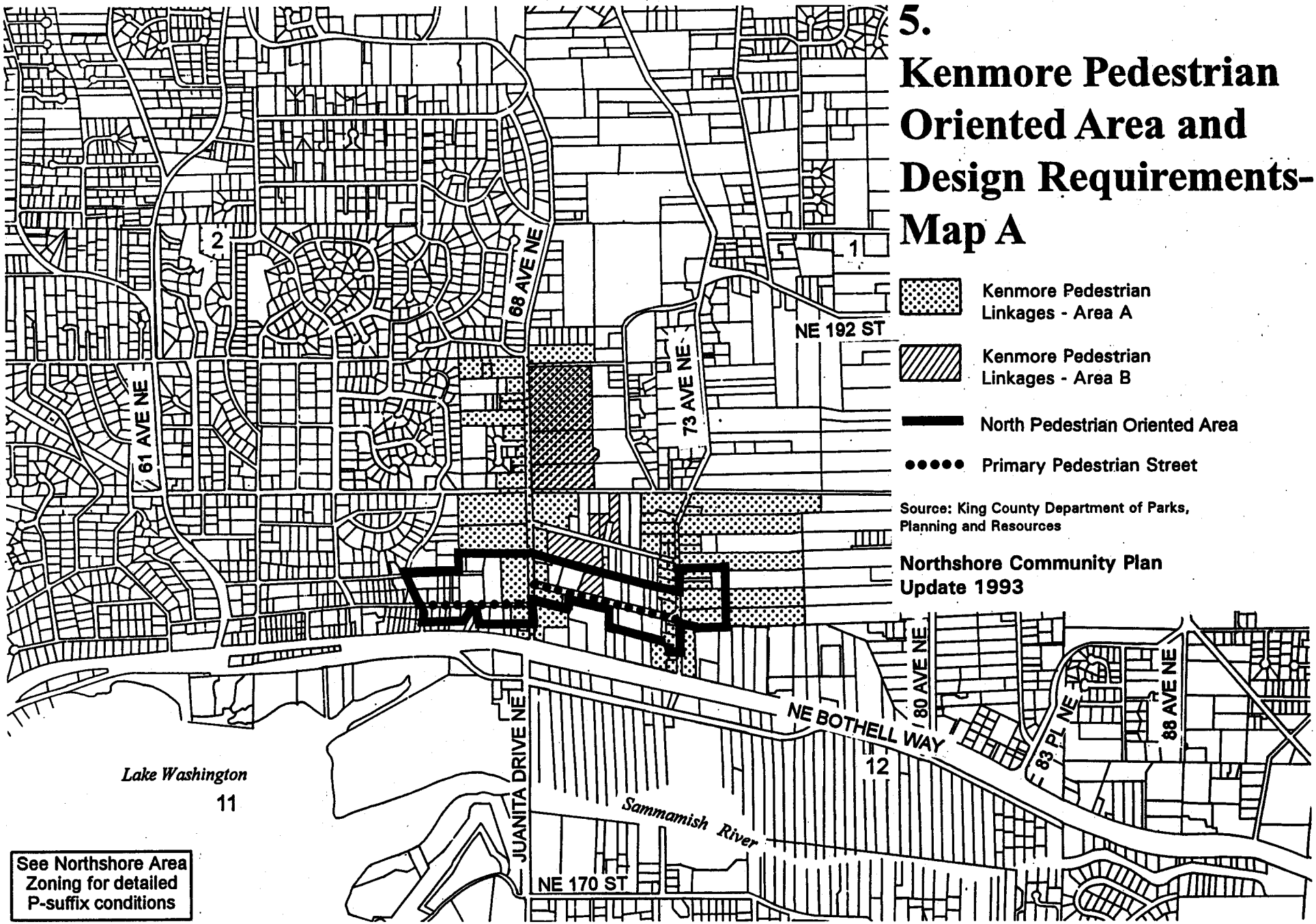
   As a condition of approval for any development permit, public pedestrian right-of-way must be provided between the north and south ends of the property. The walkway may be located within any landscaping buffers, but must connect with walkways located on other properties established in accordance with this condition.

D. Office Only Requirement

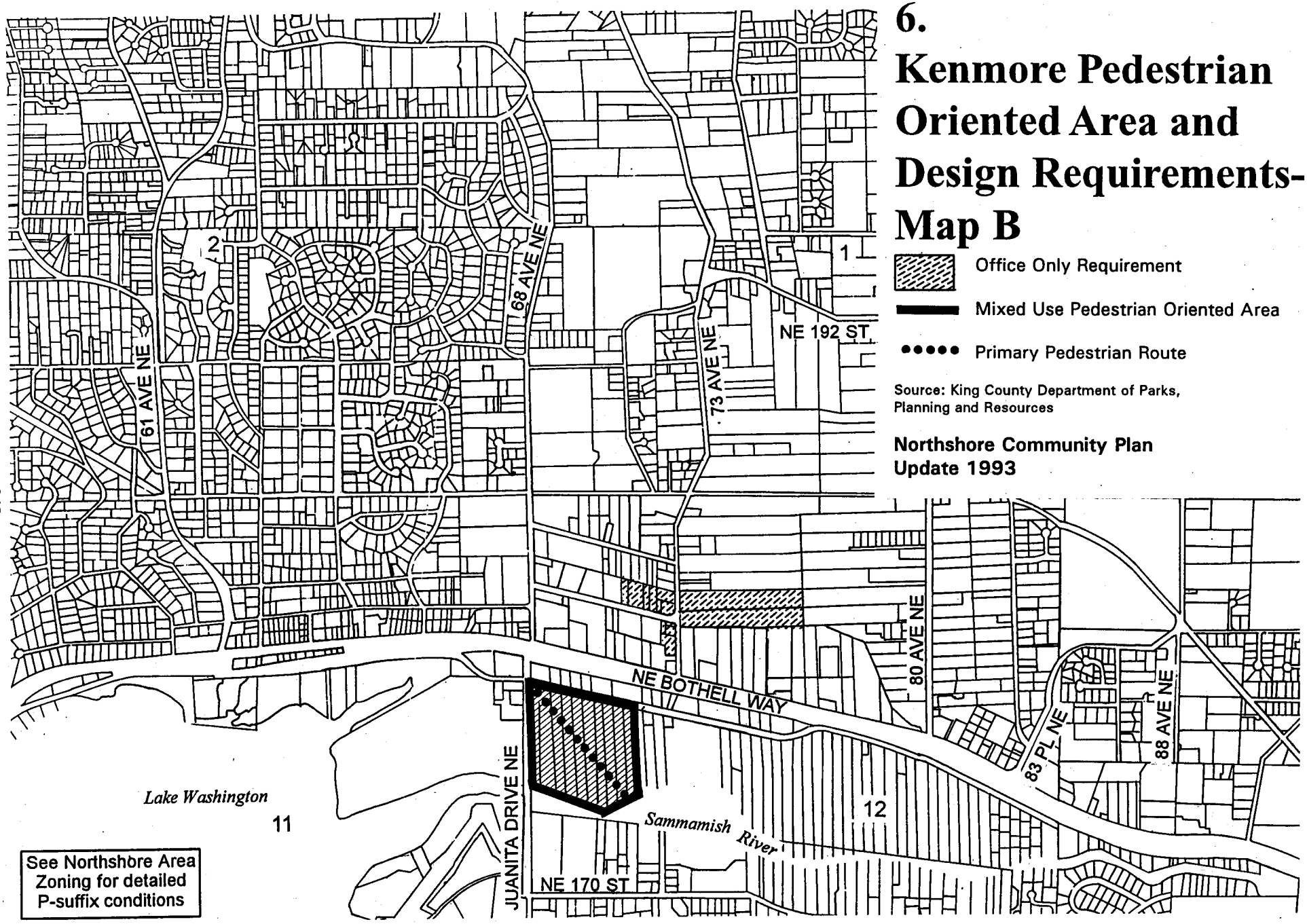
To implement policy K-5, the following P-suffix applies to all properties in the area shown in the Office Only Requirement area on the Kenmore Pedestrian Oriented Areas and Design Requirements - map B

Office uses only are permitted.

5. Kenmore Pedestrian Oriented Area and Design Requirements-Map A



6. Kenmore Pedestrian Oriented Area and Design Requirements-Map B



E. Mixed-Use Pedestrian Oriented Areas

To implement policies CI-4, K-2 and K-12, special conditions are attached to the property known as the Kenmore Pre-Mix site. The discussion and mitigation below applies specifically to the Pre-Mix site (shown on Map A).

The Mixed-Use District is intended to be a pedestrian-oriented place, where residents and visitors can enjoy an "urban village" extension of Kenmore. The design of the Mixed-Use District is intended to integrate different land uses and activities and minimize the conflicts between vehicles, pedestrians and cyclists. It includes a new "pedestrian street" that will connect the new 175th Street alignment to the waterfront park. Shops and dining establishments will front the street, with residences above.

The Mixed-Use District will provide almost a mile of Lake Washington and Sammamish River channel shoreline public access. A waterfront promenade will be developed for pedestrian use along the existing barge basin, and will include trees, benches, public viewpoints, walking paths and sidewalk cafes. The promenade will lead to a new public waterfront park at the end of the peninsula with a special public gathering place for musical events and other occasions. The park will have unobstructed views down Lake Washington available to residents of the Kenmore community.

Pedestrian improvements will include a new public shoreline park along the Sammamish River channel, which will incorporate a shoreline/wildlife interpretive trail and bike path. Townhouse style homes will be set back from the shoreline to allow for enhancement of this new natural area. The shoreline/wildlife interpretive trail will lead to a new public community shoreline park with public restrooms and a trailhead interpretive center.

Mixed business-residential use is recognized as a viable use in the long term for the Kenmore Pre-Mix site. However, any development in this area requires mitigation of environmental impacts. Therefore, a site-specific mitigation program is incorporated in the P-suffix conditions for this area. The objective of this mitigation plan is to ensure that all impacts of the proposed development are mitigated.

SR-522 in Kenmore is recognized to be at "ultimate design." Roads that are at ultimate design cannot be widened without significant destruction of existing development and potential environmental damage because the land around the roadway is already developed and/or contains natural features. King County recognizes that while some improvement to adjacent roadways is possible, congestion below County thresholds is likely to continue on SR-522.

The King County Department of Public Works has identified potential transportation improvements which will facilitate traffic flow in Kenmore. Preliminary transit improvements have also been identified. The transportation P-suffix conditions in this package identify ways to mitigate transportation impacts as a result of mixed use development on the Pre-Mix site. The level of acceptability cannot be based on current County standards due to the ultimate design characteristics of the SR-522 roadway described above. Completion of the Transportation/Circulation Master Plan is necessary to update and clarify mitigation measures when a more detailed development proposal is submitted.

The following conditions apply to the Kenmore Pre-Mix site:

1. Permitted Uses

Permitted uses shall include those uses permitted in the various zones within the overlay district, except the following:

a. Gasoline service stations
b. Drive-through restaurants or banks

c. Retail nurseries
d. Car washes
e. Stores with outdoor storage
f. Single retail tenants with a gross floor area in excess of 65,000 square feet

For properties in the Neighborhood Commercial, Waterfront, and Waterfront Extension Subdistricts (described below), the location of residential dwelling units shall be prohibited on the ground floor, and retail and service uses are encouraged on the ground floor. Other ground floor uses (including parking) may be permitted when designed so as to be compatible with the pedestrian orientation of the development.

2. Building Development

Orientation to Pedestrian Street

For properties with frontage on the primary pedestrian street (shown on Map A), the following building setback requirements shall apply:

Street Setback: maximum of 5 feet; larger setbacks shall be allowed if arcades, street-side outdoor cafes, patios, parks, plazas, or other public spaces are provided along the street.

For properties with frontage on the primary pedestrian street, the primary ground floor building entrance should orient to either the street or public spaces such as plazas, arcades, and parks.

For development located on the primary pedestrian street, a minimum of 75% of the street shall be fronted by buildings at-grade. A minimum of 50% of the buildings on the street shall be fronted by retail or service uses.

Public pedestrian access to the waterfront located at the rear of buildings located on the primary pedestrian street shall be provided a minimum of every 300 feet of street frontage.

Street Facade Requirements

The building street facade of ground floor retail and service uses that front the primary pedestrian street shall include windows and overhead protection. The use of blank walls without facade ornamentation is not permitted along the primary pedestrian street.

Building materials such as concrete, brick, masonry, glass, tile, stone, metal, or wood is required on the building street facade. Sheer, uninterrupted glass curtain walls, all mirrored glass and cinderblocks are not permitted on the building street facade along the primary pedestrian street.

Height

Maximum heights shall be 92 feet in the northern and central portions of the mixed use development area. A 45-foot height limit shall apply to all development within 100 feet of the channelized edge of the Lake Washington shoreline. The boundary of the channelized edge shall extend to the inner harbor line. A 35-foot height limit shall apply to all development within the first 200 feet, and a 45-foot height limit to all development within the next 100 feet of the Sammamish River shoreline edge and the Lake Washington shoreline edge that is not channelized.

175th Street Frontage

The frontage of the new 175th bypass road shall be designed as to be attractive to passing road users and to screen surface parking adjacent to the roadway. For example, parking areas fronting on 175th Street NE should be screened wither by bermed landscaping or buildings. Street trees shall be provided along the realigned 175th.

3. Parking

Amount and Location

At full build-out, off-street parking shall be no greater than one space for every 400 square feet of floor area in the waterfront, waterfront extension, and residential subdistricts; provided that during initial phases of development, off-street parking standards may be exceeded in anticipation of future development.

In the Neighborhood Commercial subdistrict, minimum parking requirements for office, retail and commercial uses shall be reduced to one space for every 300 square feet of floor area.

Surface parking shall be located to the greatest degree possible in the rear of buildings that front the primary pedestrian street. Any parking which cannot be accommodated in the rear of the building may be provided on the side of the building.

At full build-out, on-site surface parking shall consume a maximum of 50% of the total site area in the Neighborhood Commercial subdistrict, and 25% of the total site area in the Waterfront, Waterfront Extension, and Residential subdistricts. The remaining off-street parking requirements shall be accommodated using one or a combination of the following:

On-site parking structure
On-street parking spaces
Off-site common parking facility

At full build-out, 75% of the parking in the Waterfront, Waterfront Extension, and Residential subdistricts shall be provided in structures or on-street.

In the Neighborhood Commercial subdistrict of the Pre-Mix site, a maximum of 60 parking stalls are permitted in any one surface parking lot. At a minimum, parking lots must be separated by buildings, streets, or 12 feet of type two landscaping.

Design

All parking areas that front sidewalks (except along 175th Street) shall be screened by a streetwall and landscaping.

Retail uses shall be provided on the first floor of the street side edges of parking structures.

4. Transit and Transportation Circulation

Mitigation for development of the Pre-Mix site should emphasize enhancement of transit and non-vehicular use and improvement of local access and circulation within the Kenmore area. Therefore, mitigating conditions (as specified in paragraph 14 below) include dedication and construction of a new 175th bypass road, signalization of the intersection of this road with 68th Avenue, dedication and improvement of a transit hub on SR-522, development of a pedestrian bridge crossing SR-522,

construction of a pedestrian street, shared use with Metro of a parking area associated with the transit hub, the construction of the new 175th bypass roads and improvements to a new intersection at 65th Avenue NE, participation in the cost of intersection improvements at the intersection of the new 175th bypass road and 61st Avenue and development and enforcement of a transportation management plan on site. Fair share participation in applicable projects listed in the current Mitigation Payment System program as well as transportation projects recommended in the Northshore Plan is also a required mitigation condition.

Furthermore, the requirement that residential development occur throughout the various phases of development of the Pre-Mix site will ensure that transit and transportation linkages occur from the very beginning of development.

5. Pedestrian and Bicycle Circulation

Design of the Mixed-Use District shall emphasize public pedestrian access and linkages to the transit facilities and adjacent sites. This includes development of a pedestrian bridge across SR-522, as specified in Condition 14 below, if approved by King County and WSDOT. Required primary public pedestrian and bicycle routes are shown on Map B. Other, minor pedestrian routes shall be identified through the Master Planning and building permit review processes.

All pedestrian walkways and connections, including shoreline pedestrian routes, shall be accessible and open to the general public. While public vehicular access may be limited to the Residential area, the Residential area shall be open to the general public.

Bicycle and pedestrian linkages to the Burke-Gilman Trail, and to the transit hub required as part of Condition 14 below, shall be provided. See Map B. Location of these linkages is subject to the review and approval of King County.

Bicycle parking facilities shall be provided at all major public destination points.

6. Landscaping and Public Amenities

All properties that front the pedestrian street must provide sidewalk landscaping and other amenities (street furniture, street trees, and special lighting).

20% of the entire mixed use development shall be designated as public open space for the general public. Major public activity nodes are identified on Map B. A public gathering place which accommodates a minimum of 50 people shall be provided on the site. See Map F and G. These public open space areas shall be easily accessible to the pedestrian, and shall be considered in the pedestrian circulation plan. Waterfront access areas, public parks and sensitive area buffers may be utilized to calculate the 20% requirement. Internal pedestrian walkways, public streets, and private open space areas shall not be utilized to calculate the 20% requirement. Public access shall be provided around the entire waterfront edge of the site. See Map B.

Street trees shall be provided in all roads constructed with the development. The normal landscaping requirements of the code, with the exception of parking area landscaping are hereby waived.

7. Vehicular Access and Circulation

Driveways on the primary pedestrian street shall be limited to an average of one for every two hundred lineal feet.

The on-site vehicular circulation system shall contribute to pedestrian movement and safety by including all of the following items that are feasible, considering the overall design of the development:

- Pedestrian crosswalks at key crossing areas
- Signage that clearly communicate the location of vehicular and pedestrian zones.
- Designated passenger drop-off areas
- Parking on interior roads, to slow down vehicular traffic
- The primary pedestrian street shall be built in the Waterfront subdistrict. Location of this pedestrian route as shown in Map B is conceptual. Actual location may vary based on road and signalization design. The street shall be built to the general specifications of the illustrative street section in Map C and Map D.

8. Public Viewpoints

Public viewpoints, linked with the pedestrian routes, shall be provided. Public viewpoints shall provide views of the Sammamish River and Lake Washington. See Maps B, E, F and G. Public viewpoints shall be integrated into the pedestrian plan for the site and shall be easily accessible to the public. Development of the public viewpoint areas shall include pedestrian amenities such as seating and signage.

9. Shoreline Enhancement.

The shoreline edge of the Sammamish River and Lake Washington shall be improved to enhance water quality and wildlife and marine habitat. A wetland and riparian enhancement plan subject to the review and approval of King County, shall be performed by a qualified wetland biologist. Setbacks shall be subject to the King County Sensitive Areas Ordinance and the Shoreline Master Program with a minimum 100-foot setback for structures from the river's edge. Variations to adopted setbacks, may require off-site mitigation, to be determined in the Master Plan process. No disturbance of the Sensitive Areas Ordinance required buffers is permitted, except at minimum 300 foot intervals, wildlife viewing trails extending into the buffer may be allowed if no significant impact to the wildlife and marine habitat is anticipated to occur. The use of moorage developed in the barge channel shall be limited to private use. Public moorage shall be provided, if feasible, on the Lake Washington frontage of the site, subject to approval under the King County Sensitive Areas Ordinance, the Shoreline Master program and other agencies with jurisdiction. Approval of all water moorage is subject to mitigation of marine/air conflicts. A special study shall be performed to determine if boat moorage will have a negative impact on salmon runs entering the Sammamish River or feeding at the River mouth. If it is found that moorage and associated boat traffic may have an impact, boat moorage shall not be provided. At the time of the creation of this condition package, no setbacks are required along the inner harbor line. Regulations adopted subsequently may require setbacks within this area.

10. Affordable Housing.

Affordable housing units amounting to 10% of the total number of units in the development shall be provided. Compliance with this requirement shall be required (a) in the development of the start-up phase, described below, based upon the number of residential units in that phase, and (b) thereafter, upon the completion of each additional 260 residential units at the site. Compliance may be achieved through construction of affordable units or provision of adequate security to the County to ensure their future development. The affordable units need not be provided within the development, but must be provided within the Northshore planning area. Units may be either rented or sold. Affordable housing shall be calculated as follows: Rented units shall be provided only to households earning less than 50% of the median income. Monthly rents shall be no greater than 30% of the monthly income for households earning 50% of the median income. Sold units shall be sold to first-time buyers (i.e. person not having owned a home in the past three years) earning less than 80% of the median

income. Home prices shall be Affordable based on FHA lending standards. Covenants shall be established which guarantee the fulfillment of this obligation.

11. Residential Density.

Residential density shall be calculated at the following levels per acre for the gross land area of each subdistrict in the development:

	Minimum	Maximum
Neighborhood Commercial	12 du/ac	18 du/ac
Waterfront & Waterfront Extension	12 du/ac	24 du/ac
Residential	24 du/ac	48 du/ac

Residential uses in the mixed use area shall not exceed 75% and shall not fall below 50% of the total built floor area of the development at full build-out. Where feasible, buildings with non-residential uses (in particular, large buildings), shall include residential uses as well.

12. Hazardous Waste Removal

Prior to any development, the applicant shall conduct additional environmental assessment as specified by King County and, if contamination is found, shall prepare a remediation plan and schedule acceptable to the King County Executive. Prior to development of any phase of the project, contamination (if any) on the portion of the site to be developed in that phase shall be remediated in accordance with the remediation plan and all legal requirements. The remainder of the site shall be cleaned up on accordance with the remediation schedule.

13. Fair Share Mitigation.

In applying the above conditions on individual properties, mitigation shall be at a reasonable level related to each proposed development.

14. Phasing Requirements

The approved Master Site Plan for and all approvals for development of phases of the Pre-Mix site, shall satisfy the following requirements for phasing, provision of mitigation, and development by subdistrict.

a. Subdistrict Development. The Pre-Mix site shall be divided into four subdistricts, as shown on Map A. The location of the subdistrict boundaries may vary somewhat from Map A; the final boundaries for each subdistrict will be determined in the master plan process. Development in each subdistrict is subject to all P-Suffix conditions of the zone set forth above, as well as the subdistrict-specific conditions described below and any mitigations identified through the Master Site Plan approval process. The Residential Subdistrict may overlap with the adjacent subdistricts for the purpose of distributing density across the site, as set forth under the approved Master Plan. This plan contemplates that ultimate development of the entire Pre-Mix District will include approximately 1000 units of residential development and approximately 500,000 square feet of commercial (including office, retail and entertainment) development.

(1) Neighborhood Commercial (approximately 12-18 acres). This area will serve as the focus of neighborhood-scale retail and commercial development, because of its proximity to road and transportation infrastructure. It may also include entertainment uses, and will incorporate residential development, though at a lower density than the remainder of the Mixed-Use District. Where feasible, residential uses will be included in the same

structure as retail and office uses. Some vertical integration of residential and retail/office uses shall occur in this area.

(2) Waterfront (approximately 10-14 acres). This subdistrict will emphasize pedestrian-scale access and development, both at and near the channelized edge of the inner harbor. Development will be mixed-use, with a higher density of residential than in the Neighborhood Commercial Subdistrict. Enjoyment of the urban shoreline environment and pedestrian connections throughout the site will be stressed.

(3) Residential (approximately 10-14 acres). The residential subdistrict will be the center of residential development on the site. This area will be linked to the neighboring commercial and waterfront subdistricts, as well as to the transit hub, by pedestrian corridors, bridges, and other linkages. Residential development will respect the natural shoreline of the Sammamish River, where public access will be provided.

(4) Waterfront Extension (approximately 4-8 acres). This future phase will develop after the discontinuation of the existing industrial use.

b. Phasing Requirements. Initial development of the Pre-Mix site shall be required to satisfy the requirements of this subsection for the "startup phase." Otherwise, there are no restrictions on when or where development may occur within the Pre-Mix site, so long as it is in accordance with the approved master plan.

(1) Startup Phase. Initial development in the Mixed-Use District shall be mixed residential and commercial in nature and may occur in any subdistrict of the Mixed-Use District. This initial development shall be known as the "startup phase." The zoning for the startup phase may be actualized as part of a plan amendment study and shall satisfy the following requirements as well as others identified through the plan amendment study.

(a) Development Area: The development area of the startup phase shall be no less than 10 acres and no greater than 26 acres.

(b) Minimum Residential Density: Development within the startup phase shall include residential density of no less than 12 du/acre.

(c) Uses: Development of the startup phase will include approximately 400 residential units; 250,000 square feet of commercial (office and retail); and a multi-screen cinema, or the equivalent thereof. Development beyond these thresholds will be permitted if the applicant can satisfy current congestion standards.

(d) Phasing Conditions: Certificates of occupancy shall not be issued for any development in the startup phase until the startup phase mitigation/linkage requirements (as described below) have been satisfied.

c. Phasing Requirements. The purpose of identifying phasing requirements in the area zoning is to insure that adequate mitigation is in place for development of each portion of the mixed-use development site. These requirements are designed to insure that most of the capital-project roadway mitigations for the entire Pre-Mix site shall occur at the startup phase (in excess of that required to mitigate the impacts of the startup phase above). Thus most of the roadway related capital infrastructure and amenities will be in place at the end of the startup phase to support further development in the Pre-Mix site. Certificates of occupancy shall not be issued for subsequent development in a particular subdistrict until the mitigation requirements of that subdistrict have been satisfied.

The applicant shall be required to make payments required under SEPA. Mitigation provided under these conditions shall be credited where appropriate against mitigation requirements otherwise applicable to the project through the SEPA process or under County codes. The property owner may fund mitigation improvements based upon agreements for reimbursement of portions of such costs by public agencies or other benefited private parties. Additional transportation mitigation may be added to any phase as a result of completing the Transportation/Circulation Master Plan.

The intersection of SR-522 and 68th Avenue is near its ultimate design improvement, and currently operates at LOS F. Significant mitigation of this intersection is not possible, and therefore mitigation for the development of the Pre-Mix Site must be directed to improving access and circulation in other ways. Satisfaction of the linkage requirements set forth below shall be construed as satisfying the County's road adequacy requirements for each respective phase or subdistrict of the overall project.

(1) Startup Phase. The following phasing items shall be provided in connection with development of the startup phase. These mitigations are projected to more than satisfy mitigation requirements of the start-up phase itself. Additional mitigation requirements of individual subdistricts shall be triggered to the extent development occurs in individual subdistricts outside of the start-up phase boundaries.

(a) Full signalization of the intersection of 68th Avenue and the new 175th bypass road, and intersection improvements to include a northbound left-turn and left-turn/pass-through lane on 68th Avenue but not including improvements to the 68th Avenue Bridge;

(b) Dedication of right-of-way adequate for a five lane principal arterial on-site for the new 175th bypass road, connecting 68th Avenue to SR 522 at the northwest corner of the Pre-Mix Site;

(c) Construction of the new 175th bypass road onsite in a five-lane cross-section with landscape median within the dedicated right-of-way, connecting 68th Avenue to SR 522;

(d) Provide for signalization of the intersection of SR 522 and the new 175th bypass road, once signal installation authority has been obtained from the State of Washington by King County;

(e) Provide for realignment of existing 175th Street to coordinate with the new 175th bypass road, as set forth in the approved Transportation Master Plan;

(f) The developer shall contribute the cost of construction for an enhanced transit stop to serve the start-up phase which shall be located on the south side of SR-522 and north of the Burke-Gilman Trail and shall include seating areas, weather protection, and specially-designed landscaping and walkway surfaces;

(g) A surface parking area of up to 2 acres in size, in a location adjacent to the identified transit stop, shall be made available for use or development by Metro. Use of this parking area shall be shared by Metro and adjoining developments on-site. Satisfaction of this condition shall quality as TDM mitigation under the County's road adequacy standards;

(h) If a decision to use the surface parking area is not made by Metro by January 1, 1995, then the above conditions shall not apply, and the developer shall be

responsible for a pro-rata share of the construction of any new park-and-ride in the Kenmore area. Satisfaction of this condition shall qualify as TDM mitigation under the County's road adequacy standards;

(i) Payment of fair share mitigation fees, including those for a fair share contribution to the transit lane improvements planned on SR 522 if applicable;

(j) Pedestrian access from the developed area to the transit hub and the 68th Avenue/SR 522 intersection;

(k) Provision of other minor roadway improvements identified by the TMP, such as signal phasing, lane realignment, etc.;

(l) Provide a touchdown location on-site for the proposed pedestrian bridge crossing SR-522;

(m) Provide for a grade-separated connection for the Burke-Gilman Trail under the to-be constructed 65th Avenue, that is compatible with the design of the Burke-Gilman Trail undercrossing at 68th Avenue;

(n) The developer shall provide cash incentives, such as transit subsidies, parking fees, or rent abatement for transit use, in residential leases, if called for under the approved TMP;

(o) Development of shoreline enhancement, including public recreation and access areas on the Sammamish River shoreline of the Mixed-Use District, in the area immediately adjacent to the start-up phase area and extending to Lake Washington. Development shall include parking, public restrooms, trailhead facilities, vehicle turnaround, public viewpoint, construction of shoreline interpretive trail, enhancement of the riparian edge of the Sammamish River, and provision of a public viewpoint; and

(p) Prior to any development, the applicant shall conduct additional environmental assessment as specified by King County and, if contamination is found, shall prepare a remediation plan and schedule acceptable to the King County Executive. Prior to development of any phase of the project, contamination (if any) on the portion of the site to be developed in that phase shall be remediated in accordance with the remediation plan and all legal requirements. The remainder of the site shall be cleaned up on accordance with the remediation schedule.

(2) Neighborhood Commercial Subdistrict. The phasing requirements for the Neighborhood Commercial Subdistrict are associated with the startup phase development and are required to be provided at that time. Therefore, additional phasing requirements are not set forth for further development in the neighborhood commercial subdistrict. Development in this subdistrict may proceed following the startup phase as demand warrants, consistent with the adopted master plan. Although single-use commercial buildings are not prohibited in this subdistrict, residential and commercial uses in various structures should be integrated to the greatest degree possible, through the use of walkways and other functional connections between buildings. Further, the prohibition on ground floor residential units will encourage the inclusion of mixed uses in residential structures. A conceptual plan for a portion of the neighborhood commercial area is shown on Map J.

(3) Waterfront Subdistrict. The phasing requirements for the Waterfront Subdistrict are dependent upon completion of the mitigation requirements for the startup phase development. Additional mitigation requirements for the Waterfront Subdistrict, identified below, are focused on enhancing open space opportunities in this portion of the mixed-use district and on emphasizing pedestrian connections within the development. Development in the Waterfront Subdistrict may proceed following the startup phase as demand warrants, consistent with the adopted mater plan. Development shall satisfy the following criteria, in addition to the standards of the underlying zoning:

(a) The pedestrian street shall be constructed. See Maps C and D. Construction of the street shall be phased so that the street is constructed in conjunction with development of adjacent buildings. The pedestrian street shall be developed to County road standards as a business access street including two traffic lanes, two 8-foot parallel parking strips, and two 10-foot sidewalk areas.

(b) The harborside promenade shall be constructed. See Map E. Like the pedestrian street, the construction of the harborside promenade shall be phased to occur in conjunction with development of adjoining buildings. The harborside promenade shall be constructed as a 20-foot wide hard-surfaced pedestrian walkway, beginning at the channelized edge, and shall include pedestrian features such as seating, landscaping, sidewalk cafes, and pedestrian amenities.

(c) Upon completion of the pedestrian street, a public parking area shall be developed at the southern end of the pedestrian street. The parking area shall provide parking for approximately 20 vehicles.

(d) A harborside viewpoint shall be constructed in conjunction with the harborside promenade, at a location identified in the approved master plan. See Map E.

(e) A lakeside viewpoint shall be developed at the southern end of the site, at a location identified in the approved master plan. Development of the lakeside view point shall occur upon completion of the pedestrian street. See Map B and F.

(f) A public gathering place shall be developed at the southern end of the pedestrian street, adjacent to the lakeside viewpoint and in a location identified in the approved master plan. See Map F. The major public gathering place shall provide area for gathering of at least fifty people. It shall be developed upon completion of the pedestrian street.

4. Residential Subdistrict. The mitigation/linkage requirements for the residential subdistrict depend upon implementation of the startup phase mitigation. Additional mitigation/linkage requirements for the residential subdistrict are geared toward enhancing pedestrian connections within the site, reducing reliance on single-occupancy vehicles, and enhancing transit use. Development in this sub-district may proceed following the startup phase as demand warrants, consistent with the adopted master plan. Development shall satisfy the following criteria, in addition to the standards of the underlying zoning:

(a) Internal pedestrian connections from the residential subdistrict to the transit hub shall be provided;

(b) A pedestrian bridge over SR 522 shall be provided (subject to WSDOT approval). Funding for construction may come from sources other than the developer;

(c) An on-site transportation coordinator shall be appointed for the entire site, and a transportation management plan (TMP) adopted and enforced for all development within the subdistrict;

(d) At build-out of the Residential District, the developer shall provide a shuttle service to connect the development with the transit hub, if called for under the approved TMP;

(e) The developer shall provide cash incentives, such as transit subsidies, parking fees, or rent abatement for transit use, in residential leases in the residential subdistrict, if called for under the approved TMP;

(5) Waterfront Extension Stage. Phasing requirements for the waterfront extension stage are provided in connection with development of the other subdistricts. Therefore, additional phasing requirements are not set forth for development in the Waterfront Extension Subdistrict. Development in this subdistrict may not proceed until mitigation for the startup phase and Waterfront subdistrict have been provided.

15. Mixed Use Master Plan Submittal Requirements.

Before development can occur, a Master Site Plan shall be completed and approved. The following requirements apply to the process for obtaining Master Plan approval for development of the Pre-Mix site. The Master Plan application shall be subject to review and approval by DDES, Community Planning and King County Department of Public Works, Roads Division. The Master Plan application shall establish vehicular, pedestrian and open space connections within the entire development. In addition, a transportation master plan shall further define the transportation requirements associated with each phase of there development. These vehicular, pedestrian and open space connections and transportation mitigations shall be binding. The startup zone proposal shall prepare environmental documents that consider both the impacts of the subject application (phase) and the cumulative impacts of all other phases based on build-out of the Pre-Mix site. Approval of the Master Plan shall assure:

a. the Mixed Use development area in its entirety meets the goals, policies and criteria of the Northshore Community Plan;

b. that there is adequate environmental review of the cumulative impacts of all mixed use development in Kenmore;

c. that there is detailed project level review of environmental impacts of the phase or phases that comprise the development application;

d. that there is adequate mitigation developed for the project level review;

e. that specific criteria of the Northshore Area Zoning are met;

f. that each phase of development will adequately meet the expressed goals for the mixed use area, and adequately mitigate for its impacts at the time of development.

16. Required Elements for Master Plan Applications:

The following elements are required of the Master Plan applications in the mixed use development area. This application may include development approval for one or more phases of the entire mixed use area.

a. Environmental documents assessing project level impacts of the development. Appropriate mitigation necessary for site-specific impacts should be identified.

b. Mixed Use Development Comprehensive Project Description

(1) Housing units for all phases shall be identified by number and type for each phase including affordable housing requirements of Item 10 of the area zoning. The phase or phases included in the first development application shall also identify location and value of housing units in that phase, if applicable.

(2) Retail/Commercial uses for all phases shall be identified by square footage per phase. The phase or phases included in the first development application shall also identify major tenant types and building locations in that phase.

(3) Office uses for all phases shall be identified by square footage. The phase or phases included in the first development application shall include building footprints and employment data for that phase.

(4) Public and private facility improvements shall be identified for the entire mixed use development area. Appropriate size or capacity, location, operational characteristics and relationship should be estimated or defined in further detail as defined in other sections of the mixed use requirements.

(5) Open space shall be identified for all phases and broken down by the amount per phase and type of facility. Specific improvements should be identified for the phase or phases of the first development application.

c. Transportation/Circulation Master Plan

(1) A Traffic and Circulation report shall be prepared by the applicant identifying all daily and peak hour transportation impact and required capital and transit improvements necessary to address the impact of development of the Pre-Mix site. The report shall include the appropriate cost of each project. Cumulative impacts of the mixed use development are on the transportation system shall be evaluated as part of the Master Plan approval. The plan will address full build out of the Pre-Mix site.

(2) A Financing report identifying public and private funding commitments for identified capital and transit improvements shall be prepared. King County shall ultimately determine the public/private financing commitments in coordination with the applicant, Metro and WSDOT.

(3) A Phasing report shall be prepared identifying the timing of funding commitments necessary to mitigate impacts for the phase or phases proposed in the development application. This plan shall be consistent with the P-suffix conditions.

(4) A Parking Study shall be prepared to identify the minimum number of stalls required for commercial and residential development to be economically viable in the Mixed-Use District.

d. Pedestrian/Bicycle Circulation Plan

A map and text identifying pedestrian and bicycle circulation through the entire Mixed Use Development Area is required. Major routes are identified on Map B. Major pedestrian and

bicycle connections identified by King County through the staff report shall be binding for subsequent building permits, unless revised. Detailed design of facilities within the phase or phases applying for development approval shall be included for that phase.

e. Open Space Plan

Map and text identifying public and private open space for the entire Pre-Mix site is required. Policy K-11 shall be incorporated. The staff report prepared by King County shall identifying acreage and location of open space necessary for the mixed use development area at build-out based on impacts of the proposal and the policies and criteria of the Northshore Community Plan. At least 25% of all the open space necessary for entire Mixed Use Development shall be constructed as part of the Phase I development approval.

f. Mitigation/Recapture Plan

The application shall include a description of how proposed mitigation for the project conforms to the requirements of the P-suffix conditions or, if alternative mitigation is proposed, how such alternative mitigation meets the goals and intent of the P-suffix conditions and the Plan. The County may approve such alternative mitigation if it is warranted, based on changed conditions relating to, for example, transit plans, road alignments, pedestrian connections, or other planning or capital improvement changes, and if the goals and intent of the P-suffix conditions and the Plan are met. If the application proposes funding or construction of improvements in excess of the developer's fair share, the application shall also include a mitigation recapture plan that describes how such excess contributions can be recaptured from public or private sources.

17. Subsequent Applications

The following elements are required of subsequent development applications within the mixed use development area:

a. Environmental documents assessing project level impacts of the phase or phases of the Potential Mixed Use Development Area proposed in the potential zone application shall be prepared. Appropriate mitigation necessary for site specific impacts should be identified.

b. Phased Project Description - A map and narrative shall be submitted describing build-out of all phases proposed in the potential zone application. The narrative shall include:

(1) Housing units by phase - number, type, location and value, including the affordable housing component identified in policy K-11 of the Area Zoning for that phase.

(2) Retail/Commercial uses by phase - major tenant types, square footage and location for that phase;

(3) Office uses by phase - square feet, building footprints and employment for that phase;

(4) Public/Private facility improvements by phase - type, approximate size or capacity, location, operational characteristics, relationship to existing facilities and method of financing for that phase.

(5) Open Space by phase - type, area size, improvements.

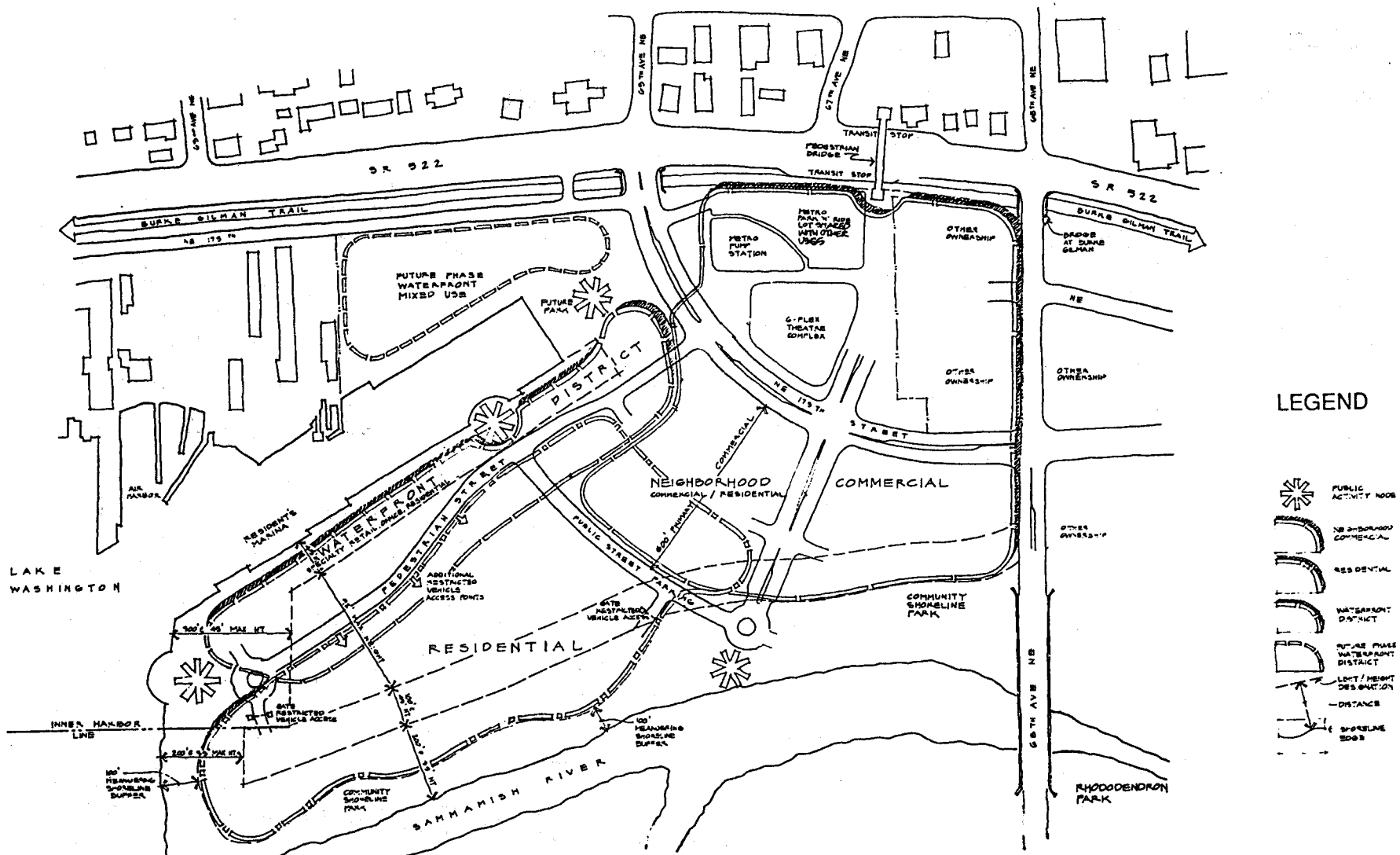
c. Capital and Transit Improvements Phasing Report that identifies improvements necessary for the phase or phases proposed in the development application based on the Transportation/Circulation Master Plan and the financing report shall be identified. This shall include timing of funding commitments.

d. Pedestrian/Bicycle Phasing Report that identifies detailed bicycle and pedestrian improvements identified for the phase or phases proposed in the development application based on the Pedestrian/Bicycle Circulation Plan.

e. Open Space Phasing Report that identifies detailed open space provisions for the phase or phases proposed in the development application based on the Open Space Plan.

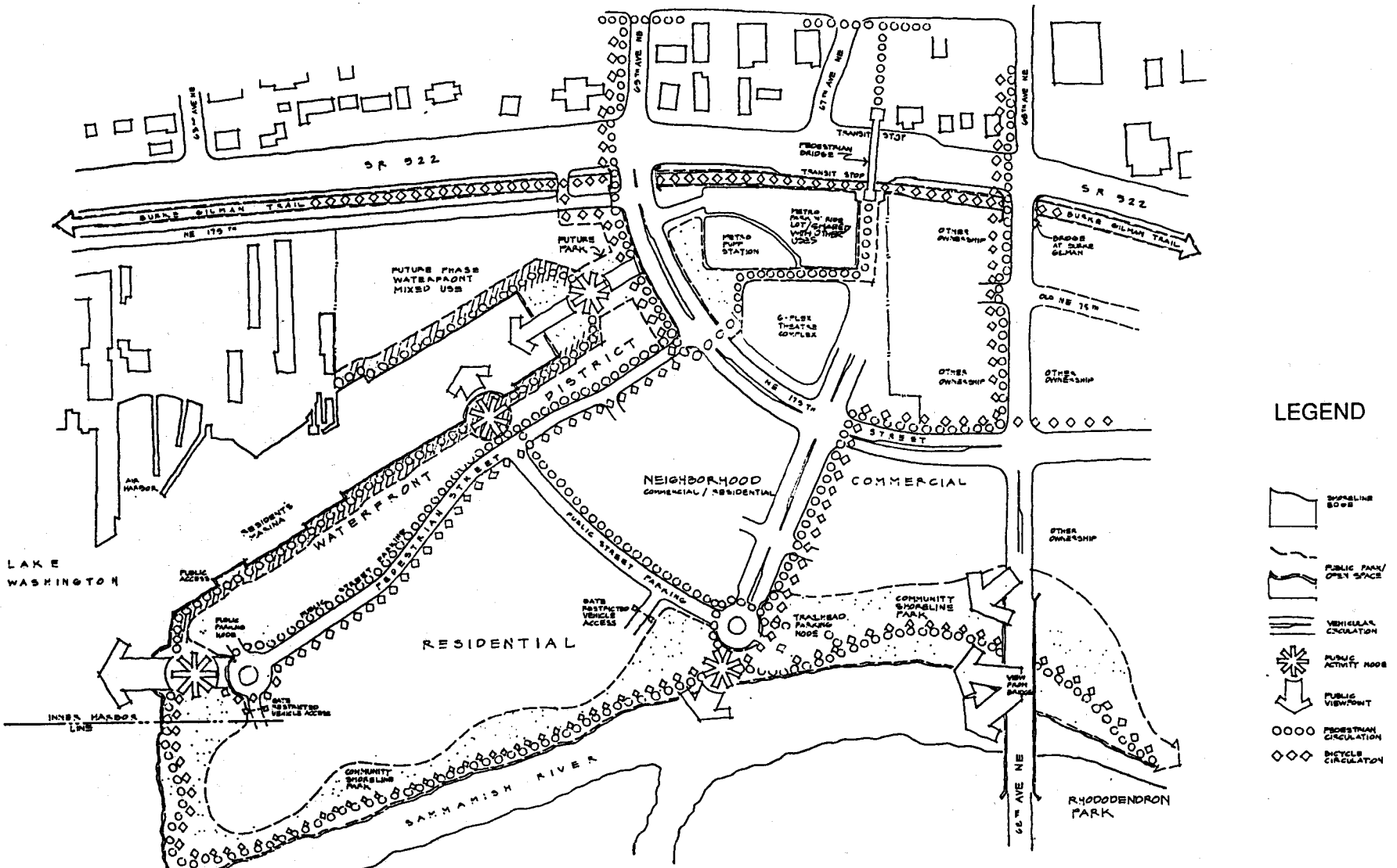
f. Mitigation/Recapture Plan, as described above.

g. A revised Master Plan may be approved by King County in connection with future development of the site, as long as the revisions to the Master Plan conform to the goals and intent of the P-suffix conditions and the Plan. All revisions to the Master Plan are subject to approval by DDES, Community Planning, and Transportation Planning.



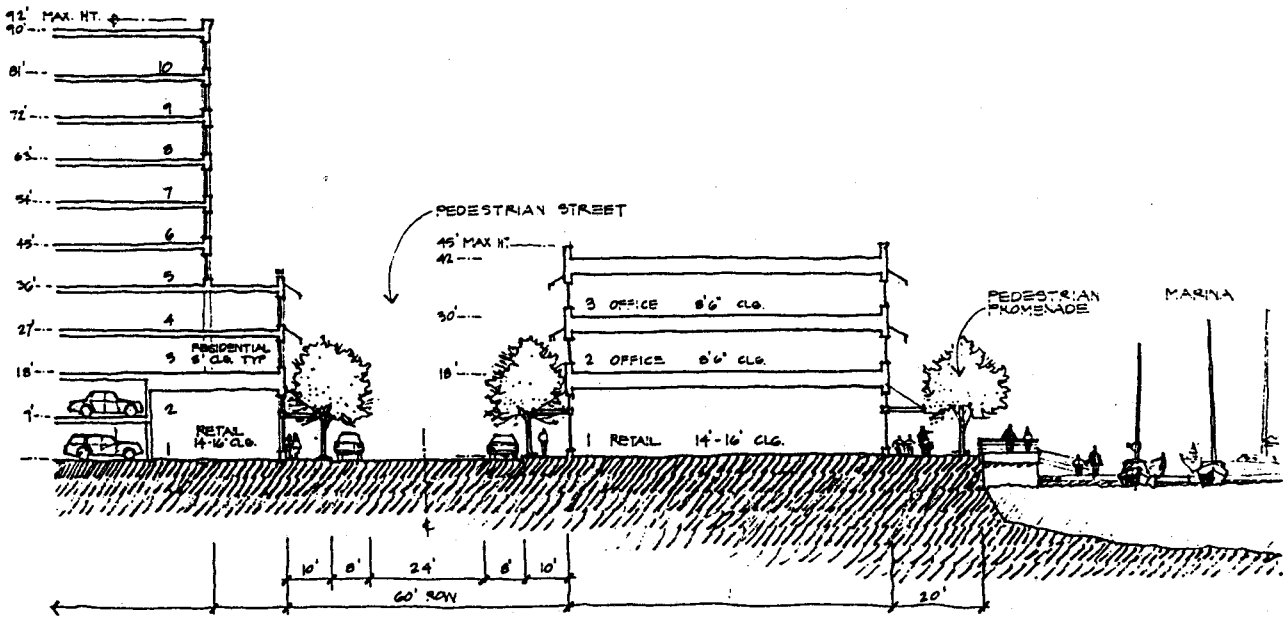
Map A Subdistrict Map

This map is shown for purposes of illustrating the intent of the P-suffix conditions for the Mixed-Use District only, and shall not be used as a development plan for the site. Actual development plans may vary from this map, as long as the intent of the P-suffix conditions is met.



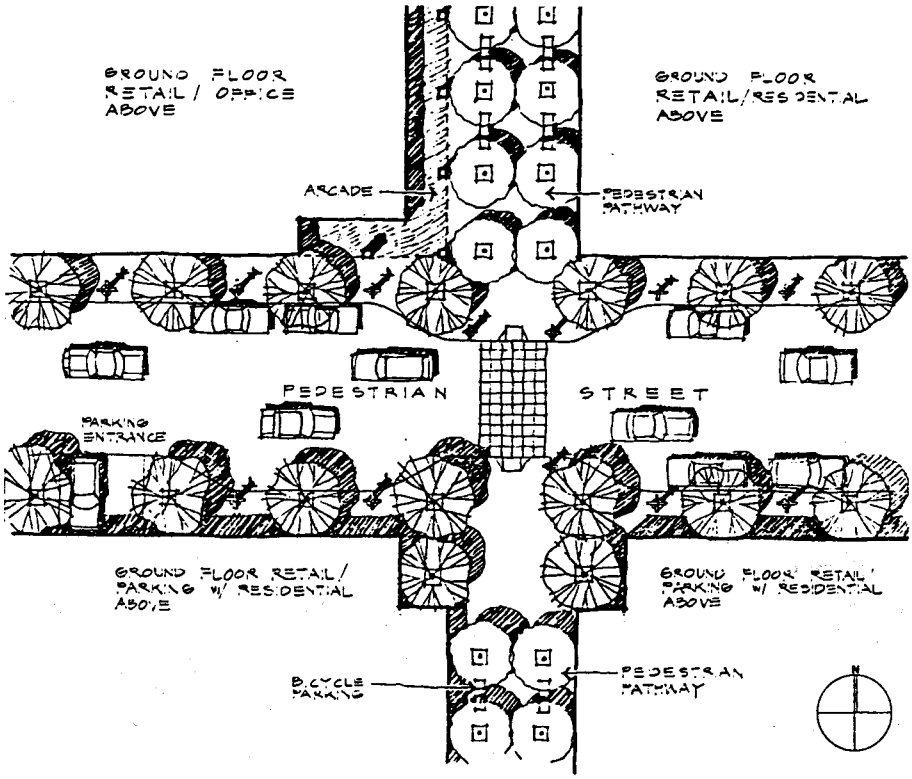
Map B Pedestrian & Transportation Connection / Open Space Plan

This map is shown for purposes of illustrating the intent of the P-suffix conditions for the Mixed-Use District only, and shall not be used as a development plan for the site. Actual development plans may vary from this map, as long as the intent of the P-suffix conditions is met.



Map C Pedestrian Street Cross-Section Concept

This map is shown for purposes of illustrating the intent of the P-suffix conditions for the Mixed-Use District only, and shall not be used as a development plan for the site. Actual development plans may vary from this map, as long as the intent of the P-suffix conditions is met.



Map D Pedestrian Street Concept Plan View

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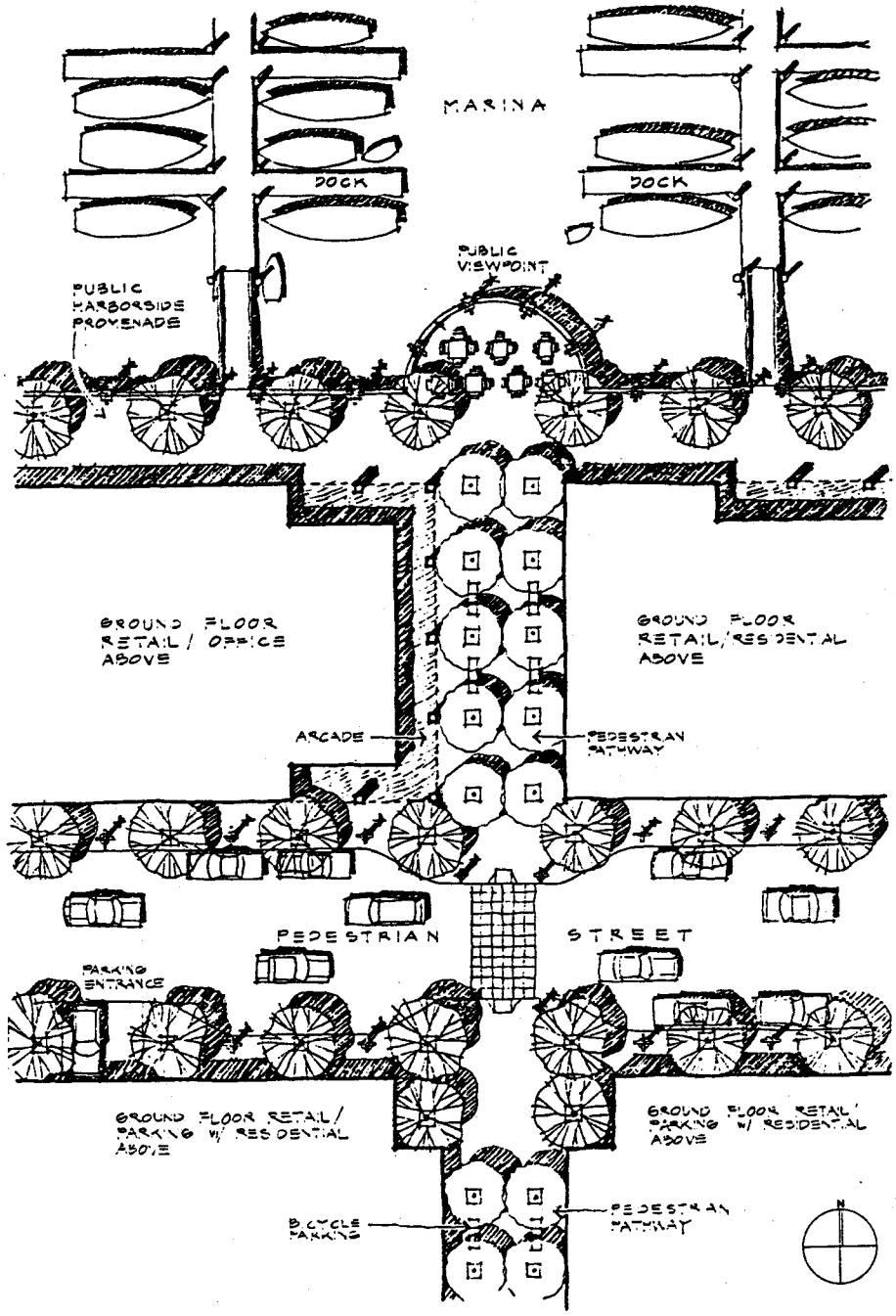
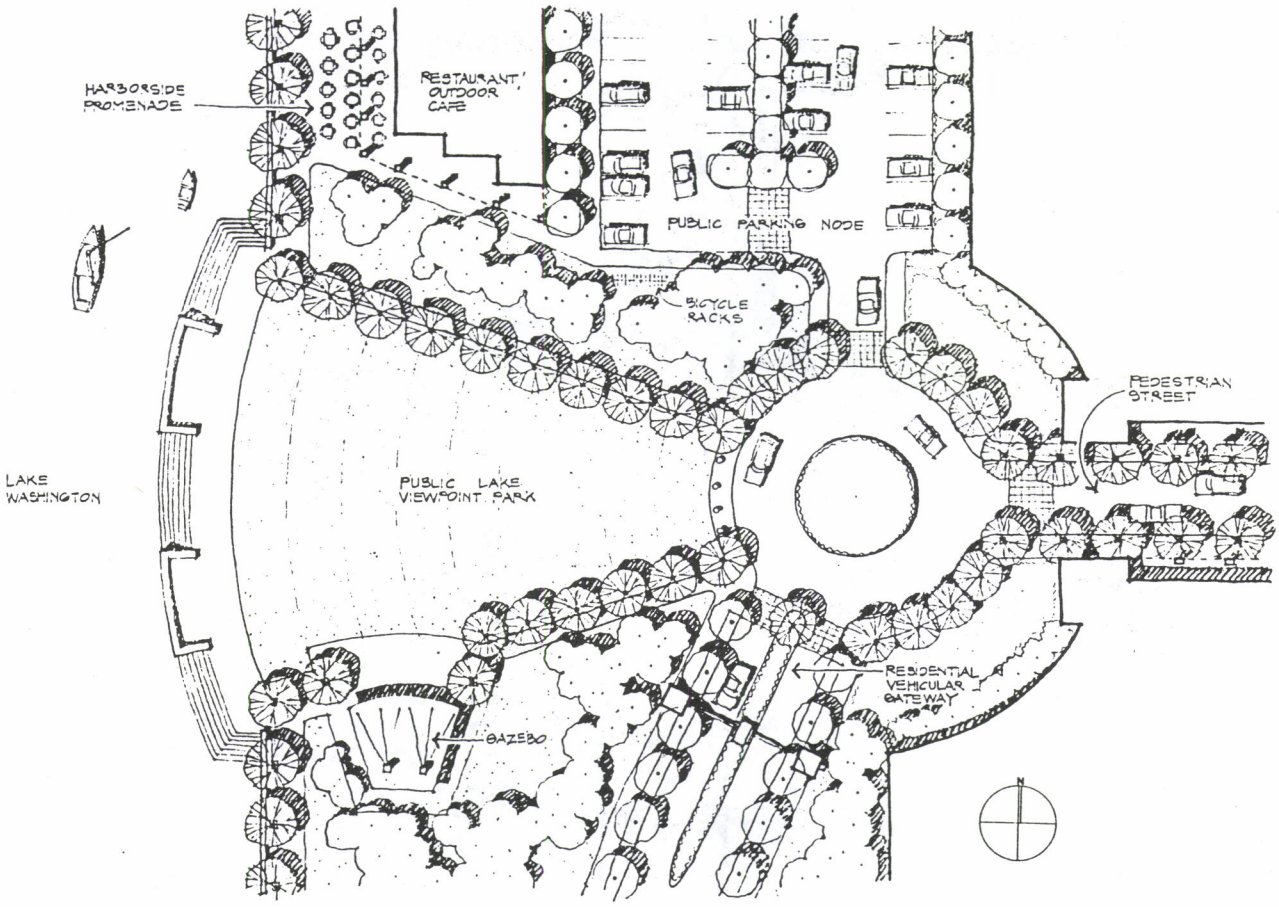


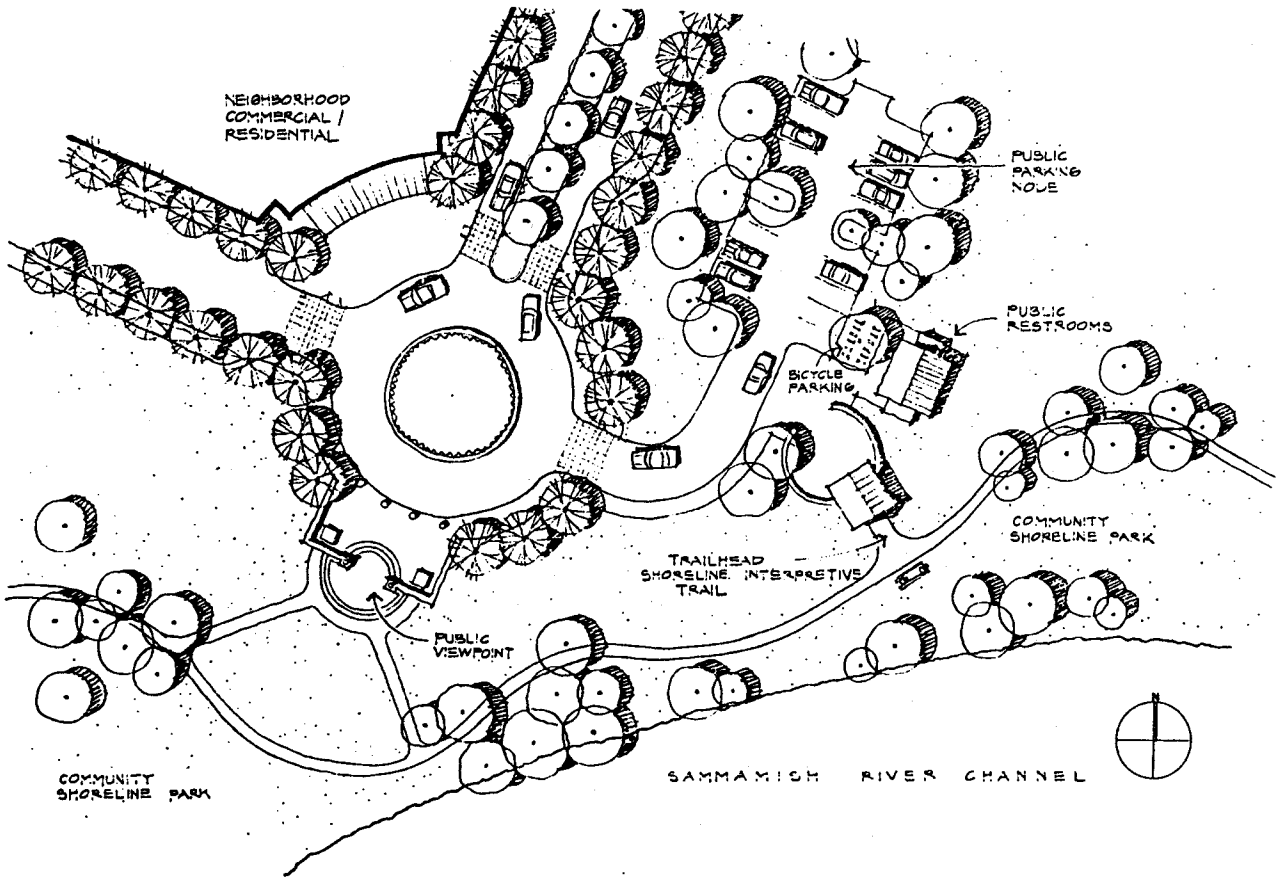
Map E Harborside Promenade Concept Plan View

This map is shown for purposes of illustrating the intent of the P-suffix conditions for the Mixed-Use District only, and shall not be used as a development plan for the site. Actual development plans may vary from this map, as long as the intent of the P-suffix conditions is met.



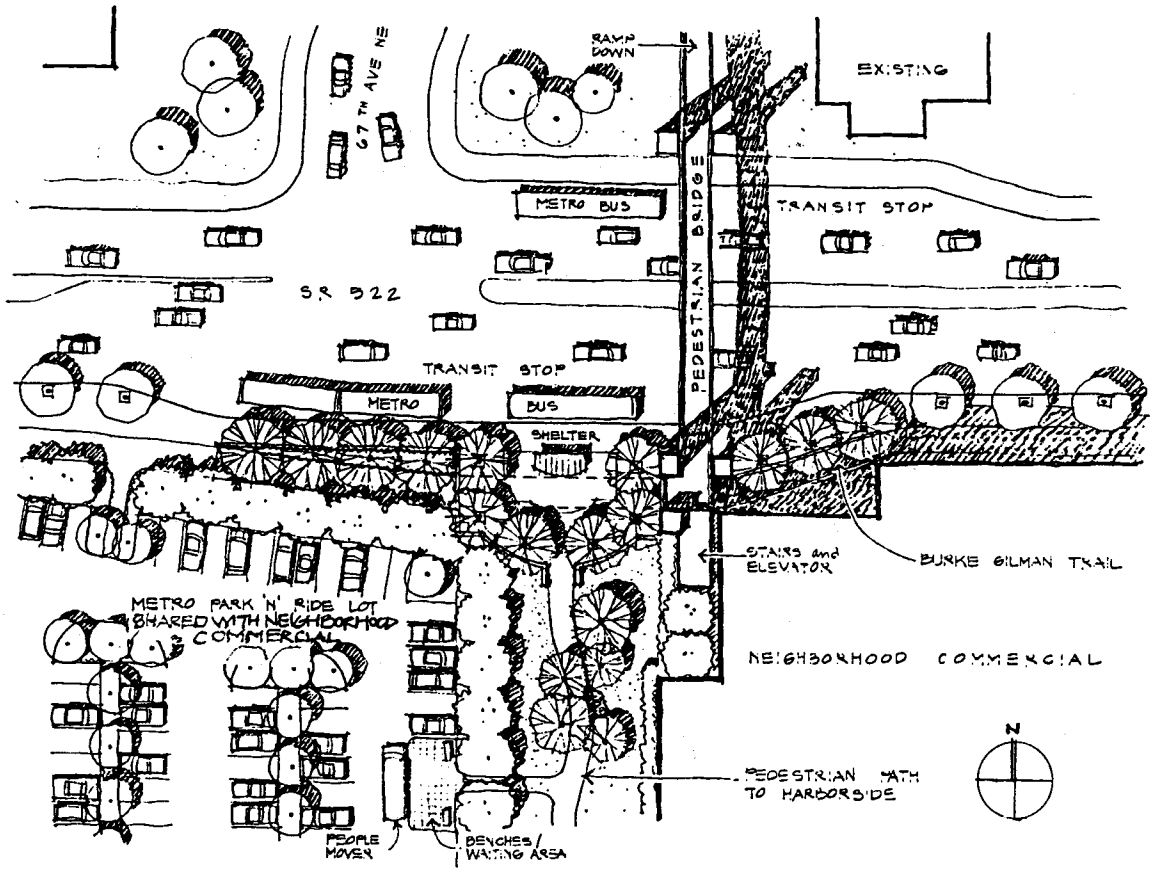
Map F Lakefront Park Concept Plan View

This map is shown for purposes of illustrating the intent of the P-suffix conditions for the Mixed-Use District only, and shall not be used as a development plan for the site. Actual development plans may vary from this map, as long as the intent of the P-suffix conditions is met.



Map G Community Shoreline Park Concept Plan View

This map is shown for purposes of illustrating the intent of the P-suffix conditions for the Mixed-Use District only, and shall not be used as a development plan for the site. Actual development plans may vary from this map, as long as the intent of the P-suffix conditions is met.



Map I Pedestrian Bridge Concept Plan View / Transit Hub

This map is shown for purposes of illustrating the intent of the P-suffix conditions for the Mixed-Use District only, and shall not be used as a development plan for the site. Actual development plans may vary from this map, as long as the intent of the P-suffix conditions is met.

Sammamish Valley Design Review

A. Sammamish River Industrial Design Requirements

To implement policies P-10, P-11, CI-11, CI-12, CI-13, CI-14 and CI-15, the following P-suffix conditions shall apply to all development on tax lots 6, 57, 5, 24, 53, 68, 63, 8, 88, 17, 99, 106 and 85 in S-T-R 15-26-5 as shown in the Sammamish River Industrial Design Requirements area on the Sammamish Valley Design Requirements map.

1. The applicant is encouraged to provide a trail easement to the King County Parks Department along the Sammamish River, consistent with the Draft Regional Trail Plan. DDES and the Parks Division shall work with the applicant regarding feasibility and width of the easement.

2. Windows that face the trail easement or agriculturally zoned land and are not blocked by other structures shall be of non-mirror glass.

3. Connections to the trail area (if provided) by adjacent developments are encouraged. Any connection proposals shall be subject to review and approval by King County Parks Division to ensure safety to trail users.

4. New development adjacent to the trail easement (if provided) or agriculturally zoned land is encouraged but not required to be of a color which is aesthetic and harmonious with adjacent uses. Earth tones are most appropriate, which would include green, light blue, brown, and tan.

B. Hollywood Neighborhood Center Design Requirements

To implement policy T-31, the following P-suffix condition applies to any development or land use permit on the properties in the Hollywood Center Pedestrian Link and Hollywood School Design Requirements areas on the Sammamish Valley Design Requirements map:

Any new construction shall include crosswalks at all four stops of the intersection of 148th Avenue NE and NE 145th Street subject to the approval of the WSDOT. Design details shall be worked out with King County Department of Public Works, Traffic and Planning Section.

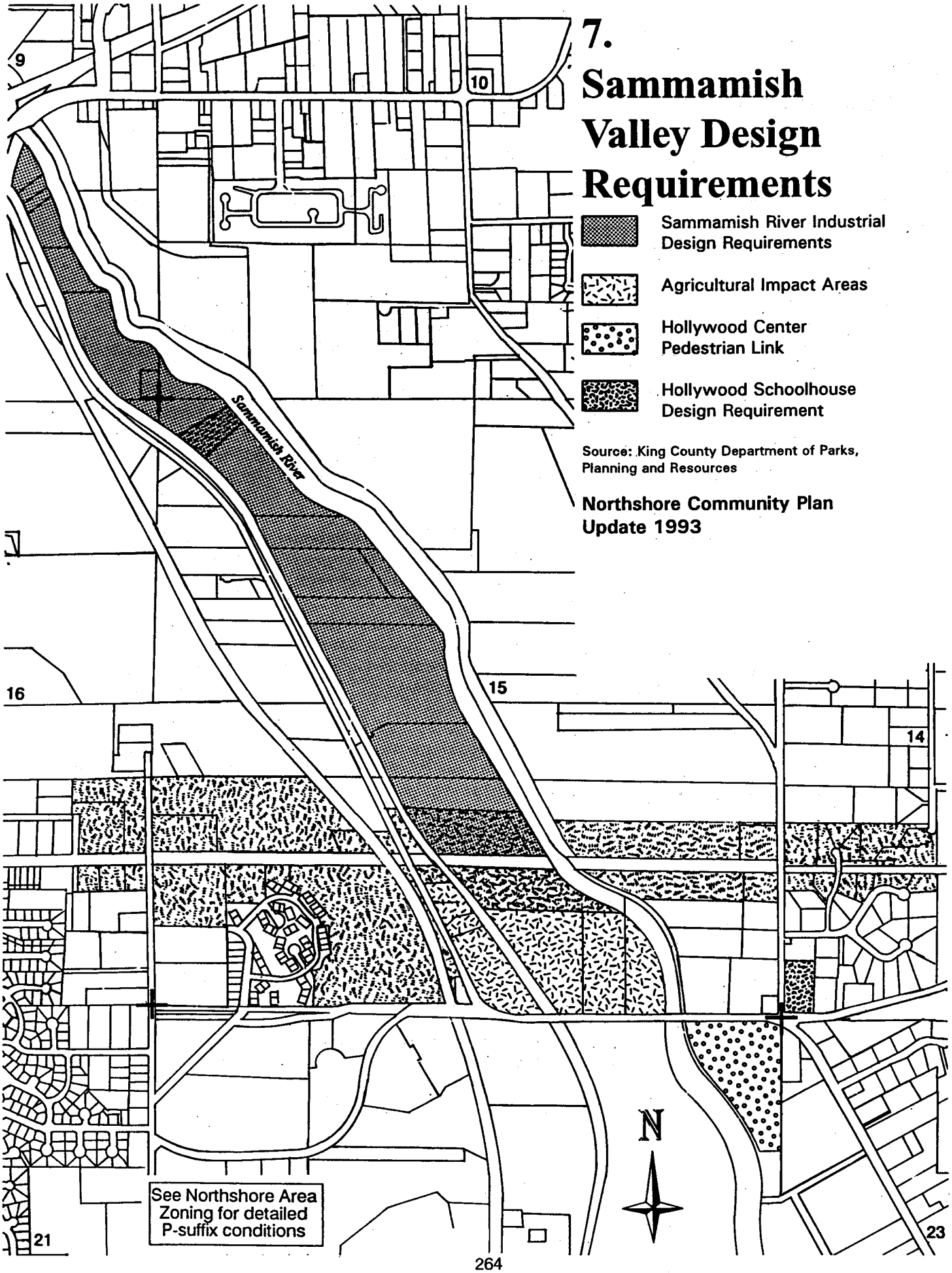
To implement policy CI-4, the following P-suffix condition shall apply to Hollywood Schoolhouse Design Requirements area on the Sammamish Valley Design Requirements map:

New structures shall utilize hip roofs with wood or similar style shingles. Building exterior walls should be a minimum of 50% brick masonry. Windows must be arched with radiating brick voissoirs. Exterior colors should match or be similar to the colors of the Hollywood Schoolhouse.

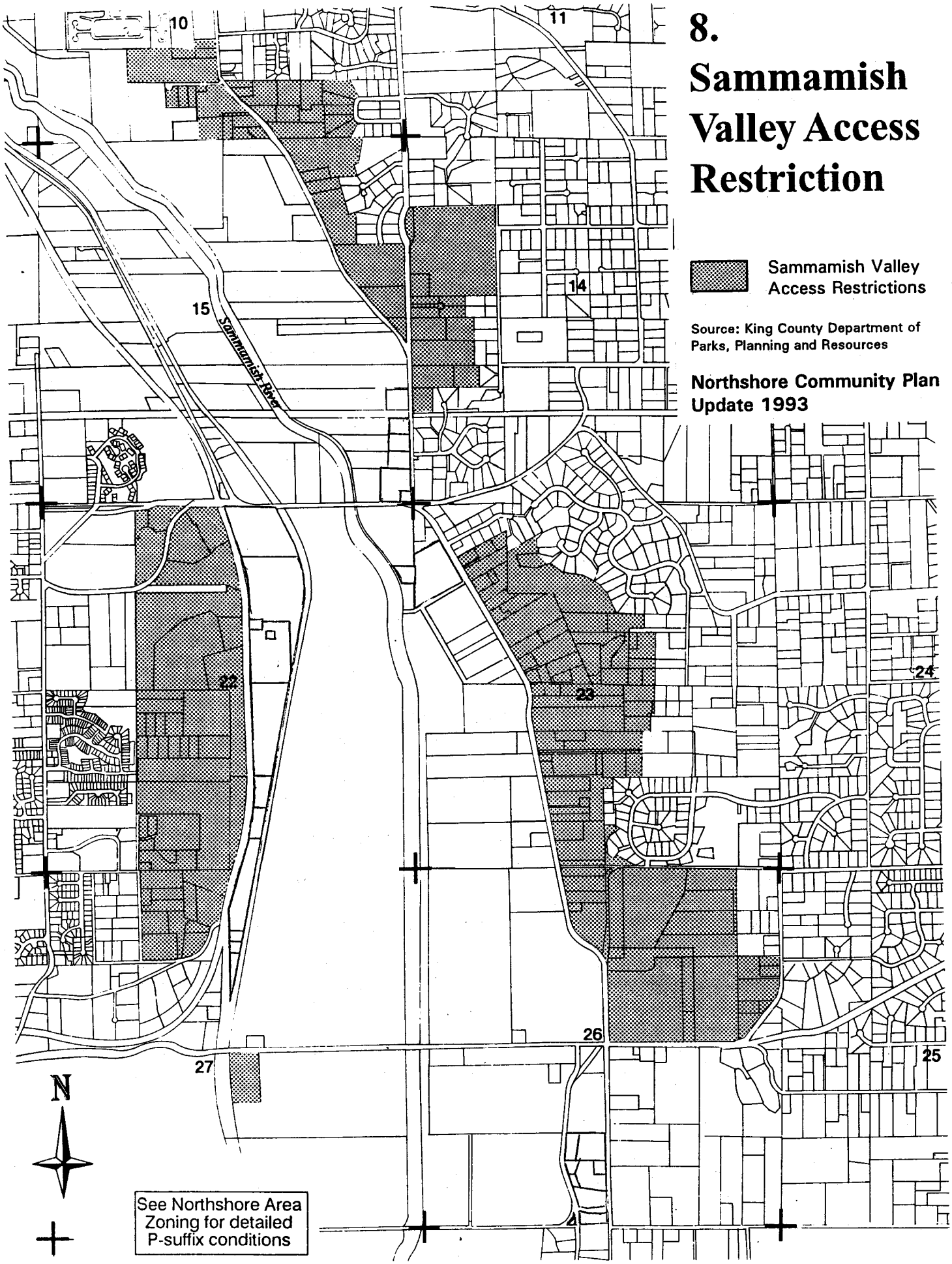
To implement Policy R-20, the following P-suffix condition applies to commercial permits in the Hollywood Center Pedestrian Link area on the Sammamish Valley Design Requirements map:

A pedestrian connection shall be "stubbed" to the south end of the Hollywood Vineyards building, which is located on tax lot 0213, W 1/2 23-26-5.

7. Sammamish Valley Design Requirements



8. Sammamish Valley Access Restriction



C. Sammamish River Valley Access Restriction

To implement policies A-5 and R-4, the following P-suffix condition applies to lots shown on the Sammamish River Valley Access Restriction map.

New development shall not take vehicular access from SR-202, 140th Place S.E., or any future extension of Willows Road from 139th Avenue N.E. to N.E. 145th Street, which are roads on the Sammamish Valley floor. It shall instead take access from roads on the Sammamish Valley wall or on the top of the Valley wall.

The above is not applicable if the developer demonstrates adequately to DDES that a) it is not reasonably possible to obtain legal vehicular access from anywhere but the Valley floor; or b) the only location where access can be obtained that will meet County standards is on the Valley floor. The developer shall pursue road variances in demonstrating in feasibility based on (b). The above is also not applicable if the developer demonstrates adequately to DDES that the full number of building lots which are allowed by the zone for the parcel that would meet County zoning standards are not available on the upslope portions of the property, because of the requirements of K.C.C. 21.28 and other County regulations.

The subdivision shall be clustered. 75% of the site shall be open space, unless greater lot area is required by the Seattle-King County Health Department.

D. Agricultural Impact Areas

To implement policy A-5, the following p-suffix conditions will be required for developments in the Agricultural Impact Areas on the Sammamish Valley Design Requirements map.

1. A master plan for development of the site shall be prepared. The following elements shall be included:

    a. a site plan showing land use, internal circulation, open space and landscaping.

    b. a transportation study to determine trips generated and attracted, including peak hour traffic volumes. Impacts to the existing street system should also be identified.

2. Buildings are to be set back a minimum of 100 feet from the water's edge of the Sammamish River for the first 425 feet from NE 145th Street. The 100 feet adjacent to the river is to be left undeveloped.

3. Buildings are to be set back a minimum of 100 feet from NE 145th Street.

4. The following design standards shall be applied to any buildings on these properties.

    a. Style: Building design should be low profile. Buildings shall not exceed 45 feet in height.

    b. Materials: Buildings shall be finished in natural materials. The range of natural materials is broad. Within this range, stone, brick, and wood are most appropriate. Steel and concrete block are inappropriate.

    c. Colors: Natural and muted colors blend well with the suggested materials. Emphasis should be placed on earth tones such as browns, tans and greens. Other colors could be used to highlight entrances and details.

E. Recreational Policy

To implement policy P-9, the following P-suffix condition applies to any PUD, subdivision, short subdivision, residential or commercial building permit for properties identified as containing an equestrian trail on the Northshore Equestrian Facilities map, or a historically used trail.

> All new development that contains an equestrian trail as identified on the Northshore Equestrian Facilities map, or a historically used equestrian trail, shall provide the trail right-of-way as a condition of subdivision or other County permit approval. Trail right-of-way width shall be determined by King County at a width suitable to accommodate equestrian uses. The area within the trail right-of-way but not within any dedicated road right-of-way shall also be credited towards the lot area of any proposed development.

Historic Preservation

To implement policy CR-3, the following P-suffix conditions shall apply to all historic resources listed in the King County Historic Resources Inventory (HRI), which are potentially eligible for landmark designation, to any property with eligible historic or archeological resources identified during development review and to all parcels abutting those historic resources:

1. An environmental checklist will be prepared for all historic resources listed in the HRI which are potentially eligible for landmark designation as well as any property with potentially eligible historic or archaeological resources identified during development review, except where categorically exempt under King County SEPA guidelines.

2. All permit applications and site plans for rezones, development proposals, demolition permits, or other land use actions shall be circulated to the County Historic Preservation Officer for comment on the projects impact on historic resources and for recommendations on mitigation. This includes all permits for alterations to historic buildings, alteration of landscape elements, new construction on the same or abutting lots, or any other action requiring a permit which might affect the historic character of the resource.

   Additional information may be required for review, including, but not limited to:

   a. a vicinity map;
   b. a site plan showing the location of all existing and proposed buildings, structures, and landscape features;
   c. a brief description of the proposed project together with architectural drawings showing the existing condition of all buildings, structures, landscape features and any proposed alterations;
   d. photographs of all buildings, structures, or landscape features on the site.

3. Upon request, the Historic Preservation Officer will provide information about available grant assistance and tax incentives for owners of historic properties. The Officer may also provide applicants with examples of comparable projects in which historic resources have been restored, adapted for other uses, or protected in other ways to serve changing purposes.

4. In the event of a conflict between the development proposal and adopted King County standards for preservation of historic resources, the Historic Preservation Officer may:

   a. suggest appropriate alternatives to the owner/developer to achieve the goals of historic preservation; or

b. recommend approval, or approval with conditions to the Director of DDES; or
c. propose that a resource be nominated for County Landmark designation according to procedures established in the Landmarks Preservation Ordinance (KCC 20.62).

The following P-suffix condition is applied to known archaeological sites:

Before any disturbance of the site, including, but not limited to test boring, site clearing or construction and grading activity, the State Office of Archaeology and Historic Preservation (OAHP), and the King County Landmarks Commission (KCLC) and Historic Preservation Office must be notified and approval granted. Appropriate Indian tribal organizations must also be notified and consulted. Approval by the OAHP or KCLC may require that an archaeological survey or other work to determine exact site location, extent and appropriate mitigation be conducted by a professional archaeologist meeting the qualifications set by the Secretary of the Interior. Approval may also require that any archaeological information be shared in written form with OAHP and KCLC and that mitigation measures be implemented.

Commercial Use Limitations - North Juanita Community Business Center

The following uses are not permitted for all properties shown on the map:

Hospitals
Hotels
Self-service storage facilities
Billboards

Height limited to 35 feet

Site Specific Conditions

In addition to the conditions outlined above, a number of conditions have been adopted which apply to individual parcels. The parcels are listed below, with the specific condition following:

5-26-5, T.L. 9019
All building shall be setback a minimum of 75 feet from any common boundary with A-zoned property.

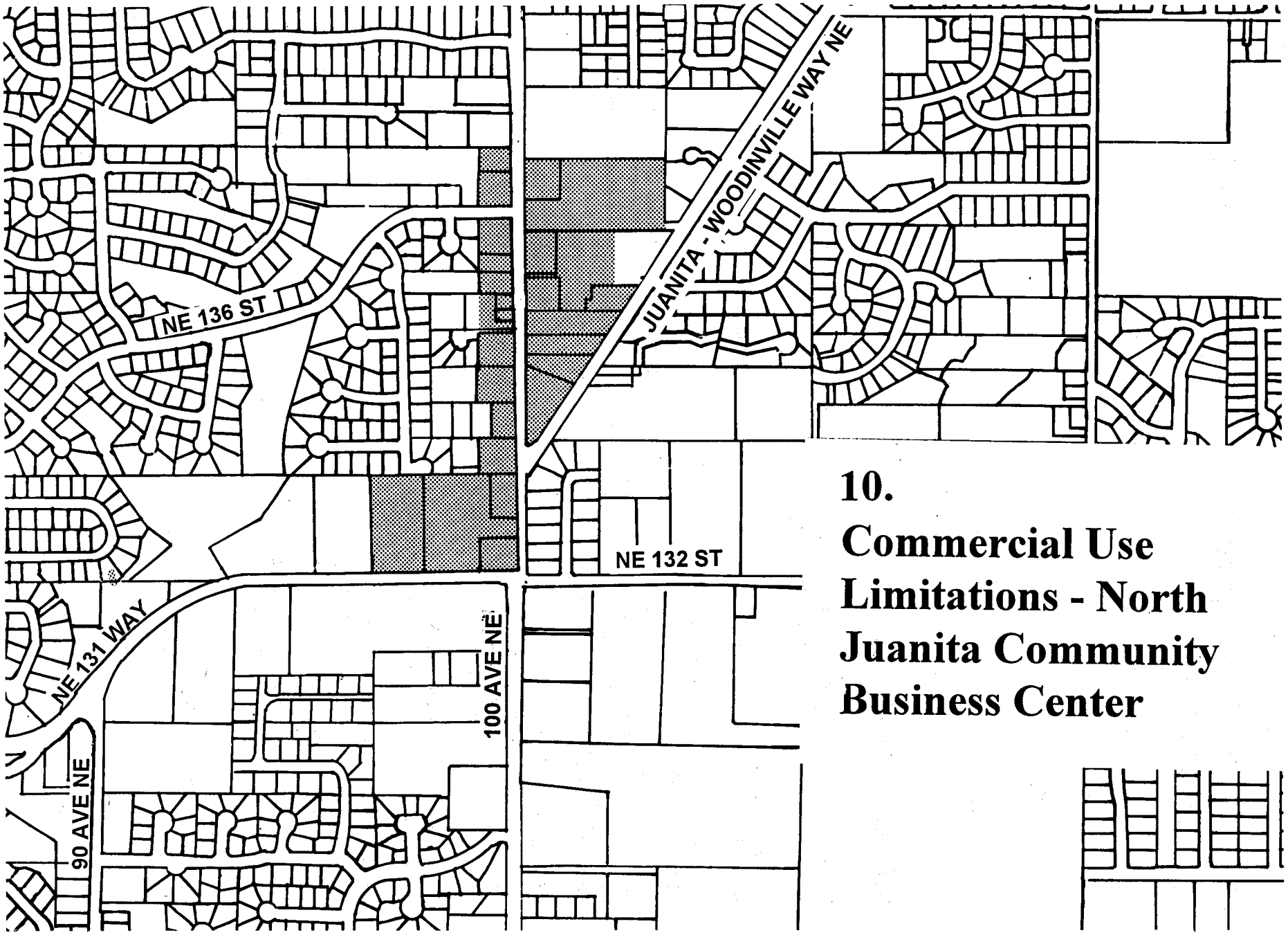
22-26-5, T.L. 9053, 9080, 9042, and 9027
27-26-5, T.L. 9002
A windbreak of poplars or similar fast-growing columnar deciduous trees shall be provided along the eastern and western edges of the property. These trees shall be on eight-foot centers. A twenty-foot wide Type One landscaping buffer shall be provided inside the columnar tree line. No vehicular access may be provided onto future extensions of Willows Road.

27-26-5 T.L. 9065, 9069
A windbreak of poplars or similar fast-growing columnar deciduous trees shall be provided along the eastern and western edges of the property. These trees shall be on eight-foot centers. A twenty-foot wide Type One landscaping buffer shall be provided inside the columnar tree line.

12-26-4 T.L. 416410-0220 & 0215
Density limited to that allowable in the RM-1800 zone.

11-26-4 T.L. 9001, 9137, 9020, 9016, 9165
12-26-4 T.L. 416410-0310, 0305, 0300, 0295, 0290, 0285, 0280, 0275, 0270
No retail uses are permitted with the exception of the sale of forest products and other building materials. Office uses shall be allowed only as required in support of industrial wholesale and permitted retail operations on the site. Personnel service uses such as banks, service stations, hotels, restaurants and mini-warehouses are not permitted. Residential uses are not permitted (applies only to the MP-P and CG-P zones of these properties).

25-26-4 T.L. 607650-0101
A minimum of 50% of the floor area to be devoted to residential uses.



10. Commercial Use Limitations - North Juanita Community Business Center

22-26-5 T.L. 9021

1. A maximum of 12 units per acre. The units shall be townhouses in a variety of configurations, i.e., 4-plexes, 6-plexes, and 8-plexes.

2. The site plan shall include detailed architectural, landscape architecture, and site improvement information. Access points shall be determined during this site plan approval.

3. Site Plan shall provide for a transition through the site from the less dense units on the north to the more dense units on the south.

4. Provide a transition from the 5,000 square foot single-family PUD lots on the north to the 18 dwelling units per acre moderate income housing on the south.

5. An earth berm approximately six feet high on a 2:1 slope shall be provided along the northern property line. A wood fence along the northern property line on the north side of the berm shall be provided. These shall be limited in areas where there is significant trees and vegetation that should be maintained. Further, the earth berm or the south side of it shall be planted with evergreen materials that reflect the following considerations:

   a. solar access to the homes

   b. an adequate visual buffer to the homes to the north

   c. a sense of the land use transition through the site.

6. Significant vegetation on the northeast corner shall be preserved wherever feasible and major trees preserved as a part of the site planning process.

7. Access alternatives such as through circulation through the site shall be finalized during the P-suffix site plan approval process.

16-26-5 T.L. 9026 and 9027; 9-26-5 T.L. 9040

Multifamily development on this property shall be required to cluster all buildings on the lower portion of the property, below the 125-foot elevation line. This elevation must be established by a certified topographical survey and permanently marked prior to development.

10-26-5 T.L. 66624-0025 & 0230

Density will not exceed the total number of units allowed by RS-5000 zoning.

20-26-5 T.L. 9017

Conditions of rezone file #109-89R continue to apply to site, with following amendments:

Site limited to 16 adults and/or children.
Multifamily development is limited to 24 units per acre.

P-suffix conditions allows redevelopment of site to multifamily dwellings, limited to 24 units per acre.

17-26-5 T.L. 9044, 9054, and 9059

Uses limited to office only.

Harbor Village Development and Marina:

The conditions of permits 130-79R, 131-79R, 020-77-SH, and 127-82-R continue to apply

The Northshore Plan Area Zoning specifies that the subject properties located in section 7-26-5, tax lots 20, 33, 44, 90, 100, 108, 188, be classified GR-5-P potential RS-15,000. The Northshore Plan recognizes that the subject properties (and others in the specific area shown on the map, Multifamily Study Area) may be subsequently considered for multifamily if the following conditions are met:

1. Areawide circulation plan shows primary access onto 91st Ave. NE with not more than one additional access point onto SR-522 is developed and approved by BALD.

2. Phasing plan for the removal of the existing commercial uses is developed that coincides with build out.

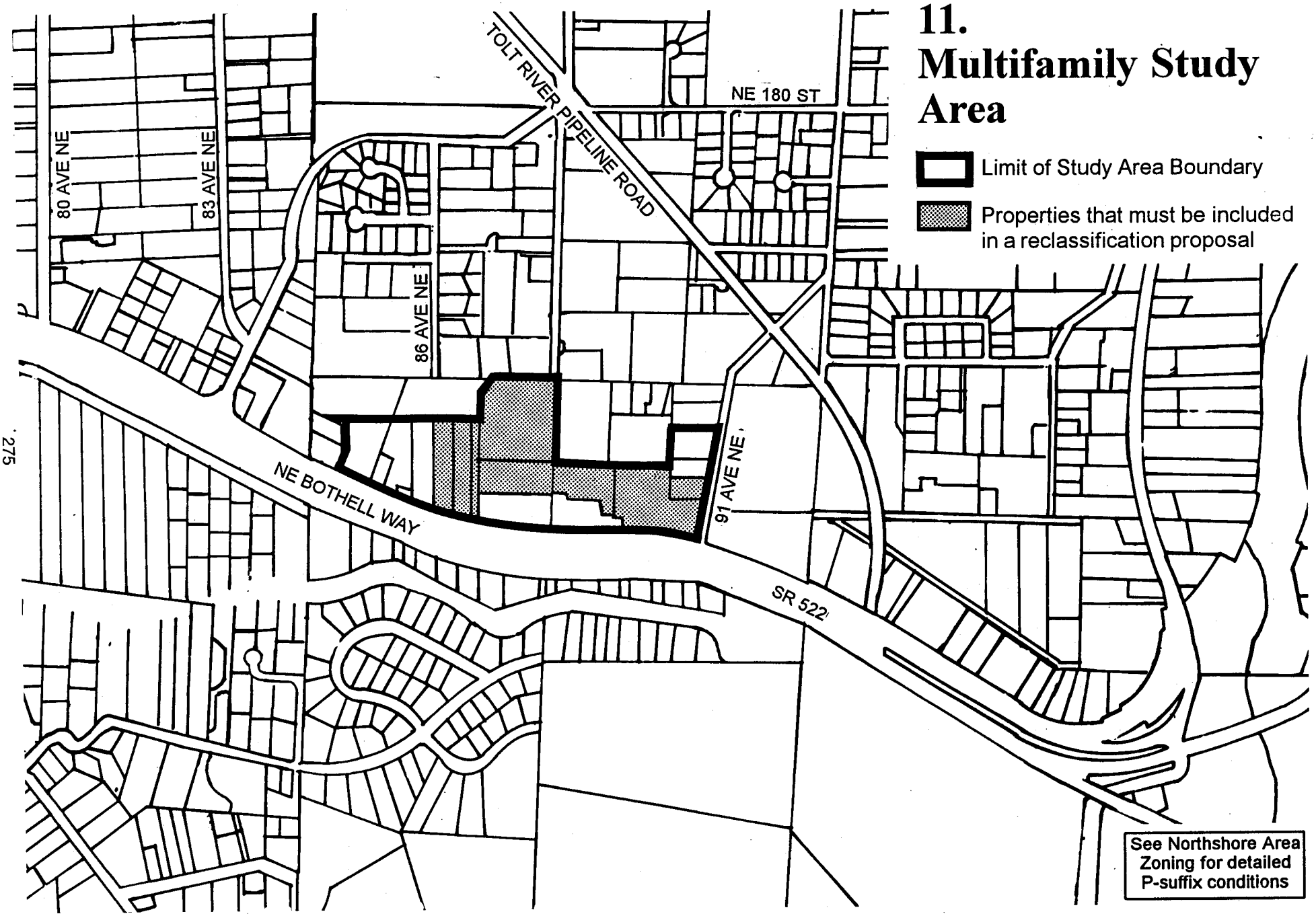
3. Site plan showing a vegetated buffer along SR-522.

4. Significant vegetation must be retained on 35% of the site, not including sensitive areas.

Any reclassification application for multifamily development should be a joint application from (but not limited to) areas of the following tax lots: 20, 33, 40, 90, 100, 126 and 188 rather than on a case by case basis.

Western half of the southeast quarter of Section 26, Township 26 North, Range 5 East:
Cluster to the eastern edge of the area away from the Woodinville-Redmond Road.

11. Multifamily Study Area



Chapter IV. Potential Zone Requirements

Potential zones provide areas with a base zone, under which uses are permitted outright, and a potential zone, which allows a different use when certain conditions have been met. Potential zones are designated when a given zone is desirable at a certain location, but the circumstances surrounding development of the site under the potential use require additional information or design review. The criteria for actualizing the potential zones are listed on the following pages. These criteria must be met before the potential zone can be actualized.

Conditions to Actualize the Potential Zone: (C-G-P Potential BR-C-P)

Mixed business-residential use is recognized as a viable use in the long term for the underutilized and vacant land delineated on the Kenmore Pedestrian Oriented Areas and Design Requirements maps A & B. However, any development in this area requires substantial mitigation for significant environmental impacts to be reduced or eliminated. Therefore, a potential mixed use zone is designated on these properties. Any mixed use development proposed in this area must achieve the following criteria in order for the potential zone to be actualized. If special district overlay-pedestrian oriented commercial development conditions are adopted by the County Council, they shall apply to these areas.

A. SR-522 in Kenmore is recognized to be at "ultimate design." Roads that are at ultimate design cannot be widened without significant destruction of existing development and potential environmental damage because that land around the roadway is already developed and/or contains natural features. King County recognizes that while some improvement to adjacent roadways is possible, congestion below County thresholds is likely to continue on SR-522.

   The King County Department of Public Works has identified potential transportation improvements which will facilitate traffic flow in Kenmore. Preliminary transit improvements have also been identified. The level of acceptability cannot be based on current County standards due to the ultimate design characteristics of the SR-522 roadway described above. Completion of the Transportation/Circulation Master Plan is necessary to update and clarify mitigation measures when a more detailed development proposal is submitted.

   Mitigation for development of the C-G-P Potential BR-C-P site should emphasize enhancement of transit and non-vehicular use and improvement of local access and circulation within the Kenmore area. Therefore, mitigating conditions include dedication and construction of a new 175th bypass

road, signalization of the intersection of this road with 68th Avenue, participation in the cost of a improvement of a transit hub on SR-522, participation in the cost of development of a pedestrian bridge crossing SR-522, construction of a pedestrian route, participation in the cost of intersection improvements at the intersection of the new 175th bypass road and 73rd Avenue, and development and enforcement of a transportation management plan on site. Fair share participation in applicable projects listed in the current Mitigation Payment System program as well as transportation projects recommended in the Northshore Plan is also a required mitigation condition.

B. The general design of the project shall be oriented to the pedestrian. Access by automobile to the interior of the development shall be minimized. A minimum of 60% of the parking shall be in structures, on-street, or off-site in joint use parking facilities. No more than 60 stalls may be provided in one parking lot. Lots must be separated by buildings, open space or roads at a minimum of 12' depth between lots.

C. One pedestrian overcrossing and one at grade pedestrian crossing to the existing Kenmore core should be provided across SR 522. In addition, direct, identifiable pedestrian access to the Lake Washington and Sammamish River waterfronts should be provided by abutting properties. Pedestrian access must be clearly visible from NE 175th and the SR-522, NE 68th Street intersection. Access to the water and to major pedestrian routes must be open to the general public. Linkages shall be provided to the nearby park facilities of Logboom Park, Swamp Creek Park (South of SR-522) and Kenmore Park.

D. 20% of the entire mixed use development area shall be designated as public open space for the general public. A public gathering place which accommodates a minimum of 50 people shall be provided on the site. These public open space areas shall be easily accessible to the pedestrian, and shall be considered in the pedestrian circulation plan. Waterfront access areas, public parks and sensitive area buffers may be utilized to calculate the 20% requirement. Internal pedestrian walkways, public streets, landscaping and private open space areas shall not be utilized to calculate the 20 % requirement. Public access shall be provided around the entire waterfront edge of the site.

E. A minimum of two view corridors shall be provided. View corridors identified in the Kenmore Urban Design Study are recommended conceptually, subject to further design review.

F. At least two public viewpoints, linked with the pedestrian routes shall be provided. Public viewpoints shall provide views of Kenmore and the Sammamish River.

G. Bicycle and pedestrian linkages to the Burke-Gilman shall be provided. Location of these linkages is subject to the review and approval of King County.

H. The shoreline edge of the Sammamish River shall be enhanced to provide for water quality and wildlife and marine habitat. A wetland and riparian enhancement plan, subject to the review and approval of King County, shall be performed by a qualified wetland biologist. Setbacks shall be subject to the King County Sensitive Areas Ordinance and the Shoreline Master Program. Variations to adopted setbacks may require off-site mitigation, to be determined in the Master Plan process. No disturbances of SAO required buffers shall be allowed, except at minimum 300 foot intervals, wildlife viewing trails extending into the buffer may be allowed if no significant impact to the wildlife and marine habitat is anticipated to occur.

I. Affordable housing units amounting to 10% of the total number of units in the development shall be provided. The affordable units need not be provided within the development, but must be provided within the Northshore planning area. Units may be either rented or sold. Affordable housing shall be calculated as follows: Rented units shall be provided only to households earning less than 50% of the median income. Monthly rents shall be no greater than 30% of the monthly income for households earning 50% of the median income. Sold units shall be sold to first-time buyers (i.e. person not having

owned a home in the past three years) earning less than 80% of the median income. Home prices shall be Affordable based on FHA lending standards. Covenants shall be established which guarantee the fulfillment of this obligation.

J. In general, commercial and office use should be provided adjacent to the Kenmore commercial core and residential development to the water. Specific exceptions to this may be made if the pedestrian orientation of the project will be improved. (For example, a restaurant, or other pedestrian oriented uses may be located on the waterfront.)

K. Residential density shall be calculated at a maximum of 24 d.u.'s per acre and at a minimum of 12 d.u.'s per acre for the gross land area of the entire development. Residential uses in the mixed use area shall not exceed 75% and shall not fall below 50% of the total built floor area of the development.

L. Specific requirements from the Kenmore Mixed Use Pedestrian Oriented Area P-suffix conditions shall apply to the Mixed Use Development Area, as defined in this Area Zoning.

M. Maximum heights shall be 92 feet in the northern portions of the mixed use development area. A 45 foot height limit shall apply to all development within 300 feet of the Sammamish River shoreline edge.

N. Satisfaction of these conditions may be accomplished through phased development.

O. In applying the above conditions on individual properties, mitigation shall be at a reasonable level related to each proposed development.

Mixed Use Potential Zone Submittal Requirements

The following requirements apply to the process for actualizing the potential Mixed Use zoning. These conditions apply to all properties designated Potential Mixed Use. If applications are submitted independently on separate parcels, the applications shall be analyzed as phases of the entire mixed use development area. The phase one potential zone application shall establish vehicular, pedestrian and open space connections to all other Potential Mixed Use properties in Kenmore. These vehicular, pedestrian and open space connections shall be binding. The phase one potential zone proposal shall prepare environmental documents that consider both the impacts of the subject application (phase) and the cumulative impacts of all other phases based on buildout of the Potential Mixed Use Zoning. Actualization of the potential zone should assure:

1. the Mixed Use development area in its entirety meets the goals, policies and criteria of the Northshore Community plan;

2. that there is adequate environmental review of the cumulative impacts of all mixed use development in Kenmore;

3. that there is detailed project level review of environmental impacts of the phase or phases that comprise the potential zone application.

4. that there is adequate mitigation developed for the project level review and that mitigation can be achieved for cumulative impacts of all mixed use development in Kenmore.

5. that specific criteria of the Northshore Area Zoning are met.

6. that there is adequate transportation mitigation for each phase of project development to meet the policy direction established by the King County Council for road adequacy in SR-522 corridor.

Required Elements for Rezone Applications

The following elements are required of the first potential zone application in the mixed use development area. This application may constitute one or more phases of the entire mixed use area.

1. Buildout of the mixed use development area is likely to have significant environmental impacts. The environmental review for the entire Potential Mixed Use area should address all relevant elements of the environment from WAC 197-11-444. Mitigation to address probable significant adverse impacts should be identified. Alternatives to buildout of the Potential Mixed Use Area should be analyzed.

2. Environmental documents assessing project level impacts of the phase or phases of the Potential Mixed Use Development Area proposed in the potential zone application shall be prepared. Appropriate mitigation necessary for site-specific impacts should be identified.

3. Mixed Use Development Comprehensive Project Description

   a. Housing units for all phases shall be identified by number and type for each phase including affordable housing requirements of Item K of the area zoning. The phase or phases included in the first potential zone application shall also identify location and value of housing units.

   b. Retail/Commercial uses for all phases shall be identified by square footage per phase. The phase or phases included in the first potential zone application shall also identify major tenant types and building locations.

   c. Office uses for all phases shall be identified by square footage. The phase or phases included in the first potential zone application shall include building footprints and employment data.

   d. Public and private facility improvements shall be identified for the entire mixed use development area. Appropriate size or capacity, location, operational characteristics and relationship should be estimated or defined in further detail as defined in other sections of the mixed use requirements.

   e. Open space shall be identified for all phases and broken down by the amount per phase and type of facility. Specific improvements should be identified for the phase or phases of the first potential zone application.

4. Transportation/Circulation Master Plan

   a. A Traffic and Circulation report shall be prepared identifying all capital and transit improvements possible to improve traffic flow through Kenmore. The report shall include the appropriate cost of each project. King County shall weigh the cumulative impacts of the mixed use development area on the transportation system as part of the actualization of the potential zone.

   b. A Financing report identifying public and private funding commitments for identified capital and transit improvements shall be prepared. King County shall ultimately determine the public/private financing commitments in coordination with the applicant, Metro and WASHDOT.

   c. A Phasing report shall be prepared identifying the timing of funding commitments necessary to mitigate impacts for the phase or phases proposed in the potential zone application . The staff report prepared by King County shall recommend to the County Council which road and transit improvements from the Transportation/Circulation Master Plan are necessary for the proposed phases of mixed use development. Policy K-11 and item A from the Conditions to Actualize the

Potential Zone shall apply. No potential zoning shall be activated until construction and/or service contracts are signed for capital and transit improvements needed for each project phase.

5. Pedestrian/Bicycle Circulation Plan

A map and text identifying pedestrian and bicycle circulation through the entire Mixed Use Development Area is required. Policy K-11 and items B, C, D, F, G and I from The Conditions to Actualize the Potential Zone shall be incorporated. Major pedestrian and bicycle connections identified by King County through the staff report shall be binding for subsequent potential zone applications. Detailed design of facilities within the phase or phases applying for rezone shall be included.

6. Open Space Plan

Map and text identifying public and private open space for the entire Mixed Use Development Area is required. Policy K-11 and items E, I and K from the Conditions to Actualize the Potential Zone shall be incorporated. The staff report prepared by King County shall identifying acreage and location of open space necessary for the mixed use development area at buildout based on impacts of the proposal and the policies and criteria of the Northshore Community Plan. At least 25% of all the open space necessary for entire Mixed Use Development shall be constructed as part of the Phase I potential zone approval.

The following elements are required of subsequent potential zone applications within the mixed use development area:

1. Environmental documents assessing project level impacts of the phase or phases of the Potential Mixed Use Development Area proposed in the potential zone application shall be prepared. Appropriate mitigation necessary for site-specific impacts should be identified.

2. Phased Project Description A map and narrative shall be submitted describing buildout of all phases proposed in the potential zone application. The narrative shall include:

   a. Housing units by phase - number, type, location and value, including the affordable housing component identified in policy K-11 and item J of the Area Zoning.
   b. Retail/Commercial uses by phase-major tenant types, square footage and location;
   c. Office uses by phase-square feet, building footprints and employment;
   d. Public/Private facility improvements by phase-type, approximate size or capacity, location, operational characteristics, relationship to existing facilities and method of financing.
   e. Open Space by phase - type, area size, improvements.

3. Capital and Transit Improvements Phasing Report that identifies improvements necessary for the phase or phases proposed in the potential zone application based on the Transportation/Circulation Master Plan and the financing report shall be identified. This shall include timing of funding commitments.

4. Pedestrian/Bicycle Phasing Report that identifies detailed bicycle and pedestrian improvements identified for the phase or phases proposed in the potential zone application based on the Pedestrian/Bicycle Circulation Plan.

5. Open Space Phasing Report that identifies detailed open space provisions for the phase or phases proposed in the potential zone application based on the Open Space Plan.

Appendix 1

Appendix 1

CAC Comments and Recommendations

Residential

Future Urban Areas

The Northshore CAC gave much thought to the topic of Future Urban areas. The CAC suggested that the growth-phasing tools identified by staff may not be effective enough to achieve phasing goals. The CAC recommends that King County examine the tools proposed by staff that would require new development to "pay for itself." This includes the use of the Growth Reserve zone, potential zoning and P-suffix conditions designed to require urban services concurrent with redevelopment. Because of these concerns, the CAC recommends that the portion of Leota designated as "future urban" should be designated as Single Family Low Urban, one acre, due to the lack of urban services, environmental constraints, and lot pattern.

CAC Recommendation:

1. The CAC recommends that Leota not be designated "future urban" and be designated single family low urban, one acre. King County should develop policies to allow this area to develop at a density compatible with the single family character of the neighborhood.

Mobile Home Parks

The CAC recommends that mobile home parks in Northshore be retained, as they represent an important housing option in the planning area. In particular, the CAC would add the following special recommendation.

CAC Special Recommendation:

1. The County-owned site on NE 190th Street near Woodinville should be designated as a replacement park site for displaced mobile homes in the Northshore planning area.

Commercial and Industrial

The CAC repeatedly emphasized in their recommendations that the Activity Centers in and around Northshore should be the primary areas for new growth. They recommended encouraging the enhancement of commercial and industrial areas with landscaping, stricter design controls and traffic improvements. They stressed the important linkage between new growth in centers and provision of adequate public services such as sewer, water and roads. The CAC recommended minimizing strip development, locating multifamily areas close to commercial services and concentrating commercial and industrial uses.

The CAC understands the role of the Northshore Plan in implementing the King County Comprehensive Plan. In particular, the Comprehensive Plan directs that neighborhood centers should be a mix of uses including retail, professional office, and multifamily housing. The Northshore CAC supports designation of such centers throughout the planning area, however, they emphasized that the multifamily component was inappro-

priate at two proposed centers. Their concern with the Hollywood Hill Center designation focused on its proximity to agricultural lands. The committee noted the absence of a buffer between these resource lands and high density housing and felt it was inconsistent with proposed Northshore Plan policies protecting the Agricultural Production District. With regard to the proposed Top of the Hill Neighborhood Center (also known as the White Stallion), the CAC indicated concerns about the lack of urban services and environmental constraints which would not support multifamily housing.

CAC Recommendations:

1. The Hollywood Hill and Leota-Wellington commercial areas should not be designated Neighborhood Centers. Existing commercial activity should be continued and multifamily development should not be allowed.

Transportation

CAC Special Recommendations

Transportation issues were a critical topic for the Northshore CAC. The CAC spent numerous meetings discussing strategies for providing a balanced transportation system, road capacity issues and nonmotorized needs. The following special recommendation is specifically directed to road adequacy tied to new growth. The CAC is recommending that when the worst conditions are projected (LOS F) that construction contracts for road construction must be signed before the new development can be approved.

Special Recommendations:

King County shall improve the traffic conditions in key areas as identified in the transportation element of the Northshore community plan to levels of service stated in the King County road adequacy standards (RAS) utilizing the Mitigation Payment System (MPS).

New development shall analyze impacts to the transportation network of the Northshore planning area through the use of the King County mitigation payment system computer model which simulates pre-development traffic flow and monitors changes in traffic volumes on affected roadways resulting from the proposal. The Northshore Community Plan recommends the following provisions be considered in King County's revisions to the RAS:

a. When the forecast level of service (LOS) resulting from the new development is LOS E or better, the development shall contribute a fair share payment for identified roadway improvements, and in addition shall provide transportation system alternatives involving transportation management and transit options which alleviate roadway congestion.

b. When the forecast LOS resulting from the new development is LOS F facility improvements necessary to improve roadway LOS must have a construction contract awarded concurrent with the date for final development approval. If facility improvements cannot be funded and constructed, the project shall be modified to raise the LOS on affected roadways. Transportation management alternatives must be finalized concurrent with final development approval. The new development must provide SEPA environmental documents which includes a transportation study analyzing impacts and alternatives to the proposal of lesser impacts. Modifications to the proposal resulting in lesser impacts shall mitigate according to T-6(a).

Agriculture

The CAC supported the preservation of the existing agricultural, recreational, and open space character of the Sammamish River Valley. Consistent with this goal, there was general support for policies designating land on the valley floor for long term agricultural uses. This commitment included limiting the industrial, commercial, and multifamily land uses to areas currently zoned for those uses. The CAC members expressed several different viewpoints as to the value and appropriateness of promoting tourism, in relation to the wineries, in the Sammamish Valley.

Parks and Open Space

Special Recommendations:

King County should explore the feasibility of renovating a portion of the Magnolia Dairy on Westhill into a public farm park containing petting sheds and corrals, farming equipment and areas for demonstrating farming technique and rural arts and craft. 4-H clubs, horse clubs and other similar organizations should be involved in this effort to the fullest extent possible.

The Woodinville Activity Center

The Northshore Citizen Advisory Committee (CAC) was unable to reach a consensus on the future land uses within the Woodinville Activity Center. Half of the CAC concurred with the staff proposal for a concentrated commercial area and a mix of uses including parks, retail, office, and multifamily development. The other half of the committee recommended policies supporting a proposal by the Woodinville Chamber of Commerce which expands the commercial area and locates multifamily housing on the periphery of the core (adjacent to the agricultural district buffer and single family areas). The staff recommendations have been noted previously and the alternative policies are indicated below.

CAC Recommendations:

1. For Woodinville to be a viable community, the Woodinville urban activity center needs to develop as an area with a mix of uses including retail stores, offices, recreational and entertainment facilities, distribution centers, manufacturing sites, multifamily housing, parks and community facilities, retail, office and commercial facilities to serve the needs of the surrounding population.

   Furthermore, in balancing land development, Woodinville needs to preserve a cohesive downtown business core zoned business and commercial, capable of providing a full range of goods and services for the greater Woodinville community. The south boundary of the downtown Woodinville business core shall be the south bypass road; the west boundary shall be 131st Avenue Northeast; the north boundary shall be SR 9 (the Woodinville-Snohomish road); and the east boundary shall be 140th Avenue Northeast.

2. Multifamily development at densities of 18 units per acre should be located on the periphery of the commercial/office core and along major arterials. Building heights and densities should decrease to provide a transition to nearby industrial and single family residential areas.

3. Multifamily development at densities of 18 units per acre should be located to the south of the south bypass, north of the agricultural production district (APD) boundaries, and along the west side of 140th Ave. N.E.

4. Based on the urban character of the south bypass road and surrounding commercial and multifamily development, this plan recognizes that the Canterbury estates mobile home park is suitable for future commercial development.

5. Mobile home parks in the urban activity centers of the Northshore planning area are threatened by development pressure on valuable urban land. The property on the Woodinville-Duvall Road currently owned by the King County Solid Waste Division should be designated as a site for a mobile home park to anticipate potential redevelopment of mobile home parks in Northshore and the need to relocate displaced tenants.

6. In recognition of its inclusion in the agricultural production district, the property located to the east of the Waterford apartments should retain its agricultural zoning of one home per ten acres. However, the plan recognizes the need for a community park in the Woodinville area adjacent to the activity center to provide agricultural related recreational opportunities (i.e., petting farms, etc.) for local residents and a focal point for the community. Conversion of the property for park purposes would not require a plan amendment provided the property is purchased, developed and operated by a public agency.

Appendix 2

Kenmore and Woodinville Urban Design Study

Design and Development Guidelines

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March 1991

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Section I.

The Intent and Nature of Design and Development Guidelines

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The purpose of this study effort is to identify site-specific design guidelines and other actions that can aid in creating compact, pedestrian-oriented development patterns in the Kenmore and Woodinville Urban Activity Centers.

The need for activity center development and design guidelines arises from policies contained in both the King County Comprehensive Plan and the Northshore Community Plan. The Comprehensive Plan, adopted in April 1985, states that Urban Activity Centers are intended to be the "major concentrations of commercial and industrial development in unincorporated King County." The Comprehensive Plan includes a variety of policies related to the design of urban activity centers. The overriding theme of those policies is the desire for compact centers that encourage transit and pedestrian travel, and reduce reliance on the automobile.

The Northshore Community Plan contains policies that reinforce and further define the Comprehensive Plan design objectives specifically for the Kenmore and Woodinville Urban Activity Centers. Policy CI-4 states that the "design and layout of new development in Northshore activity centers is a critical component of community character, pedestrian activity and urban vitality." That policy includes a number of goals for activity center development, including emphasis on pedestrian access and circulation, minimizing conflicts between pedestrians and automobile travel, facilitating the use of transit, and integrating urban open spaces for community use.

The development and design guidelines for Kenmore and Woodinville seek to create more compact, pedestrian-oriented activity centers and improve the potential for transit service through a variety of techniques. Examples of potential design and development guidelines include:

- Prohibiting or restricting the development of auto-oriented uses such as fast-food restaurants and drive-through banks.

- Increasing the allowable development densities to encourage greater use of transit.

- Modifying the placement of buildings (e.g. eliminating setbacks) in ways that encourage pedestrian activity by making streets more attractive routes for walking.

- Reducing the amount of parking provided by individual developments, and influencing the location and type of parking in ways that promote pedestrian mobility and minimize pedestrian/vehicular conflicts.

- Identifying key pedestrian circulation routes in the activity centers, as well as pedestrian linkages to surrounding areas. The existing and proposed streets in the activity centers are viewed as the primary routes for pedestrian movement.

- Identifying actions for enhancing transit usage, such as design improvements to transit stops, joint use of park-n-ride facilities, and the development of transit centers.

- Identifying landscaping improvements and public amenities (parks, plazas, and other public spaces) that can enhance the activity centers as attractive and accessible "people places."

The design and development guidelines for Kenmore and Woodinville are a component of the Northshore Community Plan. The guidelines included in this report, which include recommended standards for regulating private development, proposed capital improvement projects, and other actions, will be implemented through Area Zoning and other implementation tools in the Northshore Community Plan.

King County is considering new zoning code provisions that would be the establishment of Special District Overlays. These overlay districts would permit modifications to underlying zoning standards for large ownerships or areas containing several properties, in order to carry out comprehensive and community plan policies that are unique to those areas. One type of special district overlay being considered by the county -- pedestrian-oriented development -- is particularly appropriate for achieving the design objectives in much of the Kenmore and Woodinville centers.

It is anticipated that special district overlays will be a primary mechanism for implementing design and development guidelines in both Kenmore and Woodinville. Prior to the adoption of new zoning provisions that are expected to codify special district overlay standards, property-specific development standards (P-Suffix conditions) will likely be used to implement the zoning-related design and development guidelines.

THE STUDY PROCESS

The study process used to prepare development and design guidelines is depicted in Figure I-1. Initial tasks included an understanding of the design goals for the Kenmore and Woodinville activity centers as stated in both the King County Comprehensive Plan and Northshore Community Plan, review of major planning issues, and extensive on-site assessment of existing activities and circulation patterns. The primary objective of these initial tasks was to determine the major design opportunities and constraints in the Kenmore and Woodinville centers.

After identifying major design "Opportunity Areas" in the two urban activity centers, site-specific development and design guidelines were prepared and presented at community meetings held in both Kenmore and Woodinville. The guidelines were modified and/or refined based upon comments received at these meetings. This document includes both a summary of background information and a description of the development and design guidelines for the Kenmore and Woodinville activity centers.

The scope of the design guideline study effort is influenced by several factors. First, the focus of the guidelines is on those areas within the two activity centers that are designated in the Northshore Community Plan for commercial or mixed-use development. Areas designated for industrial or residential development are considered outside the scope of the effort, except for the identification of linkages to commercial areas. Second, the design guidelines take as a given the proposed land use designations for the two activity centers. Since those designations may change prior to Council adoption of the Northshore Community Plan, the design guidelines included in this document may also need to be revised.

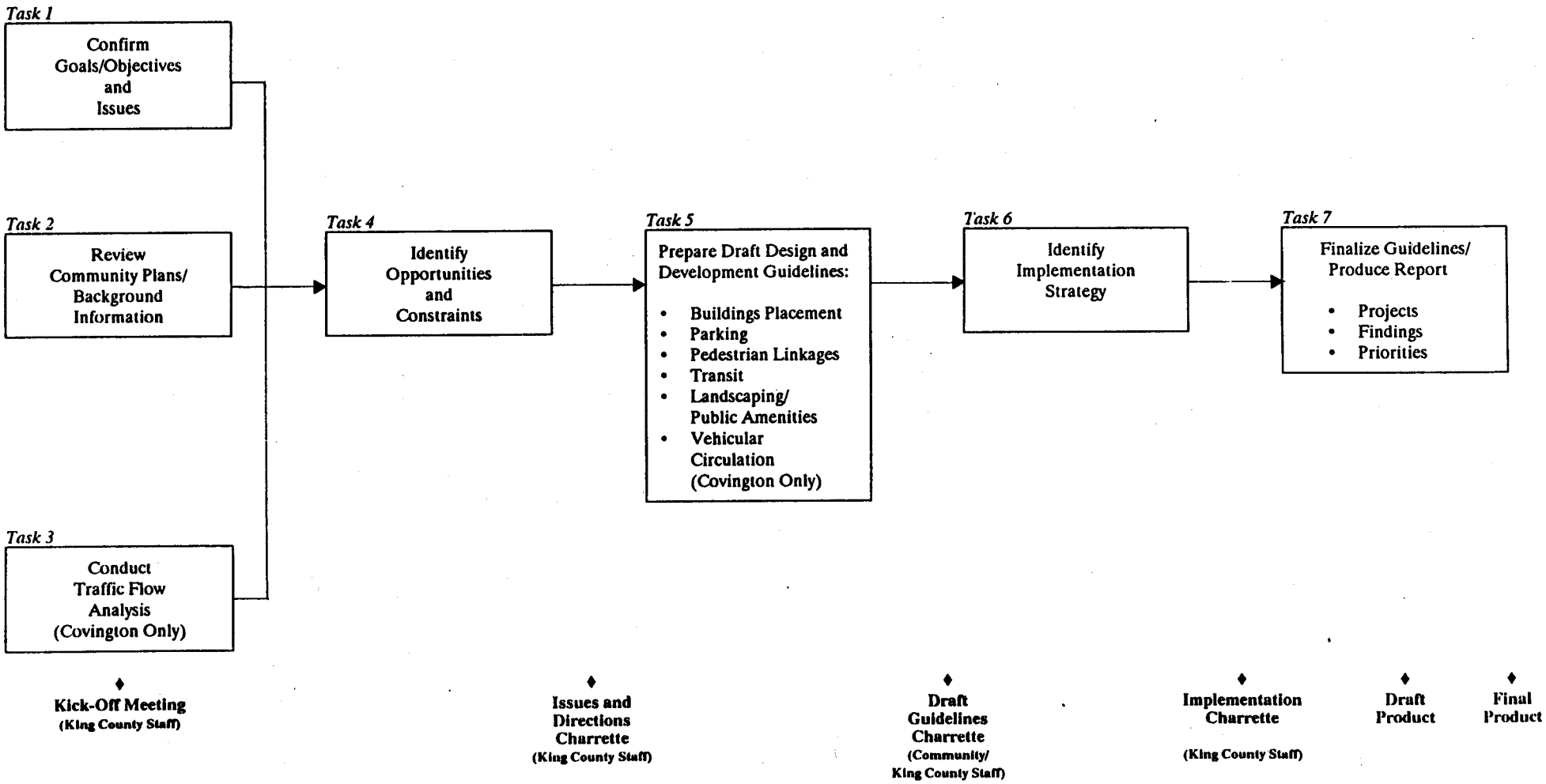
Finally, strong emphasis has been placed upon those areas in the two activity centers that are most likely to experience development change over the next six to ten years. Comparatively little effort has been expended on identifying design guidelines for areas that are relatively stable and not likely to develop or redevelop over this timeframe.

Figure I-1

Study Process

Plans for Urban Activity Centers

Kenmore•Woodinville•Covington



Section II.

Kenmore Urban Activity Center

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A. EXISTING CONDITIONS

The Kenmore Urban Activity Center comprises approximately 600 acres at the north end of Lake Washington. The activity center boundaries, as displayed in Figure II-1, are defined by natural edges including Lake Washington and the Sammamish River Channel to the south and southwest, Swamp Creek and related wetlands to the east, and steep topography to the north and west. The activity center is bisected by SR-522 (Bothell Way), a major commuting route between areas in northeast King County and Seattle.

1. MAJOR ACTIVITY NODES

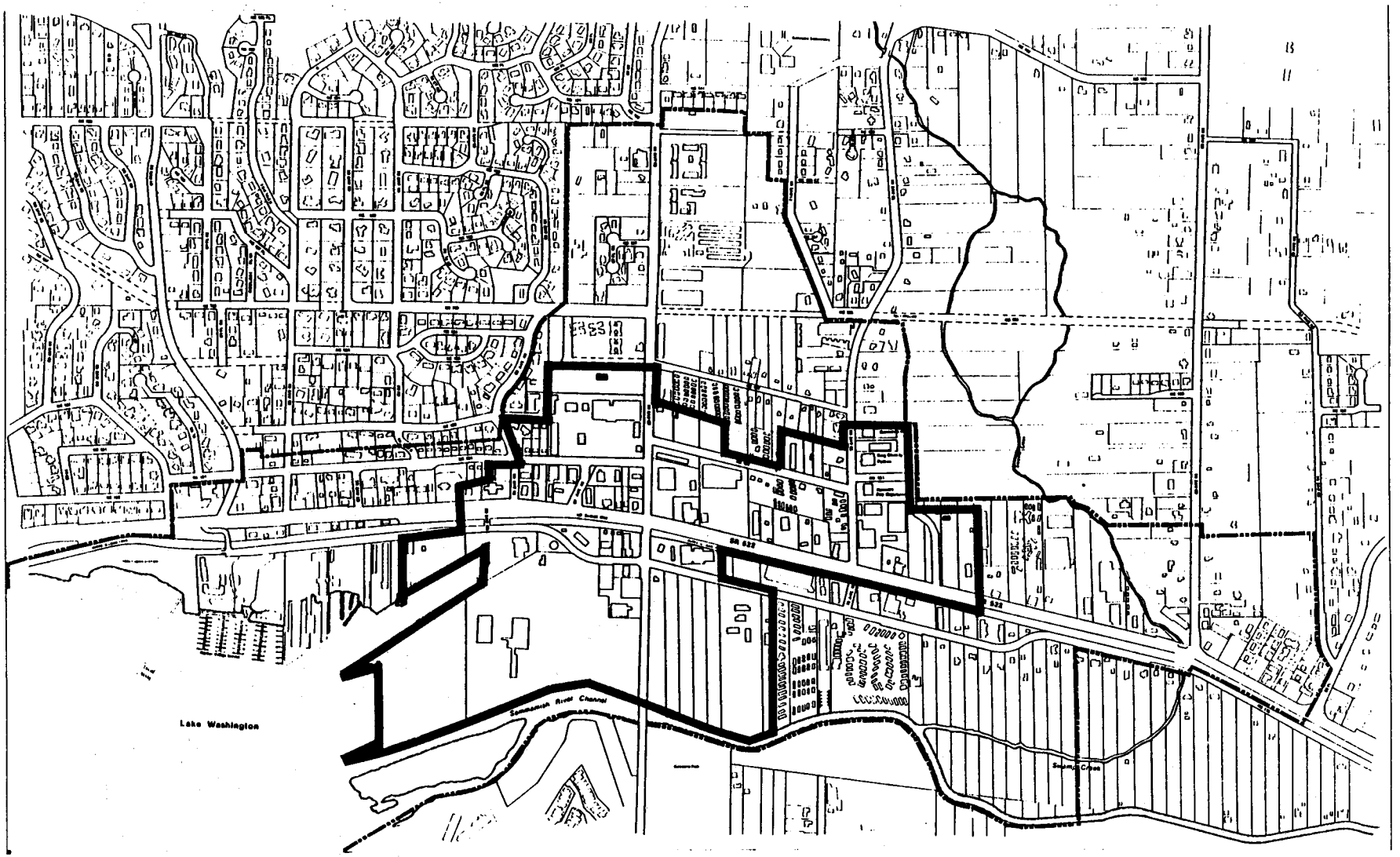
The pattern of development in the Kenmore Urban Activity Center has remained largely unchanged during the past decade. As shown on Figure II-2: Existing Activity Nodes, the activity center has several distinct concentrations of development. The area along Bothell Way (SR-522) is dominated by auto-oriented commercial uses that take advantage of the great amount of daily through traffic on this roadway. The commercial core of the center is located north of Bothell Way near 68th Avenue N.E., and consists of several neighborhood shopping centers each anchored by supermarkets.

A small core of civic uses are located near 73rd Avenue North, including a fire station, police station, and public library. These facilities are located next to a 432-space Metro park-and-ride facility.

The area south of SR-522 is dominated by the Kenmore Pre-Mix facilities and other industrial uses. Some redevelopment has taken place near the water's edge at the western end of the activity center. This area includes the Kenmore Logboom Park, residential condominiums, a marina, several small retail/office developments, and the Kenmore Air Harbor.

Residential development within the activity center consists of several mobile home parks and medium-density multi-family developments. Mobile home developments are concentrated in two areas just south and north of SR-522, while the multi-family uses are situated in the northern parts of the activity center. Single-family residential uses dominate the area directly west and northwest of the center.

Overall there is an almost complete absence of connectedness between the various activity nodes in the center, which contributes to the lack of identity that has been long been attributed to Kenmore. There are a number of reasons for the absence of linkages in the activity center, including the incompatibility of adjacent land uses (e.g. industrial versus residential), the auto-oriented nature of most commercial developments, and the presence of major barriers such as SR-522.



Activity Center Boundary
Focus Area for Design Guidelines

Figure II-1

Study Area Boundaries

Kenmore Urban Activity Center

KING COUNTY PLANNING AND COMMUNITY DEVELOPMENT

NBBJ

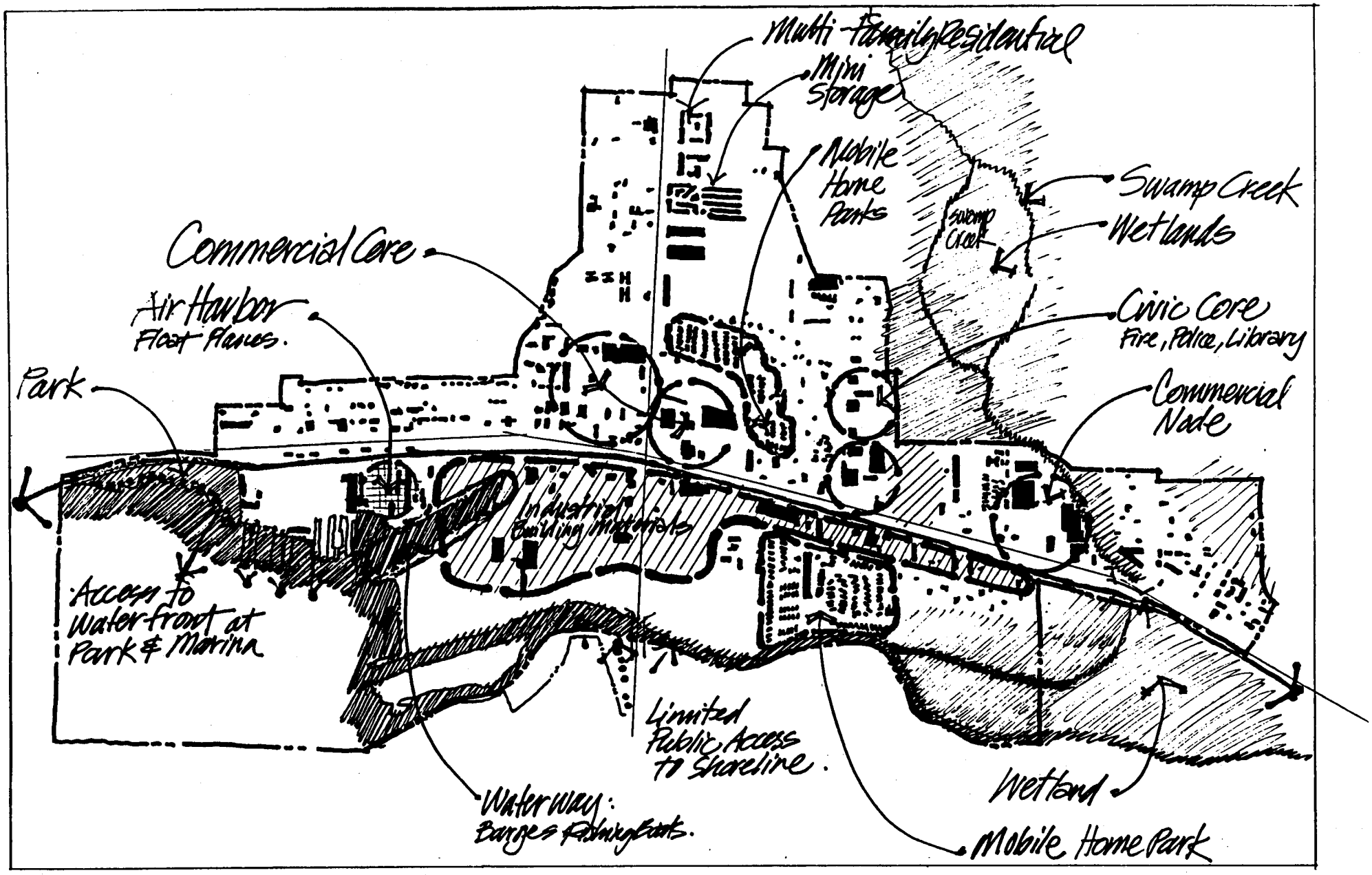


Figure II-2

Existing Activity Nodes

KING COUNTY PLANNING AND COMMUNITY DEVELOPMENT

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2. ACCESS AND CIRCULATION

Vehicular (Figure II-3)

The Kenmore Activity Center has long been a geographic funnel through which traffic between Seattle and northeast King County (Bothell, Woodinville, Juanita), and South Snohomish County must flow. Two roadways -- SR-522 and 68th Avenue North/Juanita Drive -- carry significant traffic volumes through Kenmore. According to a recently completed traffic study, it was determined that over 80% of the traffic on those roads is through traffic with no origin or destination in Kenmore. Significant traffic delays result on both SR-522 and 68th Avenue N.E. during the peak commuting hours, caused by over-capacity intersections both in Kenmore (68th Avenue N.E./SR-522) and at other locations along SR-522 such as the SR-104/SR-522 intersection in Lake Forest Park.

The congestion caused by through traffic in the Kenmore center adversely affects local vehicular access and circulation. This is compounded by the fact that other than SR-522 and 68th Avenue N.E., there are few east-west or north-south routes that provide access to the Kenmore center from surrounding areas. One obstacle to providing additional access to the east and south is the natural barrier created by the Sammamish River Channel and Swamp Creek.

The Kenmore Traffic Circulation Study, completed in 1989, recommended a number of transportation improvements for solving the problems of congestion and poor local access in Kenmore. The recommended improvements include:

- Widening and realignment of N.E. 175th Street to the south to increase separation from SR-522. Commuters originating from the south would use the realigned N.E. 175th/ 68th Avenue N.E. intersection, thereby taking some pressure off the highly congested SR-522/68th Avenue N.E. area. In addition, major intersection improvements are recommended for SR-522/68th Avenue N.E. and N.E. 175th/68th Avenue N.E.

- Widening of N.E. 181st Street to three lanes throughout the center, and realigning this roadway at the 68th Avenue N.E. and 73rd Avenue N.E. intersections to promote smoother flow. In addition, N.E. 181st Street would be extended east to connect with SR-522, thereby providing an eastern gateway to the N.E. 181st Street business district.

- Developing a western "gateway" to the N.E. 181st Street business district by channelizing left turns from SR-522 to 65th Avenue N.E. and widening 65th Avenue N.E. to provide a three-lane section to tie-in with N.E. 181st Street.

- A pedestrian overpass, along with an enhanced eastbound transit stop/bus shelter that would connect the Burke-Gilman Trail with the existing park-and-ride lot on SR-522.

The county is currently leading a separate comprehensive transportation study aimed at identifying and evaluating alternative solutions to the severe traffic congestion problems on SR-522 in the Kenmore area.

Two Metro park-n-ride lots are located in the Kenmore center. A 4.2 acre lot (432 spaces) is located on the north side of SR-522 east of 73rd Avenue N.E., while a 4-acre park-n-ride (375 spaces) lot is situated on the west side of 68th Avenue N.E., north of SR-522. Utilization statistics maintained by Metro reveal that during 1989 the park-n-ride along SR-522 was operating at 77% capacity, while the lot on 68th Avenue N.E. was on average only 13% full. Discussions have been held between King County and Metro for the possible replacement of the park-n-ride lot along 68th Avenue N.E. with a new transit center to be located south of SR-522.

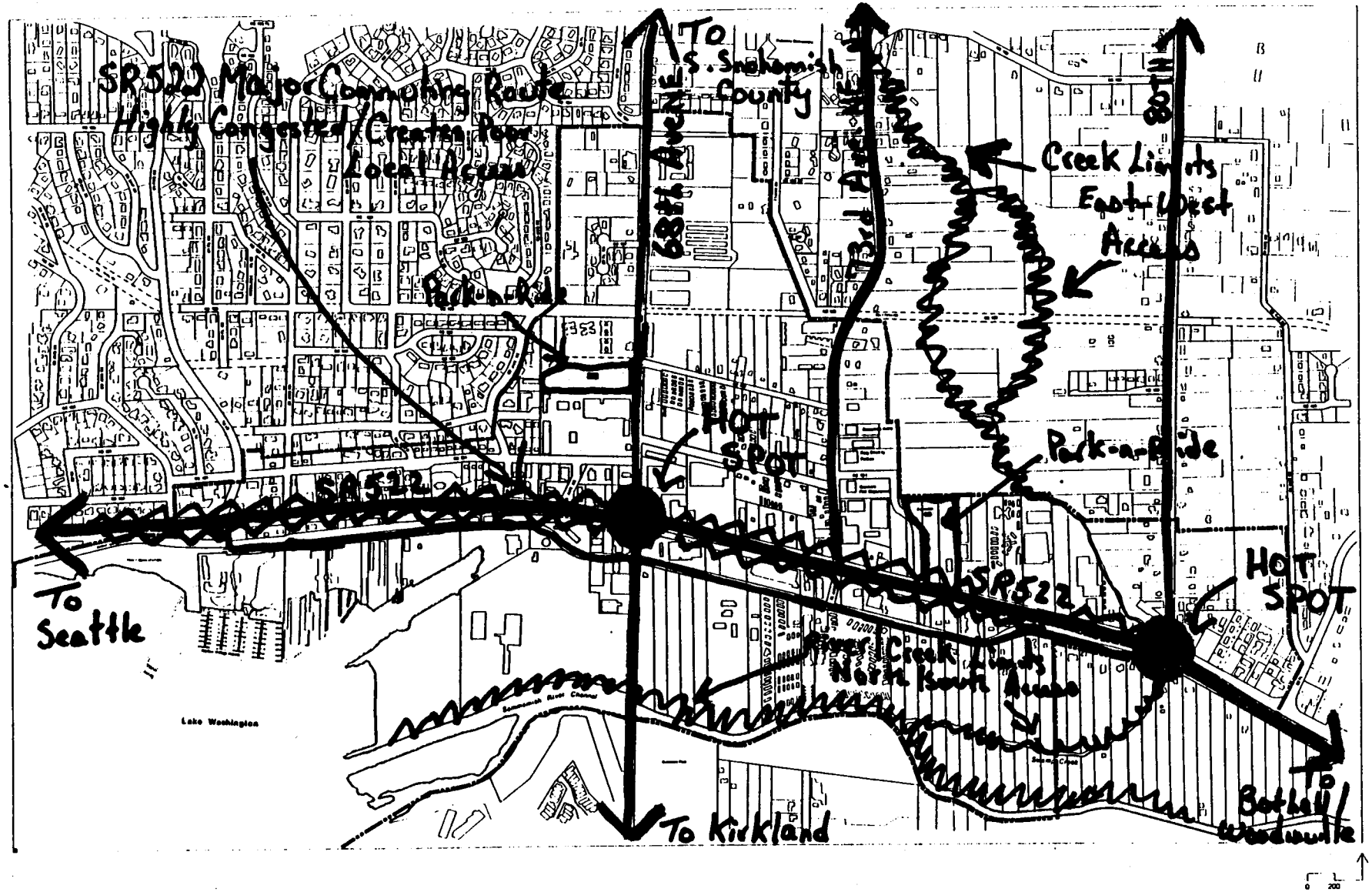

Figure II-3

Vehicular Circulation

Kenmore Urban Activity Center

KING COUNTY PLANNING AND COMMUNITY DEVELOPMENT

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Pedestrian

Currently there is very little pedestrian activity in the Kenmore Urban Activity Center. The substantial amount of through traffic that occurs on major roadways in the Kenmore center, together with the large 100-foot right-of-way of SR-522 combine to negatively affect pedestrian access and circulation in two important respects. First, SR-522 is an enormous barrier that severely restricts pedestrian access between the north and south parts of the activity center. Second, since the majority of vehicular trips in the center represent traffic moving through Kenmore to other destinations, existing commercial development is mostly of a strip-variety that is oriented towards the automobile rather than the pedestrian.

The Burke-Gilman Trail, when completed, will extend through the Kenmore center adjacent to SR-522 and link up with the Sammamish River Trail to the east. The trail will provide excellent pedestrian/bicycle access to the center from the east and west; however, because of the barrier of SR-522, the trail is difficult to reach from the north.

The Kenmore center is blessed with shoreline areas that front both Lake Washington and the Sammamish River Channel. With the exception of areas to the west such as Logboom Park and adjacent marina, however, the shoreline areas contain mostly industrial uses and are not readily accessible to the public.

3. SUSCEPTIBILITY TO CHANGE ANALYSIS

A primary objective of this study effort is to prepare design guidelines that have a high probability of being implemented over the planning timeframe of the Northshore Community Plan (6 to 10 years). Therefore, the design focus was on those properties in the Kenmore Center that are most likely to develop or redevelop over the next decade.

A susceptibility to change analysis was undertaken to evaluate the development or redevelopment potential of all properties with commercial or mixed-use designations in the Kenmore center. The following evaluation criteria were used in this analysis:

- Land Utilization: vacant versus developed sites
- Physical Constraints: degree to which natural features constrain site development
- Age and condition of buildings
- Zoning Utilization: degree to which existing development maximizes zoning potential (both permitted uses and density).
- Location: relative to other activities, access, visibility
- Planned Project: development/redevelopment currently under active consideration

Figure II-4 depicts the results of the susceptibility to change analysis for the Kenmore Activity Center. Properties are classified into two categories: stable and potential development or redevelopment. This analysis reveals that the largest concentration of land area likely to experience development change over the next decade is the approximately 75 acres located between SR-522 and Lake Washington/Sammamish River Channel. Currently the site of the Kenmore Pre-Mix concrete operation and other industrial uses, several private developers are pursuing major redevelopment plans that would transform this area with a mix of residential and commercial uses.

North of SR-522, properties with development or redevelopment potential are scattered throughout the Kenmore center, although a small concentration of such parcels does appear to form around the intersection of N.E. 181st Street and 73rd Avenue N.E.

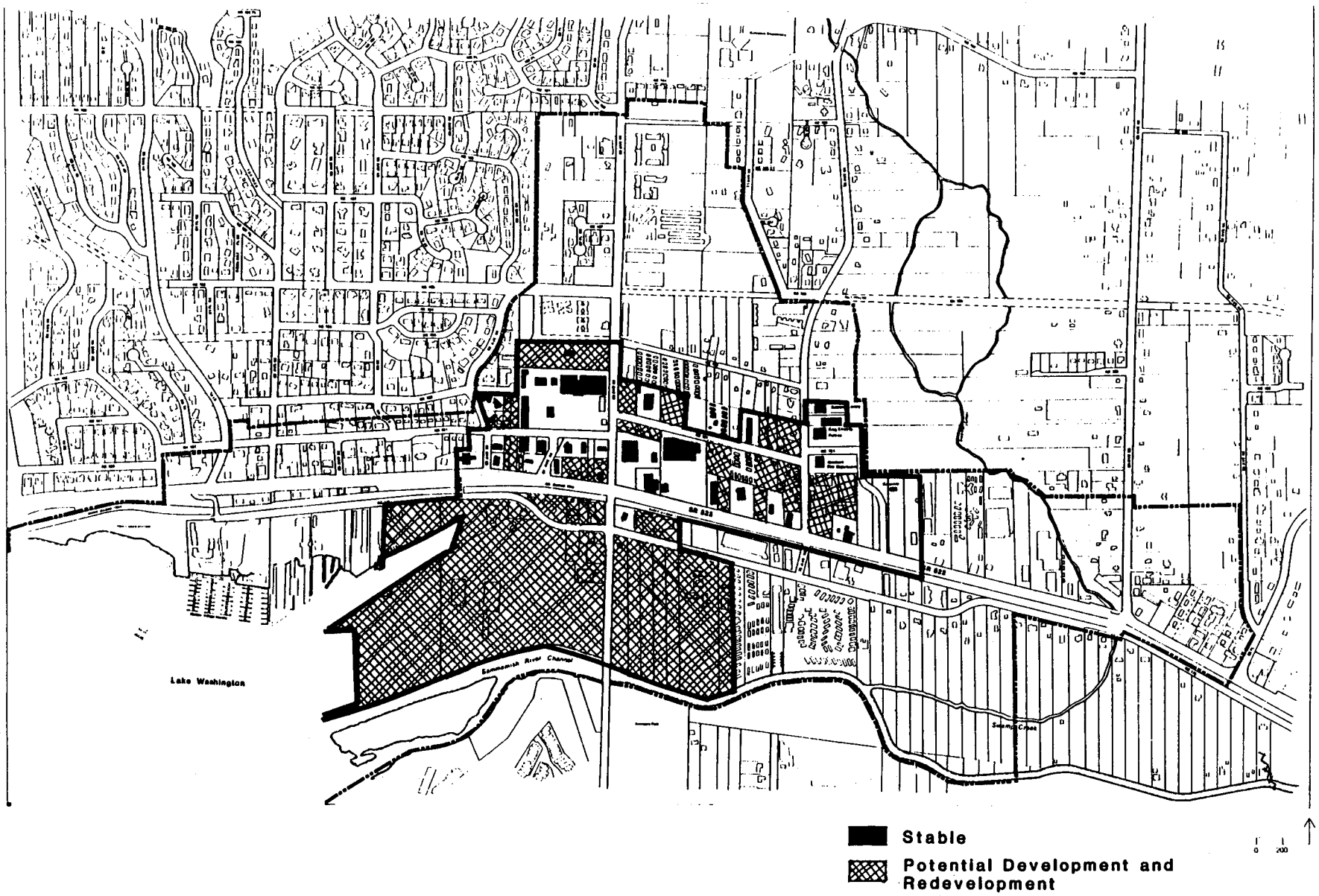

Figure II-4

Susceptibility to Change

Kenmore Urban Activity Center

KING COUNTY PLANNING AND COMMUNITY DEVELOPMENT

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4. MAJOR OPPORTUNITIES AND CONSTRAINTS

Based on the King County Comprehensive Plan design goals for activity centers, the proposed Northshore Community Plan policies for Kenmore, and an understanding of existing conditions as described above, a number of key design opportunities and constraints have been identified for the Kenmore center.

Opportunities

Redevelopment Potential South of SR-522: The approximately 75 acres located between SR-522 and Lake Washington/Sammamish River Channel represent the single greatest resource for transforming the Kenmore center from an auto-oriented "stop along the way" to a major pedestrian oriented activity center. As redevelopment occurs in this area, several key urban design objectives need to be pursued:

- Private mixed-use development must be balanced with the need for substantial public access/ open space throughout the area, particularly along the shoreline edge.

- Pedestrian/bicycle linkages must be established that connect this major activity node with adjacent areas. Links with the Burke-Gilman Trail are essential for ensuring strong east-west access to the activity center. Pedestrian connections across SR-522 to the north are also critical for providing access to the residential areas of Kenmore and for promoting integration of the shoreline and upland segments of the activity center.

- The area should have a strong pedestrian orientation. Buildings should be oriented to streets and other pedestrian routes to encourage walking. Development must be integrated with the transit center planned for this area in order to increase transit usage and minimize traffic and parking impacts.

Integration of Existing/Planned Transit Facilities: Two Metro park-and-ride facilities are present in the Kenmore center, although the lot currently situated on 68th Avenue N.E. may be replaced by the transit center planned for the area south of SR-522. There are a number of ways that these transit facilities can be integrated with activity center development to promote pedestrian activity, including:

- Encouraging high density development (especially office and residential) around transit facilities as a way of increasing non-auto commuting trips.
- Enhancing pedestrian linkages between transit facilities and surrounding activities/bicycle routes. For example, better linkages with the Burke-Gilman Trail may result in greater numbers of commuters bicycling rather than driving to the park-and-ride lot.
- Potential joint use of park-n-ride facilities to accommodate some of the parking demand from future development in the Kenmore center.

Planned Transportation Improvements: As described above, the recently completed Kenmore Traffic Circulation Study recommended a number of transportation improvements for reducing congestion and improving local access in the Kenmore center. If these recommended improvements are adopted and implemented by the county, they will contribute a to a more pedestrian-friendly environment in the activity center, and will provide new opportunities for pedestrian-oriented development. For example, by realigning N.E. 181st Street at the 68th Avenue and 73rd Avenue intersections, this roadway offers potential as a new pedestrian "Main Street" in the Kenmore center. A new transportation study is currently underway to identify and evaluate alternative solutions for reducing the impacts caused by SR-522 through traffic. Any improvements made as a result of this study will further promote pedestrian activity.

Expansion of Civic/Office Core: A small core of civic uses has developed around the 73rd Avenue N.E./N.E. 181st Street intersection that includes a library, fire and police station. These facilities could become the building blocks for a much larger core area of civic and office development that promotes pedestrian access and circulation. This area is adjacent to Swamp Creek, an important wetland area that includes a Heron rookery. It is vital that this sensitive habitat area be preserved.

Constraints

Continued Auto-Orientation of SR-522: Barring a radical solution such as a freeway lid, SR-522 is likely to remain a highly congested commuter route through the Kenmore center. Uses along this arterial will continue to be largely oriented to the automobile, and pedestrian activity is more likely to occur to the south (mixed-use area) and north (along N.E. 181st Street). In addition, SR-522 will continue to present a major barrier to north-south pedestrian movement in the Kenmore center.

Existing Fragmented Development: The existing pattern of development in much of the Kenmore center is quite fragmented, which greatly contributes to the center's overall lack of identity.

Lack of Shoreline Access: The existing industrial developments south of SR-522 are not compatible with public use and enjoyment of the shoreline. Potential mixed-use development in this area creates an opportunity for vastly improving shoreline access.

Wetlands: The Kenmore center is blessed with significant natural features including the wetland areas of Swamp Creek and the Sammamish River Channel. While these wetlands are treasured natural resources for the community, their extreme environmental sensitivity limits the ability to provide public access to or through these areas.

B. OPPORTUNITY AREAS

Based upon the foregoing analysis, seven "Opportunity Areas" have been identified for the Kenmore Urban Activity Center, as depicted in Figure II-5. These areas have been judged as offering the greatest potential for enhancing the pedestrian orientation of the Kenmore center. The following paragraphs explain the overall design objective for each opportunity area, including the relevant policies from the Northshore Community Plan. These opportunity areas form the basis of the site-specific development and design guidelines that are described in Section III.C.

1. MIXED-USE WATERFRONT DISTRICT

The industrial area to the south of SR-522 represents the most significant development opportunity in the Kenmore center. The design objective for this area is to promote redevelopment with mixed commercial-residential uses that is strongly oriented to the pedestrian, includes substantial public access and open space, encourages the use of transit, and provides pedestrian/bicycle connections to adjacent areas. An overriding goal for this area is that it not develop in isolation from the other parts of the Kenmore center, but rather become one of several major nodes of pedestrian oriented activity.

The Northshore Community Plan recognizes mixed business-residential use as a viable long-term use for this large area of underutilized and vacant land. Policy K-11 outlines the issues that proposed mixed-use development must address through the land use and development review process. They include the completion of pedestrian linkages to adjacent areas of the Kenmore center, construction of an on-site transit center, substantial mitigation of traffic impacts, provision of public access to Lake Washington and the Sammamish River waterfront as well as other community open space, off-site fish, wildlife and riparian vegetation enhancement, and provision of public viewpoints and view corridors.

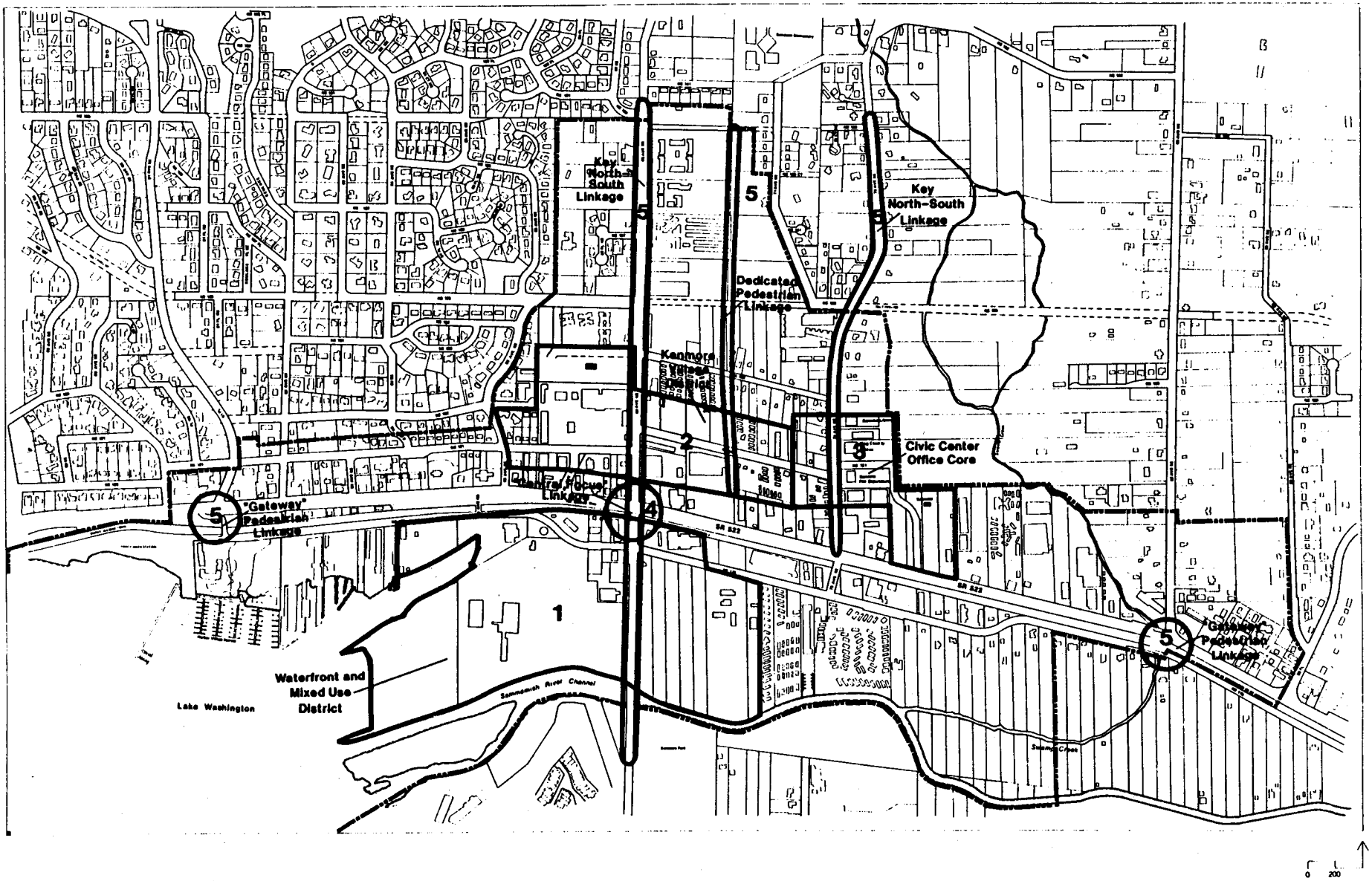

Figure II-5

Opportunity Areas

Kenmore Urban Activity Center

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2. KENMORE "VILLAGE DISTRICT"

Barring radical changes such as the construction of a freeway lid, SR-522 will remain a highly congested commuting route that attracts mostly auto-oriented development. The area north of SR-522 that fronts N.E. 181st Street provides a more suitable setting for pedestrian activity. The objective in this area is to promote redevelopment as a pedestrian-friendly village, perhaps to include a symbolic image of Kenmore's historic mill-town past. Transforming N.E. 181st Street into a major pedestrian street, with buildings that front the street, landscaped sidewalks, etc., is a major element of the overall vision for this area. Lighting, signage, and other streetscape elements could incorporate a historic theme. For example, old sawmill equipment might be placed within a small public space area along with historical markers explaining the economic history of Kenmore.

3. CIVIC CENTER AND OFFICE CORE

The area situated around the intersection of N.E. 181st Street and 73rd Avenue North contains several civic uses including police/fire stations and a library. Policy K-4 in the Northshore Community Plan states that future office development should be designated close to these existing civic uses. Thus, the foundation has been set for a future core of pedestrian-oriented office and civic activities in this area that nicely complements the adjacent retail village district along N.E. 181st Street. An important element of the civic/office core vision in the potential use of the adjacent park-and-ride lot to accommodate some of the parking needs of future office development. It is vital that the adjacent Swamp Creek wetlands area, which includes a Heron rookery, not be disturbed by any new development in this area.

4. "CENTRAL FOCUS" PEDESTRIAN LINKAGE AND PLAZA

The intersection of SR-522 and 68th Avenue N.E. is the central point in the Kenmore Urban Activity Center. As the Kenmore center develops with the waterfront mixed-use district to the south, and the commercial and office core along N.E. 181st Street to the north, there will be an increasing need to provide pedestrian linkages between these areas.

The design objective of this opportunity area is to provide a key pedestrian linkage between north and south Kenmore near the SR-522/68th Avenue N.E. intersection. Given the substantial width of SR-522 and the high level of through traffic that occurs along this roadway, the pedestrian connection will most likely need to be an overpass rather than at-grade crossing.

In addition to providing a critical pedestrian linkage between north and south Kenmore, this crossing and the adjacent areas along SR-522 are envisioned as becoming a symbolic central focal point for the center. Physical improvements could include special lighting, towers/arches, and/or flags as part of the overpass construction, along with construction of an urban plaza on the south side of SR-522.

5. OTHER KEY PEDESTRIAN LINKAGES

A major problem contributing to the poor pedestrian orientation in the Kenmore center is the absence of clearly defined and accessible pedestrian linkages between activity nodes. In addition to the central linkage discussed in 4., a number of other key pedestrian linkages have been identified in the Kenmore center, including:

- Improved pedestrian crossings of SR-522 at the intersections of 80th Avenue N.E. and 65th Place N.E. These intersections could include signage and other design elements that signify the eastern and western gateways to the activity center.
- Improvements to the public right-of-way along 68th Avenue North and 73rd Avenue North to promote pedestrian access to the Kenmore commercial core from the residential areas to the north.
- Creation of a dedicated pedestrian pathway mid-block between 68th Avenue North and 73rd Avenue N.E. to provide an additional north-south linkage through the Kenmore center.

C. DEVELOPMENT AND DESIGN GUIDELINES

This section describes development and design guidelines for the Kenmore Urban Activity Center. These guidelines consist of a variety of proposed actions -- zoning development standards, proposed capital improvement projects, and other initiatives -- that are intended to improve the pedestrian orientation of the Kenmore center and specifically achieve the design objectives of the five opportunity areas described in Section II.B. above.

The guidelines are organized into six general categories: building development; parking; pedestrian access and circulation; vehicle access and circulation; transit; landscaping, and public space.

King County is considering new zoning code provisions that would allow for the establishment of Special District overlays. These overlay districts would permit modifications to underlying zoning standards for large ownerships or areas containing several properties, in order to carry out comprehensive and community plan policies that are unique to those areas. One type of special district overlay that is being considered by the county -- pedestrian-oriented development -- is particularly appropriate for achieving the design objectives in much of the Kenmore center.

It is recommended that a pedestrian overlay district be established for two areas in the Kenmore Center, as shown in Figure II-6. The North Kenmore Pedestrian District (North Pedestrian District) includes those properties surrounding N.E. 181st Street in the main commercial core, and includes the Village District and Civic/Office Core opportunity areas (Areas 2 and 3). The North Pedestrian District in total comprises approximately 50 acres. The Kenmore Mixed-Use District includes the area south of SR-522 that comprises the 75 acre mixed-use waterfront opportunity area (Area 1).

Figure II-6 also depicts recommended primary and secondary pedestrian routes in both the North Pedestrian District and Mixed-Use District. Primary pedestrian routes are intended to function as the principal streets and pathways for pedestrian circulation in the Kenmore center. Secondary pedestrian streets are intended as major vehicle circulation routes that also promote pedestrian circulation. Many of the guidelines that follow reflect actions for creating a pedestrian friendly setting along these routes.

Guideline K-1 A Kenmore Pedestrian Overlay District should be established with boundaries as depicted on Figure II-6. Within the pedestrian overlay district, primary and secondary pedestrian routes should be designated as shown on Figure II-6.

1. BUILDING DEVELOPMENT

Permitted Uses

The properties located within the North Pedestrian District have been designated in the proposed Northshore Community Plan for regional business and office uses, while the Mixed-Use District is classified as a potential regional business area, but with a requirement for mixed residential/commercial uses.

In order to promote pedestrian circulation in both pedestrian districts, and in particular to reduce potential conflicts between pedestrian/bicycle and automobile activity, commercial uses with a significant auto-orientation should be prohibited.

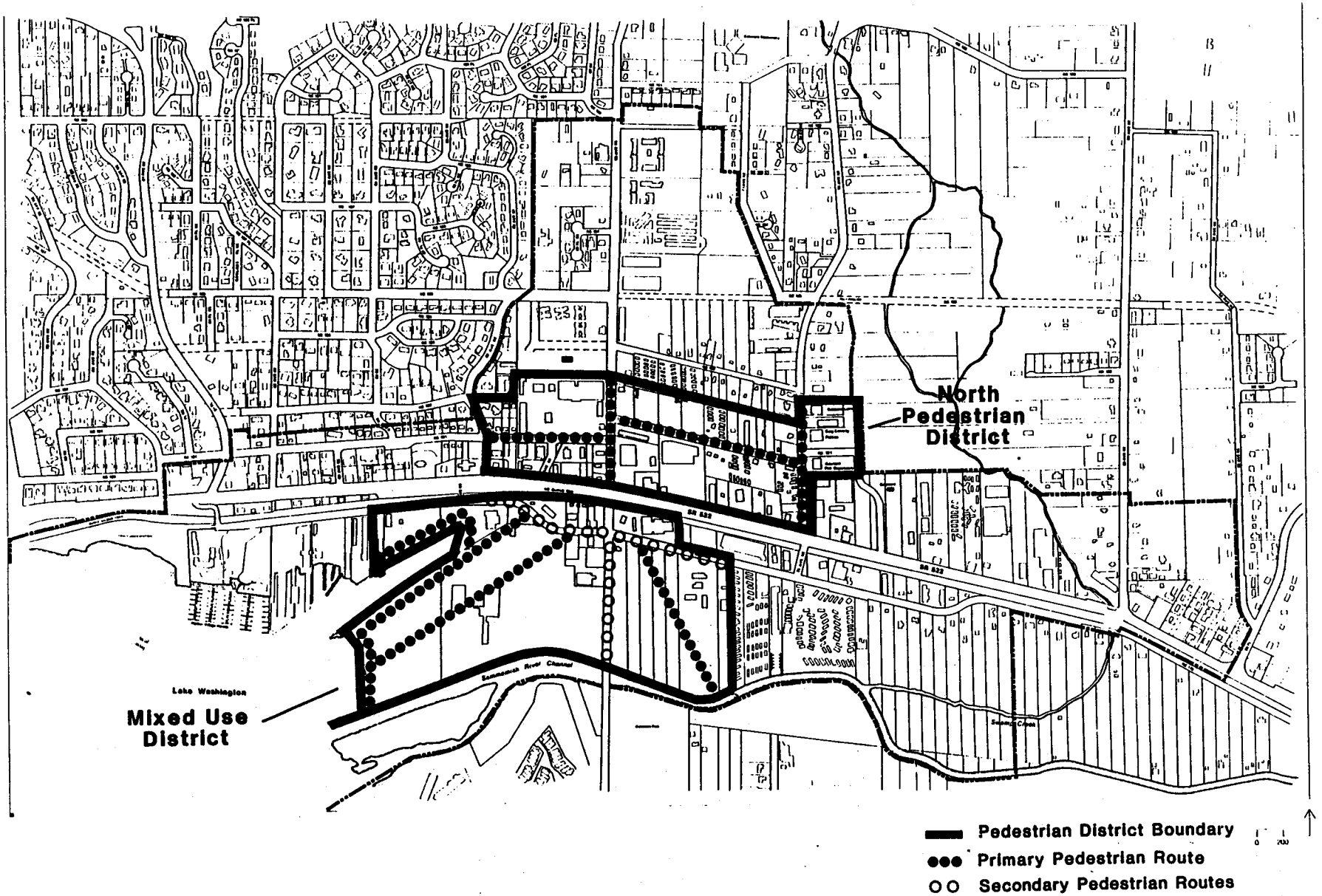

Figure II-6

Pedestrian Overlay District

Kenmore Urban Activity Center

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Guideline K-2 The following uses should be prohibited throughout both the North Pedestrian District and the Mixed-Use District in the Kenmore center:

- Gasoline service stations
- Drive-through restaurants or banks
- Retail nurseries
- Car washes
- Stores with outdoor storage
- Other auto-oriented uses

Land Use Orientation

Policy K-4 of the Northshore Community Plan states that new commercial development should be centered around the 68th Avenue N.E./SR-522 intersection. To be consistent with this policy, the primary commercial development in the Mixed-Use District should be located near SR-522, with residential uses situated towards the shoreline areas. Figure II-7 graphically depicts land-use zones for the Mixed-Use District.

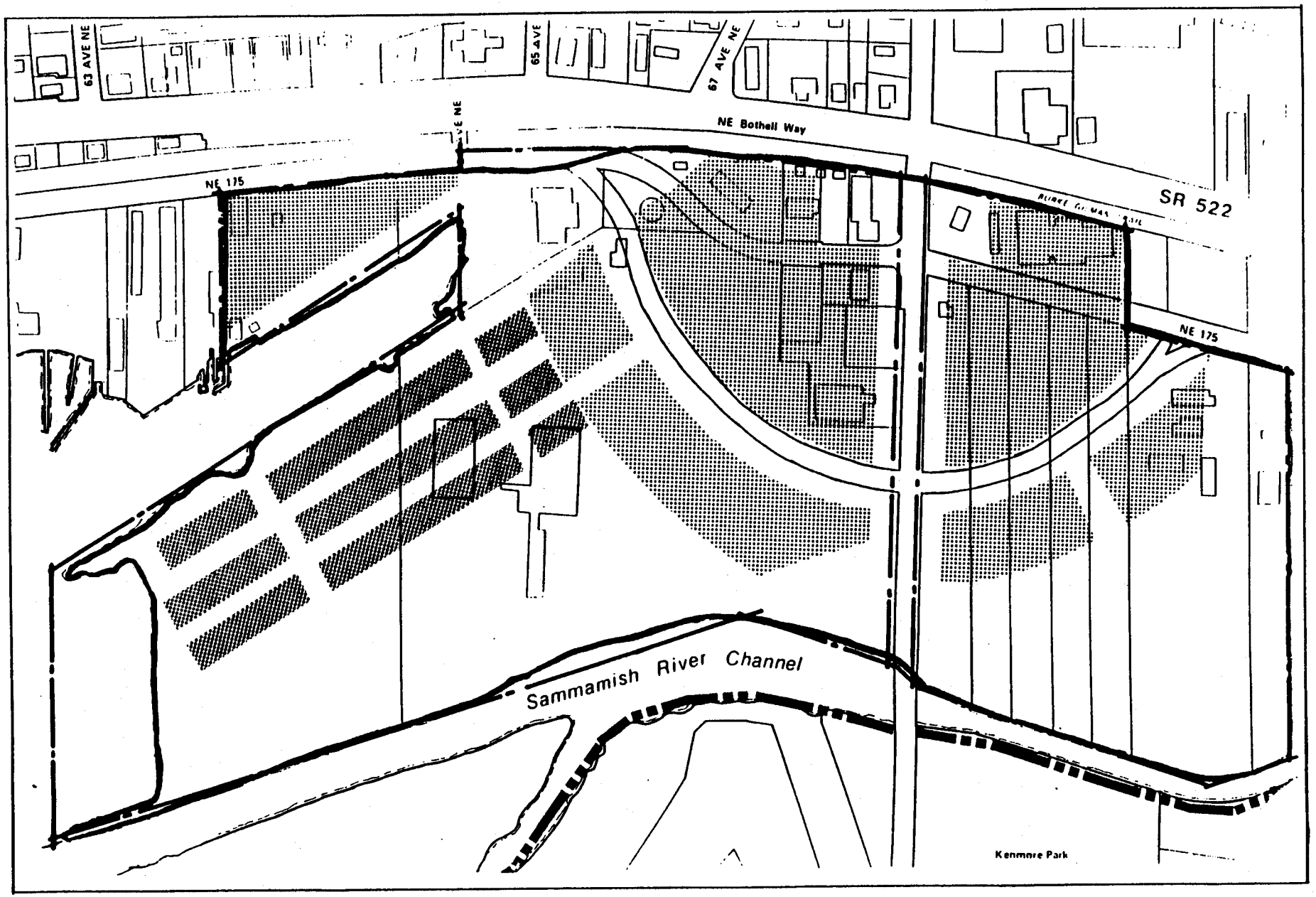
Guideline K-3 The primary commercial office and retail development in the Mixed-Use District should be located adjacent to and north of N.E. 175th Street. Residential development should be the primary uses south of N.E. 175th Street, although secondary commercial uses (restaurants, ground floor retail, small-scale professional offices) may also be included in this area.

Building Scale

New zoning code provisions being considered by the county include building densities in the commercial/mixed zones through a maximum floor-area-ratio of 4:1 and height limit of 35 feet. Height limits may be exceeded by one foot for every additional foot of street and interior setback provided (over minimums of 20 feet and 5 feet, respectively).

In order for a prospective developer to provide the public amenities desired by the county in the Mixed-Use District (substantial public space and access, view corridors, pedestrian connections), yet achieve the high densities needed to both meet the county's housing goals and assure project feasibility, height restrictions will have to be relaxed. From the standpoint of the overall goals for urban activity center development, high-density, mixed-use development is also preferred in this area as a way of encouraging transit use and promoting pedestrian activity. While taller buildings should be permitted in the northern and central portions of the site, heights should be reduced in areas near the waters edge.

Guideline K-4 Maximum height limits in the Mixed-Use District should be 85 feet in the northern and central portions of the Waterfront Mixed-Use District, with a 45 foot height limit applying to all development located within 300 feet of the Lake Washington and Sammamish River shoreline edge.



Primary Retail and Office Core

Potential Street Level Retail

Primary Residential and Open Space

Figure II-7

Land Use Zones – Mixed Use District

Kenmore Urban Activity Center

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In the North Pedestrian District, the scale of development is likely to be lower than the area to the south. Nevertheless, in order to promote higher densities yet encourage the provision of public space, height limits should be raised.

Guideline K-5 Maximum height limits throughout the North Pedestrian District should be 45 feet.

Orientation of Buildings

The primary pedestrian routes depicted in Figure II-6 are intended to be the principal streets and pathways for pedestrian travel within the Kenmore Center. To promote walking rather than driving as the primary mode of travel in the center, these routes must become inviting places for the pedestrian to use. One way of promoting an attractive setting for pedestrians is for buildings to include ground floor retail (either product or service-based) uses that directly front the street, thereby creating a pedestrian-friendly environment not unlike the traditional downtown.

The following design guidelines, which pertain to properties with frontage on designated primary pedestrian routes in the Kenmore center, are intended to integrate buildings with the main network of pedestrian circulation. Figures II-8 and II-9 illustrate these guidelines.

Guideline K-6 In the North Pedestrian District retail (products or services) uses only should be permitted on the ground floor. In the Mixed-Use District, ground floor retail/service uses should be encouraged.

Guideline K-7 To encourage buildings to front the street, front setbacks should be established at a maximum of five feet, except that larger setbacks should be allowed for arcades, streetside cafes, patios, parks and plazas.

Guideline K-8 To encourage continuous building frontage along primary pedestrian routes, minimum side setback requirements should be waived. In addition, the building facade should extend a minimum of 75% of the width of the site.

Guideline K-9 The primary ground floor building entrance should orient to either the street or public spaces such as plazas, arcades, or parks.

Design

The development and design guidelines for Kenmore are not intended to promote a unified design theme for either the North Pedestrian District or the Mixed-Use District. However, the design of buildings should be attractive to pedestrians and wherever possible facilitate walking in all types of weather.

Guideline K-10 The building facade of ground floor retail uses that front primary pedestrian streets should include windows and overhead protection. The use of blank walls (such as concrete cinder block) without facade ornamentation should be discouraged.

Guideline K-11 Throughout the Kenmore activity center, building materials such as concrete, masonry, tile, stone, and wood should be encouraged. Glass curtain walls and all reflective glass should be discouraged.

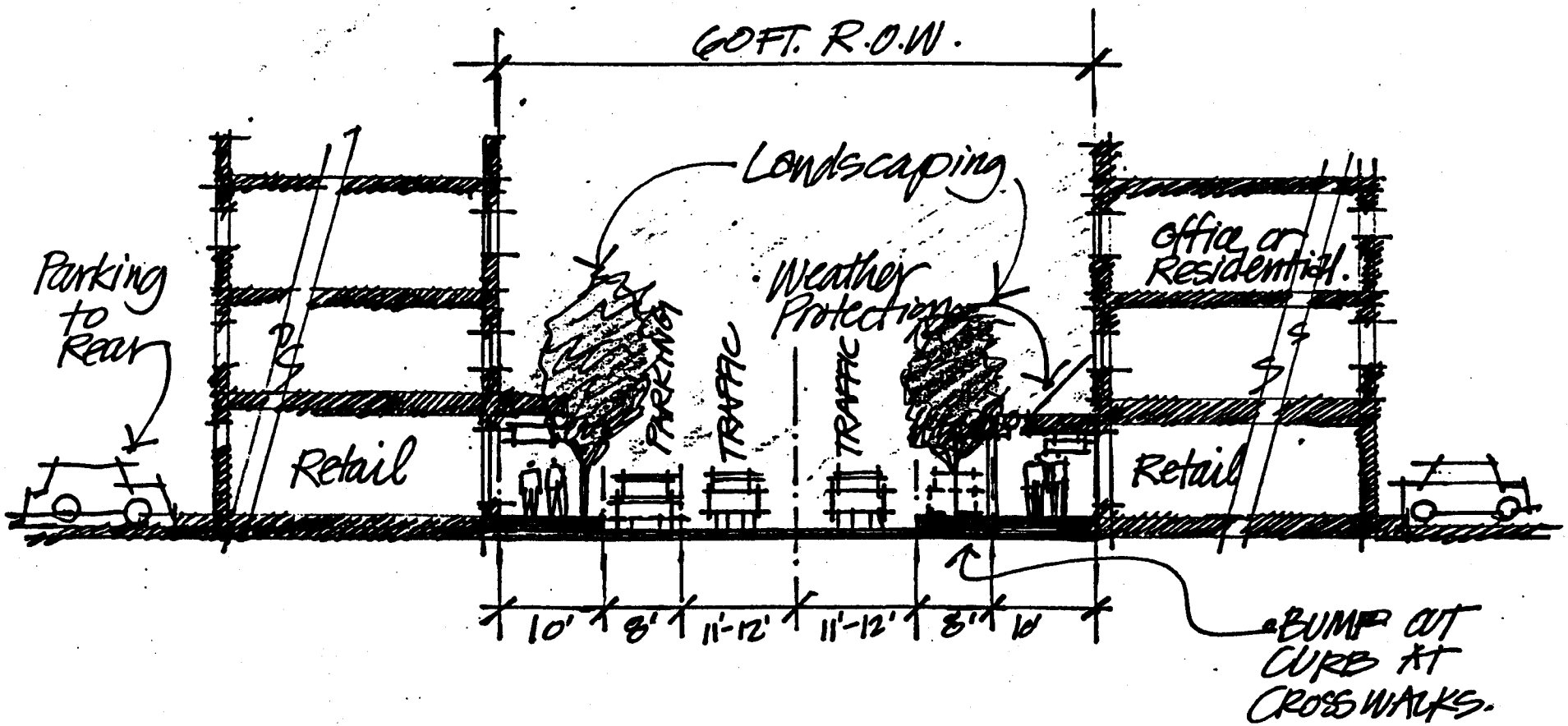

Figure II-8
Illustrative Section Diagram:
NE 181st St & Other Primary Pedestrian Streets
Kenmore Urban Activity Center
KING COUNTY PLANNING AND COMMUNITY DEVELOPMENT

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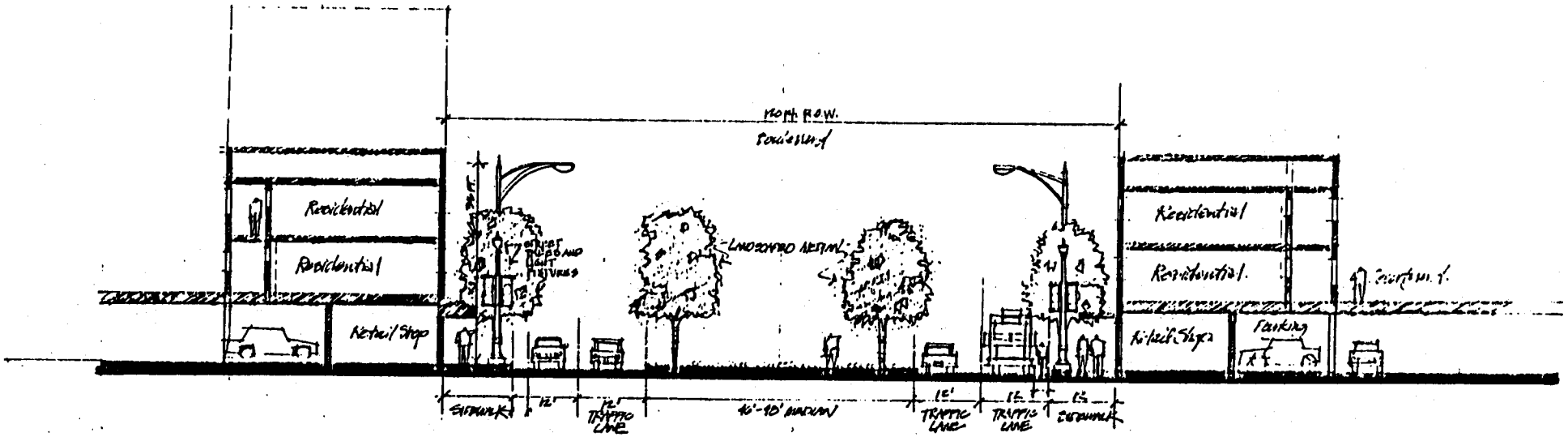

Figure II-9

Illustrative Section Diagram:
Pedestrian Boulevard in Mixed Use District

Kenmore Urban Activity Center

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2. PARKING

Off-Street Parking Requirements

In the Mixed-Use District, future redevelopment should result in increased pedestrian activity and a decreased reliance on the automobile due to several factors. First, high density development is envisioned that should encourage increased use of transit, particularly since a transit center is planned for this area (adjacent to N.E. 175th Street and the Burke-Gilman Trail). Second, densely developed mixed commercial retail/office and residential uses should create its own activity center with home, work and shopping all within walking distance. Finally, pedestrian connections to other activity nodes in the Kenmore center should encourage increased pedestrian/bicycle travel and discourage auto travel throughout the activity center.

In the North Pedestrian District, lower development densities and a high percentage of retail development will mean less opportunities for transit usage. However, the creation of a true pedestrian-friendly route along N.E. 181st Street that promotes walking between developments, and the potential use of on-street and community (park-and-ride lot) parking, should help to reduce the parking requirements of individual developments.

To further encourage non-auto modes of travel, maximum off-street parking requirements should be established in both the North Pedestrian District and Mixed-Use District.

Guideline K-12 The amount of off-street parking provided by individual developments should be reduced wherever possible. Maximum off-street parking requirements should be established at either 1 space per 500 square feet of development or 50% of the amount required by underlying county zoning regulations, whichever is greater.

Location and Design

In both pedestrian districts, the on-site parking should minimize conflicts with pedestrian access and circulation. Three techniques for reducing pedestrian-parking conflicts are: 1) separating and screening the primary parking areas from the main pedestrian circulation routes, 2) breaking large amounts of surface parking into smaller lots, and 3) reducing the amount of the total site area consumed by parking through use of structured lots or community parking facilities. Figure II-10 illustrates these guidelines.

Guideline K-13 On-site parking facilities should minimize conflicts with pedestrian circulation. The following standards apply in the North Pedestrian District and Mixed-Use District:

- Parking should be located in the rear or side of buildings that front primary pedestrian streets.
- No more than 60 stalls should be provided in any one surface parking lot, and individual lots should be separated by buildings, roads, and/or landscaping.
- All parking areas that front sidewalks should be screened by a streetwall and landscaping.
- Where feasible, retail uses should be provided on the first floor of the streetside edges of parking structures.

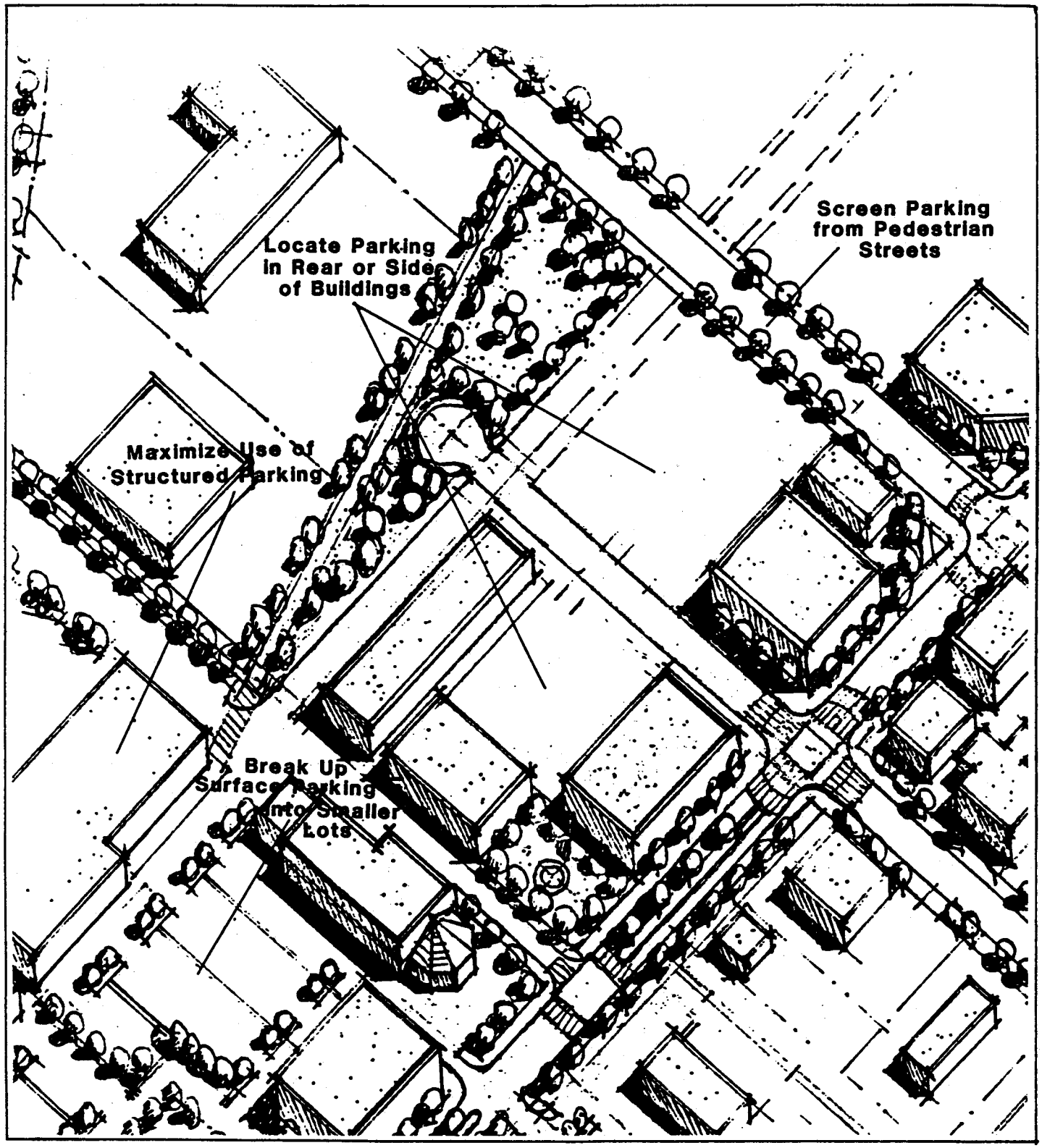

Figure II-10
Parking Standards
Kenmore Urban Activity Center
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Guideline K-14 In both the North Pedestrian District and Mixed-Use District, on-site surface parking should consume a maximum of 30% of the total site area. The remaining off-street parking requirements should be accommodated in on-site parking structures or off-site common parking facilities.

3. PEDESTRIAN ACCESS AND CIRCULATION

A primary objective of future urban activity center development is to promote pedestrian activity both in terms of access to/from surrounding areas and throughout the center itself. Improved pedestrian access and circulation in the Kenmore can occur through a combination of elements as described below.

Enhancement of Primary Pedestrian Routes

These streets and pathways are envisioned to be the principal routes for pedestrian circulation in the Kenmore center. Many of the guidelines covering building development, parking, and landscaping are intended to enhance primary pedestrian routes as attractive places for walking.

On-Site Pedestrian Circulation

If the pedestrian-orientation of the Kenmore center is to be enhanced, it is vital for individual developments to provide a comprehensive on-site pedestrian network that facilitates walking and reduces pedestrian/auto conflicts.

Guideline K-15 Any new commercial development in the Kenmore Urban Activity Center must include pedestrian pathways that provide connections between:

- Principal entrances of adjacent buildings located on the same site.
- Building entrances and on-site parking areas.
- The principle building entrance and sidewalks.
- The principle building entrances of buildings on adjacent sites, if entrances are setback more than five feet from the public right-of-way.

Pedestrian Connections Between Activity Nodes

The two primary pedestrian-oriented activity nodes envisioned for the Kenmore center are the mixed-use waterfront area south of SR-522 (Mixed-Use District) and the village district and civic/office located to the north (North Pedestrian District). Linking these two activity nodes requires enhanced pedestrian crossings of the major SR-522 barrier.

Guideline K-16 Pedestrian crossings of SR-522 should be completed or enhanced at the following general locations:

- Near 68th Avenue N.E.
- Park-n-Ride lot
- 80th Avenue N.E.
- 65th Place N.E.

Further transportation study is needed to determine if these pedestrian crossings can be completed as at-grade crossings or as overpasses. All of the crossings should provide links to the Burke-Gilman Trail.

The pedestrian crossing near 68th Avenue N.E. should include design elements that signify this area as the central focal point in Kenmore. Likewise, the design of crossings at 80th Avenue N.E. and 65th Place N.E. should create an image as the eastern and western gateways to the center. Potential design elements may include special lighting, signage, towers/arches, flags, other treatments. Figure II-11 depicts illustrative design concepts for these crossings.

Pedestrian/Bicycle Connections to Surrounding Areas

By enhancing pedestrian connections to surrounding areas such as Logboom and Kenmore Park, the Burke-Gilman Trail, and the residential areas to the north and west, non-automobile travel to and from the center can be increased, thereby reducing traffic congestion and overall parking needs.

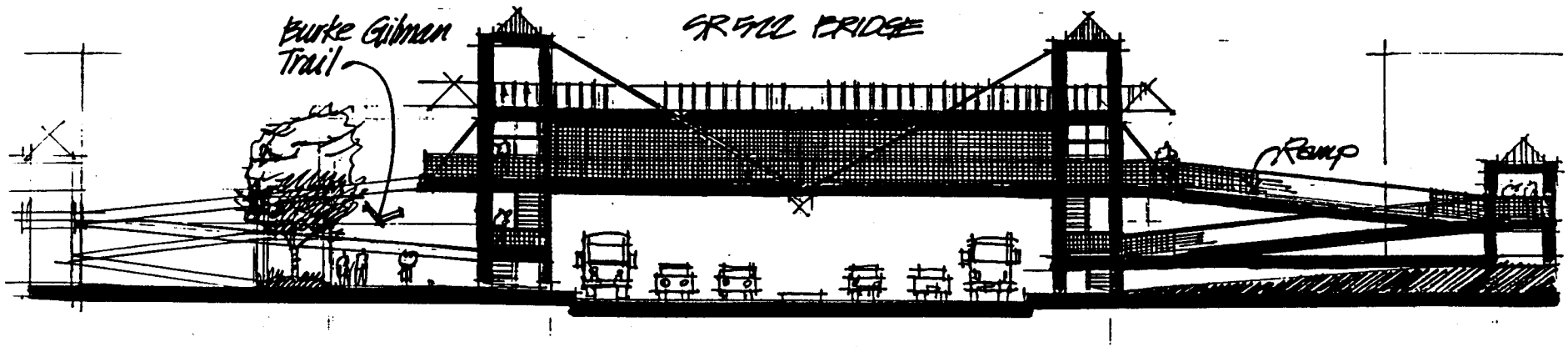
Guideline K-17 In the Mixed-Use District, pedestrian connections should be provided that link this area to the Burke-Gilman Trail and Kenmore Park.

In the North Pedestrian District, the following routes should be designated as the primary north-south pedestrian connections to the commercial/office core:

- 68th Avenue N.E. and 73rd Avenue N.E.
- A new dedicated pedestrian pathway located mid-block between 68th Avenue N.E. and 73rd Avenue N.E.

Pedestrian linkages along existing roadways in the center can be made more attractive for walkers by limiting vehicle access points and requiring landscape improvements such as street trees. Completion of a dedicated pedestrian pathway should be required as part of development approval for all affected parcels.

Figure II-12 depicts the location of all recommended pedestrian/bicycle linkages in the Kenmore Activity Center. Figure II-13 illustrates pedestrian connections on 68th Avenue N.E. and 73rd Avenue N.E.



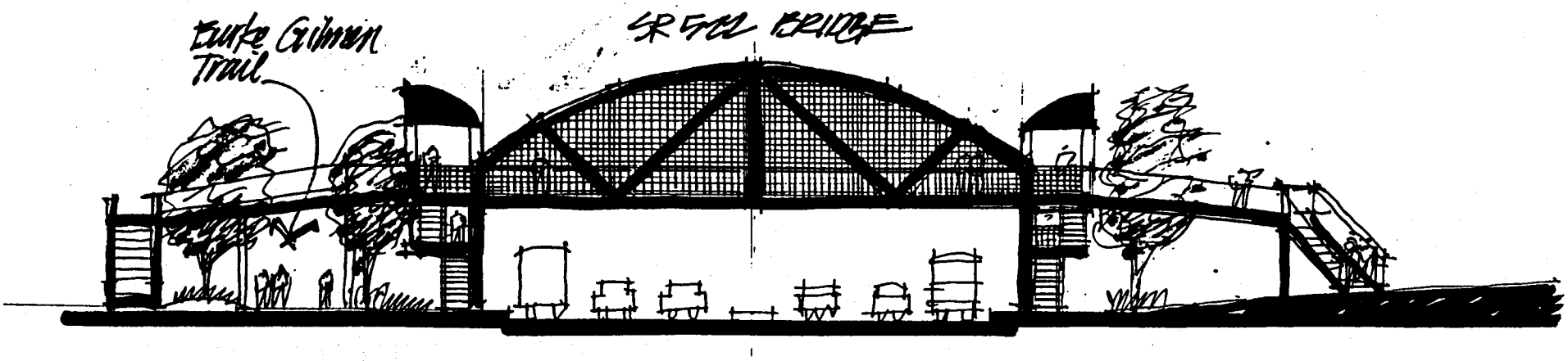


Figure II-11

Illustrative Design Concepts: Pedestrian Crossing at SR 522

Kenmore Urban Activity Center

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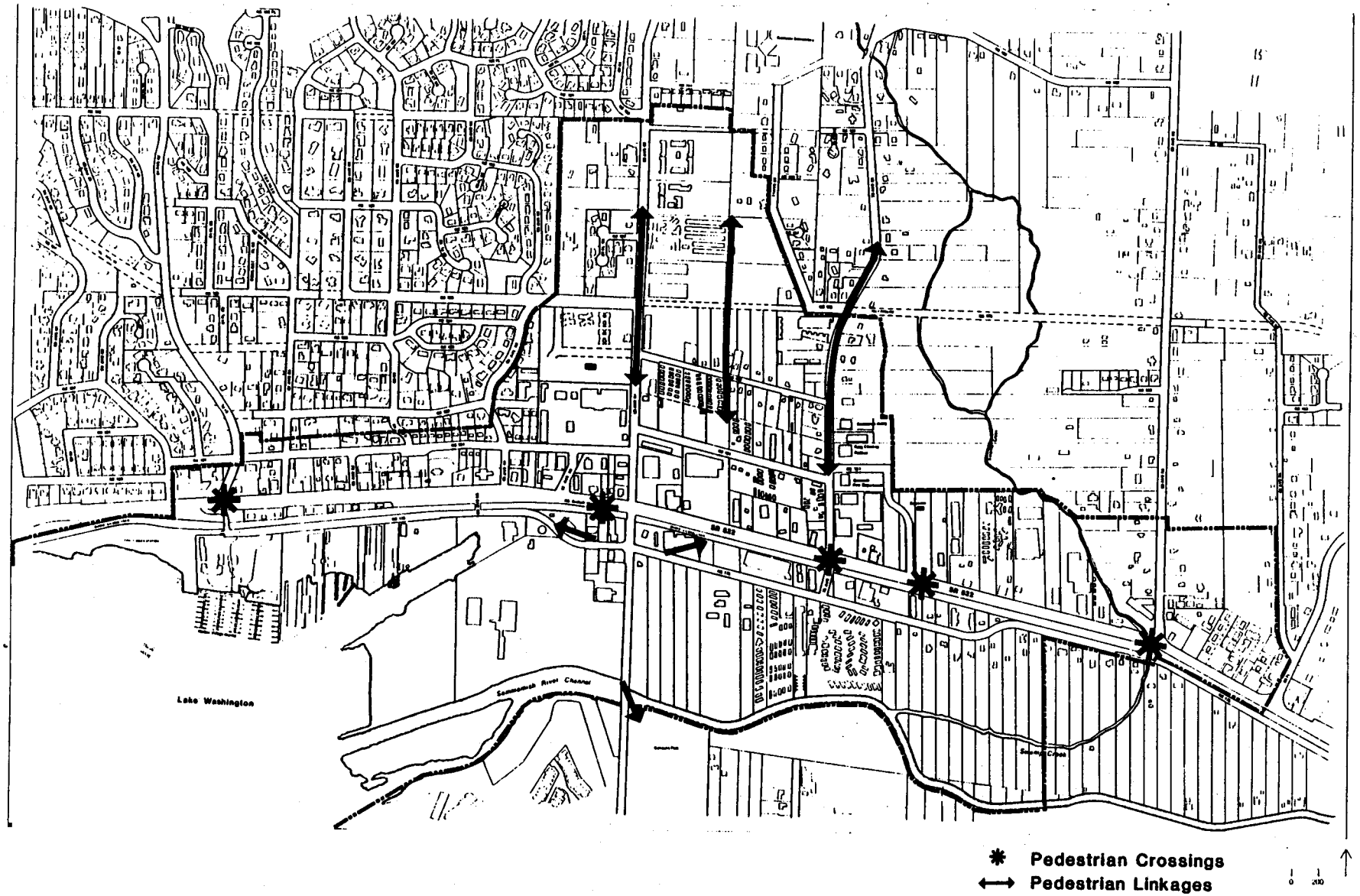

Figure II-12

Pedestrian Linkages

Kenmore Urban Activity Center

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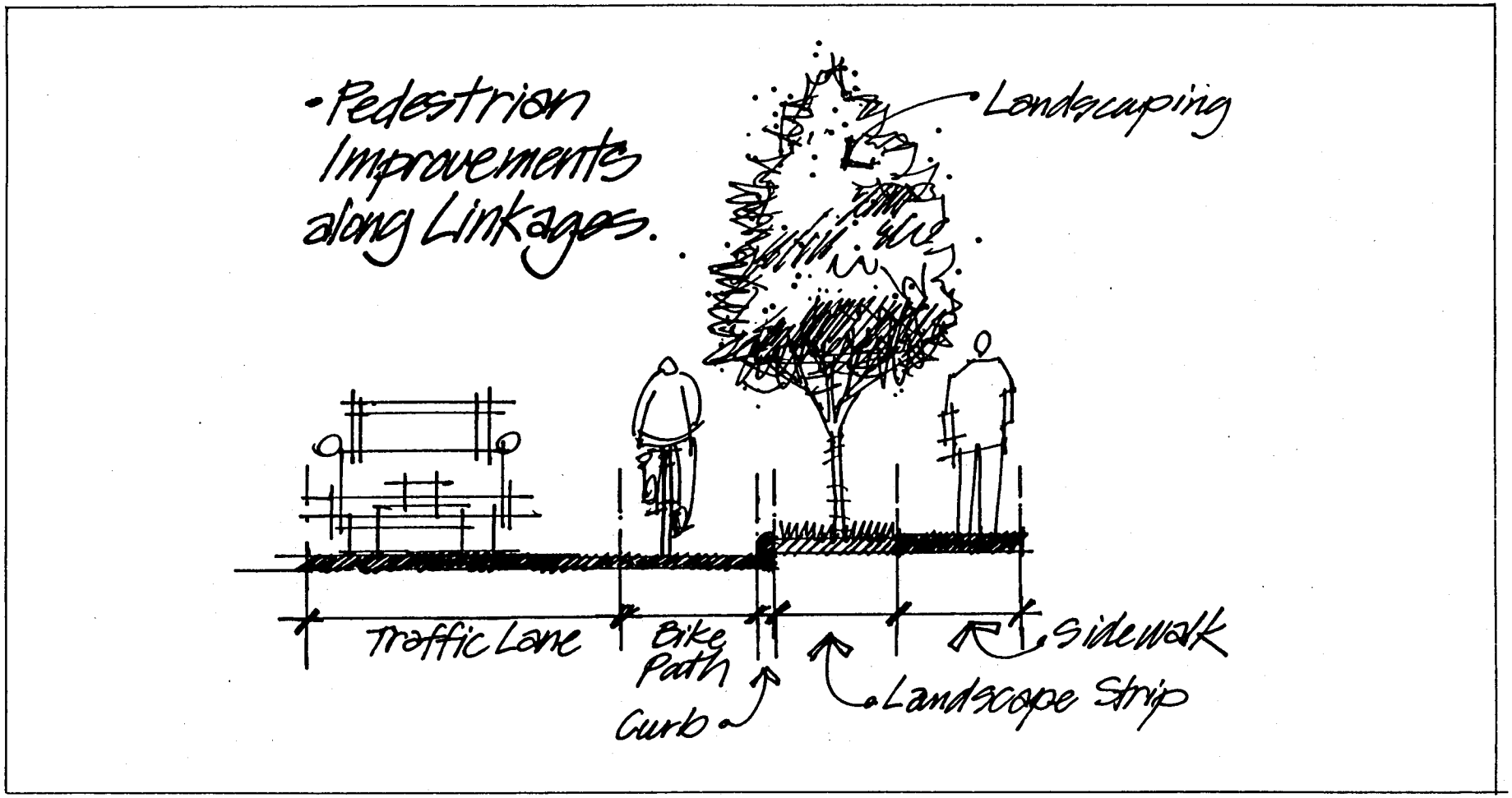

Figure II-13
Pedestrian Connections:
68th Avenue and 73rd Avenue NE

Kenmore Urban Activity Center

KING COUNTY PLANNING AND COMMUNITY DEVELOPMENT

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4. VEHICLE ACCESS AND CIRCULATION

Transportation Improvements

The recent Kenmore Circulation Study included a number of recommendations for improving local vehicle access in Kenmore and reducing the impacts from heavy through traffic on SR-522 and 68th Avenue N.E. We believe that these recommended improvements will also result in enhanced pedestrian access and circulation throughout the center.

Guideline K-18 The recommended transportation improvements in the Kenmore Traffic Circulation Study should be completed. From the standpoint of improved pedestrian access and circulation, the following proposed improvements should be given highest priority:

- Widening and realignment of N.E. 181st Street to create a continuous, three lane roadway between 73rd Avenue N.E. and 65th Avenue N.E.
- Extension of N.E. 181st Street to the east and south to connect with SR-522.
- Widening and realignment of N.E. 175th Street to the south to increase separation from SR-522, plus intersection improvements at N.E. 175th Street/68th Avenue N.E. and SR-522/68th Avenue N.E.
- New signal on N.E. 175th Street between SR-522 and N.E. 175th Street (western segment). This signal should be located where N.E. 175th Street intersects with new roadway in mixed-use site.

The county is currently involved in a major transportation study to identify and evaluate alternative solutions to the severe traffic congestion problems along SR-522. Any planned transportation improvements that are adopted as part of that effort should be integrated with the applicable development and design guidelines in this study (e.g. pedestrian crossings).

Road Standards

With the proposed widening/realignment of N.E. 181st Street and the new roads that will be constructed as part of development in the mixed-use area south of SR-522, opportunities are afforded for improving these primary pedestrian streets in ways that make them more attractive and accessible for pedestrians.

If the recommendations from the Kenmore Circulation Study are implemented, N.E. 181st Street will have a continuous 60-foot right-of-way that includes two traffic lanes plus a center lane for left-hand turns. In order to help meet some of the parking needs for surrounding developments, as well as to enhance the "Village Street" feeling along this primary pedestrian street, it is recommended that the center turn lane be eliminated and on-street parallel parking be permitted on both sides of the street (with bump out curb at crosswalks) [see Figure II-8].

In the mixed-use district south of SR-522, the vehicular circulation system will be established as part of the overall master site planning for this key area. At a minimum, the vehicular circulation system should include streets in the general areas, as depicted in Figure II-14.

The major north-south pedestrian streets in the Mixed-Use District (see Figure II-14) are envisioned as wide boulevards that include a landscaped median, four traffic lanes, and wide, landscaped sidewalks (see Figure II-9). The other primary pedestrian streets in the Mixed-Use District should be designed to include elements (on-street parking, two traffic lanes) as shown in Figure II-8.

Guideline K-19 As part of future transportation improvements on N.E. 181st Street, the center turn lane should be eliminated between 68th Avenue N.E. and 73rd Avenue N.E., and parallel parking should be permitted on both sides of the street. Curbs and sidewalks should be constructed along the entire route. (See Figure II-8)

Guideline K-20 The vehicular circulation system in the Mixed-Use District should, at a minimum, include streets in general location shown in Figure II-14. Designated primary pedestrian streets in the Mixed-Use District should be constructed to the following standards:

- Major North-South Streets: 120 foot right-of-way that includes 48 foot landscaped median, four 12 foot traffic lanes, and 12-foot sidewalks (see Figure II-9).
- Other Primary Pedestrian Streets: 60 foot right-of-way that includes two 12-foot traffic lanes, 8-foot parallel parking strips, and 10-foot sidewalks (see Figure II-8).

Access and Circulation

One important way of creating streets that are attractive to pedestrians is by minimizing pedestrian-automobile conflicts along the sidewalk. The key to reducing such conflicts is to restrict vehicle access points (driveways) along pedestrian oriented streets.

Guideline K-21 In the North Pedestrian District, N.E. 181st Street between 68th Avenue N.E. and 73rd Avenue N.E. is the most important pedestrian route. As new development or redevelopment occurs in this area, vehicle access points should be limited as follows:

- No access points should be allowed if there is alternative access (via other roads) to the site.
- A maximum of one access point per site should be allowed if there is no alternative access.

On all other primary pedestrian streets in the North Pedestrian District, a maximum of one vehicular access point per site should be permitted.

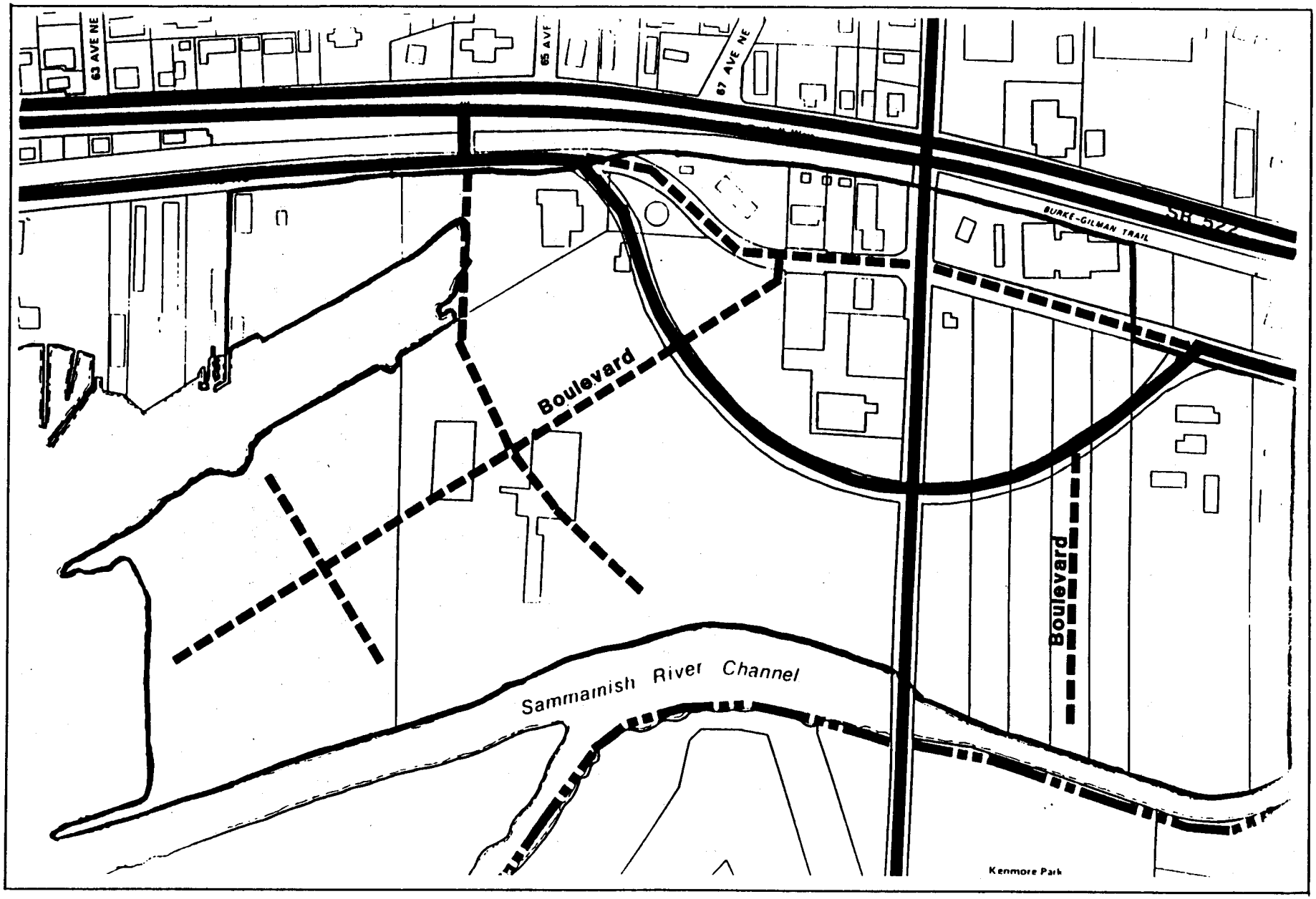

Figure II-14

Mixed Use Pedestrian District: Vehicular Circulation

Kenmore Urban Activity Center

KING COUNTY PLANNING AND COMMUNITY DEVELOPMENT

Primary

Secondary

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Guideline K-23 In the North Pedestrian District, adjacent properties should be encouraged to provide a single shared access point for developments that front primary pedestrian streets. In addition, owners of property with frontage along N.E. 181st Street (between 68th Avenue N.E. and 73rd Avenue N.E.) should be encouraged to develop alternative east-west access roads (between SR-522/N.E. 181st Street and between N.E. 182nd Street/N.E. 181st Street).

Guideline K-24 In the Mixed-Use District, vehicular access points on primary pedestrian streets should be limited to one for every 200 linear feet of site frontage.

Figure II-15 illustrates these guidelines.

In addition to reducing pedestrian-auto conflicts along primary pedestrian streets, the on-site vehicular circulation system of all developments should promote pedestrian movement and safety.

Guideline K-25 In the North Pedestrian District and Mixed-Use District, the on-site vehicular circulation system of all new developments should minimize conflicts between autos and pedestrians by including some or all of the following:

- Provide pedestrian crosswalks at key crossing areas.
- Construct tighter turning radius that reduces vehicular speed.
- Include signage that clearly communicates the location of vehicular and pedestrian zones.
- Provide designated passenger drop-off areas.
- Include speed bumps in areas of high pedestrian activity
- Permit parking on interior roads as a way of slowing down vehicular traffic.

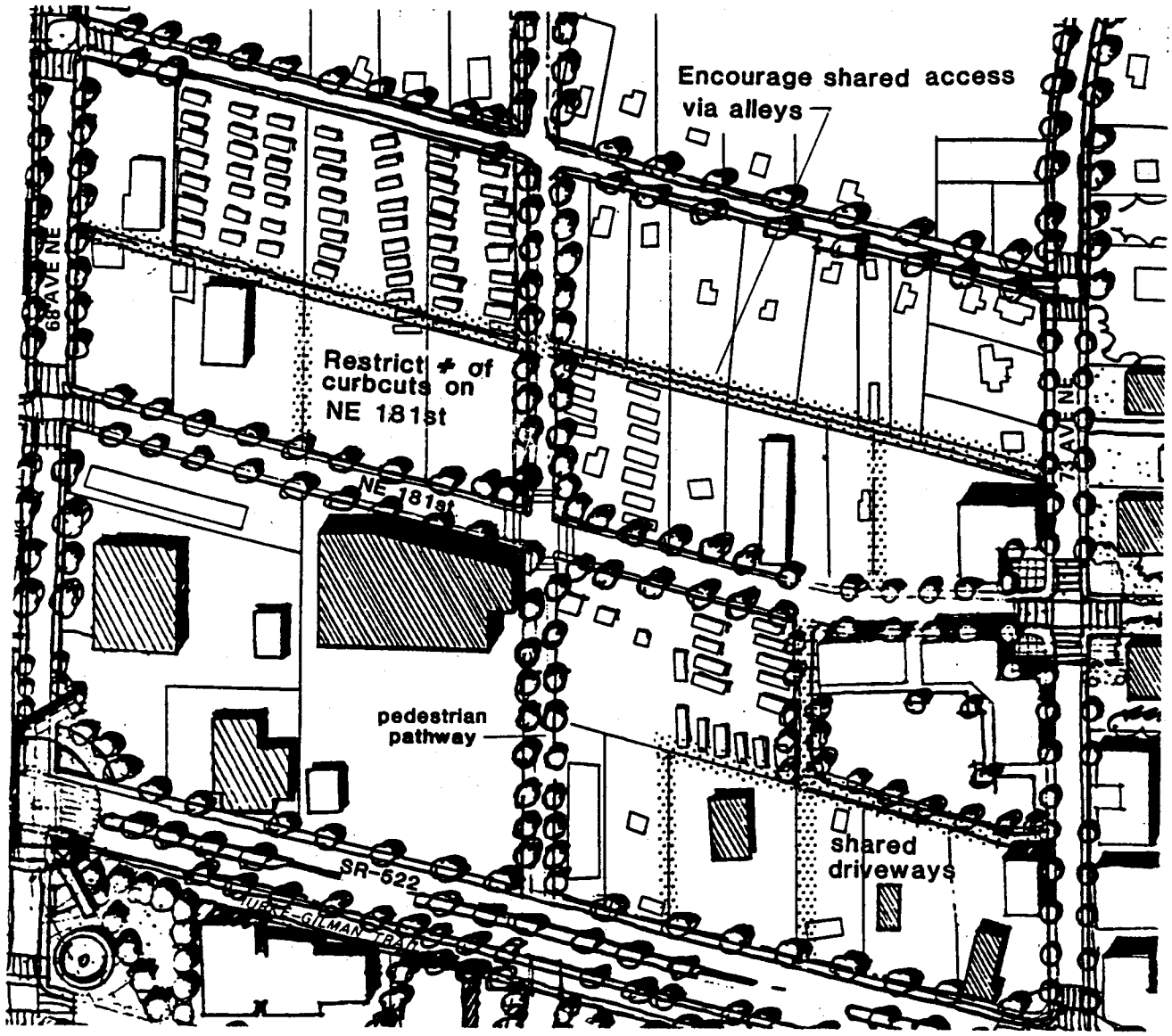

Figure II-15
Guidelines for Vehicle Access on Primary Pedestrian Streets

Kenmore Urban Activity Center

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5. TRANSIT

Several of the development and design guidelines for Kenmore are intended to encourage the use of transit rather than the private automobile as a mode of travel to, from, and within the Kenmore center. For example, Guideline K-4 and K-5 permits increased development densities in both the North and South Pedestrian Districts as a way of promoting increased transit use. Likewise, Guideline K-12, which recommends a maximum off-street parking requirement for individual developments, should result in greater use of transit.

There are two existing park-and-ride lots in the Kenmore center. These two major transit facilities, however, are poorly integrated with major commercial activities in the center. The transit center proposed for the mixed-use site south of SR-522 should provide better integration with center development.

Guideline K-26 — The transit center proposed for the area south of SR-522 should be integrated with surrounding development. Pedestrian connections should be provided between the transit center and the Burke-Gilman Trail, the planned pedestrian crossing of SR-522 and surrounding commercial/residential mixed-use development.

Guideline K-27 — As future development occurs in the office/civic core area, consideration should be given to increasing the capacity of the park and ride lot on SR-522 and using it as a shared park-n-ride/community parking facility.

6. LANDSCAPING AND PUBLIC ACCESS/PARKS/PUBLIC SPACES

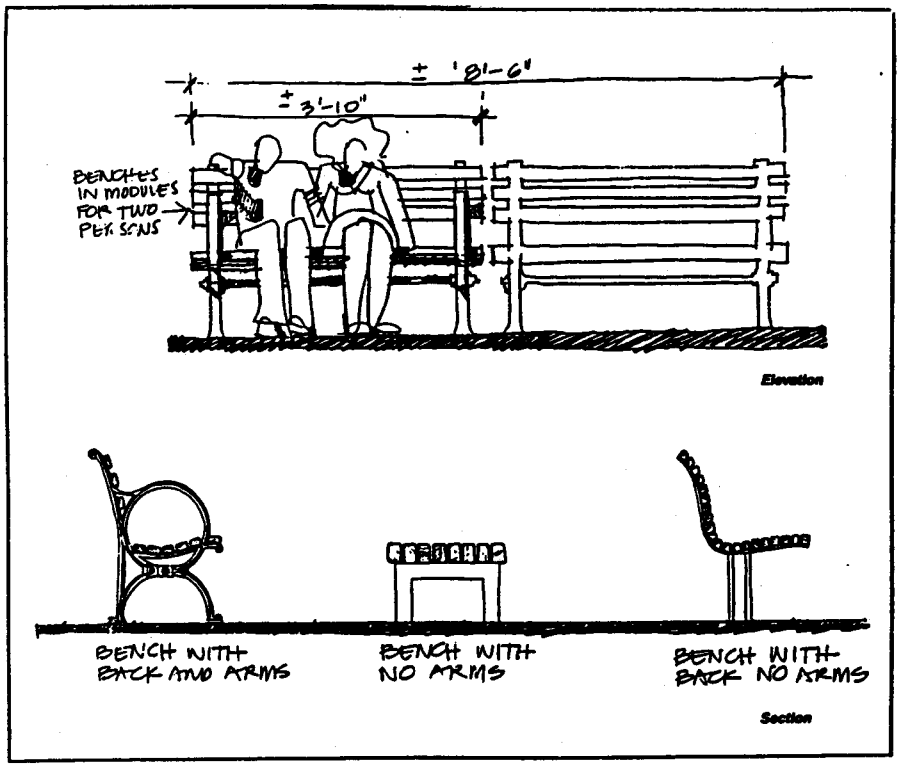
Landscaping

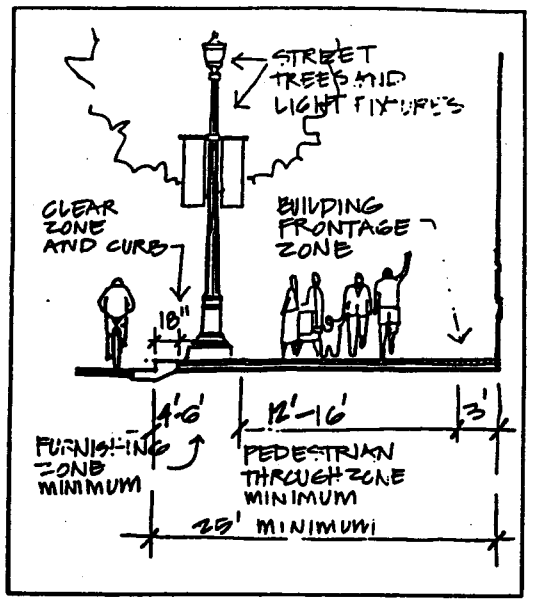
The King County Zoning Code includes minimum landscape requirements for site development that cover both building and parking areas. In addition, the Northshore Community Plan includes supplemental policies and requirements for landscaping throughout the Northshore planning area. Together these standards are sufficient to assure adequate on-site landscaping is provided for all new developments in the Kenmore activity center.

Landscape improvements within the right-of-ways of designated primary pedestrian streets are vital for attracting increased pedestrian activity in the District. Figures II-8 and II-9 depict illustrative section diagrams of primary pedestrian streets in the Kenmore center. The major landscape elements include a landscaped boulevard median (mixed-use site only), and sidewalk improvements such as street trees, special lighting fixtures, benches and planters. Figure II-16 includes examples of design features for enhancing the attractiveness of pedestrian streets.

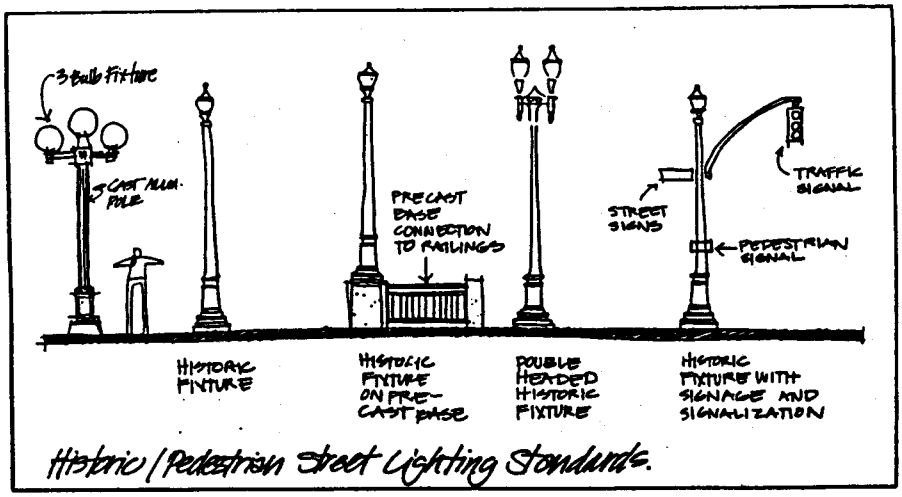
Guideline K-28 — A landscape plan should be developed for all primary pedestrian streets. The landscape plans should strive to create an environment that promotes pedestrian access and circulation. At a minimum, the landscape plan should include standards for:

- Median landscaping
- Street trees and planters
- Special lighting fixtures
- Special paving patterns
- Benches and other public amenities
- Signage

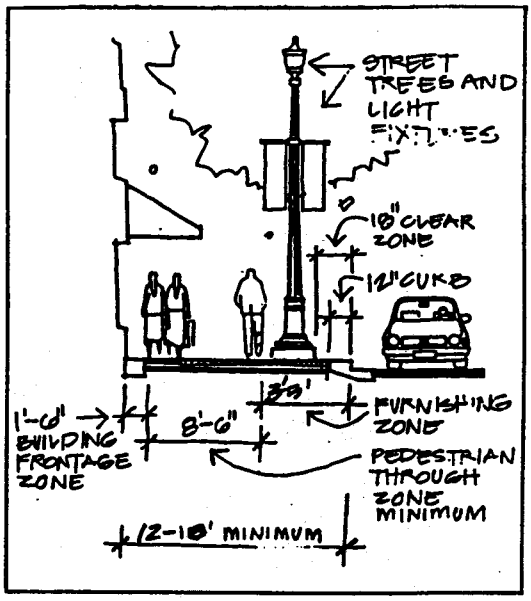




12 Ft. R.O.W. Prototypical Sidewalk



Historic / Pedestrian Street Lighting Standards.



"Main Street" Sidewalk

Figure II-16

Examples of Landscaping and Other Amenities: Pedestrian Streets

Kenmore Urban Activity Center

KING COUNTY PLANNING AND COMMUNITY DEVELOPMENT

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Public Access and Parks/Public Spaces

The Kenmore activity center suffers from the absence of accessible public space. While the center is blessed with shoreline frontage along Lake Washington and the Sammamish River Channel, the current industrial activities located south of SR-522 preclude public use and enjoyment of the shoreline area. As new development or redevelopment occurs in Kenmore, it is critical that substantial amounts of public space be preserved and/or created.

Figure II-17 depicts the location of recommended new major open space areas in the Kenmore center. In the mixed-use area south of SR-522, recommended open space areas include:

- Preservation of the entire shoreline area along the Sammamish River Channel. Public access will likely be limited in this sensitive wetland area.

- Major public space/parks along the Lake Washington shoreline and at the foot of the waterway located in the western end of the Kenmore center. These two public space areas would accentuate the view corridors proposed in these locations (see View Corridor guidelines below).

- An urban plaza near SR-522/68th Avenue N.E. intersection that is integrated with the proposed transit center, pedestrian crossing of SR-522 and the Burke-Gilman Trail. An illustrative concept of this proposed plaza is shown in Figure II-18.

In the area north of SR-522, two new public spaces are recommended:

- A plaza around the N.E. 181st/73rd Avenue N.E. intersection that provides a key public space within the civic/office core area. Figure II-19 shows an illustrative concept of this plaza.

- A small park north of SR-522 near 68th Avenue N.E. that would provide access to the proposed pedestrian overpass (see Guideline K-18).

Guideline K-29 Public spaces should be preserved and/or developed in the Kenmore activity center in the areas depicted in Figure II-17. Where feasible, the provision of these public space areas should be required as a condition of development or redevelopment.

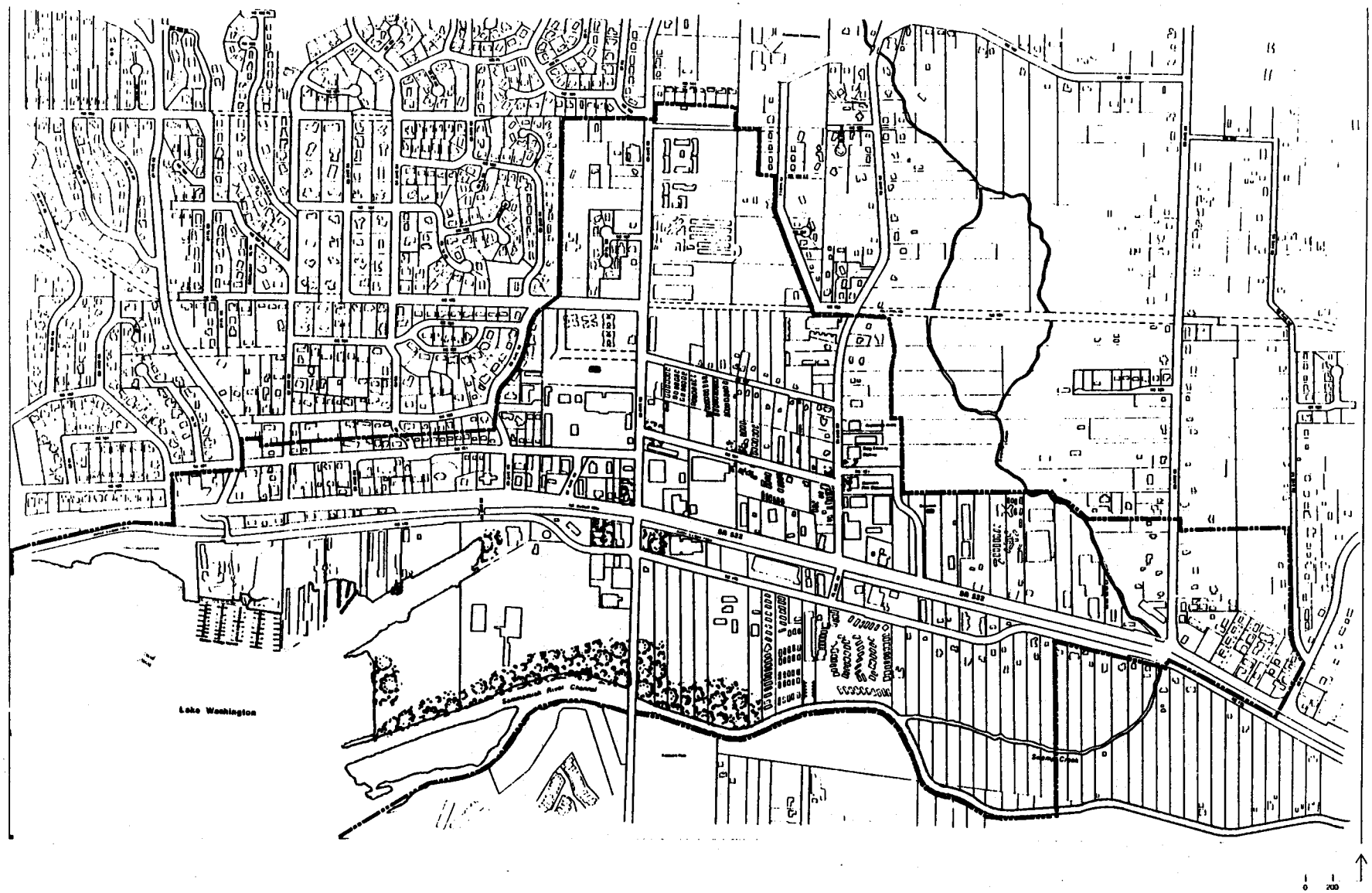

Figure II-17

Major Park/Public Space Areas

Kenmore Urban Activity Center

KING COUNTY PLANNING AND COMMUNITY DEVELOPMENT

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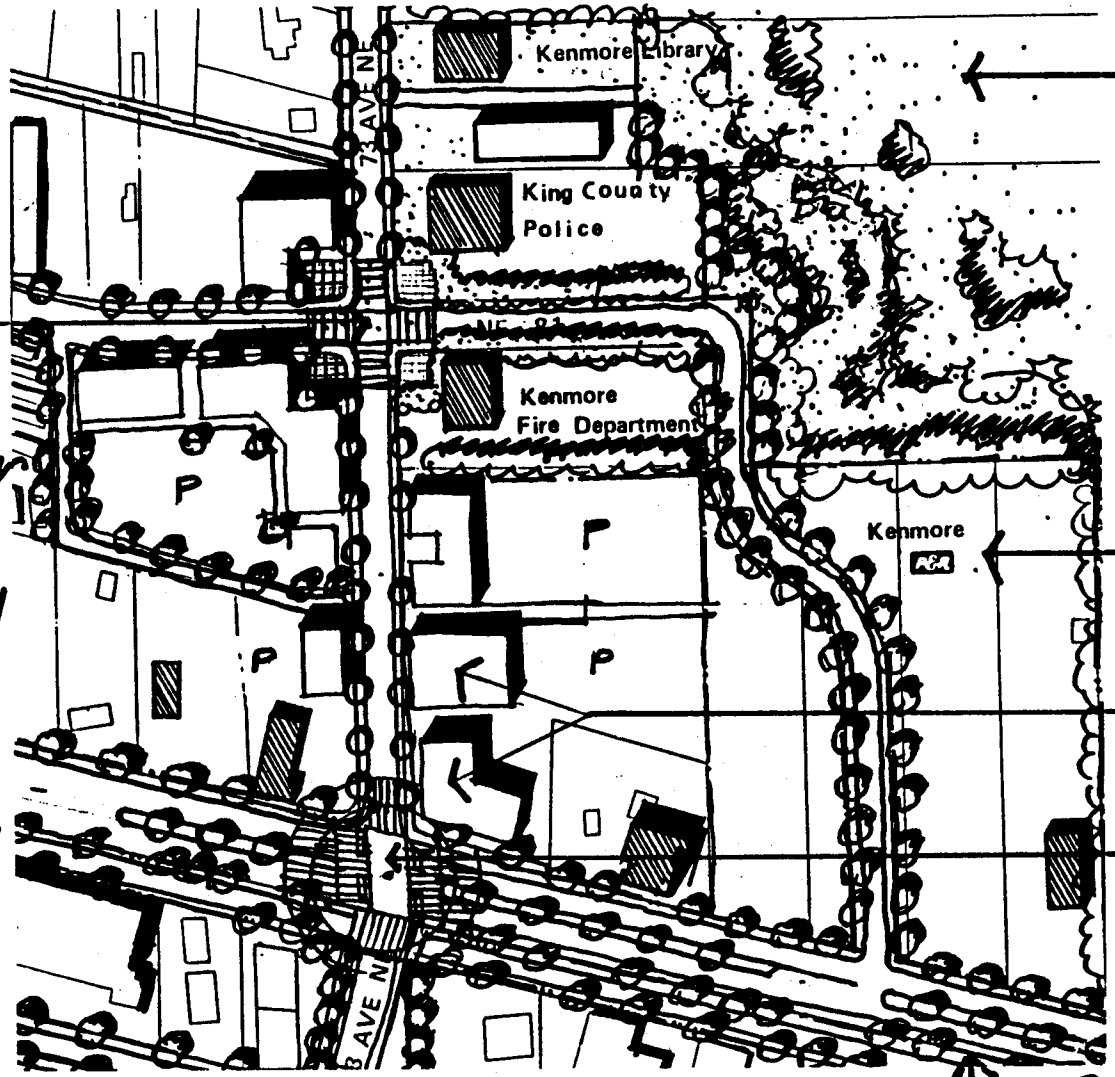

Environmentally Sensitive Area Restrict Access

Kenmore Civic Center Plaza: Develop a Civic Center Plaza around the Police & Fire Dept. and Library with Potential for a community center & senior center & future City Hall. New Office Dev. is encouraged with frontage along 73RD Ave. & 181ST.

Kenmore Metro Park-n-Ride Lot

New Office Dev. with Parking at Rear.

Improved Pedestrian Crossing at 73RD Ave and SR 522.

Burke Gilman Trail.

Figure II-18
Civic Plaza Concept
Kenmore Urban Activity Center
KING COUNTY PLANNING AND COMMUNITY DEVELOPMENT

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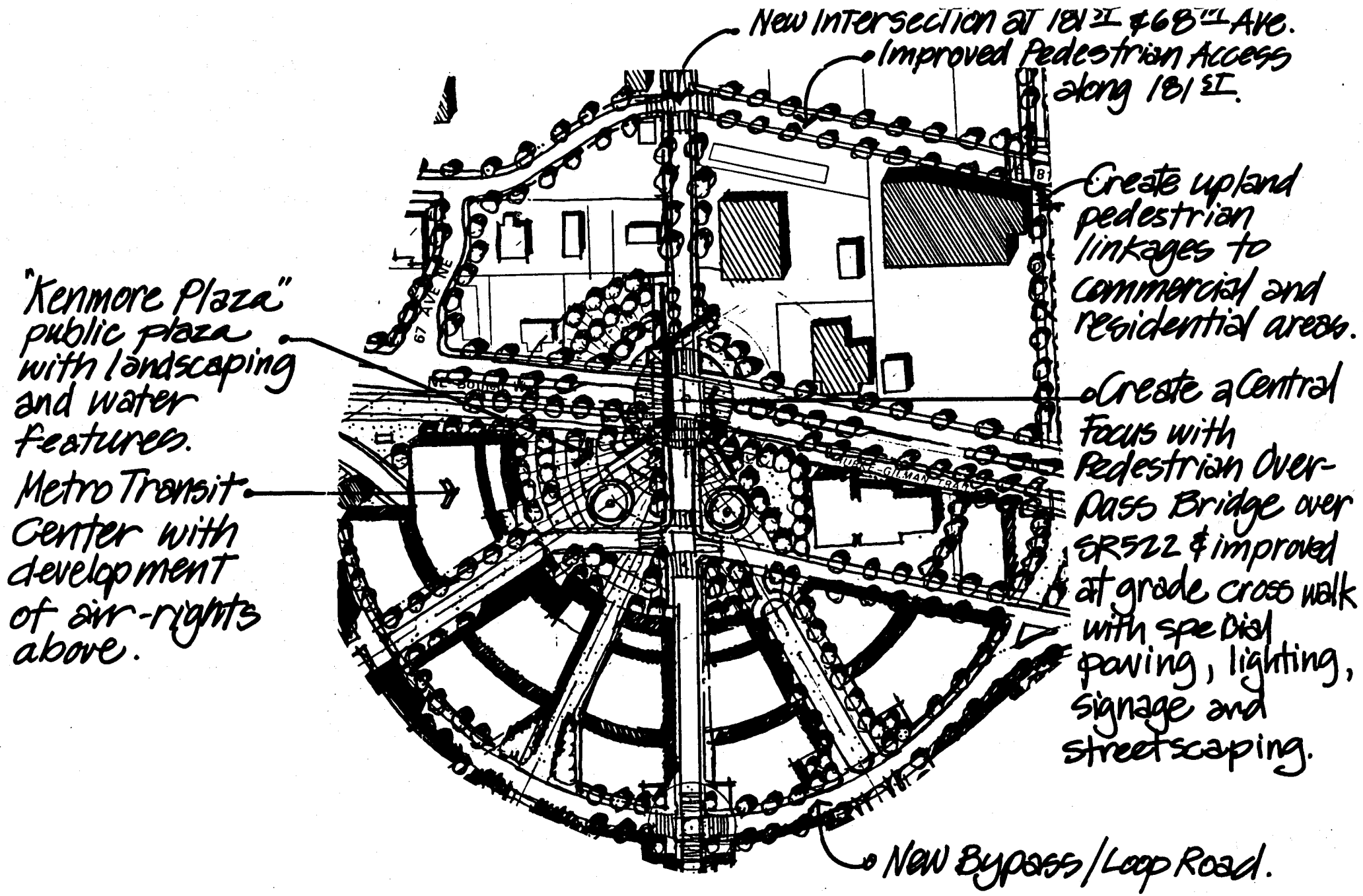

Figure II-19
Central Plaza Concept
Kenmore Urban Activity Center
KING COUNTY PLANNING AND COMMUNITY DEVELOPMENT

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In addition to providing major new open space areas in the Kenmore, all commercial developments should provide a minimum area of public space.

Guideline K-30 In the North Pedestrian District, public space should be provided as part of all new development in an amount that covers no less than 10% of the total site area. Public space includes parks, plazas, and arcades, but excludes pedestrian walkways.

For properties with less than one acre of site area, a park acquisition fee may be paid in lieu of providing the minimum amount of on-site open space.

Guideline K-31 Adjacent property owners are encouraged to enter into joint agreements to provide the minimum public open space through clustering buildings and/or parking within multiple sites.

Guideline K-32 In the Mixed-Use District, public space should be provided as part of all new development in an amount that covers a minimum of 20% of the total site area. The nature and location of the public space should be consistent with Figure II-17 and related discussion.

Guideline K-33 Redevelopment of the Mixed-Use District may include construction of a private marina. To enhance public access to the shoreline, public transient moorage should be provided as part of any private marina development.

View Corridors

In the mixed-use area south of SR-522, visual access to Lake Washington from the upland areas should be afforded via the preservation of view corridors. Figure II-20 depicts the general location of major view corridors in the mixed-use area.

Guideline K-34 In the Mixed-Use District, a minimum of three view corridors should be provided that preserve unobstructed views from N.E. 175th Street to Lake Washington and/or the Sammamish River Channel. The location of these view corridors should be consistent with the general areas depicted in Figure II-20.

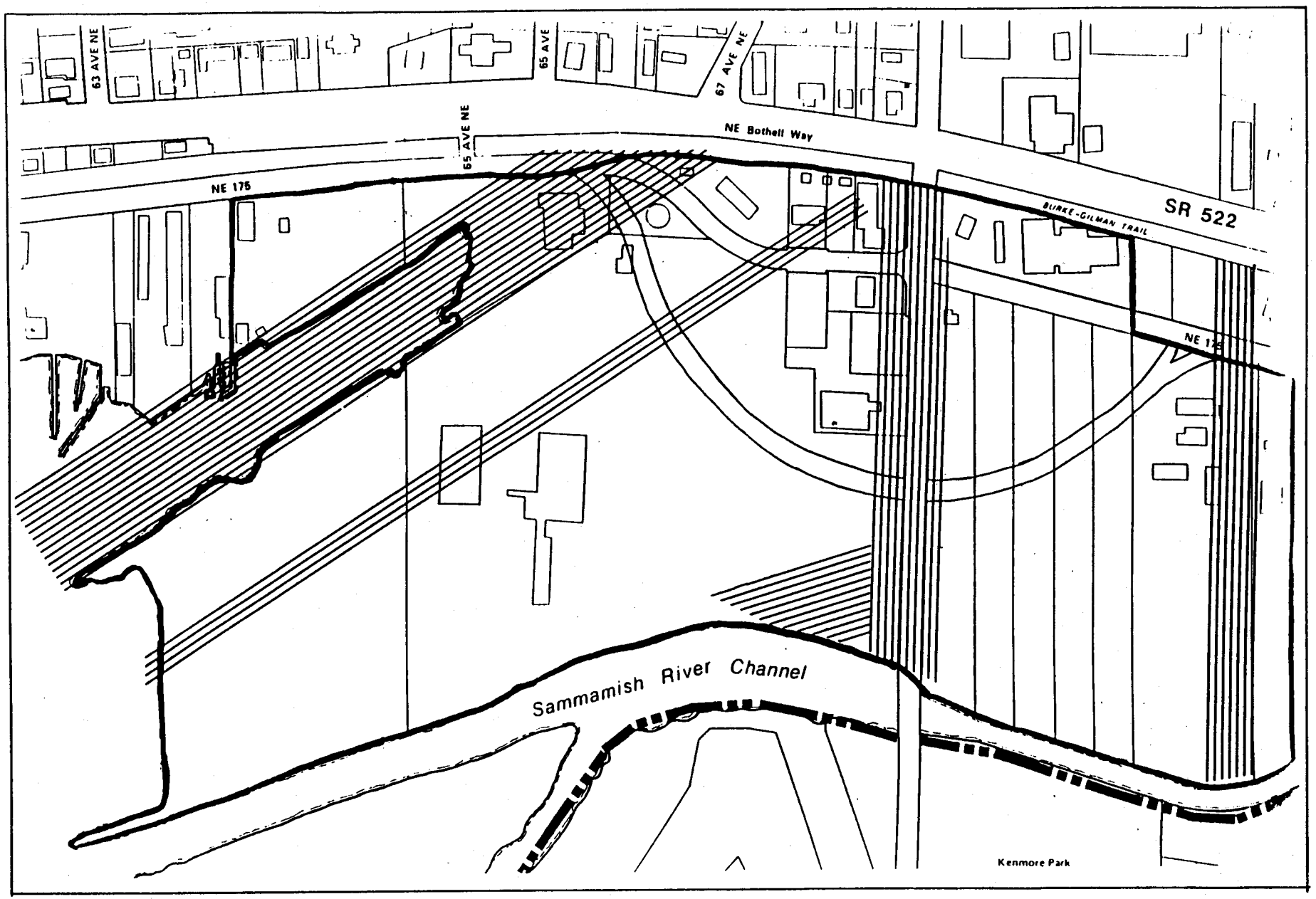

Figure II-20

Mixed Use Pedestrian District: View Corridors

Kenmore Urban Activity Center

KING COUNTY PLANNING AND COMMUNITY DEVELOPMENT

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Section III.

Woodinville Urban Activity Center

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A. EXISTING CONDITIONS

The Woodinville Urban Activity Center comprises approximately 450 acres in northeast part of King County. As displayed in Figure III-1, the Woodinville center is bounded by SR-522 and the proposed new north bypass road on the north, Woodinville-Duvall Road on the east, the proposed new south bypass road on the south, and 124th Avenue and the Sammamish River on the west. The major commercial core in Woodinville is centered around Woodinville-Duvall Road (N.E. 175th Street).

1. MAJOR ACTIVITY NODES

Figure III-2 shows the primary activity nodes in the Woodinville center. In the western part of the center between SR-522 and Woodinville-Snohomish Road N.E. is a crescent of light and heavy industrial uses. The Burlington Northern Railroad right-of-way runs through this area. The primary retail core is located around N.E. 175th Street between 131st Avenue and the eastern end of the activity center. Existing retail development consists mostly of a series of one-story strip centers with buildings surrounded by large surface parking lots.

The western part of the Woodinville center includes the major public uses and open space areas in the activity center, including the Sammamish River and adjacent regional trail system, the Sorenson Elementary School and related ballfields, and the Woodinville Memorial Park cemetery.

Residential development in the Woodinville center consists of newly constructed multi-family development and a large mobile home park in the southwest sector, and additional multi-family uses in the northwest segment. A 470-car park-n-ride lot is situated on the west side of 140th Avenue N.E. just north of N.E. 175th Street. Approximately 50 acres of largely undeveloped parcels is situated area in the north part of the center (bordered by N.E. 175th, 140th Avenue N.E. and Woodinville-Snohomish Road N.E.).

Overall, the Woodinville center is an active retail center which serves well the needs of the surrounding community. Since the commercial core is low-scale and spread out over a fairly large area, pedestrian activity throughout the center is limited.

2. ACCESS AND CIRCULATION

Vehicular

The existing and planned vehicular circulation system in the Woodinville Center is depicted in Figure III-3. There are a number of major roadways providing access to and from the center, including SR-522, SR-202, Bothell-Woodinville Road, N.E. 175th Street (Woodinville-Duvall Road), Woodinville-Snohomish Road N.E., and 140th Avenue N.E.

During the past decade, a number of transportation studies were undertaken in the Woodinville center to solve two key circulation problems. One was the need to alleviate congestion along N.E. 175th Street by reducing the amount of through traffic that uses that roadway. N.E. 175th is a three-lane street with a relatively small (60 feet) right-of-way, and as such has a limited capacity. The other problem was the need to improve local vehicular access within the commercial core area of the center. Currently there is an almost complete absence of local streets in the Woodinville center. As a result, virtually all local traffic, must use major roadways such as N.E. 175th Street and 140th Avenue N.E. The large surface parking lots in the Woodinville Center are often used as local circulation routes.

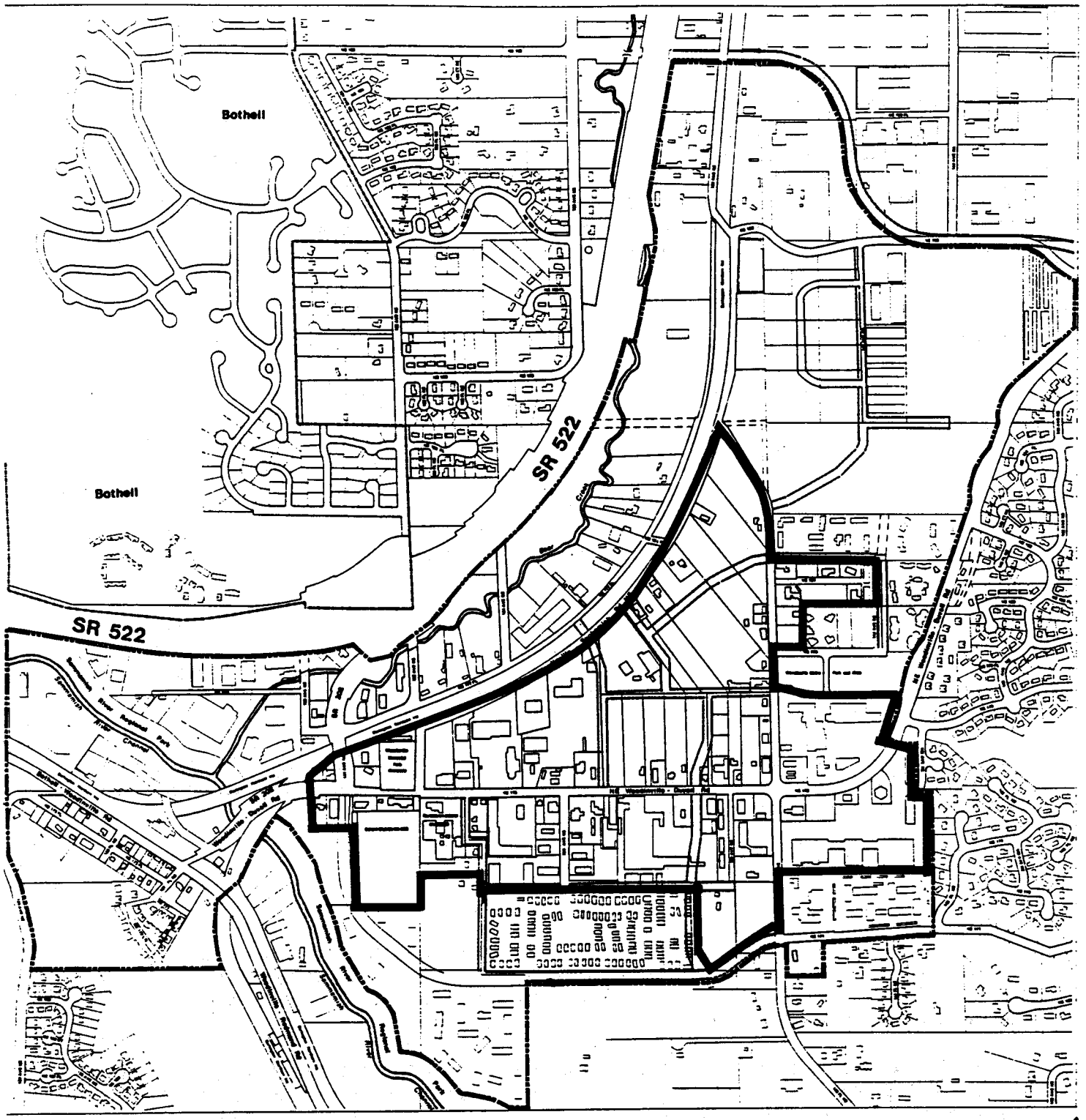

Figure III-1

Study Area Boundaries

Woodinville Urban Activity Center

KING COUNTY PLANNING AND COMMUNITY DEVELOPMENT

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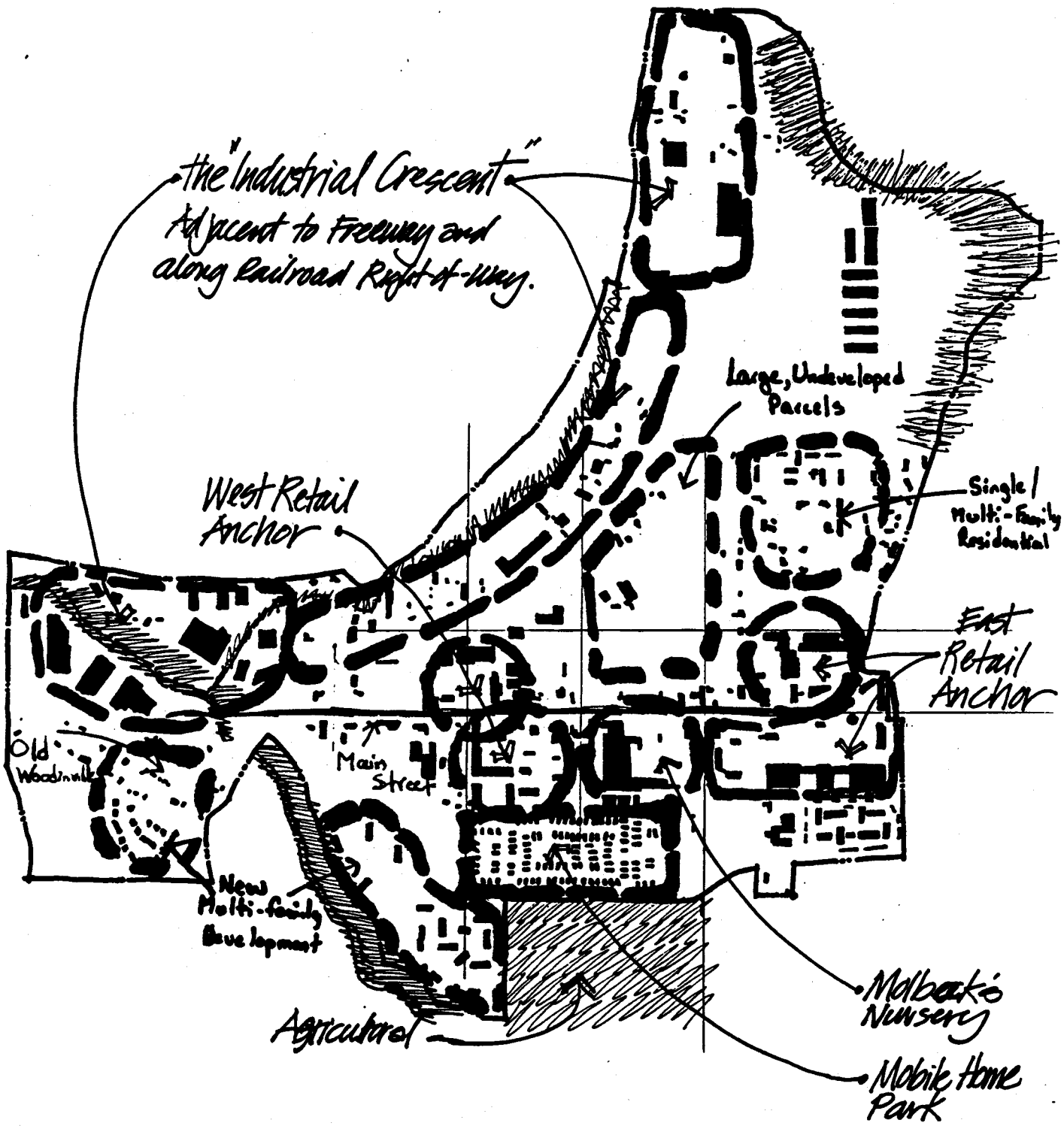

Figure III-2

Existing Activity Nodes

Woodinville Urban Activity Center

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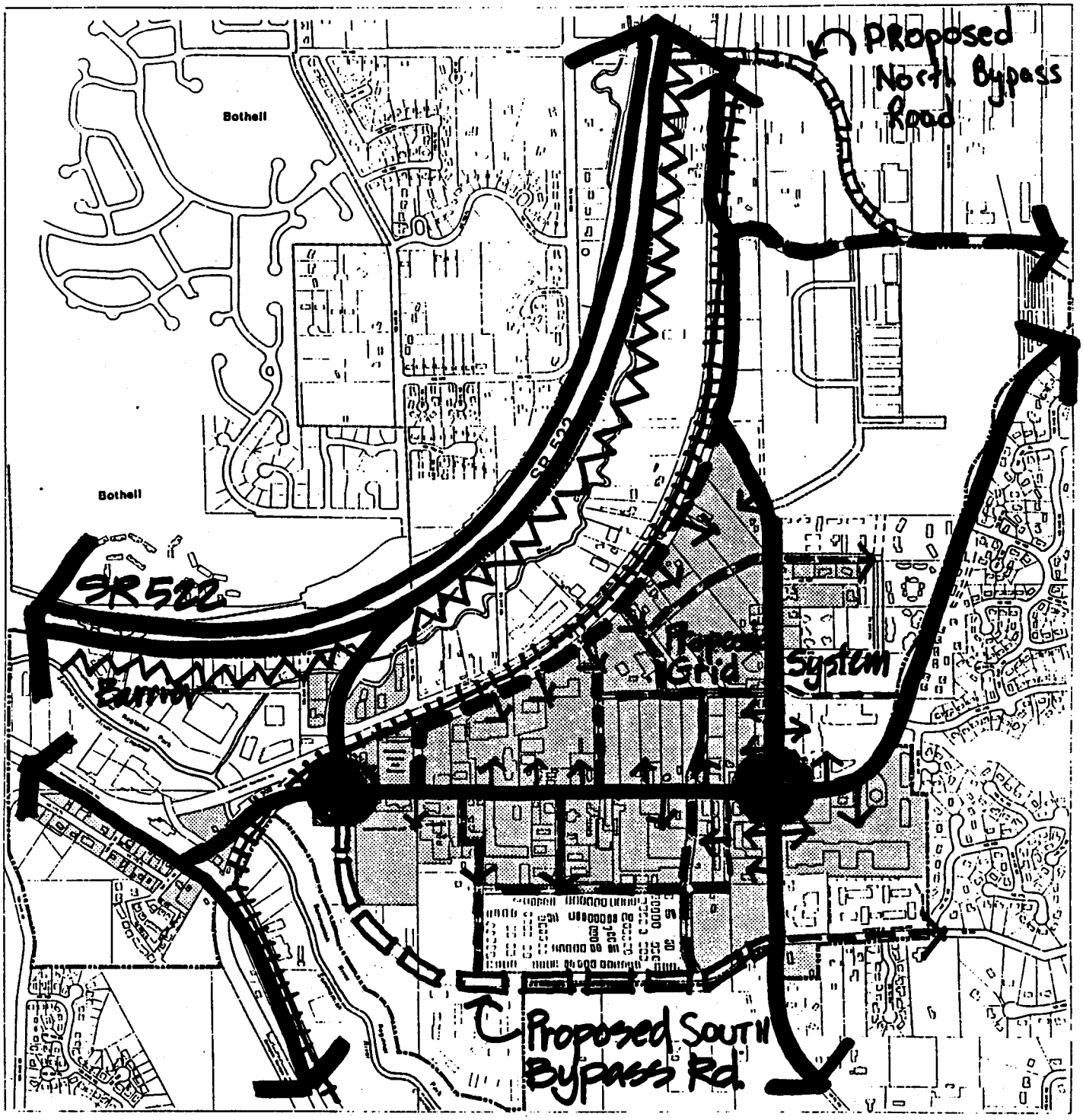

Figure III-3
Vehicular Circulation

Woodinville Urban Activity Center

KING COUNTY PLANNING AND COMMUNITY DEVELOPMENT

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As a result of these studies, two major transportation improvements are planned for the Woodinville activity center. First, bypass roads will be constructed at both the north and south ends of the activity center that are intended to redirect a substantial amount of through traffic (particularly trucks) away from N.E. 175th Street. Second, a new grid system has been adopted for the commercial core area that will improve local vehicular access. The locations of both the proposed bypass road and new grid system are shown on Figure III-3.

Pedestrian

The limited amount of pedestrian activity in the Woodinville center is due to several factors. First, as noted above, existing commercial development is comprised largely of one-story strip centers that together form a highly dispersed retail core that discourages walking. Second, N.E. 175th Street, which is the primary commercial route in the center, is generally not pedestrian-friendly due to the large number of sidewalk curb cuts and the presence of large parking lots between the sidewalk and principal building entrances of most developments. Finally, the almost complete absence of local access roads in the center not only restricts vehicular circulation, but also limits the ability to use public right-of-ways (sidewalks) for pedestrian activity.

The Sammamish River Trail, located on the western edge of the activity center, is part of a major regional bicycle trail system in King County. Currently there is one pedestrian/bicycle linkage connecting the trail with adjacent multi-family development. Pedestrian connections to the commercial core are limited.

3. SUSCEPTIBILITY TO CHANGE ANALYSIS

A primary objective of this study effort is to prepare design guidelines that have a high probability of being implemented over the planning timeframe of the Northshore Community Plan Update. Therefore, the design focus was on those properties in the Woodinville center that are most likely to develop or redevelop over the next six to ten years.

A susceptibility to change analysis was undertaken to evaluate the development or redevelopment potential of all properties with commercial or mixed-use designations in the Woodinville center. The following evaluation criteria were used in this analysis:

- Land Utilization: vacant versus developed sites
- Physical Constraints: degree to which natural features constrain site development
- Age and condition of buildings
- Zoning Utilization: degree to which existing development maximizes zoning potential (both permitted uses and density).
- Location: relative to other activities, access, visibility
- Planned Project: development/redevelopment currently under active consideration

Figure III-4 depicts the results of the susceptibility to change analysis for the Woodinville activity center. Properties are classified into two categories: stable and potential for development/ redevelopment. This analysis reveals that the largest concentration of land area likely to experience development change over the next decade is the approximately 50 acres located in the northwest sector of the commercial core area. The northern 25 acres of this area (north of park-n-ride lot) is under single ownership, while the southern area near 175th Street is comprised of a series of smaller parcels with multiple owners.

There are several other smaller concentrations of properties in the Woodinville center that are likely to experience development change over the next six to ten years. They include several parcels fronting N.E. 175th Street at the western edge of the commercial core, and the area around the 140th Avenue N.E./N.E. 171st Street intersection. Planned developments in this latter area include a medical clinic and expansion of parking for a local nursery.

4. MAJOR OPPORTUNITIES AND CONSTRAINTS

Based on the King County Comprehensive Plan design goals for activity centers, the Northshore Community Plan proposed policies for Woodinville, and an understanding of existing conditions as described above, a number of key design opportunities and constraints can be identified for the Woodinville center.

Opportunities

- *Proposed Bypass Road and Grid System*: While the planned new bypass roads and extension of the local grid system in the Woodinville center are intended primarily to improve vehicular circulation and relieve traffic congestion, these new roadways also will create major opportunities for enhancing the center as an attractive place for pedestrians. First, by redirecting much of the through traffic away from N.E. 175th Street, a new chance is afforded to transform this roadway into a pedestrian-friendly "Main Street" for the commercial core. Second, the new grid system can provide vastly improved pedestrian access throughout the center. The key will be to improve both N.E. 175th and the new grid roads in ways that render these public right-of-ways as attractive circulation routes for pedestrians as well as vehicles.

- *Development Potential in Northeast Area*: The 50 acres of largely vacant properties located in the northeast corner of the commercial core represents a prime opportunity for shaping future development that is strongly oriented to the pedestrian.

- *Existing Public Uses and Open Space*: The concentration of public uses (Sorenson School) and public open spaces (Memorial Park, Sorenson School ballfields, Sammamish River and trail) in the western edge of the commercial core represents building blocks for a potential "Green Gateway" that could form a major entryway to the Woodinville center.

- *Existing Streetscape Improvements along N.E. 175th Street*: Portions of the sidewalk along N.E. 175th Street have been improved with special paving patterns, street trees and other landscaping. These improvements represent a starting point for creating a continuous attractive streetscape along the entire length of N.E. 175th Street in the commercial core area.

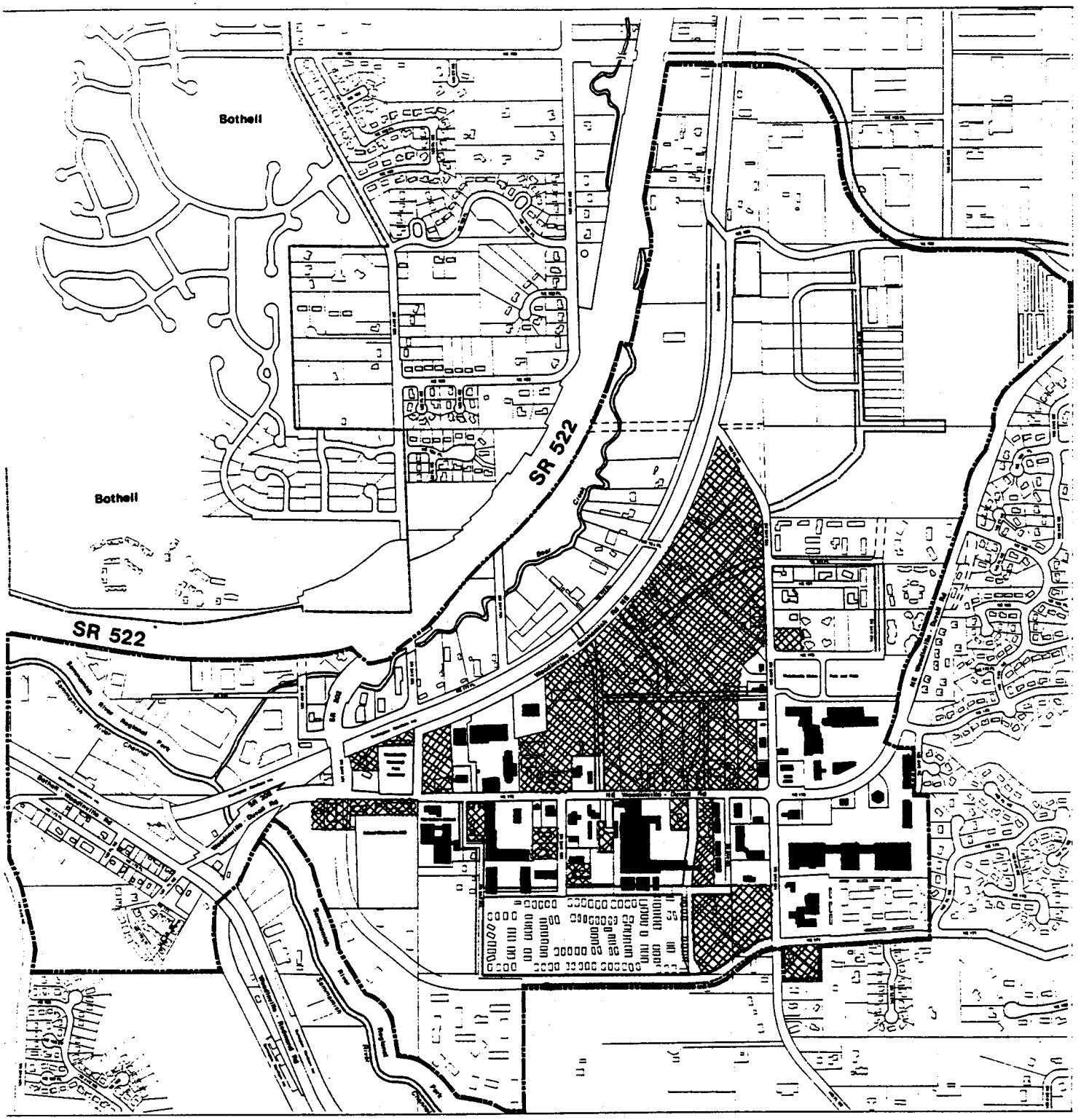

Figure III-4

Susceptibility to Change

Woodinville Urban Activity Center

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Constraints

- *Low Scale of Development*: The existing one-story buildings spread throughout the commercial core represents a scale of development that is not conducive to significant pedestrian activity. Furthermore, Northshore Community Plan policies for the Woodinville center state that buildings should not exceed three stories. Some of the key design objectives for urban activity centers that were adopted as part of the King County Comprehensive Plan -- such as compactness and promoting the use of transit -- are largely dependent upon achieving development densities that are higher than what is likely to occur in the Woodinville center.

- *Existing Auto-Oriented Development*: Much of the development that already exists along N.E. 175th Street consists of auto-oriented strip centers. These developments include large parking lots and numerous driveways along the 175th Street right-of-way that creates severe pedestrian-auto conflicts and greatly reduces the area's overall attractiveness for walking. Since much of this area is unlikely to redevelop during the next decade, it will continue to be an obstacle to pedestrian activity in the Woodinville center.

- *Poor Entry Image*: The intersection of N.E. 175th Street and SR 202 is the western entry point to the Woodinville activity center. This intersection experiences significant traffic congestion that combined with the presence of unattractive uses such as service stations conveys a poor first image of the Woodinville center.

B. OPPORTUNITY AREAS

Based upon the foregoing analysis, six "Opportunity Areas" have been identified for the Woodinville urban activity center, as depicted in Figure III-5. These areas have been judged as offering the greatest potential for enhancing the pedestrian orientation of the Woodinville center. The following paragraphs explain the overall design objective for each opportunity area, including the relevant supporting policies from the Northshore Community Plan. These opportunity areas form the basis of the site-specific development and design guidelines that are described in Section III.C.

1. MIXED-USE PEDESTRIAN DISTRICT

While there are opportunities for enhancing pedestrian access and circulation throughout the commercial core area in Woodinville, the greatest potential lies in the largely undeveloped area located in the northeast corner of the center. The southern portion of this area is designated for regional business land uses in the Northshore Community Plan, while the northern segment is planned for mixed commercial-residential uses.

While strongly supporting mixed-use development in this area, the Northshore plan specifies a number of criteria that proposed development must meet, including the provision of pedestrian linkages between residential and commercial uses, implementation of the Woodinville grid system, provision of usable open space, and integration with public transit.

The design objective for this opportunity area is to promote a pedestrian-friendly commercial core area that integrates retail, office and multi-family uses. The pedestrian orientation of this area can be enhanced through a number of elements, including retail shops that front directly onto N.E. 175th Street and the new grid system, prohibition of auto-oriented uses, and reduction in on-site surface parking and the number of driveways that impede pedestrian circulation.

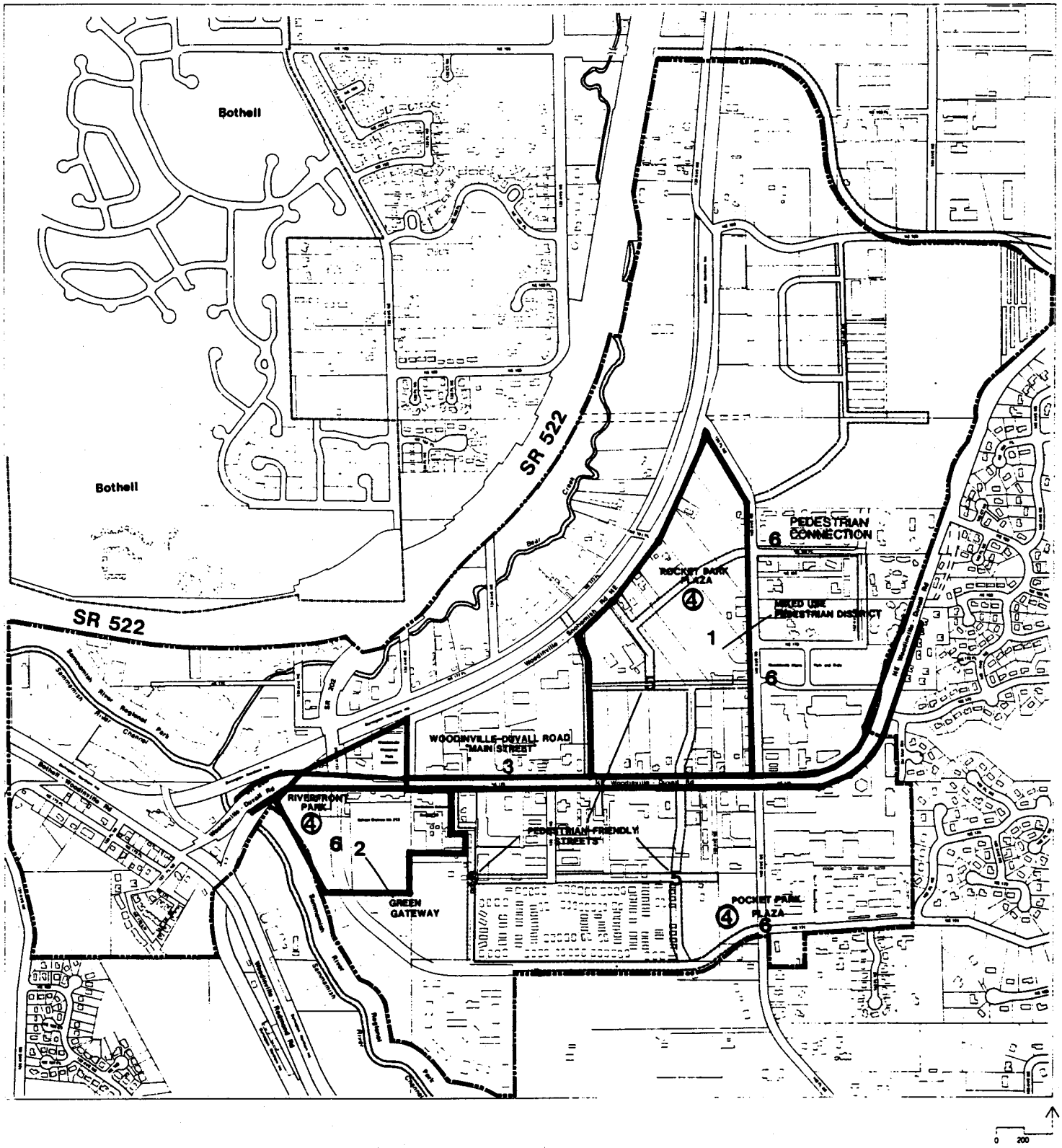

Figure III-5

Opportunity Areas

Woodinville Urban Activity Center

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2. THE GREEN GATEWAY

The intersection of SR-202 and Woodinville-Duvall Road is currently the western gateway to the Woodinville activity center. This area is highly congested and together with the presence of unattractive uses such as service stations conveys a poor first image of the Woodinville center. Although several open space areas are located in this area, they effectively hidden from view of the traveler who is entering the activity center.

The design objective for the "Green Gateway" opportunity area is to physically improve the character and quality of the main entrance to Woodinville. Four elements are significant to this effort, and thus will be the focus of specific development and design guidelines. First, Memorial Park could be physically improved to provide a more attractive open space and historical site for the community. Second, the Sorenson School and related playfields offer potential for becoming major open space and a community center with historical significance. Some of the existing structures located adjacent to Sorenson School are of marginal quality, and there may be opportunities for redevelopment or property acquisition that would provide enhance visual and physical access from N.E. 175th Street to the school and playfield area. Third, the intersection of N.E. 175th Street and the south bypass road should be improved with signage, banners, etc. to create an improved visual image.

Finally, the Sammamish River Park and Trail needs to be reinforced as a key part of the entryway to the Woodinville activity center. This may be accomplished through additional park development along the trail and provision of additional pedestrian linkages to the commercial core.

3. WOODINVILLE-DUVALL ROAD AS "MAIN STREET

With the proposed bypass roads that should divert much of the through-traffic that currently uses Woodinville-Duvall Road (N.E. 175 Street), there is potential for transforming this roadway into a pedestrian-friendly "Main Street" for the Woodinville center.

The design objectives for N.E. 175th Street include additional streetscape improvements that extend pedestrian-friendly sidewalks currently existing along N.E. 175th; landscaping portions of the existing center turn lane; and imposing new development standards that restrict auto access points and reduce or eliminate setbacks.

4. PARKS/PUBLIC SPACES

Since it is highly unlikely that funding will be available to acquire property for a major downtown park in the Woodinville center, the focus will be on developing a series of small or pocket parks. There are several potential sites along the Sammamish River Trail that might be appropriate for a such a park. Other potential small park sites need to be identified in the Woodinville center.

5. THE NEW GRID SYSTEM

The proposed new grid system presents a major opportunity for improving pedestrian access and circulation in the activity center. The design objective is to ensure that the new roads and adjacent development are designed as attractive areas for walking. The right-of-way for these new roads (72 feet) should include wide sidewalks with street trees and other amenities. They should also allow for on-street parking where possible. Development along these local access streets should be encouraged to front the street, with parking located in the rear or side of buildings.

6. PEDESTRIAN LINKAGES

There currently are a limited number of pedestrian linkages between the Woodinville commercial core and surrounding residential areas. In order to encourage pedestrian activity and discourage the use of the automobile, additional pedestrian connections need to be provided.

C. DEVELOPMENT AND DESIGN GUIDELINES

This section describes development and design guidelines for the Woodinville Urban Activity Center. These guidelines consist of a variety of proposed actions -- modifications to zoning development standards, proposed capital improvement projects, and other mechanisms -- that are intended to improve the pedestrian orientation of the Woodinville center and specifically achieve the design objectives of the five opportunity areas described in Section III.B. above.

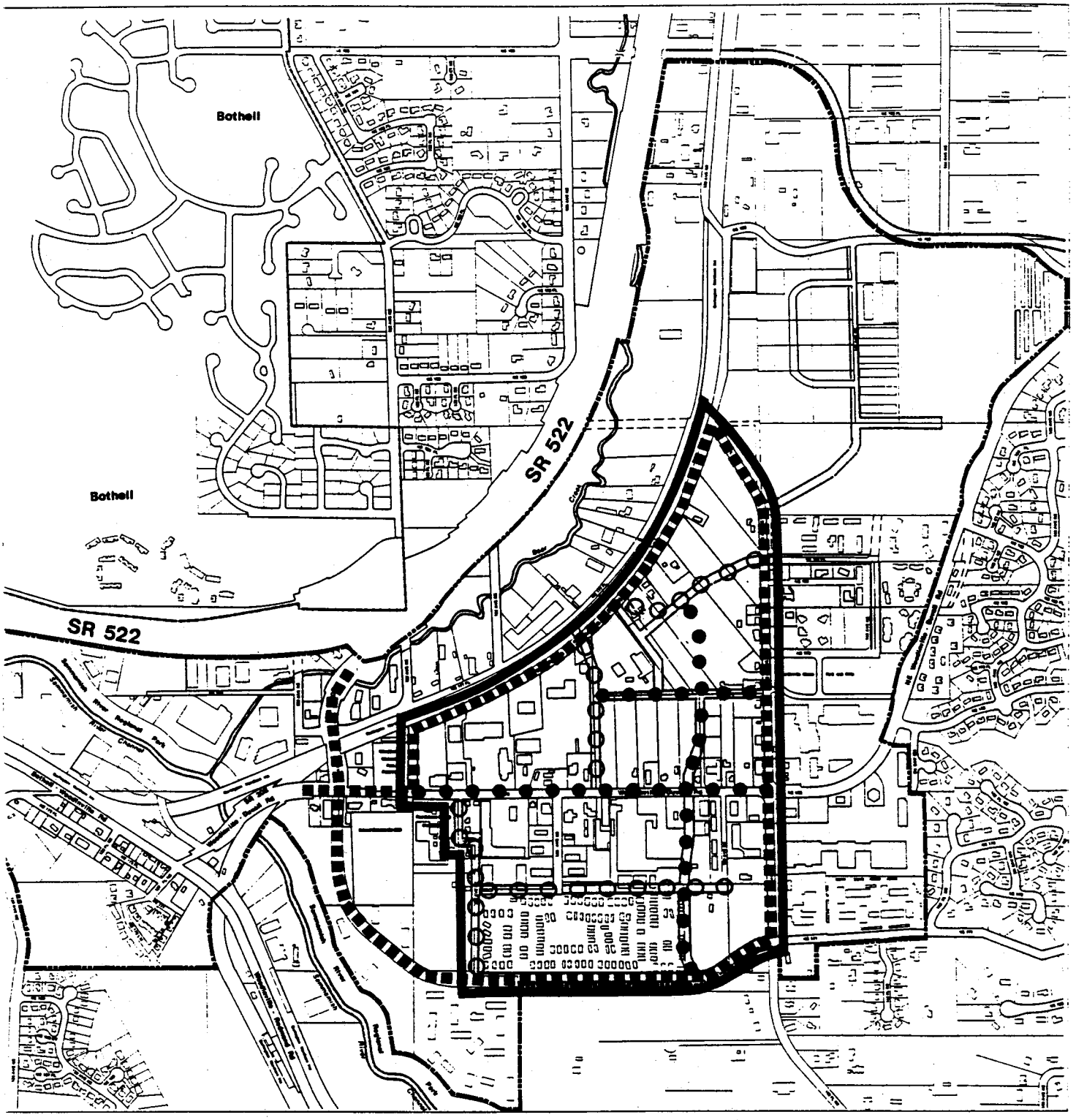
The guidelines are organized into six general categories: building development; parking; pedestrian access and circulation; vehicle access and circulation; transit; and landscaping and public open space.

King County is considering new zoning code provisions that permit the establishment of Special District overlays. These overlay districts permit modifications to underlying zoning provisions for large ownerships or areas containing several properties, in order to carry out comprehensive and community plan policies that are unique to those areas. One type of special district overlay being considered by the county -- pedestrian-oriented development -- is particularly appropriate for achieving the design objectives in much of the Woodinville center.

It is recommended that a pedestrian overlay district (Pedestrian District) be established for the Woodinville commercial core area as shown in Figure III-6. The boundaries of the Pedestrian District are 140th Avenue N.E. on the east, Woodinville-Snohomish Road N.E. to the on the north and west, and the proposed bypass road on the south.

Figure III-6 also depicts the existing and planned roadways in the Pedestrian District, which are classified into three categories. Primary pedestrian routes are intended to function as the principle routes for pedestrian activity in the District. N.E. 175th Street, and two segments of the proposed new grid system are designated as primary pedestrian streets. All other local access streets in the Pedestrian District are designated as secondary pedestrian routes. These streets are intended to serve both as avenues for pedestrian circulation as well as local routes for vehicle access. The arterials that border the Pedestrian District, including 140th Avenue N.E., Woodinville-Snohomish Road N.E. and the proposed south bypass road, are designated as primary vehicular routes. The major function of these roadways is to provide efficient vehicular access to and from surrounding areas. Many of the guidelines that follow proscribe varying standards to the three types of streets described above.

Guideline W-1 A Woodinville Pedestrian Overlay District should be established with boundaries as depicted on Figure III-6. Within the pedestrian overlay district, streets should be classified as primary pedestrian routes, secondary pedestrian routes, and primary vehicular routes as shown on Figure III-6.



Pedestrian District Boundary
Primary Pedestrian Street
Secondary Pedestrian Street
Primary Vehicular Route

0 200

Figure III-6

Pedestrian District Boundaries

Woodinville Urban Activity Center

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1. BUILDING DEVELOPMENT

Permitted Uses

Certain retail uses, such as drive-through restaurants/banks and auto service stations, are strongly oriented to the automobile. These activities generate a constant flow of vehicles entering and leaving the site, which results in frequent conflicts with pedestrians. In order to promote pedestrian circulation in the Woodinville Pedestrian District, and in particular to reduce potential conflicts between pedestrian/bicycle and automobile activity, commercial uses with a significant auto-orientation should be prohibited.

Guideline W-2 The following uses should be prohibited Woodinville Pedestrian District:

- Gasoline service stations
- Drive-through restaurants or banks
- Retail nurseries
- Car washes
- Stores with outdoor storage
- Other auto-oriented uses

Orientation of Buildings

The primary pedestrian routes depicted in Figure III-6 are intended to be the principal pathways for pedestrian travel within the Woodinville Center. Secondary pedestrian routes, while providing local access to vehicles, also are viewed as streets that should encourage pedestrian circulation. To promote walking and discourage driving as the primary mode of travel in the center, these routes must become inviting places for the pedestrian to use. One way of creating an attractive pedestrian setting is for ground floor retail uses (either product or serviced-based) to directly front the street, thereby creating a village-like environment much like the traditional downtown.

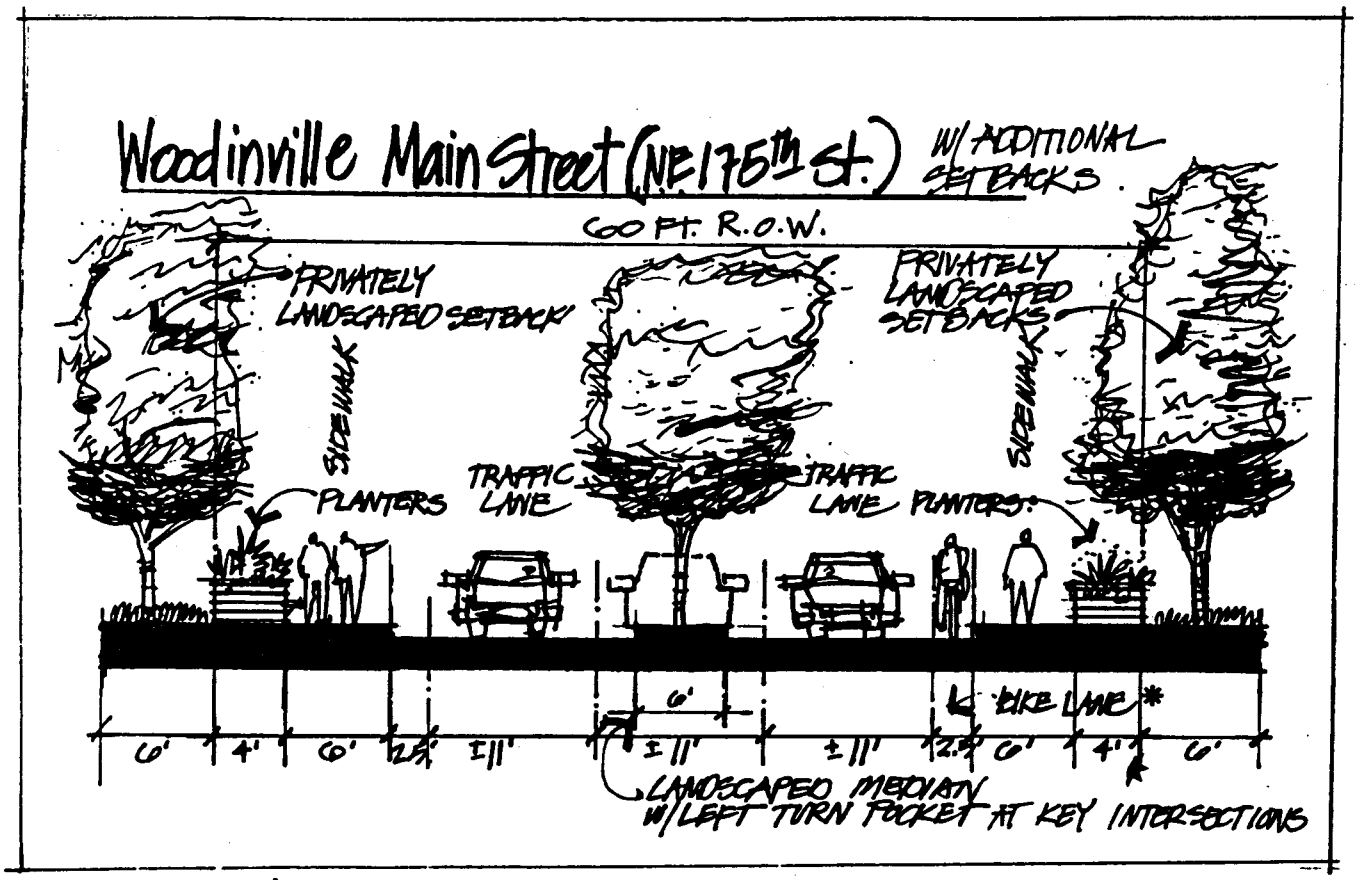
The following design guidelines, which pertain to properties with frontage on designated primary and secondary pedestrian routes in the Woodinville center, are intended to integrate retail activities with the main network of pedestrian circulation. Figures III-7 and III-8 depict graphical illustrations of these guidelines.

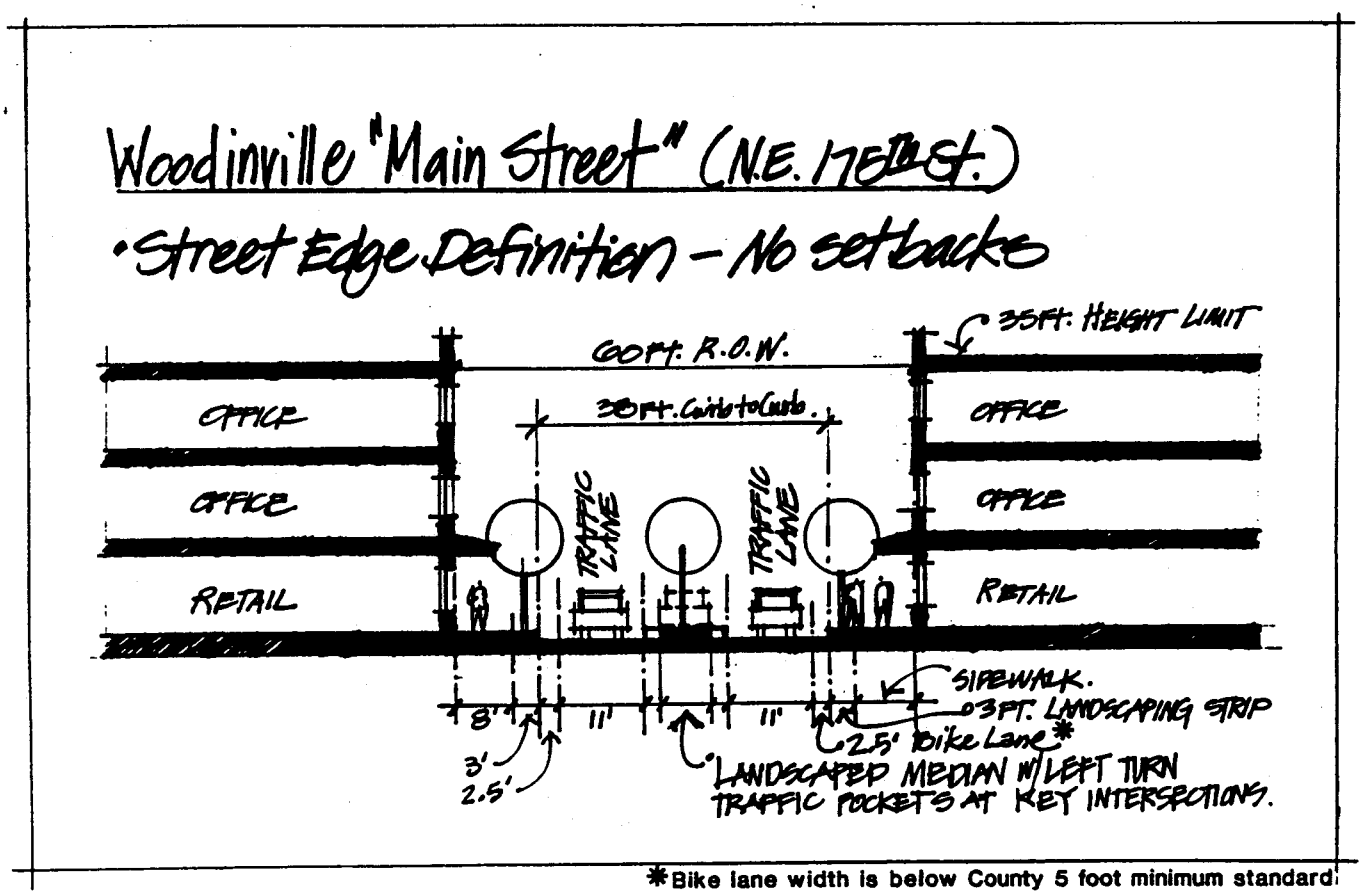
Guideline W-3 For properties with frontage on primary or secondary pedestrian routes, retail (products or services) uses only should be permitted on the ground floor.

Guideline W-4 For properties with frontage on primary or secondary pedestrian routes, front setbacks should be established at a maximum of five feet. Larger setbacks should be allowed for arcades, streetside cafes, patios, parks and plazas.

Guideline W-5 To encourage continuous building frontage along primary and secondary pedestrian routes, minimum side setback requirements should be waived. In addition, the building facade should extend along the width of the site in the following minimum percentages:

- Primary pedestrian route frontage: 90%
- Secondary pedestrian route frontage: 75%





*Bike lane width is below County 5 foot minimum standard.

Figure III-7

Illustrative Section Diagram: NE 175th Street

Woodinville Urban Activity Center

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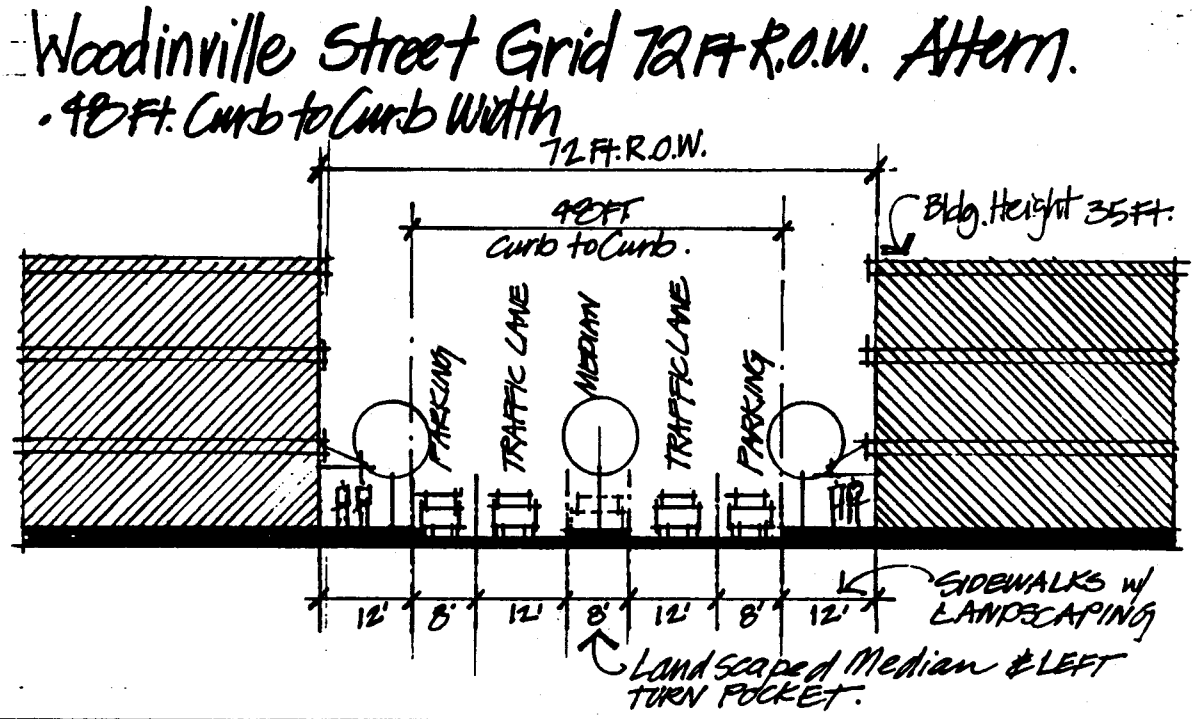
PRIMARY PEDESTRIAN STREET



SECONDARY PEDESTRIAN STREET

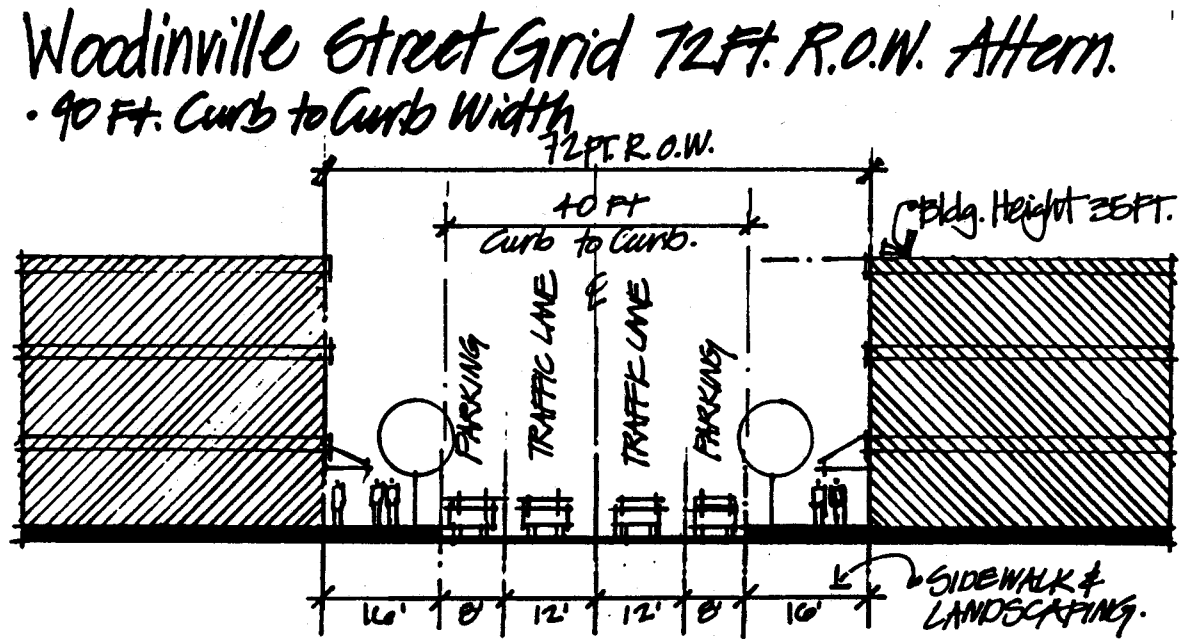


Figure III-8

Illustrative Section Diagram: New Grid Road

Woodinville Urban Activity Center

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Guideline W-6 The primary ground floor building entrance on primary and secondary pedestrian routes should orient to either the street or public spaces such as plazas, arcades, or parks.

Design

The development and design guidelines for the Woodinville center are not intended to promote a unified design theme for the area. However, the design of buildings should be attractive to pedestrians and wherever possible facilitate walking in all types of weather.

Guideline W-7 The building facade of ground floor retail uses that front primary and secondary pedestrian streets should include windows and overhead protection. The use of block walls (such as concrete circle blocks) without facade ornamentation should be discouraged.

Guideline W-8 Throughout the Woodinville activity center, building materials such as concrete, masonry, tile, stone, and wood should be encouraged. Glass curtain walls and all reflective glass should be discouraged.

2. PARKING

Off-Street Parking Requirements

By reducing the amount of required parking for individual developments, the pedestrian orientation of an activity center can be enhanced in two ways. First, less on-site parking can result in an increase in the use of transit or other non-auto travel modes, particularly if a rigorous transportation management program is adopted for the area. Second, a reduction in required parking means that less of the site will be consumed by surface parking lots that are generally hostile to pedestrian circulation.

In the Woodinville center, factors are present that may make it difficult for individual developments to increase transit use and reduce the amount of parking provided, including:

- Northshore Community Plan policies limit building heights in the Woodinville center to three stories. By restricting building heights, future development in the Center will be hard pressed to achieve the densities generally considered necessary for substantial transit use.

- Virtually all commercial development in the Woodinville center is retail rather than office. Typically, the primary mode of access to retail development (unless in major downtown area such as Seattle or Bellevue) is the automobile, with minimal amount of transit use.

On the other hand, there are numerous large surface parking lots in the Woodinville center that appear to be rarely filled to capacity. This factor, plus the potential for providing on-street parking on the proposed grid system, point to some opportunities for reducing parking requirements.

To further encourage non-auto modes of travel, maximum off-street parking requirements should be established in the Woodinville Pedestrian District:

Guideline W-9 The amount of off-street parking provided by individual developments should be reduced wherever possible. Maximum off-street parking requirements should be established at either 1 space per 500 square feet of development or 50% of the amount required through regular zoning provisions, whichever is greater.

Location and Design

The parking that is provided on-site in the Woodinville Center should not conflict with pedestrian access and circulation. Three techniques for minimizing pedestrian-parking conflicts are: 1) separating and screening the primary parking areas from the main pedestrian circulation routes, 2) breaking up large parking requirements into separate, smaller lots, and 3) reducing the amount of total site area consumed by parking through use of structured lots or community parking facilities. Figure III-9 illustrates these guidelines.

Guideline W-10 On-site parking facilities should minimize pedestrian/automobile conflicts on both primary and secondary pedestrian circulation routes. The following standards apply in the Woodinville Pedestrian District

- Parking should be located in the rear or side of buildings that front primary or secondary pedestrian streets.
- No more than 60 stalls should be provided in any one surface parking lot, and individual lots should be separated by buildings, roads, and/or landscaping.
- All parking areas that front sidewalks should be screened by a streetwall and landscaping.
- Where feasible, retail uses should be provided on the first floor of the streetside edges of parking structures.

Guideline W-11 Surface parking lots should consume a maximum of 30% of the total site area. The remaining off-site parking requirements should be accommodated in on-site parking structures or off-site common parking facilities.

Guideline W-12 King County and the Woodinville community should conduct further study on potential locations and methods of financing community parking facilities.

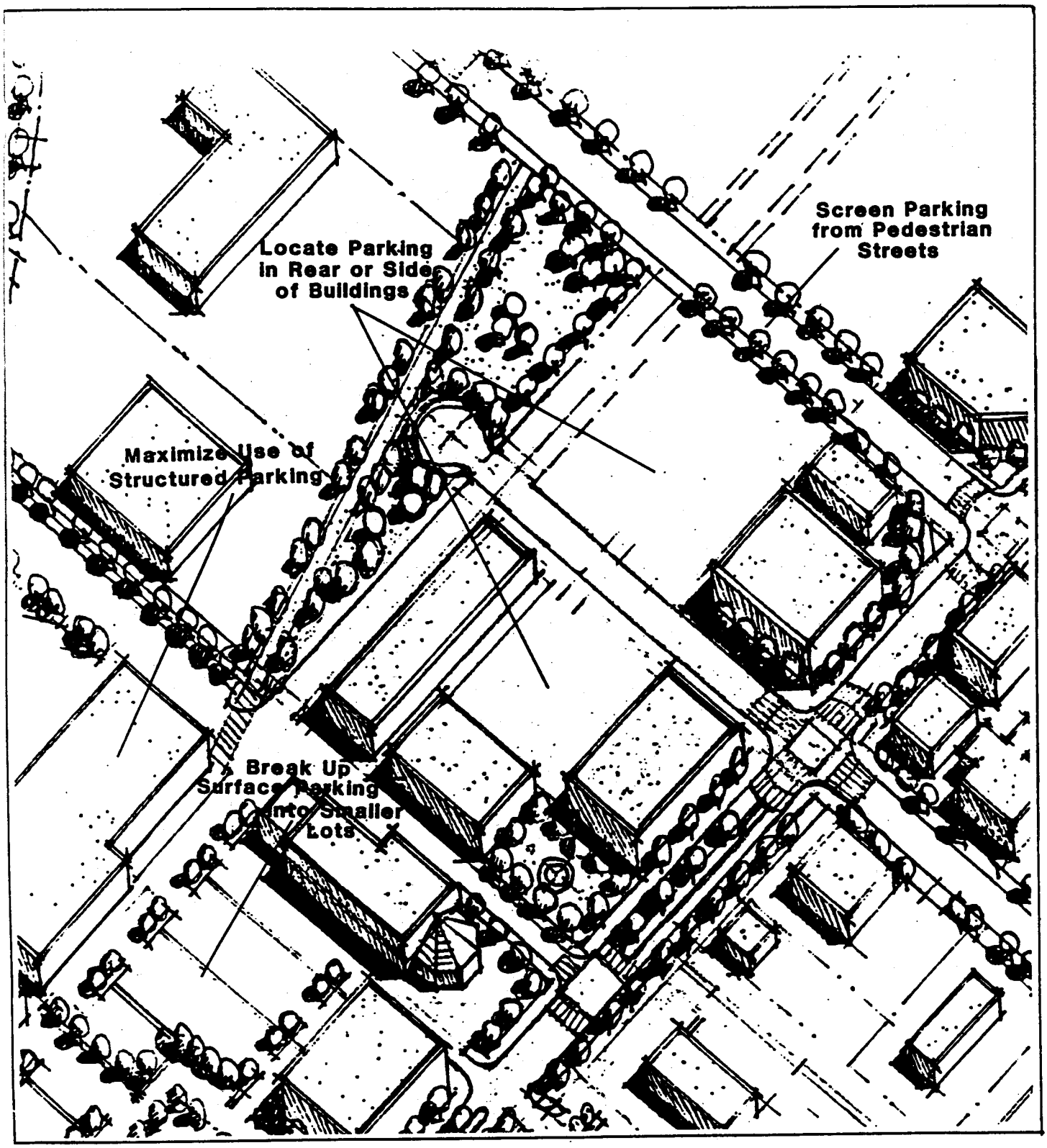

Figure III-9

Parking Standards

Woodinville Urban Activity Center

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3. PEDESTRIAN ACCESS AND CIRCULATION

A primary objective of urban activity center development is to promote pedestrian activity both in terms of access to/from surrounding areas and throughout the center itself. Improved pedestrian access and circulation in the Woodinville center can occur through a combination of elements as described below.

Enhancement of Primary and Secondary Pedestrian Routes

These streets are envisioned to be the principal routes for pedestrian circulation in the Woodinville center. Many of the guidelines covering building development, parking, and landscaping are intended to enhance primary pedestrian routes as attractive and functional places for walking.

On-Site Pedestrian Circulation

It is imperative that individual developments provide a comprehensive on-site pedestrian network that facilitates walking and reduces pedestrian/auto conflicts.

Guideline W-13 All commercial development in the Woodinville Urban Activity Center must include pedestrian pathways that provide connections between:

- Principal entrances of adjacent buildings located on the same site.
- Building entrances and on-site parking areas.
- The principal building entrance and sidewalks
- The principal building entrances of buildings on adjacent sites, if entrances are setback more than five feet from the public right-of-way.

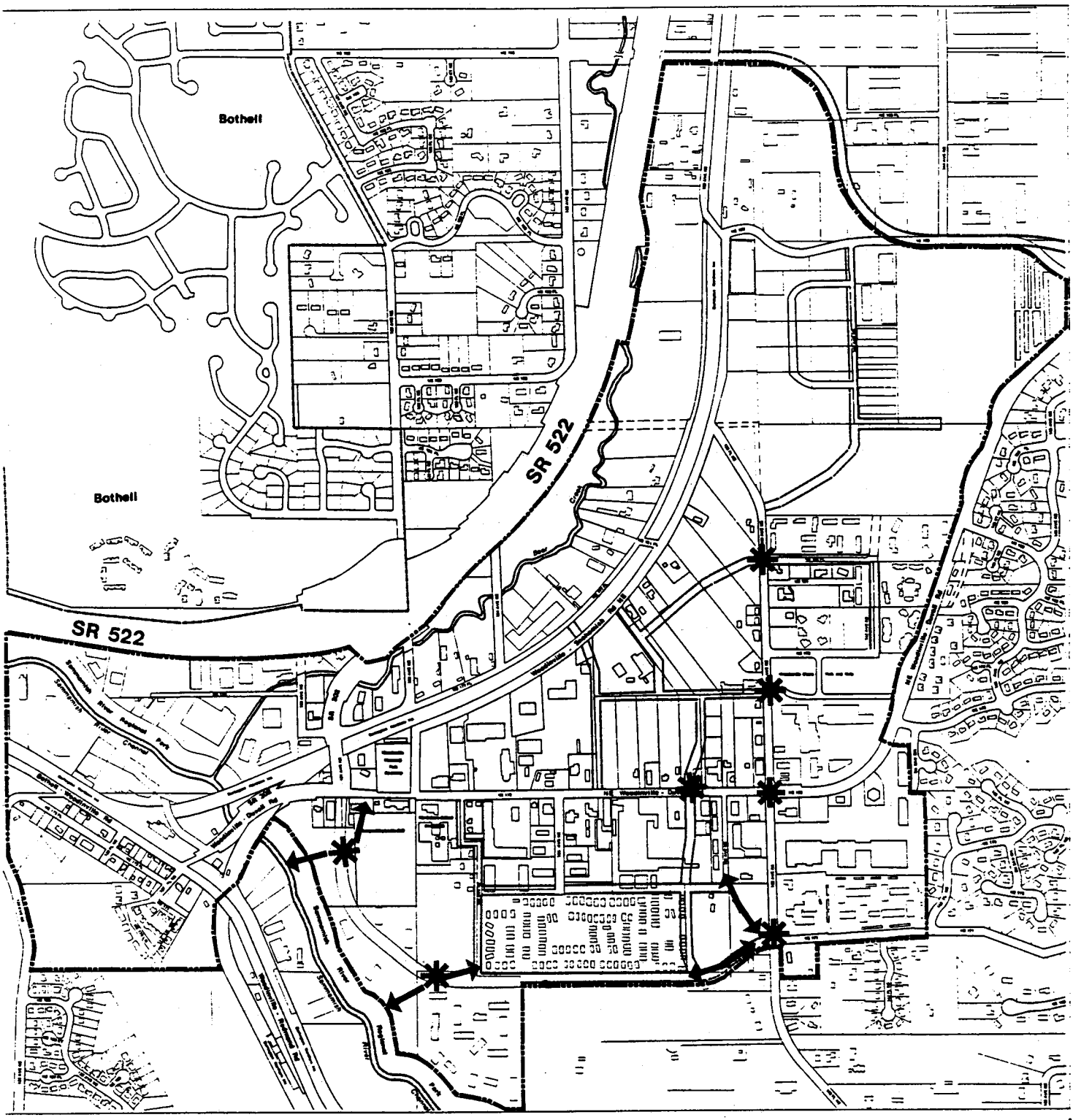
Pedestrian Connections To Surrounding Areas

While the Woodinville Pedestrian District will greatly facilitate pedestrian circulation in the commercial core of the Activity Center, linkages to surrounding areas must also be expanded in order to promote pedestrian access to and from the District. A number of potential pedestrian linkages have identified (See Figure III-10 for locations):

- Linkages from the Sammamish River Trail to N.E. 175th Street: The Sammamish River and adjacent trail represent both a major open space area in the Center and a regional access route for bicycles and pedestrians. A pedestrian linkage should be created that connects this area with N.E. 175th Street and the commercial core. That linkage should include a pedestrian crossing of the proposed south bypass road.

- Access along the creek in the southeastern part of the Center, and pedestrian connection from this area to the commercial core.

- Improved pedestrian crossings at 140th Avenue N.E. to enhance access from the park and ride lot and residential areas to the east of the Activity Center. Two at-grade crossings should be constructed where the proposed new grid system intersects with 140th Avenue N.E. (park-n-ride lot) and N.E. 181st Place. In addition, the 140th Avenue N.E./N.E. 175th Street and 175th Street/North-South Grid Road intersections should be enhanced as a pedestrian crossing.



✱ Pedestrian Crossings

⟷ Pedestrian Linkages

Figure III-10

Pedestrian Linkages

Woodinville Urban Activity Center

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Guideline W-14 Pedestrian linkages to and from the Woodinville Center should be provided and or enhanced in locations shown on Figure III-10.

4. VEHICLE ACCESS AND CIRCULATION

Transportation Improvements

Both the proposed north and south bypass roads and much of the Woodinville Center grid system have been adopted by King County ordinance. The grid system will be constructed privately as new development occurs in the areas where these roads are planned. Figure III-11 shows the recommended location of the new grid system.

Guideline W-15 The proposed Woodinville grid system should be completed in general accordance with the street network shown in Figure III-11.

Road Standards

The roads in the proposed new grid system that have been established by ordinance will have a right-of-way of 72 feet. All of these roads have been designated as either primary or secondary pedestrian routes as part of the Pedestrian District recommended for the Center (see Guideline W-1). In order to help meet some of the parking needs for surrounding developments, as well as to create an attractive setting for pedestrian circulation, the new grid roads should be constructed according to the following standards:

- *Primary Pedestrian Streets*: These key pedestrian routes should include two traffic lanes, a landscaped medium with left-turn pockets at key intersections, on-street parallel parking on both sides of street, and wide (12 foot) landscaped sidewalks (see Figure III-8 [Top]).

- *Secondary Pedestrian Streets*: These routes should include two traffic lanes, on-street parallel parking on both sides of the street, and wide, landscaped sidewalks (see Figure III-8 [Bottom]).

Although the new grid roads are being planned for 72-foot right-of-ways, a narrower 60-foot right-of-way may in fact be a more appropriate width for secondary pedestrian streets. With a 60-foot right-of-way, sidewalk widths could be reduced by six feet on each side (to ten feet) yet still maintain a strong pedestrian character (as shown in Figure II-8 [Bottom]).

N.E. 175th Street is designated as a primary pedestrian route in the Woodinville Pedestrian District. This roadway has a narrow 60-foot right-of-way that restricts traffic capacity to two lanes plus a center turn lane. The great number of driveways that are present along N.E. 175th Street results in substantial vehicular use of the left-turn lane, resulting in frequent auto-pedestrian conflicts along the sidewalk. In addition, this continuous three-lane asphalt roadway imparts a strong image of the auto-oriented nature of the Woodinville center.

In order to reduce automobile-pedestrian conflicts along N.E. 175th, and to enhance the aesthetics of this roadway as a primary pedestrian route in the Woodinville center, strong consideration should be given to landscaping the center turn lane throughout the Pedestrian District, while retaining left-turn pockets at intersections and other key access points. Figure III-7 depicts an illustration of a landscaped median along N.E. 175th Street.

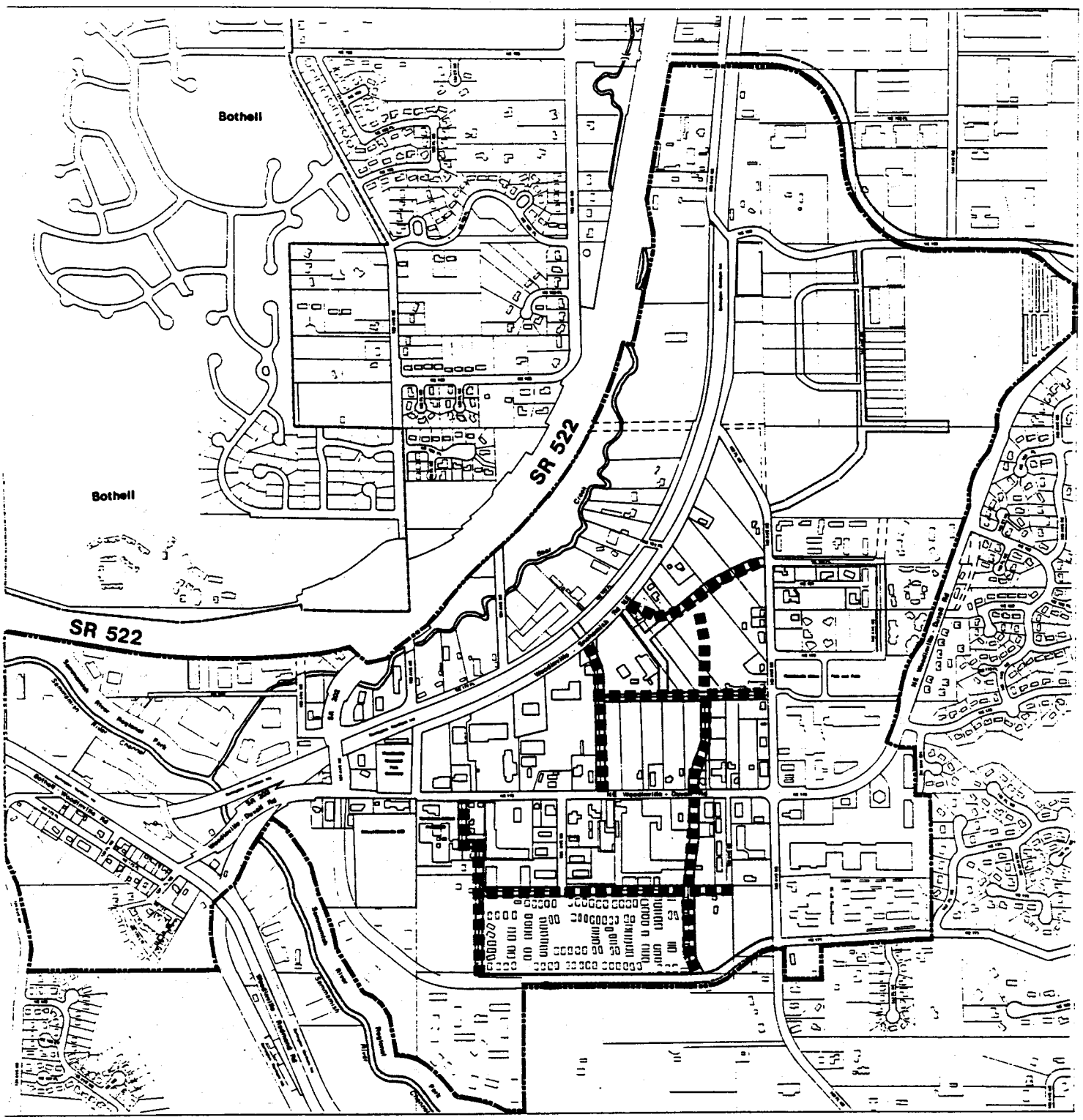

Figure III-11

Recommended New Road Grid Network

Woodinville Urban Activity Center

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Guideline W-16 The proposed new grid system for the Woodinville Center should incorporate the road standards shown in Figure III-8. Consideration should be given to reducing the right-of-way of secondary pedestrian streets to 60 feet, and reducing the sidewalk widths (as shown on Figure III-8 [bottom]) from 16 feet to 10 feet.

Guideline W-17 The center turn lane along N.E. 175th Street in the Pedestrian District should be landscaped with left-turn pockets provided at intersections and other key access points (see Figure III-7).

Access and Circulation

One important way of creating streets that are attractive to pedestrians is by minimizing pedestrian-automobile conflicts along the sidewalk. The key to reducing such conflicts is to restrict vehicle access points (driveways) along pedestrian oriented streets.

Guideline W-18 The number of vehicle access points provided as part of new development in the Woodinville Pedestrian District should be limited as follows:

- Primary Pedestrian Streets: No access points should be permitted, unless alternative access is not available from other streets, in which case a maximum of one access point per site or one per every 200 linear feet (whichever is greater) should be allowed.
- Secondary Pedestrian Streets: A maximum of one access point per site or one per every 200 linear feet (whichever is greater) should be allowed.
- Primary Vehicular Streets: A maximum of two access points per site or every 100 linear feet (whichever is greater) should be allowed.

In addition to reducing pedestrian-auto conflicts along primary and secondary pedestrian streets, the on-site vehicular circulation system of all developments should contribute to pedestrian movement and safety.

Guideline W-19 In the Woodinville Activity Center, the on-site vehicular circulation system of all new developments should minimize conflicts between autos and pedestrians by including some or all of the following:

- Provide pedestrian crosswalks at key crossing areas.
- Construct tighter turning radius that reduces vehicular speed.
- Include signage that clearly communicates the location of vehicular and pedestrian zones.
- Provide designated passenger drop-off areas.
- Include speed bumps in areas of high pedestrian activity
- Permit parking on interior roads as a way of slowing down vehicular traffic.

5. TRANSIT

Because of the narrow 60-foot right-of-way on N.E. 175th Street, it is difficult to provide efficient transit service along this route. With the development of the new grid system, opportunities should be explored for providing alternative transit service locations.

As major new pedestrian-oriented development occurs in the northeast section of the Woodinville Pedestrian District (Opportunity Area 1), potential locations for a transit hub should be identified. This hub is envisioned as a major transit stop/transfer point that serves the Woodinville Activity Center, but would not include park-n-ride spaces. The hub should provide a strong pedestrian linkage with the park-n-ride lot located along 140th Avenue N.E.

Guideline W-20 The county, Metro, and the Woodinville community should explore opportunities for a transit hub in the Woodinville Pedestrian District.

6. LANDSCAPING AND PUBLIC ACCESS/OPEN SPACE

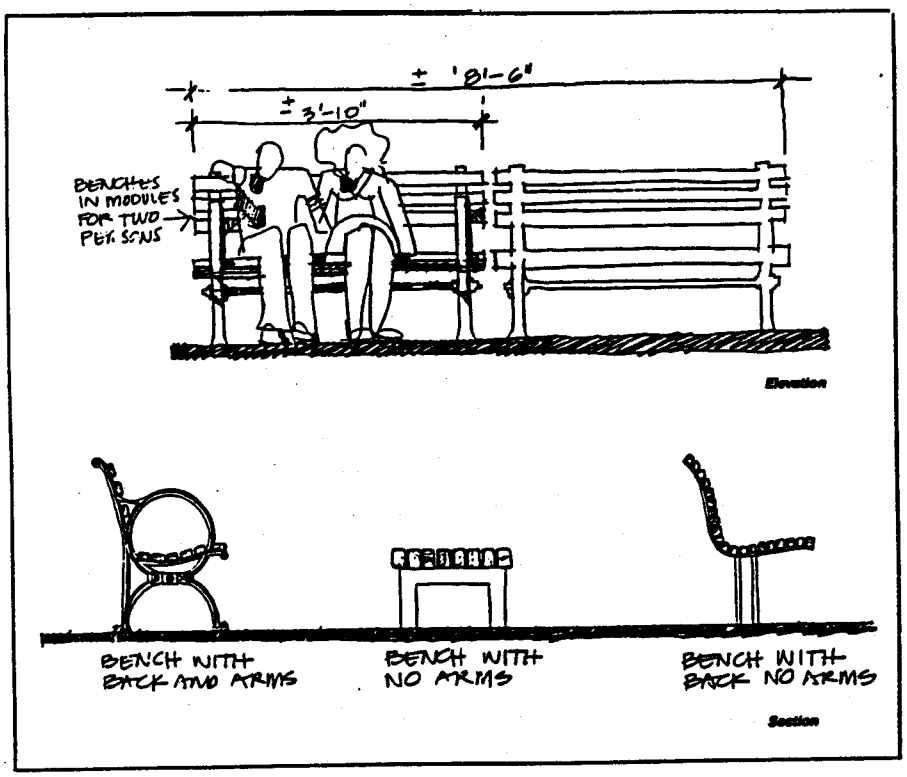
Landscaping

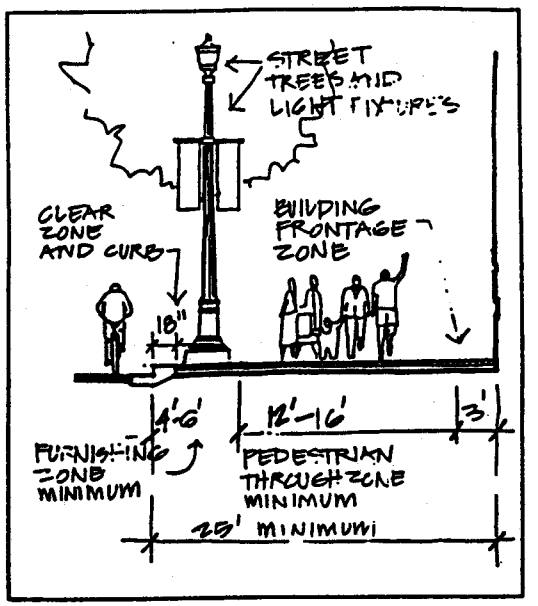
The King County Zoning Code includes minimum landscape requirements for site development that cover both building and parking areas, as well as provisions that regulate signage. The Northshore Community Plan includes supplemental policies and requirements for landscaping throughout the Northshore planning area. Together these standards are sufficient to assure adequate on-site landscaping is provided for all new developments in the Woodinville Activity Center.

Landscape improvements within the right-of-ways of designated primary and secondary pedestrian streets are vital for promoting increased pedestrian activity in the Woodinville Pedestrian District. Figures III-7 and III-8 depict illustrative sections of the proposed new grid system and N.E. 175th Street with potential landscape improvements. The major landscape elements include a landscaped median (N.E. 175th Street and primary pedestrian streets in new grid system only), and various sidewalk improvements such as street trees, special lighting fixtures, benches and planters. Figure III-12 includes examples of landscape design features for enhancing the attractiveness of pedestrian streets.

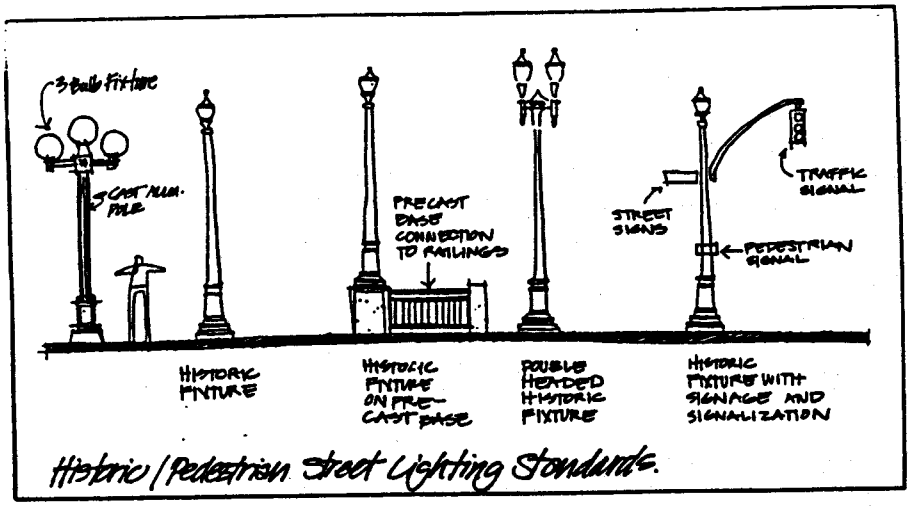
Guideline W-21 A landscape plan should be developed for all primary and secondary pedestrian streets in the Woodinville Pedestrian District. The landscape plans should strive to create an environment that promotes an attractive setting for pedestrian access and circulation. At a minimum, the landscape plan should include standards for:

- Center lane landscaping
- Street trees and planters
- Special lighting fixtures
- Special paving patterns
- Benches and other public amenities
- Signage

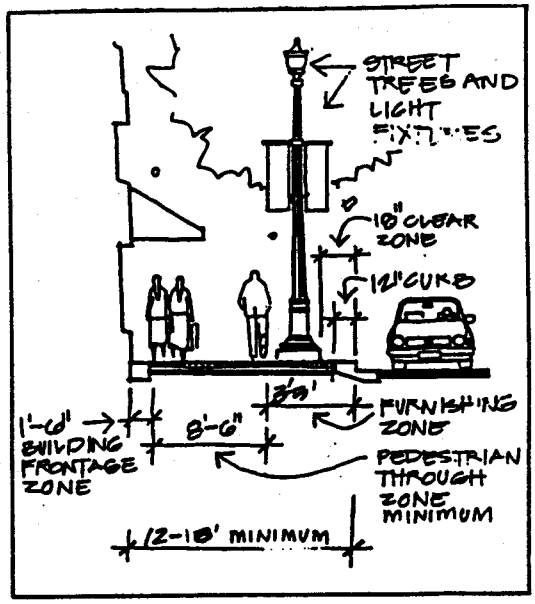




72 Ft. R.O.W. Prototypical Sidewalk



Historic / Pedestrian Street Lighting Standards.



"Main Street" Sidewalk

Figure III-12

Examples of Landscaping and Other Amenities: Pedestrian Streets

Woodinville Urban Activity Center

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Public Access and Public Space

As described in Section III.B., a "Green Gateway" opportunity area has been identified in the western part of the Woodinville center. The design objective of the green gateway concept is to physically improve the character and quality of the main entrance to Woodinville. Four elements are significant to this effort. First, Memorial Park needs to be physically improved to provide a more attractive open space and historical site for the community. Second, the properties along the south side of N.E. 175th between the South Bypass Road and Sorensen School create a visual and physical barrier to the school and related playfields. Part or all of the buildings on these sites should be demolished to provide a visual/physical linkage to the school and playfields. Third, the acquisition of parcels located southwest of the N.E. 175th Street/South Bypass Road intersection for a park should be strongly pursued. A riverfront park at this location would add important open space in the Woodinville Center and begin to provide a key linkage between the Sammamish River Trail and the commercial core. Finally, the N.E. 175th Street/South Bypass Road intersection should be improved to create an attractive entryway to the Woodinville Center.

Figure III-13 depicts an illustrative concept of the "Green Gateway."

Guideline W-22 The concept of a "Green Gateway" for the western edge of the Woodinville Center should be pursued through the following actions:

- Physical improvements should be made to the Memorial Park cemetery to enhance the attractiveness of this site as a significant open space and historical landmark. Improvements could include additional landscaping, addition of small public common area with picnic tables, and replacement of chain-link fence with a more attractive border.

- The buildings located along the south side of N.E. 175th Street between the proposed south bypass road and Sorenson School should be demolished in whole or part to provide improved visual and physical access to the school and related ballfields.

- The property located adjacent to the Sammamish River Trail directly south of N.E. 175th Street should be developed as a riverfront park.

- The N.E. 175th Street/South Bypass Road intersection should be improved with special paving, landscaping, signage, etc.

Public open spaces are sorely lacking in the commercial core area of the Woodinville Center. While it is unlikely that funding will be available for purchase and development of a major downtown park, smaller parks, plazas and other public spaces should be a required condition of new private development. Possible locations for small public parks/plazas are depicted in Figure III-14.

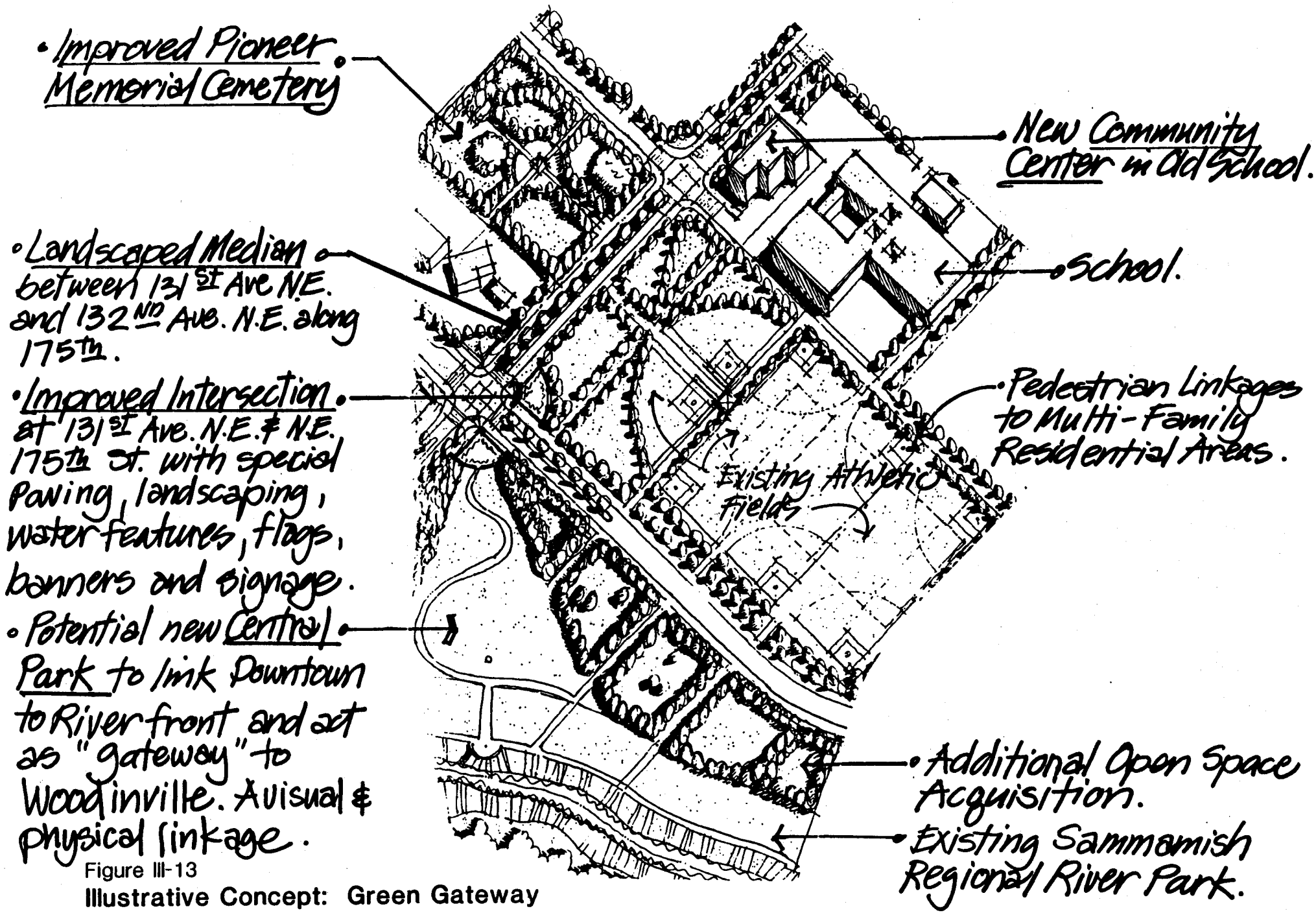

Figure III-13

Illustrative Concept: Green Gateway

Woodinville Urban Activity Center

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Guideline W-23

Throughout the Woodinville Urban Activity Center, public open space should be provided as part of all new commercial development in an amount that covers no less than 10% of the total site area. Public open space includes parks, plazas, and arcades, but excludes pedestrian walkways.

For properties with less than one acre of site area, a park acquisition fee may be paid in lieu of providing the minimum amount of on-site open space.

Guideline W-24

Adjacent property owners are encouraged to enter into joint agreements to provide the minimum public open space through clustering buildings and/or parking within multiple sites.

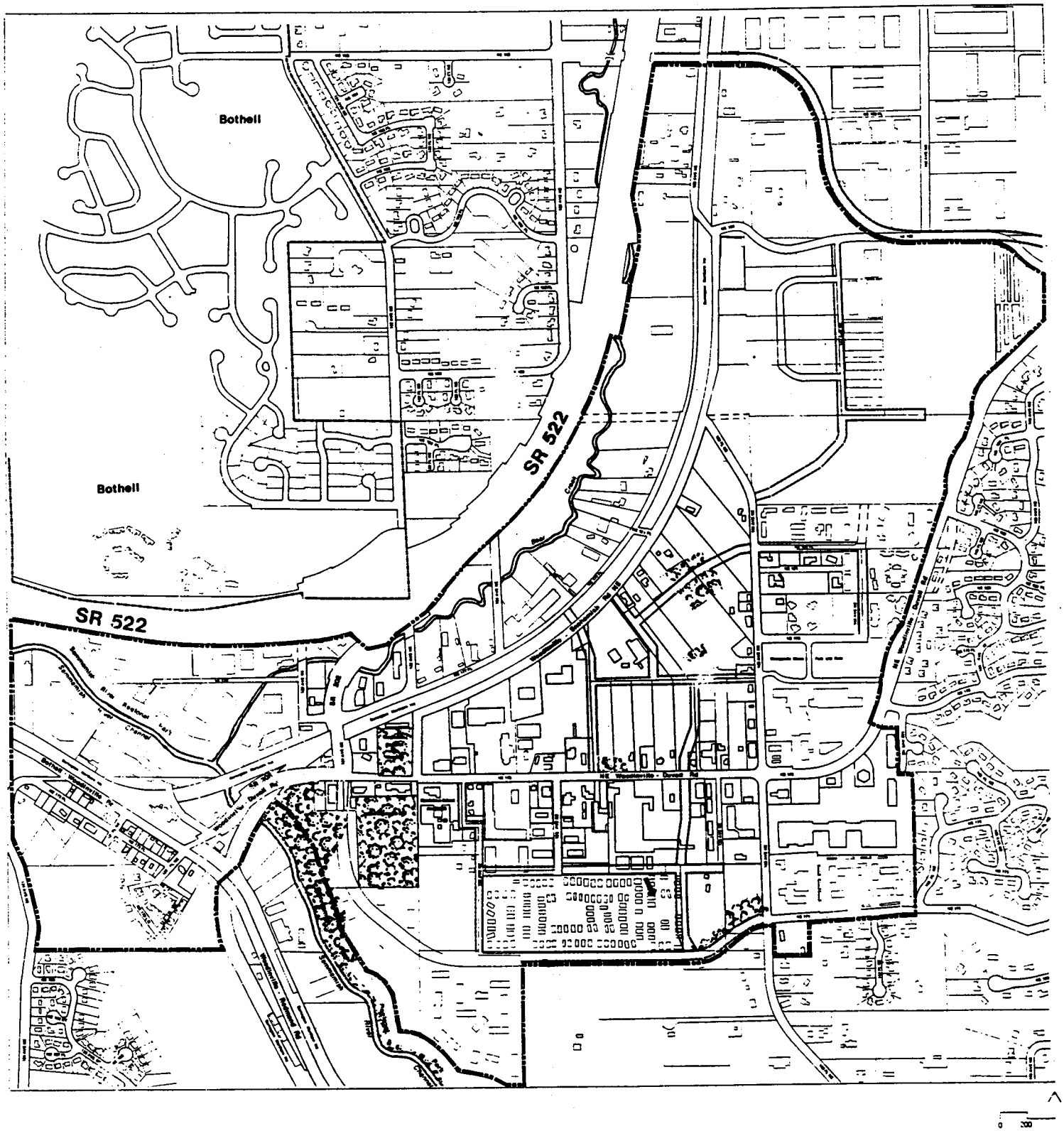

Figure III-14

Major Park/Public Space Areas

Woodinville Urban Activity Center

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Section IV.

Implementation and Issues Requiring Further Study

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A. IMPLEMENTATION STRATEGIES

The development and design guidelines recommended for the Kenmore and Woodinville Urban Activity Centers can be implemented through a variety of mechanisms, including:

- Northshore Area Zoning: General zoning provisions, special district overlay conditions, and property-specific development standards (P-Suffix conditions).
- Capital improvement projects (parks and transportation).
- Other joint mechanisms such as business improvement areas, joint/shared parking agreements, and local improvement districts.

1. NORTHSHORE AREA ZONING

The King County Zoning Code is currently being updated; however, adoption of the new code may not occur until after the Northshore Community Plan is adopted. Therefore, the recommended development and design guidelines that will be implemented through zoning regulations will initially be subject to the current zoning code, with a transition to the new code once it is adopted.

The timing of the adoption of the Northshore Community Plan vis-a-vis the new zoning code has quite an important effect on this study, since the new zoning code is expected to contain special provisions -- such as Special District Overlays -- that will greatly facilitate implementation of many of the recommended design and development guidelines. The existing zoning code does not contain these provisions.

The following paragraphs describe how the zoning-related design and development guidelines are likely to be implemented under the existing and new zoning code.

a. Existing Zoning Code

Many of the design and development guidelines require modifications to the development standards contained in the existing zoning code. For example, guidelines recommend that maximum building setbacks of five feet be established for properties fronting primary pedestrian streets, while the zoning code requires a minimum setback of twenty feet.

The primary tool for implementing the zoning-related guidelines under the existing zoning code will be property-specific development standards (P-suffix conditions). P-suffix conditions represent special conditions that can be assigned to individual properties that are intended to address site-specific problems not anticipated by the general minimum requirements of the zoning code. P-suffix conditions may perform a variety of functions, including:

- Limiting the range of permitted uses.
- Requiring special development standards for property with physical constraints (e.g. environmental hazards, view corridors).
- Specifying the phasing of the development of a site.
- Requiring infrastructure sites or improvements (e.g. road improvements, utilities, parks, open space, school sites).

P-suffix conditions cannot be used to expand permitted uses or reduce minimum requirements of the code.

Many of the development and design guidelines recommended in this study are intended to apply to all properties located within defined Pedestrian Districts. Under existing zoning code provisions, all properties within the Pedestrian Districts should be designated with the necessary P-suffix conditions for implementing the guidelines.

Since P-suffix conditions cannot be used for those guidelines that increase rather than reduce minimum code requirements (e.g. raising maximum building heights, reducing setbacks), it will most likely be necessary to incorporate the Pedestrian District (and related guidelines) into the ordinance that codifies the Northshore Community Plan and Area Zoning.

b. New Zoning Code

The new zoning code will likely contain provisions allowing for the establishment of special district overlays. Special Overlay Districts are intended to combine with underlying zoning for large ownerships or areas containing several properties, to carry out comprehensive and community plan policies in areas with special land use objectives. Within a special overlay district, development conditions/standards can be adopted that modify regular zoning provisions. Otherwise, the standard requirements of the zoning code and other county ordinances and regulations govern all development and land uses within the special district.

One type of Special Overlay District being considered for the new zoning code -- Pedestrian-Oriented Development -- is especially appropriate for achieving the activity center design goals in Kenmore and Woodinville. Pedestrian district overlays must be located in urban activity centers (BC, CR or O zones) and are intended to establish a specific area for high-density, pedestrian-oriented retail/employment developments.

As described in Section II.C. and III.C., a key element of the development and design guidelines for both Woodinville and Kenmore is the establishment of pedestrian overlay districts in a portion of each activity center. When the new zoning code is adopted it is expected that the majority of development and design guidelines will be implemented through special district overlay provisions, including:

- Restrictions on permitted uses.
- Increases in allowable development densities (raising height limits).
- Elimination/modification of setback and other standards related to building location.
- Maximum parking requirements and limitation on the amount and location of surface parking lots.
- Designation of primary and secondary pedestrian streets, and specifying standards for streetscape improvements and vehicle access.
- Minimum requirements for providing public access and open space.

Even with the new zoning code; special overlay district provisions, some guidelines will still need to be implemented by P-suffix conditions. For example, P-Suffix conditions may be used is for special standards/requirements on properties that fall outside of the special district overlay boundaries (e.g. easements are required on specific properties to complete pedestrian linkages to/from surrounding areas).

2. CAPITAL IMPROVEMENT PROJECTS

Many of the design and development guidelines represent recommended capital improvement projects including transportation improvements (new roads, improved intersections) and park/public space acquisition and/or development. The funding of these projects may come from either the County capital improvement budget or through private developer exactions that are either required by the zoning code or negotiated as mitigating measures in the SEPA process.

It is our understanding that the County Parks Department funding for new parks focuses on major regional park areas, and that County funding for smaller, urban park areas such as those recommended in this study for Kenmore and Woodinville are of lower priority. This study includes recommended guidelines for minimum park/public space requirements that should result in increased provision of public space by private developers. The guidelines also recommend that for small properties (under one acre), the payment of a fee for parks/public space be allowed in lieu of providing such space on the site. Such fees should be accumulated in a fund that is earmarked for park/public space development in the respective activity center.

Similar to park development, the majority of recommended transportation improvements will likely be funded by private developers through impact fee provisions in the code or through mitigation measures agreed upon in the SEPA process.

The development and design guidelines include the following recommendations for future capital improvement projects. Figures IV-1 and IV-2 depict these improvements on maps of the Kenmore and Woodinville Activity Centers.

Kenmore

Recommended improvements from Kenmore Circulation Study:

1) Widening and realignment of N.E. 175th Street between SR-522 and 68th Avenue N.E. (both east and west segments)

2) Intersection improvements at 68th Avenue N.E./N.E. 175th and 68th Avenue N.E./SR-522.

3) New signal on N.E. 175th Street between 68th Avenue N.E. and SR-522. Location should be where N.E. 175th Street intersects with primary access road on mixed-use site.

4) Improvements of N.E. 181st Street to provide consistent roadway width throughout the activity center, and fixing the alignment at 68th Avenue and 73rd Avenue N.E. to create smoother flow.

5) Pedestrian overpass to connect park-n-ride lot with Burke-Gilman Trail. Also an enhanced eastbound transit stop/bus shelter in this area.

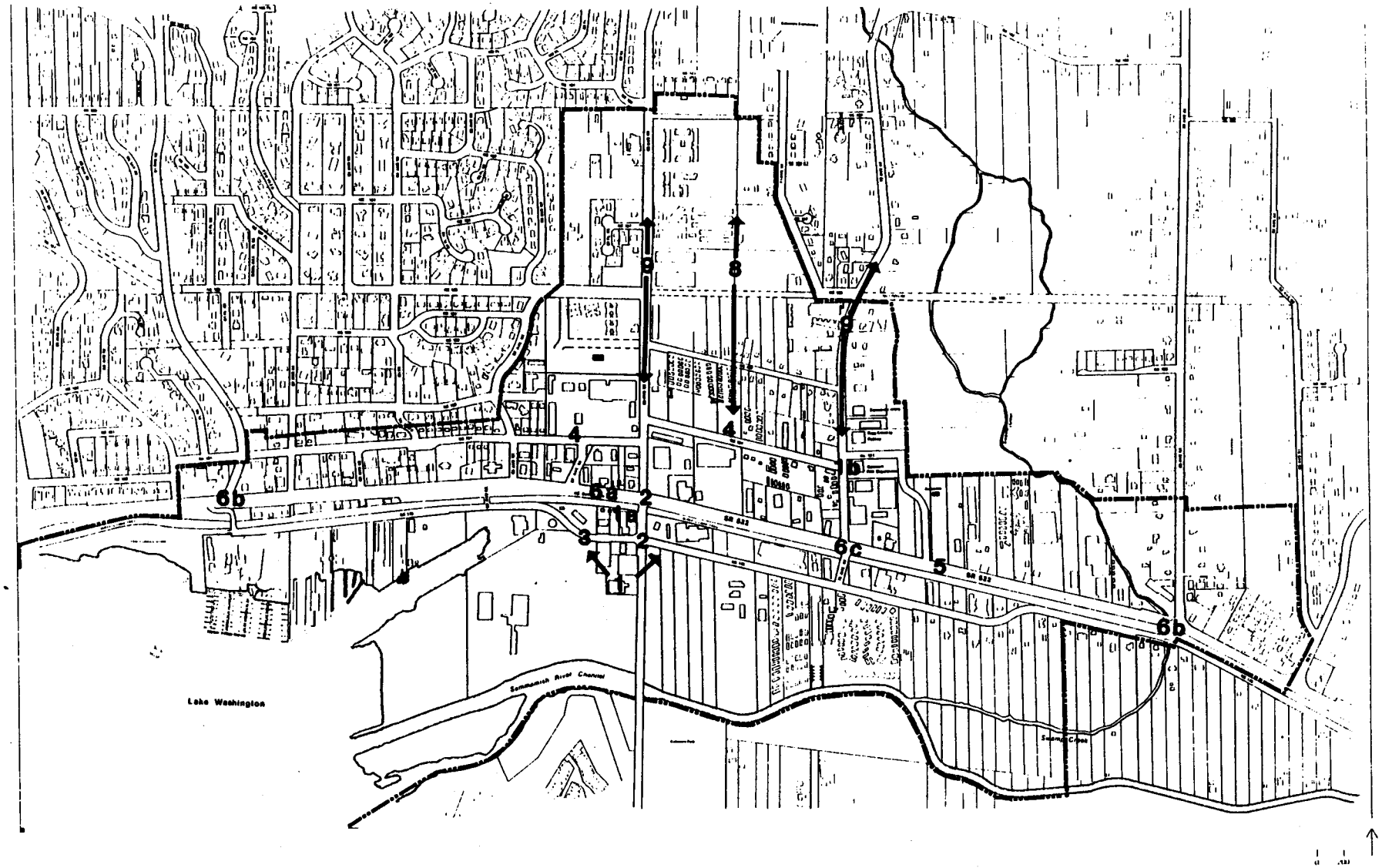

Figure IV-1

Recommended Capital Improvement Projects

Kenmore Urban Activity Center

KING COUNTY PLANNING AND COMMUNITY DEVELOPMENT

NBBJ

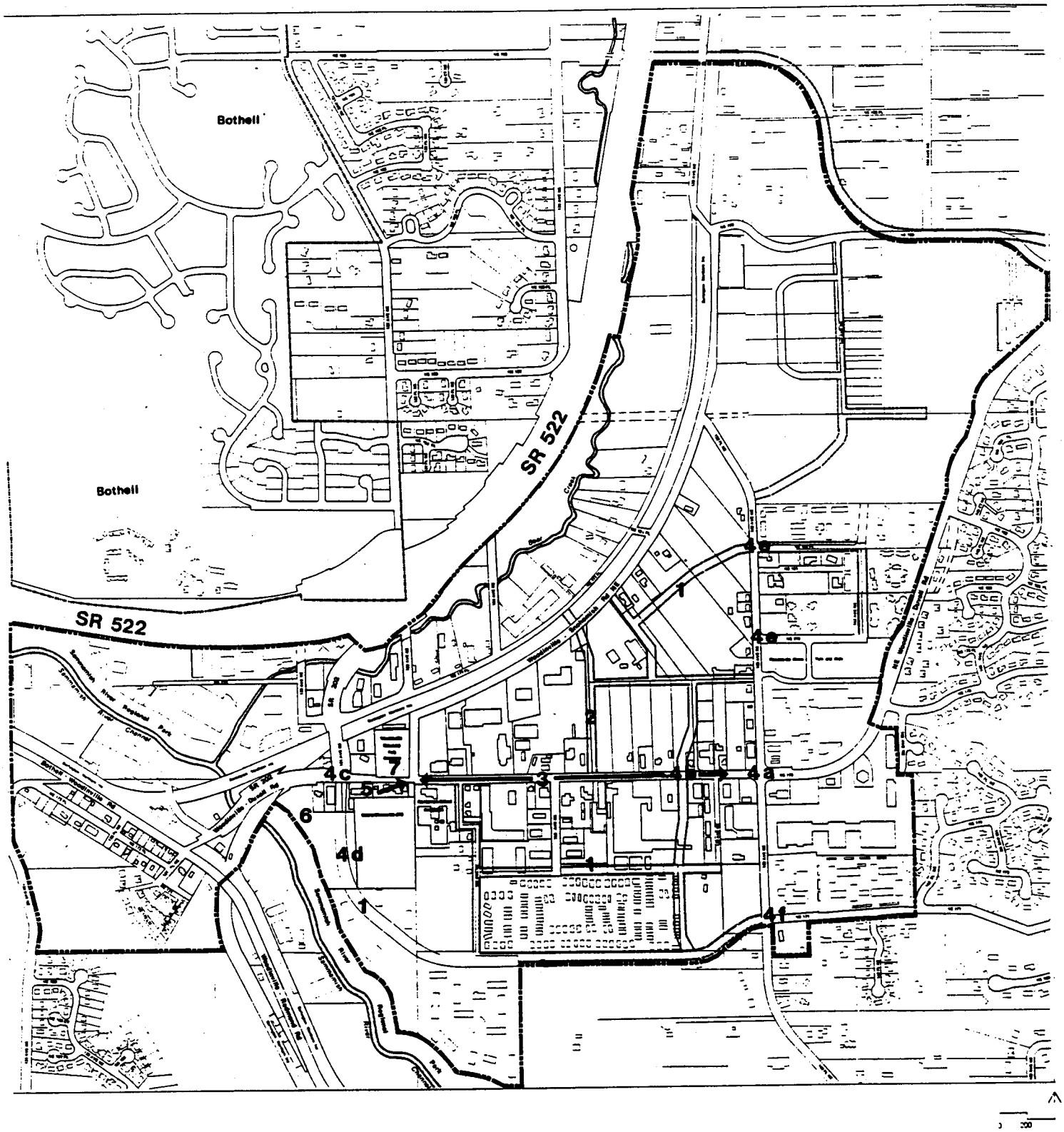

Figure IV-2

Recommended Capital Improvement Projects

Woodinville Urban Activity Center

KING COUNTY PLANNING AND COMMUNITY DEVELOPMENT

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Other recommended capital improvement projects:

6) Enhanced pedestrian crossings (either at grade or overpass in three locations along SR-522):

   a. Near 68th Avenue N.E. to connect mixed-use development/transit center/Burke-Gilman Trail with north Kenmore business district.

   b. Western and eastern gateway crossings at 61st Place and 80th Avenue N.E.

   c. At 73rd Avenue N.E. to connect office/civic core with Burke-Gilman Trail and mixed-use development.

7) Construction of urban plazas/parks at the following locations:

   a. The vicinity of the SR-522/68th Avenue N.E. intersection. The purpose of this plaza is to create a central focal point in the Kenmore activity center.

   b. The area surrounding the intersection of N.E. 181st Street and 73rd Avenue N.E. The purpose is to create an urban plaza for the office/civic core area.

8) Construction of a dedicated pedestrian pathway from the north part of the activity center to SR-522. The location of this pathway should be mid-block between 73rd Avenue N.E. and 68th Avenue N.E.

9) Enhanced pedestrian access and circulation on 73rd Avenue and 68th Avenue N.E. (e.g. landscaped sidewalks) to connect residential areas to main commercial core.

Woodinville

1) Completion of the Woodinville North and south by-pass as described in King County Ordinance.

2) Completion of the Woodinville Grid System as described in King County Ordinance. For those portions of the grid system that are not established by ordinance, the locations and design standards of such roads should be consistent with recommendations from the Design Guidelines Study.

3) Woodinville-Duvall Road (N.E. 175th Street): construct landscaped median in current center turn lane with left-hand turn pockets at key intersections.

4) Construct or enhance at-grade pedestrian crossings at the following locations:

   a. 140th Avenue N.E. and N.E. 175th Street intersection.

   b. Proposed north-south grid road and N.E. 175th Street intersection.

   c. Proposed south by-pass and N.E. 175th Street intersection.

   d. At least one pedestrian crossing along South Bypass Road to promote pedestrian access between Sammamish River Trail and Woodinville Center.

e. 140th Avenue N.E. at park-n-ride lot and N.E. 181st Place intersection.

f. 140th Avenue N.E. and south bypass intersection.

5) Acquisition of properties fronting N.E. 175th Street between proposed South bypass Road and Sorenson School to create open space/view corridor.

6) Acquisition of properties along Sammamish River Trail near N.E. 175th Street and development of park with pedestrian connection to commercial center.

B. OTHER MECHANISMS FOR IMPLEMENTATION

In addition to private development conditions enacted through Area Zoning and the King County Zoning Code and capital improvement projects funded by the county and/or private developers, other potential mechanisms for implementing specific development and design guidelines include:

- Business Improvement Areas: A voluntary association such as a Business Improvement Area (BIA) could help in implementing certain design guidelines, such as streetscape improvements along primary pedestrian streets. Comprised of property and business owners in a defined area, a BIA has the ability to raise funds through assessments levied on all members.

- Local Improvement Districts: Local Improvement Districts could be formed to finance transportation improvements such as the proposed Woodinville grid system or a potential community parking facility.

- Joint Private Agreements: Voluntary arrangements between property owners can be used to implement several important development and design guidelines, including:

  - Shared access agreements that can reduce the number of driveways on primary pedestrian routes.

  - Shared parking agreements that can help reduce the amount of parking needed for individual development.

C. ISSUES REQUIRING FURTHER STUDY

The development and design guidelines recommended in this effort represent a broad framework for transforming Woodinville and Kenmore into compact, pedestrian oriented activity centers. Because of the limited budget and scope of the study effort, the guidelines are not intended as detailed design concepts; for example, detailed landscape plans are not designed for each primary pedestrian street, although such plans are recommended for future completion. Likewise, there are a variety of issues that require substantial study and analysis, for which this study effort could only begin to scratch the surface. A listing of planning/design issues requiring further study would include:

- A comprehensive analysis of parking demand and supply in Kenmore and Woodinville. Such an analysis would help to determine appropriate standards for reducing the amount of total off-street parking and on-site surface parking lots. That study could also explore other options for accommodating parking needs, such as community parking facilities and shared parking arrangements (e.g. park-n-ride lots).

- Many of the guidelines should be subject to additional testing and analysis. For example, prototypical development concepts and site plans should be prepared that incorporate guidelines such as minimum setbacks, height limits, and parking requirement. This analysis will provide much needed tests of the economic (development feasibility) effects of the recommended guidelines.

- Landscape plans for the designated primary pedestrian streets in both the Woodinville and Kenmore centers. Those plans would include detailed standards for street trees, planters, street furniture, special lighting, and other streetscape elements, as well as identifying and evaluating alternative sources of funding these improvements.

- Detailed design concepts for recommended open space areas and pedestrian connections. Examples include the urban plaza, civic square and dedicated pedestrian pathway in Kenmore, and the riverfront park in Woodinville.

Appendix 3

Kenmore Urban Activity Center Parking & Economic Analyses

Final Report

June 12, 1992

NBBJ

I. Introduction and Background

As part of the Northshore Community Plan Update, an urban design study was undertaken in early 1991 to identify design guidelines for the commercial areas in the Kenmore urban activity center (Kenmore center). The purpose of the urban design study was to translate County-wide and Northshore community design goals and policies for the Kenmore center into site-specific development conditions and other actions that can serve as guides to future development. The design goals for the Kenmore center seek to increase density, encourage pedestrian activity, create a sense of identity for Kenmore, reduce reliance on the automobile, and enhance the Center's marine orientation.

During the same period, the King County Building and Land Development Division was engaged in a project to update the King County Zoning Code. Title 21.38 of the Executive Proposed Revised Zoning Code includes provisions for establishing Special District Overlays for carrying out comprehensive and community plan policies in areas with special land use objectives. Within a designated Special District Overlay, development conditions/standards can be adopted that modify regular zoning provisions. One type of Special District Overlay being considered in the proposed zoning code -- Pedestrian-Oriented Development -- is intended to provide for high-density, pedestrian-oriented retail/employment uses such as is desired for the Kenmore center.

Using ideas from both the urban design study and the Pedestrian Overlay District provisions of the proposed new zoning code, a package of P-Suffix conditions were developed by King County Community Planning and applied to certain commercially-zoned properties in the Kenmore urban activity center as part of the Executive Proposed Northshore Community Plan Update and Area Zoning. Two Pedestrian Overlay Districts -- a North District extending along N.E. 181st Street between 65th and 73rd Avenues N.E., and a Mixed-Use District covering the large parcels south of SR-522 -- were identified, and development conditions were attached to properties within these districts that are intended to enhance pedestrian activity, encourage increased density, and foster better use of transit. The P-Suffix conditions include:

- Prohibition of certain uses such as gasoline stations and drive-through restaurants and banks.
- Establishment of a maximum building setback along designated primary pedestrian streets.
- Limiting ground floor uses to retail and service uses only along designated pedestrian streets.
- Establishment of a maximum parking requirement of 1 space per every 400 square feet of floor area, limiting the amount of site covered by surface parking to no more than 50%, and setting a maximum of 60 parking stalls for any one surface parking lot.
- Requirement that parking to be located behind or on the side of buildings which front primary pedestrian streets.
- Requirement for all properties to provide a minimum of 10% of public open space as part of any new development. For properties with one acre or less, an open space fee can be paid in lieu of providing the space on site.
- Limits on the number of curb cuts to be provided as part of new development, and requirements for providing pedestrian connections both within a site and to adjacent properties.

In addition to the P-Suffix conditions, a proposed Mixed-Use zone requirement has been proposed that establishes a minimum Floor-Area-Ratio (FAR) of .75:1. This provision in effect requires two-story development with ground floor retail on most developable properties within the Pedestrian District areas in Kenmore. On the largest parcels, the minimum density could also be met by providing multi-story office and/or residential buildings on the same site with one-story retail, but not necessarily in the same structure.

Since the completion of the Executive Proposed Northshore Community Plan Update, concerns have arisen regarding the economic viability of the pedestrian district guidelines proposed for the Kenmore center. As a result, King County Community Planning is undertaking a new study to evaluate the proposed guidelines and to the make any appropriate modifications as part of King County Council review of the Northshore Plan.

NBBJ was hired by King County to assist in the evaluation of the proposed pedestrian district guidelines for Kenmore. Our charge was limited to the following tasks:

- Review appropriateness of the maximum parking standard and recommend modifications as necessary.

- Evaluate the economic viability of the proposed guidelines through 1) a market analysis of the demand for small and mid-sized retail uses in North Kenmore through the year 2010, and 2) preparation of financial pro formas to assess the economic feasibility of potential development with and without the guidelines.

- Preparation of graphic materials to assist King County Community Planning at community meetings and King County Council review sessions.

The remainder of this document summarizes the results of our work from the first two tasks.

II. Review of Parking Standards

The Executive Proposed NSCP establishes a maximum parking standard that applies to all commercial-zoned properties located within the designated pedestrian districts in the Kenmore urban activity center. The proposed maximum parking requirement of 1 space per 400 square feet applies to all non-residential uses and is intended to achieve three main objectives:

1. Reduce single occupancy vehicle demand.
2. Modify the functioning of the retail and residential community to be more pedestrian-oriented.
3. Enhance the aesthetics of the urban area by limiting the size of surface parking lots.

The objective of this portion of the study was to evaluate the appropriateness of the proposed maximum parking standard in the Kenmore pedestrian district, and if necessary to identify alternative standards for off-street parking. It is also intended that this work be applicable to other King County urban activity areas. Three primary tasks were undertaken in the parking analysis:

- Background material was compiled on parking demand and standards for land uses appropriate to the pedestrian district (i.e. office, retail and multi-family residential) using reference material available from national planning and transportation organizations such the American Planning Association (APA), Urban Land Institute (ULI), and Institute of Transportation Engineers (ITE).

- Parking regulations of local jurisdictions were surveyed and compiled to identify innovative ways of handling parking in pedestrian-oriented districts and in specific development projects.

- Other innovative techniques such as performance standards, shared parking and transit-related reductions were researched nationally and locally for applicability to the Kenmore urban activity center.

The majority of existing parking supply in the Kenmore center is located along SR-522 and serves the parking needs of auto-oriented commercial developments situated on this major commuting route. Two Metro park-n-ride lots are located in Kenmore. A 4.2 acre lot (432 spaces) is situated on the north side of SR-522 east of 73rd Avenue N.E., while a 4 acre lot (375 spaces) is located on the west side of 68th Avenue N.E., north of N.E. 181st Street. The most recent utilization statistics maintained by Metro reveal that during a three-month period in early 1992 the park-in-ride lot along SR-522 was operating at 96% capacity, while the lot on 68th Avenue N.E. was on average only 17% full. The majority of the remaining off-street parking in the activity center is within the Kenmore Village shopping center located on the north side of N.E. 181st Street west of 68th Avenue N.E. It appears from multiple site visits to the area that the Kenmore Village parking lot is underutilized. There is currently limited opportunity for on-street parking in the Kenmore center.

A. Parking Demand and Standards

Parking demand is the real number of spaces required to serve the patrons that are attracted to a specific use or mix of uses over a given time period. Determinants of parking demand include:

- Type, size and intensity of use
- Location and accessibility of facility
- Availability of alternative modes of transport (transit, bicycles, walking)
- Population characteristics (car ownership rates, income, age)
- Cost of parking
- Auto occupancy

Given these multiple variables, there are no "standard" parking demand ratios for various uses. Indeed, parking demand is site specific and can and does change; fuel costs and shortages, changes in shopping patterns and work schedules, increased use of public transit all affect parking demand at both the regional and site specific level.

Nonetheless, a "measuring stick" is often useful for a basic understanding of the parking needs of different land uses. The most widely used references for auto trip generation and parking demand are compiled by the Institute of Transportation Engineers (ITE). The ITE publications are based on nationwide surveys of various development projects; the parking publication lists parking demand ratios for 45 land use categories.

Parking professionals are cautioned, however, when using these reports that data may be based on a small number of project studies for some land use types and some studies are outdated. Additionally, most ITE project studies are in suburban locations; factors such as alternative modes of travel (e.g., pedestrian access and transit) are not reflected.

The ITE parking reports are helpful in identifying trends in parking demand rates. The latest ITE parking report shows a trend toward lower parking rates for office uses that may be attributed to changes in the work place that have increased the amount of space per employee (e.g. higher ratios of professional to clerical/blue collar staff and increases in technological equipment). Thus parking rates for general office buildings (50,000 sf or less) have dropped from 3 and 3.5 spaces per 1,000 square feet in 1973 to below 3 spaces per 1,000 square feet recently. (Office buildings greater than 50,000 square feet have, on the other hand, increased the density of employees/sf.)[1]

Other planning organizations that have compiled parking demand statistics include the Urban Land Institute (ULI) whose parking survey of 161 development projects, in both downtown and suburban areas, was the basis for a detailed report on the calculation of shared parking in 1982. Both ITE and ULI parking demand ratios for those land uses appropriate to a pedestrian district are shown below. (For a more complete table of ITE data, see Appendix C, Tables 1-3).

Table 1
Peak Parking Demand

	Peak	ITE [1] (per 1,000 GLA [2])	Approximate Conversion to 1 space/GLA	ULI (per 1,000 GLA)
Office				
Building	(Weekdays)	3.0 spaces	1 space/350 GLA	Same as ITE
Office Park		3.3 spaces	1 space/300 GLA	
Retail				
Less than 400,000 sf	(Saturdays)	4.5 spaces	1 space/225 GLA	5 spaces
Multi-family Residential				
Studio	(Evenings)	1.0 spaces/unit	1 space/unit	
1-2 Bedroom		1.5 spaces/unit	(per rate auto ownership)	

1 85 percentile; add 10% safety factor to determine design value for most uses (not residential)
2 Gross Leasable Area (typically 85% to 95% of GSF)

1 Urban Land, May 1988, "Traffic and Parking, A New Generation of Information, R. Dunphy.

Minimum parking standards are established by local jurisdictions to ensure that parking demands are met for specific types of development. Local parking standards vary widely both nationally and locally (see Appendix C, Table 4 for recent nationwide survey of parking standards). A representative range of minimum parking standards for several local jurisdictions is summarized below (see Appendix C, Tables 5 and 6 for complete matrix of parking standards for King County, Kirkland, Edmonds, Seattle, and Bellevue).

Table 2
Range of Minimum Parking Standards

	High	Low
Office		
General	1 space/200 sf (KC)	1 space/350 sf (Kirkland)
Administrative	1 space/800 sf (Edmonds)	1 space/1,000 sf (Seattle)
Customer Services	1 space/350 sf (Seattle)	1 space/400 sf (Edmonds)
Health Services	3 to 5 spaces/1,000 sf (Bellevue only) (same as 1 space/200-350 sf)	
Retail		
General	1 space/200 sf (King County)	1 space/350 sf [1] (Seattle)
Restaurant	1 space/100 sf (Edmonds)	1 space/200 sf [1] (Seattle)
Multi-family Residential	2 spaces/unit (Edmonds)	1 space/unit (Seattle)

1 Seattle codes include exemptions for various amounts/types of retail space in pedestrian districts.

These ranges reflect significant differences in the required amount of parking; standards of 1 space per 200 square feet and 1 space per 350 square feet for a 20,000 square feet office building result in parking areas of 100 and 57 spaces, respectively. The 43 spaces required by the more generous standard results in roughly 1/2 acre of surface parking.

The range of minimum standards generally reflect differences between urbanized and suburban areas. Seattle, for example, has adopted standards requiring less parking than those of the county or suburban towns, which is attributable to captive market effects (reduced auto trips due to employees shopping where they work, or residents shopping within walking distance of where they live) and the greater use of transit. In practice, actual parking ratios of 1 space/350 square feet office and 1 space/200 square feet retail are considered "adequate" for pedestrian-supportive developments. For example, the Park Place mixed use development in Kirkland provides parking that reflect these ratios. Parking at Park Place has required careful management and includes reserved spaces for office uses, use of remote lots, and employee-designated spaces.

Very few jurisdictions specify maximum parking standards such as is being proposed for the Kenmore center. Locally, the "maximum" standard has been adopted only by Bellevue, in conjunction with extensive traffic modeling studies and transit improvements. Bellevue has been cited in nationwide planning publications as "innovative" in using this maximum standard. Bellevue's maximum standards are most restrictive for office uses within the "core" areas (e.g. 2-3 spaces/1,000 NSF); standards for retail and residential (e.g. 3-5 spaces/1,000 NSF and 1-2 spaces/unit, respectively) generally fall within the minimum ranges set by other jurisdictions.

Recommendations for Kenmore

1. Strive for Balance

First and foremost, parking standards must meet the real parking needs of a use or mix of uses and ideally, without overcompensating and providing unused spaces.

- An under supply of parking results in overflow into neighborhoods, congestion on adjacent streets and potential loss of business customers. In Kenmore, where revitalization of the retail district along N.E. 181st will depend on good pedestrian and auto access, an adequate parking supply must be assured for retail activities.
- An oversupply reduces overall density of development and detracts from pedestrian-friendly settings.

2. Don't Use Maximum Parking Standards

Maximum parking standards are most appropriate for urbanized areas with significant transit opportunities. Based on available research, it appears that such standards have been used only in areas with major employment (i.e. office uses), such as downtown cores of larger cities and in connection with major transit improvements and transportation demand management programs. In Kenmore, the absence of major employment uses and predominance of retail activities renders the area unsuitable for reducing auto trips through mandatory parking reductions.

3. Start with Appropriate Minimum Standards and Consider Incremental Change

The proposed parking standard of 1 space per 400 sf of non-residential use appears to be insufficient for commercial uses, particularly retail uses, based on both ITE/ULI demand values as well as standards being used by other local jurisdictions. Given the retail focus of the pedestrian area and the current lack of vitality in Kenmore, minimum standards of 1 space per 250 or 300 square feet for retail uses and 1 space per 350 sf for office uses would ensure parking demand is met. These standards fall within the mid-range of local standards. They are also more likely to be acceptable to developers and lenders of potential new projects within Kenmore.

Incremental change of these standards, once Kenmore has met with success in creating a more vibrant center and achieved a better understanding of its parking needs based on new pedestrian-oriented projects and roadway improvements, may be an appropriate strategy. For example, standards may be increased once significant new multi-family development occurs in and adjacent to the activity center, as is being encouraged by proposed new zoning for the Kenmore center.

4. Reduce through Options/Incentives

A commonly used approach, both nationally and locally, is to reduce the amount of parking provided is through use of incentives based on transit use, transportation demand management plans (TDM), on-street parking and shared parking. An incentive-based approach assures that sufficient parking is required, yet encourages property developers to consider factors that often reduce actual need on a site-specific basis.

King County's current provision for reductions based on proximity to streets with frequent transit headways would appear to be appropriate. Proposed King County zoning code parking reductions of up to 50% based on project specific parking demand studies also appears to be appropriate. Additional recommendations on incentive-based parking reductions is discussed below under the heading Innovations.

5. Additional Considerations

- Consider specifying additional parking standards within the broad "non-residential" category. This includes distinguishing between retail and office uses (see above) as well as cinemas and restaurants. These uses are potentially vital activities for a pedestrian district but have special parking needs and peak demand hours. (These are also potentially good shared parking candidates.) Refer to ITE/ULI demand values included in Appendix C for appropriate standards.

  Several residential uses that have special parking needs, typically lower demand, may also be distinguished from other residential uses. These include elderly housing and low-income disabled housing; these tenants typically have low car ownership rates and heavy reliance upon transit thereby reducing parking demand. Nationwide, reductions are typically 50%-65%; refer to Seattle zoning code for appropriate standards.

- Consider exemption of parking requirement for first 2,000-5,000 sf of ground floor retail space based on availability of on-street parking. The amount of exemption could be based on the length of property frontage, for example, a site with a 250-foot length could be able to reduce off-street parking by 17 spaces (250 feet ÷ 14 feet/car). Exemptions for retail space are typically used in urban areas, for example in Seattle. This recommendation assumes provision on on-street parking opportunities within Kenmore.

- Consider allowing tandem parking for residential uses; typically a tandem space equals 1.5 required parking spaces. In practice, this has been a successful way of providing 2 spaces per unit and reducing the amount of site area consumed by parking. This approach also works well with parking under buildings in mixed use projects.

B. Innovations

Shared Parking

Shared parking is effective between uses whose hours of operation and peak parking demands do not overlap. This technique has become an increasingly common tool for accommodating parking within mixed use projects or between adjacent uses. Most local jurisdictions have provisions for shared, joint use or cooperative parking arrangements.

Reductions vary, depending upon the mix and size of uses; typically reductions are limited by standards to 10-20% of total required parking. Methods of determining accurate parking needs for mixed use projects have been developed by several organizations (see Appendix C, Tables 7 and 8).

For Kenmore, it is recommended that shared parking reductions be encouraged, based on project specific parking demand studies. No overall parking reduction standard (e.g. a maximum 20% of required parking) is recommended.

Use of Remote Lots

Parking regulations typically allow use of remote lots with restrictions regarding distance from use; 300 feet for retail uses and 800 feet for other commercial uses is common. In practice, remote lots are an effective way of providing long-term parking, such as employee parking, and have even been used for cinema uses.

Metro park-n-ride lots are typically not candidates for remote or shared parking as they are designed to serve transit users. It is noted, however, that the current underutilization of the park-n-ride located north of N.E. 181st Street in the Kenmore center lot contradicts the goal of creating a transit-supportive, pedestrian-friendly activity center. While increasing the transit utilization of this lot would be the highest priority, if such a solution is not feasible then consideration should be given to allow parking that serves the adjacent commercial district.

Transit Related Regulations

Transit-related regulations (options for reduction of parking based on transit opportunities) are increasingly common regulatory tools. In review of local regulations, King County's present code appears to address this issue.

It is not likely that transit related reductions or TDM reductions will provide a significant reduction in parking within Kenmore due to the emphasis on retail and residential uses. These tools are most effective in employment centers with significant amount of high density office development.

Fees in Lieu of Parking Spaces

Providing parking in municipal parking facilities has been employed locally by both Edmonds and Kirkland, although the latter jurisdiction reports having significant parking problems. This is probably not a feasible tool for Kenmore due to the administrative efforts required to manage parking facilities/funds.

Performance-Based Standards

Performance-based standards require detailed calculation of parking needs on a project-by-project basis. Two examples where this approach is used is in Tumwater, Washington and San Diego, California. (See Appendix C, Worksheets 1 and 2) Drawbacks that preclude recommendation of this approach for use in Kenmore include:

- Potential inconsistency in application.
- Potential misuse by applicants/developers due to discretion allowed in worksheet (Tumwater example).
- Need to re-evaluate parking needs for changing tenants in commercial spaces.
- Limited use of this type of standard; no proven track record and unfamiliarity for developers/lenders of potential projects.

C. *Other Proposed NSCP Parking Standards*

Additional proposed parking regulations for the Kenmore Pedestrian Districts address issues such as the location of parking, maximum parking lot sizes (i.e. a 60 stall maximum) and landscaping standards.

Location of Parking to Rear/Side of Use

This regulation has been employed nation-wide (e.g. "neo-traditional town planning) and locally in pedestrian districts in Seattle and Bellevue. It is vital for using the public streets and sidewalks as key elements in creating a pedestrian-friendly environment.

On-Street Parking Provisions

While the proposed guidelines allow provision of required parking on-street, Kenmore currently has limited on-street parking opportunities. Roadway improvements that include on-street parking lanes are strongly recommended to reduce off-street parking areas, slow through traffic and provide "buffers" for pedestrians from traffic.

Maximum Size of 60 Parking Stalls

This requirement has the potential to create inefficient parking layouts, especially on small lots. The location of surface parking to the rear and side of buildings may be sufficient to create lively pedestrian streets.

Encourage Efficiency in Parking Layout and Design

In conjunction with the previous recommendation, the County should encourage efficient parking so that a minimum amount of site area is consumed by surface parking. The following guidelines may be appropriate:

- Use double bays; they are 30 - 50% more efficient than single bays.
- Use 90 degree angled parking where appropriate; is most efficient parking angle and effective for long-term parking areas such as employee and residential parking.
- Continue use of 50% compact stalls.

Limit Landscaping Requirements

Requiring 20 feet of landscaping between parking lots may be excessive within a pedestrian district with limited development area. Excessive landscaping may contribute to loss of density, in both building and parking areas, and may add to walking distances between parking and activities. This standard may also be difficult to implement given uncertain phasing of development on adjacent parcels. Continued use of 3% minimum parking landscape requirement may be sufficient to provide pedestrian comfort in parking areas.

III. Market Demand for Commercial Retail in the Kenmore Center

A key assumption underlying the application of pedestrian-supportive development conditions to commercial properties in the Kenmore urban activity center is the presence (over the 10-year life of the Community Plan) of sufficient market demand for pedestrian-oriented commercial development in Kenmore. A market analysis was undertaken to answer the following questions:

- What type of commercial uses are appropriate for a pedestrian-oriented district in the Kenmore center?
- What are the strengths and weaknesses of Kenmore as a setting for pedestrian-oriented commercial development?
- What is the potential demand for new commercial retail space in Kenmore over the next ten to twenty years, given the current and projected future level of surrounding population? How much retail demand will be generated by new multi-family development that is being encouraged within the Kenmore center?
- What steps need to be taken in Kenmore to realize the vision of a pedestrian-oriented commercial district around N.E. 181st Street, including modifications to proposed zoning and P-suffix conditions?

The following paragraphs summarize the major market analyses findings.

A. Types of Commercial Uses Appropriate for a Pedestrian District

Field visits were made to a variety of commercial settings in the Puget Sound region that have a strong pedestrian character. Two types of commercial districts/centers appear to be appropriate candidates for the Kenmore area.

The first type is the commercial district that uses the public streets and sidewalks as the primary pedestrian amenity. Examples include the downtown areas of smaller suburban communities such as Edmonds and Kirkland, and neighborhood commercial districts in Seattle such as Ballard and West Seattle. These districts are generally low-scale with mostly one-story buildings. Buildings form a continuous facade that directly fronts the street, with parking located either behind or on the sides of buildings. The core area of these pedestrian districts are quite small, spanning an area of two to five blocks. Most commercial districts are located on major arterials that serve both the local population and through-traffic.

Retail uses in commercial districts typically are small-scale: restaurants, specialty retail shops, bookstores, insurance and real estate brokers. On the fringe of the core commercial area uses tend to be less pedestrian-oriented, with surface parking lots, gasoline service stations, and small auto-oriented strip centers not uncommon.

Many of the pedestrian-oriented commercial districts in the region were developed prior to the advent of the shopping center. Over the years each one has gone through some tough periods as businesses have relocated to community and regional centers, taking advantage of the drawing power of major anchor tenants and the better automobile access and parking that shopping centers provide. The most successful districts tend to be surrounded by significant residential densities, as this walk-up traffic helps to compensate for the loss of shoppers who desire the better automobile access that a shopping center can offer.

The other type of pedestrian-supportive retail area appropriate to Kenmore is the neighborhood commercial center that has strong pedestrian features either internally and/or to adjacent areas. Examples in the region include Park Place in Kirkland, and three centers in Seattle; University Village, Jefferson Square (West Seattle), and the Broadway Market (Capitol Hill).

With the exception of University Village, each of these centers have two or more stories; ground floor uses are retail with upper floors comprised of residential (Jefferson Square), office (Park Place and Jefferson Square) or retail (Broadway Market). Retail uses typically include a supermarket, drug store, specialty retail shops, and entertainment uses such as theaters. Neighborhood shopping centers typically range in size from between 50,000 and 100,000 square feet (see Appendix A, Table A-11 for Urban Land Institute survey of neighborhood shopping centers). Parking generally fronts the public street, with internal access roads and pedestrian walkways forming the main pedestrian areas. With the exception of Broadway Market, these developments are not integrated very well with the surrounding neighborhood. Because of the need for substantial parking, overall development densities tend to be quite low even though some buildings have two stories. For example, the floor-area-ratio of Park Place in Kirkland is only about .50:1.

In the pedestrian district proposed for Kenmore around N.E. 181st Street, there are opportunities for both types of pedestrian-oriented development described above.

B. Existing Character of Commercial Development in Kenmore

Based on review of King County assessors records and land use maps maintained by the Planning Department, there is an estimated 300,000 square feet of commercial retail development currently in the Kenmore urban activity center. The breakdown by use is as follows: Supermarkets/grocery stores (106,000 sf); fine dining restaurants (51,000 sf); fast food restaurants (34,000 sf); home appliance (21,000 sf); apparel (2,000 sf); drug stores (20,000 sf); specialty and other convenience retail (66,000 sf). These numbers exclude building materials stores, banks, and entertainment uses such as Kenmore Lanes.

The majority of existing commercial development in Kenmore is located along SR-522, and is highly oriented to automobile traffic that uses this major commuting route. One exception is the Kenmore Village shopping center, located on the north side of N.E. 181st Street west of 68th Avenue N.E. Uses in the Kenmore Village center include a supermarket, drug store, a variety of specialty retail shops, a restaurant, bank, and a small amount of professional office space. While there are few vacant spaces in this center, it does not appear to be vibrant, as evidenced by the small number of parked cars witnessed during several field visits.

The commercial districts that Kenmore competes with include the Lake Forest Park Center to the west, Bothell commercial district to the east, and commercial districts in Juanita and Kirkland to the south.

Kenmore has both strengths and weaknesses as a setting for future pedestrian-oriented commercial development.

Strengths

- There is an existing core of retail development located west of 68th Avenue N.E. along N.E. 181st Street that contains some existing pedestrian amenities and expansion potential. The Kenmore Village shopping center, located north of N.E. 181st Street, contains pedestrian links to the adjacent park-n-ride lot and residential neighborhood. Furthermore, this center appears to be underdeveloped with an abundance of surface parking. Expansion and renovation could transform this Kenmore Village into a pedestrian-oriented neighborhood shopping center similar to Park Place and other developments described above.

On the south side of N.E. 181st Street there are several high-quality banks, sidewalks with landscaping, and rows of storefronts that face directly onto access streets between SR-522 and N.E. 181st Street. Streetscape improvements such as landscaping and widening of sidewalks could help create a nice pedestrian-friendly setting for this small commercial district.

- There is existing high-density residential development in the vicinity of the Kenmore center. The proposed Northshore Community Plan includes zoning that may result in significant new multi-family development within walking distance of the commercial area. This new population should create additional demand for pedestrian-oriented commercial development in Kenmore.

- The high volume of through traffic along SR-522 could aid commercial businesses along N.E. 181st Street if this latter road is improved and realigned. Some traffic would then be diverted from the highly congested SR-522, thus increasing the traffic and visibility for commercial uses along N.E. 181st Street.

- The presence of large vacant or underutilized parcels south of SR-522, plus the area's proximity to the waters edge creates a favorable setting for mixed-use development that includes retail activities. Redevelopment of the area south of SR-522 could positively affect the commercial district to the north, particularly if good pedestrian/auto linkages are provided.

Weaknesses

The existing commercial development along N.E. 181st Street is for the most part not of high quality and lacks pedestrian amenities such as landscaping, pedestrian pathways, and public spaces.

The Kenmore center lacks a strong employment base that could help augment demand for pedestrian-oriented retail development.

- When one thinks of the Kenmore center, the perception is of auto-oriented commercial development along SR-522. Given the current absence of pedestrian amenities in the area, it is very hard to conceive of a pedestrian-friendly retail district along N.E. 181st Street.

- Continuation of traffic congestion along SR-522 negatively affects access to a potential commercial district along N.E. 181st Street. This is particularly true for households who reside south of SR-522 in the North Juanita area. Commercial development on parcels south of SR-522 would be more accessible to these residents than development to the north.

- The area along N.E. 181st Street between 68th and 73rd Avenues N.E., contains a number of existing uses that are not compatible with pedestrian-oriented retail development. They include several mobile home parks, a car wash, the back side of a Safeway supermarket, and a rental store. In addition, a mini-storage warehouse is proposed for this area.

- N.E. 181st Street currently is lacking key amenities that typically characterize roads supportive of pedestrian-oriented commercial development. Access through the Kenmore center on N.E. 181st Street is poor due to the noncontiguous alignment at 68th Avenue N.E. Furthermore, much of the street lacks sidewalks, curbs, and streetscape improvements that are important in fostering a pedestrian-friendly setting.

C. *Potential Demand for Commercial Retail Space in Kenmore*

A market demand analysis was undertaken to project the potential demand for commercial retail space in the Kenmore urban activity center through the year 2010. The analysis focused on neighborhood and community-serving retail activities such as grocery/drug stores and other convenience retail uses, restaurants, and specialty retail. Retail uses that are more region-serving, such as department stores, were not considered since these destination centers would generate substantial new traffic demand in an area that already has unacceptable levels of congestion.

The methodology employed in the market demand analysis and the detailed projection results can be found in Appendix A. The following points highlight the major findings from the analysis.

1. The residential communities that surround the Kenmore urban activity center are quite wealthy, with household income levels that exceed County-wide averages for King County. The following table, which presents 1990 census data for census designated places in the Kenmore vicinity, illustrate this point clearly.

	Median Household Income Level	% of Households Over $50,000
Kenmore	$36,995	32%
Inglewood-Finn	$47,731	46%
Lake Forest Park	$43,007	39%
Alderwood Manor	$41,445	36%
Bothell	$37,159	34%
Brier	$49,547	49%
King County average	$36,179	32%

   These income levels begin to suggest that a strong local market may exist for supporting a high-quality pedestrian-oriented commercial district in Kenmore.

2. The amount of existing commercial retail space in Kenmore (300,000 sf) appears to be approximately 50,000 square feet below the level of demand supportable by the current local population and existing drive-through traffic. Market conditions vary considerably by type of store. For example, grocery stores appear to be in oversupply, while clothing and drug stores are substantially in undersupply.

3. New households projected in the Kenmore market area over the next twenty years will generate potential demand for approximately 140,000 square feet of additional retail space in the Kenmore center. Assuming population growth occurs evenly over this period, new demand for about 70,000 square feet of commercial retail development is likely over the ten-year life of the Northshore Community Plan Update. In respect to how current unmet and potential future demand might be accommodated in Kenmore, the following observations are apparent:

   - A limited amount of new commercial development is likely to occur along SR-522. Much of this commercial strip is built-out with auto-oriented retail uses, while increased traffic congestion is likely to constrain new development. Furthermore, the County's proposed new zoning would limit the amount of new commercial development along SR-522.

- The most probable location for new commercial development in Kenmore in the near-term is on the large parcels located south of SR-522. The large size of these vacant properties plus their proximity to the water's edge are favorable to creating a special pedestrian-friendly mixed-use development that includes a commercial component. These parcels also provide superior access to the fast growing and wealthy Inglemoor-Finn/North Juanita areas, since the highly congested SR-522 does not need to be crossed.

- Even if a moderate amount (say 75,000-100,000 sf) of new neighborhood commercial retail development were to be built south of SR-522 during the next ten years, projected demand for new retail space in Kenmore would still be sufficient to support a limited amount (20,000 to 50,000 sf) of new commercial development around N.E. 181st Street. North Kenmore's probability of capturing this demand depends on how well the character of the area can be transformed into a vital retail core supportive of pedestrian-oriented commercial development. Suggestions on how such revitalization might occur are included in Section III.D. below.

4. The proposed Northshore Community Plan encourages high-density residential development in and around the Kenmore center. Based on proposed zoning in the Northshore Plan, approximately 2,400 new housing units (1,200 each in areas north and south of SR-522) may be constructed that are within walking distance (one-quarter to one-half mile) of the Kenmore commercial district. At total build-out, these new households would generate demand for approximately 28,000 square feet of retail space each in the commercial districts north and south of SR-522. Assuming build-out occurs evenly through the year 2010, households residing in the Kenmore center would support approximately 14,000 square feet of space in both the north and south parts of Kenmore over the ten-year life of the Northshore Community Plan.

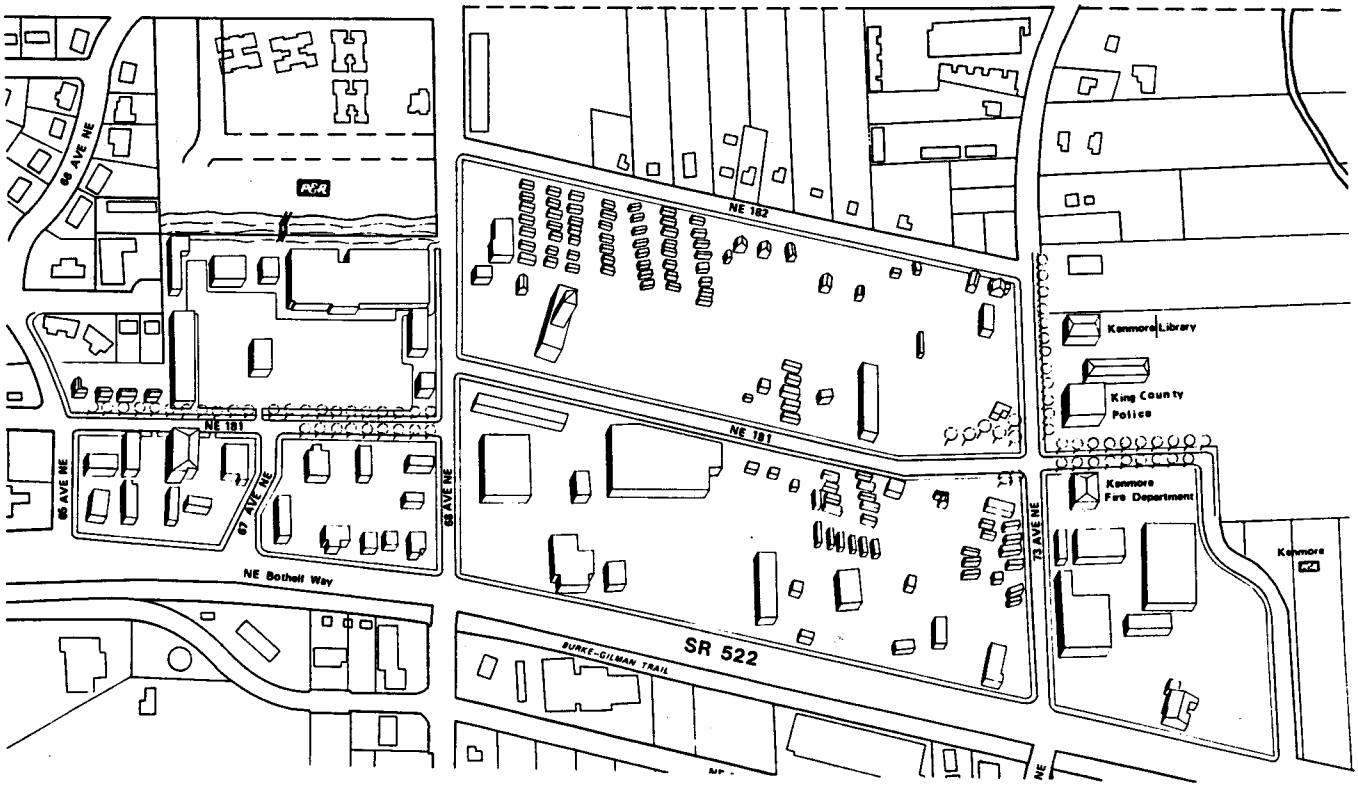
   By itself this level of close-in housing is insufficient to fully support an entire neighborhood retail center. However, it would augment demand from the broader Kenmore population base, as well as generate a substantial amount of walk-up traffic that can help foster a pedestrian-supportive retail setting in Kenmore.

D. Recommendations

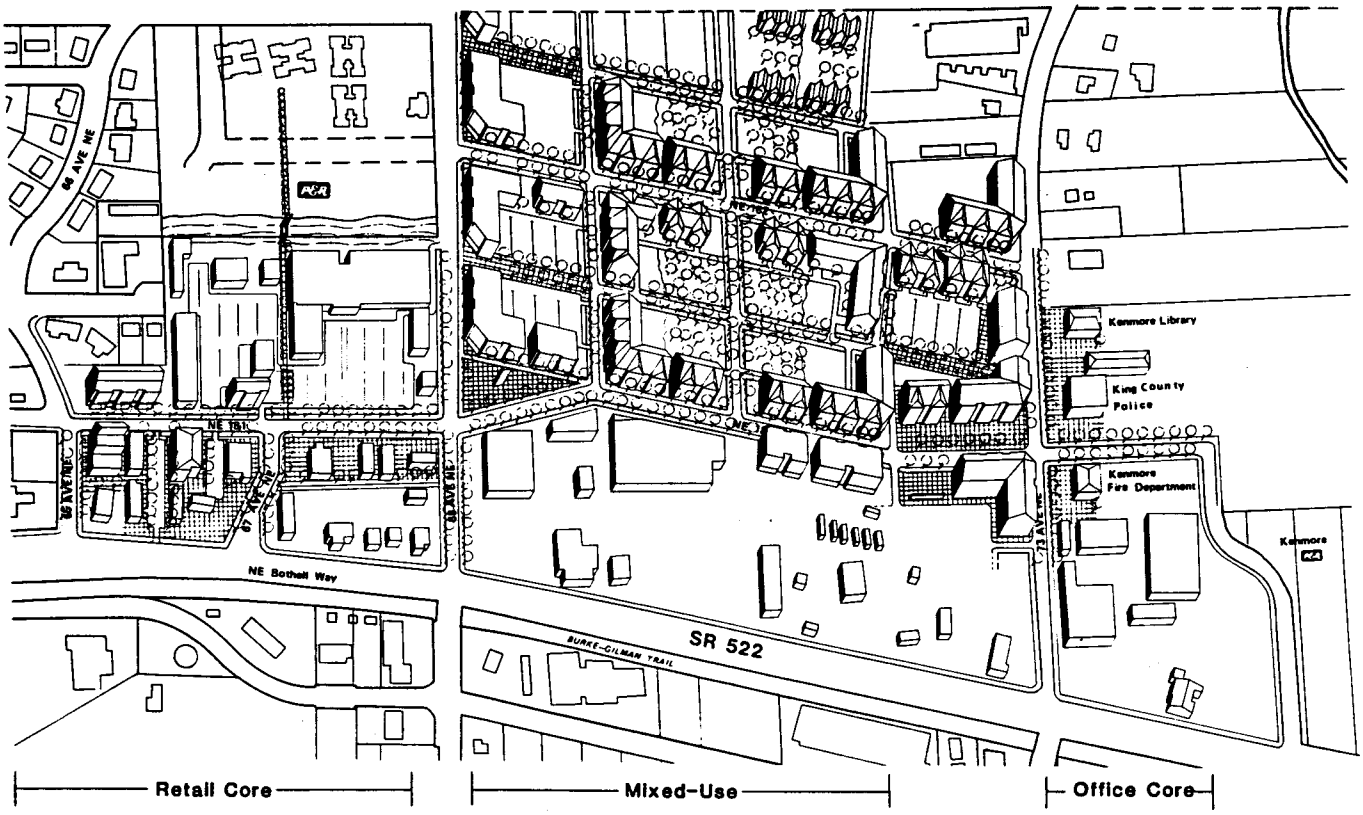
Based on the market analysis findings, the following recommendations are offered on ways to promote a vital, pedestrian-friendly commercial district in Kenmore.

1. Given the number of obstacles that must be overcome in creating a vital pedestrian-oriented commercial district along N.E. 181st Street (see discussion on weaknesses above), change is likely to occur incrementally and will require a concerted effort by both local property owners/residents and King County. A progression of improvements along N.E. 181st Street could be as follows (see the following graphic illustration):

   - <u>Improvements to N.E. 181st Street between 65th and 73rd Avenues N.E., including addition of curbs and sidewalks and alignment of the intersection at 68th Avenue N.E.</u> To promote a pedestrian setting and accommodate parking needs of the district, at least one lane of on-street parking should be provided. We recommend that King County give strong consideration to funding improvements along N.E. 181st Street through its general capital budget for transportation rather than through direct fees imposed as conditions of future development in Kenmore. County-funded improvements on N.E. 181st Street could serve as a catalyst to spur private investment in pedestrian-oriented commercial development in North Kenmore.



Kenmore North: Existing



Kenmore North: Year 2010

- Improvements to the existing commercial core area west of 68th Avenue N.E., with a focus on expansion of QFC and general upgrade of the Kenmore Village shopping center. With approximately 17,000 square feet of gross leasable area, the Kenmore Village QFC store is substantially below the 25,000-35,000 square feet range typical of modern supermarkets. Representatives of QFC contacted during this study expressed interest in a possible expansion as part of an upgrade of the entire center. Given the presence of QFC in a number of pedestrian-supportive neighborhood centers in the region (e.g. Park Place in Kirkland, University Village in Seattle), an excellent opportunity is afforded for revitalizing the Kenmore Village center and enhancing pedestrian-orientation. That expansion should include preservation and upgrade of the pedestrian linkages to the adjacent park-n-ride lot and residential community.

  Other pedestrian improvements in this core commercial area could include sidewalk improvements and landscaping along the access roads between SR-522 and N.E. 181st Street, thereby rendering these storefronts more accessible and attractive to pedestrian travel.

- New multi-family development is constructed around the commercial district, thereby creating additional demand for pedestrian-supportive commercial development.

- Redevelopment of some or all of the parcels south of SR-522 with mixed-use development that includes a neighborhood commercial component. Strong pedestrian and vehicle connections should be provided across SR-522 to encourage spin-off activity to the north.

- Office development begins to occur in the vicinity of N.E. 181st Street and 73rd Avenue N.E.

- Infill development of mixed-use projects (residential or office with ground floor retail) occurs along N.E. 181st Street, primarily between 68th and 73rd Avenues N.E.

2. Pedestrian-oriented commercial retail development is unlikely to occur along N.E. 181st between 68th and 73rd Avenues N.E. without rezones of the mobile home parks that front N.E. 181st Street.

   The attractiveness of land for pedestrian-oriented commercial development depends on the ability to establish a core area of retail development. The presence of several mobile home parks on N.E. 181st Street inhibits the potential for such a core area from developing between 68th and 73rd Avenues N.E. On the other hand, the mobile home parks do represent a dense form of housing, and their proximity to the existing commercial area west of 68th Avenue N.E. creates a good source of demand for walk-up traffic.

3. The pedestrian-oriented development conditions proposed for properties along N.E. 181st Street may have a short-term negative impact on the marketability of those properties for commercial development. The paradox is that while the development conditions are needed to assure future development is pedestrian-oriented, until steps are taken to revitalize the Kenmore center the conditions put the area at a disadvantage with competing commercial areas that do not have such conditions. Other jurisdictions who have begun to adopt pedestrian-oriented development standards (e.g. Seattle) have applied generally these standards only to areas that already exhibit strong pedestrian character.

   The financial pro forma analyses that are the subject of Section IV. provide additional information on the economic viability of the pedestrian district guidelines for North Kenmore.

4. The proposed rezoning of much of the Kenmore urban activity center for high-density residential uses should help to create increased demand for pedestrian-oriented commercial development in Kenmore. However, the level of housing projected under proposed zoning alone is insufficient to support a new commercial district. Additional residential density in Kenmore may be market-supportable given the presence of major transit service (two park-and-ride lots). On the other hand, the absence of major employment uses in Kenmore may put a limit on demand for high density apartments.

5. It is important that certain non-conforming commercial uses be allowed to expand without meeting all of the proposed development conditions for the pedestrian district. For example, in order to preserve visibility, an expansion of the QFC in Kenmore Village would likely not include much frontage along N.E. 181st Street to be covered by new buildings as required in the proposed regulations. Yet such an expansion of QFC and the Kenmore Village shopping center could be a launching point for revitalization of the North Kenmore commercial district.

IV. Financial Feasibility of Selected Pedestrian District Guidelines

An economic analysis was undertaken to test the development feasibility of several of the proposed pedestrian district development conditions in Kenmore. The analysis focused on the proposed pedestrian district located north of SR-522 that extends along N.E. 181st Street. The large vacant and underutilized parcels located south of SR-522 (Mixed Use District) have vastly different market potential from properties situated along N.E. 181st Street, and are not considered in this analysis.

The primary purpose of the economic tests described in this section is to evaluate the financial feasibility of multi-story mixed-use development along N.E. 181st Street. One development condition proposed for the North Kenmore District would require new developments to achieve a minimum floor-area-ratio of .75:1. Combined with a requirement for ground floor retail uses, this condition will necessitate development on most properties of a structure with at least two-stories, containing residential or office uses above first floor retail. On large parcels, it may also be possible to construct a multi-story residential or office building on the same site but not necessarily in the same structure of a retail building that fronts the street.

Two primary tasks were completed as part of the economic evaluation. First, research was conducted on other mixed-use projects built in the Puget Sound region, with a focus on lessons to be learned in suburban settings such as Kenmore. Research centered on mixed-use residential/retail projects that have been constructed in a variety of Seattle neighborhoods during the past five years. The second task consisted of developing a pro forma financial model that tests on a conceptual level the feasibility of mixed-use development in the North Kenmore Pedestrian District.

A. Lessons Learned from Mixed-Use Developments in Other Settings

In the last five years, a large number of multi-story mixed-used residential/retail projects have been built in Seattle neighborhoods outside of the downtown core. Site visits were made to nine of these mixed-use developments, and several developers and architects involved in these projects were interviewed to gather lessons that could be translated to suburban settings such as Kenmore. Pertinent development data from four selected mixed-use projects is included in Appendix B, Table B-12.

The inclusion of ground floor retail space in all of these projects was necessitated by City of Seattle zoning. In most commercial zones, Seattle zoning permits straight multi-family developments only at very low density. If ground floor retail space is included in the project, however, allowable multi-family densities can be substantially increased. Two characteristics are common to the majority of built mixed-use projects in Seattle. One, with few exceptions the retail space is largely vacant; and two, the economic viability of the projects depended on very high residential densities supported by strong demand for multi-family units.

Problems with Retail Space: Most of the projects in Seattle are located outside of existing commercial districts. The isolation of those developments appear to be a major reason why the retail space is not leasing well. Space that is being leased tends to be either small convenience uses (video stores are prominent) or office/personal service uses such as insurance and real estate brokers. According to one developer, another problem with retail space in these projects is that each of the parties involved in a successful development project -- developer, lender, real estate broker -- are still quite unfamiliar with the concept. Furthermore, many of these projects were completed at the tail end of an economic growth period, and thus entered a stagnant commercial retail market.

In the few mixed-use projects where the retail space has been successful, two factors tend to be present. First, the project is located in or adjacent to an existing commercial area. Second, adequate off-street parking is provided for retail customers.

Residential Portion Drives Project: All of the Seattle mixed-use projects were completed by residential apartment developers who were taking advantage of a strong multi-family market (and easily available credit) in the mid- and late-1980's. The following is a summary of the key characteristics of these projects:

- High residential density (85 to 110 units per acre).
- Limited retail space in most projects; typical retail depths are only 45 feet.
- Virtually no public open space; these are urban projects that cater to one or two person households without children.
- Parking is located under the building, either at or below grade.
- Low parking ratios that average around 1.2 spaces per unit. Parking efficiency is often increased through use of tandem parking under building.
- Apartment units are generally small (average around 700 square feet), with rents ranging between $.90 and $1.00 per square foot per month.

The combination of these factors -- extremely high density, urban rents, little or no public open space, and low parking requirements -- worked to create a successful project despite the poor performance of retail space.

With the tightening of credit markets for multi-family development in the last two years, there are a lot of similar mixed-use projects in the planning phase that are unable to obtain financing. According to every developer and architect we spoke with, the poor track record of retail space in completed mixed-use projects is one factor negatively affecting the ability to finance new projects.

From this research of mixed-use projects in Seattle, some key lessons begin to present themselves regarding the success of similar developments in Kenmore. First, a strong multi-family market is needed, and land values have to be high enough to support the higher construction costs of concrete pads for structured parking and ground floor retail space. Second, significant residential density has to be achieved. Third, for retail space to succeed, the project should be located in or adjacent to an existing commercial district, enjoy good arterial access, and provide adequate off-street parking for retail customers. Finally, given the unfamiliarity of the mixed-use product locally, a strong commercial retail market is important.

B. Financial Pro Forma Analysis

Conceptual site plans were developed and a financial pro formas were prepared to test the feasibility of multi-story mixed-use development in North Kenmore. The analysis also assessed the economic viability of certain other proposed development conditions, including minimum open space requirements and provisions restricting the amount of site area covered by surface parking.

A site of approximately 2.4 acres (379-foot length by 280-foot depth) situated along N.E. 181st Street between 68th and 73rd Avenues N.E. was selected as the basis for the pro-forma analysis. This site, which is representative of vacant properties along N.E. 181st Street, was selected for testing purposes only and should not be perceived as part of an actual development plan. Conceptual site plans were prepared to determine development parameters under the following development options:

1. One-story retail development
2. Two-story structure, with ground floor retail and second story residential.
3. Same as 2., but with second story office.
4. Same as 2. and 3., but with four stories.
5. Same as 2. and 3., but with five stories.
6. Office scenarios were also separately tested to include structured parking.

To test the sensitivity of each development option to specific development conditions proposed as part of the North Kenmore Pedestrian District, financial results were calculated under three scenarios. Scenario 1 was a baseline scenario that incorporated the following proposed development conditions:

- Building facade fronts street for at least 75% of length of site.
- A minimum of 10% of public open space is provided.
- Maximum residential density of 48 units per acre.
- On-site parking provided at 1.5 space per residential unit, 1 space per 350 square feet of office space, and 1 space per 300 square feet of retail use. These ratios represent the recommended minimum parking standards from Section II of this report. On-site retail parking was reduced by 14 spaces that could be accommodated on-street in front of the building.
- For one-story retail and two-story residential/retail, all surface parking was assumed. Four and five-story residential/retail assume some parking under building (behind retail space). For structured parking options of office/retail, a separate parking structure is assumed for accommodating office portion, with surface parking for retail.

A second scenario (Scenario 2) relaxed the open space requirements to 4% and did not proscribe any maximum residential density. A third scenario (Scenario 3) used the same assumptions as Scenario 2 and in addition used a reduced residential parking ratio of 1.2 spaces per unit.

Conceptual site plans, capital and operating cost assumptions, and the detailed financial pro forma calculations for each of the development options and scenarios are included in Appendix B. The following paragraphs highlight the major findings from the analysis.

1. Findings from Conceptual Site Plan Analysis

The development parameters for each of the development options under Scenarios 1 through 3 are shown on Tables B-1 through B-3, Appendix B. They reveal the following:

- Under the baseline scenario (Scenario 1) the minimum FAR of .75:1 proscribed in the proposed regulations for North Kenmore is not achieved for one-story retail development, two- and four-story office/retail development without structured parking, and two-story office/retail development with structured parking. If open space provisions are reduced from 10% to 4%, then only the one-story retail development and two-story office/retail development without structured parking fail to achieve the minimum FAR.

  All multi-story residential/retail developments, five-story office/retail development without structured parking, and four- and five-story office/retail with structured parking achieve an FAR of .75:1 or greater under all scenarios.

- The site area consumed by surface parking exceeds the 50% maximum proscribed in the proposed regulations for all multi-story office/retail development options without structured parking under all scenarios Conversely, the inclusion of structured parking in multi-story office/retail development reduces the site area consumed by surface parking below 50% under all scenarios.

  All multi-story residential/retail developments have surface parking that exceeds 50% of the site area except for two-story development options under Scenario 1 (Baseline) and Scenario 3 (Reduced open space and residential parking; no density limit).

  The one-story retail development option does not exceed the maximum surface parking ratio under any scenario.

- In the baseline scenario (Scenario 1), the maximum density limit of 48 units per acre becomes the limiting factor on development potential for residential/retail developments of four- and five-stories. In other words, increased densities could be achieved and still meet the other development standards such as minimum open space requirement. Under Scenario 2, for example, residential densities are 57 and 61 units per acre for four- and five-story development, respectively.

2. Findings from Financial Pro Forma Analysis

Financial pro formas were completed for all development options and scenarios. The financial analyses, which are shown on Tables B-5 through B-11 in Appendix B, estimates the underlying (residual) land value for each development option/scenario by subtracting total estimated development costs (including lease-up costs) exclusive of land from the estimated project value. The calculated land value can be compared to existing land prices along N.E. 181st Street, which range from $5 to $10 dollars per square foot. A calculated land value that is significantly lower than the existing range of values is an indication that the project as conceived is not financially viable. The financial analyses is intended to apply exclusively to properties in the North Kenmore district along N.E. 181st Street, and the results should not be interpreted as applying to other areas such as the large parcels located south of SR-522.

Assumptions for both development and operating costs were compiled from a variety of sources, including published real estate surveys, developer/architect interviews, and NBBJ experience on similar projects. A listing of all assumptions along with data sources is included in Table B-4 in Appendix B.

The calculated residual land values for each development option under the three scenarios is shown on Table 3. The following paragraphs highlight the major findings from the pro forma analyses.

Table 3
Kenmore Center Financial Pro Forma Analysis:
(Calculated Land Values per Square Feet)

	1 Story Retail	Mixed-Use Residential/Retail 2-Story	4-Story	5-Story
Scenario 1: Baseline	$7.85	$2.65	($3.73)	($2.08)
Scenario 2: Reduce Open Space to 4% and No Density Limits	$8.65	$3.08	($2.32)	($1.23)
Scenario 3: Same as Scenario 2 plus Reduced Residential Parking to 1.2 spaces per unit	$8.65	$4.04	($1.90)	$0.90

	Mixed-Use Office/Retail (Without Structured Parking) 2-Story	4-Story	5-Story
Scenario 1	$2.66	($1.33)	($1.68)
Scenario 2	$3.18	($1.05)	($1.45)
Scenario 3	$3.18	($1.05)	($1.45)

	Mixed-Use Office/Retail (With Structured Parking) 2-Story	4-Story	5-Story
Scenario 1	($1.05)	($14.92)	($23.36)
Scenario 2	($0.78)	($15.45)	($24.49)
Scenario 3	($0.78)	($15.45)	($24.49)

Note: Current land values along N.E. 181st Street range from $5-$10/square foot.

One-Story Retail Development

Under the baseline scenario, one-story retail development yields a residual land value of about $8.00 per square foot, which is within the range of existing land values along N.E. 181st Street. The land value increases slightly under Scenarios 2 and 3 to $8.65 per square foot, which reflects additional development potential from providing less public open space.

Mixed-Use Residential/Retail Development

Two-story development yields a residual land value of $2.65 under the baseline scenario, with slightly higher land values ($3.08 and $4.04) using the relaxed standards of Scenario 2 and 3. All of these land values are below the existing land values along N.E. 181st Street and also below the values for one-story retail development.

Four-story and five-story development yields negative land values or very minimal positive land values under all scenarios. As the results show, these developments are not feasible even with reduced open space and parking and no density limits. Under Scenario 3, for example, residential densities rise to 68 and 71 units per acre for four- and five-story development, respectively, yet calculated land values remain under $1.00 per square foot. Two reasons appear to underlie the poor financial results of these developments.

First, market rents for apartments in the Bothell/Kenmore area range from between $.65 and $.75 per square foot per month, or about 20% to 30% lower than achievable rents in the more urbanized Seattle area (see Table B-12 in Appendix B for rent comparables). Existing rent levels in Kenmore appear to be insufficient to cover the higher costs of structured parking, elevators, etc. that are required for four- and five-story mixed-use development.

Second, the analysis assumes high lease up costs for retail space (2-year lease up) based on the experience of recently built mixed-use projects in Seattle. These added costs have the effect of bringing down the overall value of the mixed-use project. According to interviews with mixed-use developers and architects, banks are currently given little weight to projected retail revenues in mixed-use pro formas.

To assess the sensitivity of apartment rents on feasibility, pro-forma results for four and five-story residential/retail development were calculated using rents of $.95/month per square foot, which is currently the average rents achieved for Seattle mixed-use projects. The estimated residual land values are shown below:

	Four-Story	Five-Story
Scenario 1	$8.12	$9.88
Scenario 2	$11.80	$13.71
Scenario 3	$14.90	$18.52

With average rents of $.95/month, calculated land values under the baseline scenario approximate existing land values along N.E. 181st Street. Moreover, with these increased rents, values under Scenarios 2 and 3 show very high land values. This reveals that once achievable apartment rents in Kenmore reach a certain level (additional sensitivity analysis reveals that level to be around $.90/month per square foot), project revenues are sufficient to cover the higher costs of structured parking, elevators, etc. With these rents, land values can be increased significantly with additional residential density and relaxed open space requirements.

During the course of the analysis, two multi-story multi-family projects were discovered near the Kenmore center (along 73rd Avenue N.E.) that included structured parking below the building. Since the presence of these projects seemed to contradict the financial analysis results indicating rents in Kenmore are too low to support structured parking, additional research was conducted.

One project, Johnson Court, was completed during 1991. Site visits revealed a three-story structure with external stairways/corridors and no elevator. The quality of this project is not of a level anticipated for the mixed-use district along N.E. 181st Street. Another project is currently under construction just north of Johnson Court. This latter apartment development contains four stories, and includes interior stairways/corridors and elevators. Discussions with the construction foreman on site indicated that this project might be sold as condominiums rather than apartments.

Mixed-Use Office/Retail Development

Two-story office/retail development without structured parking yields a minimal land value of $2.66 per square foot under the baseline scenario, with a slightly higher land value of $3.18 under Scenario 2 and 3. These values are substantially below the values achievable by one-story retail development. Four- and five-story office/retail development without structured parking yields a negative land value under all three scenarios.

All office/retail development options that include structured parking show negative land values for all scenarios.

The poor financial results of mixed-use office/retail development is due to the following reasons:

- There currently is no office development in Kenmore, except for a small amount of medical-related professional office space. Given the absence of an existing market in the Kenmore area, high lease up costs for office is likely (two years was assumed in analysis) unless a single tenant can be attracted in a build-to-suit project. With the tightening of credit markets in recent years, speculative office projects throughout the Puget Sound region are virtually impossible to finance.

- Market office rents in Kenmore are lower than in more established office core areas such as the I-405 corridor. Given its location, North Kenmore is most likely to attract small-scale tenants who cannot afford to pay the higher rents that cover the higher costs of multi-story development and structured parking.

- The inclusion of ground floor retail space generally adds risk to office developments. High lease up costs for retail space reduces the profitability of multi-story office/retail development.

C. *Conclusions and Recommendations*

Based on the lessons learned from mixed-use development in other settings, plus the results of the financial pro forma analyses described above, the following conclusions and recommendations are possible on the economic viability of proposed development conditions in the Kenmore North District.

1. Multi-story mixed-use development in the North Kenmore District does not appear to be economically viable at the current time, for a number of reasons. First, existing multi-family rent levels appear to be insufficient to economically support the increased costs (e.g. structured parking, elevators) of multi-story mixed-use residential/retail development. Second, based on lessons learned in Seattle, conditions along N.E. 181st Street between 68th and 73rd Avenues N.E. are not currently favorable to successful retail space in mixed-use projects. There is no existing commercial core in this area, and a number of existing uses -- mobile home parks, car wash -- that are incompatible with pedestrian-oriented commercial development.

   Finally, given the lack of a current office market in Kenmore, and the area's competitive disadvantage compared to freeway locations for attracting office development, it is highly unlikely that a mixed-use office/retail project -- which entails greater risk than a straight office development -- would be feasible.

2. Given the conclusions in 1., the proposed development condition that requires a minimum FAR of .75:1 is difficult to justify economically at this time. Even with removal of this requirement, the County's goal of increased density and pedestrian orientation still can be achieved in Kenmore. Without the minimum FAR requirement, either one of two things will happen to vacant or underutilized properties along N.E. 181st Street. One, they will be developed as one-story retail buildings, which still must comply with pedestrian-supportive development conditions such as maximum setbacks, parking in rear or side of building, and curb-cut limitations. Two, development will be withheld in anticipation of future increases in land and rent values that can support multi-story development. Either one of these options may meet the design goals for the Kenmore center.

   To encourage increased densities along N.E. 181st Street in the near-term, the following actions may be appropriate:

   - Relax open space requirements to 4% or 5% and remove all residential density limits. These modifications will promote increased development densities when land values rise to levels that are supportable of multi-story mixed-use development.

   - Consider allowing straight multi-family projects with a condition that ground floor units be convertible to retail space if and when market conditions warrant such a change. Although the financial pro forma analysis revealed poor feasibility results for multi-family development with structured parking (with or without ground floor retail space), the presence of several such projects in Kenmore indicates that they may be possible, especially under condominium arrangements.

   - Undertake the steps recommended in Section III. to revitalize the North Kenmore commercial district. Those steps include improvement and realignment of N.E. 181st Street, encouraging expansion and renovation of Kenmore Village shopping center, and rezoning of mobile home parks for commercial development.

3. Based on the poor financial results of mixed-use office/retail projects, the requirement of ground floor retail in the office only zone around 73rd Avenue N.E. should be removed. New office development in Kenmore would be a boon to efforts at commercial revitalization and would begun to create an employment base in Kenmore. Efforts at attracting office development should not be burdened by the increased risks of mixed-use development.

4. The proposed condition that limits surface parking to 50% of the site area should be removed. The conceptual site plans completed as part of the financial pro forma analysis revealed that this standard may not be met even with multi-story mixed use development. Requiring parking behind or on the sides of buildings should be sufficient for promoting a pedestrian environment in Kenmore. Ironically, one-story retail development is one of the few development options that does not violate this surface parking maximum.

5. Other proposed development conditions, such as maximum setbacks that require buildings to front the street, and requirements for parking to be located behind or on the side of buildings, were not tested in the financial pro forma analyses. As indicated in Section III of this document, given the existing absence of quality pedestrian-oriented commercial development in Kenmore, these proposed conditions may have a negative short-term impact on the marketability of properties along N.E. 181st Street. In attracting retail tenants, properties along N.E. 181st Street must compete with other commercial areas outside of Kenmore that are permitted to develop in traditional ways (e.g. parking in front of buildings), which are currently more acceptable to tenants and lenders. Nevertheless, these development conditions are vital if the County wishes to realize the goal of a pedestrian-oriented commercial district in the Kenmore center. Over the long-term, incremental change in North Kenmore as described in Section III -- improvements to N.E. 181st Street, upgrade of Kenmore Village shopping center, increase in surrounding multi-family development, and new office development -- should serve to revitalize that area and create a setting more favorable to pedestrian-oriented commercial development.

APPENDIX A

KENMORE URBAN ACTIVITY CENTER MARKET DEMAND ANALYSIS

A market demand analysis was undertaken to estimate the amount of potential retail expenditures that could be captured in the Kenmore center, and to compare the amount of retail space supportable by potential expenditures with the existing inventory of commercial space in Kenmore. Estimates of supportable square feet of retail space were made that reflect the potential spending of current and projected new households (through 2010) within a defined primary and secondary trade area surrounding the activity center. A separate estimate was made of the square feet of retail space supportable by households projected to reside within a walking distance of the Kenmore commercial district.

The major findings from the market demand analysis are summarized in Section III of the accompanying report. The following paragraphs describe the methodology employed in the market analysis. The remainder of Appendix A contains the detailed worksheets that together comprise the results of the analysis.

Market Demand Analysis: Sequence of Steps

A. A primary and secondary trade area was identified for the Kenmore center, based on standard maximum travel times of five and ten minutes, respectively (Figure A-1). The trade areas boundaries also reflect competitive shopping centers such as Lake Forest Park Center.

B. The number of households in 1990 for the primary and secondary trade area was compiled from U.S. Census data (Table A-1). Census data was also used to distribute households according to annual household income levels (Table A-2).

C. Total annual expenditures for each major spending category (e.g. food at home, housekeeping supplies) were estimated by multiplying the number of households in each income category by annual average per household expenditures (Table A-3). Average household expenditures were compiled from the U.S. Department of Labor's Consumer Expenditure Survey (Table A-4).

D. Total annual expenditures were multiplied by local capture rates to estimate the amount of spending that potentially could take place in the Kenmore center (Table A-5). Capture rates were identified from industry standards. Higher rates were used for the primary trade area and for convenience goods such as groceries and household supplies that are typically purchased close to home. Lower capture rates were used for the secondary trade area and for comparison goods such as clothing and appliances. Overall, the analysis assumes that the Kenmore center could capture 37% of primary trade area expenditures and 7% of secondary trade area expenditures.

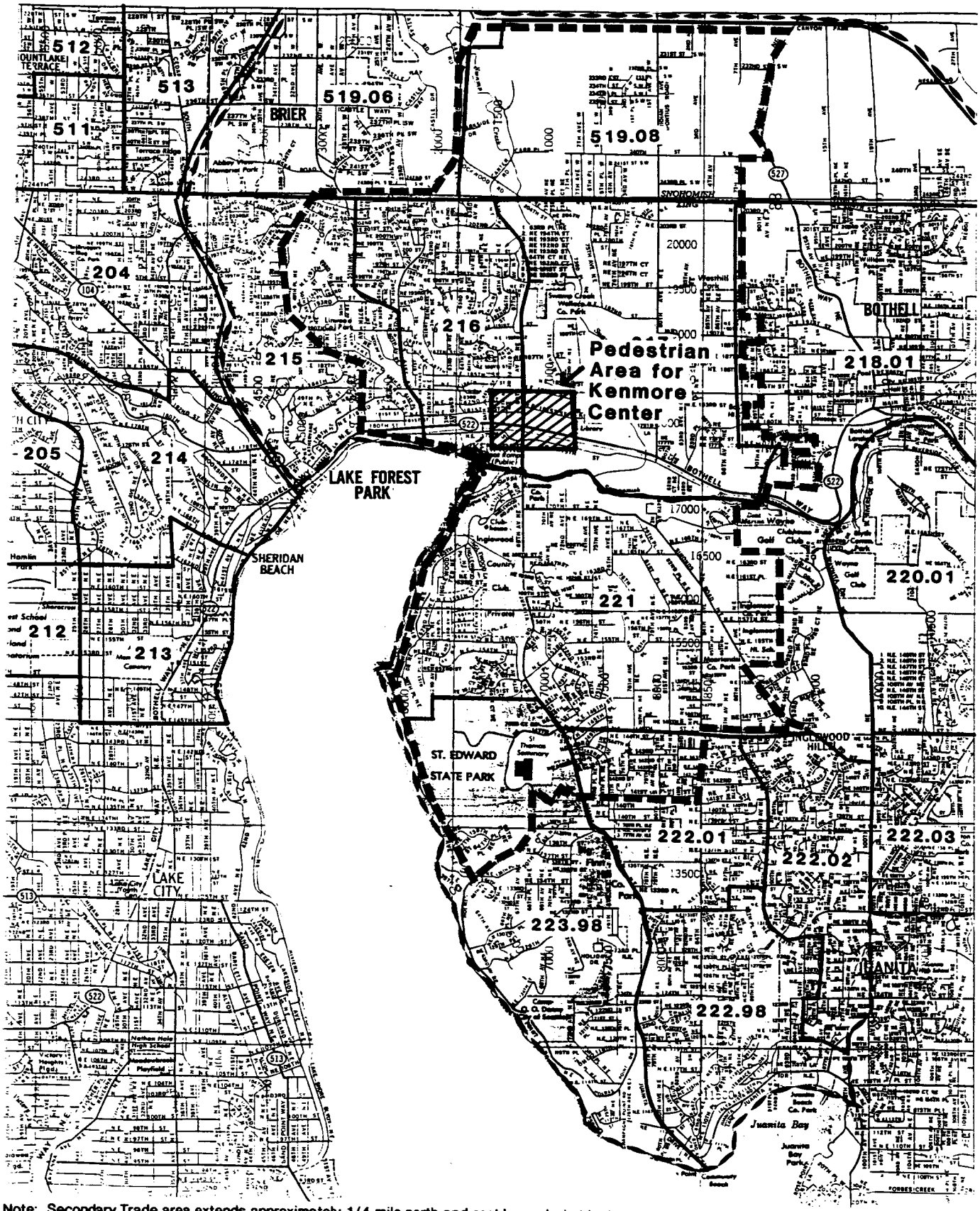
E. A non-local spending factor of 15% was added to the estimated local population spending in Kenmore to account for drive-through traffic along SR-522 and other spending from segments other than the local population (e.g. employees who work in Kenmore). The 15% factor was chosen arbitrarily since data is not available of actual non-local spending in Kenmore. Given the extremely high level of daily through-traffic along SR-522, the 15% can be considered a fairly conservative factor for non-local demand.

F. Total expenditures in each major spending category estimated for the Kenmore center were divided by the average sales per square foot for various retail stores to determine the level of supportable development (Table A-6). The average sales per square foot numbers were taken from survey data compiled annually by the Urban Land Institute.

G. The estimated level of supportable retail space was compared to the existing inventory of commercial space in Kenmore to determine whether an under or over supply condition existing in each retail category (Table A-6).

H. Steps C. through G. were repeated for projected new households in the primary and secondary trade areas through the Year 2010 (Tables A-1 through A-6). Projected new households in King County were based on estimates of residential holding capacity prepared by Planning staff. It is assumed that full build-out of residential land will occur by the year 2010. Projections of new households in Snohomish County were based on the most recent population projections of the Puget Sound Regional Planning Council.

I. Steps B. through F. were repeated for a defined pedestrian area in and around the Kenmore commercial district (Tables A-7 through A-10). The boundaries of this area generally extended one-quarter to one-half mile in each direction from the commercial district (Figure A-1).



Note: Secondary Trade area extends approximately 1/4 mile north and east beyond what is shown on map.

■■ Primary Trade Area — Secondary Trade Area 999 Census Tracts

Figure A-1

Kenmore Center Market Trade Areas

Kenmore Urban Activity Center

NBBJ

Table A–1

Kenmore Activity Center

Population and Households

Secondary Trade Area

1990	Population	House–Holds	Average HH Size
CT 215	4641	1608	2.89
216	4569	1571	2.91
217	4012	1822	2.20
218.01	7675	2970	2.58
218.02	2877	1140	2.52
220.01	2968	1086	2.73
221	7970	2849	2.80
222.01	4662	1608	2.90
222.02	6909	2591	2.67
222.03	3790	1387	2.73
223.98	2639	922	2.86
519.06	7644	2528	3.02
519.08	6281	2299	2.73
	66637	24381	2.73
Less: Primary Area	23976	8885	
	42661	15496	

Primary Trade Area

1990	Population	House–Holds	Average HH Size
CT 216	4569	1571	2.91
CT 217	4012	1822	2.20
CT 215	2057	713	2.89
CT 221	7073	2528	2.80
CT 223.98	110	38	2.86
CT 222.01	1921	663	2.90
CT 519.08	4234	1550	2.73
	23976	8885	2.70

Projected Growth: 1990–2010

Projected Buildout of Multi–family in Activity Ctr	2418
Projected Buildout of Single–Family in King County	4370
Projected Growth in Households In Snohomish County	2346
	9134
Less: Primary Trade Area	4785
	4349

Projected Growth: 1990–2010

	2418
	1592
	774
	4785

Sources of Data:

*1990 population and households: U.S. Census

*Projected Buildout of Multi– and Single–family in King County per King County Community Planning analysis

*Projected Growth of 2% per year for Snohomish County based on current

able A–2

enmore Activity Center

rimary and Secondary Trade Area

istribution of Households by Income Level

	Annual Household Income Level							
	Less than $5,000	$5,000–$9,999	$10,000–$14,000	$15,000–$24,999	$25,000–$34,999	$35,000–$49,999	$50,000+	Total
990 Households								
rimary Trade Area								
T 216	40	50	82	241	269	383	507	1571
T 217	46	58	95	279	313	444	587	1822
T 215	1	42	43	75	106	165	280	713
T 221	32	51	71	234	339	639	1162	2528
T 223.98	0	1	1	4	5	10	18	38
T 222.01	8	13	19	61	89	167	304	663
T 519.08	26	51	56	179	278	404	556	1550
otal	154	266	366	1073	1400	2212	3415	8885
econdary Trade Area								
T 215	2	53	54	94	134	207	352	895
T 216	0	0	0	0	0	0	0	0
T 217	0	0	0	0	0	0	0	0
T 218.01	57	129	232	500	466	589	997	2970
T 218.02	22	49	89	192	179	226	383	1140
T 220.01	21	47	85	183	170	215	365	1086
T 221	4	7	9	30	43	81	147	321
T 222.01	12	19	27	88	127	239	434	945
T 222.02	32	53	73	240	348	655	1191	2591
T 222.03	17	28	39	129	186	350	637	1387
T 223.98	11	18	25	82	119	223	406	884
T 519.06	0	51	68	247	250	668	1244	2528
T 519.08	13	25	27	86	134	195	269	749
otal	191	479	727	1870	2155	3649	6425	15496
rojected Household Growth: 1990–2010								
rimary Trade Area								
rojected Buildout of Multi–family in Activity Ctr	55	87	148	429	413	560	726	2418
rojected Buildout of Single–Family in King County	40	50	83	244	273	388	513	1592
rojected Growth in Households In Snohomish County	13	25	28	89	139	202	278	774
Total	108	163	259	762	825	1150	1518	4785
econdary Trade Area								
rojected Buildout of Multi–family in Activity Ctr	0	0	0	0	0	0	0	0
rojected Buildout of Single–Family in King County	71	88	144	425	476	677	895	2778
rojected Growth in Households In Snohomish County	26	51	57	181	282	410	564	1572
Total	97	139	201	607	759	1087	1460	4349

ources of Data:

*Households taken from population and households worksheet

*Income Distribution based on 1990 U.S. Census for Census Designated Places (CDP's)

Table A–3 (1 of 2)

Kenmore Activity Center

Primary Trade Area
Household Expenditure Potential
(Constant Dollars)

	Annual Household Income Levels							
	Less than $5,000	$5,000–$9,999	$10,000–$14,999	$15,000–$24,999	$25,000–$34,999	$35,000–$49,999	$50,000+	Total
1990 Households								
Food At Home	$223,922	$423,354	$735,130	$2,490,434	$3,787,420	$6,713,340	$11,814,494	$26,188,093
Food Away From Home	$138,662	$213,807	$391,898	$1,420,040	$2,470,360	$4,976,940	$10,745,726	$20,357,436
Alcoholic Beverages	$36,474	$52,720	$81,966	$329,269	$544,459	$869,306	$2,062,415	$3,976,608
Housekeeping Supplies	$26,470	$53,518	$100,262	$389,331	$573,851	$1,072,807	$2,400,459	$4,616,700
Household Furnishings/Equip	$46,477	$96,919	$215,526	$835,507	$1,669,768	$4,401,827	$8,498,924	$15,764,948
Apparel and Services	$89,261	$200,228	$373,968	$1,422,186	$2,302,404	$4,746,895	$10,766,214	$19,901,156
Drugs and Medical Supplies	$21,700	$60,707	$83,063	$284,223	$390,499	$743,223	$1,215,595	$2,799,010
Entertainment:Fees/Admissions	$28,317	$31,419	$57,083	$315,326	$555,656	$1,324,972	$3,455,569	$5,768,343
Television/sound equipment	$29,241	$49,258	$111,239	$431,160	$690,021	$1,349,304	$2,929,721	$5,589,945
Pets,Toys & Playground Equip.	$24,932	$27,159	$53,058	$262,772	$468,879	$829,490	$1,645,834	$3,312,123
Other Entertainment	$23,085	$21,035	$38,421	$238,103	$527,663	$1,535,110	$4,244,340	$6,627,757
Personal Care Products	$22,931	$48,193	$102,091	$371,098	$571,052	$1,077,231	$2,352,655	$4,545,252
Reading	$10,927	$20,768	$38,787	$140,502	$239,338	$484,422	$1,020,964	$1,955,709
Tobacco/Smoking	$18,776	$50,590	$69,524	$223,088	$326,116	$491,058	$768,284	$1,947,435
Miscellaneous	$47,555	$75,618	$147,465	$602,766	$1,048,329	$2,249,577	$5,203,841	$9,375,150
Personal Services	$4,001	$21,035	$25,614	$174,824	$417,092	$729,951	$1,724,370	$3,096,887
								$135,822,550
Projected New Households: 1990–2010								
Food At Home	$157,330	$258,825	$520,486	$1,770,467	$2,232,224	$3,489,396	$5,250,814	$13,679,541
Food Away From Home	$97,425	$130,715	$277,472	$1,009,517	$1,455,977	$2,586,867	$4,775,812	$10,333,785
Alcoholic Beverages	$25,627	$32,231	$58,033	$234,080	$320,892	$451,839	$916,616	$2,039,319
Housekeeping Supplies	$18,598	$32,719	$70,987	$276,778	$338,216	$557,613	$1,066,856	$2,361,769
Household Furnishings/Equip	$32,655	$59,253	$152,596	$593,968	$984,125	$2,287,940	$3,777,247	$7,887,785
Apparel and Services	$62,716	$122,413	$264,777	$1,011,042	$1,356,987	$2,467,296	$4,784,918	$10,070,149
Drugs and Medical Supplies	$15,246	$37,115	$58,810	$202,056	$230,152	$386,305	$540,257	$1,469,942
Entertainment:Fees/Admissions	$19,896	$19,208	$40,416	$224,168	$327,492	$688,681	$1,535,787	$2,855,648
Television/sound equipment	$20,545	$30,115	$78,759	$306,515	$406,684	$701,328	$1,302,080	$2,846,027
Pets,Toys & Playground Equip.	$17,517	$16,604	$37,566	$186,806	$276,347	$431,144	$731,472	$1,697,457
Other Entertainment	$16,220	$12,860	$27,203	$169,269	$310,993	$797,905	$1,886,347	$3,220,797
Personal Care Products	$16,111	$29,464	$72,282	$263,816	$336,566	$559,913	$1,045,610	$2,323,763
Reading	$7,677	$12,697	$27,462	$99,884	$141,061	$251,788	$453,755	$994,325
Tobacco/Smoking	$13,192	$30,929	$49,225	$158,595	$192,206	$255,238	$341,455	$1,040,838
Miscellaneous	$33,412	$46,230	$104,408	$428,511	$617,862	$1,169,264	$2,312,786	$4,712,474
Personal Services	$2,811	$12,860	$18,135	$124,283	$245,825	$379,407	$766,376	$1,549,698
								$69,083,317

Table A-3 (2 of 2)

Kenmore Activity Center

Secondary Trade Area

Household Expenditure Potential

(Constant Dollars)

	Annual Household Income Levels							
	Less than $5,000	$5,000–$9,999	$10,000–$14,999	$15,000–$24,999	$25,000–$34,999	$35,000–$49,999	$50,000+	Total
1990 Households								
Food At Home	$278,112	$761,461	$1,460,073	$4,342,313	$5,832,373	$11,075,209	$22,229,736	$45,979,278
Food Away From Home	$172,219	$384,562	$778,367	$2,475,978	$3,804,190	$8,210,616	$20,218,780	$36,044,713
Alcoholic Beverages	$45,301	$94,824	$162,796	$574,113	$838,431	$1,434,121	$3,880,567	$7,030,151
Housekeeping Supplies	$32,876	$96,260	$199,134	$678,837	$883,693	$1,769,844	$4,516,620	$8,177,264
Household Furnishings/Equip	$57,725	$174,322	$428,065	$1,456,788	$2,571,331	$7,261,834	$15,991,276	$27,941,340
Apparel and Services	$110,862	$360,138	$742,755	$2,479,719	$3,545,548	$7,831,103	$20,257,329	$35,327,455
Drugs and Medical Supplies	$26,951	$109,191	$164,976	$495,570	$601,342	$1,226,119	$2,287,221	$4,911,370
Entertainment:Fees/Admissions	$35,170	$56,511	$113,376	$549,802	$855,673	$2,185,848	$6,501,877	$10,298,257
Television/sound equipment	$36,317	$88,598	$220,937	$751,770	$1,062,587	$2,225,989	$5,512,461	$9,898,658
Pets,Toys & Playground Equip.	$30,965	$48,848	$105,381	$458,168	$722,042	$1,368,436	$3,096,744	$5,830,584
Other Entertainment	$28,671	$37,834	$76,310	$415,157	$812,566	$2,532,519	$7,986,001	$11,889,058
Personal Care Products	$28,480	$86,682	$202,768	$647,046	$879,382	$1,777,142	$4,426,673	$8,048,173
Reading	$13,571	$37,355	$77,037	$244,980	$368,565	$799,167	$1,921,009	$3,461,683
Tobacco/Smoking	$23,319	$90,992	$138,086	$388,975	$502,196	$810,114	$1,445,575	$3,399,258
Miscellaneous	$59,063	$136,009	$292,887	$1,050,982	$1,614,356	$3,711,198	$9,791,364	$16,655,859
Personal Services	$4,970	$37,834	$50,874	$304,822	$642,294	$1,204,224	$3,244,514	$5,489,530
								$240,382,632
Projected New Households: 1990–2010								
Food At Home	$141,093	$221,609	$403,953	$1,408,851	$2,052,532	$3,298,804	$5,050,669	$12,577,512
Food Away From Home	$87,371	$111,920	$215,348	$803,324	$1,338,773	$2,445,572	$4,593,773	$9,596,080
Alcoholic Beverages	$22,982	$27,597	$45,040	$186,269	$295,061	$427,160	$881,677	$1,885,786
Housekeeping Supplies	$16,679	$28,015	$55,094	$220,247	$310,990	$527,157	$1,026,191	$2,184,371
Household Furnishings/Equip	$29,285	$50,733	$118,431	$472,651	$904,904	$2,162,972	$3,633,270	$7,372,247
Apparel and Services	$56,243	$104,811	$205,496	$804,537	$1,247,752	$2,332,532	$4,602,531	$9,353,902
Drugs and Medical Supplies	$13,673	$31,778	$45,643	$160,786	$211,625	$365,205	$519,664	$1,348,375
Entertainment:Fees/Admissions	$17,843	$16,446	$31,367	$178,382	$301,129	$651,066	$1,477,248	$2,673,480
Television/sound equipment	$18,425	$25,785	$61,126	$243,910	$373,946	$663,022	$1,252,449	$2,638,662
Pets,Toys & Playground Equip.	$15,709	$14,216	$29,155	$148,651	$254,101	$407,595	$703,590	$1,573,019
Other Entertainment	$14,546	$11,011	$21,113	$134,696	$285,959	$754,323	$1,814,445	$3,036,093
Personal Care Products	$14,449	$25,227	$56,099	$209,932	$309,473	$529,330	$1,005,755	$2,150,265
Reading	$6,885	$10,871	$21,314	$79,483	$129,705	$238,036	$436,460	$922,754
Tobacco/Smoking	$11,830	$26,482	$38,204	$126,202	$176,733	$241,296	$328,439	$949,187
Miscellaneous	$29,964	$39,583	$81,032	$340,988	$568,125	$1,105,398	$2,224,630	$4,389,720
Personal Services	$2,521	$11,011	$14,075	$98,899	$226,036	$358,684	$737,164	$1,448,390
								$64,099,843

Table A–4

Kenmore Activity Center

Average Annual Household Expenditures

	Annual Household Income Level						
	Less than $5,000	$5,000–$9,999	$10,000–$14,999	$15,000–$24,999	$25,000–$34,999	$35,000–$49,999	$50,000+
Average Annual Expenditures							
Food At Home	1455	1590	2009	2322	2706	3035	3460
Food Away From Home	901	803	1071	1324	1765	2250	3147
Alcoholic Beverages	237	198	224	307	389	393	604
Housekeeping Supplies	172	201	274	363	410	485	703
Household Furnishings/Equip	302	364	589	779	1193	1990	2489
Apparel and Services	580	752	1022	1326	1645	2146	3153
Drugs and Medical Supplies	141	228	227	265	279	336	356
Entertainment:Fees/Admissions	184	118	156	294	397	599	1012
Television/sound equipment	190	185	304	402	493	610	858
Pets,Toys & Playground Equip.	162	102	145	245	335	375	482
Other Entertainment	150	79	105	222	377	694	1243
Personal Care Products	149	181	279	346	408	487	689
Reading	71	78	106	131	171	219	299
Tobacco/Smoking	122	190	190	208	233	222	225
Miscellaneous	309	284	403	562	749	1017	1524
Personal Services	26	79	70	163	298	330	505
	5151	5432	7174	9259	11848	15188	20749
Percent of Household Income	129%	72%	57%	46%	39%	36%	32%

Source: U.S Department of Labor, Consumer Expenditure Survey, 1989

able A–5

enmore Activity Center

ousehold Expenditure Potential
ocal Capture Estimates
Constant Dollars)

	Local Capture Rates Primary	Local Capture Rates Secondary	Primary Market Local Capture	Secondary Market Local Capture	Total Local Capture
990 Households					
ood At Home	75%	10%	$19,641,070	$4,597,928	$24,238,997
ood Away From Home	40%	10%	$8,142,974	$3,604,471	$11,747,446
lcoholic Beverages	75%	10%	$2,982,456	$703,015	$3,685,471
ousekeeping Supplies	75%	10%	$3,462,525	$817,726	$4,280,251
ousehold Furnishings/Equip	10%	5%	$1,576,495	$1,397,067	$2,973,562
pparel and Services	10%	5%	$1,990,116	$1,766,373	$3,756,488
rugs and Medical Supplies	50%	5%	$1,399,505	$245,568	$1,645,074
ntertainment:Fees/Admissions	10%	5%	$576,834	$514,913	$1,091,747
elevision/sound equipment	10%	5%	$558,994	$494,933	$1,053,927
ets,Toys & Playground Equip.	20%	5%	$662,425	$291,529	$953,954
ther Entertainment	25%	10%	$1,656,939	$1,188,906	$2,845,845
ersonal Care Products	75%	10%	$3,408,939	$804,817	$4,213,756
eading	50%	10%	$977,854	$346,168	$1,324,023
obacco/Smoking	25%	5%	$486,859	$169,963	$656,822
iscellaneous	25%	5%	$2,343,788	$832,793	$3,176,581
ersonal Services	75%	10%	$2,632,354	$548,953	$3,181,307
			$49,867,772	$17,776,171	$67,643,943
ercent of Total Potential Expenditures			37%	7%	18.0%
rojected New Households: 1990–2010					
ood At Home	75%	10%	$10,259,656	$1,257,751	$11,517,407
ood Away From Home	40%	10%	$4,133,514	$959,608	$5,093,122
lcoholic Beverages	75%	10%	$1,529,489	$188,579	$1,718,068
ousekeeping Supplies	75%	10%	$1,771,327	$218,437	$1,989,764
ousehold Furnishings/Equip	10%	5%	$788,779	$368,612	$1,157,391
pparel and Services	10%	5%	$1,007,015	$467,695	$1,474,710
rugs and Medical Supplies	50%	5%	$734,971	$67,419	$802,390
ntertainment:Fees/Admissions	10%	5%	$285,565	$133,674	$419,239
elevision/sound equipment	10%	5%	$284,603	$131,933	$416,536
ets,Toys & Playground Equip.	20%	5%	$339,491	$78,651	$418,142
ther Entertainment	25%	10%	$805,199	$303,609	$1,108,809
ersonal Care Products	75%	10%	$1,742,822	$215,026	$1,957,849
eading	50%	10%	$497,163	$92,275	$589,438
obacco/Smoking	25%	5%	$260,209	$47,459	$307,669
iscellaneous	25%	5%	$1,178,119	$219,486	$1,397,605
ersonal Services	75%	10%	$1,162,274	$144,839	$1,307,113
			$25,617,921	$4,750,216	$30,368,136
ercent of Total Potential Expenditures			37%	7%	23%

Kenmore Activity Center

Primary and Secondary Trade Area

Estimate of Retail Space Supportable by Local Spending

	Type of Commercial Activity									
	Super-market	Restaurant Fine Dining	Restaurant Fast Food	Clothing Store	Home Appliance	Gifts/ Specialty	Liquor Store	Drug Store	Other Retail	Total
Average Sales per Square Feet	$350	$150	$175	$170	$150	$145	$150	$175	$145	
Supportable Sq. Feet: 1990 Households										
Food At Home	69,254									69,254
Food Away From Home		39,158	33,564							72,722
Alcoholic Beverages	2,632	6,142					12,285			21,060
Housekeeping Supplies	3,057							12,229	7,380	22,666
Household Furnishings/Equip					17,841				2,051	19,892
Apparel and Services				16,573		6,477				23,049
Drugs and Medical Supplies	1,175							7,050		8,225
Entertainment:Fees/Admissions										
Television/sound equipment					6,324			602		6,926
Pets,Toys & Playground Equip.									6,579	6,579
Other Entertainment										
Personal Care Products	3,010							18,059		21,069
Reading						9,131				9,131
Tobacco/Smoking	375					2,265			1,359	3,999
Miscellaneous	2,269					5,477		4,538	5,477	17,761
Personal Services										
Total Supportable Sq. Ft.	81,773	45,301	33,564	16,573	24,165	23,350	12,285	42,479	22,845	302,334
Add: 15% for Non-local Spending	12,266	6,795	5,035	2,486	3,625	3,502	1,843	6,372	3,427	45,350
	94,039	52,096	38,599	19,059	27,790	26,852	14,128	48,851	26,272	347,684
Less: Existing Square Feet	106,111	51,130	33,779	1,833	20,908	11,227	5,100	20,000	43,850	293,938
Under (Over) Supply	(12,072)	966	4,820	17,226	6,882	15,625	9,028	28,851	(17,578)	53,746
Average Sales per Square Foot	$350	$150	$175	$150	$150	$120	$150	$175	$120	
Projected New Households: 1990-2010										
Food At Home	32,907									32,907
Food Away From Home		16,977	14,552							31,529
Alcoholic Beverages	1,227	2,863					5,727			9,818
Housekeeping Supplies	1,421							5,685	4,145	11,252
Household Furnishings/Equip					6,944				964	7,909
Apparel and Services				7,374		3,072				10,446
Drugs and Medical Supplies	573							3,439		4,012
Entertainment:Fees/Admissions										
Television/sound equipment					2,499			238		2,737
Pets,Toys & Playground Equip.									3,485	3,485
Other Entertainment										
Personal Care Products	1,398							8,391		9,789
Reading						4,912				4,912
Tobacco/Smoking	176					1,282			769	2,227
Miscellaneous	998					2,912		1,997	2,912	8,818
Personal Services										
Total Supportable Sq. Ft.	38,701	19,841	14,552	7,374	9,444	12,178	5,727	19,749	12,275	139,840
Under (Over) Supply at 2010	26,629	20,806	19,372	24,599	16,325	27,803	14,755	48,600	(5,303)	193,586

Sources of Data:

*Average Sales per Sq.Ft. from Urban Land Institute, Dollars and Cents of Shopping Centers, 1991

*Existing Sq. Ft. compiled through assessors records and land use Kroll maps on file in the King County Planning Department

* Non-local spending factor of 15% reflects drive-through traffic along Sr-522 and spending from other sources such as local employees, park and ride users, etc.

Table A–7

Kenmore Activity Center

Pedestrian Area

Population and Households

	1990			1990–2000	2000–2010	1990–2010
	Population	Average HH Size	Households	Potential New Households		
North of SR 522						
Census Tract 216						
Block 212	112					
Block 213	20					
Block 217	33					
Block 218	0					
Block 219	2					
Block 310	100					
Census Tract 217						
Block 105	250					
Block 201	161					
Block 202	60					
Block 203	100					
	838	2.00	419	629	629	1258
South of SR 522						
Census Tract 216						
Block 203	30					
Block 204	1					
Block 220	3					
Census Tract 217						
Block 205	36					
Block 206	0					
Block 211	232					
	302	2.00	151	580	580	1160
Total	1140	2.00	570	1209	1209	2418

Sources of Data:

*1990 population: U.S. Census Block Statistics

*1990 household size based on ratio of population to housing units in U.S. Census

*Potential New Households: King County Community Planning analysis of residential holding capacity under proposed zoning.

*Assumption that residential build–out will occur proportionally through 2010

Table A–8

Kenmore Activity Center

Pedestrian Area

Distribution of Households by Income

	Annual Household Income Level							
	Less than $5,000	$5,000–$9,999	$10,000–$14,000	$15,000–$24,999	$25,000–$34,999	$35,000–$49,999	$50,000+	Total
Number of Households								
North of SR–522								
1990	8	17	29	84	71	92	117	419
2010	34	67	117	335	285	369	470	1677
Projected Increase: 1990 to 2010	25	50	88	252	214	277	352	1258
South of SR–522								
1990	3	6	11	30	26	33	42	151
2010	33	43	71	208	225	316	416	1311
Projected Increase: 1990 to 2010	29	37	60	178	199	283	374	1160
Total Pedestrian Area								
1990	11	23	40	114	97	125	160	570
2010	66	110	188	543	510	685	886	2988
Projected Increase: 1990 to 2010	55	87	148	429	413	560	726	2418

Sources of Data:

*Households taken from population and households worksheet

*Income Distribution based on 1990 U.S. Census Data for Kenmore Census Designated Place (CDP)

Table A-9 (1 of 2)

Kenmore Activity Center

Pedestrian Area: North of SR-522

Household Expenditure Potential

(Constant Dollars)

	Annual Household Income Levels									
	Less than $5,000	$5,000-$9,999	$10,000-$14,999	$15,000-$24,999	$25,000-$34,999	$35,000-$49,999	$50,000+	Total	Local Capture Rate	Total Local Capture
1990 Households										
Food At Home	$12,193	$26,648	$58,924	$194,584	$192,748	$279,766	$405,927	$1,170,791	75%	$878,093
Food Away From Home	$7,550	$13,458	$31,412	$110,951	$125,721	$207,405	$369,206	$865,704	40%	$346,282
Alcoholic Beverages	$1,986	$3,318	$6,570	$25,727	$27,708	$36,227	$70,861	$172,398	75%	$129,298
Housekeeping Supplies	$1,441	$3,369	$8,036	$30,419	$29,204	$44,707	$82,476	$199,654	75%	$149,740
Household Furnishings/Equip	$2,531	$6,101	$17,275	$65,280	$84,977	$183,438	$292,009	$651,612	10%	$65,161
Apparel and Services	$4,860	$12,604	$29,975	$111,119	$117,173	$197,818	$369,910	$843,460	10%	$84,346
Drugs and Medical Supplies	$1,182	$3,821	$6,658	$22,207	$19,873	$30,972	$41,766	$126,479	50%	$63,240
Entertainment:Fees/Admissions	$1,542	$1,978	$4,575	$24,637	$28,278	$55,216	$118,728	$234,954	10%	$23,495
Television/sound equipment	$1,592	$3,101	$8,916	$33,688	$35,116	$56,230	$100,661	$239,303	10%	$23,930
Pets,Toys & Playground Equip.	$1,358	$1,710	$4,253	$20,531	$23,862	$34,568	$56,548	$142,829	20%	$28,566
Other Entertainment	$1,257	$1,324	$3,080	$18,604	$26,854	$63,973	$145,829	$260,920	25%	$65,230
Personal Care Products	$1,249	$3,034	$8,183	$28,995	$29,062	$44,892	$80,833	$196,247	75%	$147,185
Reading	$595	$1,307	$3,109	$10,978	$12,180	$20,187	$35,079	$83,435	50%	$41,718
Tobacco/Smoking	$1,022	$3,184	$5,573	$17,430	$16,597	$20,464	$26,397	$90,667	25%	$22,667
Miscellaneous	$2,589	$4,760	$11,820	$47,096	$53,351	$93,747	$178,796	$392,159	25%	$98,040
Personal Services	$218	$1,324	$2,053	$13,659	$21,227	$30,419	$59,247	$128,147	75%	$96,110
								$5,798,759		$2,263,101

Projected New Households:1990-2010									Local Capture Rate	Total Local Capture
Food At Home	$36,608	$80,009	$176,913	$584,215	$578,705	$839,967	$1,218,750	$3,515,167	75%	$2,636,375
Food Away From Home	$22,669	$40,407	$94,312	$333,118	$377,463	$622,710	$1,108,499	$2,599,179	40%	$1,039,672
Alcoholic Beverages	$5,963	$9,963	$19,725	$77,241	$83,192	$108,767	$212,753	$517,604	75%	$388,203
Housekeeping Supplies	$4,328	$10,114	$24,128	$91,331	$87,683	$134,229	$247,625	$599,437	75%	$449,578
Household Furnishings/Equip	$7,598	$18,316	$51,867	$195,996	$255,135	$550,752	$876,725	$1,956,391	10%	$195,639
Apparel and Services	$14,593	$37,841	$89,997	$333,622	$351,800	$593,927	$1,110,613	$2,532,392	10%	$253,239
Drugs and Medical Supplies	$3,548	$11,473	$19,990	$66,674	$59,667	$92,991	$125,397	$379,740	50%	$189,870
Entertainment:Fees/Admissions	$4,629	$5,938	$13,737	$73,970	$84,902	$165,779	$356,467	$705,424	10%	$70,542
Television/sound equipment	$4,780	$9,309	$26,770	$101,143	$105,433	$168,824	$302,222	$718,482	10%	$71,848
Pets,Toys & Playground Equip.	$4,076	$5,133	$12,769	$61,642	$71,643	$103,785	$169,780	$428,827	20%	$85,765
Other Entertainment	$3,774	$3,975	$9,246	$55,855	$80,625	$192,071	$437,834	$783,382	25%	$195,845
Personal Care Products	$3,749	$9,108	$24,569	$87,054	$87,255	$134,782	$242,693	$589,209	75%	$441,907
Reading	$1,786	$3,925	$9,334	$32,960	$36,570	$60,610	$105,320	$250,506	50%	$125,253
Tobacco/Smoking	$3,070	$9,561	$16,731	$52,333	$49,829	$61,441	$79,254	$272,219	25%	$68,055
Miscellaneous	$7,774	$14,291	$35,488	$141,399	$160,181	$281,465	$536,814	$1,177,413	25%	$294,353
Personal Services	$654	$3,975	$6,164	$41,011	$63,730	$91,331	$177,881	$384,747	75%	$288,560
								$17,410,116		$6,794,705
Total Household Expenditures:2010								$23,208,875		$9,057,806

Table A-9 (2 of 2)

Kenmore Activity Center

Pedestrian Area: South of SR-522

Household Expenditure Potential

(Constant Dollars)

	Annual Household Income Levels									
	Less than $5,000	$5,000 – $9,999	$10,000 – $14,999	$15,000 – $24,999	$25,000 – $34,999	$35,000 – $49,999	$50,000 +	Total	Local Capture Rate	Total Local Capture
1990 Households										
Food At Home	$4,394	$9,604	$21,235	$70,124	$69,463	$100,823	$146,289	$421,932	75%	$316,449
Food Away From Home	$2,721	$4,850	$11,320	$39,985	$45,308	$74,745	$133,055	$311,984	40%	$124,794
Alcoholic Beverages	$716	$1,196	$2,368	$9,271	$9,986	$13,055	$25,537	$62,129	75%	$46,597
Housekeeping Supplies	$519	$1,214	$2,896	$10,963	$10,525	$16,112	$29,723	$71,952	75%	$53,964
Household Furnishings/Equip	$912	$2,199	$6,226	$23,526	$30,624	$66,108	$105,235	$234,829	10%	$23,483
Apparel and Services	$1,752	$4,542	$10,803	$40,045	$42,227	$71,290	$133,309	$303,968	10%	$30,397
Drugs and Medical Supplies	$426	$1,377	$2,399	$8,003	$7,162	$11,162	$15,052	$45,581	50%	$22,790
Entertainment:Fees/Admissions	$556	$713	$1,649	$8,879	$10,191	$19,899	$42,787	$84,673	10%	$8,467
Television/sound equipment	$574	$1,117	$3,213	$12,140	$12,655	$20,264	$36,276	$86,241	10%	$8,624
Pets,Toys & Playground Equip.	$489	$616	$1,533	$7,399	$8,599	$12,458	$20,379	$51,473	20%	$10,295
Other Entertainment	$453	$477	$1,110	$6,704	$9,678	$23,055	$52,554	$94,031	25%	$23,508
Personal Care Products	$450	$1,093	$2,949	$10,449	$10,473	$16,178	$29,131	$70,724	75%	$53,043
Reading	$214	$471	$1,120	$3,956	$4,390	$7,275	$12,642	$30,069	50%	$15,034
Tobacco/Smoking	$368	$1,148	$2,008	$6,282	$5,981	$7,375	$9,513	$32,675	25%	$8,169
Miscellaneous	$933	$1,715	$4,260	$16,972	$19,227	$33,785	$64,435	$141,327	25%	$35,332
Personal Services	$79	$477	$740	$4,923	$7,650	$10,963	$21,351	$46,182	75%	$34,636
								$2,089,768		$815,581
Projected New Households:1990 – 2010									Local Capture Rate	Total Local Capture
Food At Home	$42,922	$58,370	$121,164	$412,514	$538,386	$858,513	$1,294,015	$3,325,885	75%	$2,494,414
Food Away From Home	$26,579	$29,479	$64,593	$235,215	$351,165	$636,459	$1,176,955	$2,520,445	40%	$1,008,178
Alcoholic Beverages	$6,991	$7,269	$13,510	$54,540	$77,396	$111,168	$225,892	$496,765	75%	$372,574
Housekeeping Supplies	$5,074	$7,379	$16,525	$64,489	$81,574	$137,192	$262,917	$575,150	75%	$431,362
Household Furnishings/Equip	$8,909	$13,363	$35,523	$138,393	$237,359	$562,913	$930,868	$1,927,328	10%	$192,733
Apparel and Services	$17,110	$27,607	$61,638	$235,570	$327,289	$607,041	$1,179,199	$2,455,454	10%	$245,545
Drugs and Medical Supplies	$4,159	$8,370	$13,691	$47,078	$55,510	$95,045	$133,141	$356,995	50%	$178,497
Entertainment:Fees/Admissions	$5,428	$4,332	$9,408	$52,230	$78,987	$169,440	$378,481	$698,306	10%	$69,831
Television/sound equipment	$5,605	$6,792	$18,334	$71,417	$98,087	$172,551	$320,886	$693,672	10%	$69,367
Pets,Toys & Playground Equip.	$4,779	$3,745	$8,745	$43,525	$66,652	$106,077	$180,264	$413,787	20%	$82,757
Other Entertainment	$4,425	$2,900	$6,333	$39,439	$75,008	$196,312	$464,873	$789,290	25%	$197,323
Personal Care Products	$4,395	$6,645	$16,827	$61,469	$81,176	$137,758	$257,681	$565,950	75%	$424,463
Reading	$2,094	$2,863	$6,393	$23,273	$34,022	$61,949	$111,824	$242,418	50%	$121,209
Tobacco/Smoking	$3,599	$6,975	$11,459	$36,952	$46,358	$62,797	$84,148	$252,289	25%	$63,072
Miscellaneous	$9,115	$10,426	$24,305	$99,842	$149,021	$287,680	$569,965	$1,150,354	25%	$287,589
Personal Services	$767	$2,900	$4,222	$28,958	$59,290	$93,347	$188,866	$378,350	75%	$283,763
								$16,842,439		$6,522,677
Total Household Expenditures:2010								$18,932,206		$7,338,257

Table A-11 (1 of 2)

Far West

U.S. Neighborhood Shopping Centers in the Far West: Base Data, Tenant Data, and Operating Results

Number of centers in sample: 50	Average	Median	Lower Decile	Upper Decile	Median	Lower Decile	Upper Decile	Number Reporting
Base Data		Area in Square Feet						
Center size (total occupancy area)	73,932	77,426	43,399	99,531				50
Tenant Data		Area in Square Feet						
Gross leasable area	68,341	72,574	38,152	94,775				50
		Dollars per Square Foot of GLA						
Tenant sales	$203.40	$190.05	$95.73	$312.04				43
Operating Results		Dollars per Square Foot of GLA			Percent of Total Receipts			
Operating Receipts								
Rental income—minimum	$ 7.92	$7.04	$3.44	$13.92	78.17%	62.52%	88.50%	50
Rental income—overages	1.29	0.53	0.09	2.29	4.98	0.59	30.57	29
Total rent	8.67	7.92	3.84	15.02	82.82	71.35	91.79	50
Common area charges	1.06	0.70	0.20	2.56	7.81	3.24	14.20	48
Property taxes	0.79	0.73	0.17	1.53	5.64	2.52	14.26	42
Insurance	0.15	0.11	0.04	0.28	1.24	0.42	3.03	39
Other escalation charges	0.44	0.52			3.55			5
Income from sale of utilities	0.25	0.14	0.01	0.66	1.18	0.10	5.31	17
Total other charges	1.04	0.86	0.33	2.19	8.82	4.45	16.13	44
Miscellaneous income	0.13	0.05	0.01	0.35	0.48	0.07	2.43	33
Total Operating Receipts	10.69	9.83	4.34	18.64				50
Operating Expenses								
Building maintenance	0.30	0.16	0.04	0.78	1.85	0.40	5.36	39
Parking lot, mall, and other common areas	0.92	0.78	0.22	1.80	7.74	3.16	13.81	48
Central utility systems	0.40	0.16	0.06	0.72	1.95	0.98	4.14	16
Office area services	0.14	0.07			0.75			6
Total maintenance and housekeeping	1.27	0.86	0.32	2.44	8.89	4.73	19.38	50
Advertising and promotion	0.15	0.07	0.02	0.19	0.53	0.18	2.59	28
Real estate taxes	0.96	0.83	0.33	1.61	7.91	4.67	15.89	46
Insurance	0.24	0.20	0.09	0.40	1.80	1.01	3.61	47
General and administrative	1.02	0.67	0.21	1.72	6.55	3.05	12.34	48
Management agent fees	0.39	0.37	0.13	0.76	3.58	1.47	5.30	34
Leasing agent fees	0.30	0.23	0.02	0.51	1.58	0.17	6.89	20
Total Operating Expenses	3.44	2.86	1.36	5.78	27.45	19.03	42.38	50
Net Operating Balance	$ 7.24	$6.85	$2.51	$13.41	72.55%	57.62%	80.97%	50

Note: Because data are means, medians, and deciles, detail amounts do not add to totals. No median figures are shown if fewer than five values were reported for any income or expense category, and no lower and upper decile amounts are shown if fewer than 10 values were reported.

Comparison of Sales and Rent of Principal Tenants in U.S. Neighborhood Centers and in Far West Neighborhood Centers

Tenant Classification	Sales Volume per Square Foot of GLA: U.S. Median	Sales Volume per Square Foot of GLA: Far West Median	Total Rent per Square Foot of GLA: U.S. Median	Total Rent per Square Foot of GLA: Far West Median
Supermarket	$278.48	$353.92	$ 3.58	$ 5.31
Superstore	322.75	313.90	5.26	5.80
Restaurant (with liquor)	128.71	147.34	10.46	13.20
Cleaner and dyer	99.56	108.85	11.50	14.00
Beauty	85.28	100.83	10.17	13.46
Drugs	175.40	175.57	6.50	9.00

Source: Urban Land Institute Dollars and Cents of Shopping Centers, 1991.

D. Summary of Tenant Information Tables

For the convenience of the reader, Tables 6-20 through 6-25 summarize tenant information presented in depth in the next section. Throughout the detailed tables, all dollar figures are per square foot of GLA on an annual basis. The columns headed "Rate of Percentage Rent" and "Total Charges as a Percent of Sales" should be read as percentages, not dollar amounts. The rates shown for percentage rent represent only base percentages and do not include any step increases that may or may not be included in the lease agreement. The tenant information is presented in two different formats: (1) the median, lower decile, and upper decile for GLA, rate of percentage rent, and total charges as a percent of sales; and (2) the median, top 10 percent, and top 2 percent for sales, total rent, common area charges, property taxes, insurance, and total charges per square foot.

Most Common Tenants

Table 6-19 presents the median GLA, sales volume, and total rent for the 20 tenant classifications most frequently found in neighborhood shopping centers.

In the detailed tenant information tables, any tenant class with fewer than five in the sample was deleted from the printout, and then reclassified into one of three general categories:

- Other Retail (S-06) for general merchandise, food, food service, clothing and accessories, shoes, home furnishings, home appliances/music, building materials/hardware, automotive, hobby/special interest, gifts/specialties, jewelry, liquor, drugs, other retail, recreation/community, or financial groups.

Tenants Most Frequently Found In U.S. Neighborhood Shopping Centers

Tenant Classification	Rank	Average Number of Stores	Median GLA	Median Sales Volume per Square Foot GLA	Median Total Rent per Square Foot GLA
Food					
Supermarket	10	0.3	22,413	$278.48	$ 3.58
Superstore	13	0.2	36,953	322.75	5.26
Food Service					
Restaurant (without liquor)	5	0.4	2,200	152.13	10.00
Restaurant (with liquor)	2	0.5	3,200	128.71	10.46
Fast food/carryout	4	0.5	1,434	127.41	11.00
Clothing and Accessories					
Women's specialty	9	0.3	1,590	136.52	12.00
Women's ready-to-wear	14	0.2	2,100	135.70	9.88
Shoes					
Family shoes	20	0.2	3,000	103.89	8.29
Home Appliances/Music					
Radio, video, stereo (≤10,000 sq. ft.)	19	0.2	2,228	131.15	8.71
Gifts/Specialty					
Cards and gifts	12	0.3	2,050	87.24	10.41
Jewelry					
Jewelry	17	0.2	1,000	212.29	12.78
Liquor					
Liquor/wine	18	0.2	2,400	155.35	9.00
Drugs					
Drugs	6	0.3	7,060	175.40	6.50
Other Retail					
Flowers/plant stores	11	0.3	1,320	107.60	10.83
Personal Services					
Beauty	1	0.6	1,200	85.28	10.17
Barber	15	0.2	898	98.25	10.40
Cleaner and dyer	3	0.5	1,475	99.56	11.50
Video tape rentals	7	0.3	1,538	93.93	10.45
Financial					
Banks	16	0.2	2,835		11.46
Offices (other than Financial)					
Legal	8	0.3	1,347		11.18

ble A – 10 (1 of 2)

enmore Activity Center

edestrian Area: North of SR–522

mount of Retail Space Supportable by Local Spending

	Type of Commercial Activity									
	Super–market	Restaurant Fine Dining	Restaurant Fast Food	Clothing Store	Home Appliance	Gifts/ Specialty	Liquor Store	Drug Store	Other Retail	Total
verage Sales per Square Feet	$350	$150	$175	$170	$150	$145	$150	$175	$145	
upportable Square Feet: 1990 Households										
ood At Home	2,509									
ood Away From Home		1,154	989							
coholic Beverages	92	215					431			
ousekeeping Supplies	107							428	258	
ousehold Furnishings/Equip					391				45	
pparel and Services				372		145				
rugs and Medical Supplies	45							271		
ntertainment:Fees/Admissions										
elevision/sound equipment					144			14		
ets,Toys & Playground Equip.									197	
ther Entertainment										
ersonal Care Products	105							631		
eading						288				
obacco/Smoking	13					78			47	
iscellaneous	70					169		140	169	
ersonal Services										
otal Supportable Sq Ft	2,941	1,370	989	372	535	680	431	1,483	716	9,518
verage Sales per Square Feet	$350	$150	$175	$170	$150	$145	$150	$175	$145	
upportable Square Feet: Projected Household Growth: 1990–2010										
ood At Home	7,532									
ood Away From Home		3,466	2,970							
lcoholic Beverages	277	647					1,294			
ousekeeping Supplies	321							1,285	775	
ousehold Furnishings/Equip					1,174				135	
pparel and Services				1,117		437				
rugs and Medical Supplies	136							814		
ntertainment:Fees/Admissions										
elevision/sound equipment					431			41		
ets,Toys & Playground Equip.									591	
ther Entertainment										
ersonal Care Products	316							1,894		
eading						864				
obacco/Smoking	168					235			141	
iscellaneous	206					508		421	508	
ersonal Services										
otal Supportable Sq Ft	8,956	4,113	2,970	1,117	1,605	2,043	1,294	4,454	2,150	28,702
otal Supportable Sq.Ft: 2010 Households	11,898	5,482	3,960	1,489	2,139	2,723	1,725	5,937	2,866	38,220

Sources of Data:

*Average sales per square feet from Urban Land Institute, Dollars and Cents of Shopping Centers, 1991

Table A-10 (2 of 2)

Kenmore Activity Center

Pedestrian Area: South of SR-522

Amount of Retail Space Supportable by Local Spending

	Type of Commercial Activity									
	Super-market	Restaurant Fine Dining	Restaurant Fast Food	Clothing Store	Home Appliance	Gifts/ Specialty	Liquor Store	Drug Store	Other Retail	Total
Average Sales per Square Feet	$350	$150	$175	$170	$150	$145	$150	$175	$145	
Supportable Square Feet: 1990 Households										
Food At Home	904									
Food Away From Home		416	357							
Alcoholic Beverages	33	78					155			
Housekeeping Supplies	39							154	93	
Household Furnishings/Equip					141				16	
Apparel and Services				134		52				
Drugs and Medical Supplies	16							98		
Entertainment:Fees/Admissions										
Television/sound equipment					52			5		
Pets,Toys & Playground Equip.									71	
Other Entertainment										
Personal Care Products	38							227		
Reading						104				
Tobacco/Smoking	5					28			17	
Miscellaneous	25					61		50	61	
Personal Services										
Total Supportable Sq Ft	1,060	494	357	134	193	245	155	535	258	3,4
Average Sales per Square Feet	$350	$150	$175	$170	$150	$145	$150	$175	$145	
Supportable Square Feet: Projected Household Growth: 1990-2010										
Food At Home	7,127									
Food Away From Home		3,361	2,881							
Alcoholic Beverages	266	621					1,242			
Housekeeping Supplies	308							1,232	744	
Household Furnishings/Equip					1,156				133	
Apparel and Services				1,083		423				
Drugs and Medical Supplies	127							765		
Entertainment:Fees/Admissions										
Television/sound equipment					416			40		
Pets,Toys & Playground Equip.									571	
Other Entertainment										
Personal Care Products	303							1,819		
Reading						836				
Tobacco/Smoking	164					217			130	
Miscellaneous	203					496		411	496	
Personal Services										
Total Supportable Sq Ft	8,499	3,982	2,881	1,083	1,573	1,973	1,242	4,267	2,074	27,
Total Supportable Sq.Ft: 2010 Households	9,559	4,475	3,237	1,217	1,765	2,218	1,397	4,802	2,332	31,

Sources of Data:

*Average sales per square feet from Urban Land Institute, Dollars and Cents of Shopping Centers, 1991

APPENDIX B

FINANCIAL ANALYSIS

Table B-1

Kenmore Activity Center Financial Analysis

Pro-Forma Development Parameters

Scenario 1: Baseline

	Retail Only	Mixed-Use: Residential & Ground Flr Retail			Mixed-Use: Office with Ground Floor Retail (Without Structured Parking)			Mixed-Use: Office with Ground Floor Retail (With Structured Parking)		
	One-Story	Two-Story	Four-Story	Five-Story	Two-Story	Four-Story	Five-Story	Two-Story	Four-Story	Five-Story
Site Size: Sq. Ft	104363	104363	104363	104363	104363	104363	104363	104363	104363	104363
Acres	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40
Building Footprint	45500	42480	32925	26175	31250	19100	16000	37250	31500	31500
Total Building SF	45500	84960	131700	130875	62500	76400	80000	74500	126000	157500
Retail	45500	12555	11745	11745	30250	18100	15000	36250	30500	30500
Office					32250	58300	65000	38250	95500	127000
Residential-Sf		72405	107285	109010	–	–	–	–	–	–
Units		79	115	116	–	–	–	–	–	–
Parking Requirements	138	146	198	199	179	213	222	216	361	451
Parking-Surface										
Spaces	138	146	155	165	179	213	222	107	88	88
Square Feet	48183	51223	54396	57896	62642	74517	77600	37392	30683	30683
Parking-Structured										
Spaces	–	0	42	34	–	–	–	109	273	363
Total Square Feet	–	0	12670	10120	–	–	–	38250	95500	127000
Number of Stories								2	3	4
Building Footprint (Sq Ft)								19125	31833	31750
Open Space (Sq Ft)	10680	10660	17042	20292	10471	10746	10763	10596	10346	10430
Development Ratios										
Floor-Area-Ratio (FAR)	0.44	0.81	1.26	1.25	0.60	0.73	0.77	0.71	1.21	1.51
Impervious Surface Ratio	0.90	0.90	0.84	0.81	0.90	0.90	0.90	0.90	0.90	0.90
Surface Parking/Circ. Ratio	0.46	0.49	0.52	0.55	0.60	0.71	0.74	0.36	0.29	0.29
Open Space Ratio	0.10	0.10	0.16	0.19	0.10	0.10	0.10	0.10	0.10	0.10
Res. Units/Acre	n/a	33	48	48						

Table B–2

Kenmore Activity Center Financial Analysis

Pro–Forma Development Parameters

Scenario 2: Reduced Open Space and No Density Limit

	Retail Only	Mixed–Use:Residential & Ground Flr Retail			Mixed–Use: Office with Ground Floor Retail (Without Structured Parking)			Mixed–Use: Office with Ground Floor Retail (With Structured Parking)		
	One–Story	Two–Story	Four–Story	Five–Story	Two–Story	Four–Story	Five–Story	Two–Story	Four–Story	Five–Story
Site Size: Sq. Ft	104363	104363	104363	104363	104363	104363	104363	104363	104363	104363
Acres	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40
Building Footprint	48300	45495	38175	32175	33250	20400	17000	39500	33300	33500
Total Building SF	48300	90990	152700	160875	66500	81600	85000	79000	133200	167500
Retail	48300	12555	11745	11745	32250	19400	16000	38500	32300	32500
Office					34250	62200	69000	40500	100900	135000
Residential–Sf		78435	124675	135000	–	–	–	–	–	–
Units		86	137	145	–	–	–	–	–	–
Parking Requirements	147	157	231	243	191	228	236	230	382	480
Parking–Surface										
Spaces	147	157	176	196	191	228	236	114	94	94
Square Feet	51450	54898	61734	68443	66975	79933	82767	40017	32783	33017
Parking–Structured										
Spaces	–	0	54	47	–	–	–	116	288	386
Total Square Feet	–	0	16280	14130	–	–	–	40500	100900	135000
Number of Stories								2	3	4
Building Footprint								20250	33633	33750
Open Space	4613	3970	4454	3746	4138	4030	4596	4596	4646	4096
Development Ratios										
Floor–Area–Ratio (FAR)	0.46	0.87	1.46	1.54	0.64	0.78	0.81	0.76	1.28	1.60
Impervious Surface Ratio	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Surface Parking/Circ. Ratio	0.49	0.53	0.59	0.66	0.64	0.77	0.79	0.38	0.31	0.32
Open Space Ratio	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Res. Units/Acre	n/a	36	57	61						

Table B–3

Kenmore Activity Center Financial Analysis

Pro–Forma Development Parameters

Scenario 3: Reduce Open Space and Res. Pkg; No Density Limit

	Retail Only	Mixed–Use:Residential & Ground Flr Retail			Mixed–Use: Office with Ground Floor Retail (Without Structured Parking)			Mixed–Use: Office with Ground Floor Retail (With Structured Parking)		
	One–Story	Two–Story	Four–Story	Five–Story	Two–Story	Four–Story	Five–Story	Two–Story	Four–Story	Five–Story
Site Size: Sq. Ft	104363	104363	104363	104363	104363	104363	104363	104363	104363	104363
Acres	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40
Building Footprint	48300	49995	44925	36675	33250	20400	17000	39500	33300	33500
Total Building SF	48300	99990	179700	183375	66500	81600	85000	79000	133200	167500
Retail	48300	12555	11745	11745	32250	19400	16000	38500	32300	32500
Office					34250	62200	69000	40500	100900	135000
Residential–Sf		87435	148885	156960	–	–	–	–	–	–
Units		96	163	171	–	–	–	–	–	–
Parking Requirements	147	143	221	230	191	228	236	230	382	480
Parking–Surface										
Spaces	147	143	157	181	191	228	236	114	94	94
Square Feet	51450	50068	55014	63508	66975	79933	82767	40017	32783	33017
Parking–Structured										
Spaces	–	0	64	49	–	–	–	116	288	386
Total Square Feet	–	0	19070	14670	–	–	–	40500	100900	135000
Number of Stories								2	3	4
Building Footprint								20250	33633	33750
Open Space	4613	4301	4424	4180	4138	4030	4596	4596	4646	4096
Development Ratios										
Floor–Area–Ratio (FAR)	0.46	0.96	1.72	1.76	0.64	0.78	0.81	0.76	1.28	1.60
Impervious Surface Ratio	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Surface Parking/Circ. Ratio	0.49	0.48	0.53	0.61	0.64	0.77	0.79	0.38	0.31	0.32
Open Space Ratio	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Res. Units/Acre	n/a	40	68	71						

Table B-4

Kenmore Activity Center Financial Analysis

Capital and Operating Cost Assumptions

	Retail Only	Mixed-Use Development: Retail	Residential	Office	Combined	Sources For Assumptions
Operating Assumptions						
Net Rentable Factors:						
Building Efficiency Factor	95%	95%	85%-88%	93%		NBBJ Comparable Projects
Average Square Feet per Unit:Residential			800			Cain and Scott Apartment Vacancy Report: Bothell Area
Annual Rent Per SF: One and Two Story	12.00	$11.00	$9.00	$13.00		Cain and Scott; Survey of Kenmore/Bothell area retail/office rents
Four and Five Story		$11.00	$9.40	$14.00		Same as Above
Vacancy Rate at After Lease Up	5%	5%	5%	5%		
Annual Rent per Parking Stall (Structured Only)			$180			Seattle/Kenmore Comparables
Annual Operating Expense per SF: 1 & 2 Story	$1.50	$1.38	$2.70	$4.55		Cain and Scott; Institute of Real Estate Mngrs Survey
3+ stories		$1.38	$2.82	$4.90		Same as Above
Capitalization Rate	10%	10%	9%	10%		Cain and Scott; Developer Interviews
Development Cost Assumptions						
Building Construction Cost (per SF)						
One-story	$45					NBBJ estimates; Developer/architect interviews
Two-story		$40.00	$35.00	$40		Same as Above
Three-story				$45		Same as Above
Four-story		$45.00	$40.00	$45		Same as Above
Five-story		$45.00	$38.50	$45		Same as Above
Parking Construction Cost (per SF)						
Surface	$5				$5	NBBJ estimates
Structured: Under Building					$15.00	NBBJ estimates
Structured: Separate 2-level					$18	NBBJ estimates
Structured: Separate 3-level					$20	NBBJ estimates
Structured: Separate 4-level					$22	NBBJ estimates
Site Costs: Utilities (per SF of Site)	$1				$1	NBBJ estimates
Landscaping(SF of open sp.)	$3				$3	NBBJ estimates
Other Project Costs (% of Const. Costs)	20%				20%	NBBJ estimates
						NBBJ estimates
Other Development Costs						NBBJ estimates
Developer Overhead and Profit (% of Total Project Costs)	5%				5%	NBBJ estimates
Financing Fee (% of Construction Costs)	2%				2%	NBBJ estimates
Interest Carry (% of Construction Costs)	10%				10%	NBBJ estimates
Lease Up Costs (% of 1st Year Lease Revenue)	50%	100%	50%	100%		NBBJ Market Assessment

Table B-5

Kenmore Activity Center

Mixed-use Development Pro Formal Financial Analysis

Residential with Ground Floor Retail

Scenario 1: Baseline

	One-Story Retail Only	Two-Story: Res. with Ground Floor Retail			Four-Story: Res. with Ground Floor Retail			Five-Story: Res. with Ground Floor Retail		
		Retail	Residential	Total	Retail	Residential	Total	Retail	Residential	Total
Building Gross SF	45,500	12,555	72,405	84,960	11,745	107,285	119,030	11,745	109,010	120,755
Building Net(Rentable) SF	43,225	11,927	63,200	75,127	11,158	92,000	103,158	11,158	92,800	103,958
Project Value										
Annual Rental Income	$518,700	$131,200	$568,800	$700,000	$122,735	$864,800	$987,535	$122,735	$872,320	$995,055
Less: Vacancy Rate	$25,935	$6,560	$28,440	$35,000	$6,137	$43,240	$49,377	$6,137	$43,616	$49,753
Annual Net Rental Income	$492,765	$124,640	$540,360	$665,000	$116,598	$821,560	$938,158	$116,598	$828,704	$945,302
Parking Revenues	$0	$0	$0	$0	0	$7,602	$7,602	0	$6,072	$6,072
Total Annual Operating Income	$492,765	$124,640	$540,360	$665,000	$116,598	$829,162	$945,760	$116,598	$834,776	$951,374
Annual Operating Expenses	$64,838	$16,400	$170,640	$187,040	$15,342	$259,440	$274,782	$15,342	$261,696	$277,038
Net Annual Operating Income	$427,928	$108,240	$369,720	$477,960	$101,257	$569,722	$670,979	$101,257	$573,080	$674,337
Capitalization Rate	10%	10%	9%		10%	9%		10%	9%	
Estimated Project Value	$4,279,275	$1,082,398	$4,108,000	$5,190,398	$1,012,566	$6,330,244	$7,342,810	$1,012,566	$6,367,556	$7,380,121
Development Costs										
Construction Costs										
Buildings	$2,047,500	$502,200	$2,534,175	$3,036,375	$528,525	$4,291,400	$4,819,925	$528,525	$4,196,885	$4,725,410
Roads and Surface Parking	$240,917			$256,113			$271,979			$289,479
Structured Parking				$0			$190,050			$151,800
Site Work Landscaping	$32,039			$10,660			$51,127			$60,877
Utilities	$104,363			$104,363			$104,363			$104,363
Total Construction Costs	$2,424,819			$3,407,511			$5,437,444			$5,331,929
Other Project Costs	$484,964			$681,502			$1,087,489			$1,066,386
Total Project Costs	$2,909,782			$4,089,013			$6,524,932			$6,398,314
Other Development Costs										
Developer Overhead/Profit	$145,489			$204,451			$326,247			$319,916
Financing Fee	$48,496			$68,150			$108,749			$106,639
Interest Carry	$96,993			$136,300			$217,498			$213,277
Lease-up Costs	$259,350	$131,200	$284,400	$415,600	$122,735	$432,400	$555,135	$122,735	$436,160	$558,895
	$550,328			$824,501			$1,207,628			$1,198,727
Total Development Costs	$3,460,111			$4,913,514			$7,732,561			$7,597,041
Residual Land Value: Total	$819,164			$276,884			($389,751)			($216,920)
Per SF of Land	7.85			2.65			-3.73			-2.08

Table B-6

Kenmore Activity Center

Mixed-use Development Pro Formal Financial Analysis
Office with Ground Floor Retail (No Structured Parking)
Scenario 1: Baseline

	Two-Story:Office with Ground Floor Retail			Four-Story:Office with Ground Flr Retail			Five-Story:Office with Ground Flr Retail		
	Retail	Office	Total	Retail	Office	Total	Retail	Office	Total
Building Gross SF	30,250	32,250	62,500	18,100	58,300	76,400	15,000	65,000	80,000
Building Net(Rentable) SF	28,738	29,993	58,730	17,195	54,219	71,414	14,250	60,450	74,700
Project Value									
Annual Rental Income	$316,113	$389,903	$706,015	$189,145	$759,066	$948,211	$156,750	$846,300	$1,003,050
Less: Vacancy Rate	$15,806	$19,495	$35,301	$9,457	$37,953	$47,411	$7,838	$42,315	$50,153
Annual Net Rental Income	$300,307	$370,407	$670,714	$179,688	$721,113	$900,800	$148,913	$803,985	$952,898
Parking Revenues	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Annual Operating Income	$300,307	$370,407	$670,714	$179,688	$721,113	$900,800	$148,913	$803,985	$952,898
Annual Operating Expenses	$39,514	$136,466	$175,980	$23,643	$265,673	$289,316	$19,594	$296,205	$315,799
Net Annual Operating Income	$260,793	$233,942	$494,734	$156,045	$455,440	$611,484	$129,319	$507,780	$637,099
Capitalization Rate	10%	10%		10%	10%		10%	10%	
Estimated Project Value	$2,607,928	$2,339,415	$4,947,343	$1,560,446	$4,554,396	$6,114,842	$1,293,188	$5,077,800	$6,370,988
Development Costs									
Construction Costs									
Buildings	$1,210,000	$1,290,000	$2,500,000	$814,500	$2,623,500	$3,438,000	$675,000	$2,925,000	$3,600,000
Roads and Surface Parking			$313,208			$372,583			$388,000
Structured Parking			$0			$0			$0
Site Work Landscaping			$31,414			$32,239			$32,289
Utilities			$104,363			$104,363			$104,363
Total Construction Costs			$2,948,985			$3,947,185			$4,124,652
Other Project Costs			$589,797			$789,437			$824,930
Total Project Costs			$3,538,782			$4,736,622			$4,949,582
Other Development Costs									
Developer Overhead/Profit			$176,939			$236,831			$247,479
Financing Fee			$70,776			$94,732			$98,992
Interest Carry			$176,939			$236,831			$247,479
Lease-up Costs	$316,113	$389,903	$706,015	$189,145	$759,066	$948,211	$156,750	$846,300	$1,003,050
			$1,130,669			$1,516,606			$1,597,000
Total Development Costs			$4,669,451			$6,253,228			$6,546,582
Residual Land Value: Total			$277,892			($138,386)			($175,595)
Per SF of Land			$2.66			($1.33)			($1.68)

Kenmore Activity Center

Mixed-use Development Pro Formal Financial Analysis
Office with Ground Floor Retail (With Structured Parking)
Scenario 1: Baseline

	Two-Story:Office with Ground Floor Retail			Four-Story:Office with Ground Flr Retail			Five-Story:Office with Ground Flr Retail		
	Retail	Office	Total	Retail	Office	Total	Retail	Office	Total
Building Gross SF	36,250	38,250	74,500	30,500	95,500	126,000	30,500	127,000	157,500
Building Net(Rentable) SF	34,438	35,573	70,010	28,975	88,815	117,790	28,975	118,110	147,085
Project Value									
Annual Rental Income	$378,813	$462,443	$841,255	$318,725	$1,243,410	$1,562,135	$318,725	$1,653,540	$1,972,265
Less: Vacancy Rate	$18,941	$23,122	$42,063	$15,936	$62,171	$78,107	$15,936	$82,677	$98,613
Annual Net Rental Income	$359,872	$439,320	$799,192	$302,789	$1,181,240	$1,484,028	$302,789	$1,570,863	$1,873,652
Parking Revenues	$0	$19,671	$19,671	$0	$49,114	$49,114	$0	$65,314	$65,314
Total Annual Operating Income	$359,872	$458,992	$818,864	$302,789	$1,230,354	$1,533,143	$302,789	$1,636,177	$1,938,966
Annual Operating Expenses	$47,352	$161,855	$209,206	$39,841	$435,194	$475,034	$39,841	$578,739	$618,580
Net Annual Operating Income	$312,520	$297,137	$609,657	$262,948	$795,160	$1,058,108	$262,948	$1,057,438	$1,320,386
Capitalization Rate	10%	10%		10%	10%		10%	10%	
Estimated Project Value	$3,125,203	$2,971,369	$6,096,572	$2,629,481	$7,951,603	$10,581,084	$2,629,481	$10,574,383	$13,203,864
Development Costs									
Construction Costs									
Buildings	$1,450,000	$1,530,000	$2,980,000	$1,372,500	$4,297,500	$5,670,000	$1,372,500	$5,715,000	$7,087,500
Roads and Surface Parking			$186,958			$153,417			$153,417
Structured Parking			$688,500			$1,910,000			$2,794,000
Site Work Landscaping			$31,789			$31,039			$31,289
Utilities			$104,363			$104,363			$104,363
Total Construction Costs			$3,991,610			$7,868,819			$10,170,569
Other Project Costs			$798,322			$1,573,764			$2,034,114
Total Project Costs			$4,789,932			$9,442,582			$12,204,682
Other Development Costs									
Developer Overhead/Profit			$239,497			$472,129			$610,234
Financing Fee			$95,799			$188,852			$244,094
Interest Carry			$239,497			$472,129			$610,234
Lease-up Costs	$378,813	$462,443	$841,255	$318,725	$1,243,410	$1,562,135	$318,725	$1,653,540	$1,972,265
			$1,416,047			$2,695,245			$3,436,827
Total Development Costs			$6,205,979			$12,137,827			$15,641,509
Residual Land Value: Total			($109,407)			($1,556,743)			($2,437,645)
Per SF of Land			($1.05)			($14.92)			($23.36)

Table B-8

Kenmore Activity Center

Mixed-use Development Pro Formal Financial Analysis

Residential with Ground Floor Retail

Scenario 2: Reduced Open Space and No Density Limit

	One-Story Retail Only	Two-Story: Res. with Ground Floor Retail			Four-Story: Res. with Ground Floor Retail			Five-Story: Res. with Ground Floor Retail		
		Retail	Residential	Total	Retail	Residential	Total	Retail	Residential	Total
Building Gross SF	48,300	12,555	78,435	90,990	11,745	124,675	136,420	11,745	135,000	146,745
Building Net(Rentable) SF	45,885	11,927	68,800	80,727	11,158	109,600	120,758	11,158	116,000	127,158
Project Value										
Annual Rental Income	$550,620	$131,200	$619,200	$750,400	$122,735	$1,030,240	$1,152,975	$122,735	$1,090,400	$1,213,135
Less: Vacancy Rate	$27,531	$6,560	$30,960	$37,520	$6,137	$51,512	$57,649	$6,137	$54,520	$60,657
Annual Net Rental Income	$523,089	$124,640	$588,240	$712,880	$116,598	$978,728	$1,095,326	$116,598	$1,035,880	$1,152,478
Parking Revenues	$0	$0	$0	$0	0	$9,768	$9,768	0	$8,478	$8,478
Total Annual Operating Income	$523,089	$124,640	$588,240	$712,880	$116,598	$988,496	$1,105,094	$116,598	$1,044,358	$1,160,956
Annual Operating Expenses	$68,828	$16,400	$185,760	$202,160	$15,342	$309,072	$324,414	$15,342	$327,120	$342,462
Net Annual Operating Income	$454,262	$108,240	$402,480	$510,720	$101,257	$679,424	$780,681	$101,257	$717,238	$818,495
Capitalization Rate	10%	10%	9%		10%	9%		10%	9%	
Estimated Project Value	$4,542,615	$1,082,398	$4,472,000	$5,554,398	$1,012,566	$7,549,156	$8,561,721	$1,012,566	$7,969,311	$8,981,877
Development Costs										
Construction Costs										
Buildings	$2,173,500	$502,200	$2,745,225	$3,247,425	$528,525	$4,987,000	$5,515,525	$528,525	$5,197,500	$5,726,025
Roads and Surface Parking	$257,250			$274,488			$308,671			$342,213
Structured Parking				$0			$244,200			$211,950
Site Work Landscaping	$13,839			$3,970			$13,362			$11,237
Utilities	$104,363			$104,363			$104,363			$104,363
Total Construction Costs	$2,548,952			$3,630,246			$6,186,120			$6,395,787
Other Project Costs	$509,790			$726,049			$1,237,224			$1,279,157
Total Project Costs	$3,058,742			$4,356,295			$7,423,344			$7,674,944
Other Development Costs										
Developer Overhead/Profit	$152,937			$217,815			$371,167			$383,747
Financing Fee	$50,979			$72,605			$123,722			$127,916
Interest Carry	$101,958			$145,210			$247,445			$255,831
Lease-up Costs	$275,310	$131,200	$309,600	$440,800	$122,735	$515,120	$637,855	$122,735	$545,200	$667,935
	$581,184			$876,429			$1,380,190			$1,435,430
Total Development Costs	$3,639,927			$5,232,724			$8,803,534			$9,110,374
Residual Land Value: Total	$902,688			$321,673			($241,813)			($128,497)
Per SF of Land	8.65			3.08			-2.32			-1.23

Table B-9

Kenmore Activity Center

Mixed-use Development Pro Formal Financial Analysis

Office with Ground Floor Retail (No Structured Parking)

Scenario 2: Reduced Open Space and No Density Limit

	Two-Story:Office with Ground Floor Retail			Four-Story:Office with Ground Flr Retail			Five-Story:Office with Ground Flr Retail		
	Retail	Office	Total	Retail	Office	Total	Retail	Office	Total
Building Gross SF	32,250	34,250	66,500	19,400	62,200	81,600	16,000	69,000	85,000
Building Net(Rentable) SF	30,638	31,853	62,490	18,430	57,846	76,276	15,200	64,170	79,370
Project Value									
Annual Rental Income	$337,013	$414,083	$751,095	$202,730	$809,844	$1,012,574	$167,200	$898,380	$1,065,580
Less: Vacancy Rate	$16,851	$20,704	$37,555	$10,137	$40,492	$50,629	$8,360	$44,919	$53,279
Annual Net Rental Income	$320,162	$393,378	$713,540	$192,594	$769,352	$961,945	$158,840	$853,461	$1,012,301
Parking Revenues	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Annual Operating Income	$320,162	$393,378	$713,540	$192,594	$769,352	$961,945	$158,840	$853,461	$1,012,301
Annual Operating Expenses	$42,127	$144,929	$187,055	$25,341	$283,445	$308,787	$20,900	$314,433	$335,333
Net Annual Operating Income	$278,035	$248,450	$526,485	$167,252	$485,906	$653,159	$137,940	$539,028	$676,968
Capitalization Rate	10%	10%		10%	10%		10%	10%	
Estimated Project Value	$2,780,353	$2,484,495	$5,264,848	$1,672,523	$4,859,064	$6,531,587	$1,379,400	$5,390,280	$6,769,680
Development Costs									
Construction Costs									
Buildings	$1,290,000	$1,370,000	$2,660,000	$873,000	$2,799,000	$3,672,000	$720,000	$3,105,000	$3,825,000
Roads and Surface Parking			$334,875			$399,667			$413,833
Structured Parking			$0			$0			$0
Site Work Landscaping			$12,414			$12,089			$13,789
Utilities			$104,363			$104,363			$104,363
Total Construction Costs			$3,111,652			$4,188,119			$4,356,985
Other Project Costs			$622,330			$837,624			$871,397
Total Project Costs			$3,733,982			$5,025,742			$5,228,382
Other Development Costs									
Developer Overhead/Profit			$186,699			$251,287			$261,419
Financing Fee			$74,680			$100,515			$104,568
Interest Carry			$186,699			$251,287			$261,419
Lease-up Costs	$337,013	$414,083	$751,095	$202,730	$809,844	$1,012,574	$167,200	$898,380	$1,065,580
			$1,199,173			$1,615,663			$1,692,986
Total Development Costs			$4,933,155			$6,641,405			$6,921,368
Residual Land Value: Total			$331,693			($109,819)			($151,688)
Per SF of Land			$3.18			($1.05)			($1.45)

Table B-10

Kenmore Activity Center

Mixed-use Development Pro Formal Financial Analysis

Office with Ground Floor Retail (With Structured Parking)

Scenario 2: Reduced Open Space and No Density Limit

	Two-Story:Office with Ground Floor Retail			Four-Story:Office with Ground Flr Retail			Five-Story:Office with Ground Flr Retail		
	Retail	Office	Total	Retail	Office	Total	Retail	Office	Total
Building Gross SF	38,500	40,500	79,000	32,300	100,900	133,200	32,500	135,000	167,500
Building Net(Rentable) SF	36,575	37,665	74,240	30,685	93,837	124,522	30,875	125,550	156,425
Project Value									
Annual Rental Income	$402,325	$489,645	$891,970	$337,535	$1,313,718	$1,651,253	$339,625	$1,757,700	$2,097,325
Less: Vacancy Rate	$20,116	$24,482	$44,599	$16,877	$65,686	$82,563	$16,981	$87,885	$104,866
Annual Net Rental Income	$382,209	$465,163	$847,372	$320,658	$1,248,032	$1,568,690	$322,644	$1,669,815	$1,992,459
Parking Revenues	$0	$20,829	$20,829	$0	$51,891	$51,891	$0	$69,429	$69,429
Total Annual Operating Income	$382,209	$485,991	$868,200	$320,658	$1,299,924	$1,620,582	$322,644	$1,739,244	$2,061,887
Annual Operating Expenses	$50,291	$171,376	$221,666	$42,192	$459,801	$501,993	$42,453	$615,195	$657,648
Net Annual Operating Income	$331,918	$314,616	$646,534	$278,466	$840,122	$1,118,589	$280,191	$1,124,049	$1,404,239
Capitalization Rate	10%	10%		10%	10%		10%	10%	
Estimated Project Value	$3,319,181	$3,146,156	$6,465,337	$2,784,664	$8,401,222	$11,185,886	$2,801,906	$11,240,486	$14,042,392
Development Costs									
Construction Costs									
Buildings	$1,540,000	$1,620,000	$3,160,000	$1,453,500	$4,540,500	$5,994,000	$1,462,500	$6,075,000	$7,537,500
Roads and Surface Parking			$200,083			$163,917			$165,083
Structured Parking			$729,000			$2,018,000			$2,970,000
Site Work Landscaping			$13,789			$13,939			$12,289
Utilities			$104,363			$104,363			$104,363
Total Construction Costs			$4,207,235			$8,294,219			$10,789,235
Other Project Costs			$841,447			$1,658,844			$2,157,847
Total Project Costs			$5,048,682			$9,953,062			$12,947,082
Other Development Costs									
Developer Overhead/Profit			$252,434			$497,653			$647,354
Financing Fee			$100,974			$199,061			$258,942
Interest Carry			$252,434			$497,653			$647,354
Lease-up Costs	$402,325	$489,645	$891,970	$337,535	$1,313,718	$1,651,253	$339,625	$1,757,700	$2,097,325
			$1,497,812			$2,845,620			$3,650,975
Total Development Costs			$6,546,494			$12,798,683			$16,598,057
Residual Land Value: Total			($81,157)			($1,612,797)			($2,555,665)
Per SF of Land			($0.78)			($15.45)			($24.49)

Table B-11

Kenmore Activity Center

Mixed-use Development Pro Formal Financial Analysis

Residential with Ground Floor Retail

Scenario 3: Reduce Open Space and Res. Pkg; No Density Limit

	One-Story	Two-Story: Res. with Ground Floor Retail			Four-Story: Res. with Ground Floor Retail			Five-Story: Res. with Ground Floor Retail		
	Retail Only	Retail	Residential	Total	Retail	Residential	Total	Retail	Residential	Total
Building Gross SF	48,300	12,555	87,435	99,990	11,745	148,885	160,630	11,745	156,960	168,705
Building Net(Rentable) SF	45,885	11,927	76,800	88,727	11,158	130,400	141,558	11,158	136,800	147,958
Project Value										
Annual Rental Income	$550,620	$131,200	$691,200	$822,400	$122,735	$1,225,760	$1,348,495	$122,735	$1,285,920	$1,408,655
Less: Vacancy Rate	$27,531	$6,560	$34,560	$41,120	$6,137	$61,288	$67,425	$6,137	$64,296	$70,433
Annual Net Rental Income	$523,089	$124,640	$656,640	$781,280	$116,598	$1,164,472	$1,281,070	$116,598	$1,221,624	$1,338,222
Parking Revenues	$0	$0	$0	$0	0	$11,442	$11,442	0	$8,802	$8,802
Total Annual Operating Income	$523,089	$124,640	$656,640	$781,280	$116,598	$1,175,914	$1,292,512	$116,598	$1,230,426	$1,347,024
Annual Operating Expenses	$68,828	$16,400	$207,360	$223,760	$15,342	$367,728	$383,070	$15,342	$385,776	$401,118
Net Annual Operating Income	$454,262	$108,240	$449,280	$557,520	$101,257	$808,186	$909,443	$101,257	$844,650	$945,907
Capitalization Rate	10%	10%	9%		10%	9%		10%	9%	
Estimated Project Value	$4,542,615	$1,082,398	$4,992,000	$6,074,398	$1,012,566	$8,979,844	$9,992,410	$1,012,566	$9,385,000	$10,397,566
Development Costs										
Construction Costs										
Buildings	$2,173,500	$502,200	$3,060,225	$3,562,425	$528,525	$5,955,400	$6,483,925	$528,525	$6,042,960	$6,571,485
Roads and Surface Parking	$257,250			$250,338			$275,071			$317,538
Structured Parking				$0			$286,050			$220,050
Site Work Landscaping	$13,839			$4,301			$13,271			$12,541
Utilities	$104,363			$104,363			$104,363			$104,363
Total Construction Costs	$2,548,952			$3,921,426			$7,162,680			$7,225,977
Other Project Costs	$509,790			$784,285			$1,432,536			$1,445,195
Total Project Costs	$3,058,742			$4,705,711			$8,595,216			$8,671,172
Other Development Costs										
Developer Overhead/Profit	$152,937			$235,286			$429,761			$433,559
Financing Fee	$50,979			$78,429			$143,254			$144,520
Interest Carry	$101,958			$156,857			$286,507			$289,039
Lease-up Costs	$275,310	$131,200	$345,600	$476,800	$122,735	$612,880	$735,615	$122,735	$642,960	$765,695
	$581,184			$947,371			$1,595,137			$1,632,812
Total Development Costs	$3,639,927			$5,653,082			$10,190,353			$10,303,985
Residual Land Value: Total	$902,688			$421,316			($197,943)			$93,581
Per SF of Land	8.65			4.04			-1.90			0.90

Table B-12

Kenmore Financial Analysis
Rent Comparables

		RESIDENTIAL USES								OFFICE & RETAIL USES			OTHER
				1 Bedroom			2 Bedroom						
	F.A.R.	No of Units	Density (units/ac)	SF	Rent	$ per SF	SF	Rent	$ per SF	SF	Rent	% Occupied	Other Comments
SEATTLE – Mixed Use													
Bridgeview Place:Ballard	2.26	79	104	750	$695	$0.93	800	750	$0.94	4,400	$12	0%	– Parking at $20 per space
Wharfside: Queen Anne	1.7	136	75	716	$700	$0.98	994	938	$0.94	16,000	$12	20%	– Parking included in rent
California Place: West Seattle	1.8	33	85			$0.85 – .95				4,003		50%	– On street parking for retail; tandem parking for res.
Northbrook: Lake City Way		68	116	600	$550	$0.92	850	750	$0.88	10,000	$12	20%	– $25 per month for covered – Move-in special ($25 redu
KENMORE – Residential Developments													
Johnson Court		42		750	$525	$0.70	1000	660	$0.66				– $30 rent reduction plus free
Coventry Place		100		750	$560		1003	745	$0.74				– $25 rent reduction for six m
Kenmore Estates (485-0001)		163		732	$470	$0.64	950	570	$0.60				– Free surface parking, jucuz
Sunridge (481-7473)		30		594	440	$0.74	858	$530	$0.62				– Free surface parking
Kenmore Village (481-7473)		57		600	$445	$0.74	700	550	$0.79				– Free surface parking
Riverbend Apts. (486-9829)													
OTHER – Commercial/Mixed Use													
Park Place: Kirkland	0.49									145,000 Retail 90,000 Office			– 781 parking spaces (1 space/300 SF overall)
Kenmore Village Plaza	0.24									60,000 GLA (80,000 GSF)		100%	– + 500 parking spaces (1 space/160 GLA)
Lake Forest Park	0.33									243,000 GLA (256,000 GSF)		85%	– 1,130 parking spaces (1 space/215 GLA)

APPENDIX C

PARKING RESEARCH

PARKING DEMAND
ITE STANDARDS

ITE Design Parking Demands

Use	*Unit*	*Period*	*Spaces per Unit* Demand[a] (85% tile)	Design Value[b]
Commercial airport	Enplaning passengers	Weekday	0.64	0.70
	Enplaning passengers	Saturday	1.48	1.62
	Enplaning passengers	Sunday	2.05	2.26
Light industry	1,000 sq ft building area	Weekday	2.43	2.67
	Employee		1.00[c]	1.10
Industrial park	1,000 sq ft building area	Weekday	2.11	2.32
	Employee	Weekday	0.80	0.88
Manufacturing	1,000 sq ft building area	Weekday	2.28	2.51
	Employee	Weekday	1.00[c]	1.10
Low-rise apartment	Dwelling unit	Weekday	1.38	1.52
		Saturday	1.53	1.68
High-rise apartment (central area)	Dwelling unit	Weekday	0.59	0.65
Residential condominium	Dwelling unit	Weekday	1.41	1.55
		Saturday	1.23	1.35
Convention motel	Rooms	Weekday	1.10	1.21
Motel with restaurant/ lounge	Rooms	Weekday	1.49	1.64
Movie theater	Seats	Weekday	0.30	0.33
		Saturday	0.37	0.41
Sports club/ health spa	1,000 sq ft GLA	Weekday	6.37	7.01
Church/synagogue	Attendees	Sunday	0.62	0.68
Hospital	Beds	Weekday	2.48	2.73
Medical-dental clinic/office	1,000 sq ft building area	Weekday	5.50	6.05
General offices building	1,000 sq ft building area	Weekday	3.00[d]	3.30
	Employees	Weekday	0.93	1.02
Office park	1,000 sq ft building area	Weekday	3.28	3.61
Hardware/paint/ home improvement store	1,000 sq ft GLA	Weekday	3.23	3.55
		Saturday	4.19	4.61
Shopping center	1,000 sq ft GLA	Weekday	4.43	4.87
	1,000 sq ft GLA	Saturday	5.10	5.61
Quality restaurant	1,000 sq ft GLA	Weekday	17.40	19.14
	1,000 sq ft GLA	Saturday	20.11	22.12
	Seats	Weekday	0.54	0.59
	Seats	Saturday	0.61	0.67
Family restarant	1,000 sq ft GLA	Weekday	11.15	12.26
	Seats	Weekday	0.42	0.46
Fast food restaurant (without drive-in window)	1,000 sq ft GLA	Weekday	15.36	16.90
	Seats	Weekday	0.77	0.85
Bank-with drive-in and walk-in facilities	1,000 sq ft building area	Weekday	5.47	6.02
Fast food restaurant with drive-in window	1,000 sq ft building area	Weekday	13.36	14.70
	Seats	Weekday	0.70	0.77

a. Average rate plus 1 standard deviation.
b. 10 percent safety factor. May not be needed in all cases (i.e., residential).
c. Adjusted to 1.00 space/employee.
d. Adjusted to 3.00 spaces/1,000 sq ft of building area.

Source: Based on Institute of Transportation Engineers parking generation rates, *Parking Generation*, 2nd Edition.

Table 1

PARKING DEMAND
ITE STANDARDS

Suggested Peak-Parking Demand Indices

Use	*Unit*	*Peak-Parking Demand Index[a] Spaces per Unit*	*Peak-Parking Period*
Office			
Office building	Employee	0.9	Weekday-day
	1,000 sq ft GLA	3.0	Weekday-day
Office park	1,000 sq ft GLA	3.3	Weekday-day
Medical-dental clinic office	1,000 sq ft GLA	5.5	Weekday-day
Retail			
<400,000 sq ft	1,000 sq ft GLA	4.5	Saturday-day
400,000-600,000	1,000 sq ft GLA	5.0	Saturday-day
>600,000 sq ft	1,000 sq ft GLA	5.5	Saturday-day
Convenience Store	1,000 sq ft GLA	4.0	Saturday-day
Restaurant			
Quality	1,000 sq ft GLA	20.0	Weekday or Saturday Evening
Family	1,000 sq ft GLA	11.2	Weekday
Fast food (without drive-in window)	1,000 sq ft GLA	15.4	Weekday
Bank (with drive-in and walk-in facilities, over 10,000 sq ft)	1,000 sq ft GLA	5.5	Weekday-day
Cinema	Seat	0.35[c]	Saturday-evening
Hotel (convention)	Rooms	1.2	Weekday-evening
Light industry	Employee	1.0	Weekday-day
Industrial park	Employee	0.8	Weekday-day
Heavy industry	Employee	0.6[b]	Weekday-day
Light industry	1,000 sq ft building area	2.4[b]	Weekday-day
Industrial park		2.1[b]	Weekday-day
Heavy industry		2.3	Weekday-day
Medical			
Medical center	Beds	3.2	Weekday-day
General hospital	Beds	2.5	Weekday-day
Residential			
Single family	per dwelling unit	2.0	Evening
Multi-Family			
Condominium (all)	per dwelling unit	1.4	Evening
Efficiency	per dwelling unit	1.0	Evening
1-2 bedrooms	per dwelling unit	1.50	Evening
3 or more bedrooms		2.00	Evening
All	per car per dwelling unit	1.00	Evening

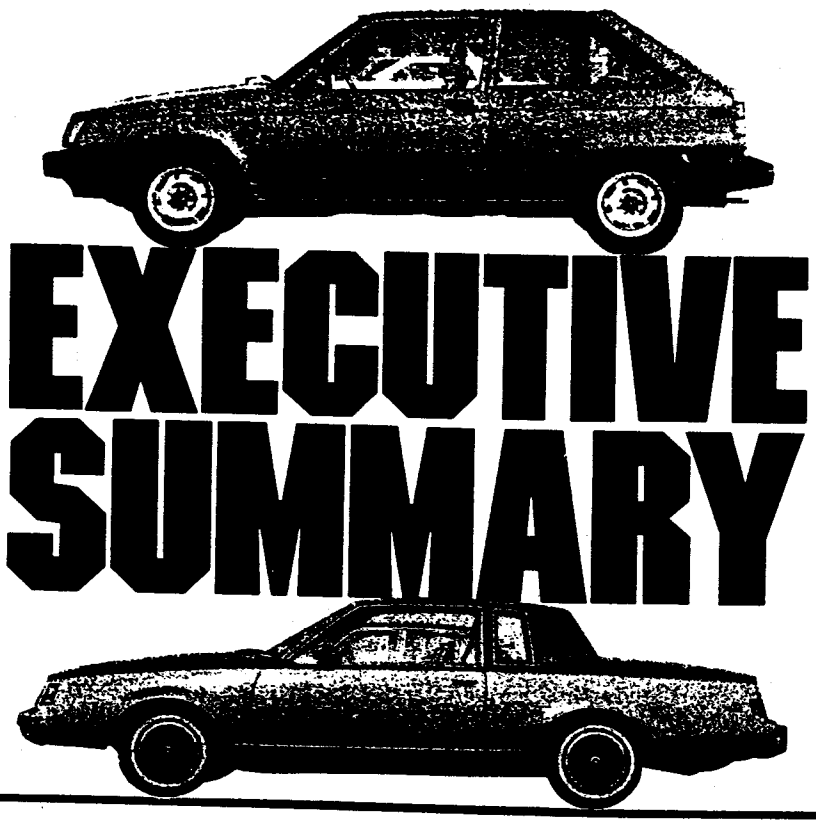
a. These indices represent 85 percentile values. Increase by 10% to determine *design values in most cases.*
b. Preferred values.
c. 0.33 is a commonly used value.

Handicapped Parking Demands

There is growing concern over providing parking for disabled persons. Suggested space-requirements are summarized in Table 6-34. The number of spaces that should be provided on-site will depend on actual or anticipated demand for handicap parking and local requirements.

TABLE 6-

PARKING DEMAND
ULI "SHARED PARKING"



EXECUTIVE SUMMARY

This study has examined the concept of shared parking with the objective of explaining how it works and developing a methodology to estimate its magnitude at locations throughout the United States.

The significance of shared parking is related to growth in mixed-use development across the United States. Experience indicates that combining land uses results in a demand for parking space that is less than the demand generated by separate freestanding developments of similar size and character.

For the purpose of this study, shared parking data were collected for 161 development projects in several urban areas throughout the nation. These projects were selected to represent five basic types and six combinations of land use in downtowns and suburban areas. All had varying amounts of floor space.

For the analysis of shared parking, peak parking ratios and hourly parking accumulations were determined for single developments in freestanding situations with maximum use of the auto as transportation. These characteristics provide the means to estimate the impact on peak parking space requirements when land uses are combined.

TECHNICAL FINDINGS

- Peak parking demand factors determined for single land uses were:
  - Offices: 3.0 spaces per 1,000 square feet (GLA-occupied), weekday
    0.5 space per 1,000 square feet (GLA-occupied), Saturday
  - Retail: 5.0 spaces per 1,000 square feet (GLA-occupied), Saturday
    3.8 spaces per 1,000 square feet (GLA-occupied), weekday
  - Restaurants: 20.0 spaces per 1,000 square feet (GLA-occupied), weekday or Saturday
  - Cinemas: 0.30 space per seat, Saturday
    0.25 space per seat, weekday
  - Residential: 1.0 space per dwelling unit (per rate of auto ownership)
  - Hotel rooms: 1.25 spaces per occupied room.

Table 2

PARKING STANDARDS PAS MEMO

ng used today, *planners still need them*. As mentioned earlier, financial and staff constraints limit the ability of planning departments to revise their parking codes on a regular basis. In part, this is the reason the Planning Advisory Service receives so many requests for parking standards each year.

We chose the following sample parking standards because these are the types of standards that we are asked for most often. The standards here come from recently revised ordinances and from the ITE *Parking Generation* manual. In general, the standards listed here progress from the least stringent to the most stringent.

COMMERCIAL USES

Art Gallery

One space per 300 square feet of floor area (*Montgomery County, Ohio*)

One space per 500 square feet of gross floor area (*Arlington County, Va.*)

One space per 600 square feet of gross floor area and one space per employee (*Pleasanton, Calif.*)

Beauty Parlor

Three spaces per chair (*St. Louis County, Mo.*)

One space per each 300 square feet of gross floor area, except storage areas (*Pleasanton, Calif.*)

Six spaces per 1,000 square feet of gross floor area (*Cedar Rapids, Iowa*)

Bed and Breakfast Establishments

One space per guest room (*Baltimore County, Md.*)

One space per guest room, plus one space per owner (*Carlsbad, Calif.*)

One space per guest room, plus two spaces per owner's unit (*National City, Calif.*)

Convenience Store

One space per 500 square feet of floor area, plus one space per employee, but never to exceed a total of six spaces (*Fairfax County, Va.*)

3.3 spaces per 1,000 square feet of gross floor area (*St. Louis County, Mo.*)

One space per 200 square feet of gross floor area (*Omaha, Nebr.*)

1.41 spaces per 1,000 square feet of leasable area (*ITE manual*)

Express Delivery Service

One space per every two employees on the combined work shift, plus one space per each vehicle maintained on the premises (*Montgomery County, Ohio*)

One space per two employees on maximum shift (*Cedar Rapids, Iowa*)

Fast-Food Restaurant with Drive-Through Facilities

One space per four seats, plus one space per two employees. With drive-through facility, add 11 stacking spaces for the drive-in window, with a minimum of five such spaces designated for the ordering station (*Fairfax County, Va.*)

9.95 spaces per 1,000 square feet of gross leasable area (*ITE manual*)

One space per 100 square feet of gross floor area (*Chino, Calif.*)

Funeral Home

One space per five seats (*Bellevue, Wash.*)

One space per four permanent seats, or one space per 30 square feet of floor area (*Riverside, Calif.*)

One space per three fixed seats, plus one space per 24 square feet of assembly area without seating (*Vista, Calif.*)

Furniture Store

One space per 600 square feet of gross floor area (*Provo, Utah*)

One space per 500 square feet of net floor area, plus one per employee (*Fairfax County, Va.*)

One space per 400 square feet of floor area, plus one space per every 6,000 square feet floor area over the first 6,000 square feet (*Hopkins, Minn.*)

Movie Theater

One space per five seats (*Ames, Iowa*)

One space per four seats or 10 spaces per 1,000 net square feet (*Bellevue, Wash.*)

OFFICE USES

Business or Professional Office

One space per 250 square feet of gross floor area (*Hopkins, Minn.*)

One space per 200 square feet of gross floor area (*Contra Costa County, Calif.*)

One space per 150 square feet of floor area (*Carroll County, Md.*)

Government Office Building

Four spaces per 1,000 square feet of gross floor area (*Cedar Rapids, Iowa*)

3.84 spaces per 1,000 square feet of gross building area (*ITE manual*)

One space per every 1.5 employees or one space per 200 square feet of floor area, whichever is greater (*Carroll County, Md.*)

Medical or Dental Office

4.5 spaces per 1,000 square feet of gross floor area (*St. Louis County, Mo.*)

One space per 175 square feet of gross floor area (*Vista, Calif.*)

Ten spaces per 1,000 square feet of gross floor area (*Cedar Rapids, Iowa*)

Research and Development Facility

One space per 1.5 employees up to capacity, plus one per each company vehicle (*Fairfax County, Va.*)

TABLE 4

One and one-tenth (1.1) spaces per each employee on the maximum shift (*Charlotte-Mecklenburg County, N.C.*)

Four spaces per 1,000 square feet of gross floor area for buildings up to three stories; 3.5 spaces per 1,000 square feet of gross floor area for buildings four to nine stories tall; three spaces per 1,000 square feet of gross floor area for buildings over 10 stories (*Anaheim, Calif.*)

Veterinarian Office

Four spaces per 1,000 square feet of gross floor area (*Cedar Rapids, Iowa*)

One space per 400 square feet of floor space in office, with a four space minimum (*Loudoun County, Va.*)

One space per 200 square feet of examining and operating areas, plus one space per 400 square feet of additional floor area (*Escondido, Calif.*)

PUBLIC AND QUASI-PUBLIC USES

Auditorium

One space per six permanent seats, or one space per each 100 square feet of gross floor area used for assembly (*Provo, Utah*)

One space per five fixed seats, plus one space per 35 square feet of assembly area without seating (*Vista, Calif.*)

One space per four seats or one space per 50 square feet of gross floor area (*St. Louis County, Mo.*)

Day Care Center

Two spaces per three employees, plus a sufficient number of spaces to accommodate all persons who may be at the establishment at any one time under normal operating conditions (*Fairfax County, Va.*)

One space per 10 children, plus one space per staff person (*Riverside, Calif.*)

One space per six children or two spaces, plus one space per employee (*St. Louis County, Mo.*)

Fraternity or Sorority

One space per three occupants, up to building capacity (*Montgomery County, Ohio*)

One space per sleeping room or one space per two beds, whichever is greater (*Ames, Iowa*)

One space per 300 square feet of floor area (*Iowa City, Iowa*)

Group Home

Two spaces per home (*St. Louis County, Mo.*)

One space per staff person, plus one space per two occupants (*Ames, Iowa*)

Two spaces per first six residents, plus one space per each additional six residents, plus one space per two nonresident employees (*Clearwater, Fla.*)

High School

One space per six students, plus one per faculty member (*Chino, Calif.*)

One space per four students in the 11th and 12th grades, plus one per employee on largest shift (*Omaha, Nebr.*)

One space per 20 square feet of classroom floor area, plus one per 200 square feet of office space, and one per 300 square feet of common open area (*Vista, Calif.*)

Landfill

Two spaces per employee on maximum shift (*Cedar Rapids, Iowa*)

Two spaces per every three employees on maximum shift, plus one space per each company vehicle (*St. Louis County, Mo.*)

Library and Museum

One space per 400 square feet of gross floor area (*Carroll County, Md.*)

One space per 500 square feet of gross floor area (*Arlington County, Va.*)

One space per 2.5 patrons, based on the occupancy load, plus one space per employee on a major shift (*Fairfax County, Va.*)

Nursing Home, Rest Home, or Convalescent Center

One space per four beds, plus one space per two employees on the maximum shift (*Omaha, Nebr.*)

One space per three beds (*Iowa City, Iowa*)

One space per two beds (*Clearwater, Fla.*)

Post Office

One space per 600 square feet of gross floor area and one space per employee (*Pleasanton, Calif.*)

Four spaces per each customer service station, plus two spaces per each three employees and one space per company vehicle (*St. Louis County, Mo.*)

One space per 200 square feet of gross floor area, plus two spaces per three employees on the maximum shift (*Newark, Del.*)

Zoo or Zoological Gardens

One space per 2,000 square feet of land area (*Lake Forest, Ill.*, and *Cedar Rapids, Iowa*)

RECREATIONAL USES

Amusement Park

Ten spaces per ride or activity area (*Anne Arundel County, Md.*)

Six spaces per 1,000 square feet of gross floor area, plus an additional six spaces per 1,000 square feet of gross land area directly used for outdoor recreation (*Cedar Rapids, Iowa*)

One square foot of parking area for each square foot of public activity (*St. Louis County, Mo.*)

Golf Course

Six spaces per hole (*Chino, Calif.*)

Fifty spaces per nine holes (*Omaha, Nebr.*)

Three spaces per hole (*Iowa City, Iowa*)

TABLE 4, CONT.

Health Club

One space per 150 square feet of gross floor, building, or ground area devoted to such use (*New Castle County, Del.*)

Ten spaces per 1,000 square feet of gross floor area (*Costa Mesa, Calif.*)

One space per 100 square feet of floor area, plus one space per two employees (*Rockville, Md.*)

Marina

.26 spaces per berth (*ITE manual*)

One-half space per slip (*Clearwater, Fla.*, and *Baltimore County, Md.*)

.7 spaces per each berth or mooring, plus two spaces per each three employees on maximum shift, and one space per company vehicle (*St. Louis County, Mo.*)

Miniature Golf

Twenty spaces per course, plus one space per employee (*Anaheim, Calif.*)

Three spaces per hole (*Chino, Calif.*)

Ten spaces, plus one space per every 200 square feet devoted to the use (*Hopkins, Minn.*)

1.5 spaces per hole (*Omaha, Nebr.*)

Pool or Billiard Hall

Two spaces per each billiard or pool table (*Pleasanton, Calif.*)

Four spaces per 1,000 square feet of gross floor area (*Baltimore County, Md.*)

One space per each 100 square feet of floor area (*Arlington, Tex.*)

Racquetball Courts

Three spaces per court (*St. Louis County, Mo.*, and *Chino, Calif.*)

Four spaces per court, plus one space per each additional 200 square feet of floor area (*Ames, Iowa*)

Two spaces per court (*Raleigh, N.C.*)

Self-Service Storage Facilities

One space per 5,000 square feet of gross floor area (*Escondido, Calif.*)

One space per 20 storage stalls, plus one space per 250 square feet of manager's quarters (*Arlington, Tex.*)

One space per 10 cubicles, plus two spaces for the manager's office, plus one additional space per each 25 cubicles (*York County, Va.*)

Swimming Pool

One space per 10 persons, up to capacity (*Provo, Utah*)

One space per each 40 square feet of pool area (*Arlington County, Va.*)

One space per four persons, up to capacity (*Carroll County, Md.*

REFERENCES AND CONTACTS

References

Institute of Transportation Engineers. *Parking Generation.* 2d ed. 1987. Available from Planner's Bookstore. $85. APA members and PAS subscribers, $75.

Model Parking Code Provisions to Encourage Ridesharing and Transit Use. Washington, D.C.: Federal Highway Administration, September 1983. Available from National Technical Information Services, Springfield, VA 22161. 703–487–4600. $21.95. Ask for publication PB 85120871.

Shared Parking. Washington, D.C.: ULI-The Urban Land Institute, 1983. $52.

Contacts

City of Bellevue, Permit Center, Design and Development Department P.O. Box 90012, Bellevue, WA 98009, 206–462–2034

Kansas City Department of Planning and Development, 701 N. 7th St., Municipal Office Building, Kansas City, MO 66101, 816–274–1855

Call for Information

The American Planning Association was recently awarded financial assistance from the George Gund Foundation for the purpose of conducting a one-day workshop on land-use planning for wildlife habitat protection. In preparation for this project, PAS is seeking examples of planning documents and regulatory ordinances that address habitat conservation practices in urban, suburban, and rural areas. A future *Memo* will relay the findings from this research to PAS subscribers.

Please send any habitat preservation studies, plans, or ordinances to: Kirk Bishop, American Planning Association, 1313 E. 60th St., Chicago, IL 60637.

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TABLE 4, [illegible]

LOCAL PARKING STANDARDS

	Existing King Co.	Proposed King Co.	Seattle General	Seattle Pedestrian District
OFFICE	1 sp/200 GSF	1 sp/300 GSF	1 sp/1000SF admin office 1 sp/350SF customer service office	Non–Res. Uses: No parking requirement for first 2,500SF
RETAIL	1 sp/200 GSF	1 sp/300 GSF (exc. auto oriented uses)	1 sp/350SF retail 1 sp/200SF restaurant, tavern, pub 1 sp/100SF fast food 0 spaces for ground–floor biz in MF zone; maximum 10 spaces	No parking for 1st 4,000–5,000SF in NCI 15,000 SF in NC2 25,000SF in NC3 No parking for 1st 150 movies seats; 2,500SF of restaurants (maximums waived)
RESIDENTIAL	2 sp/SF unit 1.5 sp/MF unit	2 sp/single family & townhome Varies with bdrm size: 1.5 sp/one bdrm; 1.8 sp/2bdrm	Varies by size of development & # of units: 0–10 units: 1 sp/unit 2–10 units: 1.1 sp/unit 11–30 units: 1.15 sp/unit 31–60 units: 1.2 sp/unit +60 units: 1.25 sp/unit Higher standards for large units Lower standards for: low income elderly low income disabled UW area	Full parking required
MIXED USE		Use with greatest standard applies to entire development		
DESIGN/ LAYOUT	NTE 50% compact Landscaping req'ment: min. 3% of parking area	Same as existing Pedestrian access walkways required		Locate to rear or under buildings 60' max. along street frontage at side of building
OTHER PROVISIONS	*Shared parking for uses over 5000 SF: Max. 10% reduction per use for uses whose operations are separate by 1 hour *Transit: 1 rideshare space per 20 required spaces; 2–20% reduction in spaces for each transit run within 660 feet (peak hour)	Same as existing *Up to 50% reduction w/ parking demand study	Shared parking: Reductions: office + retail= 20% reduction retail + res. = 30% reduction office + res. = 50% reduction daytime + nitetime/Sunday = 90% reduction of combined daytime parking req'ment Cooperative Parking: commercial uses only; reductions of 10–20%; parking w/in 800' of uses (continued next table)	Transit Reductions: 20% reduction if use is w/in 800' of street w/ 15' headways (com. zone) TDM: 5–40% reduction for mfg/office uses for alt. transport programs (car/van pools, subsidies, metro, bikes, etc.) (min. 40 space lots)

TABLE 5

LOCAL PARKING STANDARDS

	Kirkland (CBD)	Edmonds (BC zone)	Bellevue CBD Core	Bellevue Outer CBD Zones	"Neo-Trad. Villages"
OFFICE	1 sp/350 SF of gross floor area	1sp/400SF cust. svc. 1sp/800SF if no cust. svc. (admin)	gen: 2 – 2.7 sp/1000SF health: 3 – 4 sp/1000SF	2.5 – 3.sp/1000SF 4 – 5 sp/1000 SF	1 sp/300 SF for commercial uses
RETAIL	1 sp/125 SF for restaurants/taverns (All other retail 1 sp/350SF)	1sp/300SF retail 1sp/600 SF service Restaurants: 1sp/200SF if under 4,000SF 1sp/100SF if over 4,000SF	gen: 3 – 5 sp/1000SF mix use: 0 – 3.3 sp/1000 restaurant: 0 – 15sp/1000SF hotel:	4 – 5 sp/1000SF 2 – 4 sp/1000SF	3 sp/1000 for shopping centers 1 sp/room hotels
RESIDENTIAL	1.7 sp/dwelling unit	2sp/dwelling unit (MF)	MF: 0 – 2 sp/unit	1 – 2 sp/unit	
MIXED USE					
DESIGN/ LAYOUT					
OTHER PROVISIONS	Parking may be provided onsite, in municipal parking facilities, or fees in lieu	Fees in lieu: 50% reduction if 10 spaces; director decision for lots over 10 spaces Arch. Design Board review (protecting street frontage, compliance w/ Comp/Parking plans Joint Use: Up to 50% reduction in parking for nitetime/daytime uses within 500 feet of parking	Cooperative Parking: For non overlapping hours, the greater individual parking stalls are required For overlapping hours: 20% reduction of total allowed Off-Site parking: Allowed within same or similar districts; Allowed if functionally or physically contiguous/connected	(same)	*75-100% of off-street parking to be located to rear of building *Shared parking encouraged *Lays out internal street grid in parking areas for future redevelopment of buildings and roads

SHARED PARKING CALCULATIONS —

RKING DEMANDS

mmarizes parking demands for and use. (See Appendix J for .)

g Demands

k-parking demand factors for in suburban settings are sum- s 6-30 through 6-33. These fac- n be used for typical suburban th minimum transit use. They or determining parking require- dividual (stand-alone) and mul- and-use developments.

ives parking demand indices for land uses. The cited values are e. The number of spaces that ed are 10 percent more than the o account for vehicles searching eak surges.

gives suggested parking demand r likely times of occurrence. These erived from a variety of sources as a guide in preparing zoning

gives short- and long-term de- or selected land uses.

gives peak weekday and Saturday ds by time of day for selected land e provides a practical guide for red-parking requirements.

es shown in the preceding tables uate about 85 percent of the time. a broad guide for planning pur- ly, care should be used in their ce parking demands reflect the veness of any given activity mix: nter may have a productivity of 20 more than the norm as a result of es, promotions and the like. associated with a restaurant may e singles group.

occupancy in an office building a lower employee density and an king over time.

h as these should be taken into account in developing demands based on the tables presented in this chapter and in assessing parking space requirements.

Shared-Parking Demands

Parking demands for each time period should be estimated for each use, and the composite demands should then be computed (see Appendix K). The largest combined parking demand should be used for estimating required spaces.

Where offices constitute most of the space in a mixed-use mega-development, retail shops and restaurants may draw on workers for their patrons. In such cases, appropriate deductions should be made in computing parking demands. One suggested approach is to consider the center as a CBD and to apply the methods outlined earlier in this chapter.

Computing Shared Parking Demands

GIVEN: 600,000 sq ft office
500,000 sq ft retail
(Gross leaseable area)

STEP 1: Identify factors by time period
(Spaces per thousand sq ft)

	Weekday Day	Weekday Night	Saturday Day	Saturday Night
Retail	4.0	4.4	5.0	3.4
Office	3.0	--	0.5	--

STEP 2: Apply factors to activity to obtain parking space demands

Retail	2,000	2,200	2,500	2,700
Office	1,800	---	300	---

STEP 3: Compute total parking space demands

Total:	3,800	2,200	2,800	2,700

THEREFORE: 3,800 spaces are needed.

TABLE 7

Use
Commercial airport
Light industry
Industrial park
Manufacturing
Low-rise apartment
High-rise apartment (central area)
Residential condominium
Convention motel
Motel with restaurant/ lounge
Movie theater
Sports club/ health spa
Church/synagogue
Hospital
Medical-dental clinic/office
General offices building
Office park
Hardware/paint/ home improvement store
Shopping center
Quality restaurant
Family restarant
Fast food restaurant (without drive-in window)
Bank-with drive-in and walk-in facilities
Fast food restaurant with drive-in window

a. Average rate plus 1 standard dev
b. 10 percent safety factor. May no
c. Adjusted to 1.00 space/employe
d. Adjusted to 3.00 spaces/1,000 s

Source: Based on Institute of Tran

SHARED PARKING CALCULATIONS – APA

of the development. The reservation of parking areas, according to the report, "would preclude the sharing of these spaces." See the box below for an outline of the steps in calculating the permitted amount of shared parking.

According to the report, "the key values in the calculation of reductions are the percentages associated with each land use for each of the time periods mentioned." To determine the amount of parking required for a specific mix of uses, the report provides the following steps:

1. Determine the minimum amount of parking required for each land use as though it were a separate use;
2. Multiply each amount by the corresponding percentage for each of the five time periods;
3. Calculate the column total for each time period;
4. The column total with the highest value is the parking space requirement.

CALCULATING PARKING FOR MIXED-USE DEVELOPMENTS (MONTGOMERY COUNTY, MARYLAND)

	WEEKDAY		WEEKEND		NIGHTTIME
	Daytime (9 a.m.–4 p.m.)	Evening (6 p.m. – midnight)	Daytime (9 a.m. – 4 p.m.)	Evening (6 p.m. – midnight)	(midnight–6 a.m.)
Office/Industrial	100%	10%	10%	5%	5%
Retail	60	90	100	70	5
Hotel	75	100	75	100	75
Restaurant	50	100	100	100	10
Entertainment/Recreational	40	100	80	100	10

Source: "Parking Policies Study: Draft Proposals for Revising the Zoning Ordinance," Transportation Planning Division, Montgomery County Planning Department, July 1983.

Example: Mixed-Use Development—Office, Retail, and Entertainment. The assumption is that the individual land uses would have the following parking space requirements:

Office	300 spaces
Retail	280 spaces
Entertainment	100 spaces
Total	680 spaces

	WEEKDAY		WEEKEND		NIGHTTIME
	Daytime (9 a.m. – 4 p.m.)	Evening (6 p.m. – midnight)	Daytime (9 a.m. – 4 p.m.)	Evening (6 p.m. – midnight)	(midnight 6 a.m.)
Office	300	30	30	15	15
Retail	168	252	280	196	14
Hotel	–	–	–	–	–
Restaurant	–	–	–	–	–
Entertainment/Recreational	40	100	80	100	10
TOTAL	508	382	390	311	39

Solution to example problem: shared parking requirement, 508 spaces; (shared parking allows a 25 percent savings.)

Source: APA.

TABLE 3

PERFORMANCE BASED STANDARD WORKSHEET-1

PROPOSED PARKING WORKSHEET

I. RESIDENT REQUIREMENT

Studios	20	x 1.00	=	20	(Studios of 400 sq. ft. or less)	
1 BR	30	x 1.25	=	37.5		
2 BR	25	x 1.50	=	37.5		
3 BR +	20	x 1.75	=	35	= 130	Total Required Resident Spaces

II. SUPPLEMENTAL REQUIREMENT

A. BASE SUPPLEMENTAL REQUIREMENT

Resident Requirement (From Step I) 130 x 0.30 = 39 Total Base Supplemental Requirement

B. SUPPLEMENTAL CALIBRATION

Proximity to Transit				
Transit Corridor:	0.10			
Nodal Corridor/Transfer Node:	0.20			
Transit Node:	0.30	Transit Calibration	.20	
Transit Hub:	0.60			
			+	
Achieved Density (DU/NRA)				
42 - 72 :	0.10			
73 - 142 :	0.20	Density Calibration	.20	
143+ :	0.30			
			+	
Commercial Use (GFA)				
4 to 8.9 percent:	0.10			
9 to 12.9 percent:	0.20	Mixed Use Calibration	.10	= .5 Total Supplemental Calibration Allowances
13+ percent:	0.30			

39 Total Base Supplemental Requirement x .5 Total Supplemental Calibration Allowances = 19.5 Supplemental Calibration

39 Total Base Supplemental Requirement − 19.5 Supplemental Calibration = 19.5 Total Required Supplemental Spaces

III. TOTAL REQUIRED SPACES

130 Total Required Resident Spaces (Round to nearest whole) + 20 Total Required Supplemental Spaces (Round to nearest whole) = 150 Total Required Off-Street Spaces

Notes:

1. For each 20-foot section of curb cut, one additional parking space must be provided on-site.
2. Discretionary permits require that common area parking, in the amount of 15 to 25 percent of the total resident require ment, be provided on- or off- street.

San Diego City Planning Department

The city of San Diego has been revising parking standards for various land uses. This worksheet helps housing developers figure out how many parking spaces will be needed for each project—with calculations based on density, commercial space, and proximity to transit.

tion also would include a maximum number of parking spaces. The county already lowers parking requirements in exchange for ride-sharing programs.

National data

While parking needs will always vary from community to community and from region to region, communities are finding a helpful starting point in the *Parking Generation* reports produced by the Institute of Transportation Engineers and based on information supplied by members. The second edition, issued in 1987, includes data on 64 different land uses; an update of the report is expected to be out next year. (The 208-page manual is available for $75 to APA members from APA's Planners Bookstore; $85 to nonmembers.)

"The ITE report provides the best information available," says Robert Weant of the Eno Foundation. "But it's still not gospel and probably never can be. What happens in California may not be right for Connecticut."

In fact, the institute stresses that its findings are not to be taken as recommendations. The introduction to the report also cautions data users to take into account special local characteristics such as the availability of alternative transportation and ride-sharing programs. And it urges users to collect their own local data before making any decisions.

Wayne Swanson is a Chicago-based writer.

WORKSHEET 1

Address: _____
Name of Business: _____
Owner: _____

PERFORMANCE BASED STANDARD - TUMWATER WORKSHEET

CALCULATION OF PARKING NEEDS
(Based on answers as submitted on Application for Defining Parking Needs)

1. (3.a.) Usual number of employees. + _____

2. (3.b.) If the highest possible number of employees is twice the number of the usual number of employees, add another one-half the number of employees (#1 above). + _____

3 (3.d.) Usual number of customers during a customer stay period. + _____

4. (3.e.) If the highest number of customers is twice the number of usual customers, add another one-half the number of customers (#3 above). + _____

5. (3.c.) If the usual length of the average customer stay is less than one (1) hour, add another one-half of #3 above. + _____

6. (3.f.) If there are more than five deliveries per day, add another one (1) parking space. + _____

7. (3.h. & 3.g.) If delivery is made during peak use time, add another one-half parking space. + _____

8. (3.i.) If deliveries are made during normal business hours and large trucks or semi-trailer type vehicles are used, a loading space will be required for every four (4) deliveries. + _____

9. (4.c., & 4.d.) If storage area and/or combined office use area of the total floor area is 50% or more, the parking area may be reduced by 25%. - (25%= _____) = _____

10. (5) If parking is shared, the total number of required spaces may be reduced by 10%. - (10%= _____) = _____

11. (5) If parking is shared by three or more businesses, the total number of spaces may be reduced by no more than 25%. - (25%= _____) = _____

* 12. Reductions based on transit use / proximity are under consideration.

TOTAL NUMBER OF REQUIRED PARKING SPACES _____

APPROVAL: _____ _____
(Name) (Position/Title)

_____
(Date)

(Date revised: 05/12/89)

WORKSHEET 2

Appendix 4

RECONNAISSANCE REPORT NO. 10

SAMMAMISH RIVER BASIN

JUNE 1987

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and Surface Water Management Division
King County, Washington

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I. SUMMARY

The Sammamish River Basin is located north of Bellevue and east of Lake Washington in northern King County. The basin is characterized by numerous small sidehill drainages that flow into a floodplain occupied by the main stem Sammamish River. The river's floodplain has been greatly altered in the last 70 to 80 years, mostly in connection with the draining of wetlands to create agricultural lands. Agricultural production is still a major land use in the basin; commercial and industrial areas are also located in the river valley, particularly around the major population centers of Woodinville, Bothell, and Kenmore. Single-family residential areas predominate on the plateaus, although multi-family housing is also present. The basin is scheduled for major growth that will double impervious surface area by the year 2000.

Without thoughtful safeguards, this expansion will adversely affect the Sammamish River Basin. Development to date has already damaged many areas of the basin. A combination of numerous steep, erosion-prone slopes and increased surface runoff resulting from upland development has **accelerated erosion, landsliding, and sedimentation.** These problems have, in turn, caused **clogged conveyance systems** (both natural and artificial), **flooding, and habitat damage** in the form of filled pools and gravels and of washed-out large organic debris. Flooding, erosion, and the loss of almost all usable fish habitat are the three most serious consequences of development in this basin.

There are two major recommendations for the Sammamish River Basin. The first is to **1) control erosion** as a basic approach to preventing further mass-wasting, sedimentation, flooding and habitat damage. Planning and regulatory measures are suggested as parts of an overall management approach and structural solutions are proposed where these are needed to assure control or mitigation. Secondly, **2) take specific steps to protect and restore habitat,** stressing interagency cooperation among King County, local cities, and other public agencies.

II. INTRODUCTION: History and Goals of the Program

In 1985 the King County Council approved funding for the Planning Division (now called the Natural Resources and Parks Division), in coordination with the Surface Water Management Division, to conduct a reconnaissance of 29 major drainage basins located in King County. The effort began with an initial investigation of three basins -- Evans, Soos, and Hylebos Creeks -- in order to determine existing and potential surface water problems and to recommend action to mitigate and prevent these problems. These initial investigations used available data and new field observations to examine geology, hydrology, and habitat conditions in each basin.

Findings from these three basins led the King County Council to adopt Resolution 6018 in April 1986, calling for reconnaissance to be completed on the remaining 26 basins. The Basin Reconnaissance Program, which was subsequently established, is now an important element of surface water management. The goals of the program are to provide useful data with regard to 1) critical problems needing immediate solutions, 2) basin characteristics for use in the preparation of detailed basin management plans, and 3) capital costs associated with the early resolution of drainage problems.

The reconnaissance reports are intended to provide an evaluation of present drainage conditions in the County in order to transmit information to policymakers to aid them in developing more detailed regulatory measures and specific capital improvement plans. They are not intended to ascribe in any conclusive manner the causes of drainage or erosion problems; instead, they are to be used as initial surveys from which choices for subsequent detailed engineering and other professional environmental analyses may be made. Due to the limited amount of time available for the field work in each basin, the reports must be viewed as

descriptive environmental narratives rather than as final engineering conclusions.

Recommendations contained in each report provide a description of potential mitigative measures for each particular basin; these measures might provide maximum environmental protection through capital project construction or development approval conditions. The appropriate extent of such measures will be decided on a case-by-case basis by County officials responsible for reviewing applications for permit approvals and for choosing among competing projects for public construction. Nothing in the reports is intended to substitute for a more thorough environmental and engineering analysis possible on a site-specific basis for any proposal.

III. FINDINGS IN THE SAMMAMISH RIVER BASIN

The field investigation in the Sammamish River Basin was conducted in November 1986 by resource planner Ray Heller, geologist Matthew Brunengo, and engineer Doug Chin. Their findings and recommendations are presented in the following report.

A. Overview of the Basin

Geography and land use. The Sammamish River Basin forms a 14-mile-long connection between Lake Sammamish and Lake Washington in northern King County. The basin, with an area of 26 square miles, is located north of Redmond, east of Kenmore, and northeast of Lake Washington. Two tributary valleys (those of North and Horse Creeks) on the basin's northern boundary extend into Snohomish County.

Many small sidehill drainages characterize the Sammamish River Basin. These flow onto the Sammamish River floodplain, which was channelized and diked in the early 1900s and again in the 1950s to drain wetlands for agricultural use. Agricultural production is still a major land use in the basin, with dairies, turf farming, and small truck farms located between Woodinville and Redmond. Much of this agricultural area has had its development rights purchased through the King County Agricultural Preservation program. This land will remain open or in agriculture in perpetuity.

Commercial and industrial areas are also located in the river valley. These exist south of Redmond; along Willows Road on the west side of the valley; in the Northeast 124th/Totem Lake, Woodinville, Bothell, and Kenmore areas; and at the interchanges of Intestate 405 (I-405) and State Road (SR) 522. Parks and golf courses occupy large acreages in the valley. On the plateaus, single-family residential use predominates, although multi-family housing is also present. The area of impervious surfaces in the basin is expected to double by the turn of the century. All of the present land uses will continue and expand; the major anticipated change is the redesignation of some areas presently zoned single family for commercial/industrial uses. This will occur mainly in current upland forest and pasture lands. The basin is located primarily within the Northshore Community Planning Area.

Dominant geologic and geomorphic features. The basin consists of a wide trough north of Lake Sammamish, the narrower valley between Woodinville and Lake Washington, and the areas that drain directly into them. The plateaus adjacent to the trough are built of glacial and nonglacial sediments; the trough contains a variable thickness of alluvium. Oversteepening of the sides of the major valleys (during and immediately

following glaciation), combined with the effects of groundwater emergence and erosion by small streams, has resulted in long-term mass-wasting of the unconsolidated materials in these slopes.

The Interlake and Bear Creek drift plains expose the top of a thick stack of sediments. The rolling uplands are underlain mostly by till, a relatively strong material that supports the plateaus; some low spots in the surface were later partially filled by sand and silt. Underneath the till there is a deposit of loose proglacial sand and gravel exposed in the upper valley walls; lower still is a layer of lacustrine silt and clay. In some places, older sediments are exposed below the silt.

The drift plains are cut by valleys of various sizes. The largest is the Sammamish River trough. Perhaps a valley before the last glaciation, it was carved by ice movement and postglacial outflow and now contains up to 200 feet of sediment. The trough is intersected by several smaller valleys, which were outflow channels at the end of the last glaciation and are now occupied by Big Bear, Evans, Little Bear, North, Horse, and Swamp Creeks and by the Juanita Creek-Totem Lake System. All are floored with alluvial and outwash sands and silts.

Although the Sammamish River is the most obvious landscape element, it has been channelized through most of its course. This has halted its role as a geomorphic agent in the valley and along the sides of the trough. The major geomorphic activity presently takes place on the hillslopes, where a complex of mass-wasting and fluvial processes is eroding valley walls.

Streamflow comes mostly from the emergence of groundwater, especially at the top of the silt layer. This is augmented during the rainy season by surface runoff from the plateaus. Streams erode into the valley walls, creating steep-sided ravines. These are the loci for landsliding, which is further aided by groundwater. Failure occurs preferentially in the outwash sand overlying the silt layer but can occur in any of the geologic units. All steep slopes in this basin are susceptible to sliding. Streams deliver the sediment to the valley, where some of it has been deposited in small alluvial fans.

Major hydrologic and hydraulic features. The Sammamish River flows north and then west from Lake Sammamish to Lake Washington. The basin is characterized by numerous small stream reaches within deeply incised ravines draining to the Sammamish River. The reach of the river that flows north runs through the center of the basin and is fed by tributaries from the east and west. This reach begins its course at Lake Sammamish and flows through Redmond and unincorporated areas of King County until it reaches Woodinville. There it turns west, flowing through portions of Bothell and then on to Lake Washington at the community of Kenmore. The reach of the river that flows west is located mainly along the northern edge of the basin and is fed primarily by many small tributaries that drain northward. The alterations made to the basin's tributary network appear to have adversely affected the basin's hydraulics by causing increased erosion, sedimentation, and flooding.

Earlier inventories have identified nine wetlands in the basin. Four are located on the plateau and five are in the Sammamish River valley.

Habitat characteristics. There has been almost a total loss of fish habitat in the

Sammamish River Basin except in the river itself. Stream corridors have been cleared, filled, moved, or eliminated. Increased surface water runoff from development has been inadequately detained; this has also caused instream habitat damage in the forms of erosion, loss of large organic debris, sedimentation, loss of pools, and loss of gravels for spawning. The riparian corridor between Lakes Sammamish and Washington is especially noteworthy. Most of the protective streamside vegetation in this reach has been removed by development, agricultural clearing, and flood-control levee work. Because this particular channel serves as a passageway for tens of thousands of anadromous salmonids trying to reach habitable tributaries in other basins, it would be beneficial to restore this reach with native shrubs and trees that could provide cover and help to keep water temperatures low in the summer.

B. Effects of Urbanization

Urbanization has resulted in increased sedimentation and flooding in the drainage systems, both natural and artificial. As described in the section on basin geology, the Sammamish River Basin is characterized by numerous streams located within deeply incised ravines that are very susceptible to landslides. Some of the landslide areas are very active, and the sliding process has been accelerated by the increased rates and volumes of runoff that have been generated by development. The landsliding results in a build up of sedimentation in the drainage system. Sedimentation settles and fills streambeds and pipes at points where stream gradients flatten. This has severely reduced the carrying capacities of those conveyance systems and caused flooding. These problems were most noticeable south of the Sammamish River, in the vicinity of the Quinault Estates (on Trib. 0057C, 0057D, 0057E, 0067, 0087A, 0092A, 0092B, and 0092C). Many of the specific problems found were produced by the January 1986 storm; the damage produced by this event has tended to make many other tributaries vulnerable to future damage. This is especially true between Woodinville and Kenmore, where most of the slopes south of the Sammamish River are still experiencing mass erosion.

Flooding is expected to worsen in some areas of this basin as a consequence of accelerated landsliding, erosion, and sedimentation processes. The problem will be particularly acute south of the Sammamish River between river miles .90 and 2.60 unless addressed soon.

There are two other factors that contribute to property damage and degradation of surface water in this basin. One is the routing of concentrated storm flows over steep hillsides that border streams. This problem was most evident on Tributary 0067 behind Inglemoor High School. The other factor is the dumping of domestic garbage into streams and stream channels. This produces a water quality problem that impacts fish habitat.

C. Specific Problems Identified

The most significant problems found in the Sammamish River Basin are outlined and discussed below.

1. **Accelerated erosion and landsliding are occurring as a result of increased surface water runoff.** The steep valley walls are naturally susceptible to landsliding; this is

especially true of the slopes south of the Sammamish River downstream of Woodinville (Norway Hill and Inglemoor), where there are many large, prehistoric slumps. These processes are accelerated by stream incision, and aggravated by the increased volumes and rates of runoff produced by development.

a. **Incision and accelerated bank erosion** are most obvious in a few locations at the plateau edges, where box-shaped cuts are forming in till:

   1) Worst cases exist in western Redmond (on Trib. 0104) and south of Bothell (on Trib. 0067, 0057C, 0057D, and 0057E).

   2) Stream erosion occurs where roads built in the canyons constrict the channels and force the flow against the opposite slopes (Trib. 0090, 0095B, and 0066).

b. **Stream erosion** undercuts hillslopes in the ravines, and accelerated erosion aggravates the natural instability of these slopes:

   1) Between Kenmore and Woodinville worst cases were found between Simmonds Road and Norway Hill (Trib. 0057D, 0057G, 0066, and 0067).

   2) The valley walls of the Sammamish trough, oversteepened during glaciation, are also susceptible.

   3) Tributary 0104A has severe erosion problems from river mile .60 to .80 resulting from high flow peaks and volumes. The control structure located at river mile .80 does not properly control the range of peak flows to prevent downstream erosion problems. This same type of problem exists with the R/D facility in the plat of Woodway Country Estates. Uncontrolled flows have severely eroded the tributary below the control structure that leads to Tributary 0087A. Similarly, inadequate controls on Tributaries 0095B and 0095F have caused severe erosion, sedimentation, and flooding problems downstream on Tributary 0095B at river mile .95.

c. **Groundwater emergence and undercutting both contribute to sliding.** These occur wherever there are streams. Worst cases exist on the slopes between Hollywood/Ste. Michelle and Woodinville, on the slopes west of Redmond as far as Willows Road, in the valleys that converge near Northeast 124th Street and SR 202 (Trib. 0095B and its tributaries), and along the lower valley of the Sammamish River (Bothell to Kenmore).

2. **Sediment deposition occurs where the small streams reach the low-gradient valley floors.**

   a. **Sedimentation affects ponds,** such as those in Molbaks Nursery (Trib. 0095D), on Gold Creek (Trib. 0088), and at the Ste. Michelle Winery (on Trib. 0096D).

b. **Sedimentation also constricts small channels,** e.g. near Hollywood (Trib. 0090), on Willows Road (Trib. 0101), on 164th Avenue NE (Trib. 0095B), south of Woodinville (Trib. 0087A), and south of Bothell (Trib. 0057C).

c. **The Sammamish River (Trib. 0057) receives large amounts of sediment:**

1) The area of the river most affected is the reach from Lake Washington upstream to the Wayne Golf Course (approx. RM 2.00). This reach is dredged periodically -- most recently in 1979 -- and there is a current proposal to do so again. Some of the sediments are coming from the small tributaries south of the river near Quinault Estates. A more permanent solution to the sedimentation problem in this reach cannot be implemented until the sediment sources are located.

2) The river also receives sediment from Tributary 0057B. There was a stable, well-vegetated, grass-lined swale in Marymoor Park at river mile .05. King County Parks recently cleaned the swale as part of its maintenance program, removing all vegetation and leaving raw soils exposed. Runoff has since been laden with sediments, which are carried directly to the river when it rains.

d. **Flooding is expected to continue and worsen in some locations.** Flooding is a particular problem south of the Sammamish River between river miles .90 and 2.60. Sediments carried down from steep ravines will continue to impede drainage systems or to be deposited in the river itself. New developments contributing additional flows will accelerate the landslide process and worsen the problem. Other areas along the river could also be subject to flooding from the sedimentation process.

3. **Damage to fish habitat has resulted from the alteration of streams and riparian corridors, as well as from erosion and sedimentation processes.**

a. **Development has removed most of the protective streamside vegetation** necessary for fish to use tributaries. For example:

1) The entire length of the Sammamish River is almost devoid of shrubs and trees. These would normally provide instream cover for fish and would help maintain cool water temperatures in the summer.

2) Structures have been built on Tributary 0104 between river miles .30 and .75, thereby destroying nearly all natural features of the stream corridor.

b. **Erosion and sedimentation have eliminated many pools, channels, and gravels** used by fish in the lower reaches of many streams. Of particular note are Tributaries 0087A, 0101, and 0104.

c. **Development has created barriers to fish passage.** The problem is particularly common where tributaries join the Sammamish river, e.g., on Tributary 0095B. The tributary empties into the river through a 4-foot-diameter pipe,

which is perched 6 feet above the river.

4. **Habitat has also been damaged by livestock in some locations.** On Tributary 0096A at river mile .30 and on Tributary 0069A at river mile .50, livestock have trampled and badly eroded banks and left streams full of feces. Heavy algae growth and turbidity are visible in the streams; these are probably signs of poor water quality.

IV. RECOMMENDATIONS FOR ACTION

The following proposed solutions address the identified problems of erosion, landsliding, sedimentation, flooding, and habitat destruction in the Sammamish River Basin.

A. **Erosion control is the key to preventing mass-wasting, other forms of erosion, and sedimentation.** Flooding and some forms of habitat damage could then be reduced. There are two ways to approach erosion control in this basin:

1. **Planning and regulatory measures** are the least costly, most effective means of assuring long-term prevention. These should be directed at avoidance of development on steep, landslide-susceptible hillslopes. Especially to be avoided are slopes in canyons where groundwater emerges at the top of the silt layer. Ravines of concern include, but are not limited to, Tributaries 0057D, 0057E, 0057G, 0066, 0067, 0069B, 0092A, 0092B, and 0092C. Some specific measures might include:

   a. **Establishing restrictive zoning,** such as low densities in sensitive areas.

   b. **Requiring more detailed review of subdivision applications** by the Building and Land Development office for sites in specific sensitive areas. This would include:

      1) Development review requiring developments draining to Tributary 0090 to provide a thorough downstream analysis. An area of concern is the Woodinville-Redmond Road (RM .30), where flooding now occurs.

      2) Tributary 0096D should also have thorough downstream analysis by all new developments draining to it. Minor erosion is occurring from river miles .75 to .50. Strict rate and volume controls should be imposed through a critical area designation to prevent erosion problems.

   c. **Requiring that proposals for development on steep slopes be accompanied by a professional evaluation** of slope stability with recommendations for preventing adverse impacts.

   d. **Conducting careful planning and design for streets and drainage,** so as to preclude long, steep grades where runoff can concentrate and cause erosion in ditches (Trib. 0089D) and at outfall points (Trib. 0057D and 0090A).

   e. **Establishing nonerosive flow rates for streams in the basin.**

   f. **Conducting a study to determine the major source(s) of sediment in the**

Sammamish River. The study should contain recommended solutions that include appropriate interlocal agreements if sediment sources indicate the involvement of more than one jurisdiction is necessary.

g. **Developing a basin plan,** which would be carried out jointly by King County, Redmond, Bothell, and Snohomish County. The goal would be to identify problems, solutions, and methods of implementation.

2. **Structural measures** will be necessary to control surface runoff in the basin in some cases. Field reconnaissance identified the need for the following measures to prevent further damage from surface water.

   a. **Additional R/D is needed in some locations to prevent excessive erosion** from the increased flows produced by development. Some locations of note include:

      1) The plateaus, especially above the sensitive ravines (Trib. 0057C, 0057D, 0057G, 0067, 0087A, 0088, 0088B, 0090, 0090A, 0095B, 0095D, 0095F, 0096D, 0101, 0104, 0104A, and 0141) where development is proceeding. In some cases (Trib. 0057D and 0090A) natural wetlands may be enhanced to store additional runoff;

      2) In Woodway Country Estates. The R/D facility should be analyzed to determine if it needs to be retrofitted to optimize flow control and flood storage;

      3) The control structure and facility on Tributary 0104A at river mile .80. This should be thoroughly analyzed and retrofitted to minimize the severe erosion in the entire reach of the stream below the facility.

   b. **In more extreme cases, it may be necessary to redirect runoff around damaged and sensitive channel reaches.** This can be accompanied by routing flows into storm-drainage systems in a safe, nonerosive manner (Trib. 0057D, 0057E, 0088, 0088B, 0095B, 0096D, 0104, and 0141) or by containing flows in tightline pipes. Better outfall structures can reduce erosion below culverts (Trib. 0057D and 0090A).

   c. **Sediment traps,** normally associated with R/D structures, could further control sediment deposition problems on some tributaries (Trib. 0066, 0069, 0090, and 0096D).

   d. **Some lowland channels will have to be rebuilt** to convey greater amounts of flow and to control bank erosion along some tributaries (Trib. 0087A, 0090, 0095B, and 0095F).

B. **Specific measures should be taken to restore habitat where damaged and to prevent further destruction.**

   1. **Conduct a habitat study for the entire drainage course of the Sammamish River.** The study should address these issues:

a. **The impact of the absence of riverside vegetation** on anadromous fish species.

b. **The impact of riverside vegetation** on floodwater conveyance and the maintenance of the river levees.

c. **A plan for implementing a revegetation program** along the river (including a detailed planting plan and cost estimates).

2. **Control erosion and pollution related to livestock access to stream corridors:**

a. **Livestock waste-management plans** should be developed jointly by the Soil Conservation Service and the King County Conservation District. There has already been an indication that staff will be provided to conduct this work and that the cost of solutions could be shared;

b. **Have property owners provide fencing for streams** at least 15 feet from the streambanks in agricultural areas, allowing access points on the stream for watering.

c. **Provide native shrubs (e.g., willows) for revegetation** where livestock have denuded streambanks and caused erosion and sedimentation.

d. **Establish stream corridor guidelines** for all streams in the basin. These would include prohibitions on clearing, filling, developing, or otherwise altering the corridors, except for limited recreation.

APPENDIX A
ESTIMATED COSTS: PROPOSED CAPITAL IMPROVEMENT PROJECTS
SAMMAMISH RIVER BASIN

* Indicates project was identified by Surface Water Management office prior to reconnaissance

NOTE: All projects are located on map included in this report.

Project Number	Collect. Point	Project Description	Problem Addressed	Estimated Costs and Comments
5101*	15	Construct bypass drainage system for flows causing severe channel erosion.	Eliminates channel erosion.	$120,000 (Project design has been completed.)
5102*	4	Enhance R/D capabilities of Wetland 5199 by constructing proportional weir at outlet of wetland. Biological assessment is needed to assure project does not decrease habitat values.	Decrease downstream erosion and flooding.	$34,000 (dependent on land acquisition costs)
5103* & 5106	6	Bypass flows that are overtaxing a tightline conveyance system that is prone to sediment buildup. Remove gravel build up in tightline system and gravel bar that has blocked moorage area on the Sammamish River.	Eliminates gravel build up in moorage area. Bypass of flows into a partially open conveyance system will allow for easier monitoring of problems that develop so that maintenance can be performed.	$72,000
5104*	23	Severe ditch erosion along NE 145th St., between 165th Pl. NE and 156th Pl. NE. Work has been completed. Eliminate project.	None.	None.

Project Number	Collect. Point	Project Description	Problem Addressed	Estimated Costs and Comments
5105*	4	Enhance capacity of sediment deposition zone and the tightline drainage system.	Prevents sediment from being transproted downstream.	$17,000
5107	25	Construct instream R/D facility at this location. Control will be proportional weir on inlet of driveway culvert.	Decreases downstream erosion and potential flooding.	$30,000
5108	25	Tightline road runoff to bottom of ravine in a safe, nonerosive manner.	Eliminates hillside erosion from uncontrolled roadway runoff.	$51,000
5109	4	Stabilize eroding streambank and enhance capacity of sediment deposition zone.	Minimize potential of bank erosion to damage private property. Minimize potential for sediment to be transported downstream.	$78,000
5110	8	Pipe flows to bottom of ravine. Flows currently discharge uncontrolled down an erosive hillslope.	Eliminates hillslope erosion from uncontrolled flows.	$53,000
5111	24	Construct new tightline storm drainage system to control flows.	Eliminates capacity problem and hillslope erosion from uncontrolled flows.	$56,000

APPENDIX B
CAPITAL IMPROVEMENT PROJECT RANKING
SAMMAMISH RIVER BASIN

Prior to the Sammamish River Basin field reconnaissance, five projects had been identified and rated using the CIP selection criteria developed by the Surface Water Management (SWM) and Natural Resources and Parks Divisions. Following the reconnaissance, 10 projects are proposed for this area. They include six new, previously unidentified and unrated projects. These displace one previously selected project, which was eliminated because the project has already been completed.

The previous SWM capital improvement project list for the Sammamish River Basin had an estimated cost of $720,000, while the revised list decreases to an estimated cost of $511,000. This 50 percent decrease in estimated capital costs is due mainly to more precise evaluation of the projects during field reconnaissance.

The following table summarizes the scores and costs for the CIPs proposed for the Sammamish River Basin. The projects were rated according to previously established SWM Program Citizen Advisory Committee criteria. The projects ranked below are ones for which the first rating question, ELEMENT 1: "GO/NO GO," could be answered affirmatively. The projects can be considered now for merging into the "live" CIP list. Any project scoring over 100 points should be considered for incorporation into the six-year CIP plans.

RANK	PROJECT NO.	SCORE	COST
1	5101*	113	$120,000
2	5108	100	51,000
3	5107	95	30,000
4	5110	95	53,000
5	5103* & 5106	90	72,000
6	5102*	80	34,000
7	5111	75	56,000
8	5105	70	17,000
9	5109	65	78,000
		TOTAL	$511,000

* Indicates that project was identified by the Surface Water Management Division prior to reconnaissance.

APPENDIX C
DETAILED FINDINGS AND RECOMMENDATIONS
SAMMAMISH RIVER BASIN

* All items listed here are located on final maps in the offices of Surface Water Management, Building and Land Development, and Basin Planning

Item*	Trib. & River Mile	Collect. Point	Category	Prop. Proj.	Existing Conditions and Problems	Anticipated Conditions and Problems	Recommendations
1	--	6	Hydrology	5103 & 5106	Site is in the plat of Quinault Estates where NE 170th St. dead-ends to the east. Sediment transported from upstream has reduced the capacity of the tightline drainage system. A gravel bar has built up at the outlet of the drainage system in Sammamish river and is blocking access to a local moorage.	Continued erosion and sedimentation from upstream sources. Gravel build up will become more extensive and increase potential for localized flooding.	- Analyze sediment sources and stabilize them. See Project 5105. - Bypass flows to an open channel conveyance system east of the tightline system. - Remove gravel build up from tightline system and moorage.
2	--	23	Hydrology	5104	Recent (11/11/86) work has been completed on the roadway ditches along NE 145th St. between approximately 165th Pl. NE and 156th Pl. NE. The ditches had previously experienced severe erosion. Some areas of ditch still appear unstable.	Potential for some ditch erosion to occur.	- Drop proposed project and monitor condition of ditch. - Evaluate need for more work to be done at basin planning stage. - Coordinate efforts with King County Roads Division.

Item	Trib. & River Mile	Collect. Point	Category	Prop. Proj.	Existing Conditions and Problems	Anticipated Conditions and Problems	Recommendations
3	--	24	Hydrology	5111	Site is located at intersection of 136th Ave. NE and 128th St. Warehouse gets flooded from runoff jumping road ditch. Some recent (11/6/86) work has been done on the hillslope to keep it from eroding.	More severe erosion and flooding will occur.	- Construct new storm-drainage system to control flows. - Coordinate project with King County Roads Division.
4	0057 RM .00-13.8	1	Habitat		The river banks of the Sammamish River are devoid of protective vegetation. Temperature increases of the water are possible in the summer. Large anadromous salmonid runs pass through this drainage course.	Conditions will continue.	Conduct a habitat study of the Sammamish River to consider impact of the lack of protective shrubs and trees on fish. It should also address the impact of shrubs and trees on flood control. Study should recommend a feasible habitat enhancement plan for the Sammamish River, coordinated with landscaping plans for the Sammamish Trail.
5	0057 RM 1.80	1	Geology		Unstable, uncontrolled cuts and fills along Bothell Way at 91st Ave. NE.	Area is subject to surface erosion, gullying, and perhaps mass failure. Could block Bothell Way.	Require owner to construct and maintain runoff and sediment control structure.
6	0057 RM .60-1.20	11,12	Habitat		Trout stream. Bank cover is good in places; some pools but mostly riffles. Anadromous fish cannot access due to half-mile of pipe. Some filling, clearing, erosion, and sediment from high flows.	Further loss of stream corridor and instream habitat from future development and associated higher stream flows.	King County should work with the city of Bothell to jointly resolve surface water concerns in this shared drainage. The stream systems would benefit from established corridors and adequate runoff controls for both existing and future development.

Item	Trib. & River Mile	Collect. Point	Category	Prob.Site/ Prop. Proj.	Existing Conditions and Problems	Anticipated Conditions and Problems	Recommendations
7	0057A RM 1.60	12	Habitat		Property owner has cleared away wetland buffer and ground cover. Former bog has been excavated, and open water is called Lake Pleasant. Property is just north of Snohomish County line.	Depending on the type of outlet placed on Lake Pleasant, the downstream flows could significantly increase, causing flooding, erosion, and sedimentation in King County. Lower release rates could cause stream habitat problems associated with low flows.	King County SWM should work with Snohomish County agencies and property owner to determine best outlet structure for Lake Pleasant. Plant native vegetation around lake.
8	0057C RM 1.00	2	Hydrology		Outlet of concrete culvert suspended 5' above channel bottom is causing bank and channel erosion.	Continued erosion.	Place manhole drop structure at outlet of culvert to dissipate flow velocities and reduce erosion.
9	0057C RM .15-1.10	2	Geology		Bank erosion in several channels; deposition, local changes in channel location in lower valley.	Approx. 6 tributaries deliver water to lower valley. Stream erosion (and some landsliding) provide sediment, which is deposited in small channels.	Control flows from area south of NE 155th St., especially in major channel east of 78th Ave. NE.
10	0057C RM .20	2	Hydrology		Tightline drainage system at this location is filling with sediment. Trash rack broken on eastern inlet structure on the south side of NE 170th St.	Continued sediment buildup with a potential for localized flooding.	Sediment buildup should be removed and the trash rack repaired. R/D facilities upstream should control release rates to prevent erosion and sedimentation.

Item	Trib. & River Mile	Collect. Point	Category	Prop. Proj.	Existing Conditions and Problems	Anticipated Conditions and Problems	Recommendations
11	0057C RM .38	2	Hydrology		A driveway culvert at this location was completely submerged and downsized from upstream drainage system. Heavy sediment loads being transported downstream.	Increased sedimentation downstream during periods of heavy runoff. Increased potential for localized flooding from downsized driveway culvert.	- Developments should note and analyze the downsized culvert in the downstream analysis required in drainage plans. - R/D facilities should regulate flows to prevent flooding and erosion (which results in downstream sedimentation). - Stabilize channel with bio-engineering techniques to keep sediment from filling stream channel.
12	0057C RM .40	2	Hydrology		Bank erosion, flooding, and streambed instability caused by flows from the Jan. '86 storm.	Potential for more erosion and flooding during periods of heavy runoff.	- Ability of stream to handle cumulative flows from upstream development adjacent to this stream reach should be examined in the downstream analysis provided with drainage plans. - Channel capacity should be enhanced and stabilized with bioengineering techniques and/or rock riprap.
13	0057D RM .40	4	Geology		Gullying below outfall at end of 84th Ave. NE.	Road is on steep spur, so flow is directed onto unchannelled hillslope.	Provide better outfall facility. If some of the flow is coming from area south of intersection with Simonds Rd., redirect it down storm drains on Simonds Rd.

Item	Trib. & River Mile	Collect. Point	Category	Prop. Proj.	Existing Conditions and Problems	Anticipated Conditions and Problems	Recommendations
14	0057D RM .70-.80	4	Geology & Hydrology		Incision in channel below culvert outfall north of NE 157th St.; undercutting of banks downstream. Severe channel erosion.	Canyon is eroding back toward roads and houses. Continued erosion during periods of heavy runoff.	Control runoff with R/D facility upstream (see Project 5102). May be necessary to tight-line through sensitive reach.
15	0057D RM .90	4	Hydrology	5102	Site is a wetland (5199) located on the south side of NE 155th St. Fill has been placed on the west side of outlet channel, partially submerging it.	Increased erosion and potential for flooding downstream.	Construct R/D facility at this location by enhancing storage capacity of wetlands.
16	0057E RM .25-.30	4	Geology		Street runoff from 88th Ave. is eroding gully below outfall, contributing to landslides below. Bank erosion in lower reaches.	Street is intercepting flow that normally would have gone into Trib. 0057D. Problem will get worse if development continues north of Inglemoor High School.	Redirect flows into Trib. 0057D and 0057E; may need to tightline through sensitive reach.
17	0057E	4	Hydrology	5105	Site is a sediment-deposition zone on upstream side of a road culvert crossing. Sediment has been transported downstream through the drainage system. Inlet of pipe is crushed.	Continued sediment build up with potential for downstream erosion.	- Identify the source of sediment build up and stabilize it. - Enhance capacity of sediment-deposition zone and drainage system to prevent sediment transport downstream. - Increase maintenance in sediment-deposition zone.

Item	Trib. & River Mile	Collect. Point	Category	Prop. Proj.	Existing Conditions and Problems	Anticipated Conditions and Problems	Recommendations
18	0057F RM .20	4	Hydrology	5109	Site is south side of NE 169th St. Stream has experienced severe bank and channel erosion. There is a gravel deposition zone at road crossing.	Continued erosion and gravel build up.	- Require developments upstream to restrict flows to prevent bank and channel erosion downstream. - Monitor developments closely in the development-review process. - Stabilize eroding bank and enhance capacity of deposition zone. - At time of basin planning, identify sources causing erosion and develop plan to eliminate problems.
19	0057H RM .10	4	Hydrology		Slump (approx. 10' high) at head of ravine; also erosion in channel and on banks. Large debris (concrete slabs) in channel.	More extensive erosion caused by flows tributary to this stream.	Remove debris from ravine and stabilize using bioengineering techniques and/or rock riprap. An option would be to analyze the ability of Trib. 0057E, to the east, to handle flows draining to this tributary.
20	0057 RM .10	40	Habitat		Marymoor Park maintenance crews have ditched stream along park entrance. Banks are raw and exposed. Instream erosion is washing sediment into Sammamish River.	Continued erosion.	Parks maintenance office should create a grass-lined swale when stream dries up in the summer or install rock check dams and rock-line the ditch to stop erosion.
21	0066A RM .10	10	Hydrology		Access road at this location flooded in Jan. '86 storm. There is evidence further downstream of bank and instream erosion.	Potential for more erosion during periods of heavy runoff	Monitor condition of channel through the development review process.

Item	Trib. & River Mile	Collect. Point	Category	Prop. Proj.	Existing Conditions and Problems	Anticipated Conditions and Problems	Recommendations
22	0066 RM .20-.40	8	Habitat		Instream habitat heavily impacted by high, erosive flows and sediment. Very few pools remaining. Stream shares ravine bottom with road. Some trout habitat potential if existing flows and upstream problems can be solved.	Instream erosion and sedimentation.	- King County should coordinate with Bothell to solve drainage-related problems within shared drainage collection areas. Bothell and King County should have the same stream corridor protection policies. - Reduce existing high flows to non-erosive levels by a combination of onsite controls and regional R/D ponds.
23	0066 RM .25	9	Geology		Bank erosion along 96th Ave. NE.	Cuts into terraces and fill will continue below outfall of culvert. Development of rural upper (southern) valley will seriously aggravate this problem.	Control flows upstream with R/D in upper valley.
24	0066 RM .35-.45	10	Hydrology		Location is at confluence with Trib. 0066A. Concrete box culvert with wing-walled inlet crosses roadway. Right wing-wall damaged. Water appeared turbid on 11/14/86. Landslide and bank erosion at this location also.	Potential for increased erosion during periods of heavy runoff. Continued turbidity in water.	- Require developments upstream to restrict flow rates to prevent bank and instream erosion. - Identify source of turbidity and eliminate. - Repair damaged wing-wall.
25	0066 RM .45-.60	10	Geology		Stream flows at toe of large slump-earthflow complex; continuing erosion of toe (NW side) and opposite bank (SE side).	Large, slow landslide will continue to move; erosion will continue to deliver sediment to main stem.	Prevent development on side complex. If sediment becomes a problem, it may be trapped by installing a structure at 96th Ave. NE.

Item	Trib. & River Mile	Collect. Point	Category	Prop. Proj.	Existing Conditions and Problems	Anticipated Conditions and Problems	Recommendations
26	0067 RM .00	8	Hydrology		Stream banks were once riprapped but have become unstable.	High flows will cause bank erosion.	- Restrict upstream flows to minimize erosion. - At the time of basin planning, evaluate the possibility of bypassing some of the flows generated at Inglemoor H.S.
27	0067 RM .00-.40 0057G RM .40	8 6	Geology		Landsliding at edges of plateau (fill) around Inglemoor H.S. and County park. Gullying in headwater channels where runoff flows into canyons; bank erosion and deposition above 96th Ave. NE.	Much of the problem is due to surface runoff from school and park; runoff causing downcutting and undercutting of naturally unstable slopes. Further development east of the high school will exacerbate problems in the valley.	Provide for control of flows from park and high school grounds, e.g., onsite detention and slow metering into the canyons. Prevent further development near edges of the canyon.
28	0067 RM .40	8	Hydrology	5110	Right bank has experienced a slide and severe erosion from flows draining into a pipe system that discharges flows partially down the hillslope of the ravine. At the top of the hillslope there is a crack indicating a potential for a slump or slide.	Continued erosion with a potential for a slump in the hillside or a slide.	- Pipe flows discharging partially down the hillslope, all the way to the bottom of the ravine. - Investigate bypassing some of the flows tributary to this ravine to another ravine or conveyance system that is stable and can handle them in a safe, nonerosive manner.
29	0068 RM .25	9	Hydrology		Streambed instability. Channel is 4' lower at this location than at RM .27. Source of instability not identified.	None.	Monitor condition of channel through the development review process.

Item	Trib. & River Mile	Collect. Point	Category	Prop. Proj.	Existing Conditions and Problems	Anticipated Conditions and Problems	Recommendations
30	0069 RM .35	13	Geology		Sediment in channel at top of fan.	Runoff and sediment will continue from I-405, agricultural uses, and new construction. (Sandy materials are susceptible to surface erosion.)	- Restrict further development in the ravines. - Prevent sediment from construction sites from entering the stream system.
31	0069 RM .20	13	Habitat		Some potential trout habitat. Erosive upstream flows are rapidly filling existing pools with sediment.	Situation will continue.	- Reduce existing flows to nonerosive levels with R/D facilities. - Require further development to maintain downstream flow at non-erosive levels.
32	0069A RM .10-.20	7	Geology		Downcutting and bank erosion in terraces.	Beginnings of problems despite low levels of development in this valley.	Care must be taken in further development -- restrict construction in ravines.
33	0069A RM .50	7	Habitat		Erosion control has failed at new church construction site; filter fence with sediment flowing onto stream. Dairy facility has inadequate dairy waste disposal. Stream smells like manure and is full of algae.	Increased flows with associated downstream erosion, sedimentation, and water quality problems.	- Increase inspection and maintenance of construction erosion control. - Require dairy operators to have adequate waste management plan. USDA Soil Conservation Service (SCS) and King County Conservation District will assist.
34	0070 RM .30-1.00	14	Habitat		Stream draining most of the I-405 - SR 522 interchange. Most of stream system is ditched, with grass banks.	Low gradients could cause temperature and low dissolved oxygen problems in the summer.	Establishing a stream corridor to be included in development of the site would be a visual amenity and would increase habitat potential. Planting trees and shrubs along the stream is needed. Oil/water separation is needed before discharge into this stream.

Item	Trib. & River Mile	Collect. Point	Category	Prop. Proj.	Existing Conditions and Problems	Anticipated Conditions and Problems	Recommendations
35	0087A RM .00-.50	15	Geology		Deposition and bank erosion in ditch through trailer park and farm.	Ditch is probably too narrow, especially as continuing development in hills east of Woodinville will probably cause increases in runoff and sediment discharge.	Control runoff from developing area; be especially careful to prevent erosion on the hillsides. May be necessary to build a larger conveyance system on the valley floor
36	0087A RM 1.20	16	Hydrology		Bank erosion with heavy loads of instream sediment.	More extensive erosion with high runoff from upstream.	Analyze R/D facilities to determine if necessary to retrofit control structures for erosion prevention. Analysis should begin with plat of Woodway Country Estates.
37	0087A RM .35-.40	15	Hydrology	5101	Severe channel erosion south of trailer park.	Increased flows will cause more extensive erosion with increased potential for flooding.	Bypass flows adjacent to channel at this location. SWM Project Management and Design Section has completed the design for this bypass. (See design report for Woodinville central business district bypass.)
38	0087B RM .20-.40	16	Habitat		Nice stream corridor. Little impact in stream from encroaching development. Trout possibilities only. Pipes block anadrommous fish at many points downstream.	Increased erosion and loss of instream and stream corridor habitat from future development.	- Establish stream corridor guidelines to prohibit clearing within the corridor. - Restrict future development flows that empty into stream to non-erosive levels.
39	0087B RM .30-.60	16	Geology		Gullying of fills, erosion of ditches.	Steep slopes in sandy outwash being developed for housing; increased flows in ditches and below culvert outfalls.	Include energy dissipation devices in ditches and at outfalls; consider effects of street and home construction on erosion in sandy soils.

Item	Trib. & River Mile	Collect. Point	Category	Prop. Proj.	Existing Conditions and Problems	Anticipated Conditions and Problems	Recommendations
40	0088 RM .75	21	Hydrology		Trout farm located here. Farm was flooded in Jan. '86 storm, which caused damage to trout ponds.	None.	None.
41	0088 RM .80-1.00	21	Habitat		Very nice, clear-water stream. Trout farm located on this reach. Little fish-habitat potential upstream of trout ponds.	Future development could endanger water source for stream by increasing flows, erosion, sediment, and water quality problems.	- Closely monitor upstream development to safeguard this year-round flow of clear, clean water. - Require oil/water separation in any adjacent development.
42	0088 RM .80-1.20 0088B RM .00-.10	21	Geology		Discontinuous gullying in previously unchanneled upper valley; some bank and lower-slope erosion in park. Spring-sapping on north fork. Deposition caused damage to trout farm ponds in Jan. '86.	Sandy soils in canyons are susceptible to erosion. Increasing flows (especially Jan. '86 storm) have caused damage to channel and park facilities. Spring-sapping on Trib. 0088B is causing landsliding in that canyon.	Sensitive valley; monitor carefully the direction of runoff from developing areas. R/D facilities will probably be necessary. Restrict construction near edges of valleys.
43	0088 RM 1.90-1.40	21	Habitat		No fish-habitat value. Stream only flows in big storm events.	None.	R/D facilities upstream should be sized to restrict big storm flows to nonerosive rates.
44	0090 RM .30	22	Hydrology		Severe bank erosion at this location, probably from the Jan. '86 storm.	Potential for more severe erosion and flooding during high flows.	- Developments adjacent to this location should control flow rates to prevent erosion and flooding downstream. - BALD should require integrated drainage analyses to be provided with drainage plans to ensure that erosion and flooding are prevented.

Item	Trib. & River Mile	Collect. Point	Category	Prop. Proj.	Existing Conditions and Problems	Anticipated Conditions and Problems	Recommendations
45	0090 RM .30-1.30	22,23	Geology		Upper valley: downcutting in channel; gullying of canyon slopes due to farm runoff. Along NE 146th: intermittent bank erosion, lower slope failures. Deposition at old Hollywood School.	Increased runoff from development in upper valley is causing erosion in head-water tributaries. Gullying (S of Tolt pipeline on Trib. 0090) indicates susceptibility to surface erosion. In lower valley, stream is eroding into right bank and undercutting slopes. Sediment load fills channels and ditches in Sammamish River Valley.	- Redesign storm flows off the plateau, especially in the eastern section of the subcatchment. - Restrict development in canyons, especially north of NE 146th. Rebuild channel there to minimize bank and slope erosion and to provide sediment trap above old Hollywood School.
46	0090 RM .40-.70	22	Habitat		Stream channelized along NE 145th St. Private driveway is partial fish blockage. Trash and sediment are problems. Some good fish habitat remains.	Probable increased storm flows and erosion from future development. Further loss of habitat.	Provide upstream R/D to reduce existing flows and erosion. Fish enhancement is a possibility in this reach. Add instream structures and protective vegetative cover.
47	0090 RM .70	22	Geology		Uncontrolled sidecast on slope north of creek along NE 146th Place.	Soil from earthmoving operations has been dumped onto 60% slope above creek. Area undergoing surface erosion and rilling, burying bases of trees on slope.	Require operator to control sidecast with combination of removal, revegetation, contouring, and sediment retention. Goal is to prevent sediment from reaching the stream.
48	0090 RM .70	21	Hydrology		Apparent illegal filling and grading at the top of the ravine. No erosion-control measures.	Potential for severe erosion of exposed soils into the ravine.	Problem is being investigated by the SWM Drainage Investigation Section.

Item	Trib. & River Mile	Collect. Point	Category	Prop. Proj.	Existing Conditions and Problems	Anticipated Conditions and Problems	Recommendations
49	0090A RM .50	24	Geology		Beginnings of gullying below drain outfalls in Hollywood Hills development.	Sandy materials on slopes are susceptible to surface erosion and are contributing to flooding, sedimentation downhill.	Avoid directing too much flow into sensitive swales; R/D facilities should be designed to minimize peak outflows. May need to pipe flows to lower valleys.
50	0092A RM .70	18	Hydrology		Channel and bank erosion occurring. Domestic garbage thrown into ravine.	More extensive erosion with heavy runoff. Poor water quality from garbage.	- Analyze and retrofit R/D facilities upstream to prevent erosive flows. - Enhance channel by removing garbage from ravine and stabilizing with rock riprap and/or bioengineering techniques. Costs for garbage removal and stabilization should be paid for by the individuals causing the problems.
51	0092B RM .70	15	Hydrology		Channel is eroding and downcutting. Channel is very sensitive to flows increased above natural levels.	More severe erosion and channel downcutting with any increases in flow.	- Monitor condition of channel very closely through the development review process. - Analyze and retrofit R/D facilities upstream to prevent erosive flows in the channel.
52	0092C RM .70	14	Hydrology		See comment for 0092B RM .70.	See comment for 0092B, RM .70.	See comment for 0092B, RM .70.
53	0095B RM .00	30	Habitat		Sammamish River straightening in the 1950s created anadromous fish barrier at the culvert outflow to the river.	None.	Conduct anadromous salmonid habitat analysis in the upstream area to ascertain if cost effective to remove fish blockage.

Item	Trib. & River Mile	Collect. Point	Category	Prop. Proj.	Existing Conditions and Problems	Anticipated Conditions and Problems	Recommendations
54	0095B RM .01-.80	30	Habitat		Livestock have access to the stream. Fecal contamination and bank erosion are problems. Erosion upstream is filling pools with sediment.	Continued problems.	- Ask property owner to fence the stream at least 15' back from each streambank. Provide livestock water access at discrete points. - Provide R/D upstream to reduce flow rates and volumes to nonerosive levels.
55	0095B RM .60	29	Hydrology		Road embankment erosion with heavy silt deposition at outlet of pipe under road.	Potential for more erosion with heavy runoff from upstream areas.	Monitor developments upstream closely to ensure that erosive flows are controlled.
56	0095B RM .80-1.20	28	Habitat		Formerly very good trout stream. Jan. '86 storm moved a lot of sediment down the stream.	Probably increased flows along with erosion and sedimentation from future development.	- Construct R/D upstream to reduce existing high flows and rates. - Restrict new development runoff volumes and rates to nonerosive levels.
57	0095B RM .90-1.10	28	Geology		Bank and ditch erosion deposition in valley bottom.	Sandy materials easily eroded by increased flows in developing areas. Deposition affects ditches, yards, landscaping.	- Provide better R/D facilities, especially in north (Trib. 0095B). - Rebuild ditch and channel systems along 164th Ave. NE and 162nd Pl. to prevent ditch erosion.
58	0095B RM 1.00	29	Hydrology		Severe erosion and flooding of residential property downstream.	Increased flows from tributary area upstream will cause more extensive erosion.	SWM Drainage Investigation Section has performed a study of this problem. A solution has been recommended.
59	0095D RM 1.00	29	Hydrology		Flows flooded channel in Jan. '86 storm, depositing heavy loads of sediment downstream.	Heavy runoff in channel could cause erosion in channel.	Monitor flows from upstream developments closely to ensure that erosive flows are controlled.

Item	Trib. & River Mile	Collect. Point	Category	Prop. Proj.	Existing Conditions and Problems	Anticipated Conditions and Problems	Recommendations
60	0095D RM .30-.60	27	Habitat		Heavy sedimentation has filled all pools. Most large organic debris is unstable or flushed out of the stream ravine from high stream flows. Some trout habitat exists.	More sedimentation.	- Provide R/D upstream to reduce existing flows. - Require future development to restrict runoff to nonerosive levels. - When the system stabilizes, implement stream-enhancement measures (such as pools, instream structures, etc.).
61	0095D RM .40-.60	27	Geology		Bank erosion in ravine reach; heavy sedimentation in lower reach, and in ponds at north of canyon.	Development in large subcatchment is causing increased flows and erosion in canyon; development is beginning to occur on the plateau edges.	- Restrict construction along ravine and direct runoff (from development in that area) around the ravine reach. - Improve R/D facilities in upper basin (preferably by utilizing wetland at RM .90).
62	0095E RM .30-.80	29	Habitat		Nice trout stream. Few problems. Pools, riffles, and large organic debris all in good proportions.	Upstream development may increase flow rates and volumes, which could degrade instream habitat.	- Provide upstream R/D. - Restrict new development runoff volumes and rates to nonerosive levels.
63	0095E RM .80	29	Hydrology		Manhole located here with no control structure to regulate range of flows to prevent erosion. Site within city of Redmond.	Potential for extensive downstream erosion and flooding.	Coordinate with Redmond to install control structure to regulate flows and prevent erosion and flooding.

Item	Trib. & River Mile	Collect. Point	Category	Prop. Proj.	Existing Conditions and Problems	Anticipated Conditions and Problems	Recommendations
64	0095E RM 1.00	39	Geology		Erosion in ditch.	Swale (and former channel?) have been filled for home construction. Flow is forced to make sharp turn along road.	Will probably have to reinforce ditch banks; may be necessary to pipe the low around the bank below.
65	0095E RM 1.00	29	Hydrology		R/D pond located at 166th Ave. NE and NE 111th. No control structure installed to regulate flows. Severe erosion in channel at confluence with Trib. 0095E. Flows drain into tributary at approximately RM 1.00. Site is within city of Redmond.	Potential for extensive downstream erosion and flooding.	Coordinate with Redmond to install control structure to regulate flows from pond.
66	0095F RM .50	29	Hydrology		Sedimentation pond located here. The upstream channel is experiencing severe erosion. A new development with an R/D facility is going in upstream at RM .40. An existing R/D facility is located at RM .41 across NE 124th Way.	More severe erosion with increased flows from upstream development.	- SWM Drainage Investigation Section is investigating this problem. - Install control structure at upstream R/D facilities to regulate flows for erosion prevention. - Stabilize outlet from sediment pond.

Item	Trib. & River Mile	Collect. Point	Category	Prop. Proj.	Existing Conditions and Problems	Anticipated Conditions and Problems	Recommendations
67	0096A RM .30-.40	24	Habitat		Dairy barn and livestock are source of sediment, manure, and nutrients in the stream. Sod farm north of NE 124th is also potential source of nutrients. No existing stream cover.	Continued water quality problems.	- Property owner should be asked to fence the stream through pasture at least 15' away from stream edge. Livestock access could be provided at discrete points for drinking water. - Improve dairy waste management practices to exclude their introduction into the stream system. SCS and King County Conservation District could provide advice and possibly financial help.
68	0096B 0096C	24	Habitat		Two small drainages with no current problems. Stream corridors are undeveloped and in good condition above Willows Rd.	Future development could negatively impact these reaches.	All future development should retain the existing natural stream corridor. Surface water should be regulated at nonerosive levels. Little fish-habitat potential.
69	0096D RM .15-.85	24,25	Geology		Bank and slope erosion in sandy materials, upper valley; bank erosion, channel downcutting, and sedimentation in lower valley. Deposition in ditches and ponds.	Increased flows from developing areas on plateau are causing increased erosion in valley. Sediment is deposited on the valley bottom, Ste. Michelle Winery grounds.	- Control runoff from developing areas along 132nd Ave. NE. - Provide R/D, with sediment trap, above railroad tracks. May need to pipe runoff along NE 143rd Pl. to bottom of hill.
70	0096D RM .50	25	Habitat		Channel heavily sedimented.	More sediment.	Upstream R/D is definitely needed. Little fish-habitat potential.

Item	Trib. & River Mile	Collect. Point	Category	Prop. Proj.	Existing Conditions and Problems	Anticipated Conditions and Problems	Recommendations
71	0097D RM .75	25	Hydrology	5108	Severe erosion and slides. The causes are a pipe concentrating roadway runoff over the hillslope and increased urban runoff from upstream.	More severe erosion and sliding with increased runoff.	- Tightline flows from road culvert to the bottom of the ravine. - Increase R/D in tributary area upstream (see Project 5107).
72	0096D RM .96	25	Hydrology	5107	Site is within ravine with a low, flat area that causes flows to pond. There is a private access road located here with an 18" culvert under it.	Increased erosion and landslides downstream.	Construct R/D facility at this location.
73	0099C RM .50	31	Geology		Erosion, gullying of fill on steep slope.	Sandy, unvegetated fill, subject to erosion.	Have owner revegetate, ensure that sediment cannot reach streams.
74	0099 RM .50	31	Hydrology		24"-diameter CMP located under powerline right-of-way discharges onto one of its old cribbing supports. Moderate erosion in downstream channel. Culvert suspended approx. 5' above the support.	Increase in flows will cause more severe erosion.	Monitor condition of channel closely through the development process. Any channel stabilization should be performed through the permit process.
75	0101 RM .40	34	Habitat		Little remaining habitat for fish. High flows have eroded the channel and filled pools with sediment.	Conditions will continue.	R/D is needed above SR 202.

Item	Trib. & River Mile	Collect. Point	Category	Prop. Proj.	Existing Conditions and Problems	Anticipated Conditions and Problems	Recommendations
76	0101 RM .45	34	Hydrology		Two concrete pipes (36" and 21") discharging flows into stream and causing erosion. Inlet of 36" concrete pipe not located. Flows appear to be coming from an upstream development. Site is within city of Redmond.	More severe erosion with increased upstream flows.	Inspect and analyze R/D facilities upstream to determine if they need to be retrofitted for greater control of flows and erosion prevention.
77	0101 RM .10-.40	34,35	Geology		Bank and lower slope erosion; deposition in lower channel and fan on valley floor.	Heavy residential development in small subcatchment is affecting lower canyon area. High storm flows are causing erosion.	Improve control of storm flows and sediment with R/D facility above SR 202.
78	0102 RM .30	35	Habitat		Stream exits pipe under Packaging Resources Warehouse and sheet-flows northward into horse pasture. No connection to Sammamish River observed.	Unknown.	Future development should establish a permanent stream course and corridor. Provide pools and shade protection. Make into an amenity for the industrial park employees. Fish enhancement should be incorporated into the design.
79	0102 RM .50	36	Habitat		Ditched stream through industrial park. Stream corridor is gone as well as protective pools and trees.	Little habitat value. Flooding from upstream erosion and sediment filling the stream channel.	Provide R/D upstream and plant trees along stream through the industrial park. Trout might survive in the stream.
80	0103 RM .75	36	Habitat		Nice stream with no impact from erosion. Trout may use system but none were observed.	Erosion and sedimentation from future development.	Require adequate R/D for all new development adjacent to this stream to keep stream flows at a non-erosive level. The Jan. '86 storm did not affect this stream.

Item	Trib. & River Mile	Collect. Point	Category	Prop. Proj.	Existing Conditions and Problems	Anticipated Conditions and Problems	Recommendations
81	0104 RM .00-.80	37,38	Habitat		Sand visibly moving down the streambed has filled all pools; covered all spawning gravel, and will cause flooding in vicinity of NE 87th St. Resident reported two salmon trying to spawn in stream in September.	Further deterioration of remaining habitat. Sedimentation will be major problem.	Reduce flow volumes and rates upstream. Habitat enhancement would be fruitless until upstream erosion can be halted. Stream corridors need to be protected. Provide city of Redmond with copy of proposed King County stream corridor guidelines and encourage city to adopt similar standards.
82	0104 RM .70-1.50 0104B RM .50	37	Geology		Incision into till at upper end; bank and slope erosion and landsliding in ravines. Deposition above Redmond Dr. and in lower valley.	Development on plateau south of Old Redmond Rd. has greatly increased storm flows in the canyon reach, accelerating erosion and landsliding. Problem is most acute in Trib. 0104, but 0104B is also sensitive. Deposition on valley floor is affecting fish habitat.	Need much better control of runoff from areas south of Old Redmond Rd. and west of 148th Ave. NE. R/D facility in vicinity of Old Redmond Rd., perhaps also above Redmond Dr. It may be necessary to route flow around the ravine reach along 148th Ave. and/or 151st Ave. Control flows above Trib. 0104B to prevent problems before they occur.
83	0104 RM 1.50	37	Hydrology		Severe erosion and landslides downstream (north of Old Redmond Rd.) of this location. Potential danger to homes along the top of the ravine. Site inside city of Redmond.	More severe erosion and slides with increased development upstream and with high flows.	- Analyze R/D facilities upstream of this location to determine flow rates that will prevent erosion, slides, and flooding. - Develop an interlocal agreement between King County and the city of Redmond to solve this problem and other mutual drainage-related problems in the basin.

Item	Trib. & River Mile	Collect. Point	Category	Prop. Proj.	Existing Conditions and Problems	Anticipated Conditions and Problems	Recommendations
93	0141 RM .70-.80	43	Geology		Downcutting, bank erosion, some landsliding in incipient channels.	Erosion of edge of plateau is being accelerated by runoff below 159th NE.	Control flows from apartments along 156th Ave. to reduce peak volumes, or distribute the flow.
94	0141 RM .71	43	Hydrology		Small stream that originates at an R/D facility that is located at 159th Ave. NE and NE 47th Ct. is experiencing severe erosion and landsliding. This small stream intersects with Trib. 0141 at approximately RM .71. Site is within city of Redmond.	More extensive erosion and slides from future runoff.	- Inspect R/D facility at 159th Ave. NE and NE 47th Ct. to make sure it is functioning properly. Increase inspections on this facility to ensure that it continues to function properly. - Analyze the outlet control to determine if it needs to be retrofitted to prevent erosion downstream.
95	0142 RM .60	44	Habitat		New homes built too close to stream. Dirt bulldozed into stream, covering trees 4' to 5' up their trunks. Lots of construction and residential garbage present.	Probable erosion of dirt bulldozed into stream course and over bank. Downstream sedimentation and possible flooding.	Redmond should analyze and correct surface water-related problems through better enforcement of existing ordinances, establishment of new ordinances, and/or capital projects.

Appendix A

Appendix A

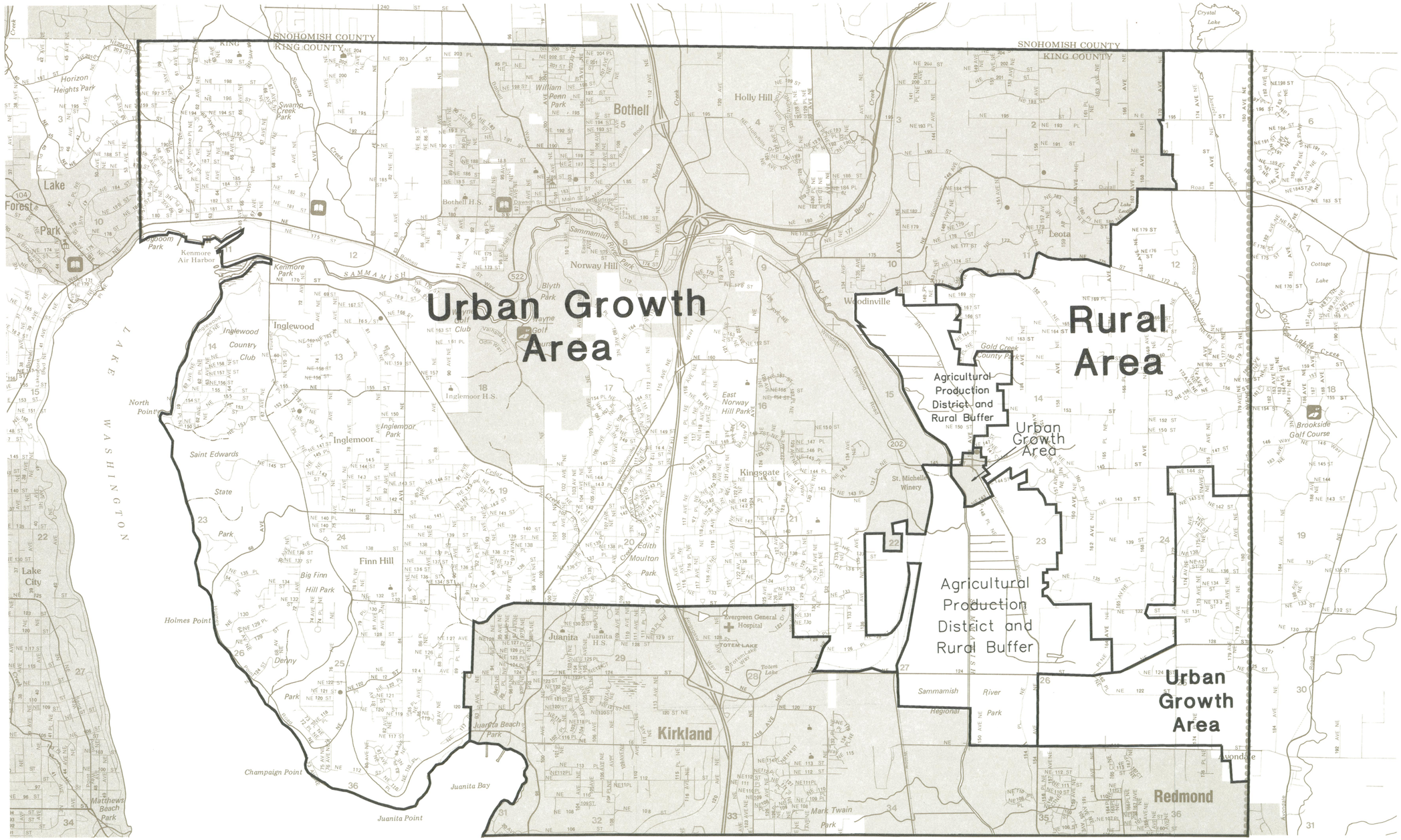
King County Code Title 21, is in the process of being revised. The King County Council will be reviewing the Executive Proposed Title 21 Revision Project in 1993. The following is a general conversion table between the current code and the Draft Revised Title 21 code if approved. These conversions are subject to modifications based on the adoption of the Draft Revised Title 21.

Current Designation	Recommended under the Draft Revised Zoning Code
RS 5,000	R-8
RS 7,200	R-6
RS 15,000	R-4
GR-5	UR
RD-3,600	R-12
RM-2,400	R-18
RM-1,800	R-24
RM-900	BC
SE	R-1
AR-2.5	R-2.5
AR-5	
A-10	A-10
BN	BN
BC	BC or BR
CG	BC, BR, or I
ML	I
MP	I
MH	I

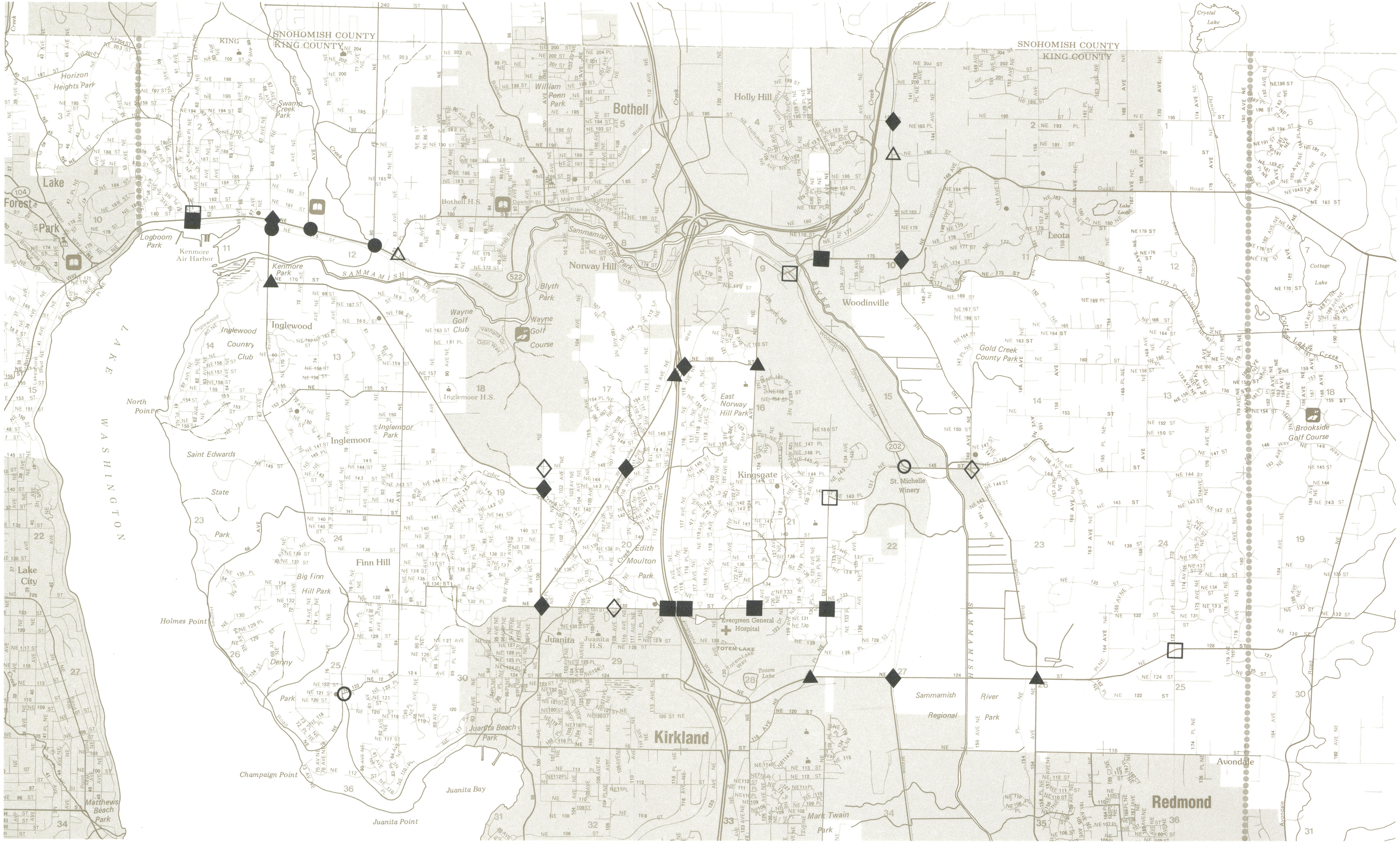
Northshore Urban Growth Area

Source: King County Department of Parks, Planning and Resources

Northshore Community Plan Update 1993



1990 PM Peak Hour Level of Service



Signalized Intersections:

- ● Level of Service A-B-C
- ■ Level of Service D
- ▲ Level of Service E
- ◆ Level of Service F

Unsignalized Intersections:

- ○ Level of Service A-B-C
- □ Level of Service D
- △ Level of Service E
- ◇ Level of Service F

Source: King County Department of Public Works

Northshore Community Plan Update 1993

Northshore Community Planning Area

King County Planning and Community Development Division
1993

N

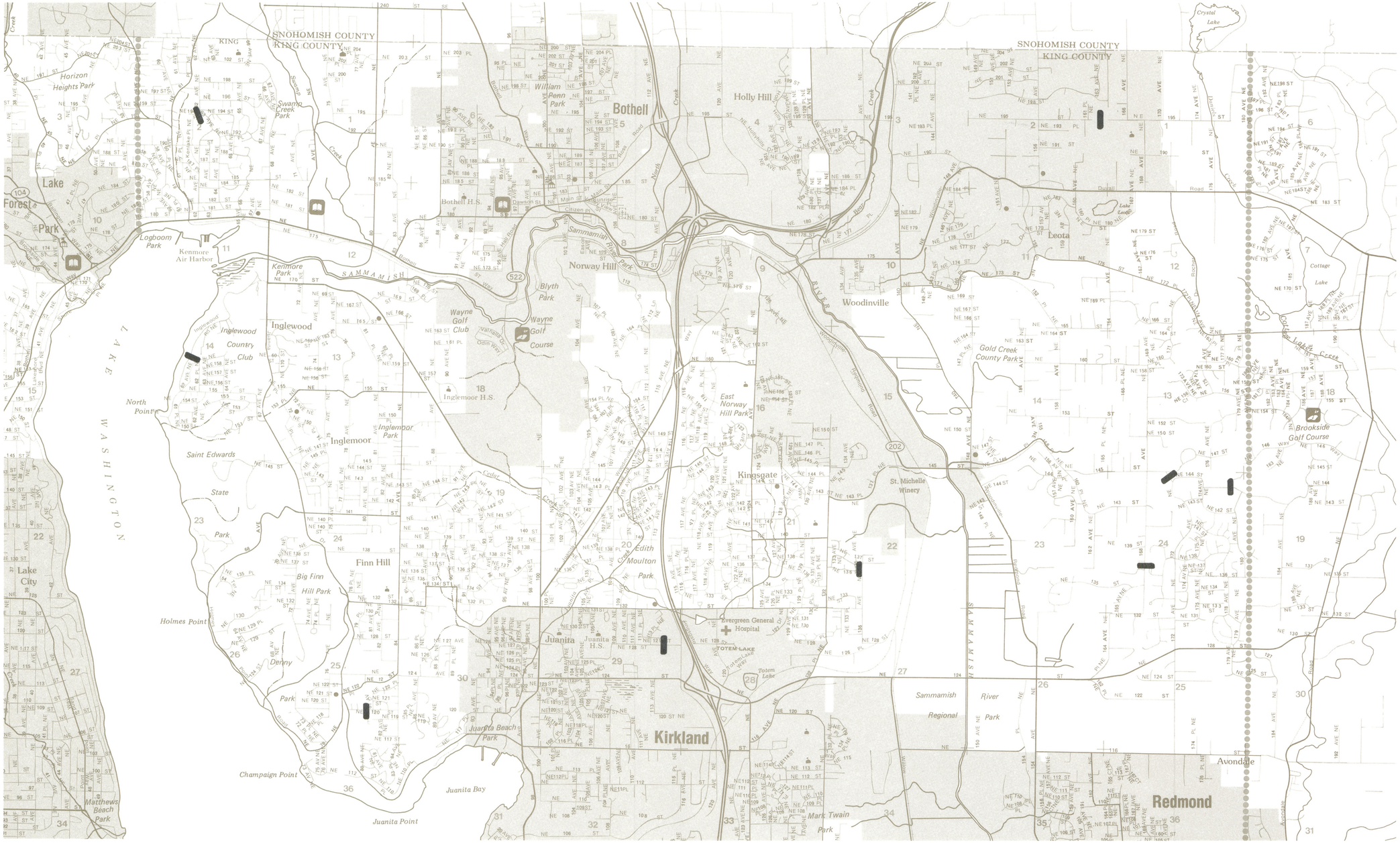
1/2 0 1/2 1 Mile

Existing Street Barricades Across Public Right-of-Way

Barricade Location

Source: King County Department of Public Works

Northshore Community Plan Update 1993



Northshore Community Planning Area

King County Planning and
Community Development Division
1993

N

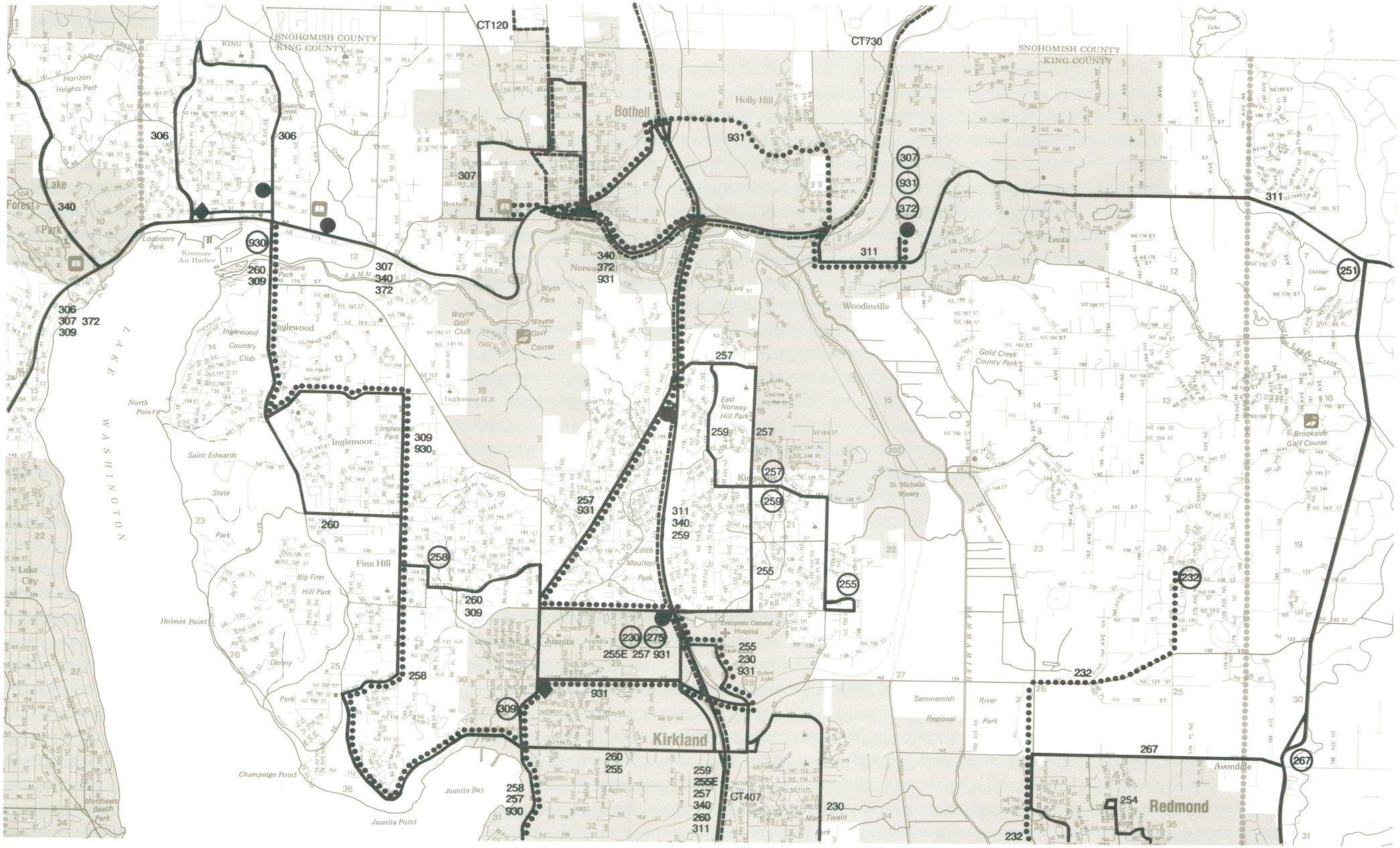
1/2 0 1/2 1 Mile

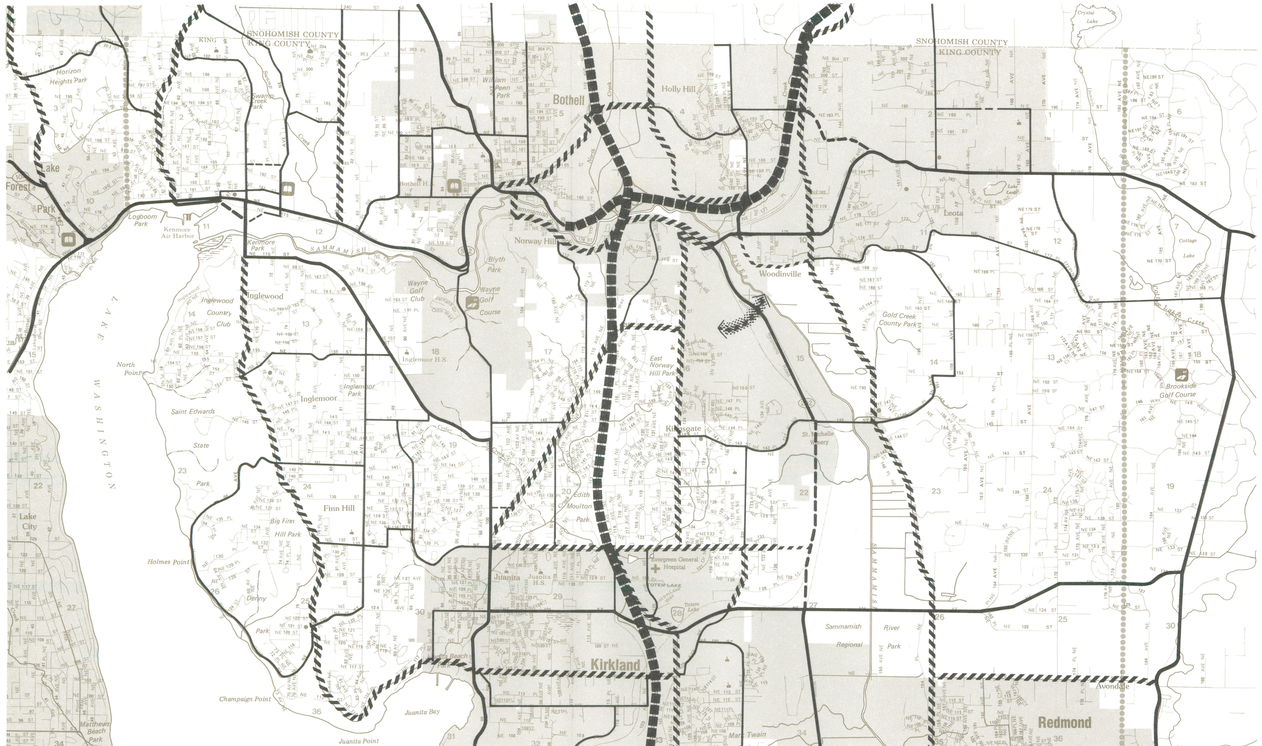
Transit Facilities and Service

- Metro Coach Service
- Community Transit Coach Service
- Metro Van Service
- 311 Route Number
- (275) Route Terminus
- Park and Ride Lots
- Park and Pool Lots

Source: METRO and Community Transit

Northshore Community Plan Update 1993





Arterial Functional Classification

- Freeways
- Principal Arterials
- Minor Arterials
- Collector Arterials

New Roadways:

- Principal Arterials
- Minor Arterials
- Collector Arterials
- Study

Source: King County Department of Public Works

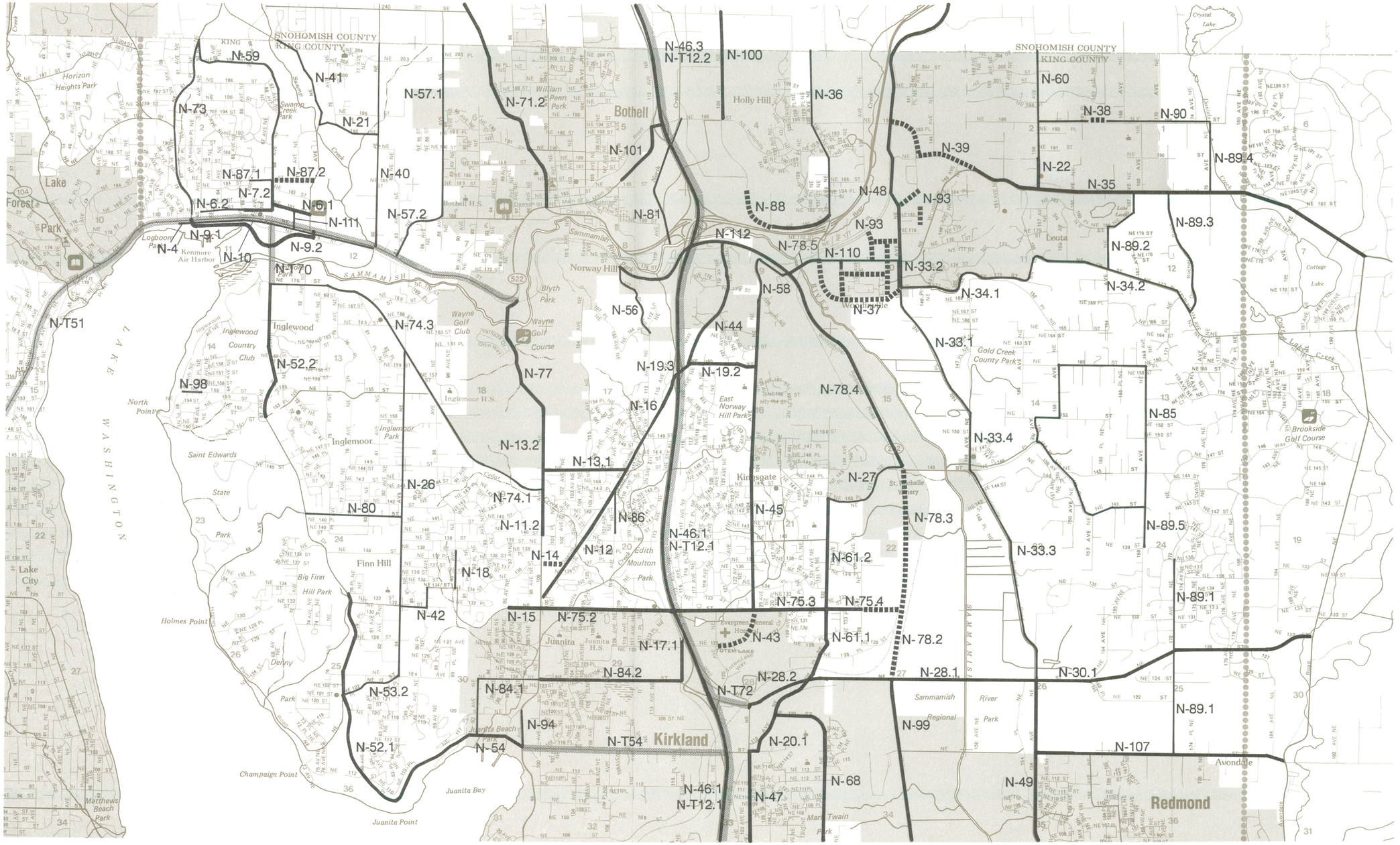
Northshore Community Plan Update 1993

Northshore Community Planning Area

King County Planning and
Community Development Division
1993

N

½ 0 ½ 1 Mile



Programmed and Planned Transportation Improvements

Roadway Projects

- New Construction
- Major Widening
- Minor Widening/Miscellaneous
- Transit/High Occupancy Vehicle
- N-34 Project Number

Source: King County Department of Public Works and King County Department of Parks, Planning and Resources

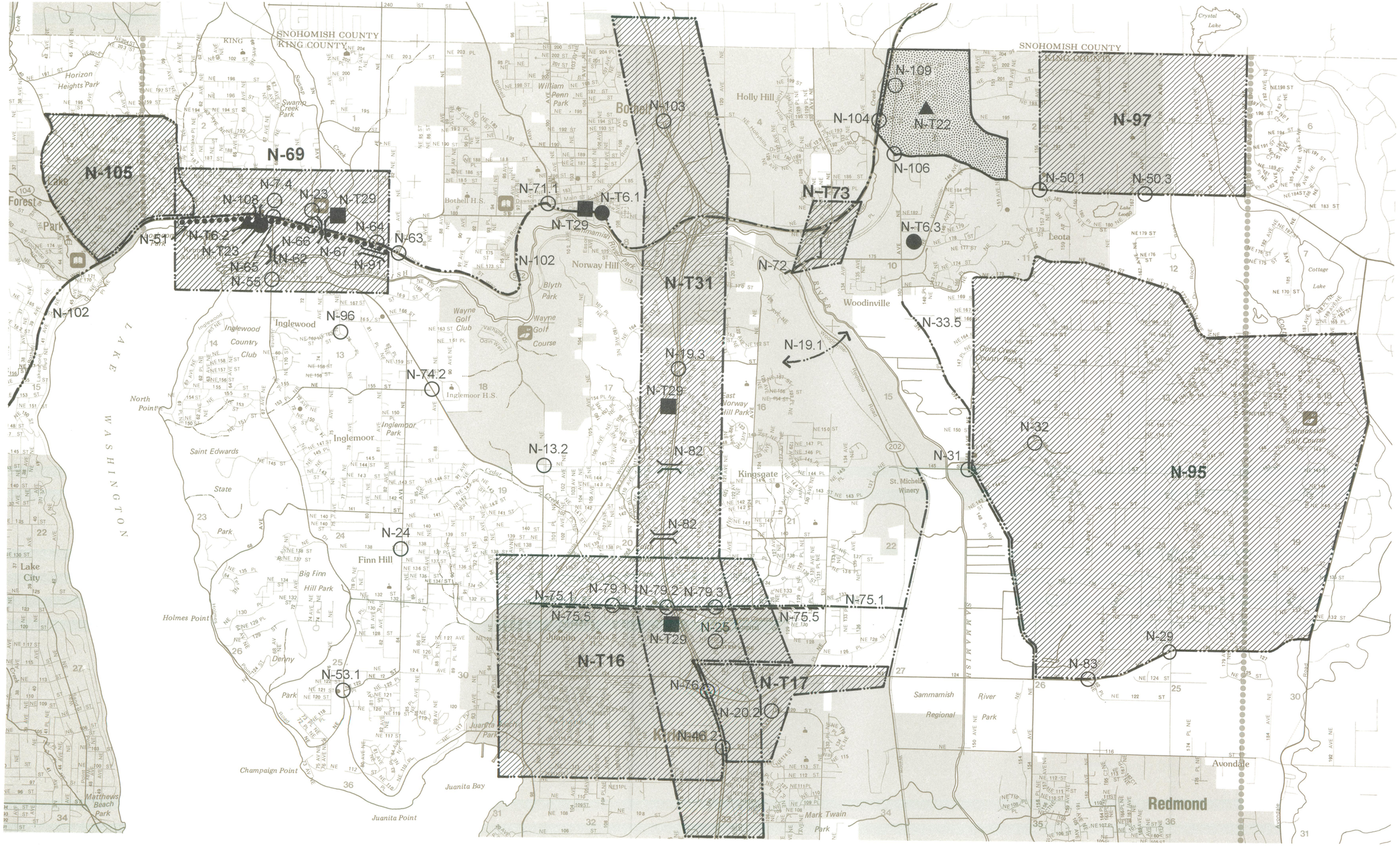
Northshore Community Plan Update 1993

Northshore Community Planning Area

King County Planning and Community Development Division
1993

N

½ 0 ½ 1 Mile



Programmed and Planned Transportation Improvements

Intersection/Operational and Other Projects

- Intersection/Operational
- Transit Hub
- New Park and Ride Lot
- New Park and Ride Lot (general vicinity)
- Expanded Park and Ride Lot
- Bridge
- Study Area
- Study
- Signal Coordination
- Access Control
- N-73 Project Number

Source: King County Department of Public Works and King County Department of Parks, Planning and Resources

Northshore Community Plan Update 1993

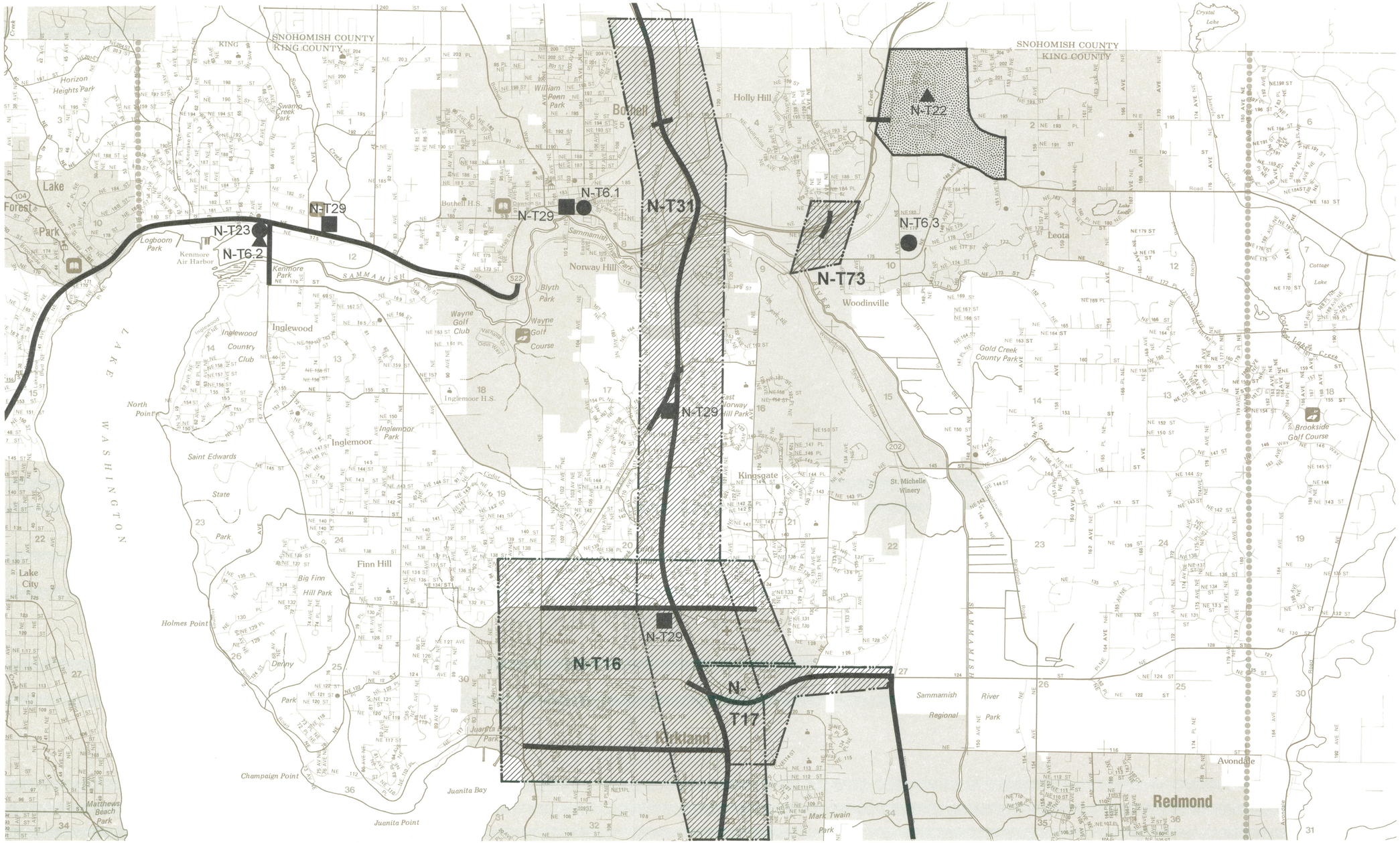
Northshore Community Planning Area

King County Planning and Community Development Division
1993

N

½ 0 ½ 1 Mile

Recommended Transit/High Occupancy Vehicle Facilities



Proposed Transit/High Occupancy Vehicle Lanes or Treatment

Proposed Transit Hub

Proposed Park and Ride Lots

Proposed Park and Ride Lots (general vicinity)

Expanded Park and Ride Lots

Transit/High Occupancy Vehicle Study

Source: King County Department of Public Works

Northshore Community Plan Update 1993

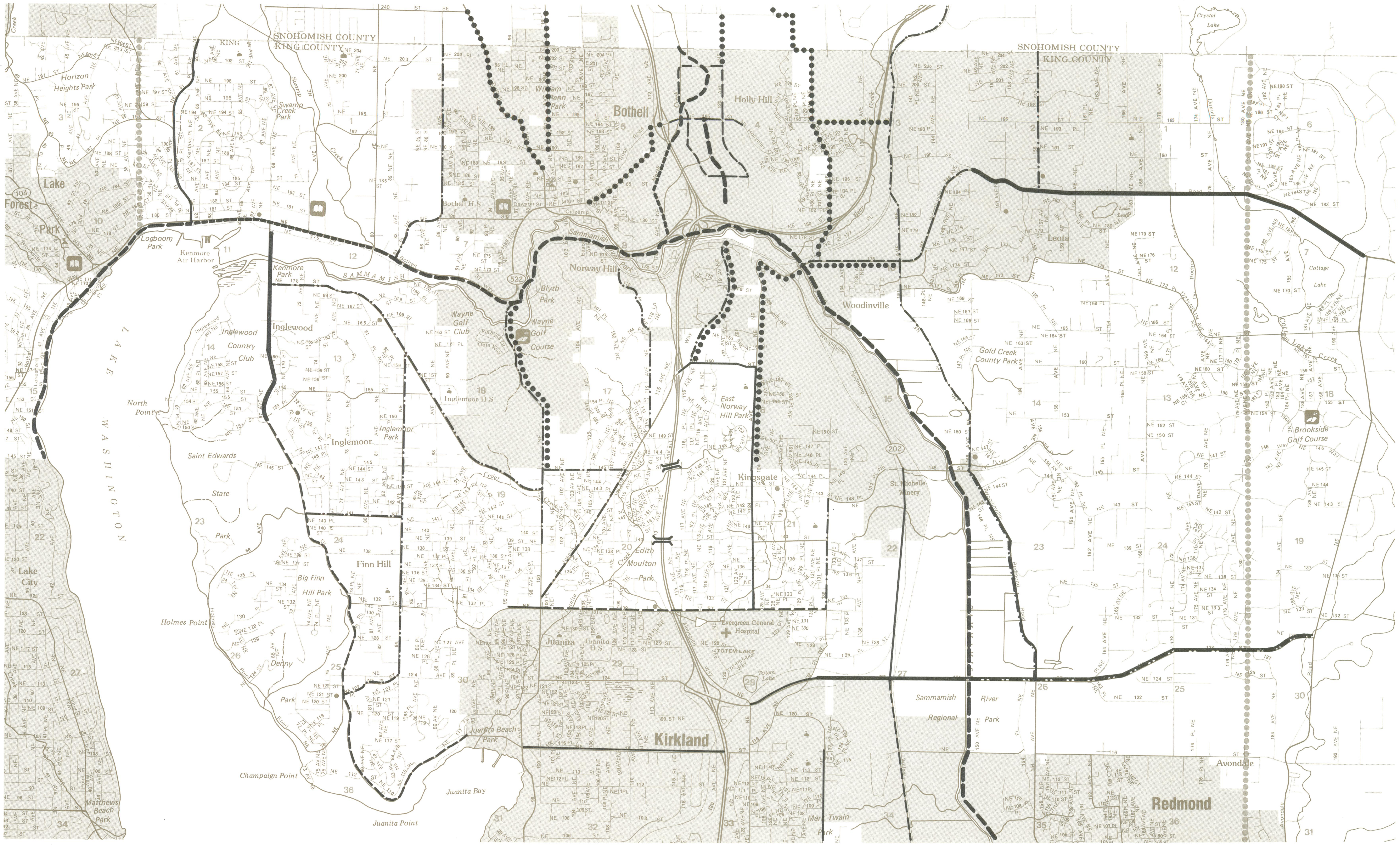
Northshore Community Planning Area

King County Planning and Community Development Division
1993

N

½ 0 ½ 1 Mile

Recommended Bicycle Facilities



Existing:

- Class II Bike Lanes (Striped and Signed)
- Multi-use Trail

Identified in King County Transportation Needs Report:

- Class II Bike Lanes (Striped and Signed)
- Shoulder Paving/Lane Widening

Proposed Bike Facilities:

- Class II Bike Lanes (Striped and Signed)
- Shoulder Paving/Lane Widening
- Multi-use Trail
- Multi-use Overcrossing

Bothell Planned:

- Class II

Source: King County Department of Public Works, RoadShare Program; Bothell Transportation Plan

Northshore Community Plan Update 1993

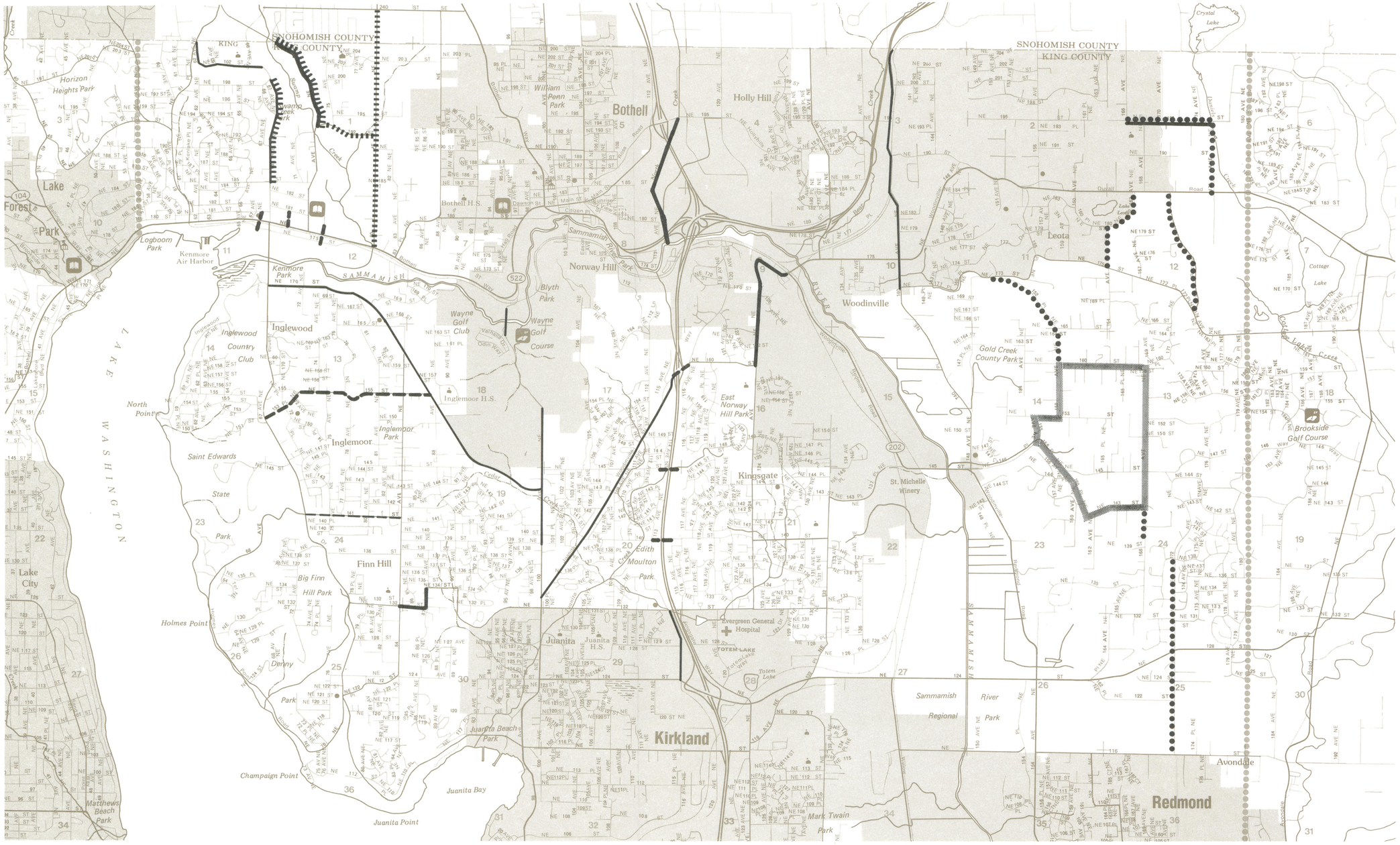
Northshore Community Planning Area

King County Planning and Community Development Division
1993

N

1/2 0 1/2 1 Mile

Recommended Pedestrian Facilities



Walkway - Identified in the King County Transportation Needs Report

Walkway - Proposed

Sidewalk - Identified in the King County Transportation Needs Report

Sidewalk - Proposed

Neighborhood Pathway - Priority I

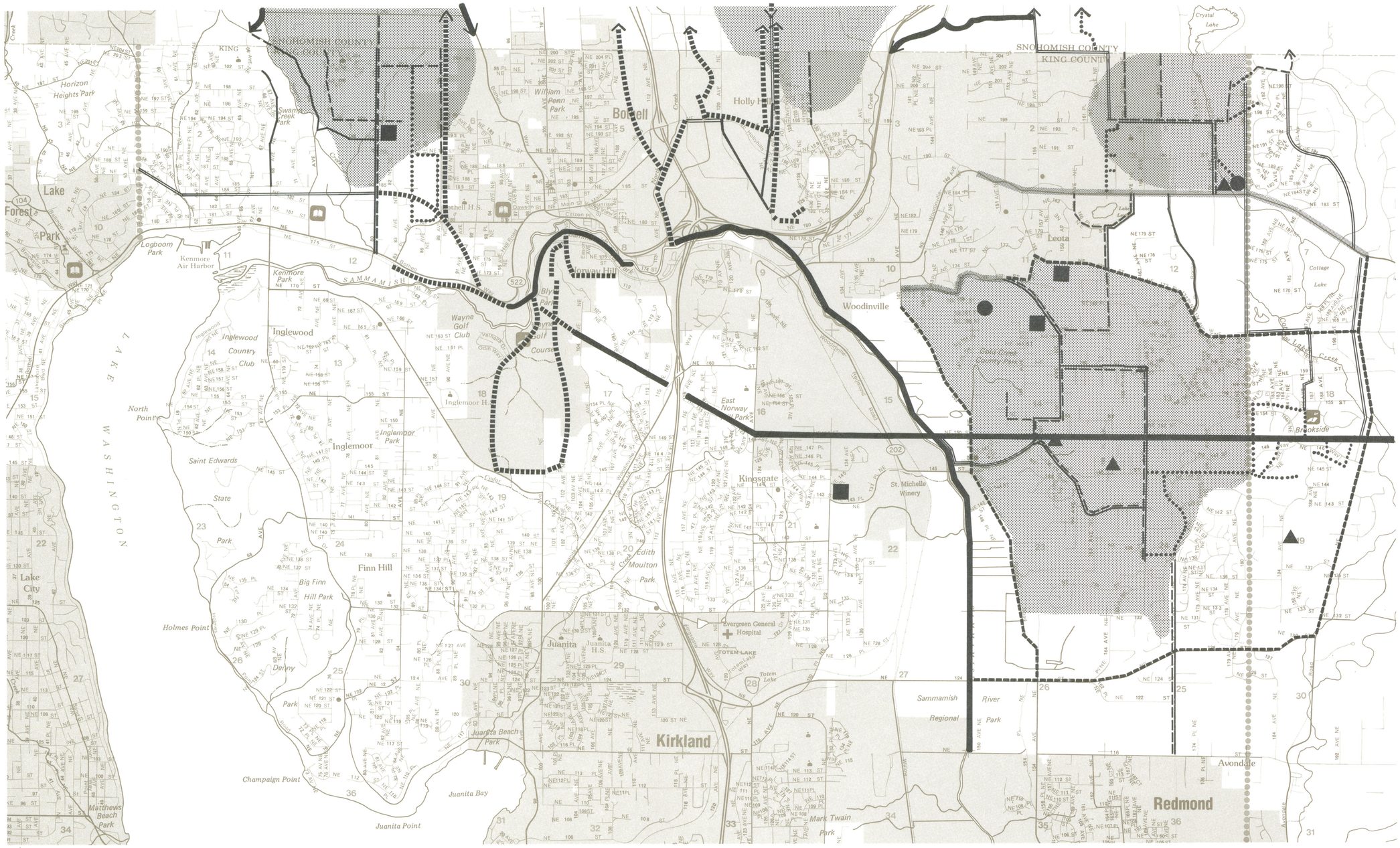
Neighborhood Pathway - Priority II

Neighborhood Pathway - Priority III

Source: King County Department of Public Works, RoadShare Program

Northshore Community Plan Update 1993

Recommended Equestrian Facilities



Equestrian Road Facilities Identified in the King County Transportation Needs Report

Public Multi-use Trails Used by Equestrians

Road Shoulder Used by Equestrians

Private Trails Used by Equestrians

Proposed Road Facilities

Proposed Multi-use Neighborhood Pathways

Community Desired Links

Bothell Proposed Equestrian Trails

Equestrian Areas

Community Barns:
10-20 Horses
30-50 Horses
70-100 Horses

Source: King County Department of Public Works Roadshare Program; King County Executive Horse Council; Bothell Transportation Plan

Northshore Community Plan Update 1993

Northshore Community Planning Area

King County Planning and Community Development Division
1993

N

½ 0 ½ 1 Mile

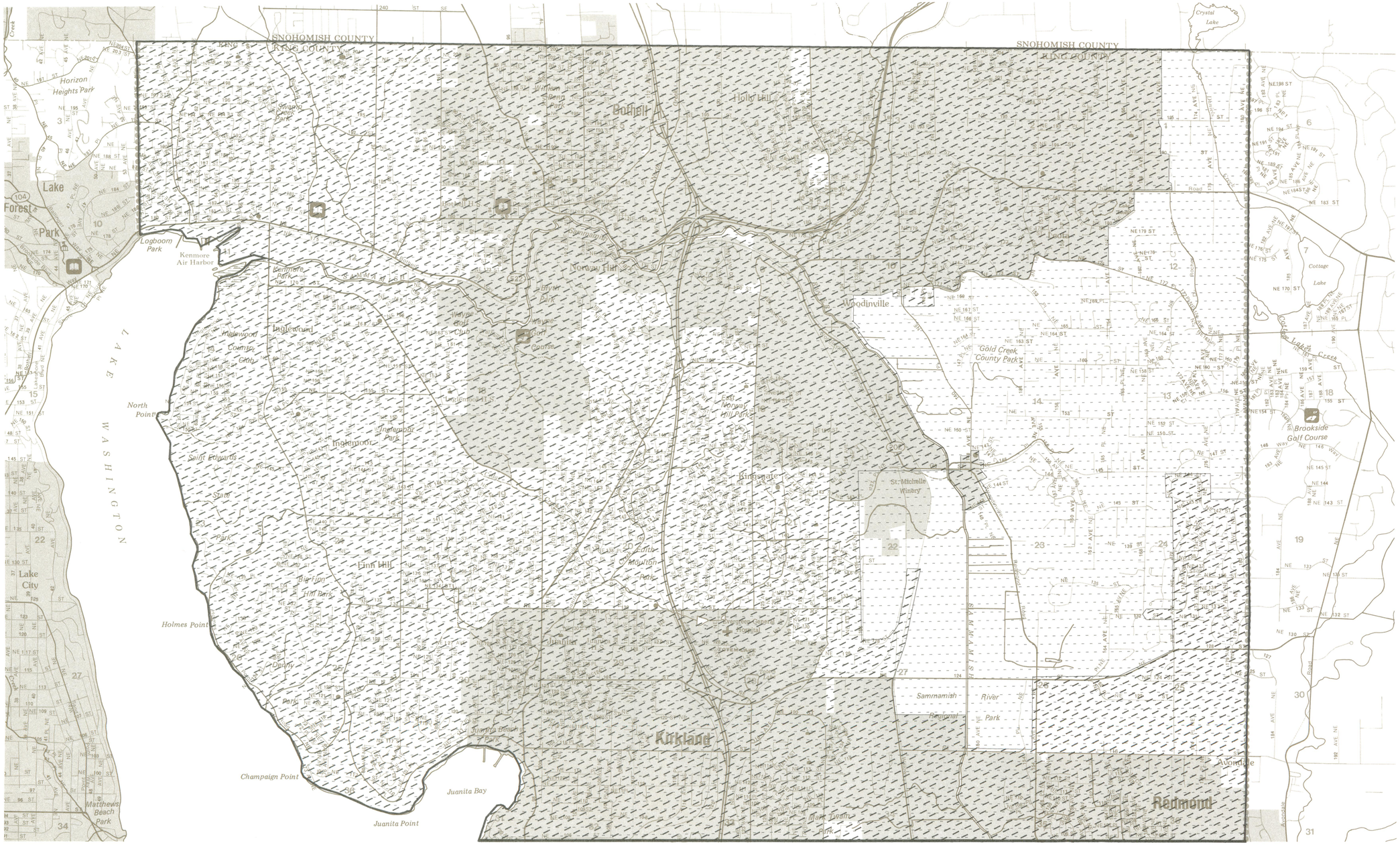
Water Service Area and Sewer Local Service Area

Water Service

Sewer Local Service Area

Source: King County Community Planning

Northshore Community Plan Update 1993

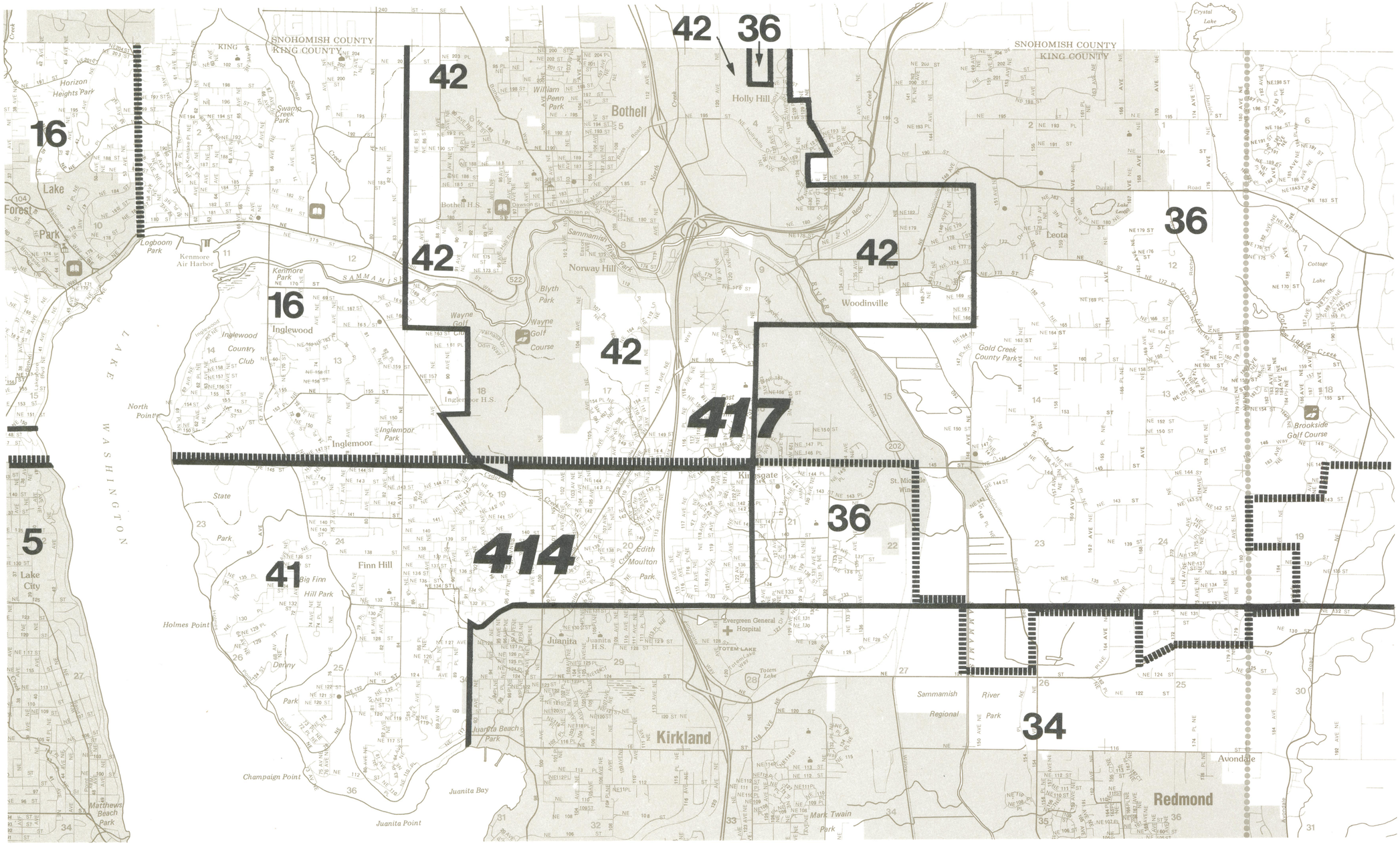


Northshore Community Planning Area

King County Planning and
Community Development Division
1993

N

½ 0 ½ 1 Mile



Fire and School District Service Areas

Fire District Boundaries

16 Fire District Numbers

School District Boundaries

4 School District Numbers

Source: Geocode Atlas of King County, March 1988

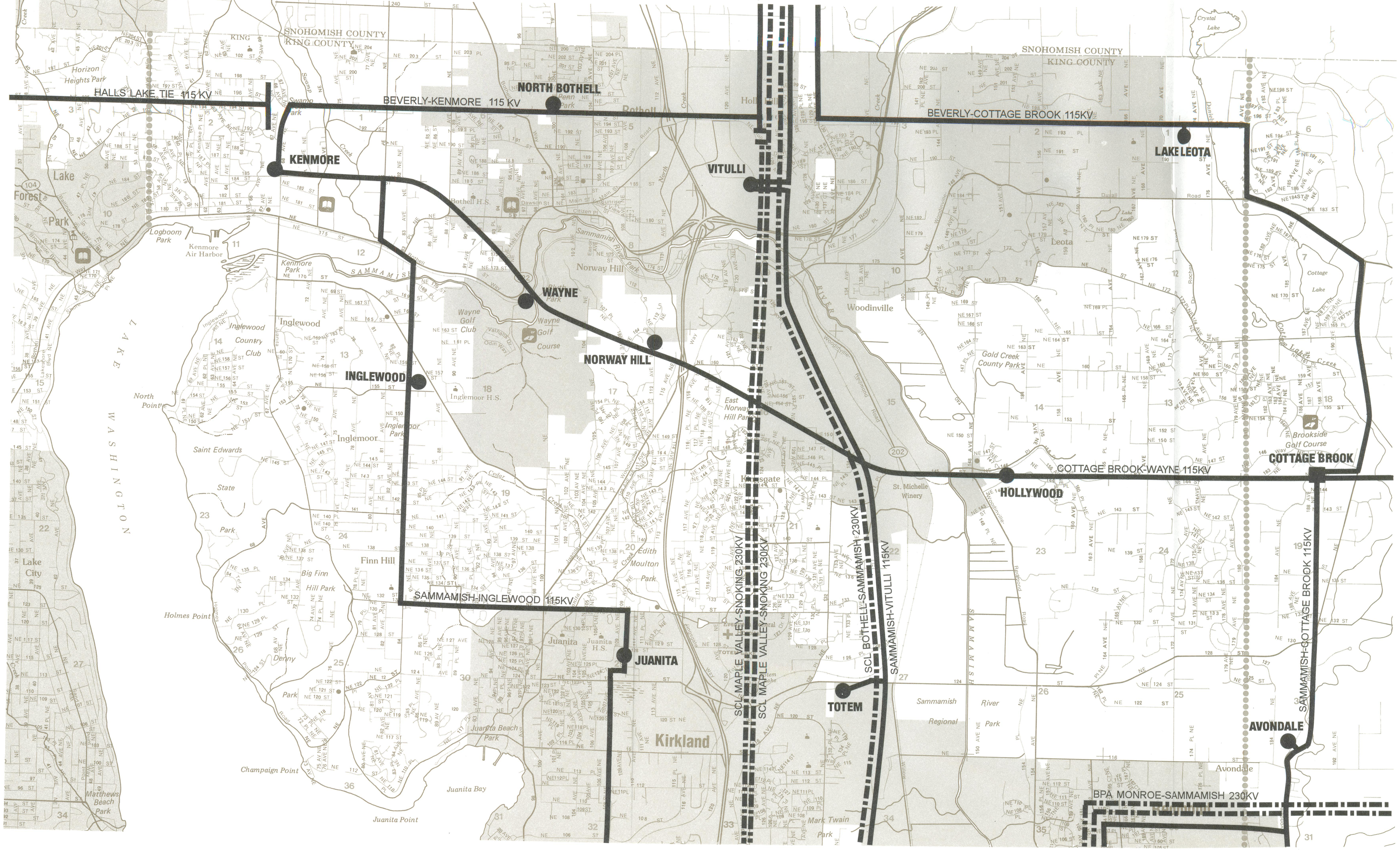
Northshore Community Plan Update 1993

Northshore Community Planning Area

King County Planning and Community Development Division 1993

N

½ 0 ½ 1 Mile



Electrical Transmission System

Existing Facilities

Existing Transmission Lines

- 115KV
- 230KV

Puget Power Stations

- Trans Switch
- Distribution

Notes: This map schematically depicts facilities owned and operated by Puget Power. Actual facility locations may not have been field checked and may differ from those depicted.

Source: Puget Power and Light Co.

Northshore Community Plan Update 1993

Northshore Community Planning Area

King County Planning and Community Development Division
1993

N

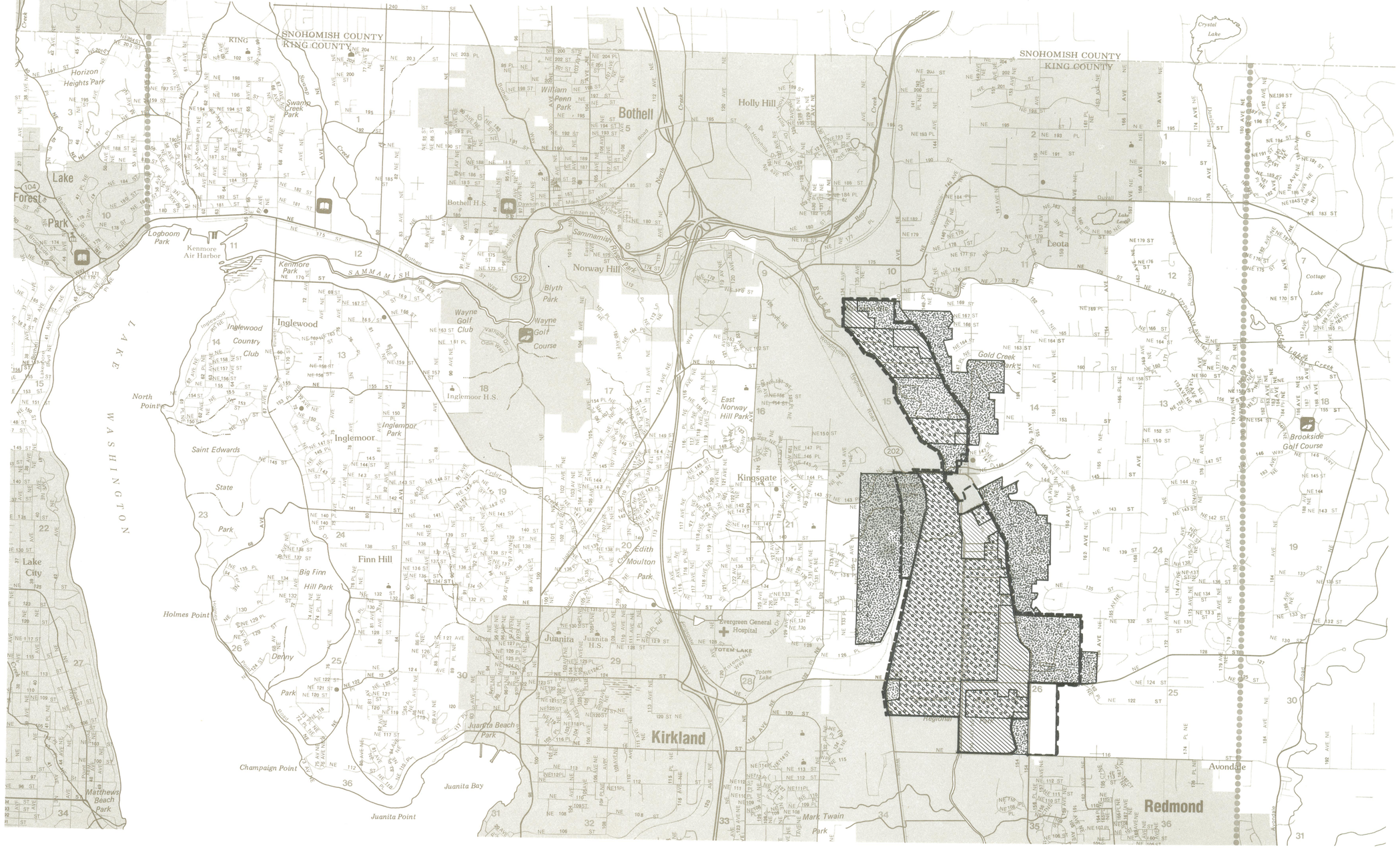
1/2 0 1/2 1 Mile

Agricultural Production District

- Lands Purchased under the Farmlands Preservation Act
- Northshore Community Plan Update Proposed Agricultural Designation
- Agricultural Production District-1985 King County Comprehensive Plan
- Zoned for Agriculture-1989 Resource Area Zoning
- Northshore Community Plan Update Proposed Rural Buffer

Source: King County Cultural Resouurces Division

Northshore Community Plan Update 1993

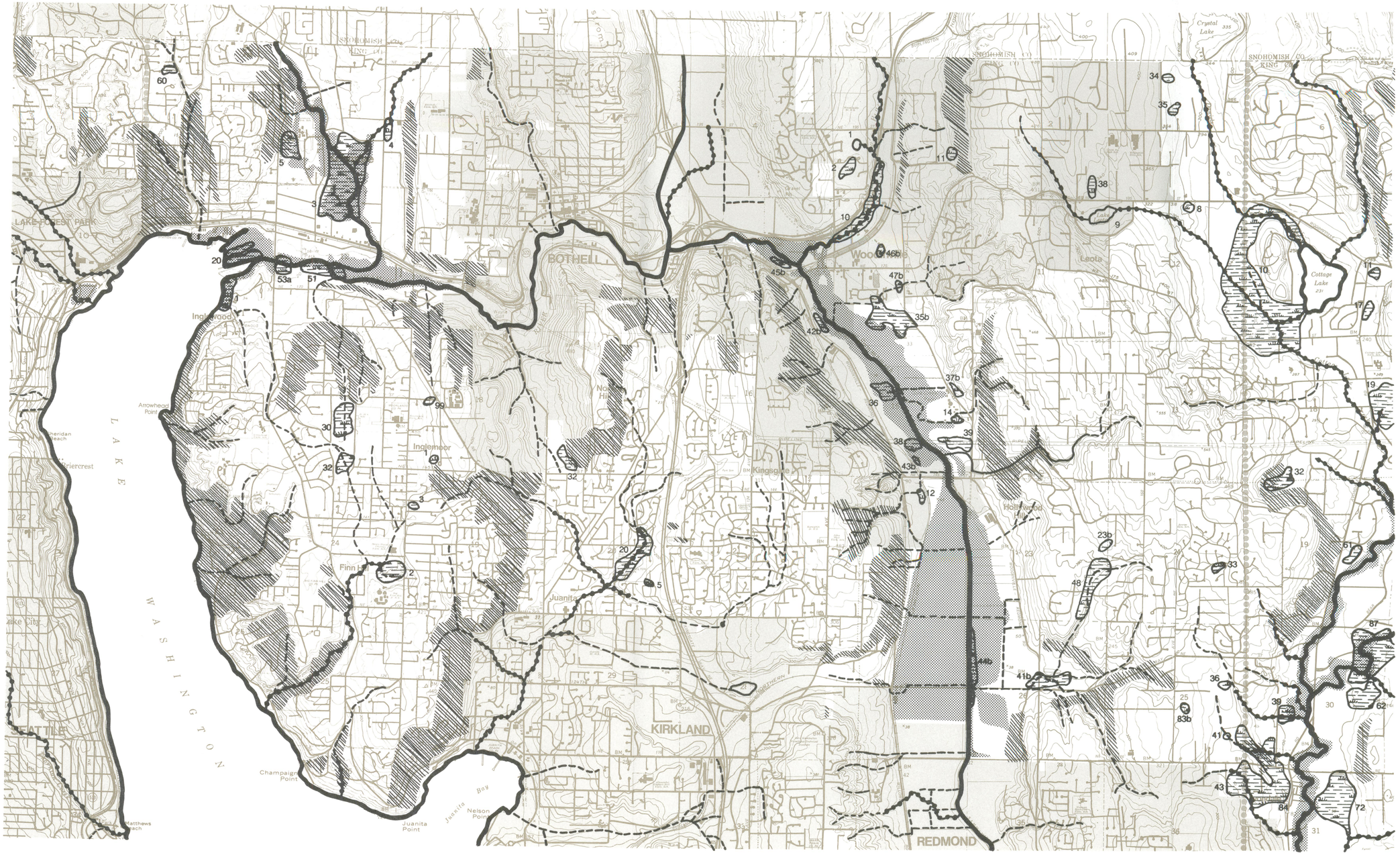


Northshore Community Planning Area

King County Planning and Community Development Division 1993

N

1/2 0 1/2 1 Mile



Sensitive Areas

- Open Water
- Wetland
- 36 Wetland Number
- 100-year Floodplain
- Erosion Hazard

Streams:

- Class I
- Class 2 (with salmonids)
- Class 2 (perennial; salmonid use undetermined)
- Unclassified

Source: Sensitive Areas Map Folio, King County, Washington, December, 1990

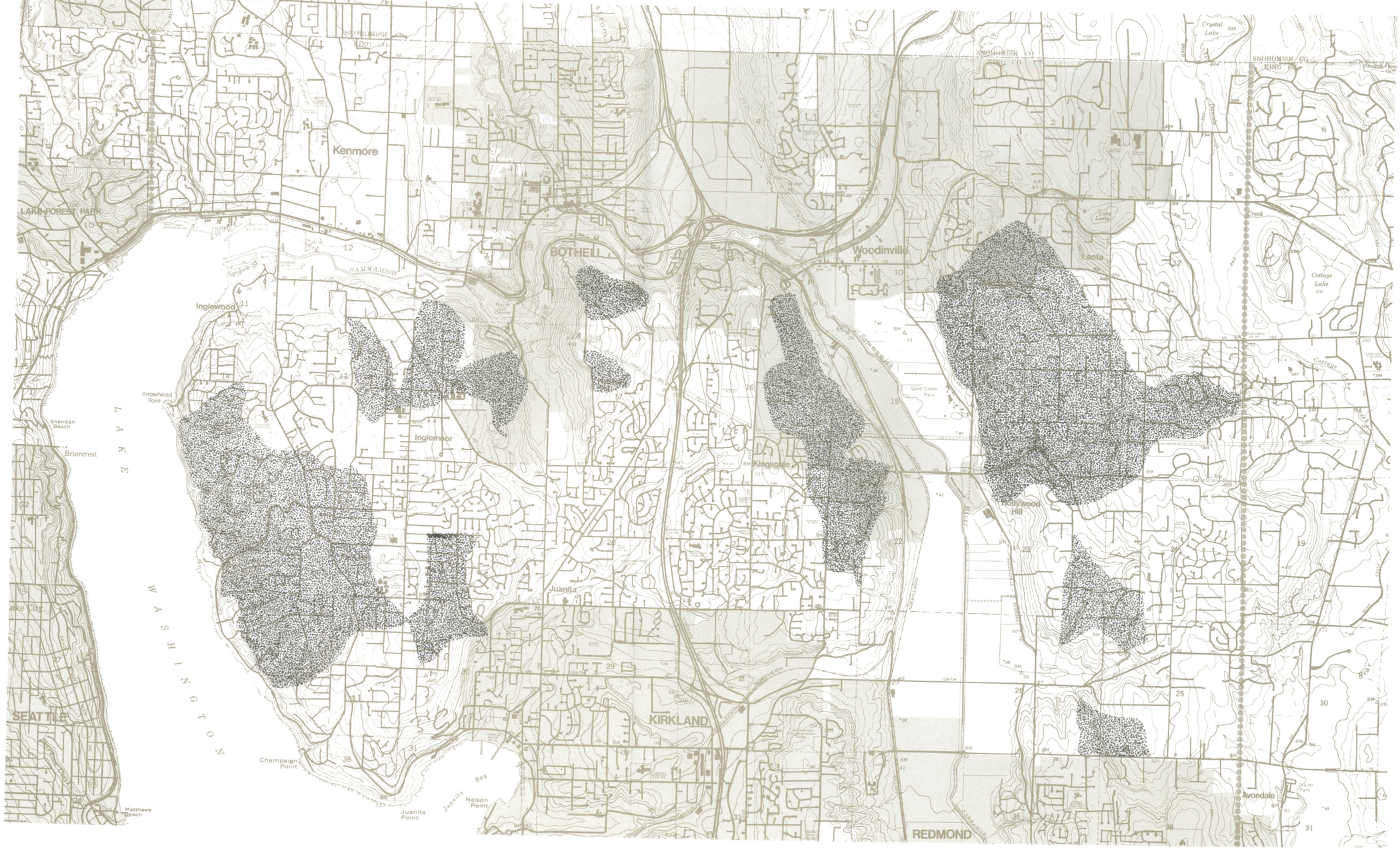
Northshore Community Plan Update 1993

Northshore Community Planning Area

King County Planning and Community Development Division 1993

N

½ 0 ½ 1 Mile



Erosion Problem Areas

Erosion Problem Area

Source: King County Surface Water Management Division

Northshore Community Plan Update 1993

Northshore Community Planning Area

King County Planning and
Community Development Division
1993

N

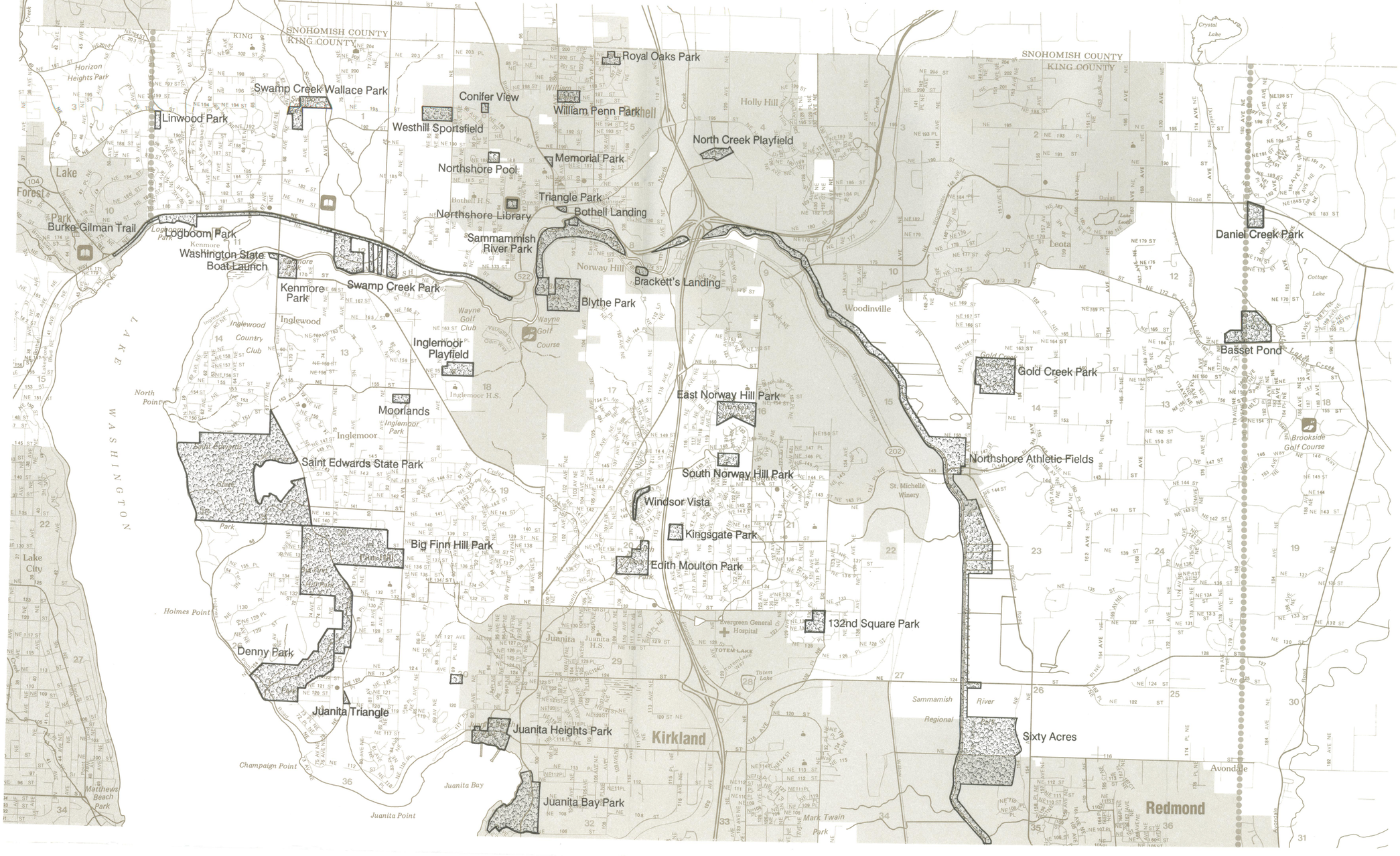
1/2 0 1/2 1 Mile

Public Park and Recreation Facilities

Public Park

Source: King County Department of Parks, Planning and Resources

Northshore Community Plan Update 1993



Northshore Community Planning Area

King County Planning and Community Development Division 1993

N

1/2 0 1/2 1 Mile

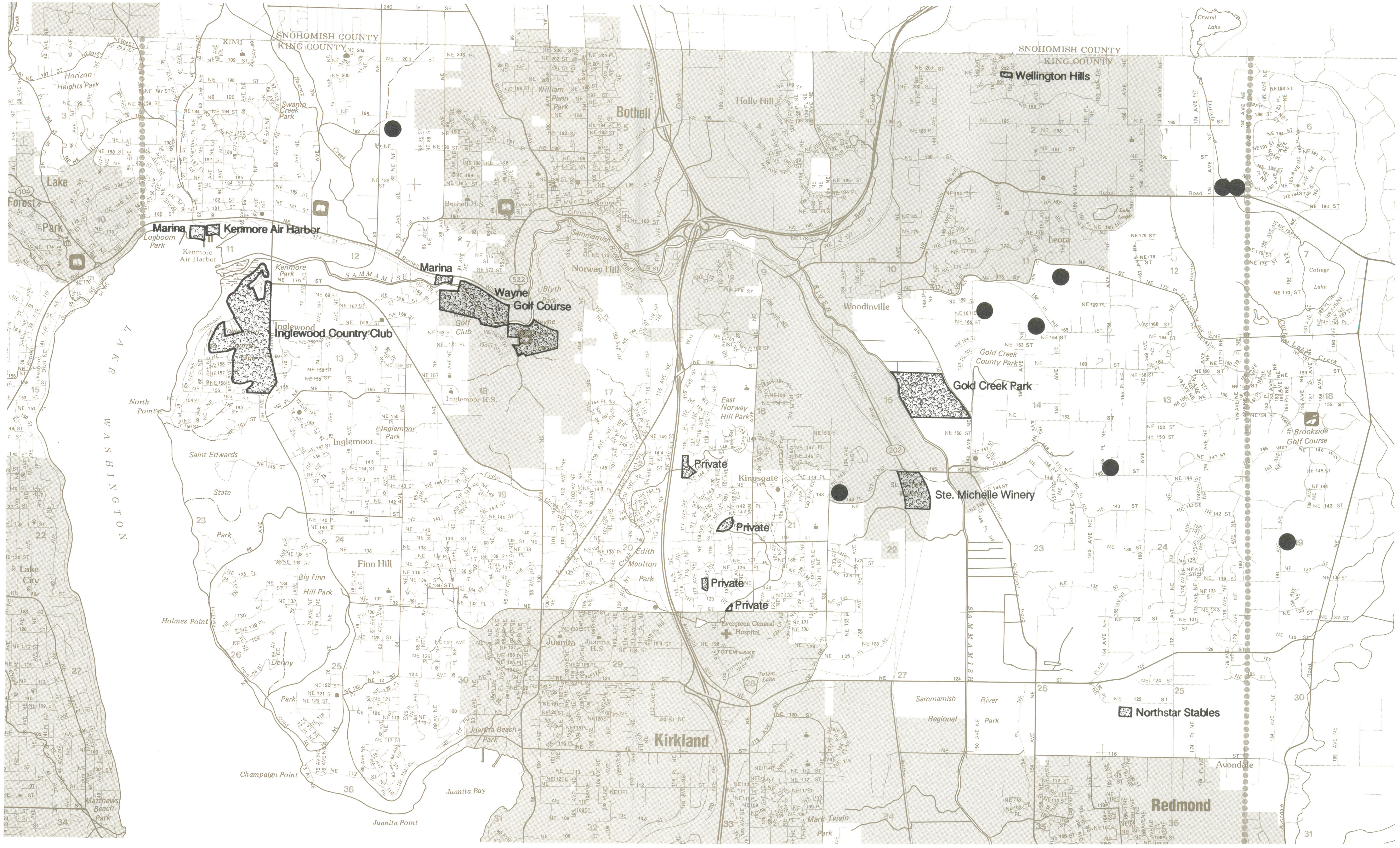
Private Park and Recreation Facilities

Private Park

Equestrian Stable

Source: King County Department of Parks, Planning and Resources; King County Executive Horse Council

Northshore Community Plan Update 1993

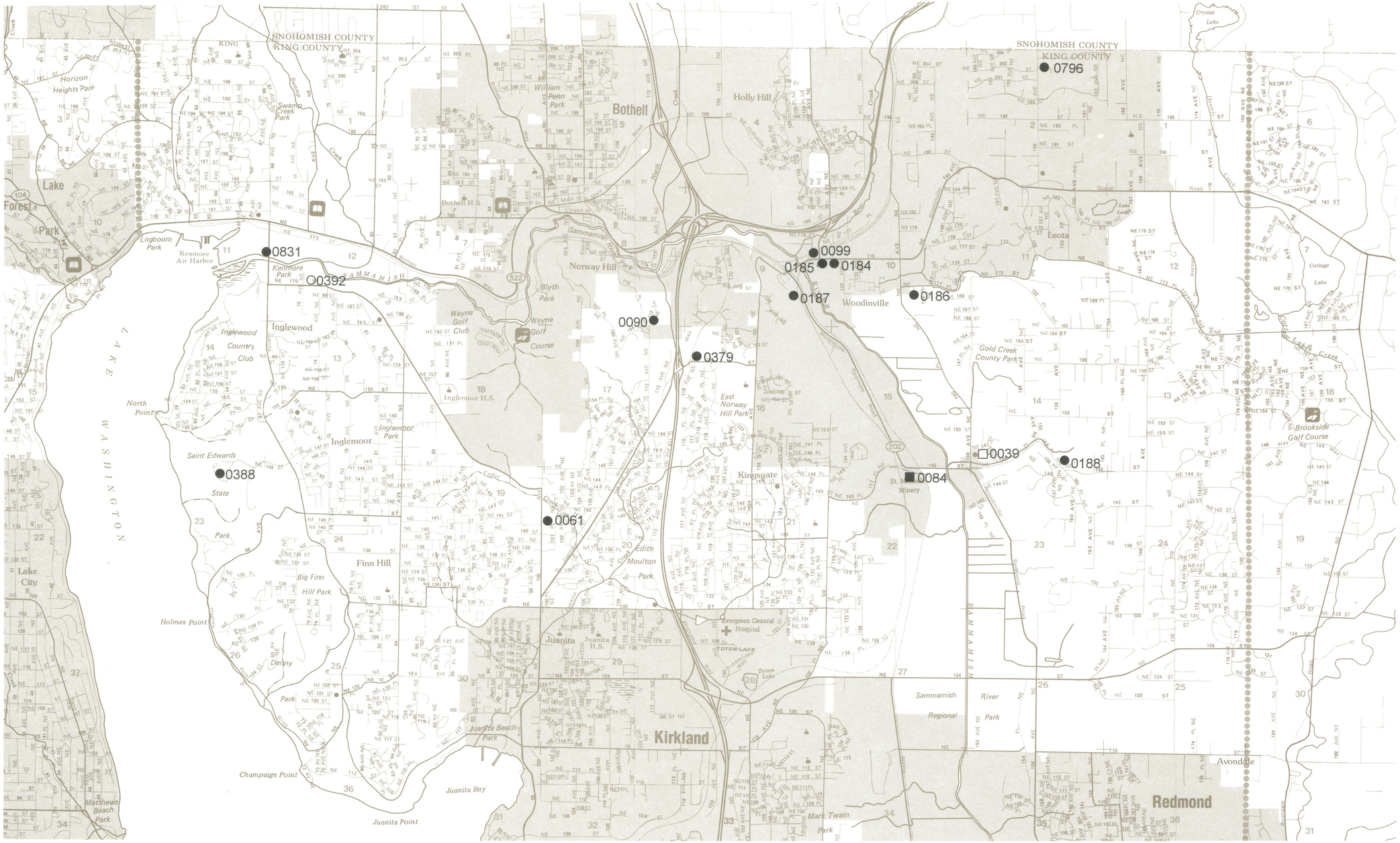


Northshore Community Planning Area

King County Planning and Community Development Division 1993

N

1/2 0 1/2 1 Mile



Historic Sites

- ■ National, State, and King County Historic Landmarks
- □ State and King County Historical Landmarks
- ○ King County Historic Landmarks
- ● Potential Historic Landmark

Historic Sites:

0039 Hollywood School
0061 Wold Homestead
0084 Hollywood Farm
0090 Ivar Larsen Home
0099 Woodinville Memorial Park
0184 Woodinville School
0185 Johann Koch Blacksmith Shop
0186 De Young House
0187 Jesse Brown House
0188 Stimson-Moore House
0379 Miller Log House
0388 St. Edwards Seminary
0392 Charles Thomsen Estate
0796 Boyer Farmhouse
0831 Kenmore Bridge

Source: King County Cultural Resources Division

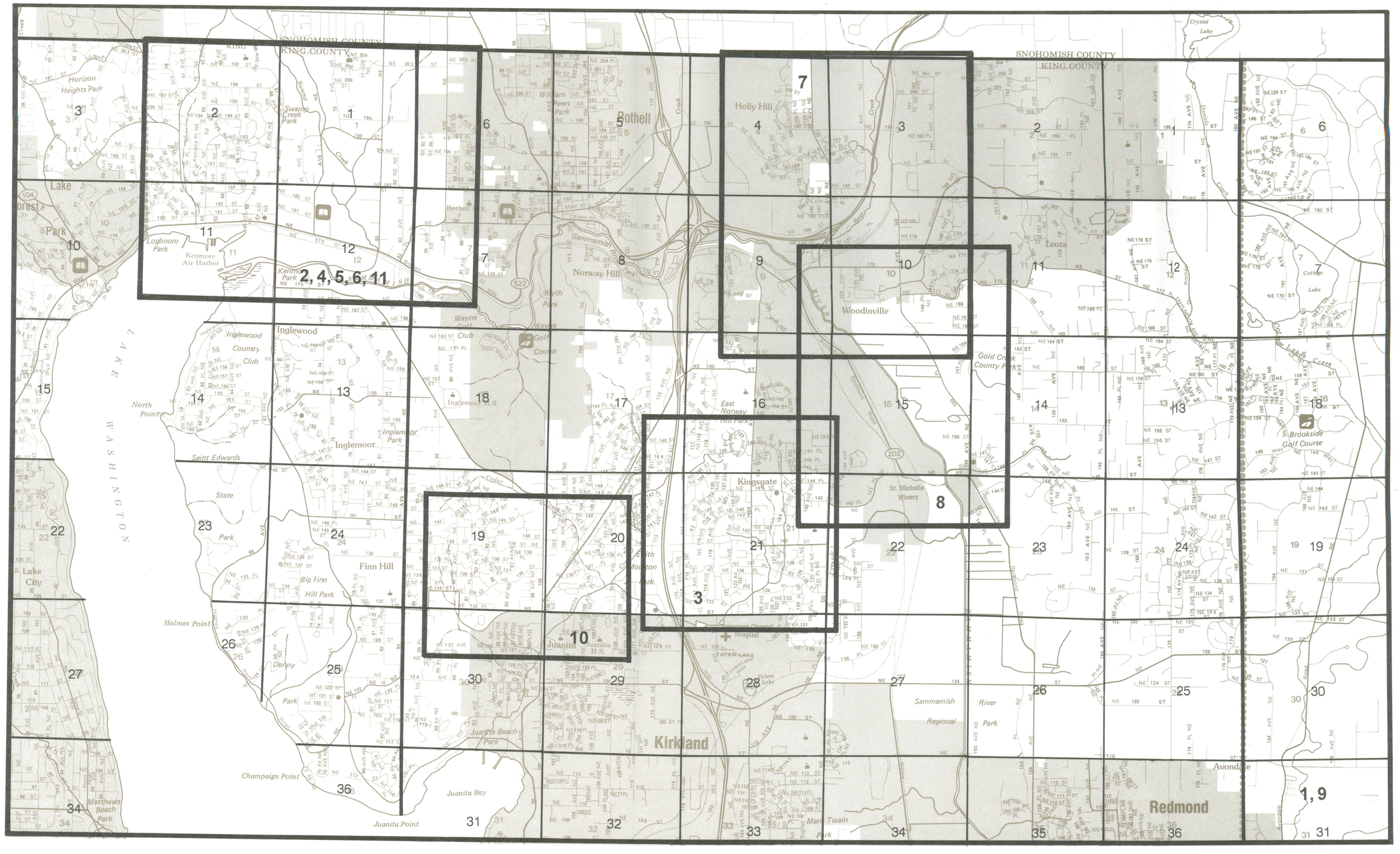
Northshore Community Plan Update 1993

Northshore Community Planning Area

King County Planning and
Community Development Division
1993

N

½ 0 ½ 1 Mile



P-Suffix Detail Map Location Index

12 Section Number

9 Detail Map Location

1 Special Stormwater Retention/ Detention Requirements
2 Natural Resource Protection Area
3 Kingsgate Fire Flow Requirements
4 Kenmore Right of Way Dedication, SR-522 Access Restriction
5 Kenmore Pedestrian Overlay District and Design Requirements - Map A
6 Kenmore Pedestrian Overlay District and Design Requirements - Map B
7 Sammamish Valley Design Requirements
8 Sammamish Valley Access Restriction
9 Historic Sites
10 Commercial Use Limitations - North Juanita Community Business Center
11 Multifamily Study Area

Source: King County Department of Community Planning

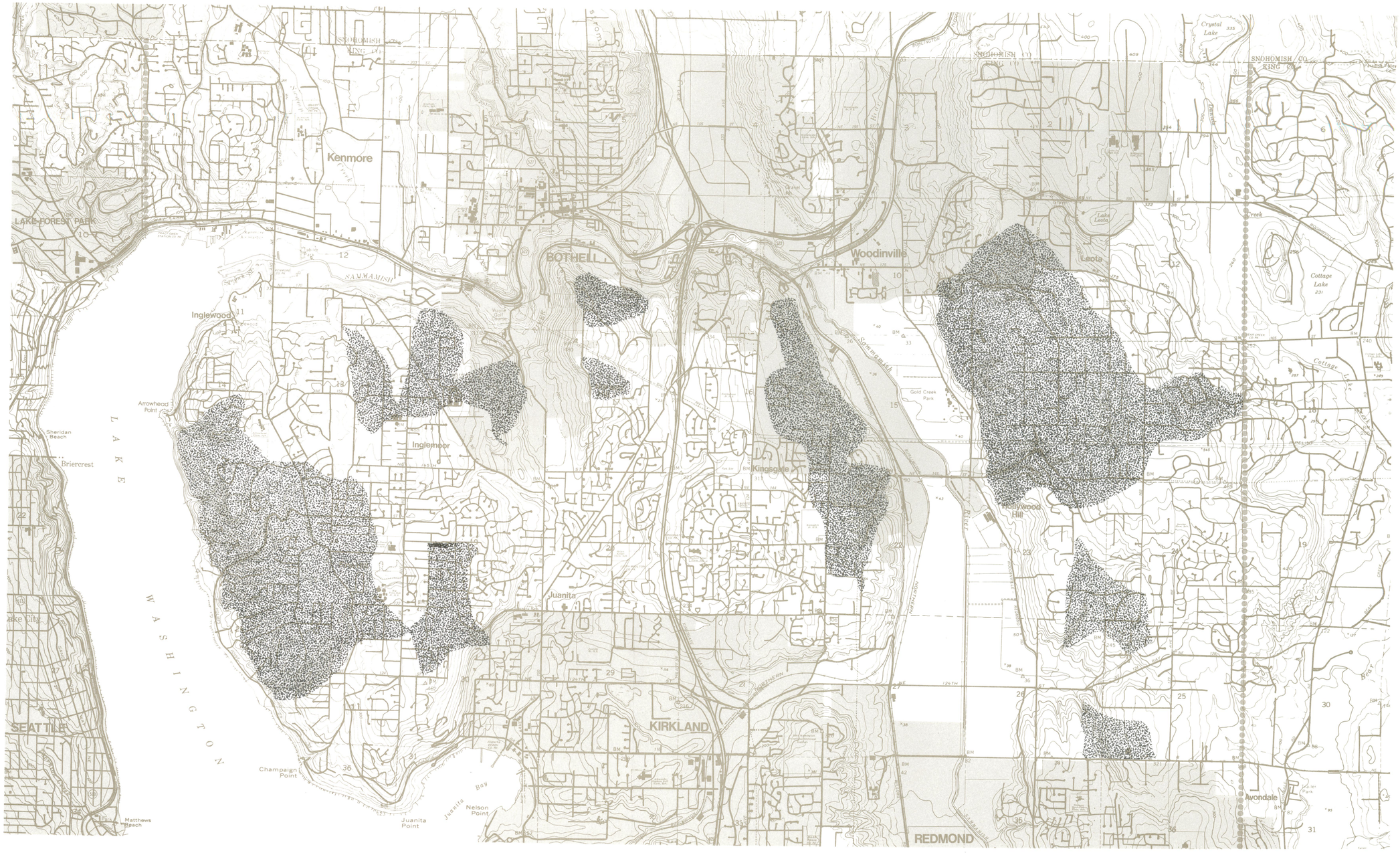
Northshore Community Plan Update 1993

Northshore Community Planning Area

King County Planning and Community Development Division
1993

N

½ 0 ½ 1 Mile



1.

Special Stormwater Retention/Detention Requirements

Special Stormwater Retention/Detention Requirements

Source: King County Surface Water Management Division

Northshore Community Plan Update 1993

Northshore Community Planning Area

King County Planning and Community Development Division 1993

N

½ 0 ½ 1 Mile

9. Historic Sites

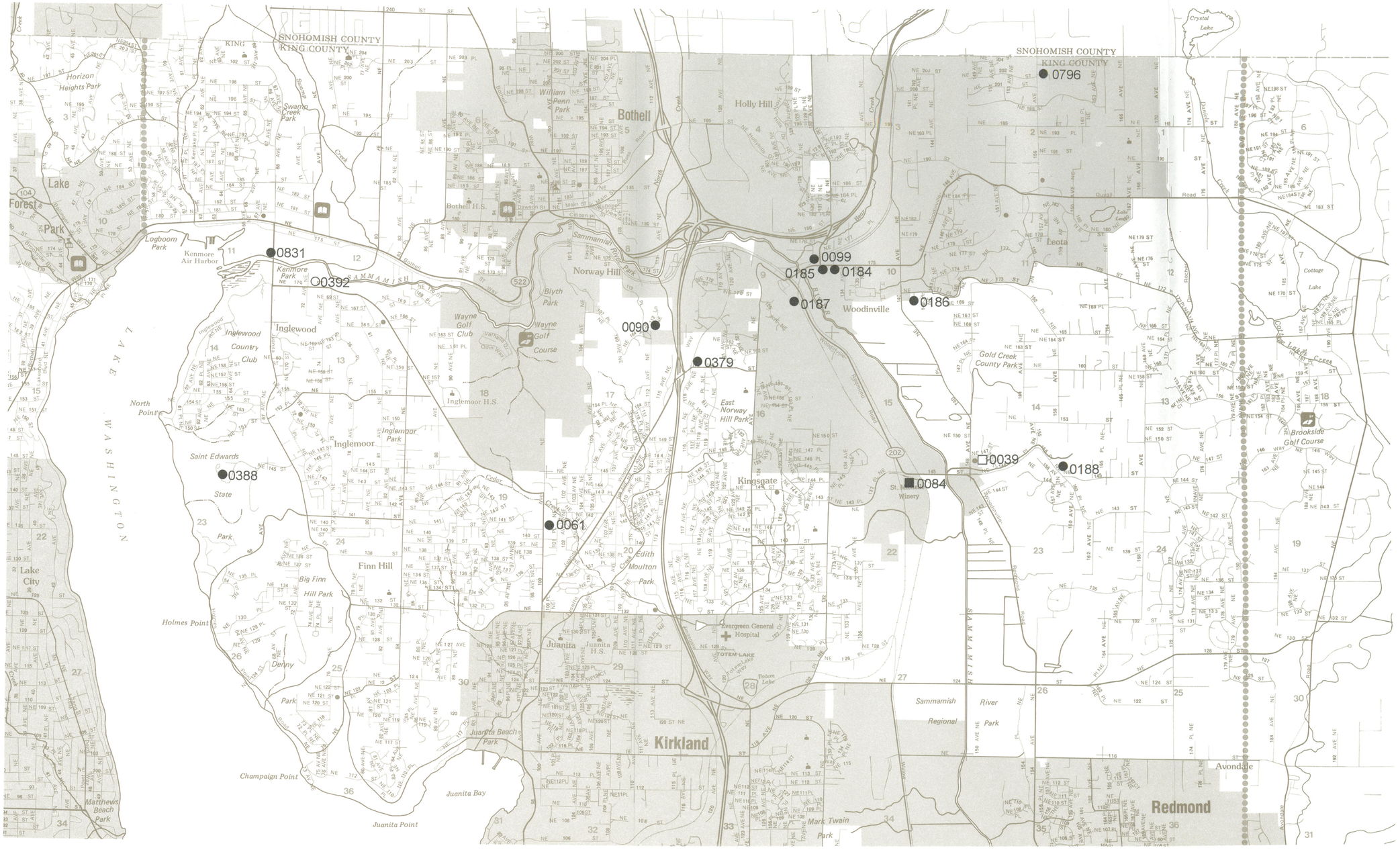
- ■ National, State, and King County Historic Landmarks
- □ State and King County Historical Landmarks
- ○ King County Historic Landmarks
- ● Potential Historic Landmark

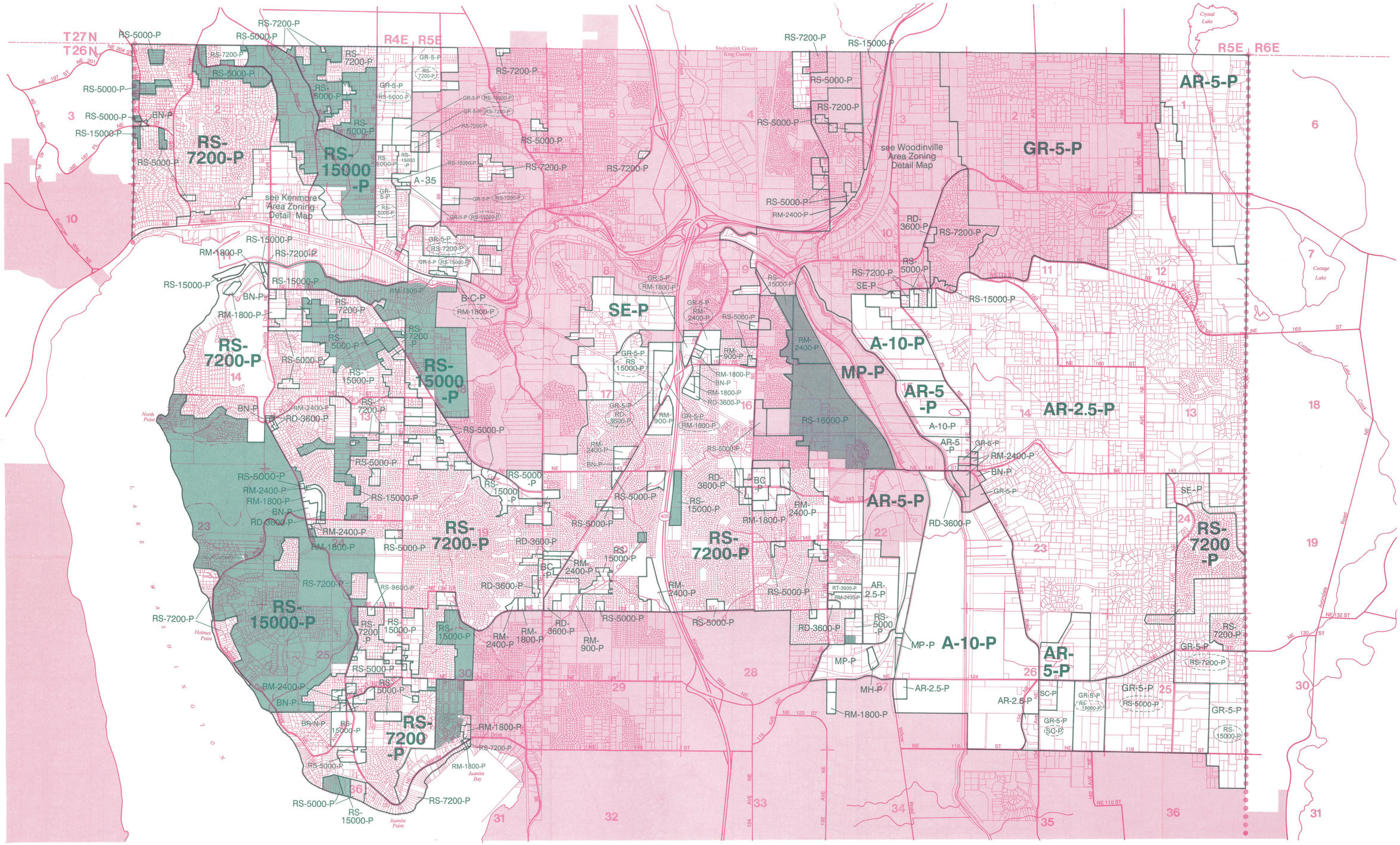
Historic Sites:

0039 Hollywood School
0061 Wold Homestead
0084 Hollywood Farm
0090 Ivar Larsen Home
0099 Woodinville Memorial Park
0184 Woodinville School
0185 Johann Koch Blacksmith Shop
0186 De Young House
0187 Jesse Brown House
0188 Stimson-Moore House
0379 Miller Log House
0388 St. Edwards Seminary
0392 Charles Thomsen Estate
0796 Boyer Farmhouse
0831 Kenmore Bridge

Source: King County Cultural Resources Division

Northshore Community Plan Update 1993





Northshore Area Zoning

Residential:

AR-5	Rural Area, 1 unit per 5 acres
AR-2.5	Rural Area, 1 unit per 2.5 acres
SE	Suburban Estate, 1 unit per 35000 sq ft
SC	Suburban Cluster, 1 unit per 35000 sq ft
RS-15000	Single Family, 1 unit per 15000 sq ft
RS-9600	Single Family, 1 unit per 9600 sq ft
RS-7200	Single Family, 1 unit per 7200 sq ft
RS-5000	Single Family, 1 unit per 5000 sq ft
RMHP	Residential Mobile Home Park
RT-3600	Residential Townhouse, 1 unit per 3600 sq ft
RD-3600	Low Density Multiple Dwelling, 1 unit per 3600 sq ft
RM-2400	Medium Density Multiple Dwelling, 1 unit per 2400 sq ft
RM-1800	Medium Density Multiple Dwelling, 1 unit per 1800 sq ft
RM-900	Maximum Density Multiple Dwelling, 1 unit per 900 sq ft
GR-5	Growth Reserve, 1 unit per 5 acres

Resource:

A-10	Agriculture, 1 unit per 10 acres
A-35	Agriculture, 1 unit per 35 acres

Commercial:

BN	Neighborhood Business
BC	Community Business
CG	General Commercial
BR-C	Mixed Use

Industrial:

ML	Light Manuracturing
MH	Heavy Manufacturing
MP	Manufacturing Park

Potential Zone

-P P-Suffix conditions apply (see Area Zoning text)

Incorporated Areas
*City of Woodinville incorporation effective March, 1993

Interim Urban Reserve
(GR-5 overlay. In 1994, a study will be transmitted to the County Council to determine if the overlay should be removed and the underlying zone come into effect.)

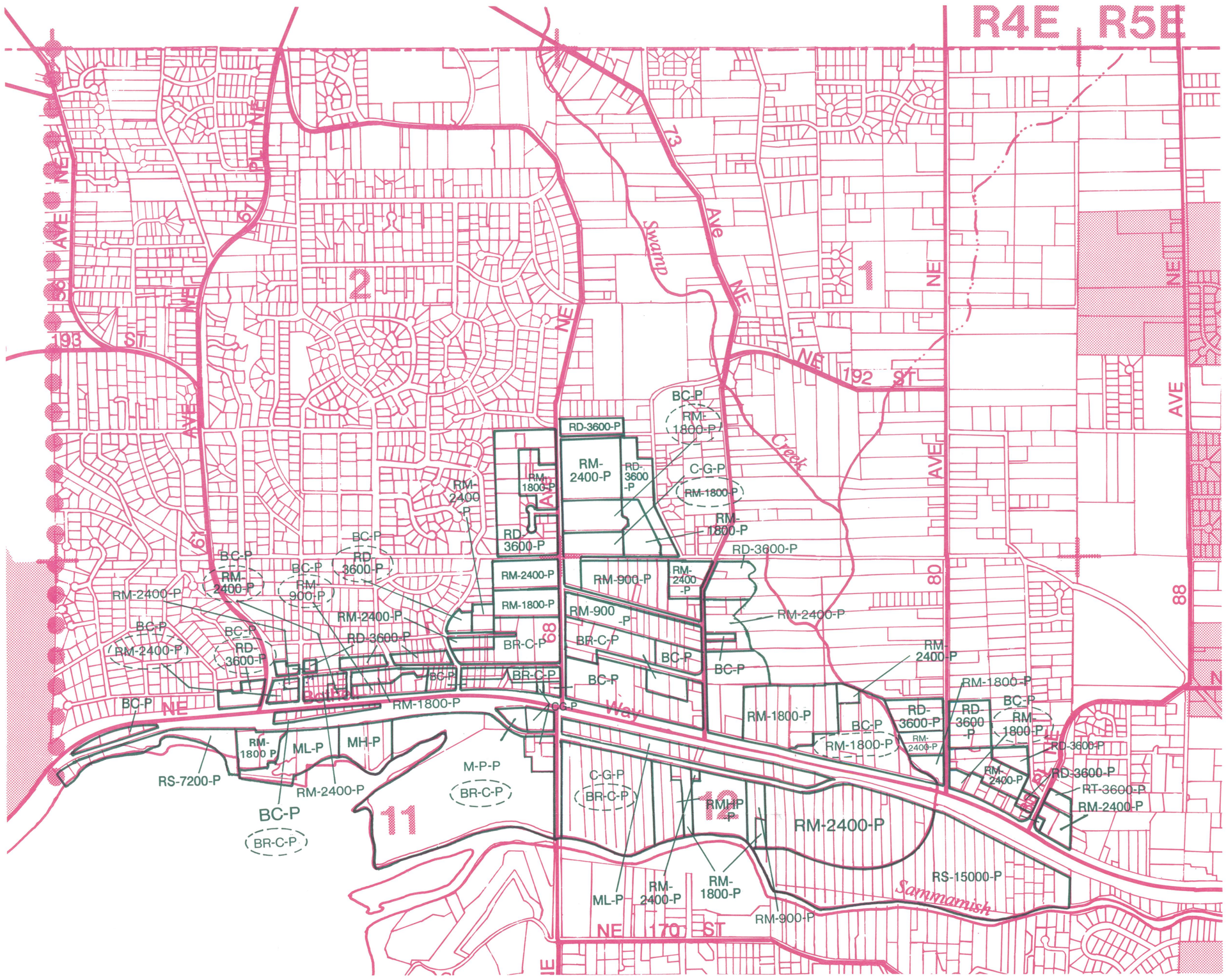
Source: King County Department of Parks, Planning and Resources

Northshore Community Planning Area

King County Planning and Community Development Division
1993

N

1/2 0 1/2 1 Mile



Kenmore Area Zoning

Residential:

RS-15000	Single Family, 1 unit per 15,000 sq. ft.
RS-7200	Single Family, 1 unit per 7,200 sq. ft.
RMHP	Residential Mobile Home Park
RT-3600	Residential Townhouse, 1 unit per 3,600 sq. ft.
RD-3600	Low Density Multiple Dwelling, 1 unit per 3,600 sq. ft.
RM-2400	Medium Density Multiple Dwelling, 1 unit per 2,400 sq. ft.
RM-1800	Medium Density Multiple Dwelling, 1 unit per 1,800 sq. ft.
RM-900	Maximum Density Multiple Dwelling, 1 unit per 900 sq. ft.

Commercial:

BC	Community Business
CG	General Commercial
BR-C	Mixed Use

Industrial:

ML	Light Manufacturing
MH	Heavy Manufacturing
MP	Manufacturing Park

Potential Zone

-P P-Suffix conditions apply, (see Northshore Area Zoning)

Source: King County Department of Parks, Planning and Resources

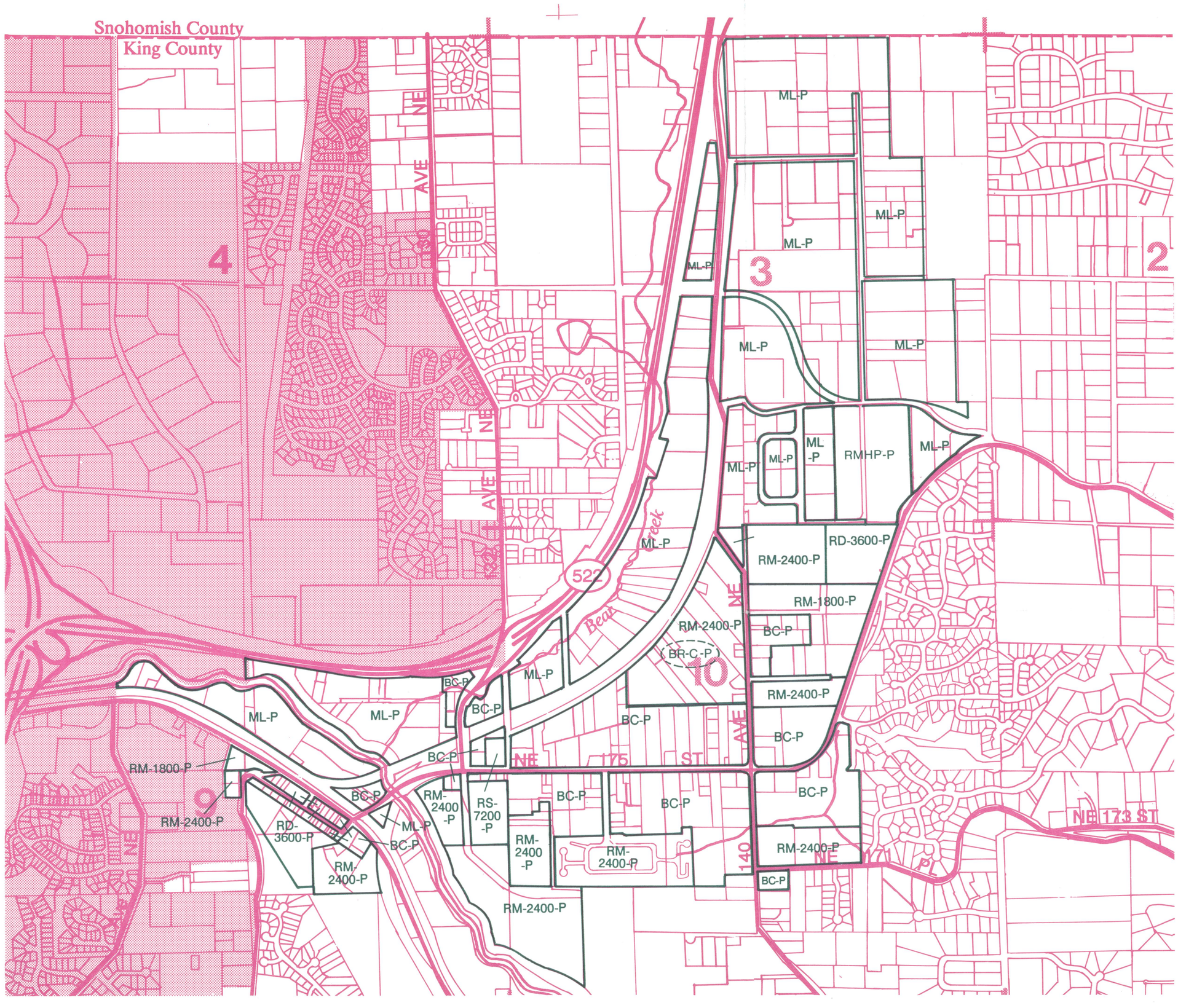
Northshore Community Plan Update 1993

Northshore Community Planning Area

King County Planning and Community Development Division

N

1000 0 1000 Feet



Woodinville Area Zoning

Residential:

RS-7200	Single Family, 1 unit per 7,200 sq. ft.
RMHP	Residential Mobile Home Park
RD-3600	Low Density Multiple Dwelling, 1 unit per 3,600 sq. ft.
RM-2400	Medium Density Multiple Dwelling, 1 unit per 2,400 sq. ft.
RM-1800	Medium Density Multiple Dwelling, 1 unit per 1800 sq. ft.

Commercial:

BC	Community Business
BR-C	Mixed Use

Industrial:

ML	Light Manufacturing

Potential Zone

-P P-Suffix conditions apply, (see Northshore Area Zoning)

Source: King County Department of Parks, Planning and Resources

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N

1000 0 1000 Feet