

THE CITY COUNCIL OF THE CITY OF BREMERTON, WASHINGTON,
DOES HEREBY ORDAIN AS FOLLOWS:

SECTION 1. The City Council accepts and adopts the Findings and Conclusions of the Planning Commission as presented in **Exhibit A**, attached hereto and incorporated by this reference as if set forth in full herein.

SECTION 2. The Comprehensive Plan is amended by the addition of the East Park Sub-Area Plan as presented in **Exhibit B**, attached hereto and incorporated by this reference as if set forth in full herein.

SECTION 3. Section 20.80.080 of the Bremerton Municipal Code entitled "Sub-Area Plans" is hereby amended to read as follows:

20.80.080 SUB-AREA PLANS.

The following are identified areas where sub-area plans may be created and unique development regulations created for each:

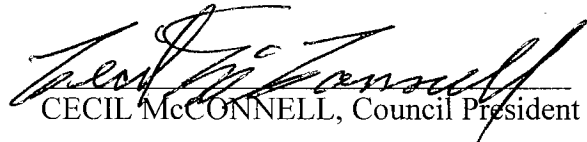
- (a) Westpark Sub-Area Plan;
- (b) East Park Sub-Area Plan (adopted by Ordinance No. 4962);
- (c) Austin Drive Sub-Area Plan;
- (d) Harrison Employment Center
- (e) Northwest Corporate Campus Employment Center;
- (f) Port Blakely Employment Center.

A specific sub-area plan has been adopted and is in effect when the project name listed above is followed by an ordinance number – this ordinance will contain the unique regulations and standards that guide development for that project area.

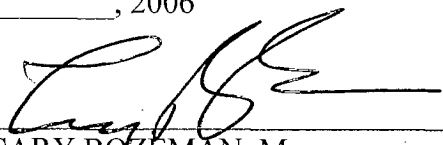
SECTION 4. Severability. If any one or more sections, subsections, or sentences of this ordinance are held to be unconstitutional or invalid, such decision shall not affect the validity of the remaining portion of this ordinance and the same shall remain in full force and effect.

SECTION 5. Effective Date. This ordinance shall take effect and be in force ten (10) days from and after its passage, approval and publication as provided by law.

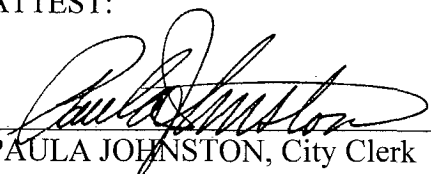
PASSED by the City Council the 18th day of January, 2006


CECIL McCONNELL, Council President


Approved this 23rd day of January, 2006


CARY BOZEMAN, Mayor

ATTEST:


PAULA JOHNSTON, City Clerk

APPROVED AS TO FORM:


ROGER A. LUBOVICH, City Attorney

PUBLISHED the 23rd day of January, 2006
EFFECTIVE the 2nd day of February, 2006
ORDINANCE NO. 4962

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Exhibit A

Findings & Conclusions

DRAFT FINDINGS AND CONCLUSIONS OF THE CITY OF BREMERTON PLANNING COMMISSION

Summary – Proposal to include the East Park Sub-Area Plan to the Comprehensive Plan and Zoning Code by amendment. The zoning code will add reference in BMC 20.80.080 to the East Park Sub-Area Plan.

I. FINDINGS OF FACT

1. Project Description

East Park is a forty-six (46) acre vacant site in East Bremerton that was previously Navy housing and is designated in the 2004 Comprehensive Plan as a Public Sector Redevelopment Site (PSRS). The developer, East Park LLC, purchased the site from the City of Bremerton according to a development agreement and has worked with the city to prepare the proposed East Park Sub Area Plan. Mithun, an architectural firm hired by the developer, has worked with city staff to conduct community and stakeholder meetings to help determine the public's vision for East Park. The draft plan was submitted to the city at the end of October and presented to the Planning Commission on November 1, 2005 at a special workshop. The next step in the Sub-Area Plan process is for the Planning Commission to review the Plan and recommend to City Council the adoption of amendments to the comprehensive plan and zoning code.

2. Procedural History

- 2.1 On June 25, 2005 the first neighborhood meeting was held inviting public questions and comments.
- 2.2 On July 26, 2005, the second neighborhood meeting was held showing the progress and inviting further public questions and comments.
- 2.3 On October 6, 2005, a stakeholders meeting was held showing the Sub-Area Plan's progress and inviting questions and comments.
- 2.4 On November 1, 2005, the Planning Commission was presented with the Sub-Area plan at a special workshop. Citizen stakeholders testified at the meeting indicating their support for the plan that was drafted.
- 2.5 On November 3, 2005, the 60 day required notification was sent to the Department of Community Trade and Economic Development (CTED).
- 2.6 On November 5, 2005, notice of Planning Commission public hearing was published in the Kitsap Sun and the public was invited to comment.
- 2.8 On November 15, 2005, Planning Commission conducted a public hearing on the East Park Sub-Area plan.
- 3.0 On December 20, 2005 the Planning Commission completed deliberations on the sub-area plan and formulated a recommendation for City Council's consideration.

3. Public Comment

3.1 Numerous individuals have provided comments at public workshops and stakeholder meetings. Comments received were considered and used to develop the draft plan that was submitted to the City on October 27, 2005.

3.2 The planning process included a "Stakeholder Committee" comprised of the following members:

- a. Eugene Brennan, Manette Resident
- b. John Burch, Manette Resident
- c. Wendy Clark-Getzin, Kitsap Transit
- d. Walt Draper, Bremerton School District-Director of Finance
- e. Lea Duffy-Kosusko, RFM Architects/Manette Resident
- f. Glen Godforoy, Bremerton YMCA
- g. Doug Groneman, Parks Commission/Illahee Forest Steward
- h. Martha Groneman, Manette Resident
- i. Elizabeth m. Hyde, Bremerton School District-Superintendent
- j. Doug Johnson, Kitsap Transit
- k. Floyd Johnson, Bremerton Ice Arena-General Manager
- l. Deb McDaniel, Manette Resident
- m. Daren Nygren, City Council-Bremerton District 3
- n. David Olson, Harrison Hospital-Vice President Business Development
- o. Rut Reese, Manette Business Owner and Resident
- p. Mike Short, City Council-Bremerton District 9
- q. Julie Wasserburger, Manette Resident
- r. Leo Wasserburger, Manette Resident
- s. Rebecca Wilson, Manette Resident

3.3 Individuals providing verbal testimony at the Planning Commission Workshop on November 1, 2005:

- a. Deborah McDaniel, Manette Resident
- b. Adam Brockus, 1146 Perry Avenue
- c. John Stokes, 2547 Greenwood Dr
- d. Floyd Johnson, Bremerton Ice Skating Center
- e. Chris Campagna
- f. Matthew Keough, KRC. 1201 Park Ave.
- g. Leo Wasserburger, Callahan Drive
- h. Eugene Brennan, Manette Resident

3.4 Individuals providing verbal testimony at the Planning Commission public hearing held on November 15, 2005:

- a. Glen Godfrey, YMCA. 60 Magnuson Way
- b. Lon Overson, 1035 Callahan Drive
- c. Ailene Mueller, 2215 Winfield Avenue
- d. Dick Bruskud, 1102 Shore Drive
- e. Adam Brockus, 1146 Perry Avenue

4. SEPA Determination

A thorough review of the development anticipated within the East Park Sub-area was conducted and a SEPA anticipated Mitigated Determination of Non-Significance (MDNS) was advertised with a public comment period that began November 7, 2005 and ended on November 21, 2005. The mitigation measures were drafted to ensure that future development will not create adverse environmental impacts. Staff issued the final MDNS on November 23, 2005, with an administrative appeal deadline of December 5, 2005. No appeals were filed.

5. Consistency

Amendments to the Comprehensive Plan

Amendments to the Comprehensive Plan shall meet the decision criteria outlined in BMC 21.06.080. The Planning Commission may recommend, and the City Council may adopt or adopt with modifications, an amendment to the comprehensive plan if the criteria outlined below are met.

5.1 BMC 21.06.080(A) allows amendments to the Comprehensive Plan if there is an obvious technical error in the pertinent comprehensive plan provisions.

This is not applicable to this project.

5.2 BMC 21.06.080(B) allows amendments to the Comprehensive Plan if the following criteria have been met.

5.2 (1) The amendment is consistent with the Growth Management Act;

This amendment is consistent with the Growth Management Act (GMA) by meeting the criteria of the Comprehensive Plan which was created to achieve the 13 goals of the GMA. The Sub-Area Plan meets the housing goal by providing a mixed use dense housing stock. It meets the open space and recreation goal by creating a green street and wildlife corridor, and the creation of parks. It will reduce sprawl and promote urban growth by creating a dense mixed use environment.

5.2 (2) The amendment is consistent with the comprehensive plan or other goals or policies of the City;

The East Park Sub-Area Plan is consistent with page 84 of the Comprehensive Plan Land Use Map because it designates the site as a Public Sector Redevelopment Site (PSRS), and identifies the project as a site where "specific area plan" should be developed. Also, in the Land Use Element, page LU-24, describes in more detail the need to create this specific area plan. The creation of the sub-area plan for East Park therefore implements the vision and goals of the Comprehensive Plan.

5.2 (3) If the amendment was reviewed but not adopted as a part of a previous proposal, circumstances related to the proposed amendment have significantly changed, or the needs of the City have changed, which support an amendment;

This amendment to the Comprehensive Plan is being directed by the Comprehensive Plan. The amendment does not change the plan, rather it supplements it based on the direction of the Comprehensive Plan to develop specific area plans for Public Sector Redevelopment Site.

5.2 (4) The amendment is compatible with existing or planned land uses and the surrounding development pattern;

The East Park Sub-Area Plan is compatible with adopted Public Sector Redevelopment Site land use and the surrounding development pattern.

5.2 (5) The amendment will not adversely affect the City's ability to provide urban services at the planned level of service and bears a reasonable relationship to benefitting the public health, safety and welfare.

The East Park Sub-Area Plan will not adversely affect the City's ability to provide urban services at the planned level of service. The amendment will benefit the public health, safety and welfare by achieving some of the City's economic development goals. Applicable goals include: A. EC1 Promote a vibrant environment for economic development, and H6 Build strong, cohesive neighborhoods with a majority of Bremerton households owning their own homes.

5.3 Amendments to the Zoning Code

Zoning code text amendments shall meet the decision criteria outlined in BMC 20.18.020 (d). The Planning Commission may recommend, and the City Council may adopt or adopt with modifications, an amendment to the zoning code text if the criteria outlined below are met.

5.3(1) 20.18.020 allows amendments to the Zoning Code if It is consistent with the goals and policies of the Comprehensive Plan.

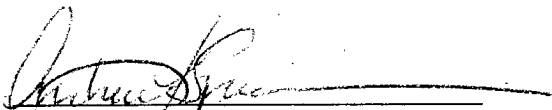
The Comprehensive Plan Land Use Map shows the East Park site as a Public Sector Redevelopment Site (PSRS) and directs the redevelopment to provide areas for large scale planned developments, which is achieved by this Plan. The Sub-Area Plan is consistent with several goals and policies in the Comprehensive Plan in the environmental, transportation, housing, community character, and land use elements. Goal E6 encourages developments to protect, preserve and restore the habitats that support Bremerton's diverse ecosystems. East Park will preserve the native forest along the western and eastern boundaries linked by a natural corridor. Goal H3 of the Comprehensive Plan is to provide a variety of housing types and densities to meet changing needs of Bremerton residents, East Park is providing housing for a diverse demographic group by building accessory dwelling units, carriage homes, cottages, affordable two story family homes and luxury homes. Goal CC3 asks developments to provide for a safe, pleasant and rich pedestrian experience. East Park's combination of tree lined streets with sidewalks and greenways provide a safe and pleasant pedestrian experience.

5.3(2) 20.18.020 allows amendments to the Zoning Code if it does not conflict with other City, state and federal codes, regulations and ordinances.
The East Park Sub-Area plan does not conflict with any other regulations.

II. CONCLUSIONS & RECOMMENDATION

Based on the findings above, the Planning Commission concludes that The East Park Sub-Area Plan has met the requirements for 1) amendment to the Comprehensive Plan and 2) text amendments to the zoning code as detailed in BMC 20.18.020. Therefore the Commission recommends the amendment to the Comprehensive Plan to include the East Park Sub-Area Plan and an amendment to the zoning code text in BMC 20.80.080 (b) to include the Ordinance number of the East Park Sub-Area plan.

Respectfully submitted by:


Executive Secretary

Approved by:


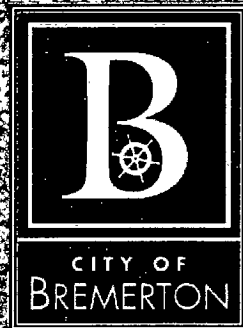
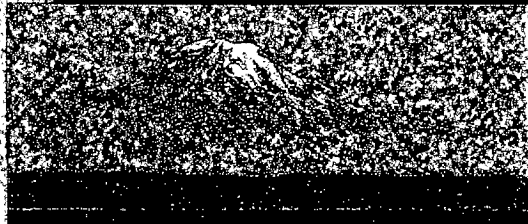

Linda Streissguth, Chair

Exhibit B

East Park Sub-Area Plan



East Park Sub Area Plan



October 26, 2005
Revised January 4, 2006

MITHÜN



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Acknowledgments:

City of Bremerton
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Dept. Community Development
Engineering Department
Parks Department

Participating Bremerton Residents

Introduction

Introduction

The East Park Sub-Area Plan reflects Bremerton's vision to continue as the metropolitan center of the West Sound by adding a unique and dense urban neighborhood. With its central location, between the Manette Neighborhood Center and the Harrison Hospital economic center, the East Park Public Sector Redevelopment Site is uniquely situated to become one of Bremerton's most livable and vibrant neighborhoods and an integral part of its redevelopment plan. The close proximity of employment, retail and recreational opportunities will give this neighborhood a desired feel in an urban environment. Planned parks within the community offer a natural, accessible close to home. Picturesque views to the south of Mount Rainier and the Olympics and a western boundary of Madrona forest provides plenty of natural beauty, literally at the doorstep of this development.

Context

This site primarily consists of vacant land with a few significant trees scattered throughout. The south-facing slope offers views of Mt. Rainier, the Olympic Mountains and Sinclair Inlet while providing an excellent opportunity for solar access to the buildings and open spaces.

Residential neighborhoods border the site's northern and northeastern sides. A native Madrona forest forms the western boundary and extends into the site. The regional recreation center anchored by the city pool, YMCA and ice arena border the southeastern edge. Wheaton Way, with its associated commercial activities, forms the southern boundary.

Wheaton Way provides access to the site on the south with connections to downtown Bremerton and the Seattle ferry. Schley Boulevard bisects the site and provides access to the north connecting the site to the shopping districts of Perry and Warren.



vicinity aerial



site aerial

Introduction

Avenues. Magnuson Street connects the site to the local school and play fields. The Urban Trail is planned to traverse the southern edge of the site, providing exceptional pedestrian and bicycle access to downtown and the Seattle ferry.

The site is currently serviced and within close proximity of all urban services. Medical facilities are within walking distance directly west of the site in the Harrison Hospital Economic Center. Fire and emergency services are stationed a few blocks to the north. The regional Library and Post Office are a short distance away. The shopping districts of Perry Avenue and the Manette Neighborhood Center are within walking distance while the larger Warren Avenue commercial corridor is easily accessible. Wheaton Way, Schley Boulevard and Magnuson Street are serviced by existing bus routes. Mountain View Middle School is located blocks from the site while View Ridge elementary is a short distance to the northwest. Employment opportunities are located in the various centers surrounding the site. The site is currently served by all public and private utilities.

The design team commenced with a thorough inventory and analysis of the existing conditions, both natural and developed. In order to conform to the vision of the citizens of Bremerton, the Bremerton Comprehensive Plan was utilized to form the basis for land use and design decisions. Using this information as a guideline, several concepts were developed as a basis for discussion of possible development opportunities. These concepts were presented, discussed and revised to address the concerns of city staff, neighbors and stakeholders. This process and the end result is the East Park Sub-Area Plan. This plan forms the direction for the design of a Master Development Plan. This Sub-Area Plan is the direct result of combining the natural and developed conditions with the vision of the citizens of Bremerton.

A hierarchy of land uses was utilized to zone residential densities, and commercial opportunities. High density multi-family and commercial activities are situated along the Wheaton Way corridor and adjacent to the Recreational Activity Center.

High density attached single-family aligns the Schley Boulevard corridor creating an urban lineal core and concentrating density adjacent to this minor arterial and the Recreational Activity Center. Medium density attached and detached single-family housing is concentrated at the interior of the site encompassing the majority of the area and surrounding active open space parks. Lower density detached single-family homes form the edge to the existing neighborhoods and the native forest. The native forests have been left to evolve as a natural conservation area. Open spaces have been scattered throughout the site to provide for passive and active recreation and protect the few significant trees within the development area.

Access within and through the site was designed to complement the existing arterials while providing numerous transportation choices and routes. Narrow travel lanes and street parking are utilized to reduce impervious area and provide traffic calming measures. Greenways, tree walks and tree lawns are incorporated for pedestrian and bicycle safety. The greenways were also conceived to provide wildlife corridors to connect the native forest on the west and southeast of the site. In addition a thorough study was completed to assure proper emergency vehicle access and staging areas.

Stormwater conveyance is conceived as an amenity to help create areas of natural vegetation within the developed site while providing for cleansing, infiltration and conveyance in a natural system. A system of swales and rain gardens are incorporated into the landscaping of the streets, parks and greenways, providing visual interest and wildlife habitat.

The minor arterial, Schley Boulevard, which bisects the site, was left in its original alignment to focus on enhancement of the existing roadway and utilities rather than replacement. Utilizing existing services reduces the impact on natural resources while focusing on improving these existing city services.

Introduction

The development consists of numerous residential unit types. This will create a more diverse neighborhood providing for the numerous lifestyle requirements. Care has been taken to integrate the different types, size and expense of the housing types throughout the community. Although density has been segregated, lifestyle has not. In addition, the architectural character is envisioned to encompass all varieties from traditional to contemporary.

All this is packaged into a sub-area comprehensive plan for the development of the East Park Public Sector Redevelopment Site. By combining the natural and developed amenities with the vision of the citizens of Bremerton, we will create a unique and progressive neighborhood that takes both amenities and aesthetics into consideration.

The East Park Public Sector Redevelopment Site will fit well into the City of Bremerton and illustrate the city's awareness of the needs to provide functional design within an environmentally friendly development. The homes will be varied in style and cost, encouraging diversity among the residents. Walkways, porches and common areas will encourage neighborly interaction and foster a sense of community. Parks, natural habitat, and tree preservation will provide natural spaces within an urban environment. This plan will integrate into the existing urban fabric while retaining a neighborhood feel.

Comprehensive Planning

GMA and Comprehensive Planning

The Washington State Growth Management Act (GMA) sets forth 13 basic planning goals ranging from Urban Growth to Public Facilities and Services. GMA requires cities to prepare Comprehensive Plans that guide growth and development for a 20 year period in accord with these goals. The City of Bremerton completed its most recent Comprehensive Plan update in December of 2004. By law a City's development pattern and zoning must be consistent with the Comprehensive Plan. The following section demonstrates how the East Park Sub-Area Plan fits the framework of, and is consistent with, the 2004 Bremerton Comprehensive Plan.

Land Use Vision

The Land Use Map of the 2004 Comprehensive Plan represents the overall vision for how the City should grow and develop over a 20-year period. The Land Use Map designation for East Park is Public Sector Redevelopment Sites (PSRS) (Comprehensive Plan, Pg. 84). The Comprehensive Plan provides clear direction for land use in areas designated PSRS (Pg. 93).

"Provide areas for large-scale, planned development by public or quasi-public entities with a clear community benefit. The PSRS designation identifies special sites representing high potential for innovative development or development meeting a unique need in the community. Sites designated PSRS will be developed consistent with specific district planning efforts that address the site as well as compatibility with surrounding uses and consistency with the comprehensive plan. Potential development includes mixed type residential development with an open space component that integrates context-sensitive commercial and/or office development as a secondary component. Projects completed

under the PSRS designation will have a clearly defined community benefit such as the satisfaction of a unique public housing need."

- Density: Varies, urban in nature
- Height: 3 stories
- Character: Well integrated, planned development
- Location: As mapped, large parcel or groups of parcels in public or quasi-public ownership

The East Park sub-area plan clearly meets the vision provided for Public Sector Redevelopment Sites by the City of Bremerton's 2004 Comprehensive Plan.

- Large Scale Planned Development by Quasi-Public Entity – The East Park redevelopment is a partnership between the City of Bremerton and developer East Park LLC. The site was purchased by the developer from the City according to an agreement, which requires the developer to provide a range of public benefit and housing features. The full 47-acre East Park site will be developed according to a coordinated, well integrated master plan as displayed in this Sub-Area Plan. (See Conceptual Site Plan.)
- Innovative Development – The East Park sub-area plan calls for highly innovative development, including a range of creative housing types, a pedestrian friendly "woonerf" street, a green street, wildlife corridor and other unique features. (See Development Standards.)
- District Planning Efforts – The East Park Sub-Area plan is the product of a community-based planning effort. To create the plan, several public neighborhood meetings were held and a neighborhood Stakeholder Committee was assembled. (See Public Process.)
- Mixed Type Residential Development With An Open Space Component – The East

Comprehensive Planning

Park Sub-Area plan calls for a wide range of mixed housing types including attached and detached single-family homes, townhomes, cluster housing and mixed use multi-family. An open space network is an integral part of the development, including conservation, passive, active, and tree preservation open spaces totaling nearly 27% of the 47-acre site. (See Open Space Plan.)

Commercial and /or Office Development as a Secondary Component - The East Park Sub-Area calls for a secondary commercial and office development to be integrated into the project. Mixed use development is allowable in a specific location as are townhouses with live/work capabilities.

Comprehensive Plan Elements

The 2004 Bremerton Comprehensive Plan is organized into seven chapters called elements, which distinctly address the subjects of Land Use, Transportation, Housing, Utilities, Economic Development, City Services and Environment. The East Park Sub-Area Plan responds specifically to numerous goals and policies in each element, further demonstrating consistency with the 2004 Bremerton Comprehensive Plan.

a. Environmental Element

The Sub-area Plan for East Park incorporates the principles of stewardship of the environment through sustainable design. By concentrating the development area, approximately 27% of the site remains in permanent open space in the form of natural open areas and parks of a variety of sizes and uses. Neighborhood parks including the two central parks, the conservation parks and numerous smaller "pocket parks" are spread throughout the neighborhood. In addition, the latest techniques in sustainable engineering for storm water detention, cleansing and dispersal including bio-filtration, surface conveyance and surface detention and infiltration will be used in

the neighborhood. Reduced run-off will minimize the off site impacts of storm water. Many existing trees will be retained and incorporated as the focus of the planned parks. In addition, new homes will incorporate "built green" elements and utilize the southern exposure with passive solar design. These considerations will ensure the natural feel of the area, while being sensitive to the environment.

Select Environment element goals and policies directly addressed by the East Park Sub-Area Plan include the following. (Pages EN-12 - 18)

Goal E3: Reduce and prevent environmental pollution of air, water, light, noise, and soil.

(E3C) East Park's proximity to transit, shopping, recreation and employment should reduce the dependence on auto use.

Goal E4: Encourage conservation of critical areas and nonrenewable resources.

(E4A, E4B, E4C) The native madrona forest and riparian corridor are left in their natural state. The majority of significant trees are saved with the most significant set in tree preservation easements. Additional trees will be planted along the streets and open spaces greatly increasing the amount of trees.

Goal E6: Protect, preserve, and restore the habitats that support Bremerton's diverse ecosystems.

(E6B) East Park will preserve the Native Forest along the west and eastern boundaries linked by a natural corridor.

Goal E7: Create an open space system that increases the amount of open space, protects Bremerton's natural resources, and provides a source of beauty and enjoyment for all residents and visitors.

Comprehensive Planning

(E7C) Pathways and trails will connect the open spaces.

Goal E8: Protect and preserve Bremerton's unique marine and fresh water resources.

(E8C) LID strategies are proposed which will include bioswales and rain gardens. These systems will provide storm water infiltration, cleansing and conveyance.

Goal E9: Incorporate efficient energy conservation strategies into all aspects of Bremerton's growth and development.

(E9A, E9B, E9D) Energy efficient building design with some use of alternative energy is planned.

b. Transportation Element

Roads and streets bring a new standard of environmental stewardship as well as increased safety to residents. By incorporating narrower street widths throughout East Park, storm water runoff is reduced, thereby allowing natural and sustainable retention and cleansing processes. Narrower streets also mean slower traffic throughout East Park and safer streets for pedestrians and children. All street sections meet accepted national standards for fire protection and emergency service delivery. The "safe streets" planning approach provides the City with designated "queuing lanes" throughout the site that allows multiple service areas for emergency vehicles.

The East Park Sub-Area plan encourages alternatives to the automobile by building at a transit-supportive density. Few other neighborhoods in the city have as high a concentration of housing as is proposed for East Park. The SPA is located adjacent to two Kitsap Transit bus lines providing convenient transit access. The Sub-Area plan also provides choice in transportation

by incorporating a network of pedestrian and trail linkages to downtown, the Harrison hospital district and the Manette neighborhood center.

Select Transportation element goals and policies directly addressed by the East Park Sub-Area Plan include the following. (Pages TR-11 -18)

Goal T1: Encourage the development of an integrated multi-modal transportation system that provides a variety of convenient transportation choices to improve the movement of people, goods and freight.

(T1A) East Park will provide transit locations, a pedestrian path system and minimize street widths to reduce speeds. In addition, the neighborhood will incorporate green space into the street system.

Goal T2: Develop transportation improvements that reflect Bremerton's natural, historic, maritime, waterfront, and urban character, consistent with the short and long term vision of the Comprehensive Plan.

(T2B) East park will incorporate street trees and landscaping throughout the neighborhood. Similar to Bremerton's older neighborhoods, on street parking will be designed on all roads and include traffic calming devices. Attractive street and pedestrian lighting will be incorporated into the design to complement the architecture.

Goal T3: develop and maintain a transportation system that respects the natural environment, including the quality of Bremerton's air, water and natural habitats.

(T3C) East Park will incorporate a transportation system that integrates into existing streets. Low impact design (LID) techniques will allow the new road system to reduce pavement by approximately 50% acres minimizing the impacts of storm water runoff and heat island effects. Most of the acres will be replaced with natural vegetated

Comprehensive Planning

stormwater controls (bioswales and rain gardens). Open corridors will also occur throughout the site providing natural habitat.

Goal T4: Protect residential neighborhoods from negative transportation impacts.

(T4C) East Park's design maintains Schley Boulevard's current location, allowing traffic to flow through the site. Traffic calming measure along Schley will provide a safer environment than what currently exists. The combination of street trees, town homes, on street parking and "bump outs" should decrease traffic speeds. Internal roads will also incorporate traffic calming strategies by reducing the streetwidth, providing street trees and on street parking.

(T4D) Encourage transportation agencies, especially public transit, to operate and maintain local and regional services and facilities that reduce the need for single occupancy vehicles and support the needs of transit dependant users.

(T4A) East Park will be a transit oriented community. Not only will East Park be a walkable and bicycle friendly community, Kitsap transit will serve the neighborhood providing connections to downtown ferry terminal and other transit stops.

c. Housing Element

A broad spectrum of housing choices will be available at East Park, many at housing prices unavailable in other parts of the City and County. By concentrating development and by providing smaller but highly functional lots, land development costs are reduced and lot prices for both single and multi-family homes can be kept lower. View lots and park frontage lots will provide sites for the mid to high price range while cluster and carriage homes would be more affordable providing a balanced neighborhood. Equal access to amenities and a pedestrian friendly environment encouraged by lower speeds, sidewalks and

parks within walking distance provide an opportunity for people from varied personal and socioeconomic backgrounds to live together and truly create a community.

East Park, is an essential part of Bremerton's revitalization, bringing a mix of residential opportunities to the City of Bremerton. From the words of the Comprehensive Plan, "The City fosters the creation and enhancement of cohesive neighborhoods through infill and rehabilitation projects designed with a community orientation."

New development, located at strategic locations that capture local amenities and complement rising land values, support diverse lifestyles and a broader, more innovative choice of housing types.

Select Housing element goals and policies directly addressed by the East Park Sub-Area Plan include the following. (Pages HS-11-18)

Goal H3: Provide a variety of housing types and densities to meet changing needs of Bremerton residents:

(H3C) East Park is designed to provide housing for a diverse demographic group. Accessory dwelling units (ADUs), carriage homes, cottages, affordable 2 story family homes and luxury homes allow for the needs of all family types and economic ability.

(H3D) ADUs, carriage homes and small attached townhomes provide inexpensive housing and opportunities for short term residents into a predominately owner occupied neighborhood.

(H3E) Cottages and clustered housing provide for sale opportunities for the elderly. ADUs and carriage unit provide for short term residents (military and students) and as many as half the units may have all living spaces on an accessible floor providing appropriate space for elderly and handicapped.

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(H3H) East Park will provide a variety of creative housing types. Live work opportunities are proposed along Schley Boulevard providing space for home occupancy or mother-in-law units. Also, ADUs and for sale carriage units will provide affordable housing opportunities creating a more diverse housing mix.

Goal H5 Promote access to quality, affordable homes for all Bremerton residents, regardless of their economic capabilities or special needs.

(H5A) ADUs, cluster housing and compact townhomes provide for more affordable, priced homes. Many single family detached and townhomes will allow ADUs. These units would have street frontage or access along the woonerf and be designed to be compatible with neighboring homes.

(H5F) The increase in density reduces the cost of infrastructure by minimizing length of services.

Goal H6 Build strong, cohesive neighborhoods with a majority of Bremerton Households owning their own homes.

(H6A) The smaller homes provide for more affordable home ownership close to public transit and city employment centers. The majority of the homes are envisioned to be owner occupied with no large scale affordable apartment building.

Goal H7 Promote safe, attractive, livable neighborhoods that will attract homeowners.

(H7B) Two large parks and multiple pocket parks provide for neighborhood recreation.

Goal H8 Promote social interaction as well as neighborhood identity and initiatives.

(H8B) Building orientation and an accessible open space system will provide opportunities for social interaction.

(H8C) Sidewalks separated from the traveling lanes and green ways provide safe, pedestrian ways through the neighborhood.

Goal H9 Ensure coordinated, effective planning and management of housing programs and development issues.

(H9F) East Park's increased density will provide a broader customer base for more affordable utilities.

d. Community Character Program

The architectural character of East Park will be modeled after the attractive older neighborhoods in Bremerton. The architectural design of the homes will draw upon the rich and varied styles that typify many of Washington's best communities. A blend of traditional and contemporary styles will provide variety and a warm charm to the neighborhood. Garages will be accessed either by an alley to the rear of the homes or from a front driveway leading to garages pulled well back from the front of each home. Front porches and picture windows enhance a pedestrian friendly environment. Planter strips, bio-filtration swales and sidewalks will line streets with an integrated pattern of street trees. Home types will be intermixed as they often were in historic communities. Large and small homes, modern and traditional, attached and detached will share the parks and fill the streetscape. High quality landscaping will compliment the architecture and blend naturally into the topography. The homes built at East Park will all have porches or a covered stoop. The porches will encourage people to meet their neighbors as well as provide a comfortable gathering place to sit and converse with family members or passing neighbors. The relationship of the buildings and streets should enable residents to create a safe

Comprehensive Planning

neighborhood by providing eyes on the street and should encourage interaction and community identity. By creating these opportunities for impromptu meetings, neighbors will create natural surveillance while feeling connected to their surroundings and to each other.

Attractive lighting will be located in the neighborhood streets and in the alleys and parks. Streets will include "bulb outs," identifiable crosswalks and other traffic calming devices to slow traffic and protect pedestrians. Guest parking will be located in close proximity to the homes. Shrubs and trees will be placed with safety as the first priority, minimizing blind corners and hiding places while still providing a lush streetscape that will enhance community character.

Goal CC1 Demonstrate excellent urban design qualities in new development.

(CC1H) Although design guidelines are not anticipated, initial design of specific units would include ADUs or other accessory uses assuming that they are compatible to the main structure.

Goal CC2 Assure that new development relates to surrounding uses and provides for urban livability.

(CC2A) Zoning and design standards are utilized to create higher densities along Schley Boulevard with lower densities adjoining existing neighbors.

(CC2B) The architectural character will complement Bremerton's established neighborhoods.

(CC2C) East Park will provide a variety of housing types, such as townhomes, clustered homes, single family detached homes, carriage homes and condos, that will provide more opportunities for prospective residents.

(CC2E) Architectural detail is enhanced with the use of porches and stoops. Active live/work space is proposed along Schley Boulevard at street level.

(CC2F) Two large active and passive parks will be developed incorporating existing trees in their design. In addition, street trees will be planted to enhance the right of ways.

Goal CC3 Provide for a safe, pleasant and rich pedestrian experience.

(CC3C) The combination of tree-lined streets with sidewalks and Greenways provide for a safe and pleasant pedestrian experience.

(CC3D) Currently, two transit stops serve the site. A third stop is planned near the mid point of the development.

Goal CC4 Promote the development of areas of special character, encouraging a diversity of communities within the city.

(CC4A) Development standards will encourage diversity while creating a special character for East Park.

e. Land Use Element

As noted above, the East Park Sub-Area Plan meshes closely with the Land Use Element of the 2004 Bremerton Comprehensive Plan. East Park's redevelopment meets direction and vision set forth for designated Public Sector Redevelopment Sites (PSRS). The redevelopment of East Park will contribute to an orderly and logical development pattern for the city as a whole. The East Park neighborhood will be situated in close proximity to employment, at the Harrison Employment Center and the Downtown Regional Center; recreation at the YMCA, Bremerton Ice Arena and adjacent Madrona forest; neighborhood services and shopping

Comprehensive Planning

at the Manette Neighborhood Center, as well as the established Manette residential neighborhood.

Select Community Character element goals and policies directly addressed by the East Park Sub-Area Plan include the following (Pages CC-14 - 24):

Goal LU1: Identify and enhance distinctive neighborhoods, communities, and Centers throughout the city.

(LU1E) East Park will be designed to foster community interaction creating a sense of place.

Goal LU2: Integrate an open space system into the land use pattern that increases the amount of open space, protects Bremerton's natural resources, and provides a source of beauty and enjoyment of all residents.

(LU2C) East Park will provide approximately 13 acres of open space integrated throughout the community. Centrally located active and passive parks will provide recreation opportunities while pedestrian green streets will provide connections to the YMCA and western trail system.

Goal LU3: Create an environment that will promote growth.

(LU3E) The East Park Sub-Area Plan development standards will provide provisions to allow site specific zoning flexibility.

Goal LU4: Provide for walkability throughout Center and Neighborhoods.

(LU4B) East Park will provide a pedestrian circulation network throughout the site connecting homes to transit stops, YMCA, and park space.

Goal LU15: Assure that future land uses and land use patterns conserve and protect groundwater resources.

(LU15B) East Park's proposed natural storm water system will attempt to infiltrate as much as possible to recharge aquifer areas.

Goal LU17: Adopt and implement appropriate standards and regulations for stormwater management. The City of Bremerton should adopt and implement regional plans, strategies and standards as appropriate, including but not limited to the Seattle/King County Storm Water Manual, REMA maps, and the Puget Sound Action Team's 2000 Water Quality Plan.

(LU 17) East park will use the latest LU storm water strategies.

f. Economic Development Element

The City of Bremerton is in the middle of an aggressive revitalization and development program. The East Park development is an essential element in achieving the City's vision. Currently, the city's home ownership accounts for 40% for the total housing inventory. According to the Mayor's office, they envision this ratio flipped to 60% home ownership and 40% rental market. East Park will provide over 400 new homes with approximately 90% of units for sale covering a broad spectrum of affordable to high-end homes.

Goal EC1: Promote a vibrant environment for economical development.

(EC1C) East Park is an essential part of Bremerton's revitalization plan. Designated Public Sector Redevelopment Site, the site will bring approximately 1000 new residents to the city. Over 90% of the homes will be

Comprehensive Planning

for sale homes ranging from affordable to high-end.

East park will provide a mixed-use element off Wheaton Way. With the close proximity to new homes, YMCA, and commercial uses, the site would provide a small neighborhood retail element with potential homes above.

g. City Services

The Sub-Area Plan for East Park calls for infill development that will contribute to efficient service provision within the City of Bremerton. Redevelopment of the East Park site allows for substantial new development within the capacity of Bremerton's existing utility and facilities infrastructure. Efficient use of existing infrastructure is a key tenet of Growth Management and sustainable development on the regional scale. Essential public services such as water, sewer, parks, and schools are already in place to accommodate the additional residents at East Park. Technical Level of Service (LOS) standards and infrastructure capacities are detailed in the Comprehensive Plan Volume II, Technical Appendix. In general terms, the development intensity proposed for East Park is well within thresholds established by the Supplemental Environmental Impact Statement (SEIS) executed along with preparation of the 2004 Comprehensive Plan.

Select City Services element goals and policies directly addressed by the East Park Sub-Area Plan include the following: (Pages CS-7 – 24)

Goal CS10 - Encourage the safety and health of residents and visitors

(CS10A) In order to achieve comprehensive plan goal 14E, minimize neighborhood street widths and crossing distances,

the design incorporates 16' x 60' queuing lanes throughout the site. These spaces are strategically located throughout the site to provide clear emergency vehicle staging areas. In addition to the absence of dead-end roads, emergency access can occur from multiple routes.

Goal CS11 Improve citizen safety after dusk

Pedestrian lighting will be incorporated into the landscape design providing a safe pedestrian environment.

(CS11A) East park will provide multiple park space for both active and passive recreational opportunities.

Goal CS14 Facilitate the provision of utilities that are environmentally sensitive, safe and reliable, aesthetically compatible with surrounding land uses, and available at reasonable economic costs.

(CS14A) New utilities will be sub-surface.

Goal CS18 - Encourage a sense of place identity within neighborhoods

(CS18A) East Park is at a unique location. East park responds to the spectacular views, native Madrona forest and the YMCA providing wonderful opportunities to create a sense of place.

Design Process

Design Process

In order to assure proper land stewardship and provide development in compliance with the Bremerton Comprehensive Plan, the design team assessed the existing conditions and analyzed how they could enhance the vision of Bremerton.

Preserving Trees

Mature broad-canopy trees are important to our environment for many reasons: in summer, they provide shade and reduce ground and air temperatures; in winter, they provide wind protection; they improve air quality by absorbing pollutants; they protect nearby waterways by filtering and reducing storm water run-off; and they reduce soil erosion. A certified arborist has field surveyed all existing trees and has identified approximately 90 trees and the unique Madrona forest to the west as great value to the community. Most of these trees in the center of the site were planted in the 1940's when the site housed World War II shipyard workers. Their age, quality and quantity make them one of Bremerton's most significant natural resources. The new development of East Park's Sub Area Plan has designed around the trees and incorporates many of them into park spaces. (See existing trees exhibit).

Storm Water Management Concept

Storm water management is a key element in maintaining and enhancing Bremerton's livability. As the city is developed, new impervious surfaces increase the amount of run-off during rainfall events and disrupt the natural hydrologic cycle. These conditions erode stream channels and prevent ground water aquifer recharge.

Streets and roofs increase the pollution levels and temperature of storm water run-off that is transported to our streams and rivers. Protecting these waters is vital for a great number of reasons, including fish and wildlife habitat, drinking water and recreation. Although existing soil conditions are less than ideal, East Park's storm water management system will attempt to use the best Low Impact Development (LID) strategies for the site. LID uses topography, vegetation and soil features to naturally infiltrate rainwater into the groundwater aquifer where it falls. LID reduces the need for underground conveyance systems and is a foundation of sustainable development on a community wide scale. East Park will have less underground storm water piping than a comparable traditional development. Storm water from the public streets is treated in biofiltration areas (swales and rain gardens) located within the public right-of-ways. Biofiltration areas are designed to allow run-off to filter through the planter soils and then infiltrate into native soils where possible. Small storm events are infiltrated by the swales and rain gardens. (See storm water concept exhibit).

Circulation

The City of Bremerton's Comprehensive Plan addresses many key transportation elements that the design team incorporated into East Park's design. Maintaining connectivity, reducing speed and providing a safe pedestrian environment are some comprehensive plan goals that are incorporated to provide a livable pedestrian oriented community.

Physical constraints to the east and west boundaries limit site access to three existing points. Magnuson enters the site from the east while Schley Boulevard travels

Design Process

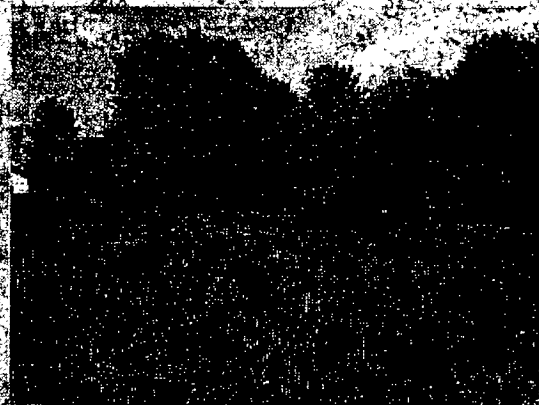
Through the site north and south bound, Schley is classified as a collector/arterial and will remain in its existing location. The majority of Magnuson will be moved, however, it would connect to Schley at the same location. By repositioning Magnuson, it allowed the design team to design a grid road system that integrates into the existing topography while providing smaller pedestrian scaled blocks. East Park's smaller blocks and narrow streets will create a safer environment, minimizing the influence of the automobile and encourage pedestrian activity on sidewalks and through green streets.

Informed by the comprehensive goal T4E "minimize neighborhood street widths and crossing distances", the design team created narrower street sections and at places replacing the typical pavement section with a "green street" or linear park. These green streets would provide access to parks, the YMCA and to the Madrona forest and function as part of the open space network. They will have pedestrian pathways that will run through them, they will have homes fronting the greens and will provide access to porches and to front doors while vehicles will have access via an alley behind.

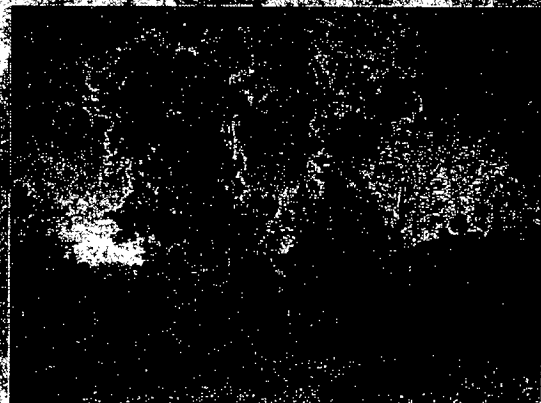
Due to the narrow street design, emergency vehicle access was carefully reviewed. Emergency vehicle queuing lanes are strategically located to provide staging areas with a minimum of two routes to each location. (See emergency vehicle coverage exhibit). In addition to green streets, the proposed road sections are narrower which has been proven to slow down traffic and thus minimizing paved area. Other traffic calming methods will also be implemented to ensure greater street safety. Compared to current city road standards, East Park road standards would reduce the amount of pavement by 5.7 acres. (See circulation hierarchy exhibit).

Habitat

In urban areas, wildlife corridors can provide important linkages in a highly fragmented landscape. Whenever possible, urban and rural parks and open spaces should be linked to form Wildlife Corridors. The design of East Park looked well beyond the site's boundaries and assessed the surrounding ecosystem analyzing ways to integrate urban density with natural systems. The plan preserves approximately 7 acres of Madrona forest adjacent city park land, adding to the preservation the city has started. Beyond the



Maple Grove and Riparian Corridor East Side



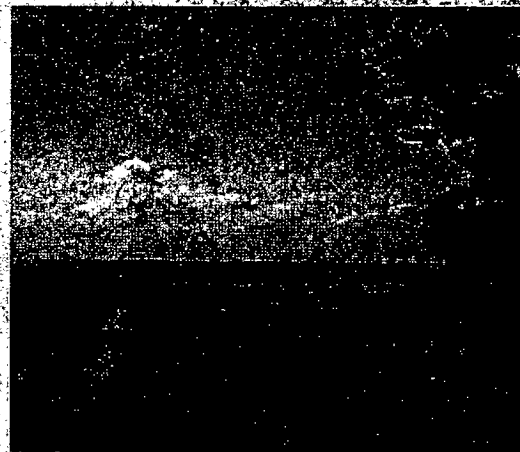
Madrona Forest West Side

Design Process

site's east boundary, a unique riparian corridor exists. This provided the design team an opportunity to connect the two spaces via an open-space corridor. (See wildlife connectivity exhibit)



YMCA and tree preservation area



views to the south

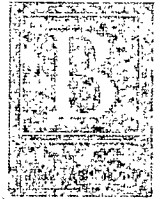


existing oak trees near Schley Boulevard placed in tree preservation area



existing tree incorporated into park design

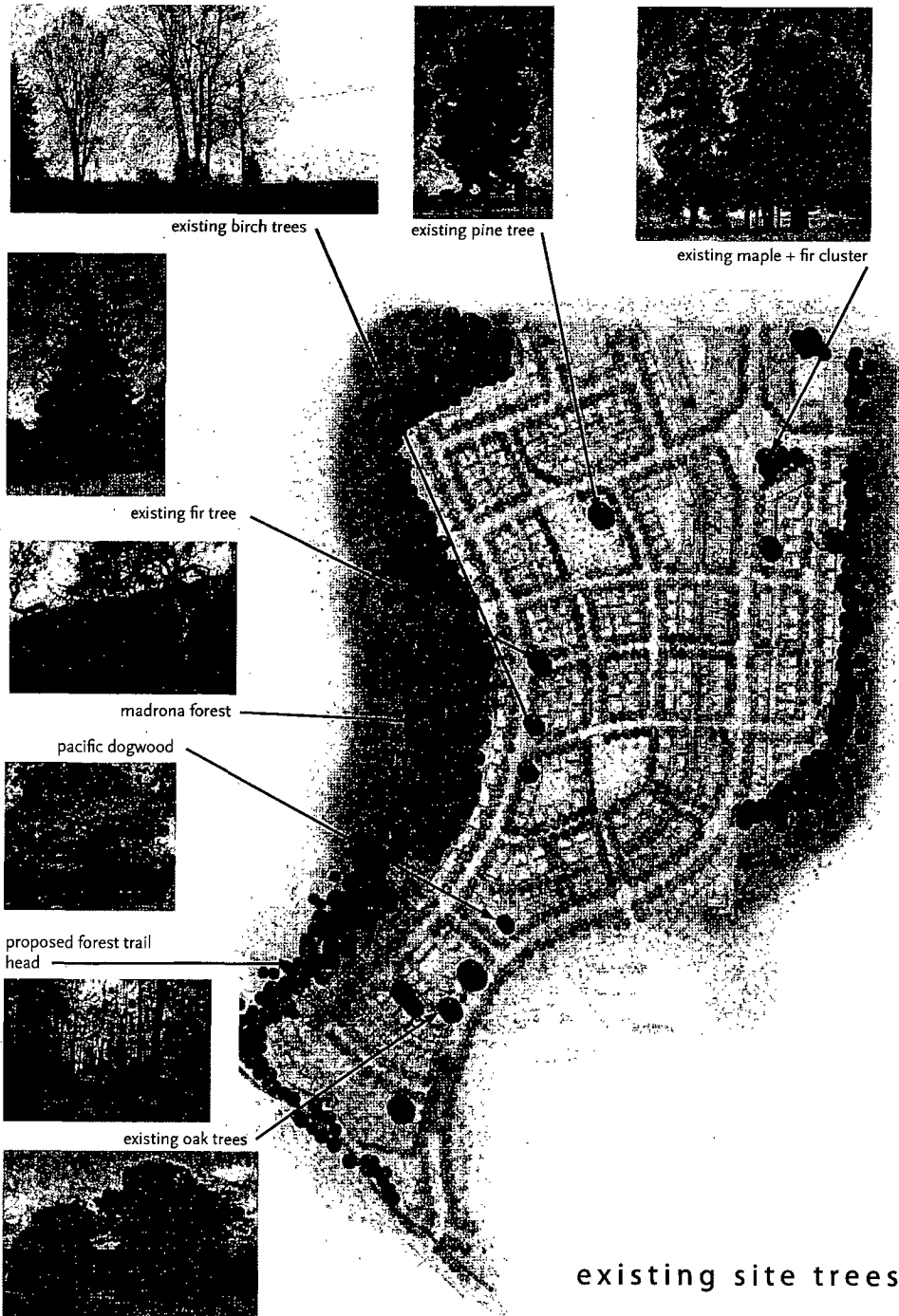
Design Process



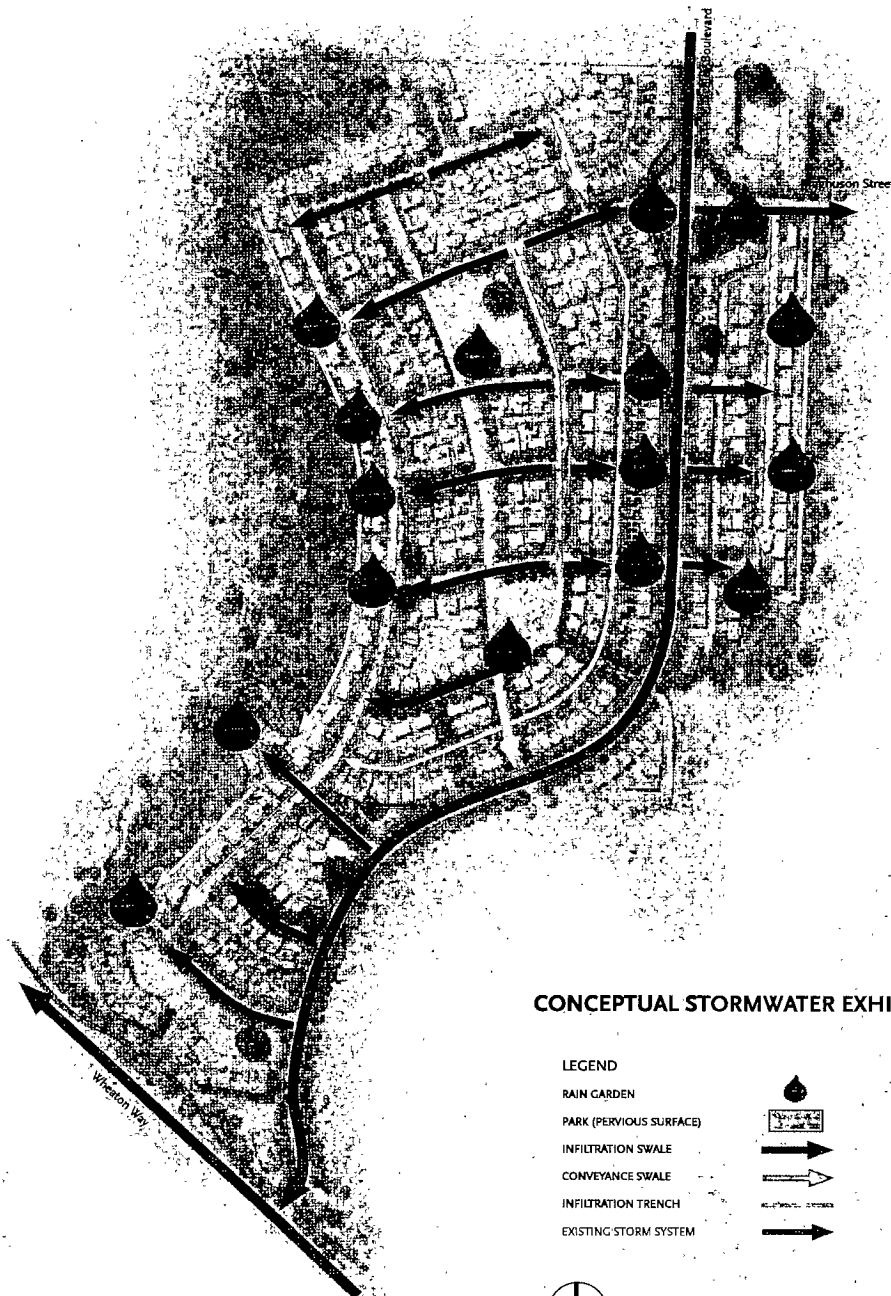
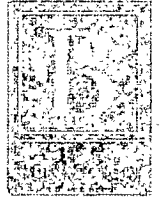
Comprehensive Planning



Design Process



Design Process



CONCEPTUAL STORMWATER EXHIBIT

LEGEND

RAIN GARDEN

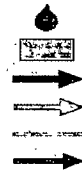
PARK (PERVIOUS SURFACE)

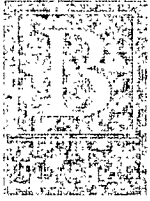
INFILTRATION SWALE

CONVEYANCE SWALE

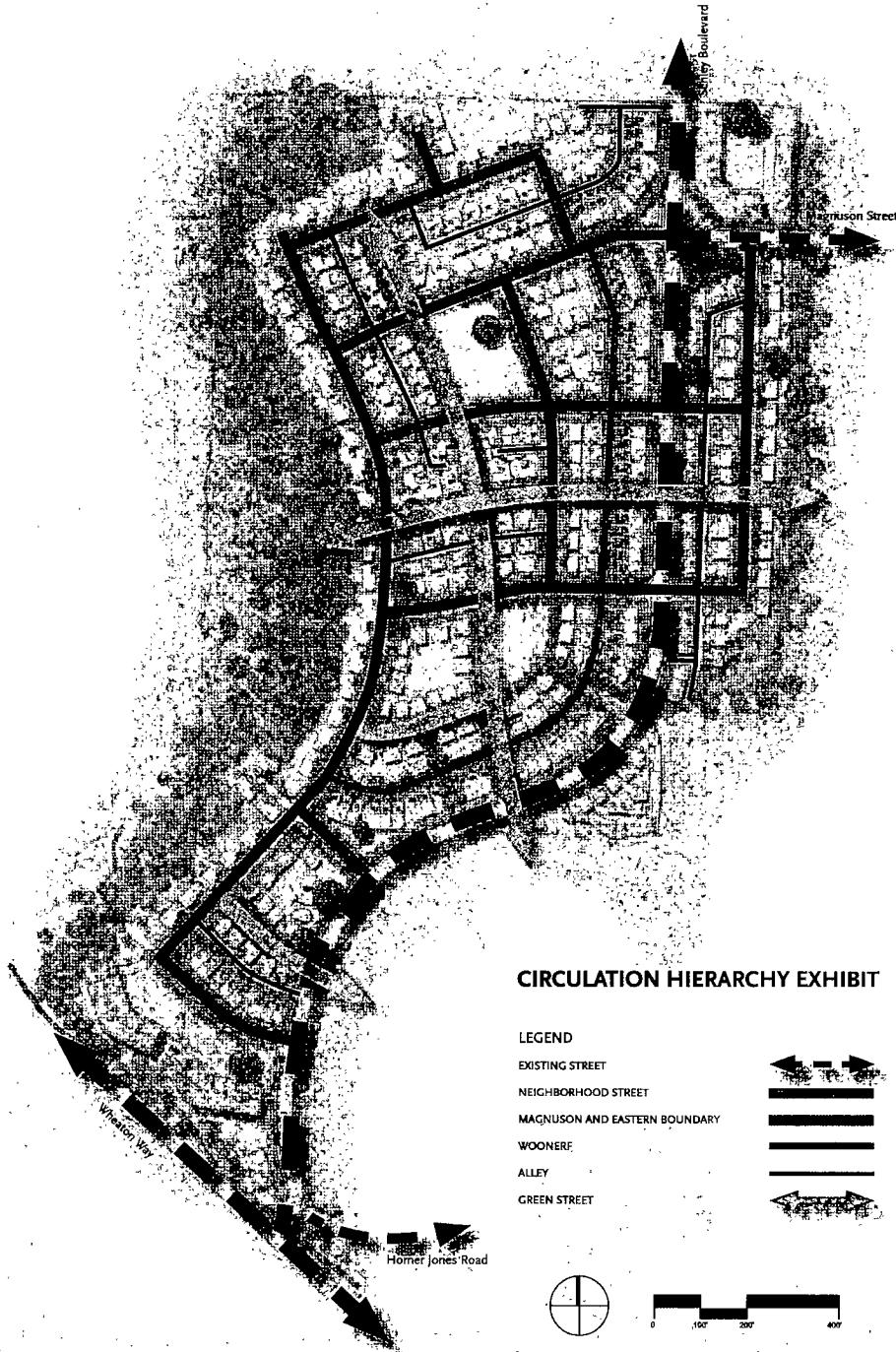
INFILTRATION TRENCH

EXISTING STORM SYSTEM

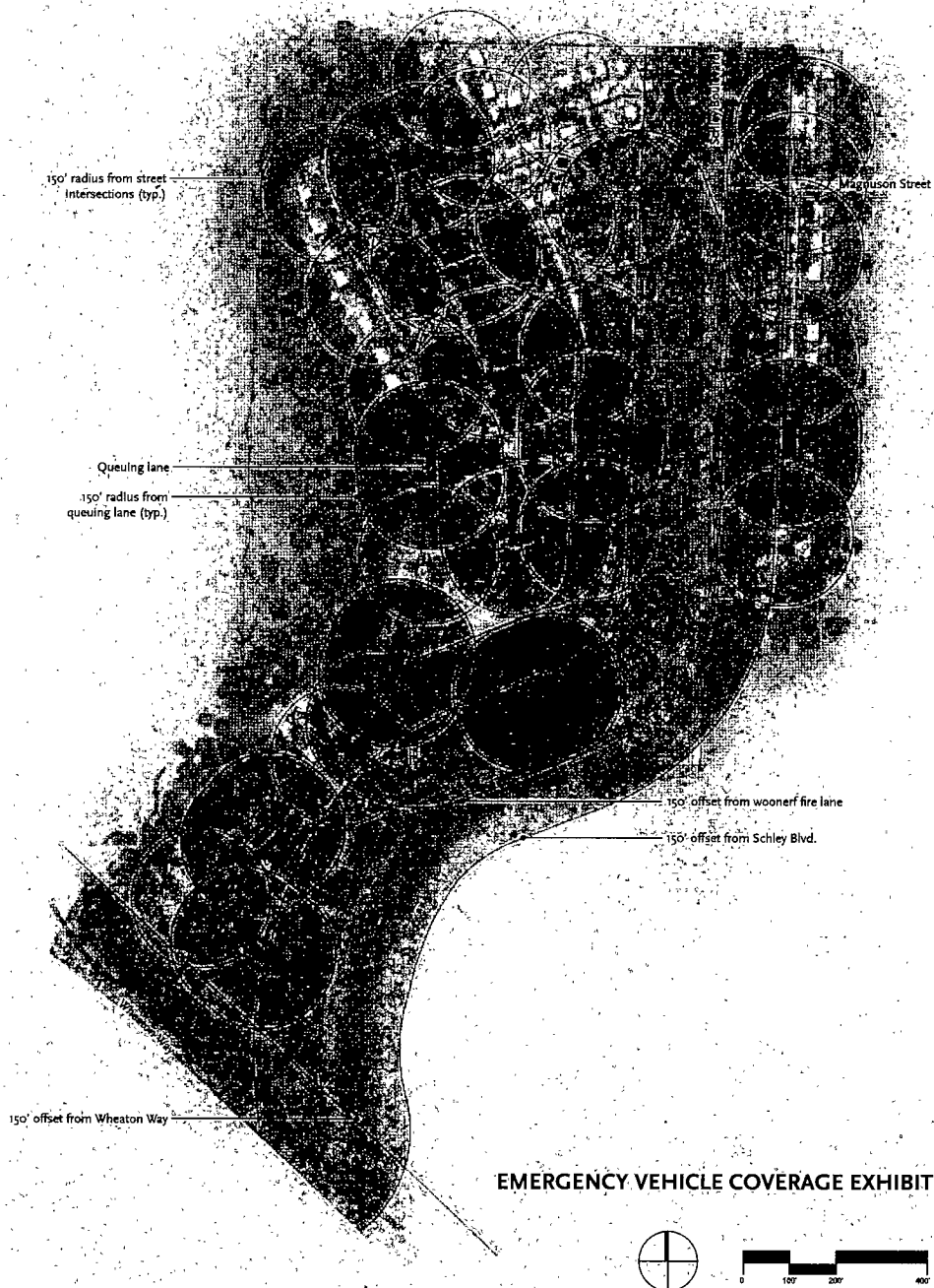
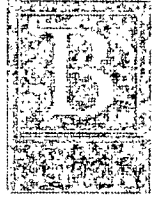




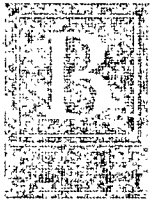
Design Process



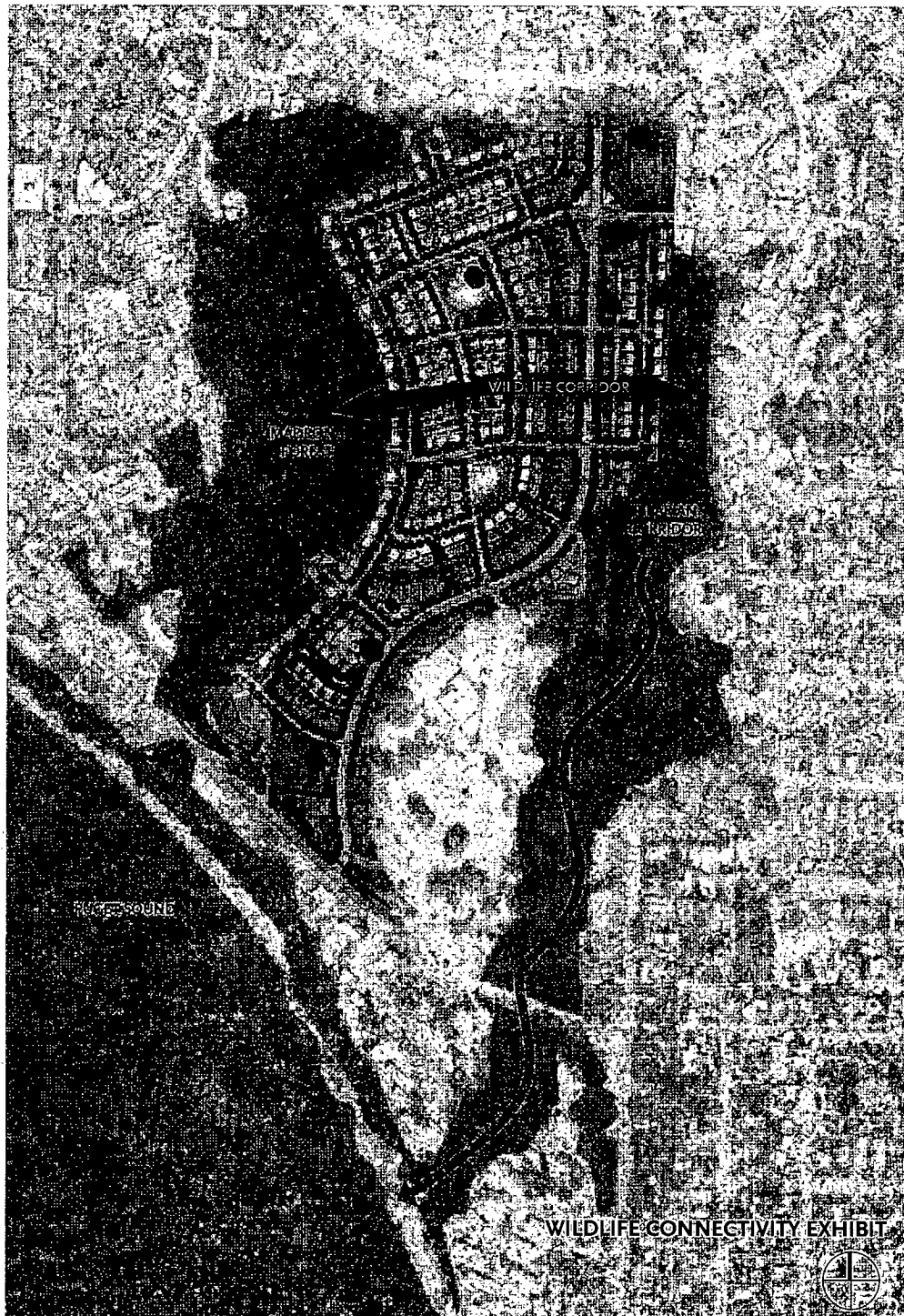
Design Process



Comprehensive Planning



Design Process



Comprehensive Planning

Public Process

Public Process

Working closely with the City and residents, the owners of East Park are creating the first community entirely built under the City's new guidelines for Master Development Zone. East Park will be the kind of neighborhood where many of us grew up, a place for community connections, opportunities for active living, and a great place for our children to be raised. This new community represents an exciting collaboration between the land owners of East Park and the City of Bremerton and its residents. The City wants to help developers create new communities with the best qualities of Bremerton's neighborhoods. The result is the emergence of a new community rooted in traditional values and patterns.

The East Park sub-area planning process was a collaborative effort. In addition to the design team and city staff, numerous public meetings were held. The goal was to encourage all residents and stakeholders to be part of East Park's design. Public and stakeholders meetings were held to discuss opportunities, implications and other issues that would occur during the revitalization of East Park.

In preparation for the public meetings, the design team posted two 4 x 4 signs on the site. One at the corner of Magnuson and Schley and the other at the intersection

of Wheaton way and Homer Jones road. In addition to the signage, the city sent a postcard to all district 3 and 5 residents within 600' of the site indicating the time and meeting objectives. Attendance at the public meeting was strong. The design team presented the project schedule, existing



public meeting images



Public Process

conditions and initial architectural and site concepts for the resident's comments, ideas and questions. The design team addressed comments and questions via verbal interaction, written "post-it notes" and emails to the city. The following are summaries of the public meetings.

Public Meetings:

The following (5) public meetings were held to solicit input from neighbors and stakeholders.

28 June 2005 - Neighborhood meeting at Manette Senior Center

Presentation of the existing conditions and design process that led to two different conceptual site plans. Character boards illustrating potential building and landscape architecture were displayed to facilitate public sentiment.

26 July 2005 - Neighborhood meeting at Manette Senior Center

Presentation of a revised site plan that incorporated the comments received from the June 28 meeting. Architectural concepts were added to this presentation as well as the existing conditions, landscape character and architectural character boards.

6 October 2005 - Stakeholders meeting at Mayor's conference room, Government Center

Power point presentation of the existing conditions, design process and conceptual site plan with landscape and architecture concept sketches. This presentation included design standards for lot configuration, building massing and street design.

1 November 2005 - Planning Commission Workshop at Meeting Chamber, Government Center

Power point presentation of the proposed Sub-Area Plan. This presentation included the conceptual site plan, landscape concepts, architectural character concepts and proposed design standards, along with the process and existing conditions reports.

15 November 2005 - Planning Commission Hearing at Meeting Chamber, Government Center

Planning commission hearing on the proposed Sub-Area Plan.

Public Process

06.28.05 Neighborhood Meeting Questions and comments from residents

Questions and initial responses from design team

Will East Park include play structures?
There will be opportunities for play structures.

How many phases? Will each phase have a balance of product types?

Probably four phases with a balance of product types in each phase. Number of product types may change depending on market demands.

Will the roads have sidewalks? Yes.

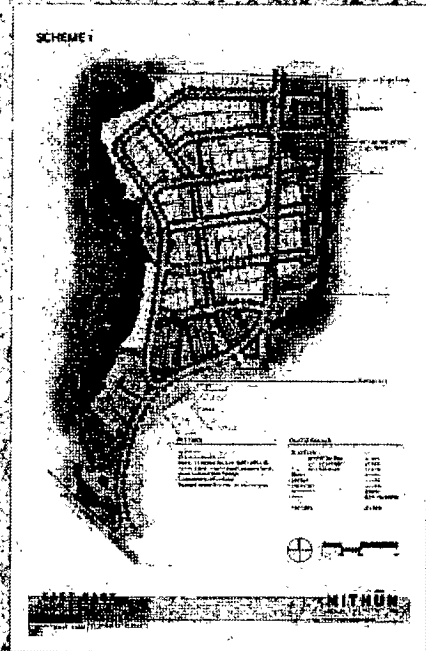
Will the utilities be underground? Yes, however the high voltage line along Schley Blvd will remain above ground.

Additional trips will occur on Schley. Are you going to assess the traffic impacts? Yes, there will be a traffic analysis.

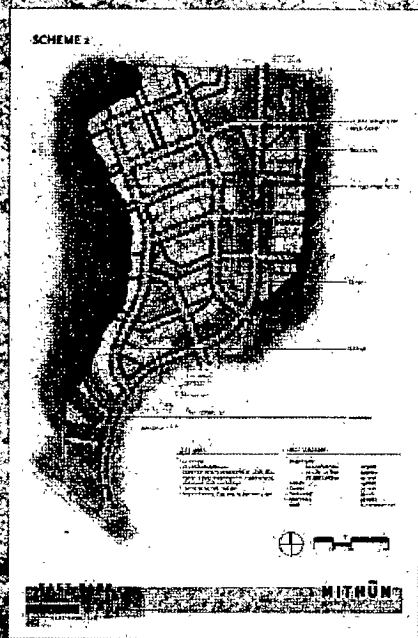
Any thought on a perimeter trail system? Yes. We plan on a trail connection through the madrona forest to the existing Girl Scout trail and to the hospital.

What are carriage and cluster units?

A carriage unit is a smaller home above a shared garage. Carriage units increase the variety of housing types and provide



Site concept



Site concept

Public Process

more affordable units. A cluster unit is a home clustered around a common open space.

Who will maintain open spaces? Will a homeowners association manage them? Yes.

Will there be areas for guest parking? Yes there will be guest parking on either the lot or the street.

Will you explore condos at the top of the hill to capture views and preserve internal views? We can explore that opportunity.

Is the developer paying for infrastructure? Yes.

Areas for RV parking? We do not plan on designated areas for RVs.

I have seen this project a couple times, does the developer own the property? Yes, the developer has purchased the property.

The design team gave the residents an opportunity to walk around and write anonymous comments on post-its and place them on image boards.

Scheme 1 Comments:

- Put the condos on the north.
- Consider putting the madrona forest into a conservation easement.
- Porches! Particularly facing the commons.
- Access to Harrison Hospital is needed.
- Please be sure there are some single level (accessible) units. Good for elderly and handicapped.

Love the "L" shaped commons.

Consider placing the homes to maximize the views.

Increased traffic on Wheaton Way will interfere with ambulance passage to Harrison Hospital.

Scheme 2 Comments:

- Keep and augment trails through forest. This road pattern has a better feel than the other scheme.
- Multi-family along Schley Blvd is good.
- To attract families you will need small playgrounds (sandbox, swing set) among single family homes. Little kids do not use skate parks.
- Be nice to young families.
- Please consider garages on side or behind homes where possible. Avoid the spout house.
- Stop sign at Magnuson and Schley.
- Any storage facilities planned?
- Are streets wide enough for parking on both sides? If not, is there room for visitors in the street?
- Could there be a general parking area/lot within walking distance to most homes.

General Comments on other Image Boards:

- Think Craftsman.
- Please don't (arrow referring to the blue and yellow modern building).

Public Process

7-26-05 Neighborhood Meeting

Questions and comments from residents:

Request to post drawings/images on city web site

How many acres are on the site?
47 acres

Comparison of proposed number of units to current zoning maximum units?

Proposal = 462 units; Current zoning = over 200 units

Will there be compensation for current residents on Callahan in regard to lost

the Apartment on the North corner eliminated or spread throughout the site. We can explore that option

Concern that the clustering of apartments will lead to increased congestion and crime that is similar to the current crime situation in the existing apartments NE of site.

The traffic in that area is already too congested. How can it be controlled?

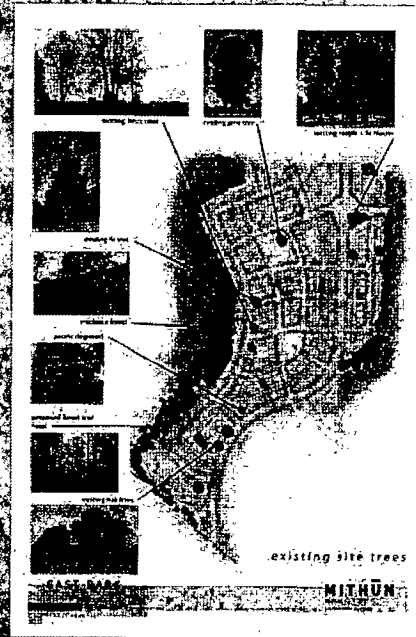
Concern that Northbound traffic to malls/stores will be congested and dangerous.

Concern for pedestrian traffic and children walking to the new school

Concern that lower income rental units will increase existing problems. Dept. of planning response: If you eliminate the apartments, the housing may increase in price. If built these will be quality apartments with underground garage, play areas, and trash collection. The overall



existing conditions diagram



existing tree diagram

Department of Planning

Public Process

development will bring neighborhood activity and a new community of homeowners and tenants to increase overall surveillance and safety within the development. Downtown Bremerton is now changing drastically. If done correctly, this neighborhood will change things. More quality development will improve the current conditions of the area.

What will the price ranges of the homes be? Low \$200's to \$450 is the target at today's economy. Likely more at completion.

Did you consider the possibility of cul-de-sacs within Schley Blvd. to slow traffic?

Schley is an arterial so cul-de-sacs will not work, but considerations such as thinner roadway widths, planting strips, and parked cars can be used to slow traffic.

What is the lowest priced product and how is it affordable? Apartment rentals. Suggestion to replace apartment cluster with Habitat for Humanity homes.

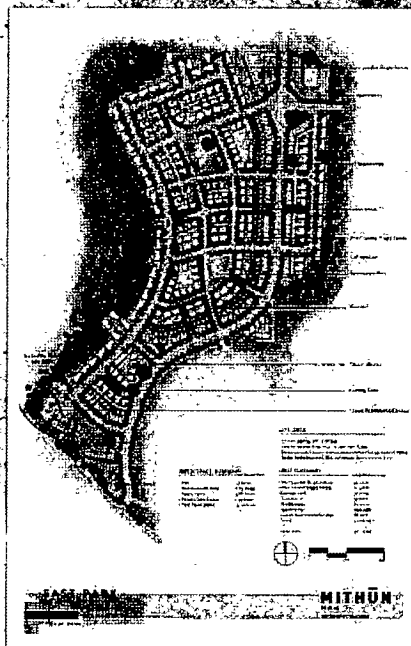
How big is the main park?

Approximately 1 acre - 210x226 sf.

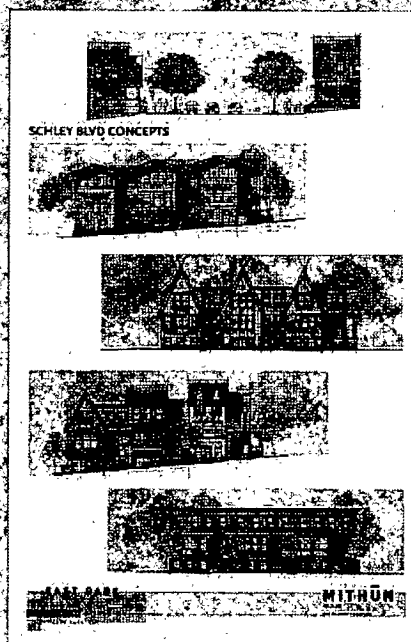
How much open space will be left upon completion?

7 acres of native growth + 5 acres of public park & green space + 1-1/3 acres of private courtyard + 3 acres of open space = 1/4 of site.

Ownership of parks - homeowners association or public ownership? We are contacting the Parks Department about these areas.



conceptual site plan diagram



conceptual building elevations

Public Process

Will there be private yards? Single family homes will have private yard space.

What is the time frame and phasing plan of the neighborhood? Construction will hopefully be well underway by this time next year. The project will be in four phases.

Are there only sidewalks on Schley? No, sidewalks will be on all the streets. Magnuson will have a sidewalk on the east side only. The west side of Magnuson will be a swale used for storm water drainage.

How much space will there be for parking at each residence? Every house will have a 2 car garage, except carriage houses and multi-family homes, with adequate street parking.

Will there be boat and RV parking? No.

City Council goal to reverse the homeownership to rental ratio from 40/60 to 60/40.

How do we reverse this ratio when we are adding so many more apartments? With apartments the overall ratio will improve the current 40/60 homeownership ratio.

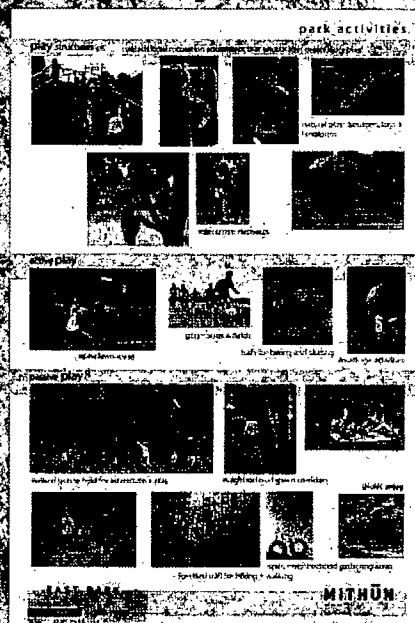
Is there a way to analyze the existing conditions in the existing apartment complex NE of site?

Concern that the density and height of townhomes on Schley will increase speed and activity of traffic.

There is currently an intensive traffic study that is underway that will address these issues.



building examples



open space ideas

comprehensive planning

Public Process

The design team gave the residents an opportunity to walk around and write anonymous comments on posters and place them on image boards. The following are the anonymous comments:

Consider universal design concepts: ramps, wider doorways, etc.

Pedestrian access to hospital is very important. Who will build the additional school before all the units are occupied?

Build a school in the development, also, more ingress/egress, more medical support.

Where will all the traffic go when everyone leaves for work at the same time?

"Apartments are a bad idea at this location near existing overcrowded area and major school/pedestrian route."

Please consider street lighting that is compatible with "dark skies".

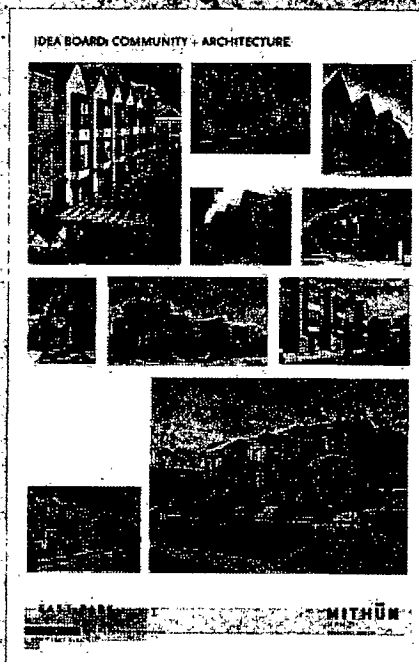
"I think you have put a lot of thought into planning. Open green space is important. Do be sure to save existing trees."

Positive responses to the green streets

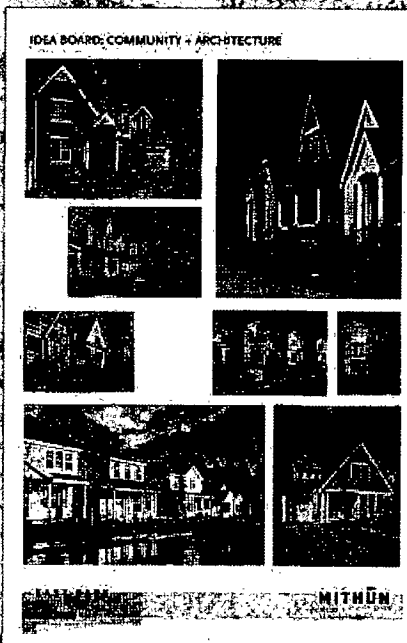
Be sure to incorporate native planting wherever possible to encourage native wildlife.

Porches!

Note: The above notes are Mithun's interpretation of the items discussed.



conceptual architecture



conceptual architecture

Public Process

10.06.05 Stakeholders Meeting Minutes

Stakeholder Committee Meeting

East Park Sub-Area Planning

October 6, 2005

Mayor's Conference Room

Norm Dicks Government Center, 345 6th St.
Bremerton

6:00pm: The meeting was called to order, everyone in attendance introduced themselves and a sign-in sheet was passed around. Andrea Spencer did a brief introduction to the planning process that is guiding this project.

6:10pm: Dick Bruskrud of Mithun began his PowerPoint presentation of East Park. Mithun's plan is to have the sub-area plan submitted by November 1st. They then hope to have their final plan completed this winter so they can have approval by spring and begin building by next summer.

The site totals 47 acres with 13 acres of open space. It is 1.3 miles from the ferry located adjacent to the YMCA and is former naval housing. Mithun plans to use a variety of methods to make East Park a unique and beautiful place to live including parks, green streets, rain gardens, narrower roadways and diverse housing types. They plan to include single family homes, off alleys or woonerfs (a Dutch alley that is 16ft wide with garage parking) and clustered homes. Through these innovations they will be reducing the amount of concrete and increasing vegetation and open space. Mithun presented a range of information related to the proposed plan including proposed road standards, emergency vehicle access, architectural characteristics, natural features, and other topics.

7:10pm: Round Table Discussion of Plan

- How are the utilities going to be run?
The electricity will be run over ground on

power lines and the sewers will be run underground. The alleys give a better ability to run wet and dry utilities separately because one can go in the front of the house and one can go in the back.

- Who will maintain the green spaces, parks, rain gardens, and trails? How affordable is that?
The homeowners association would take care of all of those places and the front yards of homes. It is unknown how much it would cost but is estimated to be "affordable". A more quantifiable amount is needed to be sure the dues are not cost prohibitive.

- Ruth Reece a Manette resident asked if East Park is going to be the name of the development. She thinks a better name would be McDougal Park because the creek that runs through the area is McDougal Creek. East Park sounds too much like West Park which makes people think of low income housing. The developer said they plan to keep the name East Park, citing that this is how the site has historically been referred to.

- Sharon Griffin from the Bremerton school district mentioned that they are planning to build a new middle school next summer and wanted to coordinate with Mithun to make sure they were not bidding against each other for contractors. Mithun assured her that they already had the contractors for East Park and would not be in competition.

- The ownership and maintenance of the large madrona forest and other parks became an issue because the parks department does not have the funding to maintain these areas. The school district would like to see more parks and fields open to their use. Some discussion was held about covenants conditions and restrictions (CC&R's) and how they could be implemented to maintain the open space areas. Councilman Nygren

Public Process

raised the possibility of a future park bond which could potentially be used to make sure the parks in this area continue into the future.

Comment was made about the increased amount of pedestrian traffic especially children crossing Magnuson Way and what could be done to make it safer.

Questions were asked regarding the location of Multi-family housing units proposed at the northeast corner of the project on the corner of Schley Blvd. and Magnuson Way. Andy Kosusko would prefer to see more single-family housing or a park in the area citing that a number of apartments are already concentrated in that vicinity. Several people in the group agreed and said they liked the condominiums on the bottom section of the project by Wheaton Way. Was it possible to get more of the multiple family units down there? Dick from Mithun said that the development agreement requires the developer to include 70 units of multi-family housing on the site. Mithun discussed that it might be possible to explore other arrangements for the multi-family units that could blend better with single family housing types.

A preference for a diversity of housing types, not just the same house with different materials on the outside was expressed. They want to see a variety of architectural styles. Mithun said their office would call on a number of different designers to make sure styles vary. They will also employ a range of products and orient housing in different directions to create a more diverse neighborhood.

Will a traffic signal at the intersection of Wheaton Way and Schley Blvd. be required with the additional vehicle traffic?

The group discussed that there once was a

signal at the Wheaton/Schley intersection location during WWII era. Mithun indicated that traffic studies have found that a signal at the location will not be necessary based on estimated additional vehicle traffic.

Will more city bus stops be needed to service East Park?

Doug Johnson of Kitsap Transit discussed existing bus routes and stops in the vicinity. While bus stops are located on Wheaton and at Magnuson, there is no intermediate bus stop on Schley. The group discussed whether an additional bus stop would be required citing the topography of the area. Kitsap Transit and Mithun will be in contact to discuss this further.

Sharon Griffin from the Bremerton School District asked what type of demographic groups would be anticipated to occupy the homes?

Mithun reported that studies indicate that there is strong market potential for young professional and young families.

Questions were raised about the ownership structure for the Carriage homes (in which one unit is located above a shared garage).

Mithun discussed how a use agreement is made between the owners of the Carriage unit and the owners of other nearby homes who will park in the garage.

7:55 pm A questionnaire was passed out containing four questions about the development. Participants were asked to email their responses back to staff by Friday October 14, 2005.

8:00 pm Meeting Adjourned.

Public Process

Response to City's 10.6.05 questionnaire:

Questionnaire 1:

1. Please describe the features of the plan you like best: Designer working with the site topography in the development of the units. Developing an ecologically sound system of water run-off using trees, shrubs, and grasses.

2. What features of the plan will provide the most community benefit? New homes that are for a mixture of citizens; Bringing more citizens to the city of Bremerton. Use of open space and retaining existing trees.

3. Are there areas of the plan that could be modified to improve it? Re-evaluate the location or mix of apartment structure in the NE corner. Not clear if the garage houses, or if they would work; Houses too close together with shared yards?

4. Is there any other feedback you would like to provide?

Maintenance of the open areas and greens. Streets must be part of the plan. Who would police the use of the fields/parks? good idea to incorporate walking paths with city plan. Concern about cost of homeowner association fees. New homes might encourage other development in adjacent properties. Traffic flow concerns in and out of development. Consider traffic light at Lower Wheaton Way and Schley Blvd. How will closure of Manette Bridge due to new bridge construction affect traffic flow?

Questionnaire 2:

1. Please describe the features of the plan you like best:

Features liked the best: the urban feeling being created and the walkability of the design.

2. What features of the plan will provide the most community benefit?

Most Community benefit: the mix of housing types, the sense of neighborhood and again the

pedestrian friendly nature of the area.

3. Are there areas of the plan that could be modified to improve it?

Modify plans: the retail center on Wheaton could include the usual Starbucks, plus a cafe/restaurant, etc. Put condos on top of the retail with parking below. Cafe could have some outside seating to enjoy the view of the city/mountains. Maybe the second floor could have offices where people from the development could actually work. What about a day care somewhere in the East Park area?

4. Is there any other feedback you would like to provide?

Other Feedback: if we do put a bus route down/up Schley, will need space for a bus stop/shelter. If they want, they can build shelter to match the architecture of the adjoining housing. They would need to maintain it, if they want one of our shelters, we would maintain it. I'm willing to work with them to locate a future bus stop somewhere in the middle of the development. Developers may also want to contact Wendy Clark-Getzin (478-6931) to discuss a possible Transit Oriented Development at Wheaton/Schley, which could be part of our Bus Rapid Transit route between Bremerton and Silverdale/Kitsap. Transit could be partners in this development.

Questionnaire 3:

1. Please describe the features of the plan you like best:

- The Bremerton School District appreciates
 - The location of the redevelopment in East Bremerton
 - The proposed single family homeowner houses to be built
 - The luxury apartments proposed
 - The park and natural setting as part of the design

2. What features of the plan will provide the most community benefit?

Bremerton School District

Public Process

We believe the park and landscaping and "green street" design will be a benefit to the entire community. The fact that this East Park development is close to downtown Bremerton and close to public transit will also provide enhanced benefits to community members who reside there or community members who visit residents there.

3. Are there areas of the plan that could be modified to improve it?

Yes, the School District feels strongly that the apartment complex proposed on Magnuson Way should be eliminated from the plan.

- First, there is already a plethora of apartment buildings in this very area that are densely inhabited, resulting in a concentration of low-income families. It is our belief that this particular area of Bremerton does not need another apartment complex.

- Second, these proposed apartments front on Magnuson Way, a busy thoroughfare and the main connection between this development and our middle school and proposed east side elementary school. There is a danger in having small children housed directly on this arterial and in increasing the density on this walk to school route.

- Third, we propose that these apartment buildings be replaced with a community park or more single family homes in that north region. If a non-luxury apartment must be part of the redevelopment plans, we would suggest that it be located further south, perhaps replaced with the proposed park development. This latter design would allow the park to be towards the north end, more accessible to the schools and residents in the already existing apartments, and would allow the proposed new

apartments to be closer to the YMCA and the services that the YM could afford to its children and families.

4. Is there any other feedback you would like to provide?

Currently, the City of Bremerton houses approximately half the poverty in the County of Kitsap. Our Mayor, our School District, and many others are working very hard to change the image of Bremerton to be more positive by increasing academic success in the schools and the amenities and opportunities provided in the City. The Bremerton School District believes adding still another high-rise apartment, which given its location, could readily revert into low-income units, does not advance this community plan. By contrast, the addition of more owned units and the more upscale apartment complex would greatly benefit our community redevelopment.

Questionnaire 4:

1. Please describe the features of the plan you like best.

I personally like the concept of green streets and open areas separating different sections of development. I was pleased to see that the developer is going to work the many old trees into the landscape scheme of the development. I think the use of natural vegetation in bio-systems are a positive approach in mitigating storm water run off. The Madrona forest provides an opportunity to make this development very unique. A trail or trails system could be established that would create a distinct character for the development and connectivity to surrounding neighborhoods and businesses.

2. What features of the plan will provide the most community benefit?

I feel the open areas and the green streets will provide for more community interaction and recreational opportunities for children and adults.

Public Process

3. Are there areas of the plan that could be modified to improve it?

I believe that the area in the southeast corner of the development where the plan calls for apartments is in the right location but needs to be more creative. I feel that buildings that are smaller or staggering sections of the buildings fronts would provide both contrast and greater aesthetic appeal from the street.

4. Is there any other feedback you would like to provide?

I feel that the architect and the developer have given a lot of thought and consideration to both the public and city comments and concerns. This development appears to be a win-win for the city and citizens of Bremerton. The plan has a variety of housing types that should appeal to different demographics. I feel that city and citizens of Bremerton are fortunate to have attracted a developer of this quality to lead the redevelopment of East Park. I expect this to be one of our shining examples of Bremerton's rebirth and to be an example of things to come.

I will close by saying that the City of Bremerton Department of Community Development must assign the appropriate priority to this project to ensure that the sub-area plan and the permitting process move forward smoothly.

Public Process

The following is a list of the comments from the three public meetings arranged by common issue groups. Each meeting is listed individually under design issues. This list is provided to help clarify common concerns and comments.

Affordability

28 June 2005 Neighborhood Meeting

No comments

26 July 2005 Neighborhood Meeting

- What will the price ranges of the homes be?
- What is the lowest priced product and how is it affordable?
- Concern that lower income rental units will increase existing problems.

6 October 2005 Stakeholders Meeting

No comments

Character

28 June 2005 Neighborhood Meeting

- Porches! Particularly facing the commons
- Love the H-shaped commons
- Please consider garages on side or behind homes, where possible
- Avoid the snout house
- Think Craftsman
- Please don't (referring to the blue and yellow modern building)

26 July 2005 Neighborhood Meeting

- Please consider street lighting that is compatible with "dark skies"
- Potatoes!

6 October 2005 Stakeholders Meeting

- Preference for diversity in housing
- Character: Variety of architectural styles

Like the urban feeling

Community benefit is the mix of housing, sense of neighborhood and pedestrian friendly nature

General

28 June 2005 Neighborhood Meeting

- How many phases? Will each phase have a balance of product types?
- I have seen this project a couple times, does the developer own the property?
- Be nice to young families
- Any storage facilities planned?

26 July 2005 Neighborhood Meeting

- Request to post drawings / images on city website
- How many acres is the site?
- What is the time frame and phasing plan for the neighborhood?
- City Council goal to reverse the home ownership to rental ratio from 40/60 to 60/40. How do we reverse this ratio when we are adding so many apartments?
- Who will build the additional school before all the units are occupied?
- Build a school in the development

6 October 2005 Stakeholders Meeting

- What will the development be called?
- Concern about competing with schools for contractors
- What demographic groups are anticipated?
- New homes might encourage other development in the area
- Add a daycare to the project
- Community benefit is the proximity to transit
- Too much affordable housing in Bremerton. Maintain upscale multi-family
- Architect and developer have given a lot of thought and consideration to both the public and city comments

Public Process

Department of Community Development must assign the appropriate priority to this project to assure the project moves forward smoothly.

Open Space

28 June 2005 Neighborhood Meeting

- Who will maintain open spaces? Will a homeowners association manage them?
- Consider putting the madrona forest into a conservation easement.
- Access to Harrison Hospital is needed.

26 July 2005 Neighborhood Meeting

- How big is the main park?
- How much open space will be left upon completion?
- Ownership of parks: Homeowners association or public ownership?
- Pedestrian access to hospital is very important.
- Open green space is important.
- Be sure to save existing trees.
- Positive responses to the green streets.
- Be sure to incorporate native planting wherever possible to encourage native wildlife.

6 October 2005 Stakeholders Meeting

- Who will maintain the green spaces, parks, rain gardens and trails?
- Possible future park bond to assure parks continue into the future.
- Community benefit by use of open space and retaining existing trees.
- Concern about maintenance of open spaces and greens.
- Who will police these areas?
- Concern about homeowners dues to maintain open spaces.
- Like the parks and natural settings as part of the design.
- Community benefit is the park, landscaping and green street design.

- Like the concept of green streets and open areas.
- Like incorporating the existing trees into landscape.
- Madrona forest provides opportunity to make this development unique.
- Green streets and open spaces provide for more community interaction and recreational opportunities for children and adults.

Parking

28 June 2005 Neighborhood Meeting

- Will there be areas for guest parking?
- Will there be RV parking areas?
- Are streets wide enough for parking on both sides? If not, is there room for visitors in the street?
- Could there be a general parking area/lot within walking distance of the homes?

26 July 2005 Neighborhood Meeting

- How much space will there be for parking at each residence?
- Will there be boat and RV parking?

6 October 2005 Stakeholders Meeting

- No comments.

Recreation

28 June 2005 Neighborhood Meeting

- Will East Park include play structure?
- Any thoughts on a perimeter train system?
- Keep and augment trails through forest.
- To attract families you will need small playgrounds among single-family homes. Little kids do not use skate parks.

Public Process

26 July 2005 Neighborhood Meeting

- No comments

6 October 2005 Stakeholders Meeting

- The school district would like to see more parks and fields open for their use.
- Like the walkability of the design.
- Trail or trail system could be integrated into madrona forest.

Roads/Traffic

28 June 2005 Neighborhood Meeting

- Will the roads have sidewalks?
- Additional trips on Schley will occur. Are you going to assess the traffic impacts?
- Increased traffic on Wheaton Way will interfere with ambulance passage to Harrison Hospital.
- This road pattern has a better feel than the others scheme.
- Stop sign at Magnuson and Schley.

26 July 2005 Neighborhood Meeting

- The traffic in that area is already too congested. Can it be controlled?
- Concern that northbound traffic to malls/stores will be congested and dangerous.
- Concern for pedestrian traffic and children walking to the new school.
- Did you consider the possibility of cul-de-sacs within Schley Blvd. to slow traffic?
- Are there only sidewalks on Schley Blvd?
- Concern that the density and height of townhomes on Schley will increase speed and activity of traffic.
- More ingress/egress.
- More medic support.
- Where will the traffic go when everyone leaves work at the same time?

6 October 2005 Stakeholders Meeting

- Concern about the increased pedestrian

traffic, especially school children

crossing Magnuson Way.

- Will a traffic signal be required at Schley and Wheaton?
- Will more bus stops be needed to service East Park?
- Currently there is no bus service along Schley. Only bus service is at Magnuson at north and Wheaton at south.
- Traffic flow concern in and out of development.
- Consider traffic light at Schley and Wheaton.
- How will Manette Bridge construction affect traffic?
- Add bus stop at center of project on Schley, provided service is extended to this street.
- Like the location of the development in East Bremerton.

Units/Product Types

28 June 2005 Neighborhood Meeting

- What are carriage and cluster units?
- Please be sure there are some single level (accessible) units. Good for elderly and handicapped.
- Consider placing the homes to maximize views.

26 July 2005 Neighborhood Meeting

- Will there be private yards?
- Consider universal design concepts: ramps, wider doorways, etc.

6 October 2005 Stakeholders Meeting

- What is the ownership agreement with the carriage houses?
- Community benefit with diverse demographic mix.
- Mixed use should contain retail and possible office and/or condos above.
- Like the homeowner houses.

Public Process

- Like the luxury apartments
- Condominiums could be smaller buildings or more modulation
- Multiple housing types should appeal to different demographics

Utilities

28 June 2005 Neighborhood Meeting

- Will the utilities be underground?
- Is the developer paying for infrastructure?

26 July 2005 Neighborhood Meeting

- No comments

6 October 2005 Stakeholders Meeting

- How are the utilities going to be run?
- Is there ecologically sound Low Impact development approach

Zoning/Planning

28 June 2005 Neighborhood Meeting

- Will you explore condos at the top of the hill to capture views and preserve internal views?
- Put the condos on the north
- Multi-family along Schley is good

26 July 2005 Neighborhood Meeting

- Comparison of proposed number of units to current zoning maximum units?
- Will there be compensation for current residents on Callahan in regard to lost views?
- Can the apartments on the north corner be eliminated or spread throughout the site?
- Concern that the clustering of apartments will lead to increased congestion and crime that is similar to the current crime situation in the

- existing apartments NE of the site
- Is there a way to analyze the existing conditions in the existing apartment complex NE of the site?
- Apartments are a bad idea at this location - near overcrowded area and major school pedestrian route
- I think you have put a lot of thought into planning

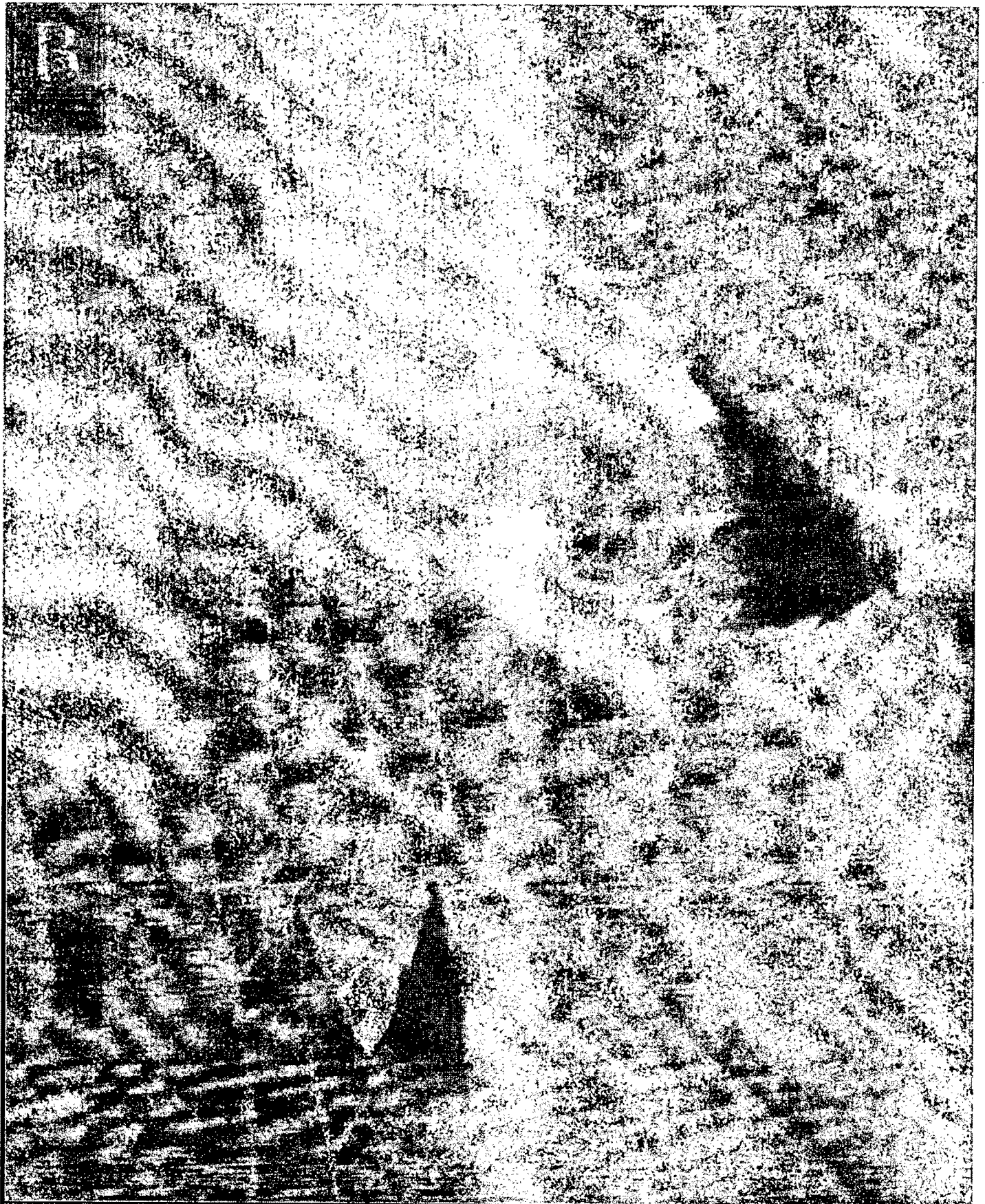
6 October 2005 Stakeholders Meeting

- Concern about the apartments at the NE corner. Should be single-family housing
- Like the integration of the plan, units and topography!
- Re-evaluate the location of apartments in the NE corner
- Houses too close together with shared yards
- Too many apartment buildings in this area
- Any new apartments should be in southern portion of site

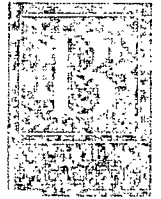
Note: The above notes are Mithun's interpretation of the items discussed

Conclusion

The review period from the initial schemes to the proposed plan took place over a six month time period to allow for maximum analysis and feedback from all interested parties. The design team compiled and through the design process responded to the comments. As a result of the information assessment and public input phase the design team generated a revised Master Plan. (See conceptual site plan).

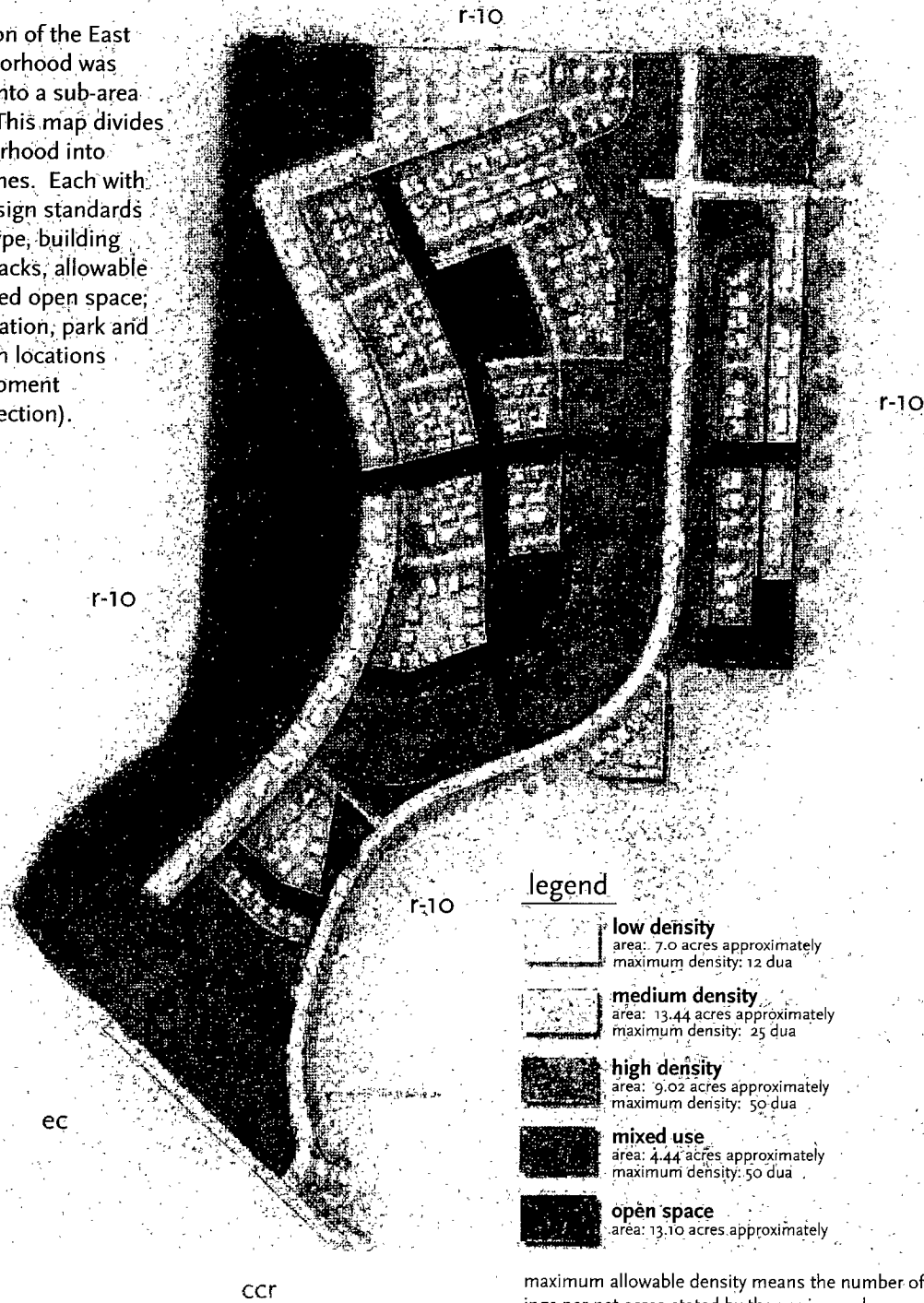


THE SAILBOAT SLEWED AROUND THE POINT



East Park Sub Area Map

The evolution of the East Park neighborhood was developed into a sub-area plan map. This map divides the neighborhood into different zones. Each with different design standards for; home type, building height, setbacks, allowable uses, required open space; road designation; park and conservation locations (See development standards section).



Development Standards

Introduction

The development standards will set the zoning regulations for the East Park development. This section will illustrate lot standards, approximate open space locations and road standards. The intention of the standards is to provide a framework that guides this development into a successful neighborhood that will provide a mixture of compatible housing types. It becomes essential for all design elements such as; uses, setbacks, height, bulk, open spaces, and circulation to coexist and complement each other.

Each sub area development zone; low, medium, high and mixed use will allow a variety of product types. The development standards illustrate multiple design examples within each zone. The variation within a zone is driven by topography, relationship to open space, emergency vehicle access, and building scale. In short, one lot standard for each zone is not enough to allow diversity and meet the Comprehensive Planning goals.

General Development Standards

Building Separation

Where building separation requirements exist, the separation shall be the average, however, in no case shall it be less than the required side yards combined.

Accessory Dwelling Units (ADUs)

- Entrance may be on any facade including that of the principal structure.
- No parking requirement for 1 bedroom or less.
- One off street parking stall required for two or more bedrooms.
- Not included in maximum density requirements.
- Carrage units maximum garage structure

shall be limited to 1400 sq ft when serving a remote residential unit.

- The maximum area of all accessory structures exclude attached and detached garages.
- Maximum height of attached or detached carriage units shall not exceed the height limit of the zone.

Open Space

- Where use easements exist, required open space may include the area on the adjacent lot covered by the use easement.
- The open spaces shall be maintained by a homeowners association.
- All landscape features and bioswales within the public ways shall be maintained by a homeowners association.
- Prior to construction, all significant trees within the open space designated or affected by construction activities shall be evaluated by a certified arborist. The arborist shall prepare a report and clearly outline necessary steps to ensure survival of healthy significant trees during and after construction.
- Wildlife corridors shall be planted and maintained appropriately for wildlife habitat in accordance with a wildlife biologist or the best available scientific evidence supporting the actions taken.

Signage

Per section BMC 20-52 with the following exceptions:

- Mixed Use areas shall comply with Commercial District Requirements BMC 20-52.100.
- All other areas shall comply with residential requirements BMC 20-52.120.

Fencing

Per BMC 20-46.020 with the following exceptions:

- Cyclone fencing not allowed except for dog runs of a maximum of 72 sq ft.

Development Standards

and screened from adjoining property.
Front yard fencing a maximum height
of 42 inches with a minimum of 25%
open.
6 ft. high fence allowed in secondary
frontage with 50% open above 42
inches.

Accessory Structures

Per BMC 20.12.060

Parking

Per East Park Development Standards

Unloading space is not required for non-
residential uses under 2500 sq. ft.
Maximum allowed garage structure
limited to 1100 sq. ft.

Rash and Recycling Collection

Residential curb side collection for all
attached and detached single family
housing.

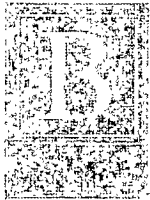
If collection area is established it
shall be screened from the public
realm by a minimum 5 ft wide
landscape buffer.

Mailboxes

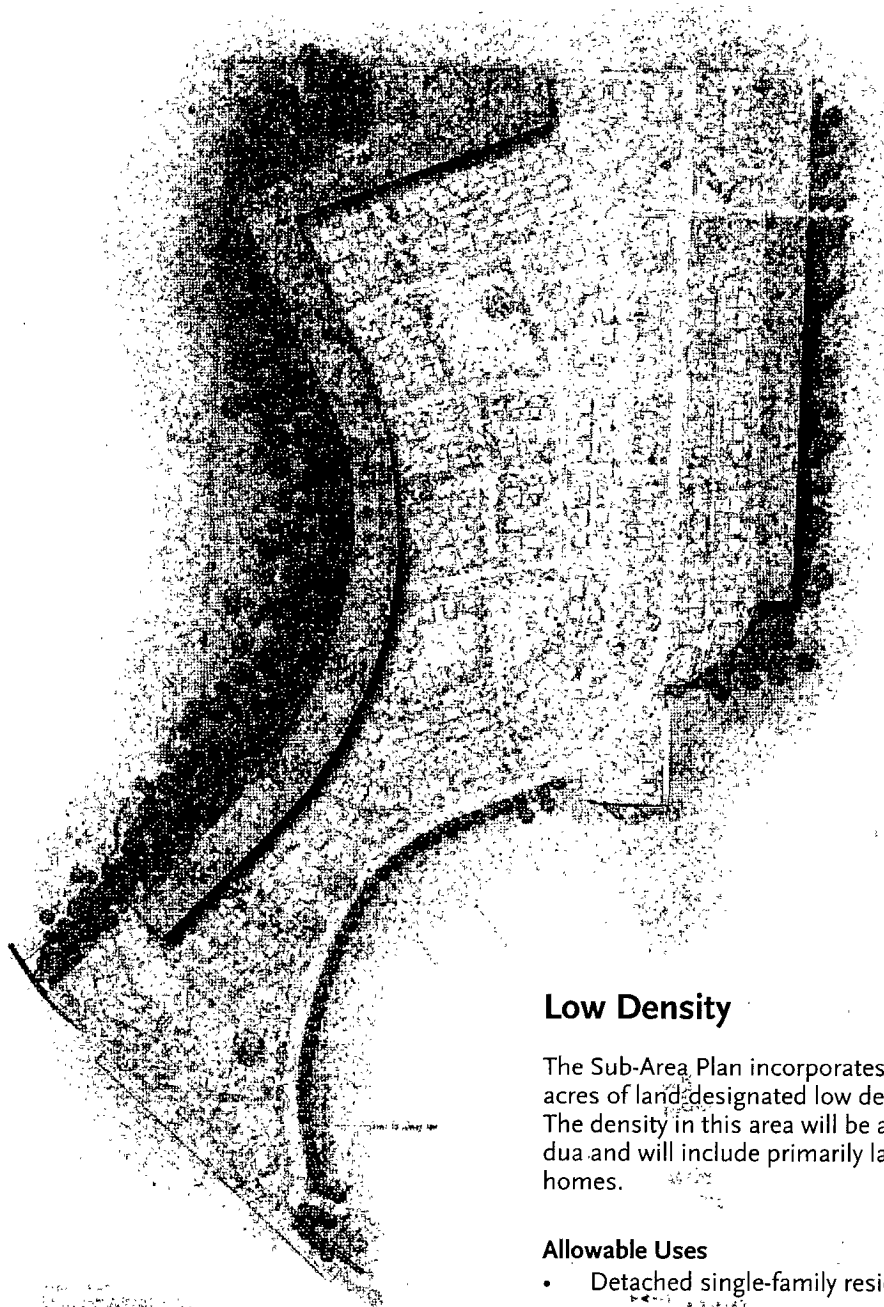
Individual door slot delivery is
preferred which is the common
delivery method for Manette. If
delivered mail box kiosks are used
they shall conform to architectural
character of neighborhood structures.

Fire Systems

Some of the road width standards
presented in the plan are reductions in
that required by the International Fire
Code and the BMC. All residential struc-
tures that are accessed from reduced
width fire apparatus access roadways in
the project area shall be equipped through-
out with a fire sprinkler system.



Low Density



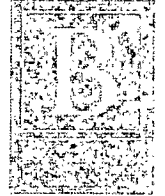
Low Density

The Sub-Area Plan incorporates approximately 7 acres of land designated low density single family. The density in this area will be a maximum of 12 du/a and will include primarily larger single family homes.

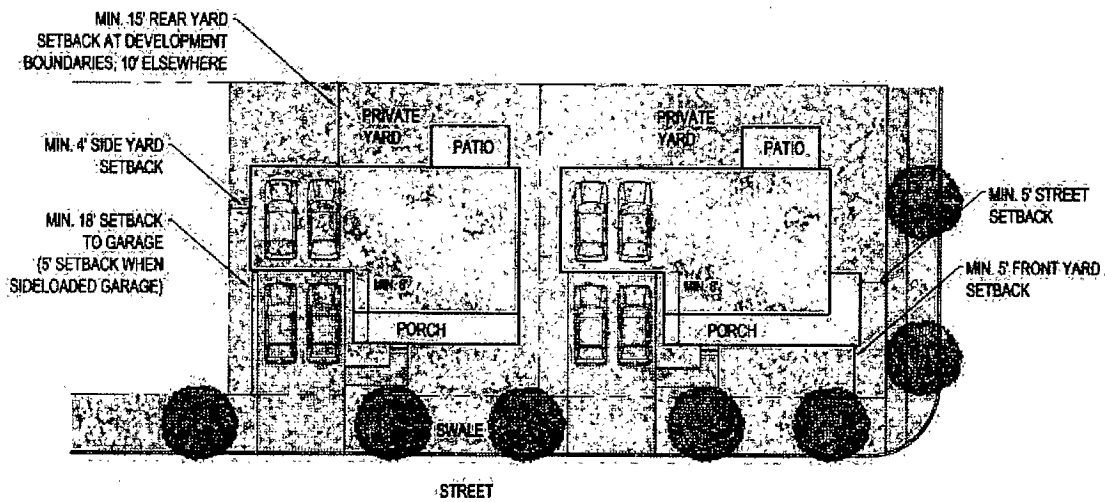
Allowable Uses

- Detached single-family residences

Low Density

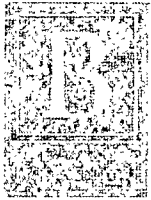


Traditional Single Family Lot



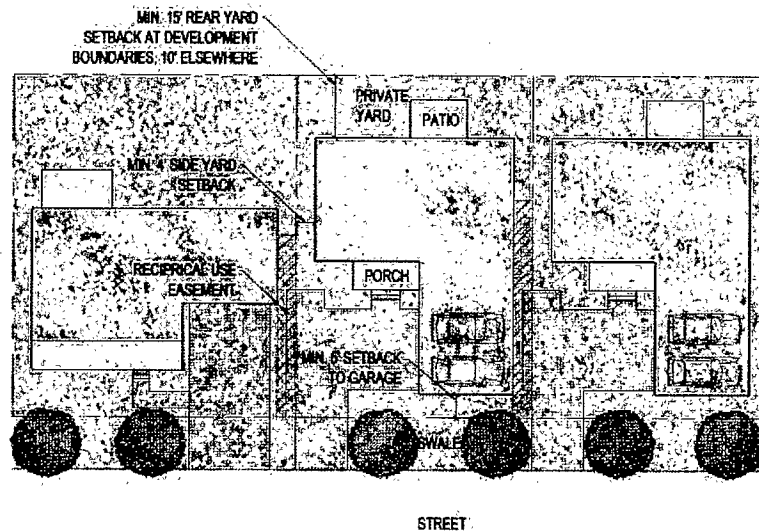
maximum building mass	lot requirements	additional standards
building height - 35' measured from average finished grade to average roof height building coverage - 60% development coverage - 70%	minimum lot size - 3600 sq ft minimum lot width - 50' minimum lot depth - 60' street setback - 5' minimum side setback - 4' minimum rear setback - 10' minimum open space - 400 sq ft parking - 2 stalls	Street facing garage limited to 50% of building width Minimum 18' setback to garage doors

Development Standards



Low Density

Traditional Single Family Lot-Side Load Garage



maximum building mass

building height - 35'
measured from average
finished grade to average
roof height
building coverage - 60%
development coverage - 70%

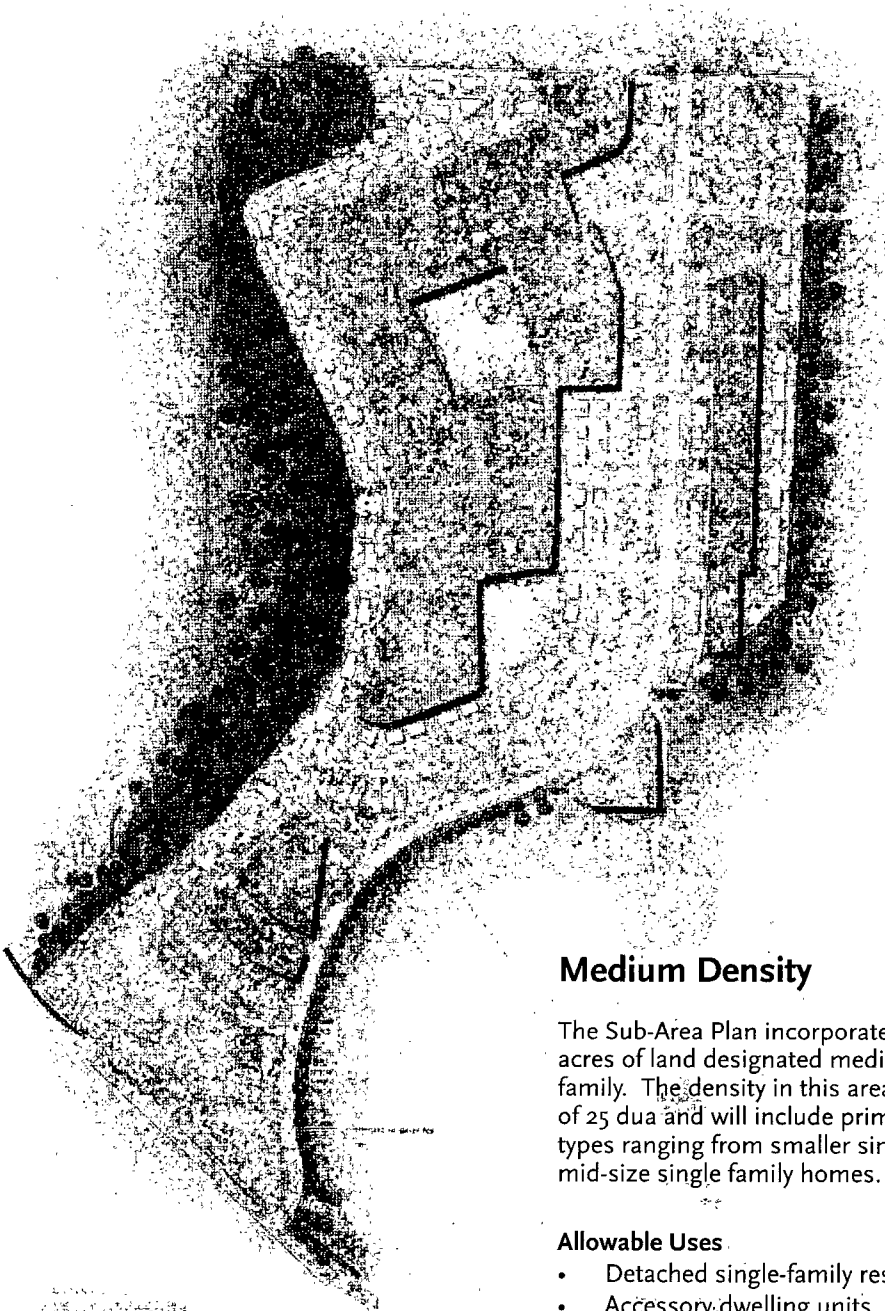
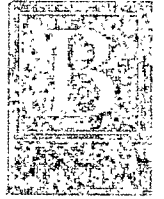
lot requirements

minimum lot size - 3600
sq. ft.
minimum lot width - 50'
minimum lot depth - 60'
street setback - 5' minimum
side setback - 4' minimum
rear setback - 10' minimum
open space - 400 sq. ft.
parking - 2 stalls

additional standards

Street facing garage
limited to 50% of building
width
Minimum 18' setback to
garage doors

Medium Density

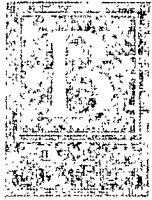


Medium Density

The Sub-Area Plan incorporates approximately 14 acres of land designated medium density single family. The density in this area will be a maximum of 25 du/a and will include primarily compatible unit types ranging from smaller single family homes to mid-size single family homes.

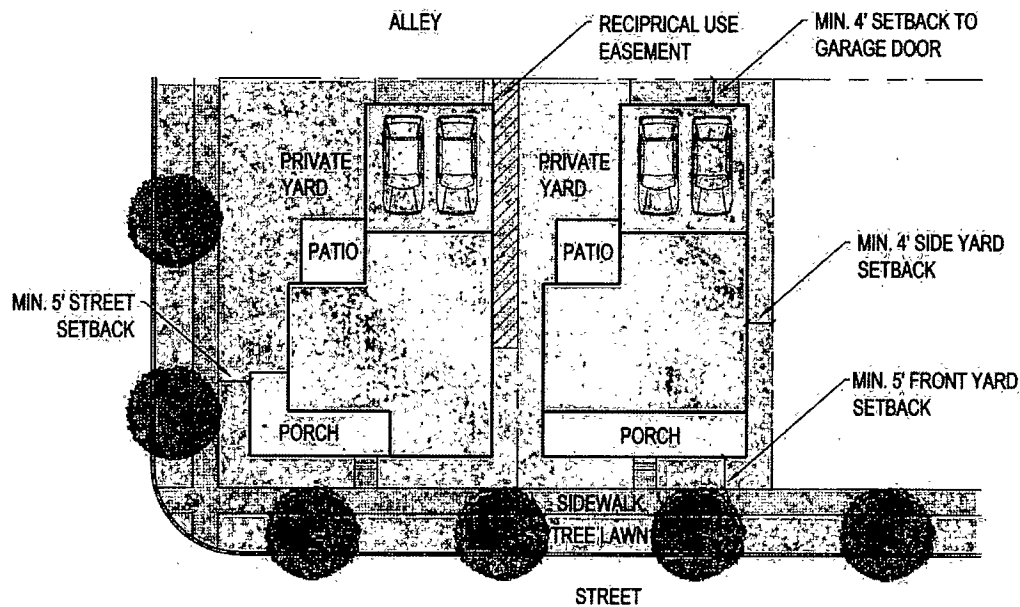
Allowable Uses

- Detached single-family residences
- Accessory dwelling units
- Cluster developments
- Carriage units



Medium Density

Single Family Alley Lot



Development Standards

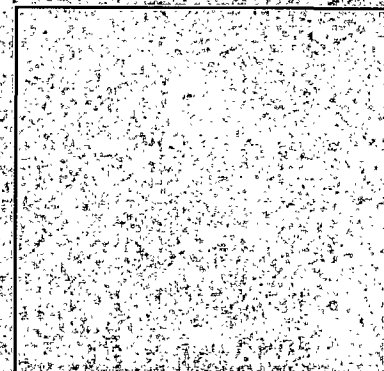
maximum building mass

building height - 35' measured from average finished grade to average roof height
building coverage - 70%
development coverage - 75 %

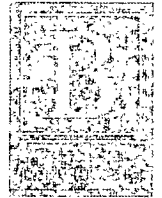
lot requirements

minimum lot size - 2000 sq ft
minimum lot width - 34'
minimum lot depth - 60'
open space - 300 sq ft
street setback - 5' minimum
rear setback - 0' minimum at alley and 4' minimum to garage door
side setback - 4' minimum
parking - 2 stalls

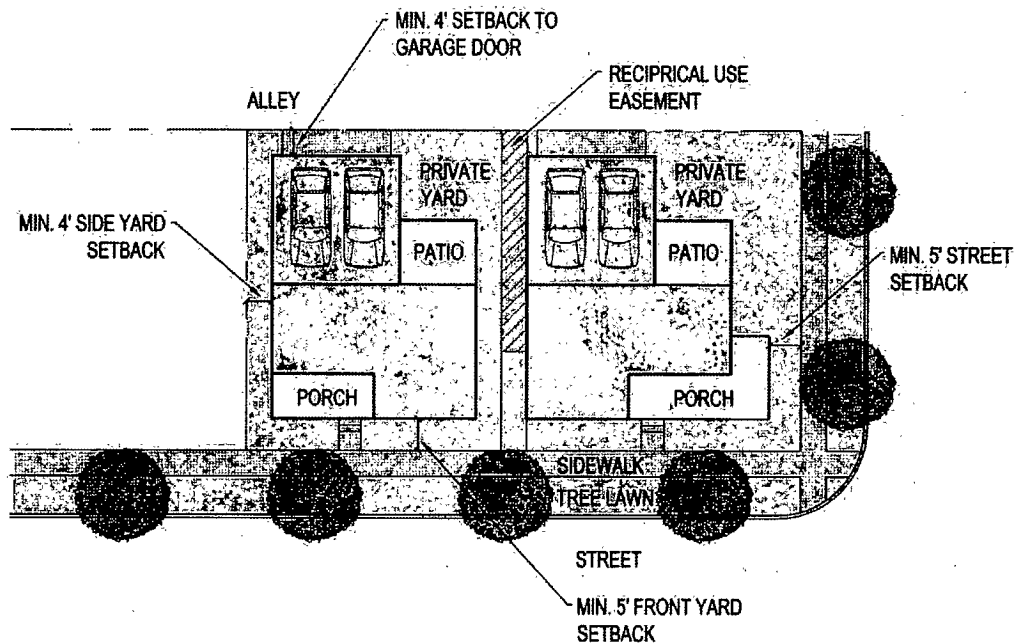
additional standards



Medium Density

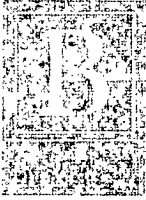


Single Family Lot with Basement Garage



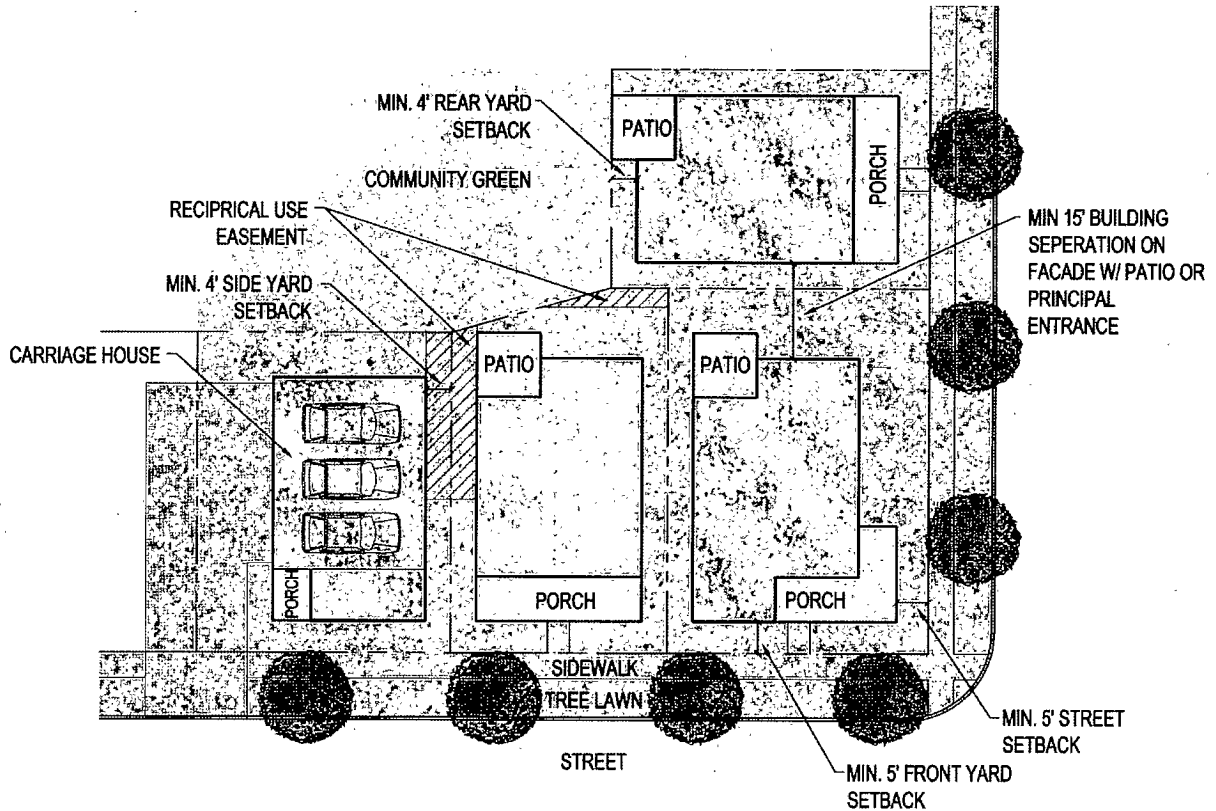
building mass	lot requirements	additional standards
<p>building height - 35' measured from average finished grade to average roof height</p> <p>building coverage - 70%</p> <p>development coverage - 75%</p>	<p>minimum lot size - 1700 sq ft</p> <p>minimum lot width - 34'</p> <p>minimum lot depth - 50'</p> <p>street setback - 5' minimum</p> <p>side setback - 4' minimum</p> <p>rear setback - 0' minimum at alley and 4' to garage door</p> <p>open space - 300 sq ft</p> <p>parking - 2 spaces</p>	

Development Standards



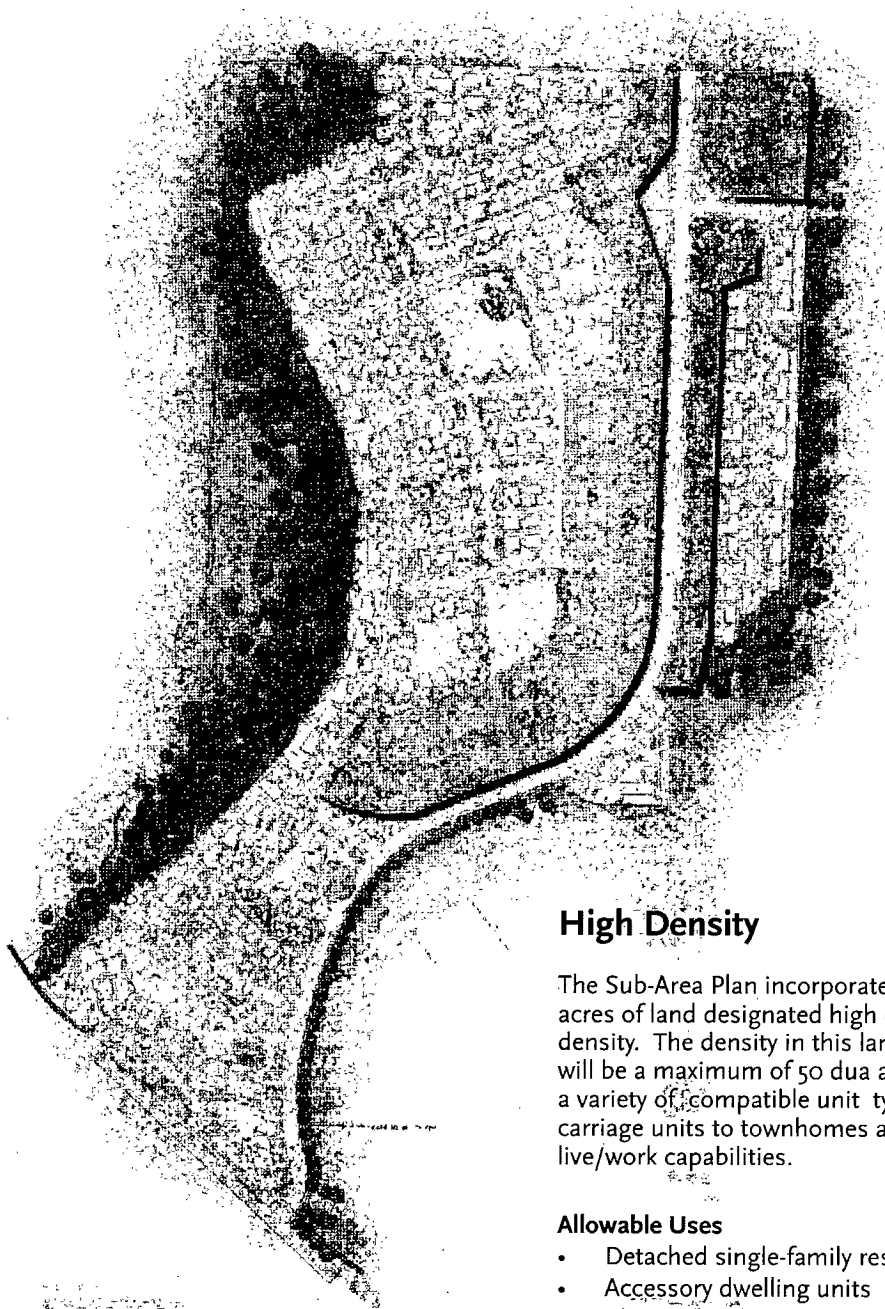
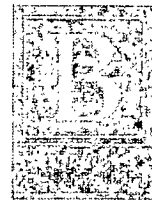
Medium Density

Cluster Development Lot



building mass	lot requirements	additional standards
<p>building height - 35' measured from average finished grade to average roof height</p> <p>building coverage - 70%</p> <p>development coverage - 75%</p>	<p>minimum lot size - 1700 sq ft</p> <p>minimum lot width - 34'</p> <p>minimum lot depth - 50'</p> <p>street setback - 5' minimum</p> <p>side setback - 4' minimum</p> <p>rear setback - 4' minimum</p> <p>open space - 200 sq ft on lot and or common green</p> <p>parking - one off street space no more than 150' from the dwelling it serves</p>	

High Density

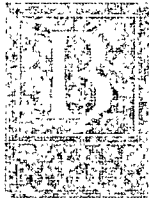


High Density

The Sub-Area Plan incorporates approximately 10 acres of land designated high density single family density. The density in this land use designation will be a maximum of 50 du/a and will allow for a variety of compatible unit types ranging from carriage units to townhomes and residences with live/work capabilities.

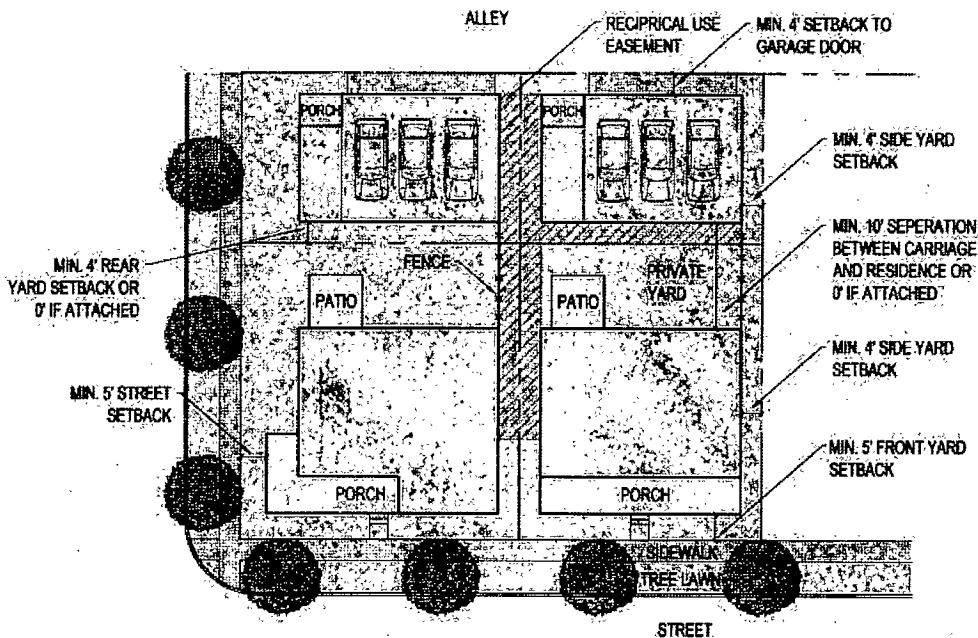
Allowable Uses

- Detached single-family residences
- Accessory dwelling units
- Cluster developments
- Carriage units
- Attached single-family residences
- Live/work units



High Density

Single Family Lot with Carriage Garage

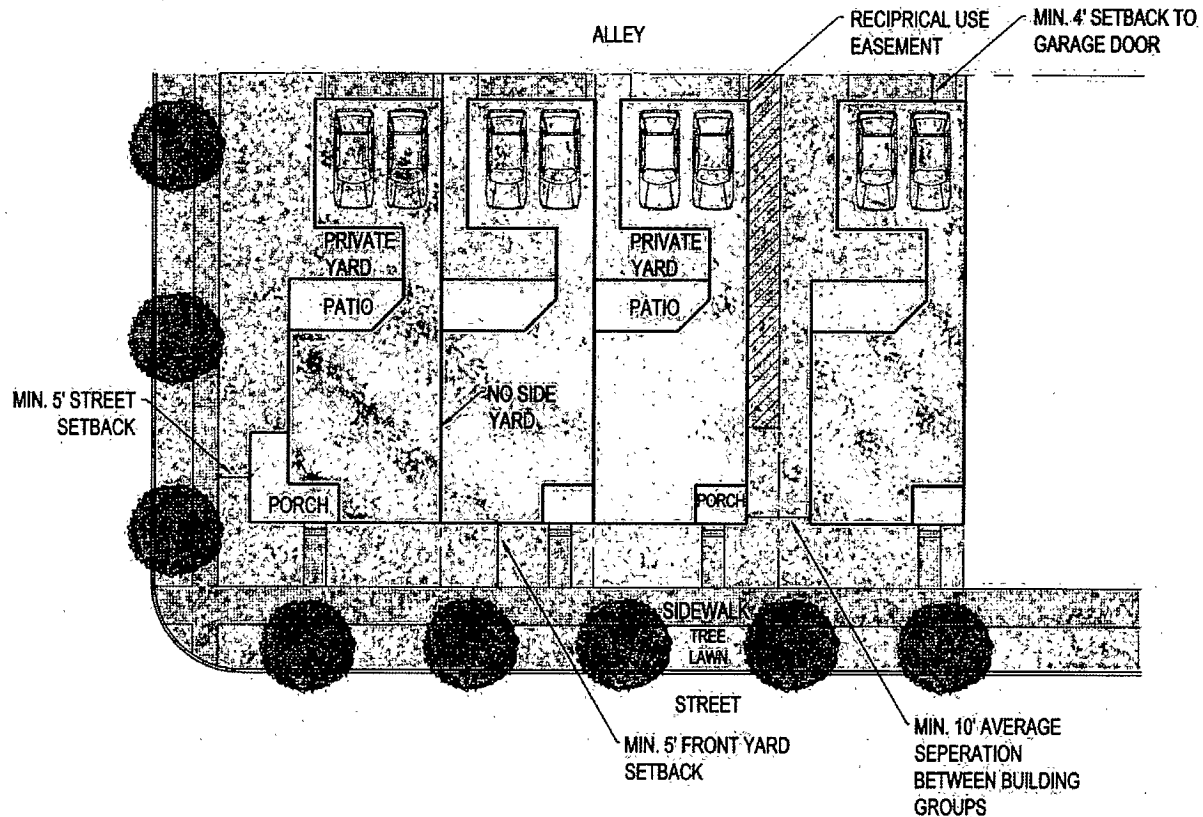


building mass	lot requirements	additional standards
<ul style="list-style-type: none"> • <i>residential lot</i> building height - 35' measured from average finished grade to average roof height building coverage - 75% development coverage - 85% • <i>carriage lot</i> building height - 35' measured from average finished grade to average roof height building coverage - 80% development coverage - 90% 	<ul style="list-style-type: none"> • <i>residential lot</i> minimum lot size - 2,500 sq ft minimum lot width - 46' minimum lot depth - 56' street setback - 5' minimum side setback - 4' minimum rear setback - 0' minimum to alley and 4' to garage door parking - 2 stalls open space - 300 sq ft • <i>carriage lot</i> minimum lot size - 850 sq ft minimum lot width - 32' minimum lot depth - 28' street setback - 5' min side setback - 4' minimum or 0' if attached rear setback - 0' minimum to alley and 4' to garage door parking - 1 stall open space - 0 sq ft 	

High Density



Townhome Lot



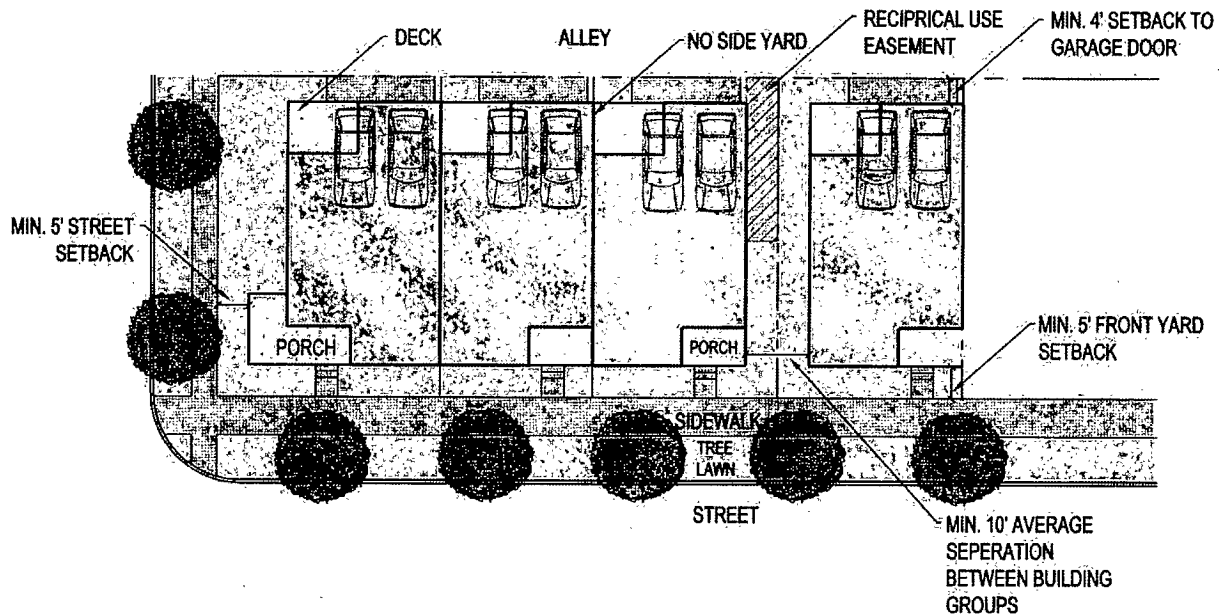
building mass	lot requirements	additional standards
<p>building height - 40' measured from average finished grade to average roof height</p> <p>building coverage - 80%</p> <p>development coverage - 90%</p>	<p>minimum lot size - 1500 sq ft</p> <p>minimum lot width - 20'</p> <p>minimum lot depth - 78'</p> <p>street setback - 5' minimum</p> <p>side setback - 4' minimum or attached</p> <p>rear setback - 0' minimum to alley and 4' to garage door</p> <p>open space - 200 sq ft</p> <p>parking - 2 stalls</p>	

Development Standards



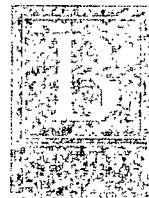
High Density

Townhome with Basement Garage Lot

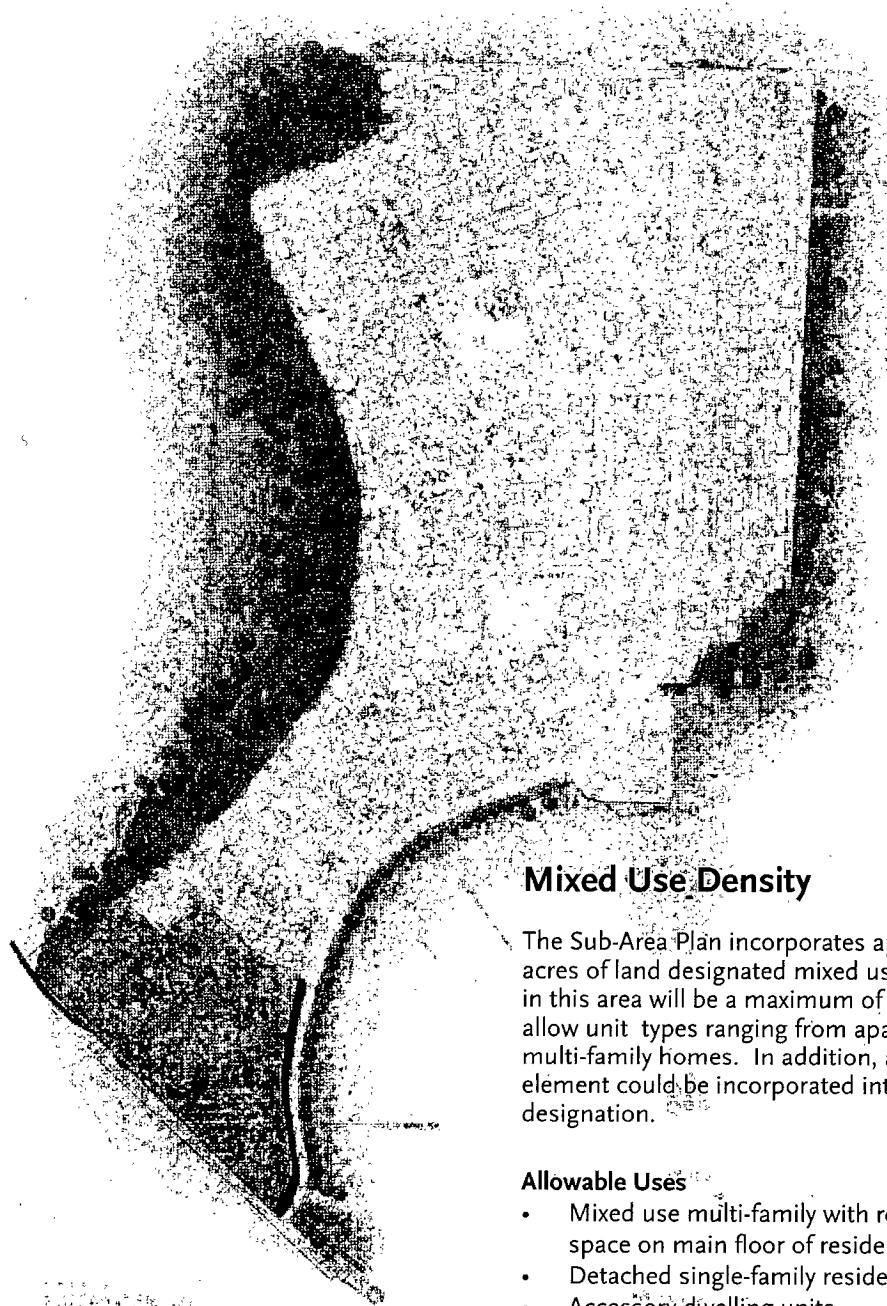


Development Standards

building mass	lot requirements	additional standards
<p>building height - 40' measured from average finished grade to average roof height</p> <p>building coverage - 95%</p> <p>development coverage - 100%</p>	<p>minimum lot size - 600 sq ft</p> <p>minimum lot width - 14'</p> <p>minimum lot depth - 44'</p> <p>street setback - 5' minimum</p> <p>side setback - 4' minimum or attached</p> <p>rear setback - 0' minimum to alley and 4' to garage door</p> <p>open space - 60 sq ft deck or porch</p> <p>parking - 1 stall per unit with 2 stalls for 2 or more bedroom units</p>	



Mixed Use Density



Mixed Use Density

The Sub-Area Plan incorporates approximately 4 acres of land designated mixed use. The density in this area will be a maximum of 50 du/a and will allow unit types ranging from apartment to luxury multi-family homes. In addition, a commercial element could be incorporated into the mixed use designation.

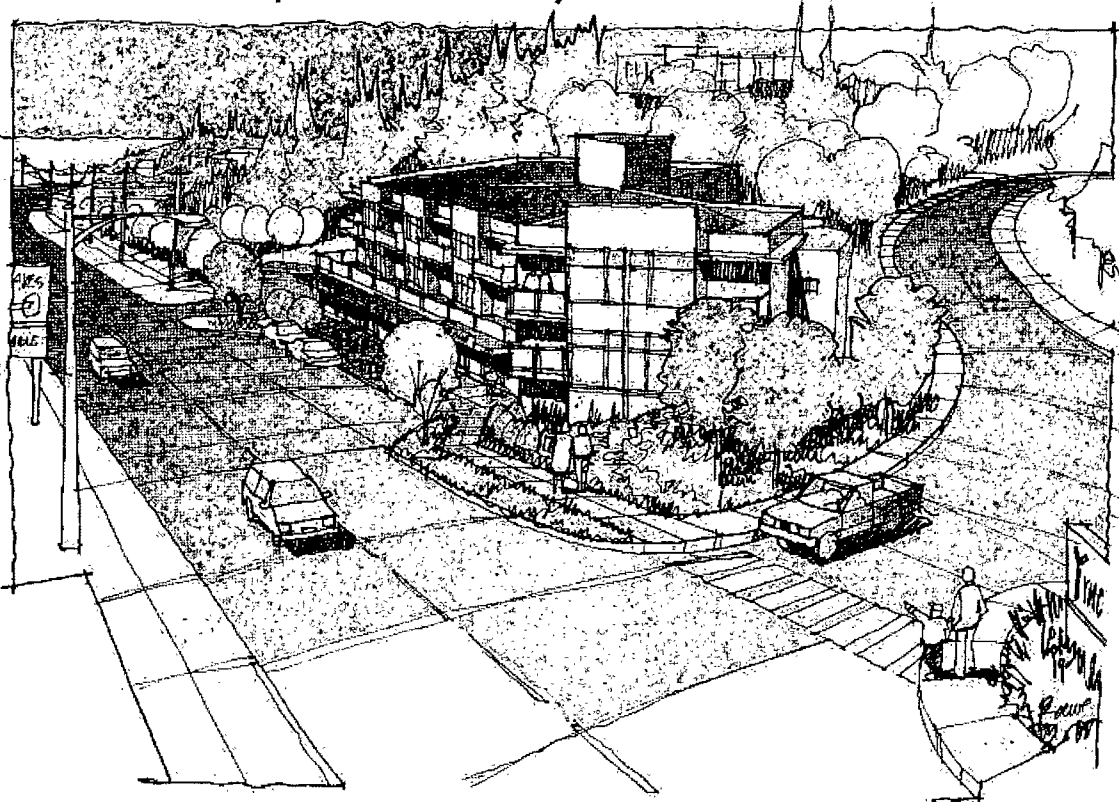
Allowable Uses

- Mixed use multi-family with retail or office space on main floor of residential building
- Detached single-family residences
- Accessory dwelling units
- Cluster developments
- Carriage units
- Attached single-family residences
- Live/work units



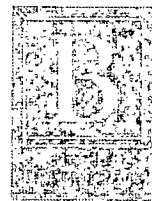
Mixed Use Density

Mixed Use Concept on Wheaton Way

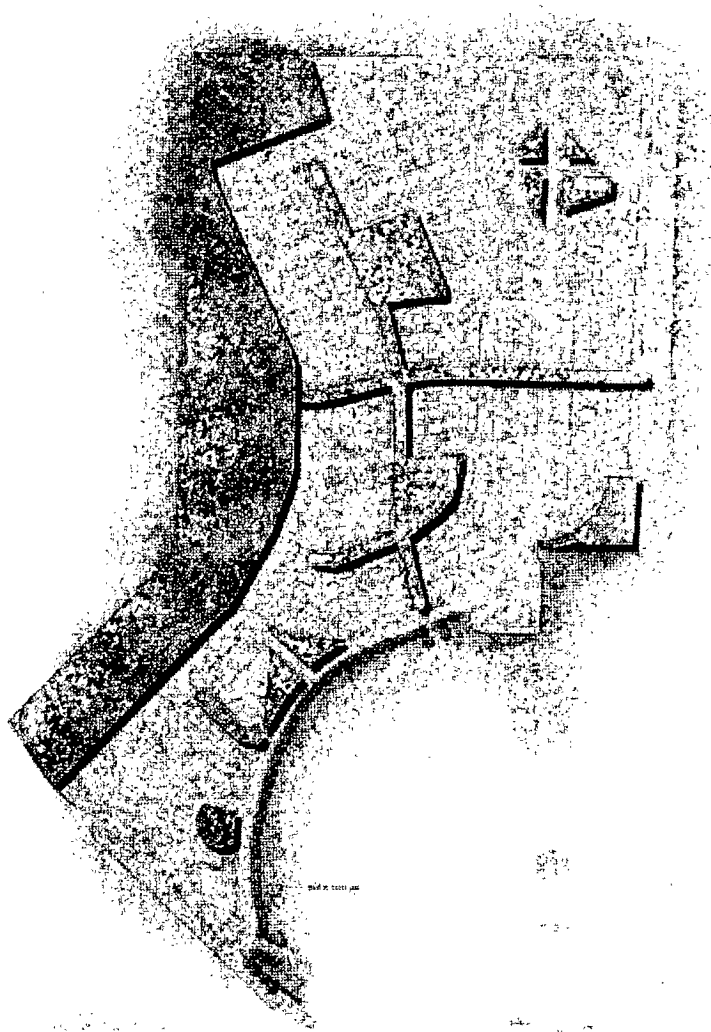


Development Standards

building mass	lot requirements	additional standards
<p>building height - 60' measured from average finished grade to average roof height</p> <p>building coverage - 90%</p> <p>development coverage - 100%</p>	<p>street setback - 0' minimum</p> <p>other setback - 10' minimum</p> <p>residential parking -</p> <p>1 per one bedroom unit</p> <p>2 per 2 or more bedroom unit</p> <p>open space - 10% of site usable</p> <p>general retail and office and business services parking - 2500 sq. ft. exempt from parking and off street loading spaces</p>	<p>Retail, commercial or office space is allowed at ground level with residential uses above. Stand alone buildings of retail, commercial or office buildings are not permitted.</p>



Open Space



Open Space

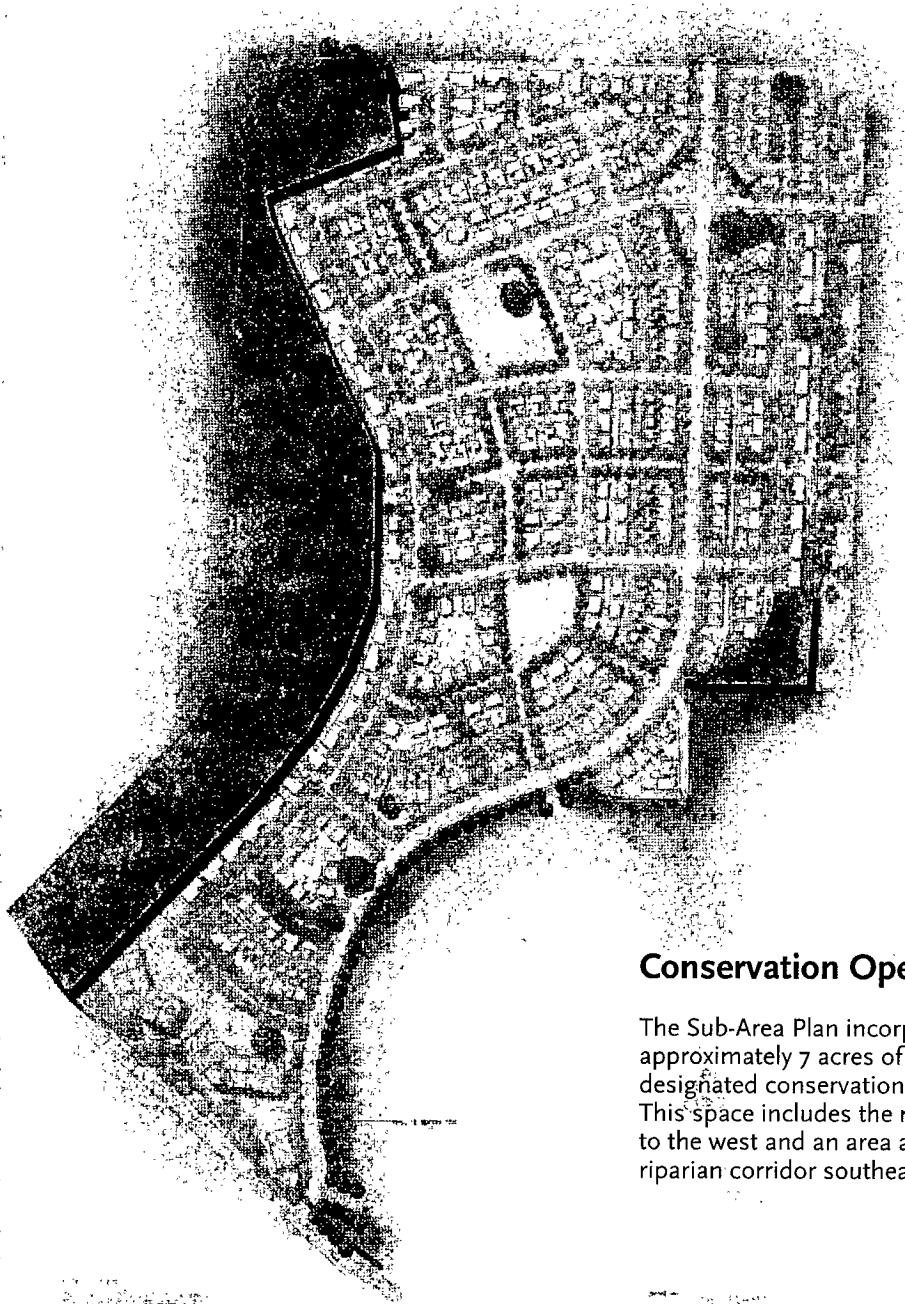
The City of Bremerton has identified the need to increase the City's supply of parks and open space. Currently, the level of service for "local park" space is 1.48 acres per 1000 residents and an additional 2.21 acres of "open space" for a total of 3.69 acres per 1000 residents (this does not include "regional" open space). The design of the East Park Sub-Area Plan will house approximately 1100 new residents and provide approximately 25% of the entire site as open space. This will exceed Bremerton's current level of park and open space service for this neighborhood by over 270%.

Goals and Strategies:

- Create a more livable and beautiful community through park and open space design. Parks will be designed to encourage and support social interaction.
- Establish a hierarchy and variety of parks and open spaces for a variety of age groups such as conservation areas, neighborhood parks, active parks, trails and sitting areas under trees to meet the diverse needs of all residents.
- Design active parks to maximize use by locating areas for easy supervision – e.g. within close proximity of homes, maximizing supervision from homes and the community at large and by providing appropriate lighting.
- Build durable parks and reduce maintenance costs, using low maintenance and sustainable landscaping.
- Include porches adjacent parks to increase community interaction.
- Provide adequate sized trash and recycling bins in park areas.
- Create open spaces easily accessible to residents.
- Create public viewing areas.
- Use open spaces for water quality.
- Provide for the Urban Trail along the south portion of the site.
- Provide a functional wildlife corridor linking the Madrona Forest on the west to the Riparian Corridor on the east.



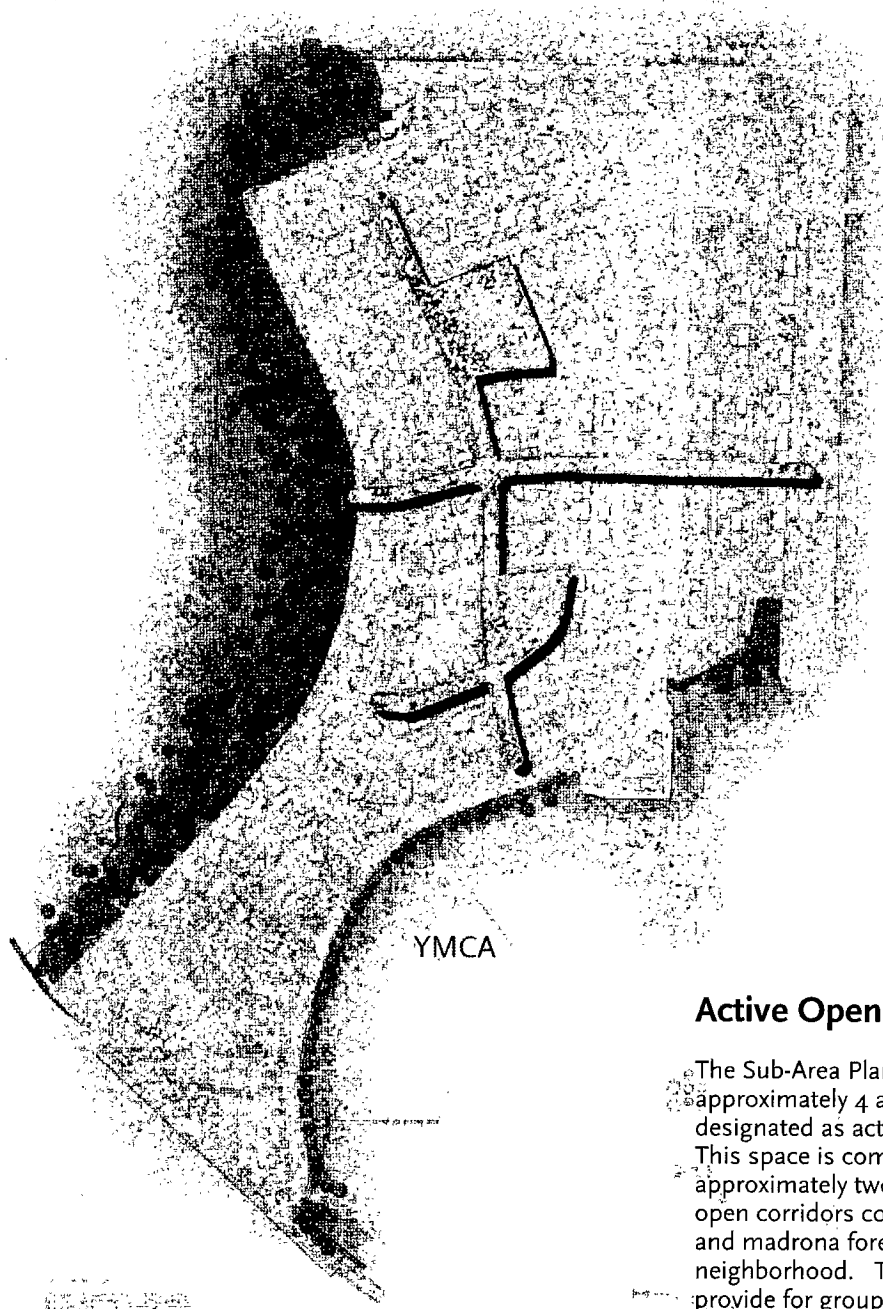
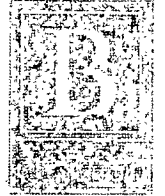
Conservation Open Space



Conservation Open Space

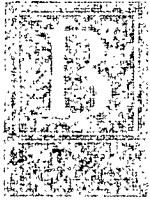
The Sub-Area Plan incorporates approximately 7 acres of land designated conservation open space. This space includes the madrona forest to the west and an area adjacent to the riparian corridor southeast of the site.

Active Open Space

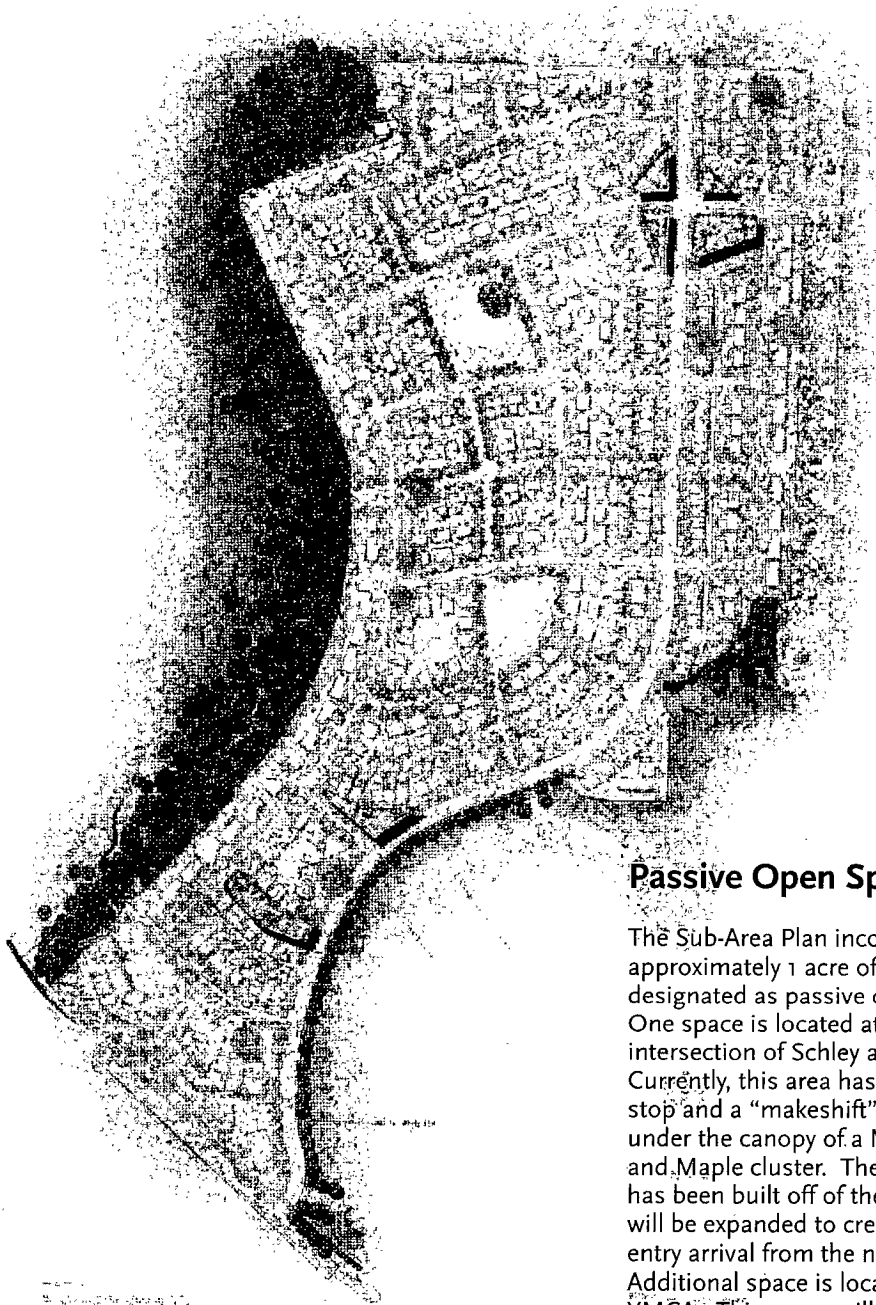


Active Open Space

- The Sub-Area Plan incorporates approximately 4 acres of land designated as active open space.
- This space is comprised of approximately two one acre parks and open corridors connecting the YMCA and madrona forest to the entire neighborhood. The park areas should provide for group and small athletic activities. These areas may include play structures , or other recreational features.



Passive Open Space



Passive Open Space

The Sub-Area Plan incorporates approximately 1 acre of land designated as passive open space. One space is located at the intersection of Schley and Magnuson. Currently, this area has a Kitsap Transit stop and a "makeshift" park space under the canopy of a Madrona, Fir, and Maple cluster. The new park space has been built off of these features and will be expanded to create a sense of entry arrival from the north and east. Additional space is located across YMCA. This space will include existing trees and viewing areas.

Tree Preservation Open Space



Tree Preservation Open Space

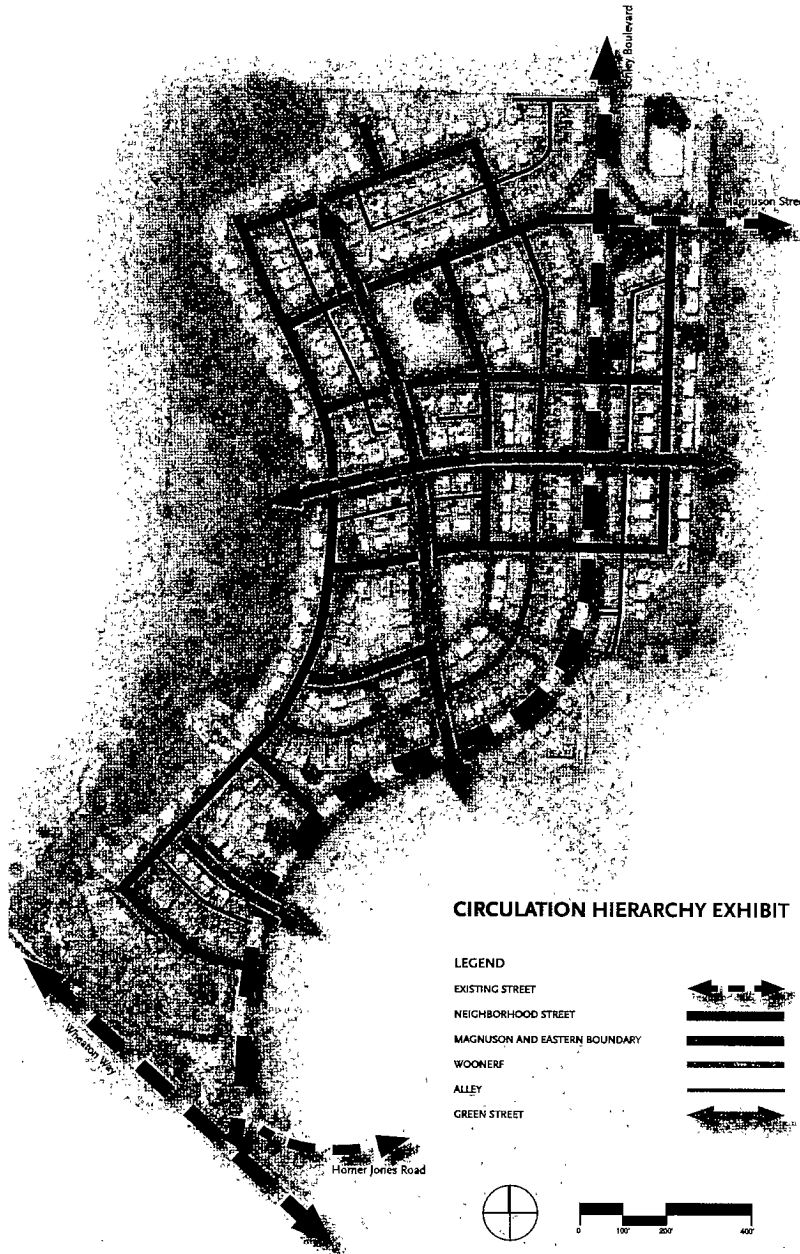
The Sub-Area Plan incorporates approximately 1 acre of land designated as tree preservation open space. Although other trees will be saved, this space is protecting three significant oak trees. East Park LLC and the design team feel this area should have additional attention to ensure tree preservation. Before construction a certified arborist shall write a report and clearly outline necessary steps to ensure survival during and after construction. Similar to the passive open space to the northeast, this area will enhance the neighborhood and serve as an arrival element from Wheaton Way.



Public Ways

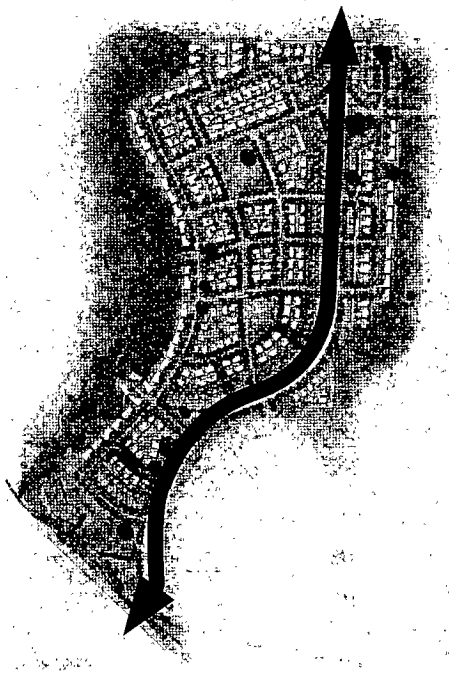
Public Ways

The circulation system and street design was created to provide neighborhood connectivity while emphasizing pedestrian and low speed auto access. Schley Boulevard was left in its original alignment to conserve existing utilities. It is proposed to be widened to include parking and curb returns to both sides as traffic calming measures. A grid system was designed to provide multiple routes to each home. Neighborhood streets are one lane two way tree lined roads with sidewalks. A variation of this street is the Country Lane that forms a transition to the edge homes and conservation areas. Alleys and the woonerf separate garages and services from the pedestrian friendly neighborhood streets.



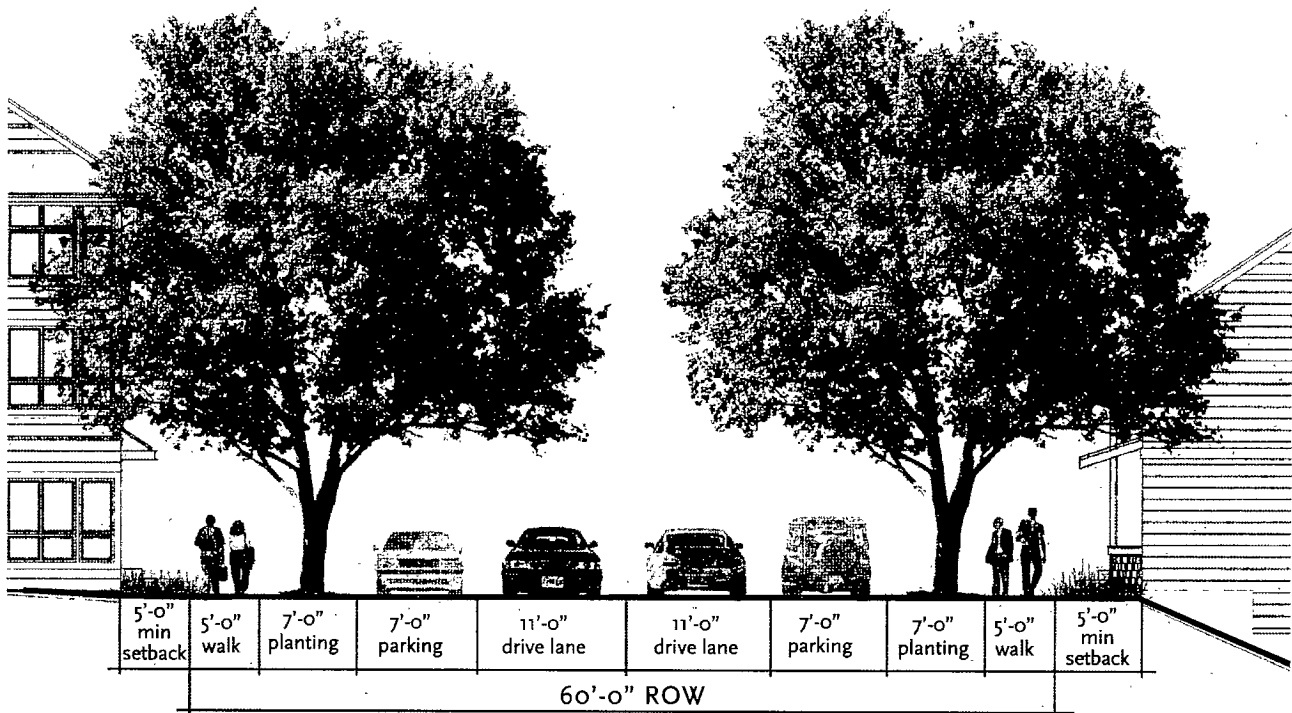
Public Ways

REVISED

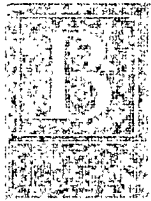


Schley Boulevard

Schley Boulevard will remain in the same location and serve as the north-south arterial through the site connecting Sylvan and Wheaton Way. Schley Boulevard will have two travel lanes with on street parking on both sides. Two large planting areas will buffer the sidewalks providing a pedestrian friendly environment. Auto access to homes on Schley will be served from alleys or the woonerf.



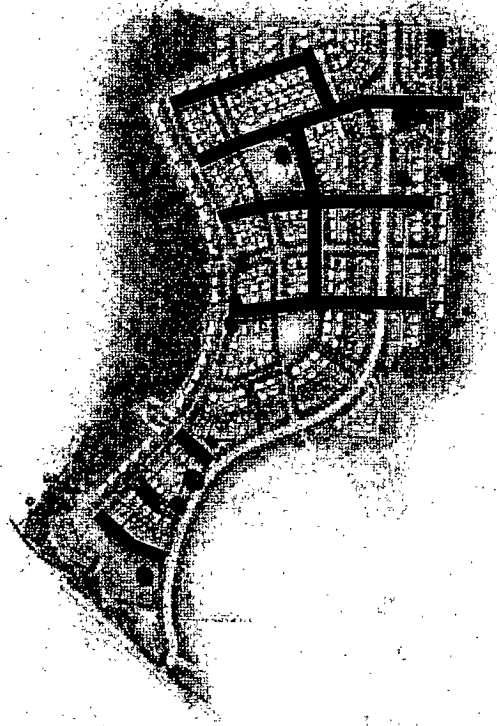
Development Standards



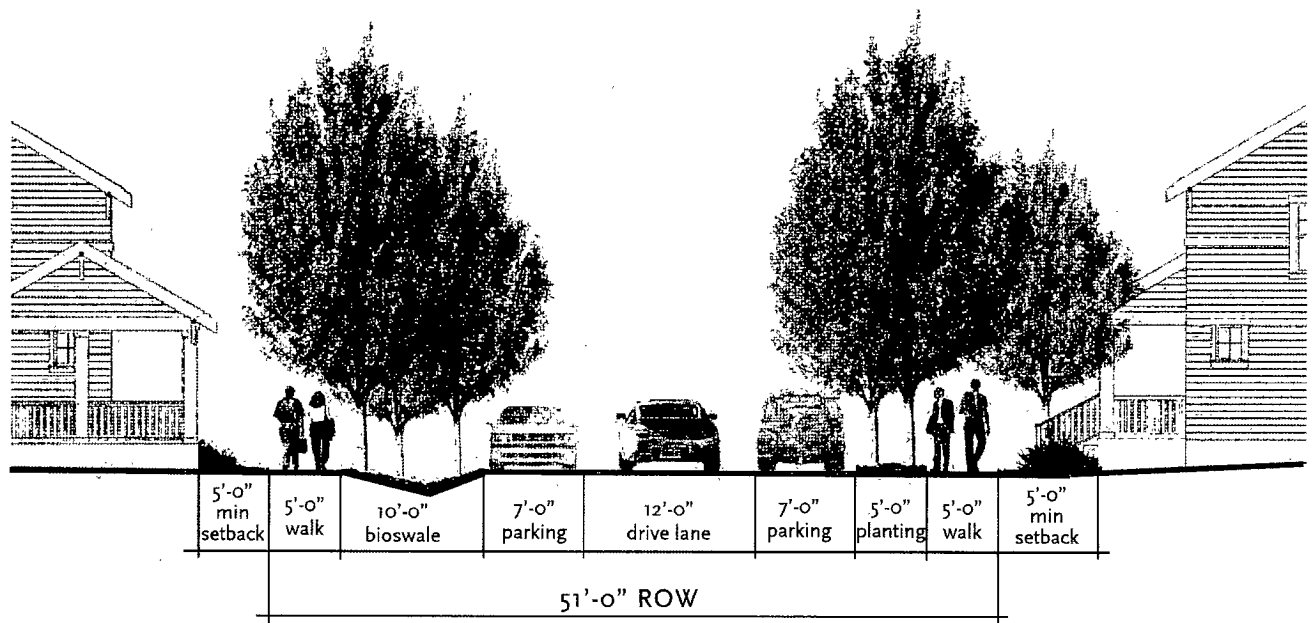
Public Ways

Neighborhood Street

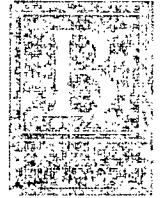
The neighborhood street is designed to serve as an urban residential access street. The neighborhood street will have a traveling lane and street parking on both sides. Queuing lanes will provide emergency vehicle staging areas and passing opportunities. The uphill side of the neighborhood street will have a planting area and sidewalk. The downhill side of the road will have bioswales that will serve as a part of East Park's natural storm water system. Behind the swale will be a sidewalk.



Development Standards

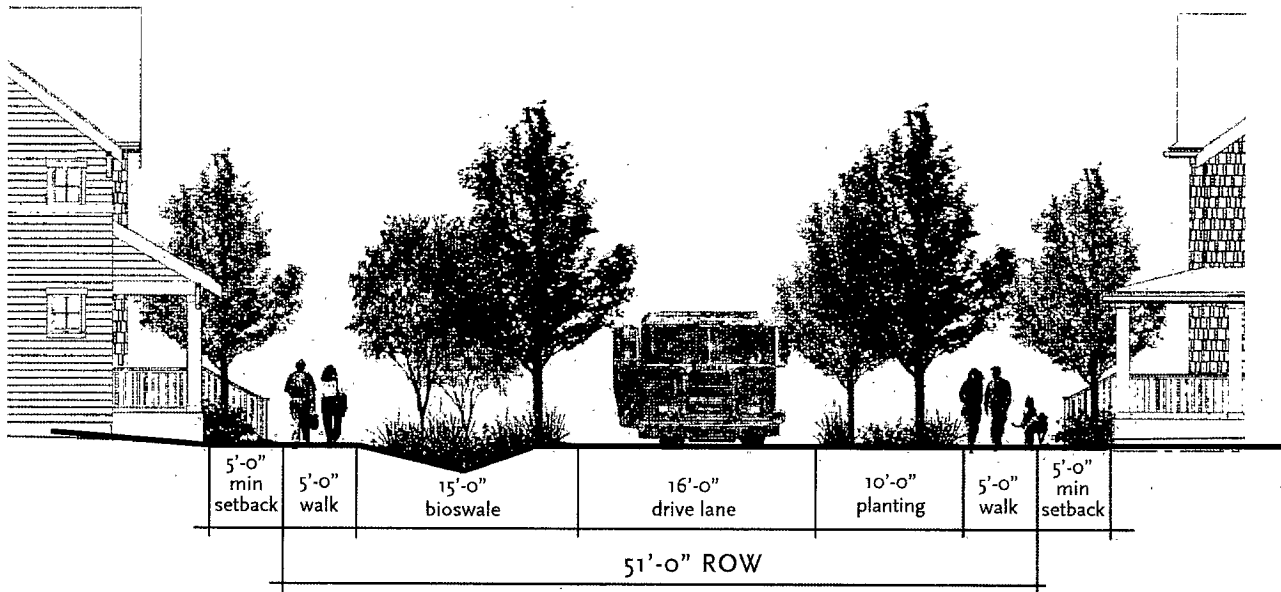
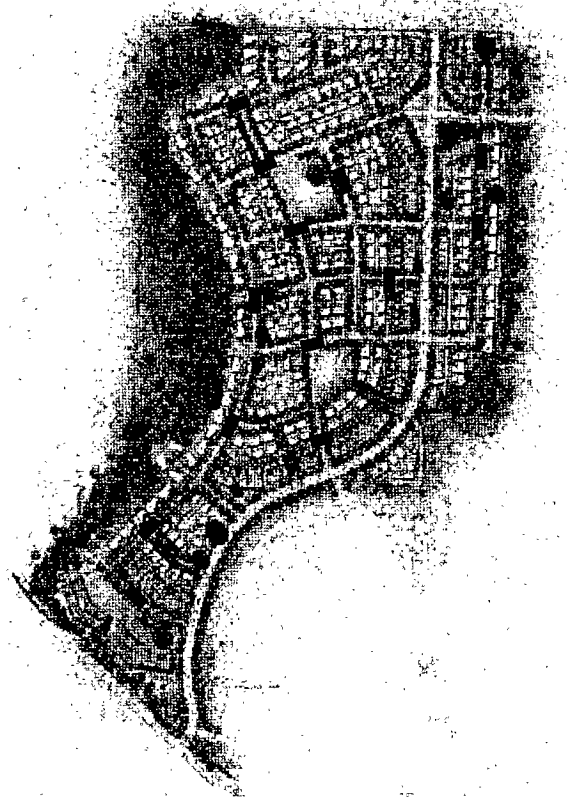


Public Ways

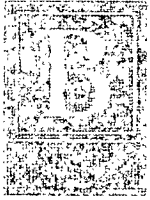


Queuing Lane

This section is a service area for emergency vehicles. By incorporating a grid circulation pattern and 16' x 60' queuing lanes throughout the neighborhood, each house can be served from multiple routes and locations.



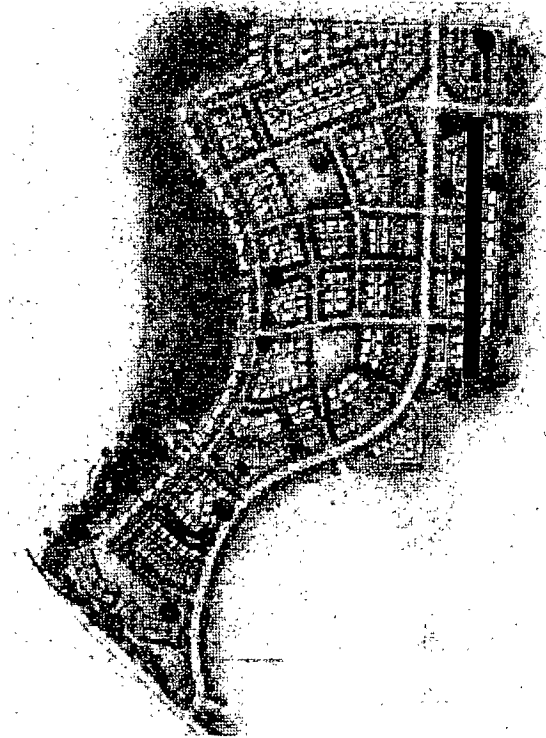
Development Standards



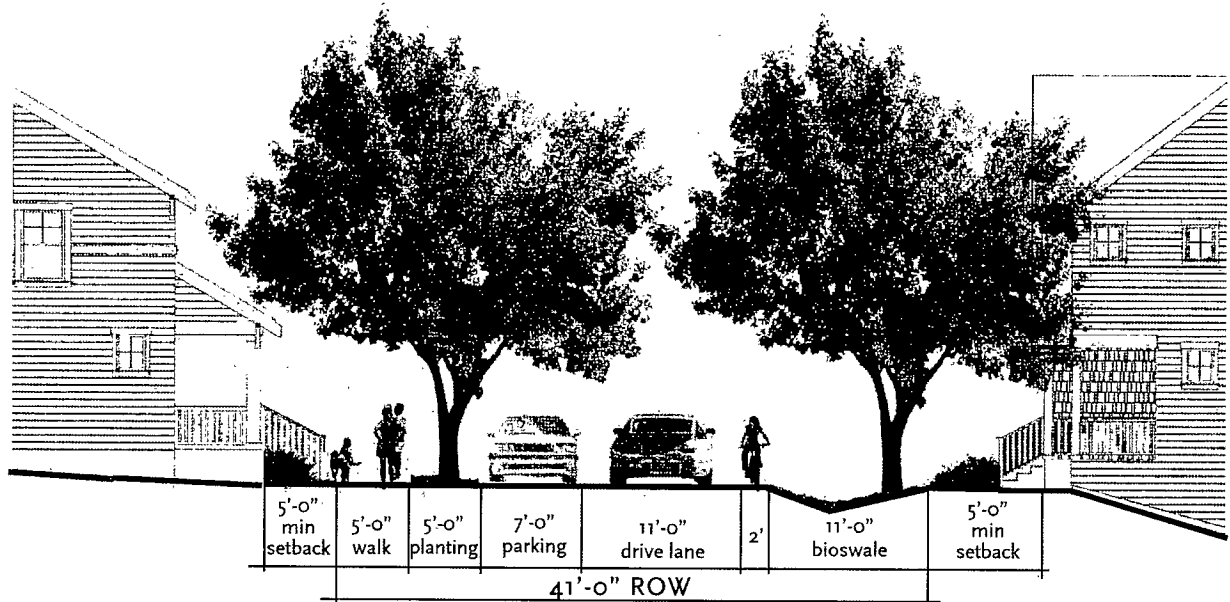
Public Ways

Country Lane

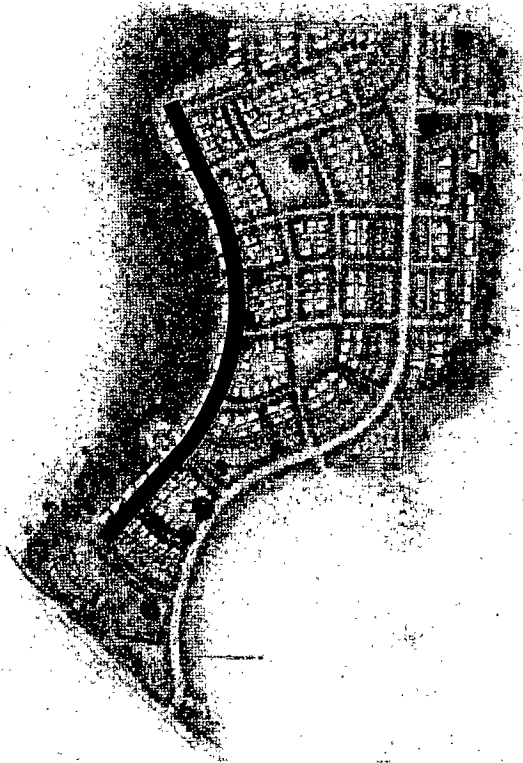
Magnuson Street and the Country Lane are designed to serve the east and west edge neighborhoods. This section is very similar to the neighborhood street however, guest parking will be provided on each individual lot. This allows the removal of parking on one side to minimize pavement and incorporate a bioswale in its place as part of East Park's natural storm water system. This road section would resemble a typical country road without curb, gutter and sidewalk on one side. In place of a typical sidewalk will be a 2' ribbon of concrete between the bioswale and driving lane to serve as a pedestrian pathway. The uphill side of the country lane will have a planting area and a sidewalk to match the neighborhood street.



Development Standards

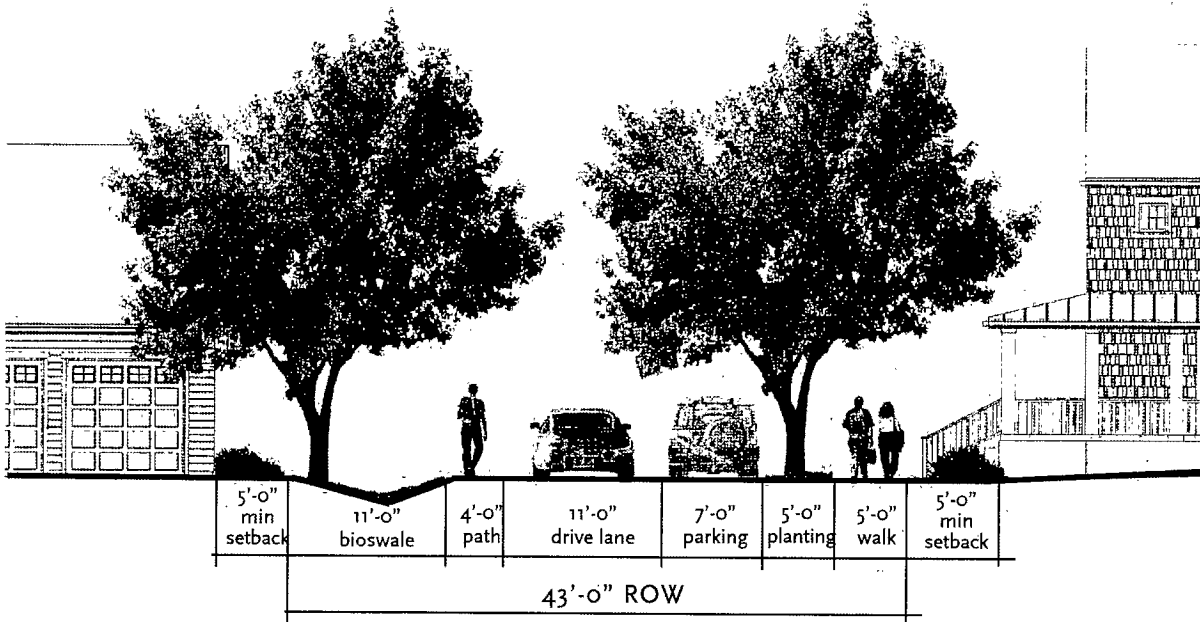


Public Ways



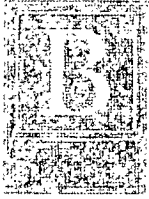
Magnuson

Magnuson Street and the Country Lane are designed to serve the east and west edge neighborhoods. This section is very similar to the neighborhood street however, guest parking will be provided on each individual lot. This allows the removal of parking on one side to minimize pavement and incorporate a bioswale in its place as part of East Park's natural storm water system. This road section would resemble a typical country road without curb, gutter and sidewalk on one side. In place of a typical sidewalk will be a 4' ribbon of concrete between the bioswale and driving lane to serve as a pedestrian pathway. The uphill side of the country lane will have a planting area and a sidewalk to match the neighborhood street.

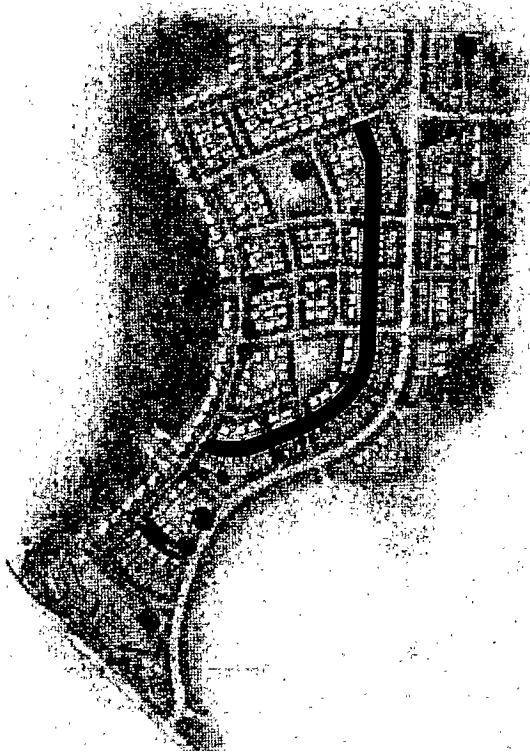


Development Standards

East Park Urban Area Plan



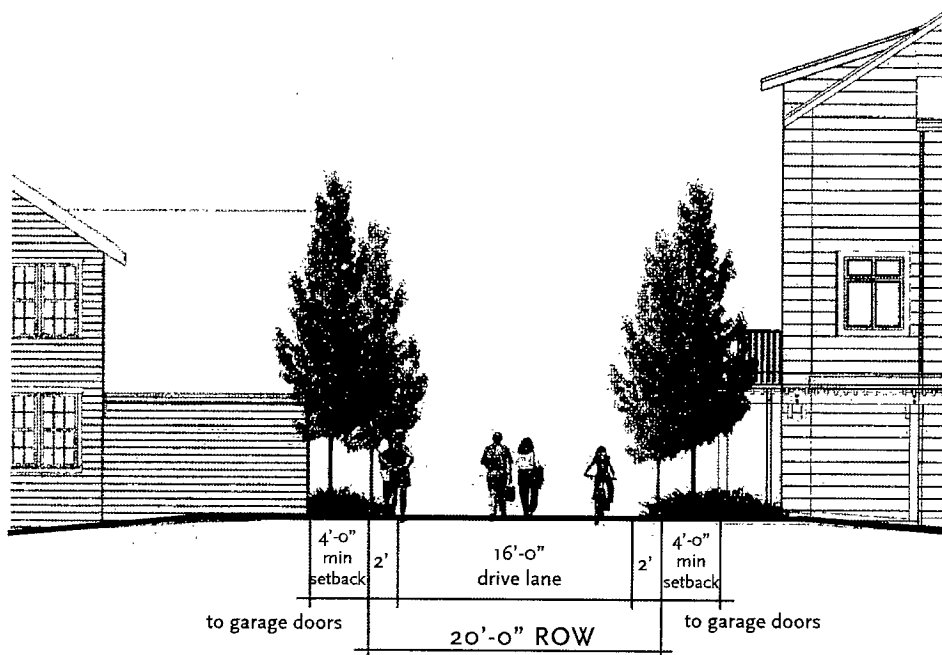
Public Ways



Woonerf Fire Lane Section

"Woonerf" is a Dutch term for a common space to be shared by pedestrians, bicyclists, and low-speed motor vehicles. They are typically narrow streets without curbs and sidewalks, and vehicles are slowed by placing trees, planters, parking areas, and other obstacles in the street. Motorists become the intruders and must travel at very low speeds below 10 mph. This makes a street available for public use that is essentially only intended for local residents, pedestrians and guests. The woonerf will be designed to a 16' section (clear) to accommodate emergency vehicles and will serve as a fire lane.

Development Standards

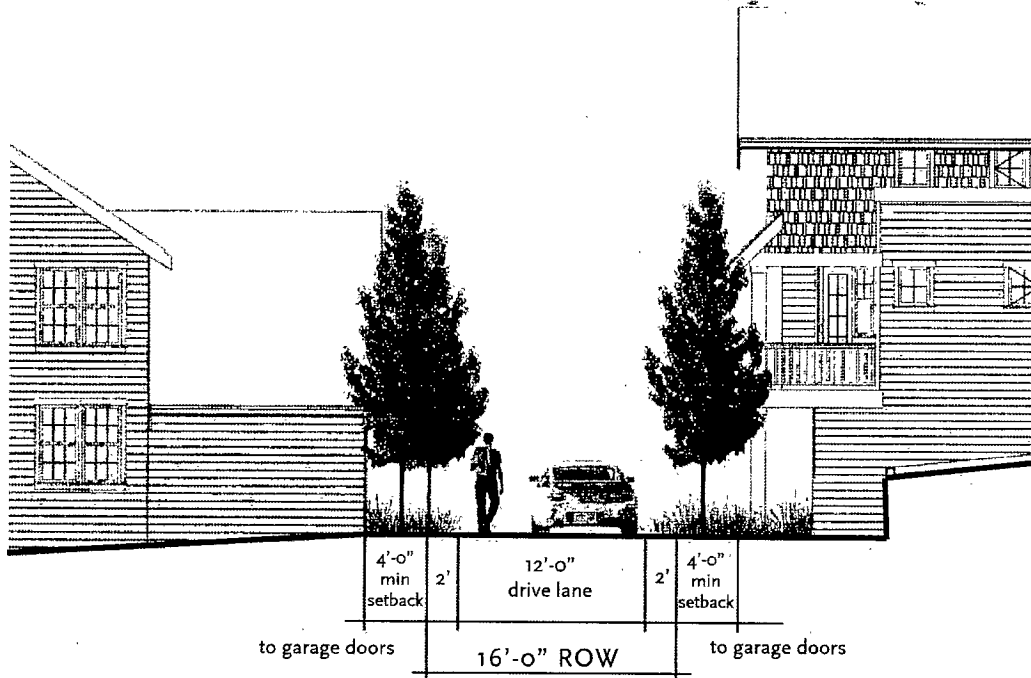
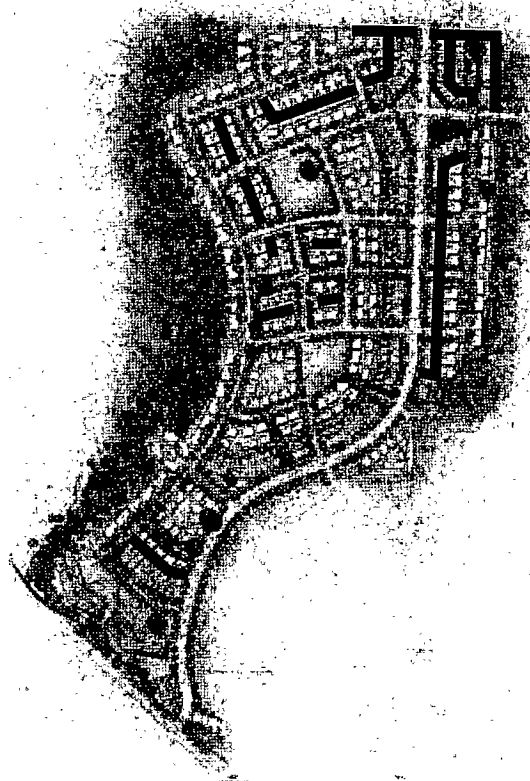


Public Ways



Alley Section

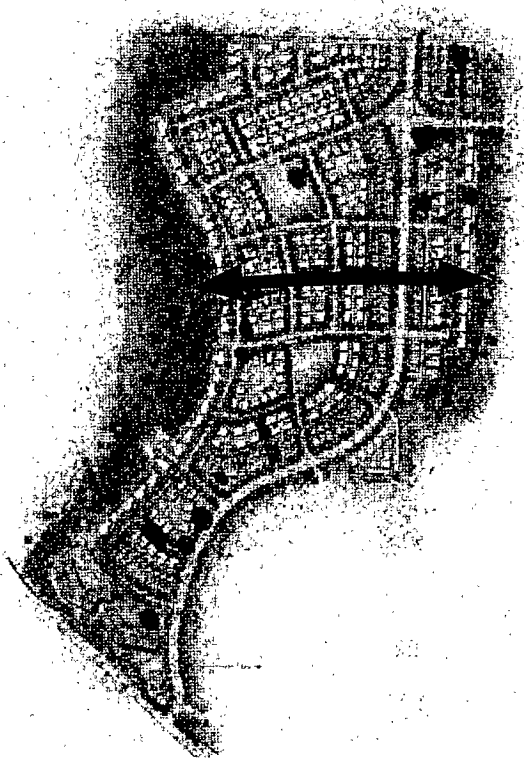
Alleys are an essential element for a successful pedestrian oriented community. By providing alleys, the automobile accesses the home from the back allowing porches and architectural details to dominate the public realm.



Development Standards



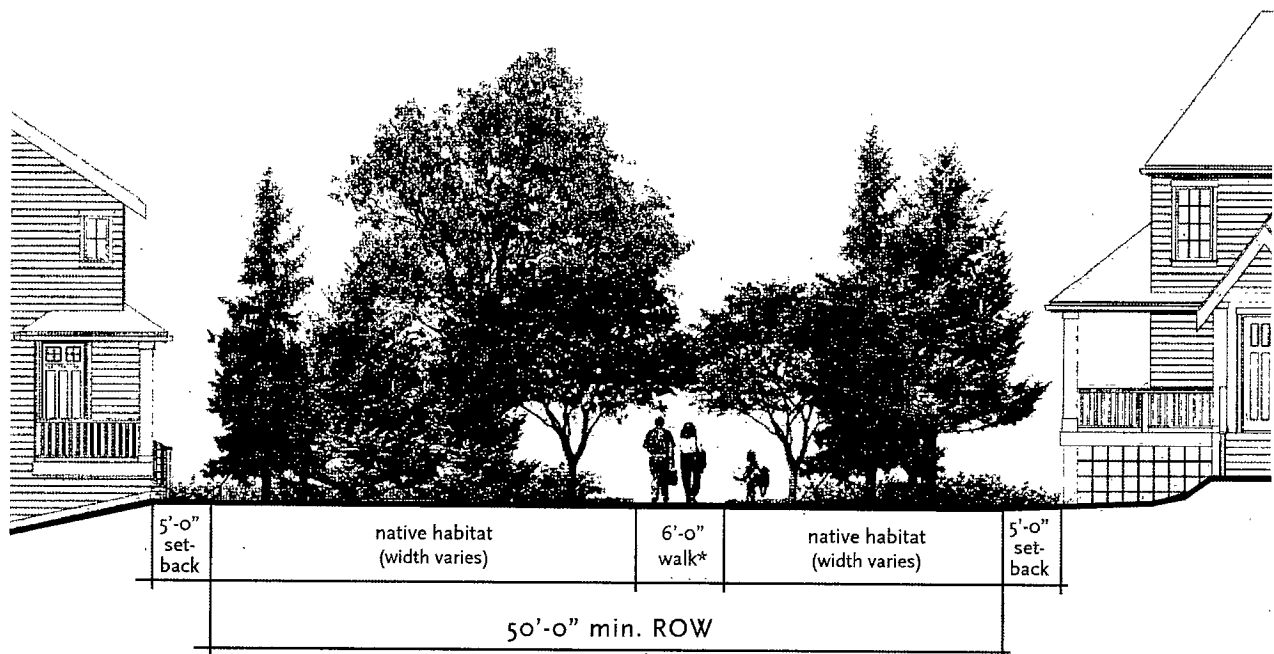
Public Ways



Wildlife Corridor Street Section

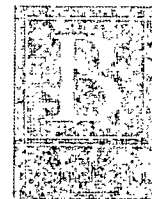
The Wildlife Corridor is a minimum 50' wide public right of way that runs where a street would typically exist. This corridor connects the Madrona Forest on the western edge of the site to the Riparian Corridor to the east. The wildlife corridor is planted with native vegetation allowing wildlife to safely travel between natural habitat areas within the region. This public way section also incorporates bioswales and infiltration space and serves as a part of East Park's natural storm water system.

Development Standards



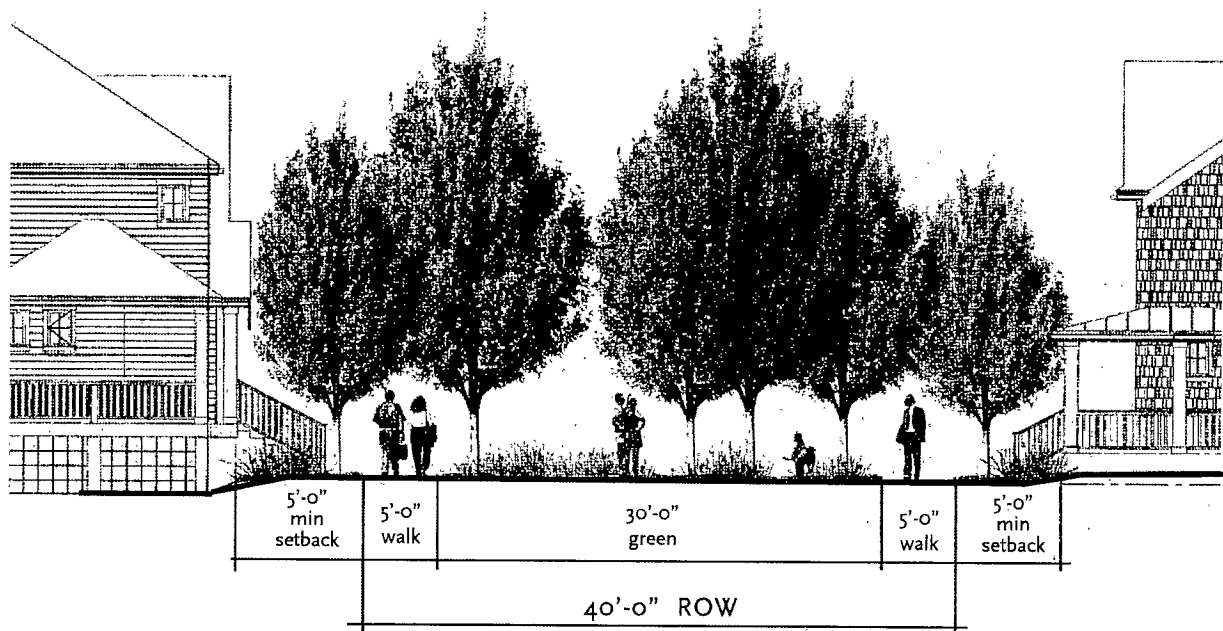
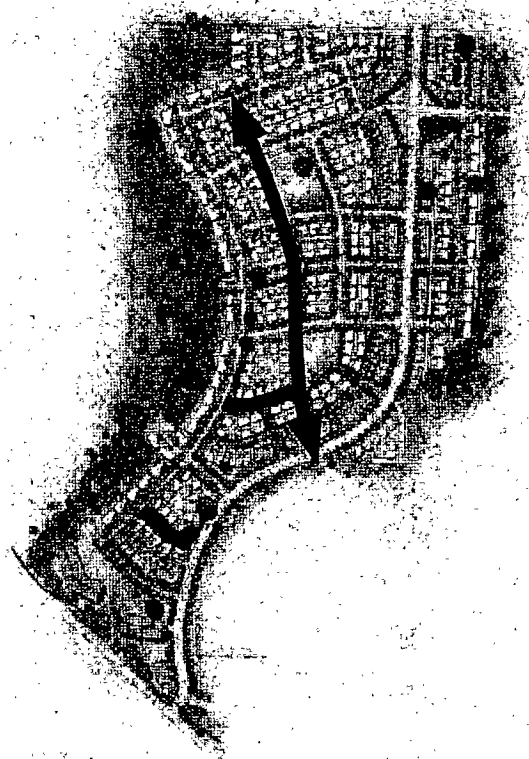
* walk meanders through habitat corridor.

Public Ways

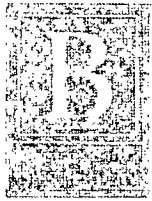


Pedestrian Green Street Section

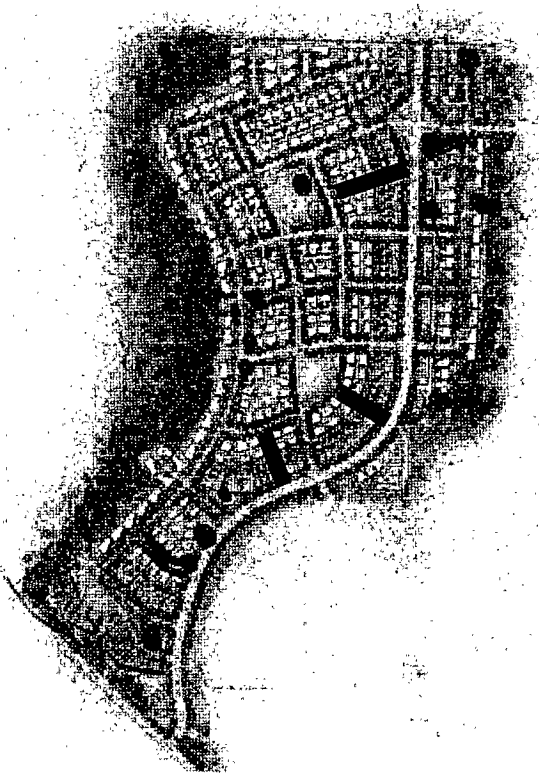
Green streets are 40' wide "pedestrian" public right of ways that run where streets would typically exist. These green streets lead to parks, the YMCA, and all areas of the neighborhood forming an open space network. They will have homes fronting the greens and will provide access to porches and to front doors. Green streets also provide a safe area where neighbors can gather together as well as a place for children to play in close proximity to their homes while parents keep a watchful eye. This public way section also incorporates bioswales and infiltration space and serves as a part of East Park's natural storm water system.



Development Standards

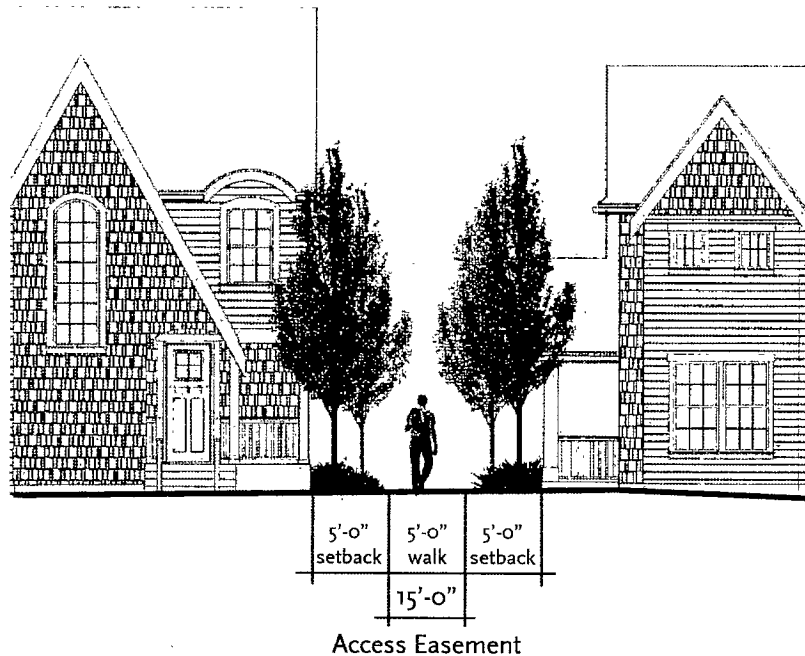


Public Ways

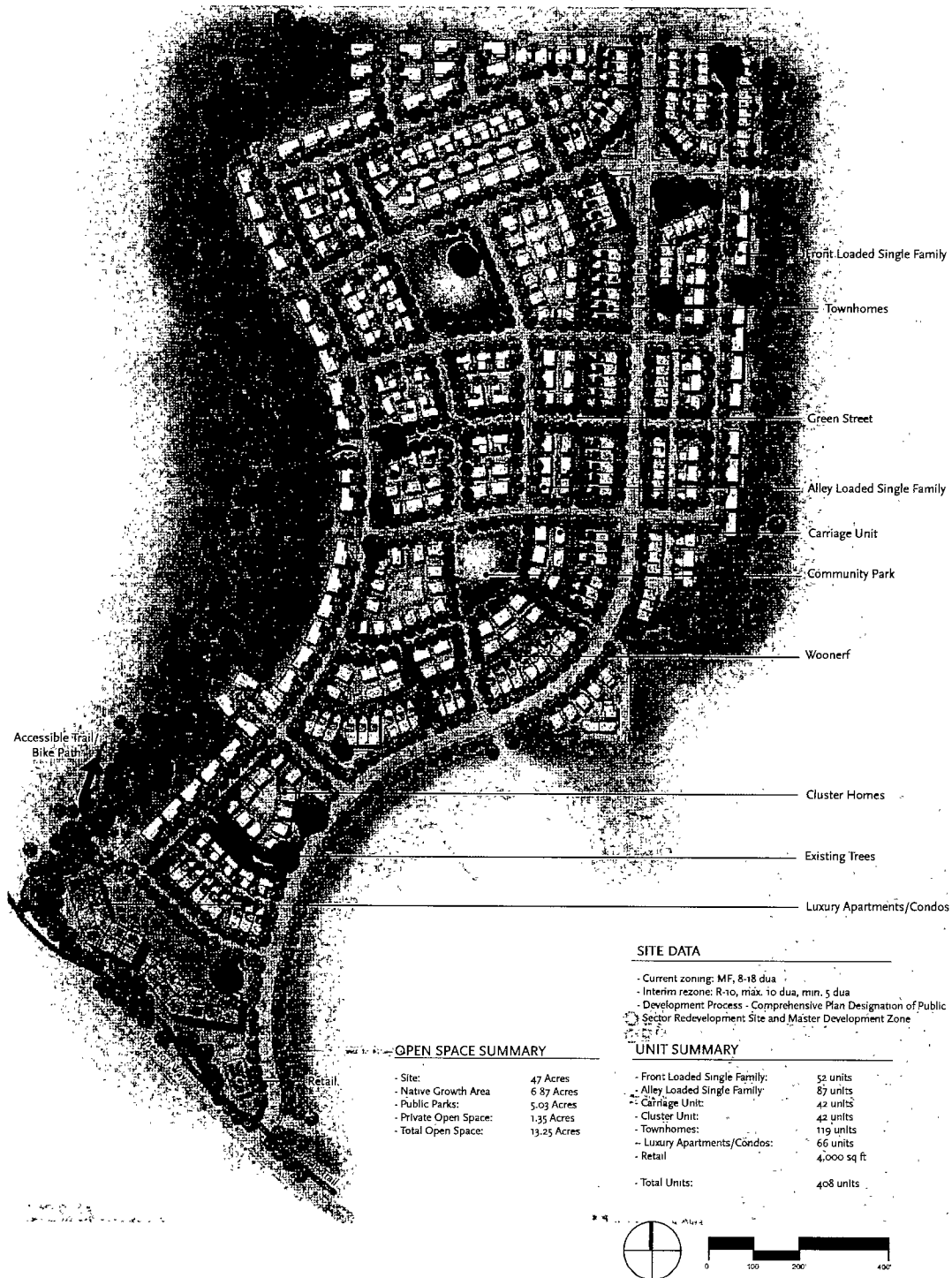
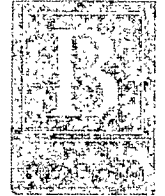


Pedestrian Lane Section

The pedestrian lane section helps create a network of sidewalks and other public paths throughout the neighborhood for pedestrian connectivity. They provide access to land-locked lots in cluster developments and provide opportunities for interaction and activity. A pedestrian lane will be provided to all homes that do not front on a neighborhood street, green street, park or common green. Pedestrian lanes shall be a minimum of 15 feet wide with a minimum 5-foot sidewalk.



Conceptual Site Plan

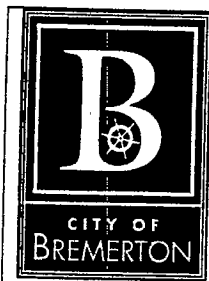


Development Standards

SEPA checklist

13

Appendix A



City of Bremerton
Department of Community Development
345 - 6th Street, Suite 600
Bremerton, WA 98337-1873

Phone: (360) 473-5275

Fax: (360) 473-5278

WAC 197-11-960 Environmental checklist.

ENVIRONMENTAL CHECKLIST

Purpose of checklist:

The State Environmental Policy Act (SEPA), chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

Instructions for applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can.

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Use of checklist for nonproject proposals:

Complete this checklist for nonproject proposals, even though questions may be answered "does not apply." IN ADDITION, complete the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D).

For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer," and "affected geographic area," respectively.

A. BACKGROUND

1. Name of proposed project, if applicable:

EAST PARK

2. Name of applicant: **EAST PARK, LLC**

3. Address and phone number of applicant and contact person:

APPLICANT: c/o EAST PARK LLC

**1601 114th Ave. SE Suite 100
Bellevue, WA 98004**

CONTACT PERSON: Jack Willing

Phone Number: 425-646-6317

Fax Number: 425-646-6313

4. Date checklist prepared: **October 14, 2005**

5. Agency requesting checklist: **City of Bremerton, Department of Community Development**

TO BE COMPLETED BY APPLICANT

6. Proposed timing or schedule (including phasing, if applicable):
Site improvements Spring/Summer 2006
Project to be completed in four phases over a period of four years.
7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.
No
8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal. **Phase 1 Environmental Assessment, Earth Solutions NW LLC, 6/24/2005;**
Geotechnical Engineering Study, Earth Solutions NW LLC, 7/7/2005
Traffic Report, Heath and Associates, Inc., 11/15/2005
9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.
None known.
10. List any government approvals or permits that will be needed for your proposal, if known.
Master Use Permit
Preliminary Plat Approval
Final Plat Approval
Vacation of Right of Way
Grading Permit
Developers Extension Agreement
Sub Area Plan
Site Specific Rezone
11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)
This approximately 48.3 acre property was previously used as military housing for the Puget Sound Naval Shipyard. The housing project has been demolished, leaving only the abandoned paved parking lots and the Magnuson Way and Schley Boulevard rights of way, street sections and utilities. The proposal is a master development plan consisting of a minimum of 400 housing units including at least 70 multifamily units, plus a minor amount of retail/commercial and office space, open space, revised rights of way and utilities.
12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.
A portion of the SW quarter and the SE quarter of Section 12, Township 24N, Range 1E W.M., City of Bremerton, Kitsap County, WA. The parcel is north and west of the intersection of Wheaton Way and Schley Boulevard. The north parcel boundary is approximately 300 ft north of the intersection of Magnuson and Schley. The east parcel boundary is approximately 250 ft east of the intersection of Magnuson and Schley.

B. ENVIRONMENTAL ELEMENTS

EVALUATION FOR
AGENCY USE ONLY

1. **Earth**

- a. General description of the site (circle one): Flat, rolling, **hilly**, steep slopes, mountainous, other...
- b. What is the steepest slope on the site (approximate percent slope)? **Native slope (outside project construction boundary): 75±%, Native slope (inside project construction boundary): 35±%, Previous development fill slope: 50±%**
- c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland. **Shelton, Kilchis and Harstine series soils. Generally, soils were silty sand with gravel (SM) containing occasional layers of poorly graded sand with silt and gravel (SP-SM) and poorly graded sand (SP). An isolated deposit of silt (ML) was also observed. See geotechnical report.**
- d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.
None known, see geotechnical report for details.
- e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.
The site will be graded for the proposed access roads and building sites. Excavations for utilities are also planned. The approximate range of earthwork quantity is from 75,000 to 100,000 cubic yards of cut and fill.
- f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.
Yes, erosion is a potential problem if significant rainfall occurs during the construction phase of the project.
- g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?
Approximately 35% of the site will be covered with impervious surfaces. (20% buildings, 15% roads)
- h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:
A temporary erosion and sedimentation control plan will be implemented as approved by the City of Bremerton Public Works. Asphalt paving, landscaping and storm drainage control improvements will stabilize the site in the long term.

2. Air

EVALUATION FOR
AGENCY USE ONLY

- a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

Dust and emissions from heavy equipment will result from construction. Automobile emissions will result from traffic at the site.

- b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

None known

- c. Proposed measures to reduce or control emissions or other impacts to air, if any:

No extraordinary measures are proposed to reduce automobile emissions.

3. Water

- a. Surface:

- 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

A stream is located along the eastern parcel boundary. The stream discharges into the Port Washington Narrows.

- 2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.
- On-site grading, road construction and utility installation will occur within 200 ft of the stream. Additional work may be required off-site on a stormwater outfall to the Port Washington Narrows.**

- 3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

None proposed or required.

TO BE COMPLETED BY APPLICANT

- 4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.
No.

EVALUATION FOR
AGENCY USE ONLY

- 5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.
No.

- 6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.
No.

b. Ground:

- 1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.
No.
- 2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.
Side sewer connections to an extension of the municipal sanitary sewer main is planned for each lot.

c. Water runoff (including stormwater):

- 1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.
Storm water runoff from the roofs and streets will be collected and conveyed to the existing or newly constructed municipal storm sewer main for discharge to the Main Street stormwater outfall.
- 2) Could waste materials enter ground or surface waters? If so, generally describe.
Yes, residential and automobile wastes could enter the drainage system.

TO BE COMPLETED BY APPLICANT

- d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:
Temporary erosion/sedimentation control will be designed and constructed in accordance with the 1992 Puget Sound Stormwater Management Manual and City of Bremerton Municipal Code Chapter 15.04. Permanent controls will be designed to the same standards to reduce and mitigate these potential impacts. Low Impact Development (LID) strategies will be incorporated into the design of the community.

EVALUATION FOR
AGENCY USE ONLY

4. Plants

- a. Check or circle types of vegetation found on the site:

☒ deciduous tree: **alder, maple**, aspen, other: **oak, birch**

☒ evergreen tree: **fir, cedar, pine**, other: **madrona forest**

☐ shrubs

☒ grass: **meadow**

☐ pasture

☐ crop or grain

☐ wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other

☐ water plants: water lily, eelgrass, milfoil, other

☐ other types of vegetation

- b. What kind and amount of vegetation will be removed or altered?

Invasive plants will be removed – ivy and blackberry as well as open grass/meadow.

- c. List threatened or endangered species known to be on or near the site.

None Known.

- d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

Tree protection fences at the dripline of existing trees to remain. Proposed landscaping to include street trees on all proposed streets with an emphasis on native and drought tolerant species.

5. Animals

- a. Circle any birds and animals which have been observed on or near the site or are known to be on or near the site:

birds: hawk, heron, **eagle, songbirds**, other: **Chinese Ring Necked Pheasant, Quail**,

mammals: **deer**, bear, elk, beaver, other:

fish: bass, salmon, trout, herring, shellfish, other:

- b. List any threatened or endangered species known to be on or near the site.

A bald eagle nest is located approximately 630' southeast of site. Please see attached occupancy/productivity survey.

- c. Is the site part of a migration route? If so, explain.

None known.

TO BE COMPLETED BY APPLICANT

d. Proposed measures to preserve or enhance wildlife, if any:

- **Conservation of native forest**
- **Greenways**
- **Native plantings**
- **Preservation of significant existing trees**
- **Bioswales and rain gardens provide cover and habitat**

EVALUATION FOR
AGENCY USE ONLY

6. **Energy and natural resources**

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Electric, natural gas, and solar will be used for domestic residential heating, cooling, and cooking.

b. Would your project affect the potential use of solar energy by adjacent properties?
If so, generally describe.

No.

c. What kinds of energy conservation features are included in the plans of this proposal?

List other proposed measures to reduce or control energy impacts, if any:

Energy efficient buildings are anticipated to include passive and active solar design strategies.

7. **Environmental health**

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal?
If so, describe.

There is a possibility of limited amounts of asbestos containing material on the site. See the Phase 1 Environmental Site Assessment Report.

1) Describe special emergency services that might be required.

None required.

2) Proposed measures to reduce or control environmental health hazards, if any:

None.

b. **Noise**

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

None known.

TO BE COMPLETED BY APPLICANT

- 2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)?
Indicate what hours noise would come from the site.

Short-term basis: construction noise limited to normal business hours.

Long-term basis: noise from traffic and residential activities.

- 3) Proposed measures to reduce or control noise impacts, if any:

Limit construction activities to normal business hours.

EVALUATION FOR
AGENCY USE ONLY

8. Land and shoreline use

- a. What is the current use of the site and adjacent properties?

Site – vacant

West – conservation of native forest

North – single family and multifamily residential development

East – single family and multifamily residential development and recreation

South – commercial (YMCA, city pool, city park, skate park, ice rink) and education (Montesorri School)

- b. Has the site been used for agriculture? If so, describe.

No.

- c. Describe any structures on the site.

None – vacant site.

- d. Will any structures be demolished? If so, what?

No.

- e. What is the current zoning classification of the site?

MF – 8-18 (Note: comprehensive plan and proposed zoning code changes zone to R-10)

- f. What is the current comprehensive plan designation of the site?

Public sector redevelopment site.

- g. If applicable, what is the current shoreline master program designation of the site?

N/A

- h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

No.

- i. Approximately how many people would reside or work in the completed project?

TO BE COMPLETED BY APPLICANT

1200 residents, 20 employees

- j. Approximately how many people would the completed project displace?

None.

- k. Proposed measures to avoid or reduce displacement impacts, if any:

N/A

- l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

Sub Area planning process.

EVALUATION FOR
AGENCY USE ONLY

9. Housing

- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

120 high, 240 middle, 100 low, totaling 460 units.

- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

None.

- c. Proposed measures to reduce or control housing impacts, if any:

Low Impact Development (LID) – street stormwater design

Open Space – protection of native forest and significant trees, parks to include passive and active open space

10. Aesthetics

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

60' will be the tallest height of any proposed structure. The principal exterior building materials will include wood, wood substitutes, masonry, concrete, steel, and glass.

- b. What views in the immediate vicinity would be altered or obstructed?

There will be minor obstruction to adjoining lots on the west side of the property. Measures to create view corridors for these properties will be used.

- c. Proposed measures to reduce or control aesthetic impacts, if any:

Building planning and character incorporated in the master development plan.

11. Light and glare

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

TO BE COMPLETED BY APPLICANT

Minimal glare from residential windows at dusk and dawn.

- b. Could light or glare from the finished project be a safety hazard or interfere with views?

No.

- c. What existing off-site sources of light or glare may affect your proposal?

None.

- d. Proposed measures to reduce or control light and glare impacts, if any:

N/A

12. **Recreation**

- a. What designated and informal recreational opportunities are in the immediate vicinity?
City Pool, YMCA, soccer field, skate park, city park playfield, ice rink, nature trail.
- b. Would the proposed project displace any existing recreational uses? If so, describe.
No.
- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:
Access to nature trail, approximately one acre of active recreation parks planned, passive parks, and greenway walking paths.

13. **Historic and cultural preservation**

- a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.
None known.
- b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.
None known.
- c. Proposed measures to reduce or control impacts, if any:
N/A

14. **Transportation**

- a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.
Magnuson Street, Schley Boulevard, Wheaton Way (see circulation plan)
- b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?
Yes, the site is currently served by public transit.
- c. How many parking spaces would the completed project have? How many would the project eliminate?
None eliminated.
- d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).
**Sidewalk and parking improvements to Schley Boulevard and Magnuson Street.
New public neighborhood streets within development.**

- e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

None in the immediate vicinity, however it is anticipated a significant portion of the population will use the Seattle/Bremerton Ferry on a regular basis.

- f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

3505 vehicle trips per day. Peak volumes will occur between 4pm-6pm.

- g. Proposed measures to reduce or control transportation impacts, if any:

Measures will be addressed in traffic impact report.

15. Public services

- a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.

Normal emergency services, health care, and schools would be required for increased population.

- b. Proposed measures to reduce or control direct impacts on public services, if any.

None proposed.

16. Utilities

- a. Circle utilities currently available at the site: **electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other: cable communications**

- b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

City of Bremerton: Sanitary Sewer, Water

Cascade Natural Gas: Natural Gas

Telephone: Qwest

Cable TV: Comcast

Puget Sound Energy: Electricity

Refuse Service: Brem-Air Disposal

Trenching as necessary to extend existing utilities into the project site.

c. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature:

Date Submitted:

d. SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (do not use this sheet for project actions)

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment.

When answering these questions, be aware of the extent the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?
Storm water runoff from the new roofs and existing and newly constructed streets will increase flows to the municipal storm sewer main and will be discharged to the Port Washington Narrows. Dust and emissions from heavy equipment will result from construction and automobile emissions will result from traffic at the site. There is a possibility of limited amounts of asbestos containing material on the site (see the Phase 1 Environmental Site Assessment Report). Noise levels will change because of this project. Short-term basis: construction noise during normal business hours. Long-term basis: noise from traffic and residential activities.

Proposed measures to avoid or reduce such increases are:

The stormwater system will be designed and constructed in accordance with the requirements of the 1992 Puget Sound Stormwater Management Manual Best Management Practices (BMP's) and City of Bremerton Municipal Code Chapter 15.04. Low impact design (LID) elements will be used as practical to reduce the amount of stormwater runoff. Dust will be controlled during the construction phase by standard construction BMP's. No extraordinary measures are proposed to reduce automobile emissions. No extraordinary measures will be required to properly handle and dispose of the anticipated asbestos material. Noise impacts during construction will be addressed by limiting construction activities to normal business hours.

2. How would the proposal be likely to affect plants, animals, fish, or marine life?
Existing brush and weeds will be removed and significant trees will be retained. Animal trails and habitat will be disturbed or displaced by construction. Fish or marine life may be affected by increased stormwater flows into the Port Washington Narrows.

Proposed measures to protect or conserve plants, animals, fish, or marine life are:
Tree retention and community green spaces are incorporated into the design plan. Green streets will provide corridors for wildlife movement opportunities between the western madrona forest and the eastern ravine maple forest. Affects on fish and marine life will be reduced or mitigated through the stormwater outfall permitting process with the WA Dept. of Fish and Wildlife, US Army Corps of Engineers and the City of Bremerton.

3. How would the proposal be likely to deplete energy or natural resources?
Depletion of energy or natural resources is not anticipated for this project.

Proposed measures to protect or conserve energy and natural resources are:

Not Applicable

4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection; such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?

No adverse affects to environmentally sensitive areas are anticipated. Fish and marine species habitat may be affected by the stormwater outfall.

Proposed measures to protect such resources or to avoid or reduce impacts are:

Affects on fish and marine life will be reduced or mitigated through the stormwater outfall permitting process with the WA Dept. of Fish and Wildlife, US Army Corps of Engineers and the City of Bremerton.

5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?

Housing density and land use will be reviewed through the permitting process. No affects incompatible with existing plans are anticipated.

Proposed measures to avoid or reduce shoreline and land use impacts are:

Shoreline impacts will be reduced or mitigated through the stormwater outfall permitting process with the WA Dept. of Fish and Wildlife, US Army Corps of Engineers and the City of Bremerton.

6. How would the proposal be likely to increase demands on transportation or public services and utilities?

Public transit, water supply, solid waste disposal and sewage service demands are all expected to increase.

Proposed measures to reduce or respond to such demand(s) are:

Public transit and solid waste representatives are included in the stakeholder process and have inputs to the site design with respect to transit and solid waste. Water and sewer service extensions will be designed using standard methods and reviewed for proper capacity by the City.

7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.

No known conflicts

Bald Eagle Report

Appendix B

2004 BALD EAGLE TERRITORY

NAME Manette (NEW TERRITORY)

ATTACH A 1:24,000 SCALE MAP SHOWING NEST LOCATIONS

OCCUPANCY / PRODUCTIVITY SURVEY

Recommended Dates: April 7 - April 25

Recommended Dates: June 10 - June 25

Early Season Survey Done by: Scott Ford

Late Season Survey Done by: _____

Reported by: Shelly Arment 360-681-4276

Reported by: _____

PLEASE USE CODES SHOWN AT BOTTOM OF PAGE TO REPORT DATA IN THE FORM BELOW.
MARK NEST LOCATIONS ON A MAP ATTACHED TO THIS SHEET. DESCRIBE THE NEST(S) IN THE SPACE BELOW.
USE EXTRA SHEETS AS NECESSARY.

NEST	MONTH	DAY	# ADULTS	BEHAVIOR	REPAIR	OCCOBS	MONTH	DAY	# ADULTS	PRODOBS	DEVELOPMENT
1	4	19	2	F P	N	5					
2											
3											

USE THE SPACE BELOW TO:

(1) Describe new nests

(2) Note other conditions, such as occupancy by another species or young present during early season survey, that don't fit into the form.

When describing a nest, include a detailed description of the nest tree (species, nest ht, etc.) as well as the tree's location.

NEW NEST #1 TRS T24N R1E S12 SW of SE LANDOWNER Private

Description: Live black cottonwood tree located at SW corner of a field to the north of 2217 Winfield Ave, Bremerton. Nest is on westward pointing limb approximately 15' out from main trunk and 45' above the ground. Visible from street.

Notes: Nest is small for an eagle nest but adult eagles were sighted in it and there are eagle droppings all around site. Landowner at 2217 Winfield is Ms. Schwal at 360-782-0642.

Tree Data: DBH: 55" Tree Ht: 110' Location: 47°34.771' N, 122°36.967' W

NEW NEST #2 TRS _____ LANDOWNER _____

NEW NEST #3 TRS _____ LANDOWNER _____

Behavior codes: I = Incubating D = Defensive P = Perched F = Flying
Repair Codes: N = New R = Repaired U = Unrepaired D = Destroyed

OCCOBS Codes:

X = Not Checked

✓ = Occupied, Active (breeding attempt confirmed by incubation or eggs)

○ = Occupied but Inactive (adults present but NOT incubating/no eggs)

○ = Occupied, Activity Unknown (adults present, breeding attempt suspected but not confirmed)

○ = Unoccupied

○ = Occupancy unknown (e.g., no birds present, but nest is new or newly repaired)

Development Codes: D = Downy F = Feathered

PRODOBS Codes:

X = Not Checked

0 = Unsuccessful/Nest Empty

1-6 = Number of Young Observed in Nest

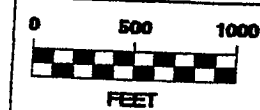
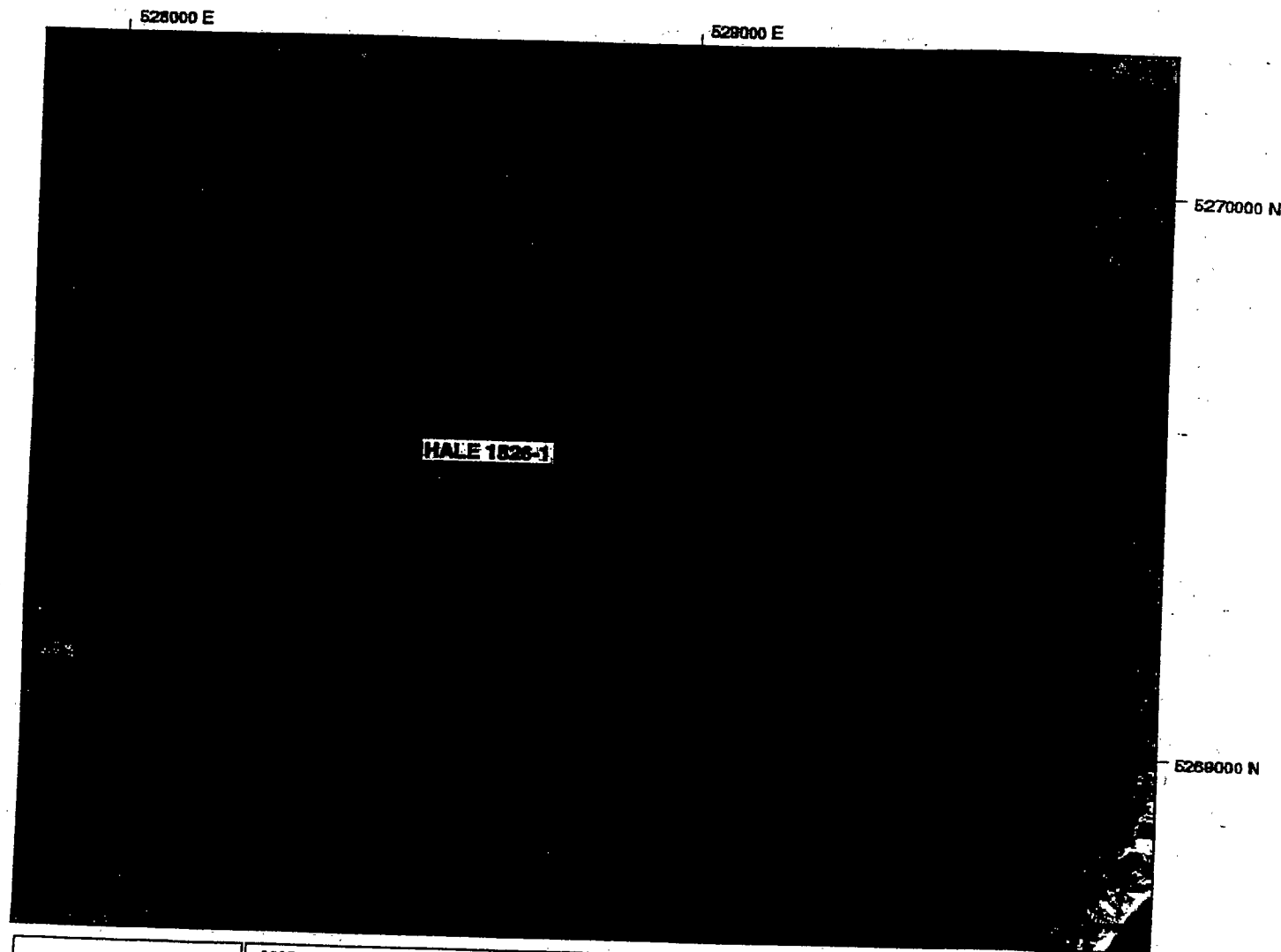
7 = Nest Successful, but # Young Unknown

8 = Adults Obstructing View of Nest

9 = Not Located or Destroyed

MANETTE BALD EAGLE TERRITORY (OCCURRENCE 1526)

OTHER SITES (IF PRESENT) SHOWN FOR REFERENCE. SEE REVERSE FOR AVAILABLE HISTORY.

COMPARE THIS MAP TO YOUR PERSONAL/REGIONAL FIELD MAP AND REPORT INCONSISTENCIES

MAP SCALE 1:12,000 MAP PROJECTION: STATE PLANE SOUTH DATUM: NAD27 CONUS TICS: UTM ZONE 10T
 WHEN ADDING NEW LOCATIONS OR CORRECTING OLD LOCATIONS, PLEASE MARK TO SCALE!

IF YOU ARE USING A GPS UNIT WITH THIS MAP, SET THE DATUM TO NAD27 CONUS

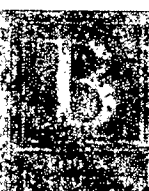
1526-1 MANETTE
 LAST OCCUPIED: 20040419
 47 34' 46" 122 36' 58"

T24N R01E S12
 FORD, S. OCCPROD SUR
 UTM 528889 E 5268420 N

BALD EAGLE NEST IN LIVE BLACK COTTONWOOD AT SW CORNER OF FIELD N. OF 2217
 WINFIELD AVE. NEST ON WESTWARD POINTING LIMB ABOUT 15 FT OUT FROM MAIN TRUNK
 AND 45 FT ABOVE GROUND. VISIBLE FROM STREET. NEST TREE DBH 65", HEIGHT 110'.

REPORT ERRORS AND RETURN COMPLETED FORM TO: Gretchen Blatz, WDFW, 600 Capitol Way North, Olympia, WA 98501-1091

Traffic Impact Analysis



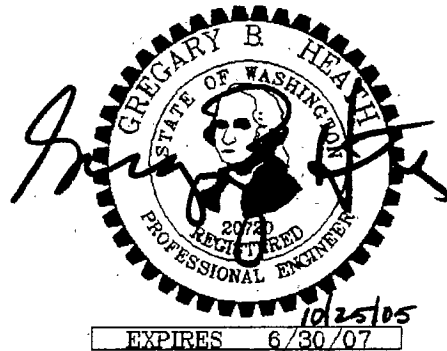
Appendix C

East Park Sub Area Plan



EAST PARK
TRAFFIC IMPACT ANALYSIS

City of Bremerton, WA



Prepared for: Jeff Wegener
Mithun
Pier 56, 1201 Alaskan Way, Ste. 200
Seattle, WA 98101

OCTOBER 2005

EAST PARK TRAFFIC IMPACT ANALYSIS

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EAST PARK TRAFFIC IMPACT ANALYSIS

I. INTRODUCTION

This study serves to investigate traffic impacts related to the accesses of the proposed East Park project. The primary goals of this study concentrate on the assessment of existing roadway conditions and intersection congestion, forecasts of newly generated project traffic, and estimations of future delay. Preliminary tasks include the collection of roadway information, road improvement information, and peak hour traffic counts. A detailed level of service analysis of the existing volumes is then made to determine the present degree of congestion on the network. Based on this analysis, forecasts of future traffic levels on the surrounding street system are determined. Following this forecast, the future service levels for the key intersections are investigated. As a final step, applicable conclusions and possible mitigation measures are defined.

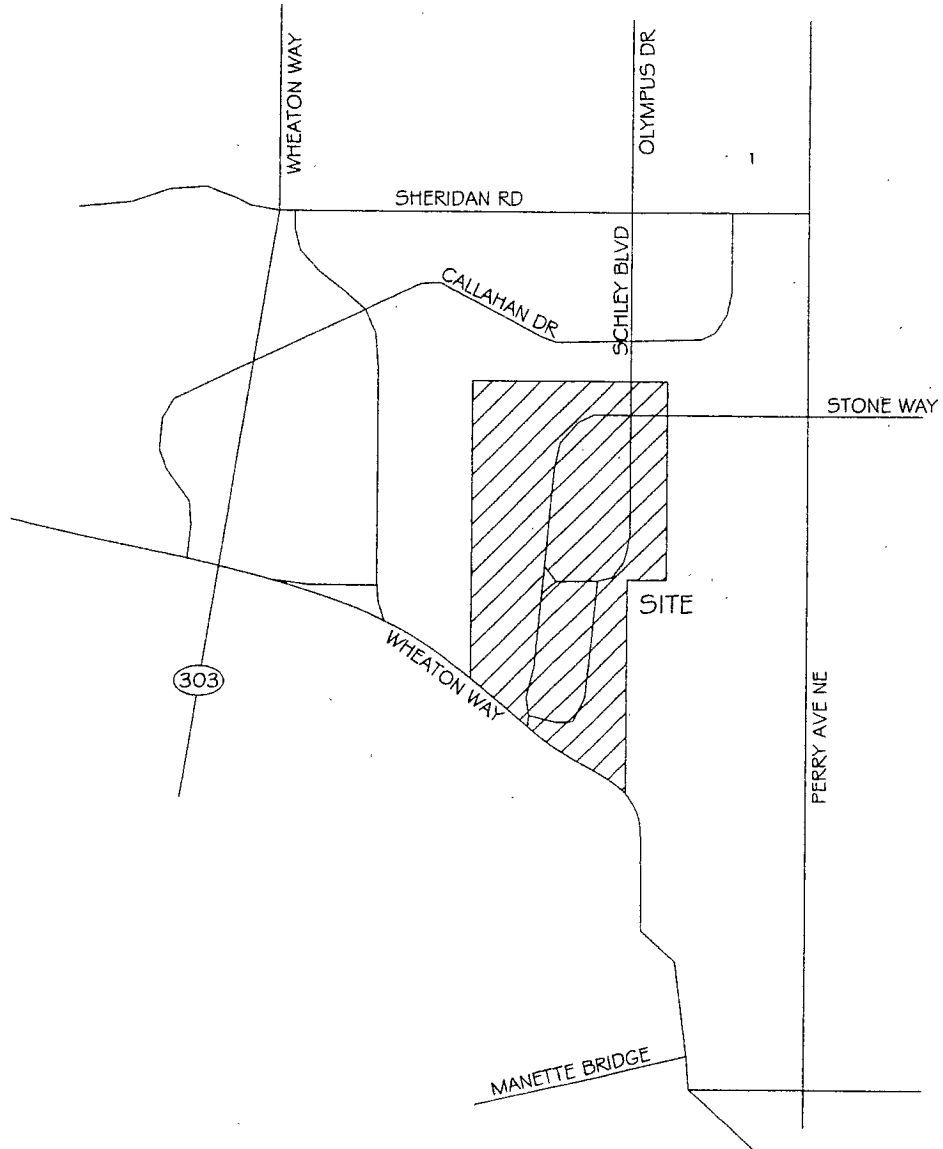
II. PROJECT DESCRIPTION

The proposed development consists of 223 single family detached units in front loaded, alley loaded, carriage unit, and cluster unit configurations, 119 townhomes, 66 luxury apartment/condominiums, and a 4,000 square foot retail building. This project is a conversion of the old East Park Naval Reserve, located on Schley Blvd just south of Sheridan Rd in the City of Bremerton. Internal roadways will provide access onto Schley Blvd. Nearby land uses are primarily residential, with a hospital and two schools located nearby as well. Figure 1 on the following page shows the site location and roadway map while Figure 2 shows the site plan and access configuration for the site.

III. EXISTING CONDITIONS

A. Surrounding Street Network

The street network serving the proposed project consists of a variety of roadways. Primary streets serving the site are two-lane arterials and multi-lane major arterials. Characteristics for most roadways vary with respect to lane widths, grades, speeds, and function. Differences are based on specific roadway designations and proximity to major employment areas. The major roadways and arterials surrounding the site are listed and described on page 6.



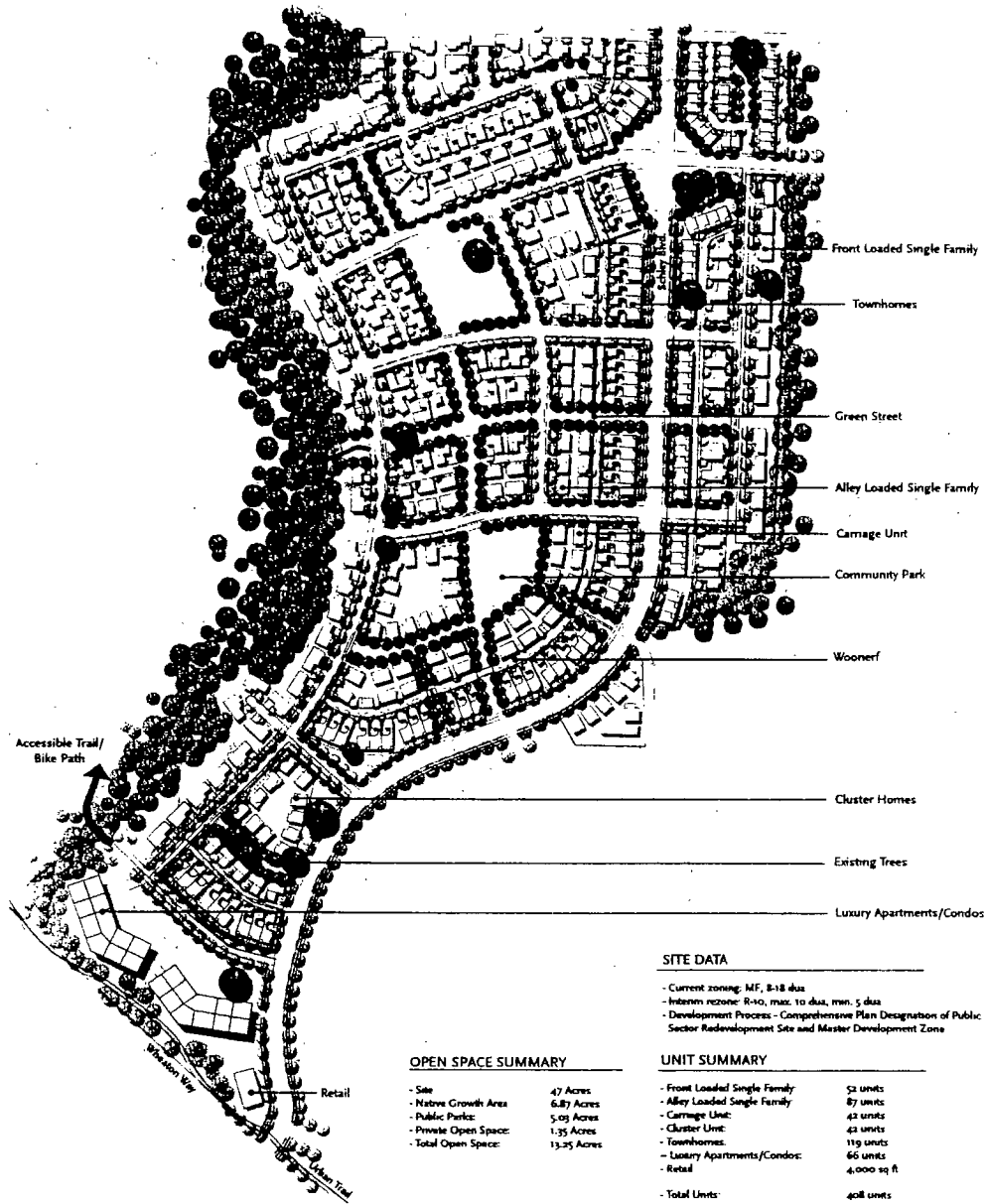
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VICINITY MAP # ROADWAY SYSTEM

FIGURE 1



SITE DATA

- Current zoning: MF, B-18 dual
- Interim rezoning: R-10, max. 10 dual, min. 5 dual
- Development Process - Comprehensive Plan Designation of Public Sector Redevelopment Site and Master Development Zone

OPEN SPACE SUMMARY

- Site	47 Acres
- Native Growth Area	6.87 Acres
- Public Parks	5.09 Acres
- Private Open Space	1.35 Acres
- Total Open Space	13.35 Acres

UNIT SUMMARY

- Front Loaded Single Family	52 units
- Alley Loaded Single Family	87 units
- Carriage Unit	42 units
- Cluster Unit	42 units
- Townhomes	119 units
- Luxury Apartments/Condos	66 units
- Retail	4,000 sq ft
- Total Units	408 units



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SITE PLAN

FIGURE 2

Wheaton Way is a two-lane arterial that borders the south edge of the project. The posted speed limit is 25 mph across the project site. To the west the road has a north-south orientation and is designated as SR-303, with a speed limit of 30 mph and multiple lanes. Lane widths are generally 12 feet, while shoulders are curbed. Grades are rolling.

Schley Boulevard is a north-south, two-lane local road that borders the east edge of the project. The speed limit is posted at 25 mph, lane widths are 12 feet, and shoulders are curb/gutter/sidewalk.

Callahan Drive is a mostly east-west, two-lane arterial that lies to the north of the project. This road provides ramp access for northbound SR-303. The posted speed limit is 25 mph, lane widths are 12 feet, and shoulders are curb/gutter/sidewalk.

Sheridan Road is a two-lane, east-west arterial which lies to the north of the site. The posted speed limit along this roadway is 25 mph, and shoulders are curbed or paved. A bike lane is also provided. Widening for turn lanes is provided at the intersection with SR-303.

B. Roadway Improvements

A review of the 2005 to 2010 City of Bremerton Six Year Transportation Improvement Program indicates several projects scheduled for the area roadways. These projects are listed and described below:

Warren Avenue (SR-303) Off-ramp from Sheridan Ave to Callahan Dr (Priority #3)
An off ramp is to be constructed connecting southbound SR-303 with Callahan Drive. The project length is 0.14 miles. The total cost is estimated at \$920,000 with funding from the state and local levels.

Wheaton Way from Callahan Dr to Sheridan Rd (Priority #9)
The roadway is to be realigned to a north-south configuration over a length of 0.12 miles. The cost is listed at \$1,405,000 with state and local funding sources.

SR-303 Bremerton to Silverdale Transportation Corridor (Priority #10)
This project is an implementation of the SR-303 corridor study, covering a length of 2.8 miles from Burwell St to Riddell. The \$100,000 cost is to be met by local sources.

C. Peak Hour Volumes

Field counts for this study were taken during the evening peak period between the hours of 4 PM and 6 PM. The PM peak hour was used for analysis purposes since it generally represents the worst case scenario for most commercial developments with respect to traffic conditions. This is primarily due to the common 8 AM to 5 PM work schedule and the greater number of recreation and shopping trips associated with the late afternoon period. Residents typically return home after work during the same general time period

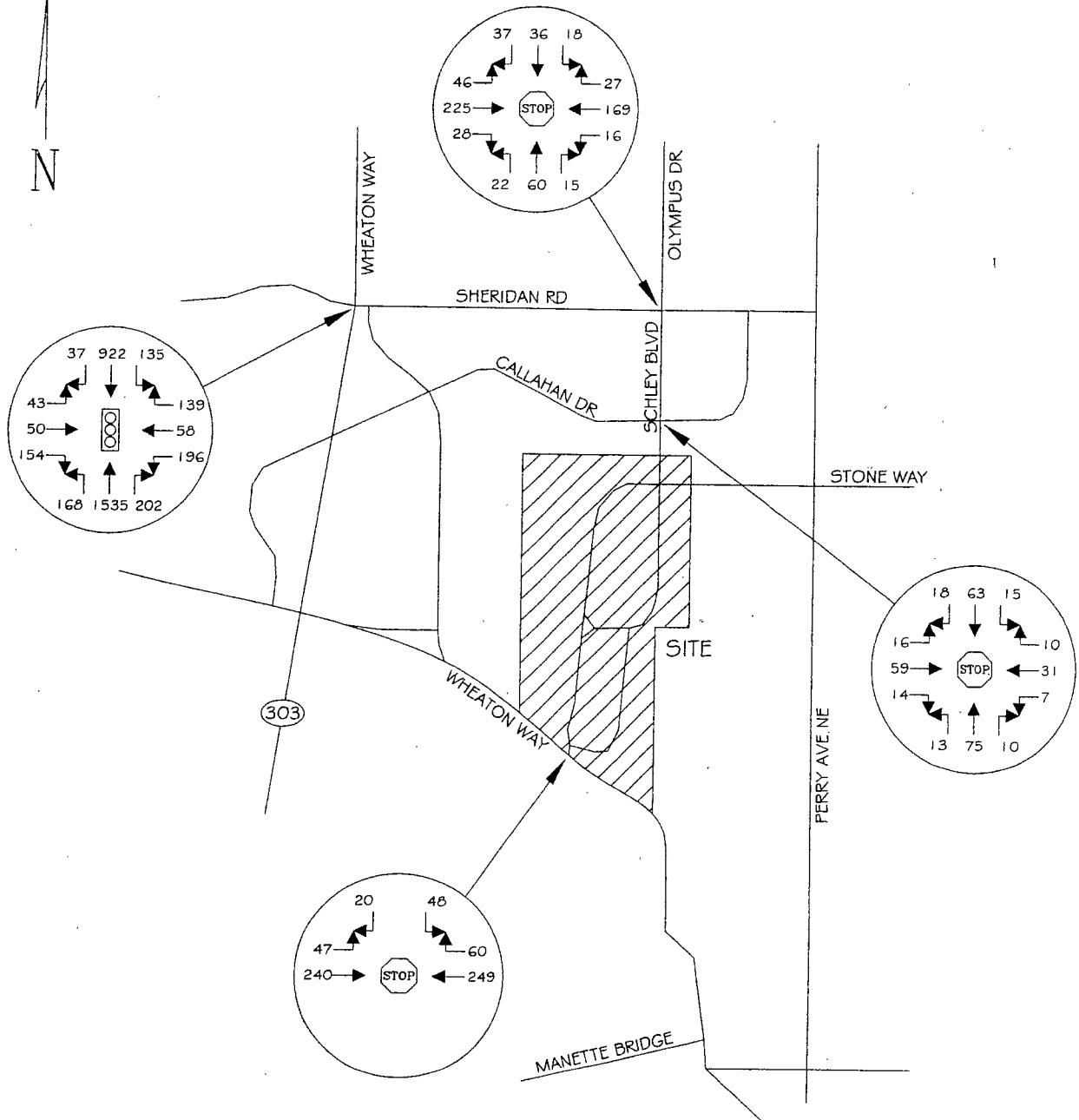
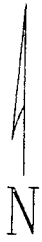
of the day, which results in a natural peak in evening traffic when combined with traffic oriented toward the project.

Shown in Figure 3 on the following page are the weekday PM peak hour volumes for the primary intersections of Schley & Wheaton Way, Schley Blvd & Callahan Dr, Olympus Dr & Sheridan Rd, and SR-303 & Sheridan Rd. ADT volumes for most roadways may be available from the City of Bremerton.

D. Level of Service Description

Existing peak hour delays were determined using the *Highway Capacity Manual*. Capacity analysis is used to determine level of service (LOS) which is an established measure of congestion for transportation facilities. LOS is defined for a variety of facilities including intersections, freeways, arterials, etc. A complete definition of level of service and related criteria can be found in the HCM. The methodology for determining the LOS at signalized intersections strives to determine the volume to capacity (v/c) ratios for the various intersection movements as well as the average control delay for those movements. *Delay* is generally used to measure the degree of driver discomfort, frustration, fuel consumption, and lost time. *Control delay*, in particular, includes movements at slower speeds and stops on intersection approaches as vehicles move up in queue position or slow down upstream of an intersection. Aside from the overall quantity of traffic, three specific factors influence signalized intersection LOS. These include the type of signal operation provided, the signal phasing pattern, and the specific allocation of green time.

The methodology for determining the LOS at unsignalized intersections strives to determine the potential capacities for the various vehicle movements and ultimately determines the average total delay for each movement. *Total delay* is described as the elapsed time from when a vehicle stops at the end of a queue until the vehicle departs from the stop line. *Average total delay* is simply the mean total delay over the entire stream. A number of factors influence potential capacity and total delay including the availability/usefulness of gaps. The range for intersection level of service is LOS A to LOS F with the former indicating the good conditions and the latter indicating the worst conditions with heavy control delays. Detailed descriptions of intersection LOS are given in the 2000 Highway Capacity Manual. Existing LOS is shown in Table 1 on page 9. Level of service calculations were made using the computer analysis programs known as *Signal 2000* and *HCS-2000* which follow signalized and unsignalized analysis procedures found in the *Highway Capacity Manual*. Refer to Chapters 16 and 17 of the HCM.



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EXISTING PM PEAK HOUR VOLUMES

FIGURE 3

TABLE 1
Existing Level of Service

<i>Intersection</i>	<i>Control</i>	<i>Geometry</i>	<i>LOS</i>	<i>Delay</i>
Schley/Wheaton	Stop	Southbound	C	17.6
		Eastbound	A	8.3
Schley/Callahan	Stop	Northbound	B	11.0
		Southbound	B	10.8
		Eastbound	A	7.3
		Westbound	A	7.4
Olympus/Sheridan	Stop	Northbound	C	19.4
		Southbound	C	15.8
		Eastbound	A	7.7
		Westbound	A	7.8
SR-303/Sheridan	Signal	Southbound	C	25.8
		Westbound	E	60.8
		Northbound	D	40.7
		Eastbound	E	58.0
		Overall	D	39.4

As shown in the table, existing delays at the key intersections are expected to run from LOS A to LOS E. The highest delays presently exist at the westbound and eastbound approaches on Sheridan at SR-303.

E. Non-Motorist Traffic Volumes

Observations for pedestrian and bicycle activities were made at several road segments serving the site. A moderate amount of non-motorist activity was noted during peak hour counts and during other visits to the area. Sidewalks and bike lanes/paths are present in the project vicinity, encouraging non-motorist activity. Based on the location of the proposed development in relationship to areas which might attract non-motorist traffic, moderate additional pedestrian and bicycle traffic would be expected along the area roadways.

F. Transit Service

A review of the Kitsap Transit regional bus schedule indicates three transit service lines provided near the project site. Routes 21, 25, and 29 run from the Bremerton Transportation Center to the East Bremerton Transfer Center. Route 25, East Park, also serves the Harrison Hospital and runs from 6 AM to 8:30 PM. Route 21, Perry Ave, also serves the Perry Ave Mall and runs from 6 AM to 8:30 PM. Route 29, Trenton Ave, also serves the Perry Ave Mall and runs from 6 AM to 7 PM. To maintain a conservative approach, no trip reductions are used in forecasting future traffic conditions due to provided transit service.

G. Sight Distance at Access Driveways

An examination of Schley Blvd was made to determine whether adequate entering and stopping sight distance could be provided for inbound and outbound project traffic. In accordance with the AASHTO Green Book, a minimum entering sight distance (ESD) of 335 feet is required for a 30 mph design speed. Based on general field reviews, the access roads should have adequate sight distance onto Schley. Schley has some horizontal curvature, however the access road intersections are located on the outside of any curves. The exact location of the accesses is critical in determining whether adequate sight distance is provided. Final sight distance review would be performed at the time engineering plans are submitted for review and approval.

IV. FUTURE TRAFFIC CONDITIONS

A. Trip Generation

Trip generation is used to determine the magnitude of project impacts on the surrounding street system. This is usually denoted by the specific number of trips, which enter or exit a site during a designated time period. Generation data was taken from the well-known Institute of Transportation Engineers publication *Trip Generation*, Seventh Edition. The specific land uses for this site were Single Family Detached Housing (LUC 210) for the single family units, Residential Condominium/Townhouse (LUC 230) for the townhouse and luxury apartment/condominium units, and Specialty Retail Center (LUC 814). Regression equations were chosen for the residential land uses, while ITE average rates were chosen for the retail center. Table 2 shown below gives a summary of project traffic. Average Daily Traffic and AM and PM peak hour volumes are given.

TABLE 2
Trip Generation

	<i>223 units</i> <i>Single Fam</i>	<i>185 units</i> <i>Condo/Twnhse</i>	<i>4000 ft²</i> <i>Spec Retail</i>	<i>Total</i>
AWDT	2175	1083	177	3435
AM Peak Enter	42	14	0	56
AM Peak Exit	124	70	0	194
AM Total	166	84	0	250
PM Peak Enter	139	67	5	211
PM Peak Exit	82	33	6	121
PM Total	221	100	11	332

B. Trip Assignment and Distribution

The destination and origination of future project traffic primarily dictates how trips will disperse at nearby intersections. Trips generated by the project are expected to follow the general pattern shown in Figure 4. This distribution is based on the existing roadway network. Future improvements such as the SR-303 southbound ramps onto Callahan would be expected to shift some inbound volumes from Sheridan to Callahan.

C. Future Traffic Volumes

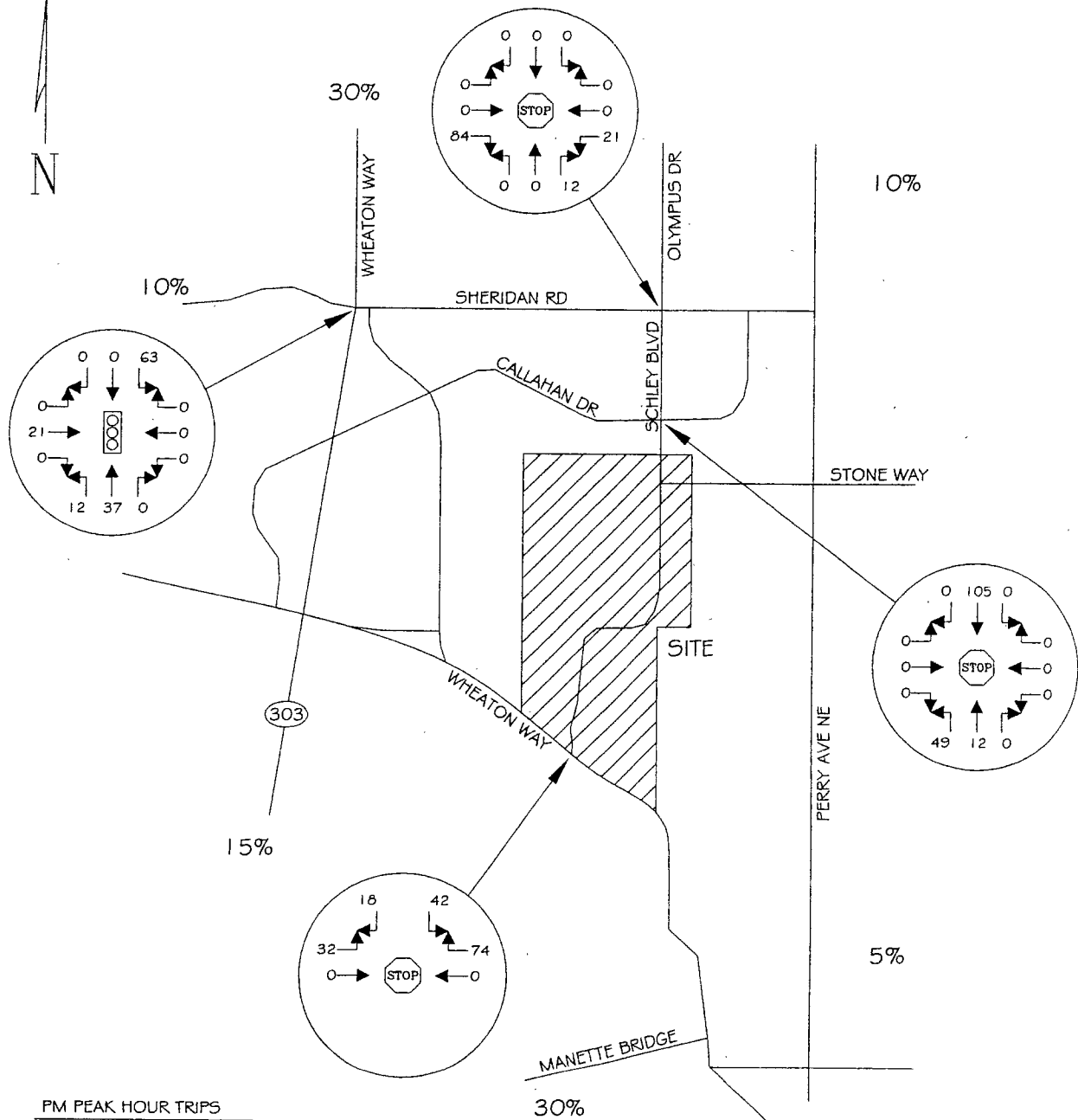
The owners of the project anticipate a completion date for the build out of this project by 2010. Future 2010 traffic volumes without the project were derived by applying a 3 percent annual growth rate to the volumes of Figure 3. 2010 intersection volumes without the project are given in Figure 5 while 2010 volumes with project traffic included are shown in Figure 6.

D. Future Level of Service

The results of the future level of service analysis are given in Table 3 shown below. These results were again determined using the intersection analysis programs *Signal 2000* and *HCS-2000*.

TABLE 3
Future 2010 Level of Service
Delays given in seconds per vehicle

<i>Intersection</i>	<i>Control</i>	<i>Geometry</i>	<u>Without Project</u>		<u>With Project</u>	
			<i>LOS</i>	<i>Delay</i>	<i>LOS</i>	<i>Delay</i>
Schley/Wheaton	Stop	Southbound	C	22.4	F	54.9
		Eastbound	A	8.6	A	9.1
Schley/Wheaton (imp)	Stop	Southbound	-	-	E	39.7
		Eastbound LT	-	-	A	9.1
Schley/Callahan	Stop	Northbound	B	11.6	B	14.9
		Southbound	B	11.3	B	13.6
		Eastbound	A	7.3	A	7.3
		Westbound	A	7.4	A	7.4
Olympus/Sheridan	Stop	Northbound	D	26.7	E	35.6
		Southbound	C	19.7	D	25.3
		Eastbound	A	7.8	A	7.8
		Westbound	A	7.9	A	8.3
SR-303/Sheridan	Signal	Southbound	C	25.9	D	36.6
		Westbound	F	107.7	F	116.2
		Northbound	D	52.6	E	59.4
		Eastbound	F	95.0	F	98.3
		Overall	D	53.2	E	61.0



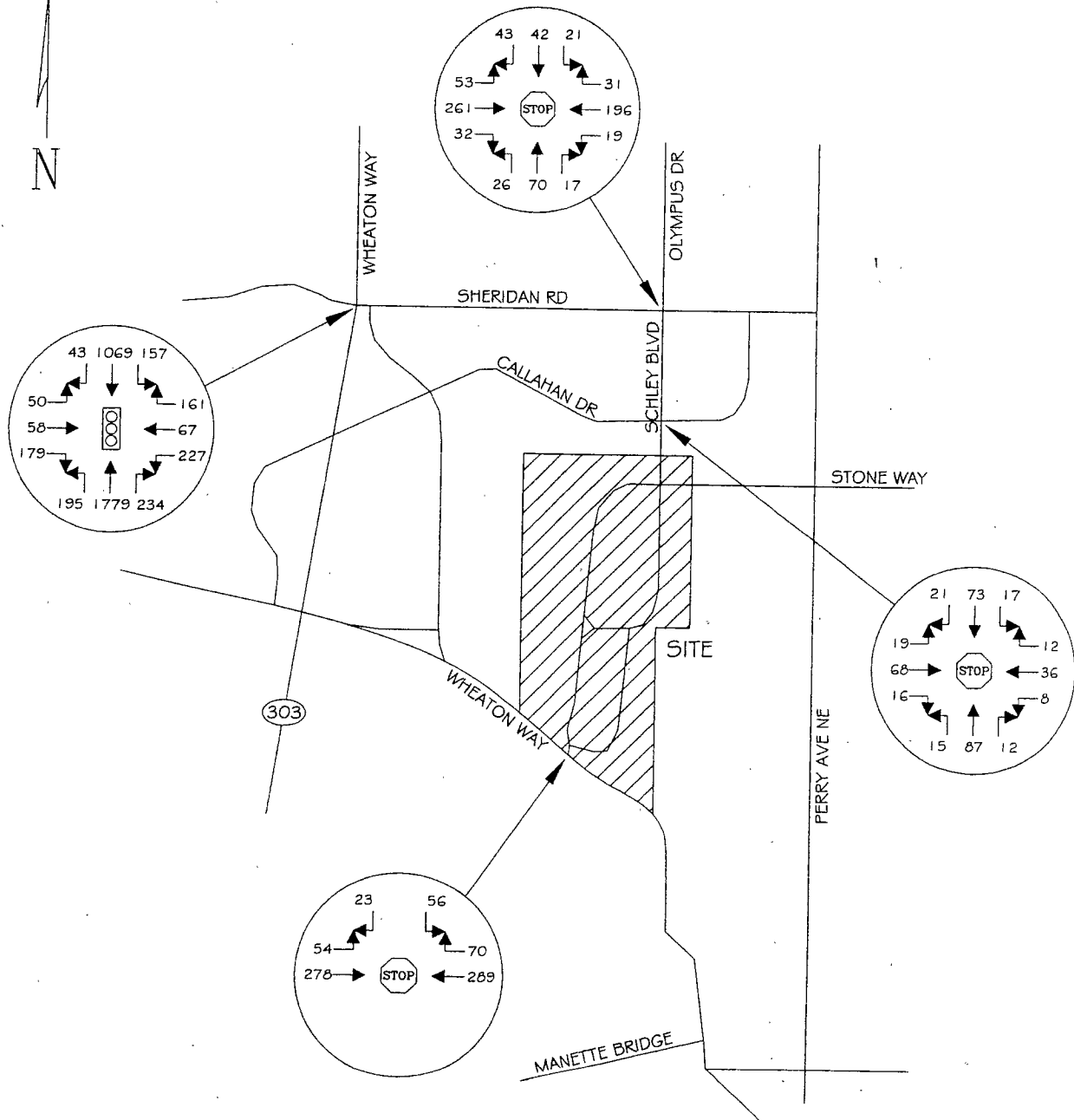
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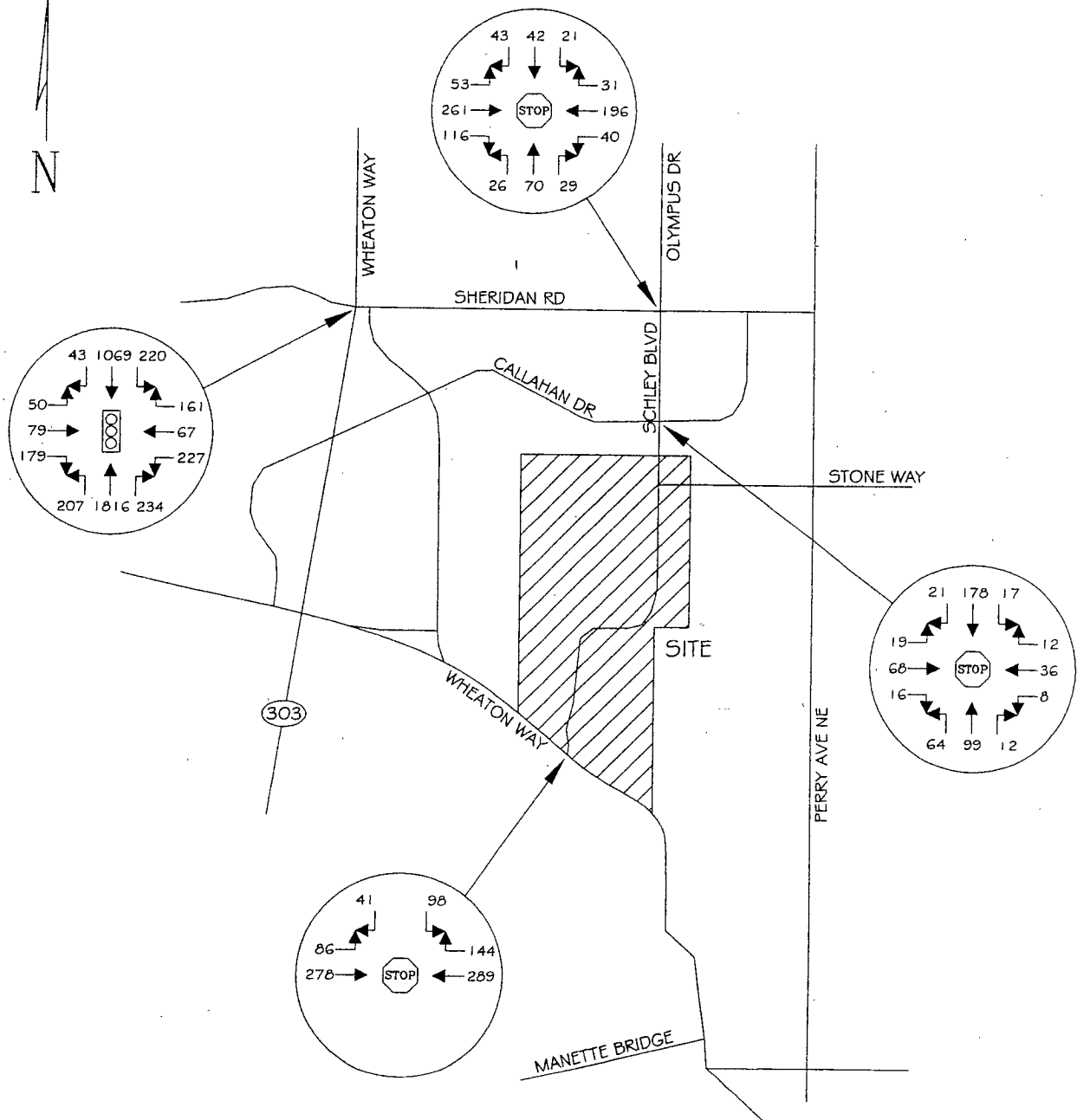
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TRIP DISTRIBUTION & ASSIGNMENT

FIGURE 4



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2010 PM PEAK HOUR VOLUMES WITH PROJECT

FIGURE 6

The intersections of Schley & Wheaton was analyzed with an eastbound left turn lane in place under future conditions with project traffic, as the lane would be warranted (see Section E below). However, delays would still be expected to be heavy at LOS F. In order to improve delays, the improvements of separate southbound turn lanes were analyzed. With these additional turning lanes in place, southbound delays should drop to LOS E. Northbound delays on Olympus at Sheridan may drop to LOS E with East Park traffic added. However, with the SR-303 southbound ramp at Callahan TIP project, East Park inbound trips would likely reroute on Callahan instead of Sheridan. In this case, delays at Olympus & Sheridan should be below the LOS E level. Future delays at the SR-303 & Sheridan are expected to increase to the LOS D to LOS F level.

E. Left Turn Lane Warrants

For this impact study, procedures described by the WSDOT Design Manual were used to ascertain left turn lane requirements on Wheaton Way at Schley. The results of this assessment indicate that a *left turn lane would be needed* at this location. A summary of the results with the applicable nomograph is given in the appendix. Also refer to the WSDOT Design Manual for detailed descriptions of the methods used.

F. MUTCD Signal Warrants

A signal warrant analysis based on the 2003 Manual on Uniform Traffic Control Devices (MUTCD) was performed for the Schley & Wheaton intersection. Specifically, Warrant 3 was considered for 2010 volumes with the project included. Based on the analysis, a signal would not be warranted, although the warrant would be close to being met based on a configuration with an eastbound left turn lane added. The proposed mitigation of separate southbound turn lanes and a westbound right turn lane would further reduce delays and keep warrants further from being met. An analysis was also made for the Olympus & Wheaton intersection. As with the Schley & Wheaton intersection, some conditions were satisfied for Warrant 3 but not enough for the warrant to be met. The analyses and applicable spreadsheets and data can be found in the appendix.

V. CONCLUSIONS AND MITIGATION

The East Park project, located on Schley Blvd north of Wheaton Way and south of Callahan Drive, consists of 223 single family units, 185 condominium/townhouse units, and a 4,000 square foot specialty retail building. Roughly 3435 daily trips would be created on a typical weekday of which approximately 332 trips are expected into and out of the site during the PM peak hour. During the AM peak hour, 250 total trips are expected to be generated. Heavy traffic volumes currently exist on the SR-303 corridor, with low to heavy delays for the key intersections.

Future delay conditions in the area are outlined in Table 3. Based on the LOS analysis results, the intersections studied are expected to have some increases in delays due to

project traffic. High southbound delays at the Schley & Wheaton Way intersection can be reduced to LOS E with the addition of an eastbound left turn lane and separate southbound turn lanes. The LOS E northbound delays at Olympus & Sheridan would be reduced upon completion of the SR-303 southbound ramp at Callahan (see the Roadway Improvements section). MUTCD Signal Warrant 3 would not be met at the Schley & Wheaton intersection or the Olympus & Sheridan intersection by the 2010 horizon year. WSDOT left turn lane warrants would be met for Wheaton Way at Schley.

Based on the above, proposed mitigations are listed below:

1. Construct an eastbound left turn lane plus taper on Wheaton Way at Schley Blvd. Also construct separate southbound left turn and right turn lanes on Schley Blvd at Wheaton Way. Construction should be to Bremerton standards.
2. If required, provide pro-rata share contribution to the area TIP projects directly impacted by East Park traffic. These projects include SR-303 improvements, the SR-303 southbound ramp at Callahan Drive, and the Wheaton Way improvements.

No other mitigations are identified at this time.

EAST PARK
TRAFFIC IMPACT ANALYSIS

APPENDIX

LEVEL OF SERVICE

The following are excerpts from the *2000 Highway Capacity Manual - Transportation Research Board Special Report 209*.

Quality of service requires quantitative measures to characterize operational conditions within a traffic stream. Level of service (LOS) is a quality measure describing operational conditions within a traffic stream, generally in terms of such service measures as speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience.

Six LOS are defined for each type of facility that has analysis procedures available. Letters designate each level, from A to F, with LOS A representing the best operating conditions and LOS F the worst. Each level of service represents a range of operating conditions and the driver's perception of those conditions.

Level-of-Service definitions

The following definitions generally define the various levels of service for arterials.

Level of service A represents primarily free-flow operations at average travel speeds, usually about 90 percent of the free-flow speed for the arterial classification. Vehicles are seldom impeded in their ability to maneuver in the traffic stream. Delay at signalized intersections is minimal.

Level of service B represents reasonably unimpeded operations at average travel speeds, usually about 70 percent of the free-flow speed for the arterial classification. The ability to maneuver in the traffic stream is only slightly restricted and delays are not bothersome.

Level of service C represents stable operations; however, ability to maneuver and change lanes in midblock locations may be more restricted than in LOS B, and longer queues, adverse signal coordination, or both may contribute to lower average travel speeds of about 50 percent of the average free-flow speed for the arterial classification.

Level of service D borders on a range in which small increases in flow may cause substantial increases in approach delay and hence decreases in arterial speed. LOS D may be due to adverse signal progression, inappropriate signal timing, high volumes, or some combination of these. Average travel speeds are about 40 percent of free-flow speed.

Level of service E is characterized by significant delays and average travel speeds of one-third the free-flow speed or less. Such operations are caused by some combination of adverse progression, high signal density, high volumes, extensive delays at critical intersections, and inappropriate signal timing.

Level of service F characterizes arterial flow at extremely low speeds, from less than one-third to one-quarter of the free-flow speed. Intersection congestion is likely at critical signalized locations, with long delays and extensive queuing.

These definitions are general and conceptual in nature, and they apply primarily to uninterrupted flow. Levels of service for interrupted flow facilities vary widely in terms of both the user's perception of service quality and the operational variables used to describe them.

For each type of facility, levels of service are defined based on one or more operational parameters that best describe operating quality for the subject facility type. While the concept of level of service attempts to address a wide range of operating conditions, limitations on data collection and availability make it impractical to treat the full range of operational parameters for every type of facility. The parameters selected to define levels of service for each facility type are called "measures of effectiveness" or "MOE's", and represent available measures that best describe the quality of operation on the subject facility type.

Each level of service represents a range of conditions, as defined by a range in the parameters given. Thus, a level of service is not a discrete condition, but rather a range of conditions for which boundaries are established.

The following tables describe levels of service for signalized and unsignalized intersections. Level of service for signalized intersections is defined in terms of average control delay. Delay is a measure of driver discomfort, frustration, fuel consumption and lost travel time, as well as time from movements at slower speeds and stops on intersection approaches as vehicles move up in queue position or slow down upstream of an intersection. Level of service for unsignalized intersections is determined by the computed or measured control delay and is determined for each minor movement.

Signalized Intersections - Level of Service

<u>Level of Service</u>	<u>Control Delay per Vehicle (sec)</u>
A	≤ 10
B	$> 10 \text{ and } \leq 20$
C	$> 20 \text{ and } \leq 35$
D	$> 35 \text{ and } \leq 55$
E	$> 55 \text{ and } \leq 80$
F	> 80

Unsignalized Intersections - Level of Service

<u>Level of Service</u>	<u>Average Total Delay per Vehicle (sec)</u>
A	≤ 10
B	$> 10 \text{ and } \leq 15$
C	$> 15 \text{ and } \leq 25$
D	$> 25 \text{ and } \leq 35$
E	$> 35 \text{ and } \leq 50$
F	> 50

As described in the 2000 Highway Capacity Manual, level of service breakpoints for all-way stop controlled (AWSC) intersections are somewhat different than the criteria used for signalized intersections. The primary reason for this difference is that drivers expect different levels of performance from distinct kinds of transportation facilities. The expectation is that a signalized intersection is designed to carry higher traffic volumes than an AWSC intersection. Thus a higher level of control delay is acceptable at a signalized intersection for the same level of service.

AWSC Intersections - Level of Service

<u>Level of Service</u>	<u>Average Total Delay per Vehicle (sec)</u>
A	≤ 10
B	$> 10 \text{ and } \leq 15$
C	$> 15 \text{ and } \leq 25$
D	$> 25 \text{ and } \leq 35$
E	$> 35 \text{ and } \leq 50$
F	> 50

Summary of Trip Generation Calculation
 For 223 Dwelling Units of Single Family Detached Housing
 October 24, 2005

	Average Rate	Standard Deviation	Adjustment Factor	Driveway Volume
Avg. Weekday 2-Way Volume	9.75	0.00	1.00	2175
7-9 AM Peak Hour Enter	0.19	0.00	1.00	41 42
7-9 AM Peak Hour Exit	0.56	0.00	1.00	124
7-9 AM Peak Hour Total	0.74	0.00	1.00	166
4-6 PM Peak Hour Enter	0.62	0.00	1.00	139
4-6 PM Peak Hour Exit	0.37	0.00	1.00	82
4-6 PM Peak Hour Total	0.99	0.00	1.00	221
AM Pk Hr, Generator, Enter	0.20	0.00	1.00	44
AM Pk Hr, Generator, Exit	0.56	0.00	1.00	124
AM Pk Hr, Generator, Total	0.75	0.00	1.00	168
PM Pk Hr, Generator, Enter	0.65	0.00	1.00	145
PM Pk Hr, Generator, Exit	0.37	0.00	1.00	82
PM Pk Hr, Generator, Total	1.02	0.00	1.00	226
Saturday 2-Way Volume	10.03	0.00	1.00	2237
Saturday Peak Hour Enter	0.51	0.00	1.00	113
Saturday Peak Hour Exit	0.43	0.00	1.00	96
Saturday Peak Hour Total	0.94	0.00	1.00	209
Sunday 2-Way Volume	8.79	0.00	1.00	1959
Sunday Peak Hour Enter	0.45	0.00	1.00	101
Sunday Peak Hour Exit	0.40	0.00	1.00	90
Sunday Peak Hour Total	0.86	0.00	1.00	191

Note: A zero indicates no data available.

The above rates were calculated from these equations:

24-Hr. 2-Way Volume:	$\ln(T) = .92\ln(X) + 2.71, R^2 = 0.96$
7-9 AM Peak Hr. Total:	$T = .7(X) + 9.43$
	$R^2 = 0.89, 0.25 \text{ Enter, } 0.75 \text{ Exit}$
4-6 PM Peak Hr. Total:	$\ln(T) = .9\ln(X) + .53$
	$R^2 = 0.91, 0.63 \text{ Enter, } 0.37 \text{ Exit}$
AM Gen Pk Hr. Total:	$T = .7(X) + 12.05$
	$R^2 = 0.89, 0.26 \text{ Enter, } 0.74 \text{ Exit}$
PM Gen Pk Hr. Total:	$\ln(T) = .89\ln(X) + .61$
	$R^2 = 0.91, 0.64 \text{ Enter, } 0.36 \text{ Exit}$
Sat. 2-Way Volume:	$\ln(T) = .94\ln(X) + 2.63, R^2 = 0.93$
Sat. Pk Hr. Total:	$T = .89(X) + 10.93$
	$R^2 = 0.9, 0.54 \text{ Enter, } 0.46 \text{ Exit}$
Sun. 2-Way Volume:	$T = 8.83(X) + -9.76, R^2 = 0.94$
Sun. Pk Hr. Total:	$\ln(T) = .89\ln(X) + .44$
	$R^2 = 0.88, 0.53 \text{ Enter, } 0.47 \text{ Exit}$

Source: Institute of Transportation Engineers
 Trip Generation, 7th Edition, 2003.

TRIP GENERATION BY MICROTRANS

Summary of Trip Generation Calculation
 For 185 Dwelling Units of Residential Condominium / Townhouse
 October 24, 2005

	Average Rate	Standard Deviation	Adjustment Factor	Driveway Volume
Avg. Weekday 2-Way Volume	5.85	0.00	1.00	1083
7-9 AM Peak Hour Enter	0.08	0.00	1.00	14
7-9 AM Peak Hour Exit	0.38	0.00	1.00	70
7-9 AM Peak Hour Total	0.46	0.00	1.00	84
4-6 PM Peak Hour Enter	0.36	0.00	1.00	67
4-6 PM Peak Hour Exit	0.18	0.00	1.00	33
4-6 PM Peak Hour Total	0.54	0.00	1.00	100
AM Pk Hr, Generator, Enter	0.08	0.00	1.00	15
AM Pk Hr, Generator, Exit	0.38	0.00	1.00	70
AM Pk Hr, Generator, Total	0.46	0.00	1.00	86
PM Pk Hr, Generator, Enter	0.35	0.00	1.00	65
PM Pk Hr, Generator, Exit	0.20	0.00	1.00	36
PM Pk Hr, Generator, Total	0.55	0.00	1.00	101
Saturday 2-Way Volume	5.93	0.00	1.00	1098
Saturday Peak Hour Enter	0.28	0.00	1.00	52
Saturday Peak Hour Exit	0.24	0.00	1.00	44
Saturday Peak Hour Total	0.52	0.00	1.00	96
Sunday 2-Way Volume	5.06	0.00	1.00	936
Sunday Peak Hour Enter	0.25	0.00	1.00	45
Sunday Peak Hour Exit	0.26	0.00	1.00	47
Sunday Peak Hour Total	0.50	0.00	1.00	93

Note: A zero indicates no data available.

The above rates were calculated from these equations:

24-Hr. 2-Way Volume:	$LN(T) = .85LN(X) + 2.55, R^2 = 0.83$
7-9 AM Peak Hr. Total:	$LN(T) = .8LN(X) + .26$ $R^2 = 0.76, 0.17 \text{ Enter}, 0.83 \text{ Exit}$
4-6 PM Peak Hr. Total:	$LN(T) = .82LN(X) + .32$ $R^2 = 0.8, 0.67 \text{ Enter}, 0.33 \text{ Exit}$
AM Gen Pk Hr. Total:	$LN(T) = .82LN(X) + .17$ $R^2 = 0.8, 0.18 \text{ Enter}, 0.82 \text{ Exit}$
PM Gen Pk Hr. Total:	$T = .34(X) + 38.31$ $R^2 = 0.83, 0.64 \text{ Enter}, 0.36 \text{ Exit}$
Sat. 2-Way Volume:	$T = 3.62(X) + 427.93, R^2 = 0.84$
Sat. Pk Hr. Total:	$T = .29(X) + 42.63$ $R^2 = 0.84, 0.54 \text{ Enter}, 0.46 \text{ Exit}$
Sun. 2-Way Volume:	$T = 3.13(X) + 357.26, R^2 = 0.88$
Sun. Pk Hr. Total:	$T = .23(X) + 50.01$ $R^2 = 0.78, 0.49 \text{ Enter}, 0.51 \text{ Exit}$

Source: Institute of Transportation Engineers
 Trip Generation, 7th Edition, 2003.

TRIP GENERATION BY MICROTRANS

Summary of Trip Generation Calculation
 For 4 T.G.L.A. of Specialty Retail Center
 October 24, 2005

	Average Rate	Standard Deviation	Adjustment Factor	Driveway Volume
Avg. Weekday 2-Way Volume	44.32	15.52	1.00	177
7-9 AM Peak Hour Enter	0.00	0.00	1.00	0
7-9 AM Peak Hour Exit	0.00	0.00	1.00	0
7-9 AM Peak Hour Total	0.00	0.00	1.00	0
4-6 PM Peak Hour Enter	1.19	0.00	1.00	5
4-6 PM Peak Hour Exit	1.52	0.00	1.00	6
4-6 PM Peak Hour Total	2.71	1.83	1.00	11
AM Pk Hr, Generator, Enter	3.28	0.00	1.00	13
AM Pk Hr, Generator, Exit	3.56	0.00	1.00	14
AM Pk Hr, Generator, Total	6.84	3.55	1.00	27
PM Pk Hr, Generator, Enter	2.81	0.00	1.00	11
PM Pk Hr, Generator, Exit	2.21	0.00	1.00	9
PM Pk Hr, Generator, Total	5.02	2.31	1.00	20
Saturday 2-Way Volume	42.04	13.97	1.00	168
Saturday Peak Hour Enter	0.00	0.00	1.00	0
Saturday Peak Hour Exit	0.00	0.00	1.00	0
Saturday Peak Hour Total	0.00	0.00	1.00	0
Sunday 2-Way Volume	20.43	10.27	1.00	82
Sunday Peak Hour Enter	0.00	0.00	1.00	0
Sunday Peak Hour Exit	0.00	0.00	1.00	0
Sunday Peak Hour Total	0.00	0.00	1.00	0

Note: A zero indicates no data available.
 Source: Institute of Transportation Engineers
 Trip Generation, 7th Edition, 2003.

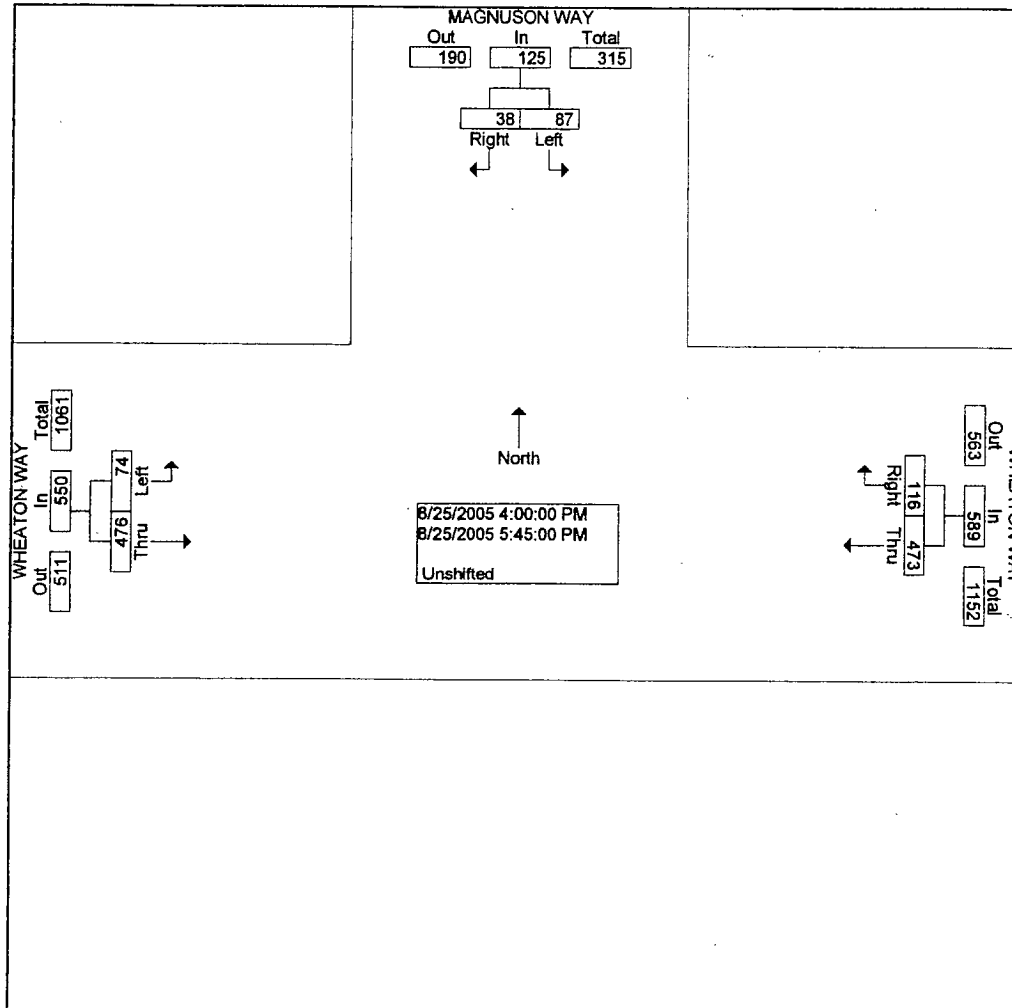
TRIP GENERATION BY MICROTRANS

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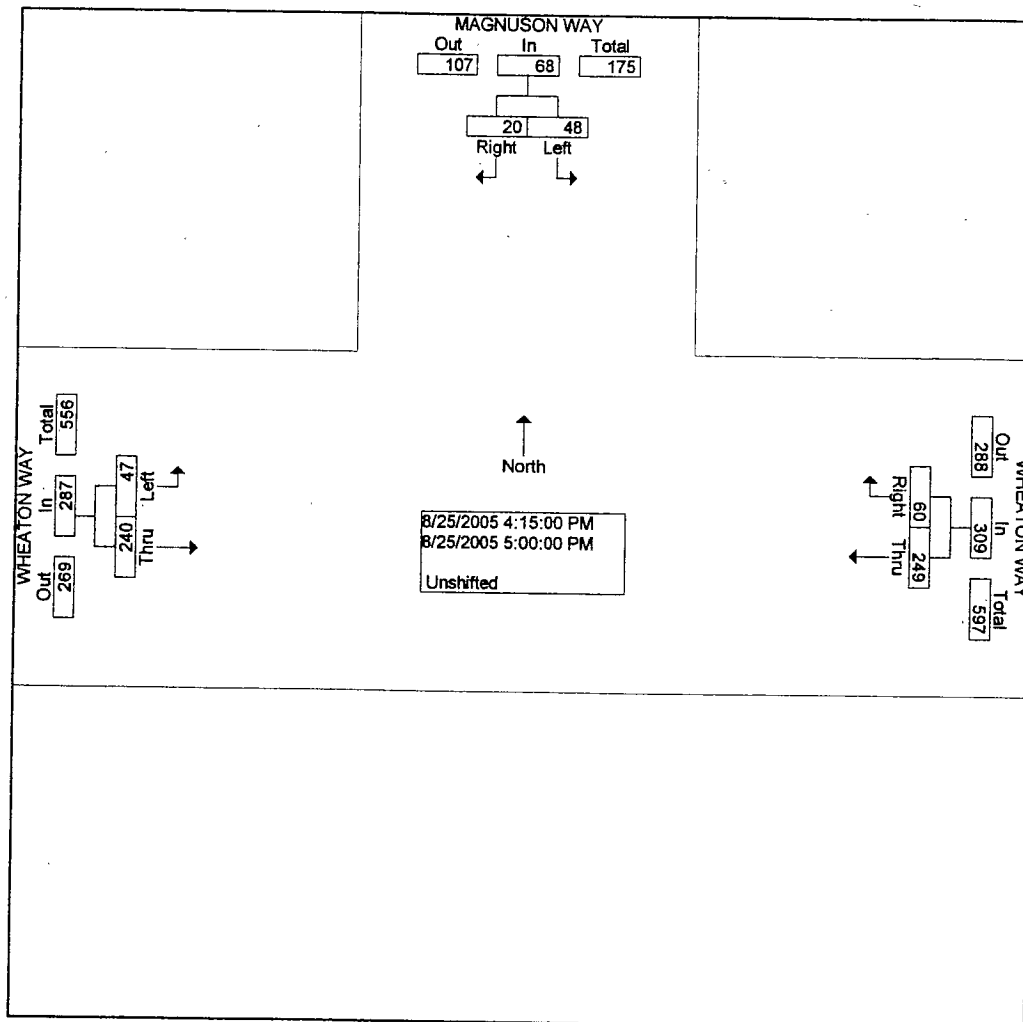
	MAGNUSON WAY Southbound			WHEATON WAY Westbound			WHEATON WAY Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
04:00 PM	3	0	3	16	84	0	0	61	3	170
04:15 PM	10	0	15	9	100	0	0	49	8	191
04:30 PM	2	0	12	13	46	0	0	42	8	123
04:45 PM	4	0	9	17	42	0	0	73	20	165
Total	19	0	39	55	272	0	0	225	39	649
05:00 PM	4	0	12	21	61	0	0	76	11	185
05:15 PM	6	0	10	15	58	0	0	59	5	153
05:30 PM	6	0	13	12	44	0	0	53	10	138
05:45 PM	3	0	13	13	38	0	0	63	9	139
Total	19	0	48	61	201	0	0	251	35	615
Grand Total	38	0	87	116	473	0	0	476	74	1264
Apprch %	30.4	0.0	69.6	19.7	80.3	0.0	0.0	86.5	13.5	
Total %	3.0	0.0	6.9	9.2	37.4	0.0	0.0	37.7	5.9	



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	MAGNUSON WAY Southbound				WHEATON WAY Westbound				WHEATON WAY Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1													
Intersection	04:15 PM												
Volume	20	0	48	68	60	249	0	309	0	240	47	287	664
Percent	29.4	0.0	70.6		19.4	80.6	0.0		0.0	83.6	16.4		
04:15 Volume	10	0	15	25	9	100	0	109	0	49	8	57	191
Peak Factor													0.869
High Int.	04:15 PM				04:15 PM				04:45 PM				
Volume	10	0	15	25	9	100	0	109	0	73	20	93	
Peak Factor	0.680				0.709				0.772				

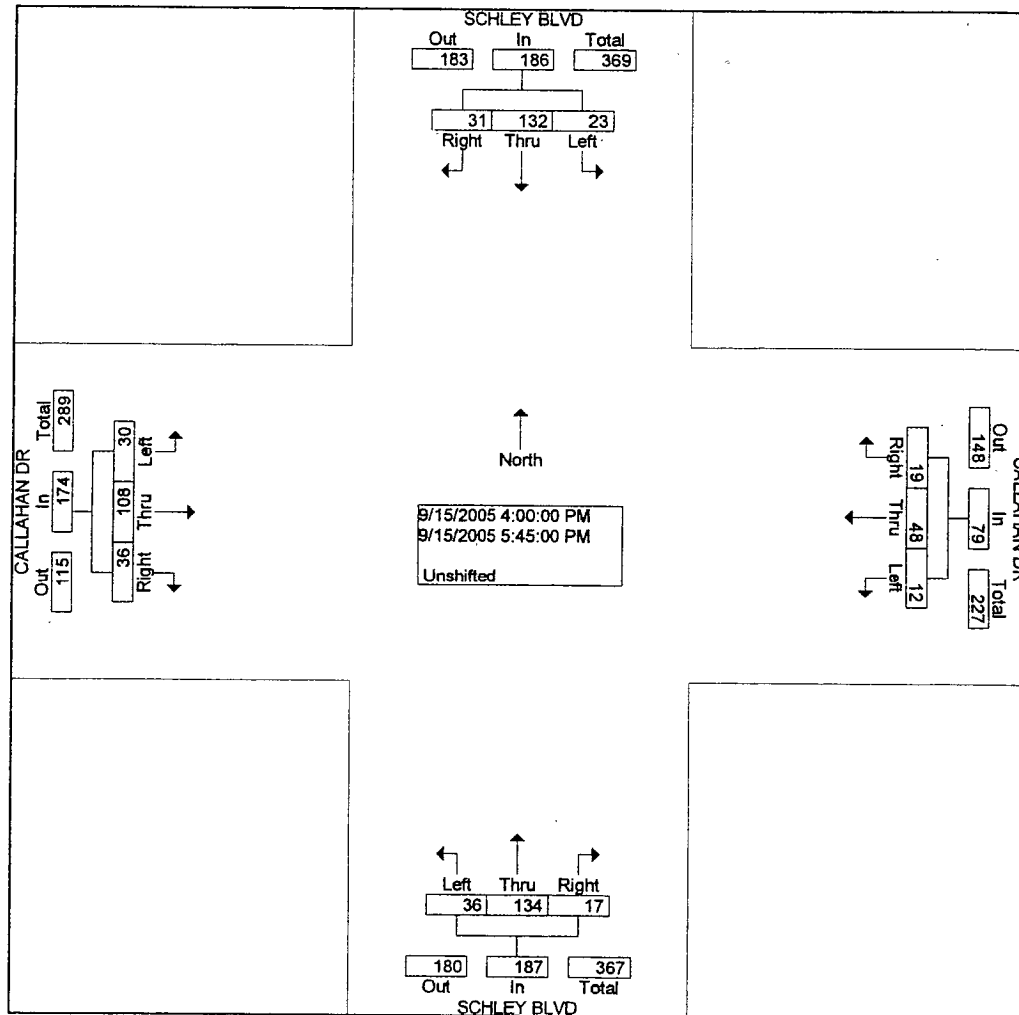


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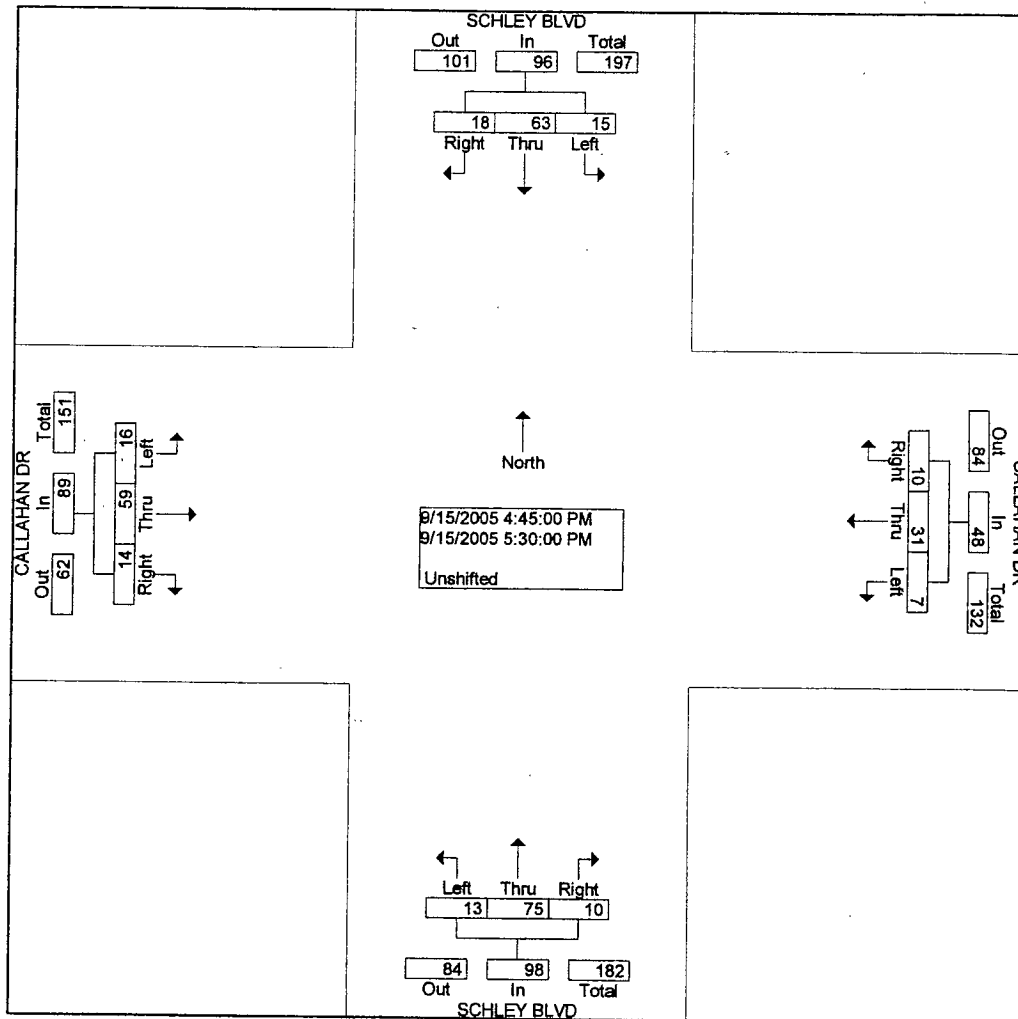
	SCHLEY BLVD Southbound			CALLAHAN DR Westbound			SCHLEY BLVD Northbound			CALLAHAN DR Eastbound			Int. Total
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
04:00 PM	5	19	2	3	7	2	2	11	7	11	15	3	87
04:15 PM	3	18	2	3	2	2	4	21	4	4	11	5	79
04:30 PM	2	15	3	2	6	1	1	17	6	3	16	5	77
04:45 PM	4	16	3	0	11	1	3	15	3	2	19	3	80
Total	14	68	10	8	26	6	10	64	20	20	61	16	323
05:00 PM	5	16	2	3	7	3	5	23	3	5	9	3	84
05:15 PM	6	11	3	4	9	0	0	23	2	5	17	6	86
05:30 PM	3	20	7	3	4	3	2	14	5	2	14	4	81
05:45 PM	3	17	1	1	2	0	0	10	6	4	7	1	52
Total	17	64	13	11	22	6	7	70	16	16	47	14	303
Grand Total	31	132	23	19	48	12	17	134	36	36	108	30	626
Apprch %	16.7	71.0	12.4	24.1	60.8	15.2	9.1	71.7	19.3	20.7	62.1	17.2	
Total %	5.0	21.1	3.7	3.0	7.7	1.9	2.7	21.4	5.8	5.8	17.3	4.8	



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	SCHLEY BLVD Southbound				CALLAHAN DR Westbound				SCHLEY BLVD Northbound				CALLAHAN DR Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Intersection	04:45 PM																
Volume	18	63	15	96	10	31	7	48	10	75	13	98	14	59	16	89	331
Percent	18.8	65.6	15.6		20.8	64.6	14.6		10.2	76.5	13.3		15.7	66.3	18.0		
05:15																	
Volume	6	11	3	20	4	9	0	13	0	23	2	25	5	17	6	28	86
Peak Factor																	0.962
High Int.	05:30 PM				05:00 PM				05:00 PM				05:15 PM				
Volume	3	20	7	30	3	7	3	13	5	23	3	31	5	17	6	28	
Peak Factor	0.800				0.923				0.790				0.795				

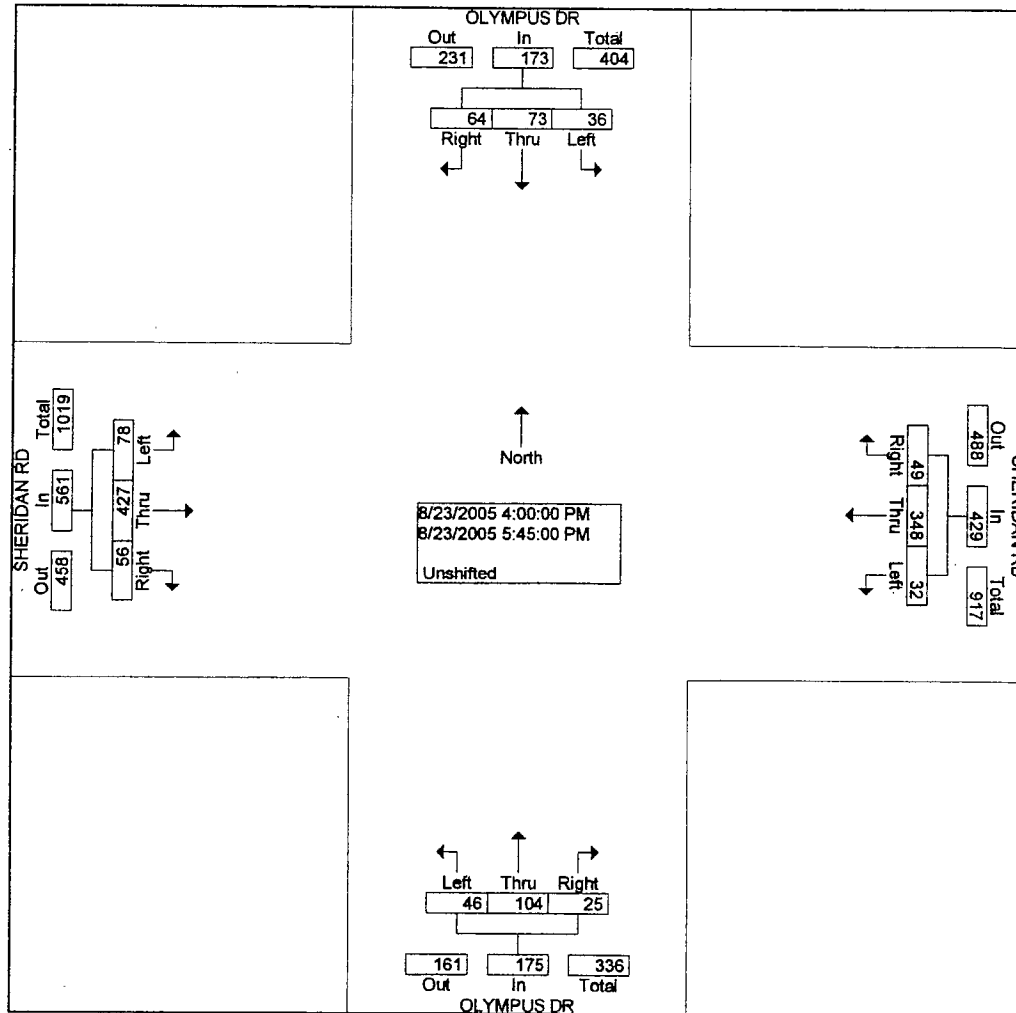


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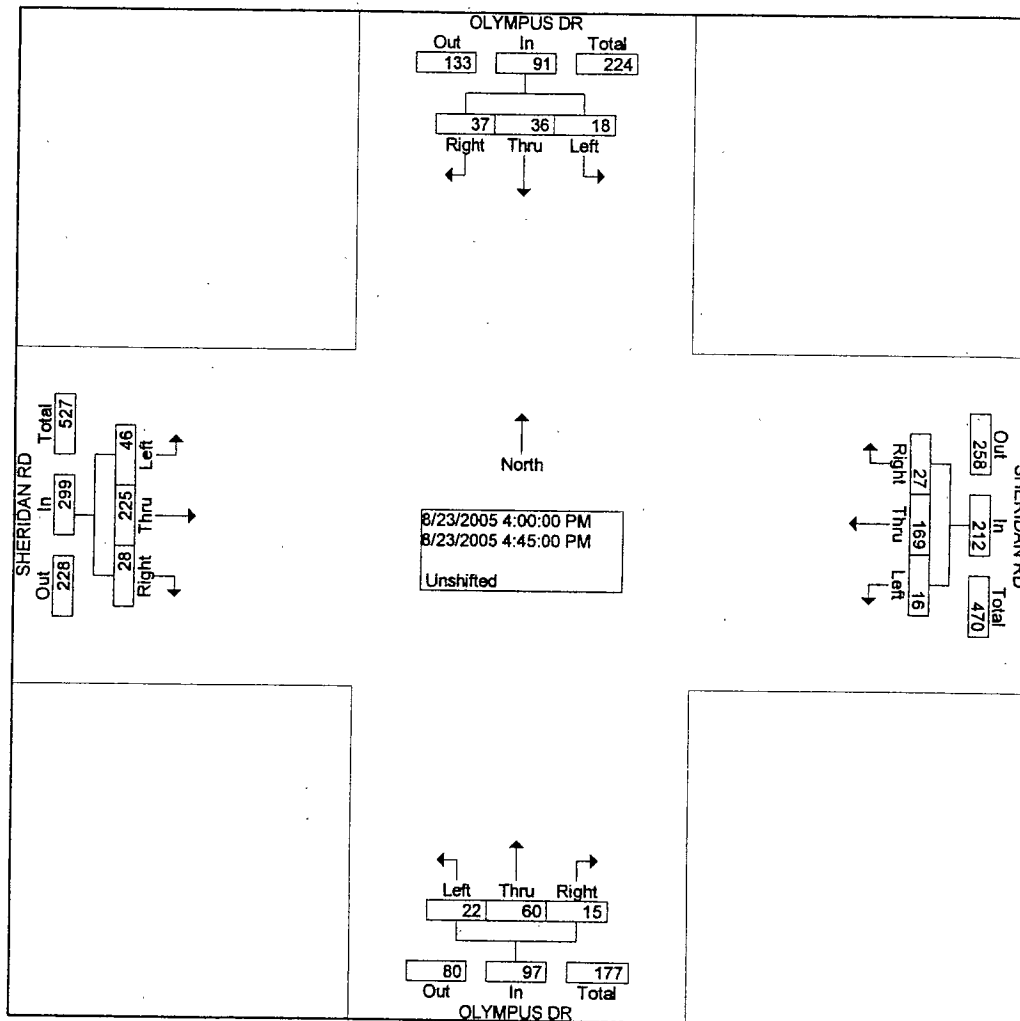
	OLYMPUS DR Southbound			SHERIDAN RD Westbound			OLYMPUS DR Northbound			SHERIDAN RD Eastbound			Int. Total
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
04:00 PM	12	16	4	8	40	7	7	26	5	7	51	7	190
04:15 PM	3	7	5	8	45	3	1	15	11	8	63	13	182
04:30 PM	13	7	7	6	45	3	3	11	1	6	56	10	168
04:45 PM	9	6	2	5	39	3	4	8	5	7	55	16	159
Total	37	36	18	27	169	16	15	60	22	28	225	46	699
05:00 PM	10	11	3	7	50	5	2	11	4	12	57	11	183
05:15 PM	6	8	4	5	48	4	3	12	10	8	60	5	173
05:30 PM	3	10	6	3	44	3	3	11	6	2	44	7	142
05:45 PM	8	8	5	7	37	4	2	10	4	6	41	9	141
Total	27	37	18	22	179	16	10	44	24	28	202	32	639
Grand Total	64	73	36	49	348	32	25	104	46	56	427	78	1338
Apprch %	37.0	42.2	20.8	11.4	81.1	7.5	14.3	59.4	26.3	10.0	76.1	13.9	
Total %	4.8	5.5	2.7	3.7	26.0	2.4	1.9	7.8	3.4	4.2	31.9	5.8	



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	OLYMPUS DR Southbound				SHERIDAN RD Westbound				OLYMPUS DR Northbound				SHERIDAN RD Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Intersection	04:00 PM																
Volume	37	36	18	91	27	169	16	212	15	60	22	97	28	225	46	299	699
Percent	40.7	39.6	19.8		12.7	79.7	7.5		15.5	61.9	22.7		9.4	75.3	15.4		
04:00	12	16	4	32	8	40	7	55	7	26	5	38	7	51	7	65	190
Volume																	
Peak Factor	04:00 PM				04:15 PM				04:00 PM				04:15 PM				0.920
High Int.	12	16	4	32	8	45	3	56	7	26	5	38	8	63	13	84	
Volume																	
Peak Factor	0.711				0.946				0.638				0.890				

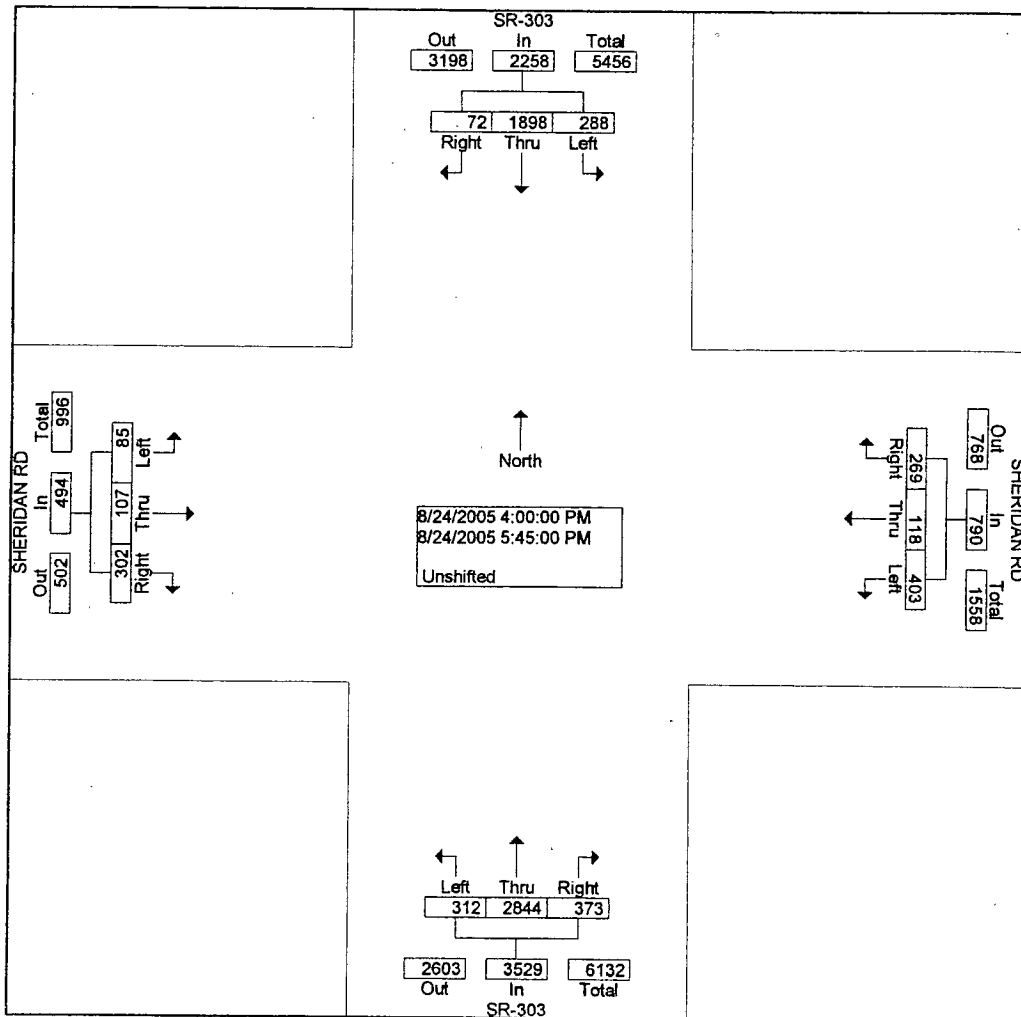


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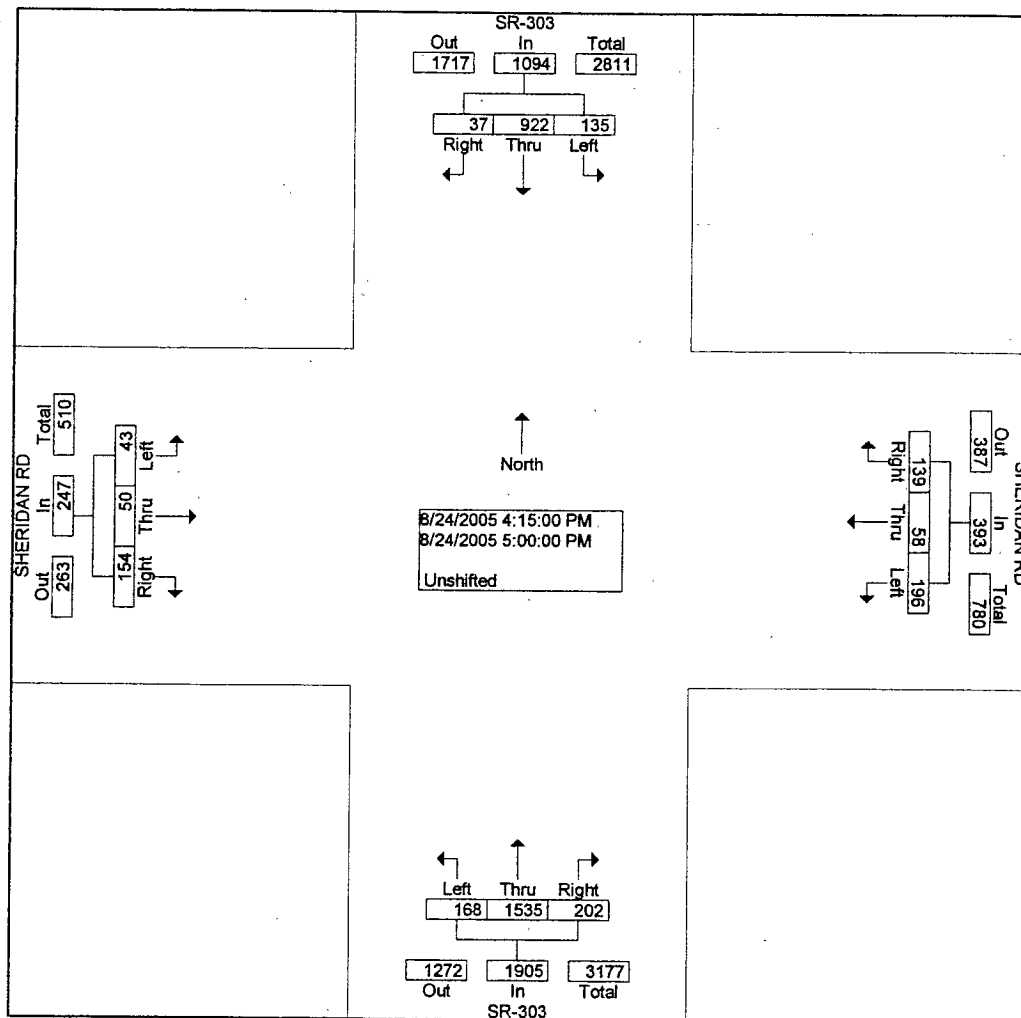
	SR-303 Southbound			SHERIDAN RD Westbound			SR-303 Northbound			SHERIDAN RD Eastbound			Int. Total
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
04:00 PM	5	243	48	33	14	49	51	360	45	31	15	6	900
04:15 PM	10	220	32	32	16	42	43	442	44	27	15	10	933
04:30 PM	7	226	36	31	11	49	65	366	45	44	15	12	907
04:45 PM	9	216	34	27	16	42	49	345	47	40	9	13	847
Total	31	905	150	123	57	182	208	1513	181	142	54	41	3587
05:00 PM	11	260	33	49	15	63	45	382	32	43	11	8	952
05:15 PM	11	234	35	39	16	57	50	353	43	40	17	11	906
05:30 PM	8	258	36	35	17	43	34	320	30	41	14	11	847
05:45 PM	11	241	34	23	13	58	36	276	26	36	11	14	779
Total	41	993	138	146	61	221	165	1331	131	160	53	44	3484
Grand Total	72	1898	288	269	118	403	373	2844	312	302	107	85	7071
Apprch %	3.2	84.1	12.8	34.1	14.9	51.0	10.6	80.6	8.8	61.1	21.7	17.2	
Total %	1.0	26.8	4.1	3.8	1.7	5.7	5.3	40.2	4.4	4.3	1.5	1.2	



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	SR-303 Southbound				SHERIDAN RD Westbound				SR-303 Northbound				SHERIDAN RD Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Intersection	04:15 PM																
Volume	37	922	135	1094	139	58	196	393	202	1535	168	1905	154	50	43	247	3639
Percent	3.4	84.3	12.3		35.4	14.8	49.9		10.6	80.6	8.8		62.3	20.2	17.4		
05:00	11	260	33	304	49	15	63	127	45	382	32	459	43	11	8	62	952
Volume																	
Peak Factor																	0.956
High Int.	05:00 PM				05:00 PM				04:15 PM				04:30 PM				
Volume	11	260	33	304	49	15	63	127	43	442	44	529	44	15	12	71	
Peak Factor				0.900				0.774				0.900				0.870	



TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	
Agency/Co.	
Date Performed	
Analysis Time Period	

Site Information

Intersection	Schley/Magnuson & Wheaton Way
Jurisdiction	
Analysis Year	

Project Description *EXISTING PM PEAK HOUR VOLUMES*

East/West Street: *Wheaton Way*

North/South Street: *Schley Blvd/Magnuson Way*

Intersection Orientation: *East-West*

Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	47	240	0	0	249	60
Peak-hour factor, PHF	0.77	0.77	1.00	1.00	0.71	0.71
Hourly Flow Rate (veh/h)	61	311	0	0	350	84
Proportion of heavy vehicles, P _{HV}	0	—	—	0	—	—
Median type	Undivided					
RT Channelized?			0			0
Lanes	0	1	0	0	1	0
Configuration	LT					TR
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	0	0	0	48	0	20
Peak-hour factor, PHF	1.00	1.00	1.00	0.68	1.00	0.68
Hourly Flow Rate (veh/h)	0	0	0	70	0	29
Proportion of heavy vehicles, P _{HV}	0	0	0	0	0	0
Percent grade (%)	0			0		
Flared approach		N			N	
Storage		0			0	
RT Channelized?			0			0
Lanes	0	0	0	0	0	0
Configuration					LR	

Control Delay, Queue Length, Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT						LR	
Volume, v (vph)	61						99	
Capacity, c _m (vph)	1136						383	
v/c ratio	0.05						0.26	
Queue length (95%)	0.17						1.02	
Control Delay (s/veh)	8.3						17.6	
LOS	A						C	
Approach delay (s/veh)	—	—				17.6		
Approach LOS	—	—				C		

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	
Agency/Co.	
Date Performed	
Analysis Time Period	

Site Information

Intersection	Schley/Magnuson & Wheaton Way
Jurisdiction	
Analysis Year	

Project Description 2010 PM PEAK HOUR VOLUMES WITHOUT PROJECT

East/West Street: Wheaton Way

North/South Street: Schley Blvd/Magnuson Way

Intersection Orientation: East-West

Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	54	278	0	0	289	70
Peak-hour factor, PHF	0.77	0.77	1.00	1.00	0.71	0.71
Hourly Flow Rate (veh/h)	70	361	0	0	407	98
Proportion of heavy vehicles, P _{HV}	0	—	—	0	—	—
Median type	Undivided					
RT Channelized?			0			0
Lanes	0	1	0	0	1	0
Configuration	LT					TR
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	0	0	0	56	0	23
Peak-hour factor, PHF	1.00	1.00	1.00	0.68	1.00	0.68
Hourly Flow Rate (veh/h)	0	0	0	82	0	33
Proportion of heavy vehicles, P _{HV}	0	0	0	0	0	0
Percent grade (%)	0			0		
Flared approach		N			N	
Storage		0			0	
RT Channelized?			0			0
Lanes	0	0	0	0	0	0
Configuration					LR	

Control Delay, Queue Length, Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT						LR	
Volume, v (vph)	70						115	
Capacity, c _m (vph)	1070						320	
v/c ratio	0.07						0.36	
Queue length (95%)	0.21						1.58	
Control Delay (s/veh)	8.6						22.4	
LOS	A						C	
Approach delay (s/veh)	—	—				22.4		
Approach LOS	—	—				C		

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	
Agency/Co.	
Date Performed	
Analysis Time Period	

Site Information

Intersection	Schley/Magnuson & Wheaton Way
Jurisdiction	
Analysis Year	

Project Description 2010 PM PEAK HOUR VOLUMES WITH PROJECT WITH EB LT LANE (REQUIRED)

East/West Street: Wheaton Way

North/South Street: Schley Blvd/Magnuson Way

Intersection Orientation: East-West

Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	86	278	0	0	289	144
Peak-hour factor, PHF	0.77	0.77	1.00	1.00	0.71	0.71
Hourly Flow Rate (veh/h)	111	361	0	0	407	202
Proportion of heavy vehicles, P_{HV}	0	—	—	0	—	—
Median type	Undivided					
RT Channelized?			0			0
Lanes	1	1	0	0	1	0
Configuration	L	T				TR
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	0	0	0	98	0	41
Peak-hour factor, PHF	1.00	1.00	1.00	0.68	1.00	0.68
Hourly Flow Rate (veh/h)	0	0	0	144	0	60
Proportion of heavy vehicles, P_{HV}	0	0	0	0	0	0
Percent grade (%)	0			0		
Flared approach		N			N	
Storage		0			0	
RT Channelized?			0			0
Lanes	0	0	0	0	0	0
Configuration					LR	

Control Delay, Queue Length, Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L						LR	
Volume, v (vph)	111						204	
Capacity, c_m (vph)	979						261	
v/c ratio	0.11						0.78	
Queue length (95%)	0.38						5.88	
Control Delay (s/veh)	9.1						54.9	
LOS	A						F	
Approach delay (s/veh)	--	--					54.9	
Approach LOS	--	--					F	

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	
Agency/Co.	
Date Performed	
Analysis Time Period	

Site Information

Intersection	Schley/Magnuson & Wheaton Way
Jurisdiction	
Analysis Year	

Project Description 2010 PM PEAK HOUR VOLUMES WITH PROJECT w/ EB LT, SB LT & RT LANES

East/West Street: Wheaton Way

North/South Street: Schley Blvd/Magnuson Way

Intersection Orientation: East-West

Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	86	278	0	0	289	144
Peak-hour factor, PHF	0.77	0.77	1.00	1.00	0.71	0.71
Hourly Flow Rate (veh/h)	111	361	0	0	407	202
Proportion of heavy vehicles, P _{HV}	0	—	—	0	—	—
Median type	Undivided					
RT Channelized?			0			0
Lanes	1	1	0	0	1	0
Configuration	L	T				TR
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	0	0	0	98	0	41
Peak-hour factor, PHF	1.00	1.00	1.00	0.68	1.00	0.68
Hourly Flow Rate (veh/h)	0	0	0	144	0	60
Proportion of heavy vehicles, P _{HV}	0	0	0	0	0	0
Percent grade (%)	0			0		
Flared approach		N			N	
Storage		0			0	
RT Channelized?			0			0
Lanes	0	0	0	1	0	1
Configuration				L		R

Control Delay, Queue Length, Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	L					L		R
Volume, v (vph)	111					144		60
Capacity, c _m (vph)	979					213		569
v/c ratio	0.11					0.68		0.11
Queue length (95%)	0.38					4.21		0.35
Control Delay (s/veh)	9.1					51.3		12.1
LOS	A					F		B
Approach delay (s/veh)	—	—				39.7		
Approach LOS	—	—				E		

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	
Agency/Co.	
Date Performed	
Analysis Time Period	

Site Information

Intersection	Schley Blvd & Callahan Dr
Jurisdiction	
Analysis Year	

Project Description *EXISTING PM PEAK HOUR VOLUMES*

East/West Street: *Callahan Drive*

North/South Street: *Schley Blvd*

Intersection Orientation: *East-West*

Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	16	59	14	7	31	10
Peak-hour factor, PHF	0.80	0.80	0.80	0.92	0.92	0.92
Hourly Flow Rate (veh/h)	19	73	17	7	33	10
Proportion of heavy vehicles, P_{HV}	0	—	—	0	—	—
Median type	Undivided					
RT Channelized?			0			0
Lanes	0	1	0	0	1	0
Configuration	LTR			LTR		
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	13	75	10	15	63	18
Peak-hour factor, PHF	0.79	0.79	0.79	0.80	0.80	0.80
Hourly Flow Rate (veh/h)	16	94	12	18	78	22
Proportion of heavy vehicles, P_{HV}	0	0	0	0	0	0
Percent grade (%)	0			0		
Flared approach		N			N	
Storage		0			0	
RT Channelized?			0			0
Lanes	0	1	0	0	1	0
Configuration		LTR			LTR	

Control Delay, Queue Length, Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LTR		LTR			LTR	
Volume, v (vph)	19	7		122			118	
Capacity, c_m (vph)	1579	1518		719			739	
v/c ratio	0.01	0.00		0.17			0.16	
Queue length (95%)	0.04	0.01		0.61			0.57	
Control Delay (s/veh)	7.3	7.4		11.0			10.8	
LOS	A	A		B			B	
Approach delay (s/veh)	—	—		11.0			10.8	
Approach LOS	—	—		B			B	

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	
Agency/Co.	
Date Performed	
Analysis Time Period	

Site Information

Intersection	Schley Blvd & Callahan Dr
Jurisdiction	
Analysis Year	

Project Description 2010 PM PEAK HOUR VOLUMES WITHOUT PROJECT

East/West Street: Callahan Drive

North/South Street: Schley Blvd

Intersection Orientation: East-West

Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	19	68	16	8	36	12
Peak-hour factor, PHF	0.80	0.80	0.80	0.92	0.92	0.92
Hourly Flow Rate (veh/h)	23	84	19	8	39	13
Proportion of heavy vehicles, P_{HV}	0	--	--	0	--	--
Median type	Undivided					
RT Channelized?			0			0
Lanes	0	1	0	0	1	0
Configuration	LTR			LTR		
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	15	87	12	17	73	21
Peak-hour factor, PHF	0.79	0.79	0.79	0.80	0.80	0.80
Hourly Flow Rate (veh/h)	18	110	15	21	91	26
Proportion of heavy vehicles, P_{HV}	0	0	0	0	0	0
Percent grade (%)	0			0		
Flared approach		N			N	
Storage		0			0	
RT Channelized?			0			0
Lanes	0	1	0	0	1	0
Configuration		LTR			LTR	

Control Delay, Queue Length, Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LTR		LTR			LTR	
Volume, v (vph)	23	8		143			138	
Capacity, C_m (vph)	1567	1502		688			705	
v/c ratio	0.01	0.01		0.21			0.20	
Queue length (95%)	0.04	0.02		0.78			0.72	
Control Delay (s/veh)	7.3	7.4		11.6			11.3	
LOS	A	A		B			B	
Approach delay (s/veh)	--	--	11.6			11.3		
Approach LOS	--	--	B			B		

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	
Agency/Co.	
Date Performed	
Analysis Time Period	

Site Information

Intersection	Schley Blvd & Callahan Dr
Jurisdiction	
Analysis Year	

Project Description 2010 PM PEAK HOUR VOLUMES WITH PROJECT

East/West Street: Callahan Drive

North/South Street: Schley Blvd

Intersection Orientation: East-West

Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	19	68	16	8	36	12
Peak-hour factor, PHF	0.80	0.80	0.80	0.92	0.92	0.92
Hourly Flow Rate (veh/h)	23	84	19	8	39	13
Proportion of heavy vehicles, P_{HV}	0	—	—	0	—	—
Median type	Undivided					
RT Channelized?			0			0
Lanes	0	1	0	0	1	0
Configuration	LTR			LTR		
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	64	99	12	17	178	21
Peak-hour factor, PHF	0.79	0.79	0.79	0.80	0.80	0.80
Hourly Flow Rate (veh/h)	81	125	15	21	222	26
Proportion of heavy vehicles, P_{HV}	0	0	0	0	0	0
Percent grade (%)	0			0		
Flared approach		N			N	
Storage		0			0	
RT Channelized?			0			0
Lanes	0	1	0	0	1	0
Configuration		LTR			LTR	

Control Delay, Queue Length, Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LTR		LTR			LTR	
Volume, v (vph)	23	8		221			269	
Capacity, c_m (vph)	1567	1502		582			688	
v/c ratio	0.01	0.01		0.38			0.39	
Queue length (95%)	0.04	0.02		1.77			1.86	
Control Delay (s/veh)	7.3	7.4		14.9			13.6	
LOS	A	A		B			B	
Approach delay (s/veh)	—	—	14.9			13.6		
Approach LOS	—	—	B			B		

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	
Agency/Co.	
Date Performed	
Analysis Time Period	

Site Information

Intersection	Olympus Dr & Sheridan Rd
Jurisdiction	
Analysis Year	

Project Description *EXISTING PM PEAK HOUR VOLUMES*

East/West Street: *Sheridan Road*

North/South Street: *Olympus Drive*

Intersection Orientation: *East-West*

Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	46	225	28	16	169	27
Peak-hour factor, PHF	0.89	0.89	0.89	0.95	0.95	0.95
Hourly Flow Rate (veh/h)	51	252	31	16	177	28
Proportion of heavy vehicles, P _{HV}	0	—	—	0	—	—
Median type	Undivided					
RT Channelized?			0			0
Lanes	0	1	0	0	1	0
Configuration	LTR			LTR		
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	22	60	15	18	36	37
Peak-hour factor, PHF	0.64	0.64	0.64	0.71	0.71	0.71
Hourly Flow Rate (veh/h)	34	93	23	25	50	52
Proportion of heavy vehicles, P _{HV}	0	0	0	0	0	0
Percent grade (%)	0			0		
Flared approach		N			N	
Storage		0			0	
RT Channelized?			0			0
Lanes	0	1	0	0	1	0
Configuration		LTR			LTR	

Control Delay, Queue Length, Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LTR		LTR			LTR	
Volume, v (vph)	51	16		150			127	
Capacity, c _m (vph)	1378	1291		399			461	
v/c ratio	0.04	0.01		0.38			0.28	
Queue length (95%)	0.12	0.04		1.71			1.11	
Control Delay (s/veh)	7.7	7.8		19.4			15.8	
LOS	A	A		C			C	
Approach delay (s/veh)	—	—	19.4			15.8		
Approach LOS	—	—	C			C		

TWO-WAY STOP CONTROL SUMMARY

General Information			Site Information	
Analyst			Intersection	Olympus Dr & Sheridan Rd
Agency/Co.			Jurisdiction	
Date Performed			Analysis Year	
Analysis Time Period				

Project Description 2010 PM PEAK HOUR VOLUMES WITHOUT PROJECT

East/West Street: Sheridan Road

North/South Street: Olympus Drive

Intersection Orientation: East-West

Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	53	261	32	19	196	31
Peak-hour factor, PHF	0.89	0.89	0.89	0.95	0.95	0.95
Hourly Flow Rate (veh/h)	59	293	35	20	206	32
Proportion of heavy vehicles, P_{HV}	0	—	—	0	—	—
Median type	Undivided					
RT Channelized?			0			0
Lanes	0	1	0	0	1	0
Configuration	LTR			LTR		
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	26	70	17	21	42	43
Peak-hour factor, PHF	0.64	0.64	0.64	0.71	0.71	0.71
Hourly Flow Rate (veh/h)	40	109	26	29	59	60
Proportion of heavy vehicles, P_{HV}	0	0	0	0	0	0
Percent grade (%)	0			0		
Flared approach		N			N	
Storage		0			0	
RT Channelized?			0			0
Lanes	0	1	0	0	1	0
Configuration		LTR			LTR	

Control Delay, Queue Length, Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LTR		LTR			LTR	
Volume, v (vph)	59	20		175			148	
Capacity, c_m (vph)	1341	1243		337			391	
v/c ratio	0.04	0.02		0.52			0.38	
Queue length (95%)	0.14	0.05		2.84			1.73	
Control Delay (s/veh)	7.8	7.9		26.7			19.7	
LOS	A	A		D			C	
Approach delay (s/veh)	—	—	26.7			19.7		
Approach LOS	—	—	D			C		

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	
Agency/Co.	
Date Performed	
Analysis Time Period	

Site Information

Intersection	Olympus Dr & Sheridan Rd
Jurisdiction	
Analysis Year	

Project Description 2010 PM PEAK HOUR VOLUMES WITH PROJECT

East/West Street: Sheridan Road

North/South Street: Olympus Drive

Intersection Orientation: East-West

Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume (veh/h)	53	261	116	40	196	31
Peak-hour factor, PHF	0.89	0.89	0.89	0.95	0.95	0.95
Hourly Flow Rate (veh/h)	59	293	130	42	206	32
Proportion of heavy vehicles, P _{HV}	0	—	—	0	—	—
Median type	Undivided					
RT Channelized?			0			0
Lanes	0	1	0	0	1	0
Configuration	LTR			LTR		
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	26	70	29	21	42	43
Peak-hour factor, PHF	0.64	0.64	0.64	0.71	0.71	0.71
Hourly Flow Rate (veh/h)	40	109	45	29	59	60
Proportion of heavy vehicles, P _{HV}	0	0	0	0	0	0
Percent grade (%)	0			0		
Flared approach		N			N	
Storage		0			0	
RT Channelized?			0			0
Lanes	0	1	0	0	1	0
Configuration		LTR			LTR	

Control Delay, Queue Length, Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LTR		LTR			LTR	
Volume, v (vph)	59	42		194			148	
Capacity, c _m (vph)	1341	1147		304			322	
v/c ratio	0.04	0.04		0.64			0.46	
Queue length (95%)	0.14	0.11		4.08			2.31	
Control Delay (s/veh)	7.8	8.3		35.6			25.3	
LOS	A	A		E			D	
Approach delay (s/veh)	—	—	35.6			25.3		
Approach LOS	—	—	E			D		

EAST PARK
SR-303 & SHERIDAN RD
EXISTING PM PEAK HOUR VOLUMES

10/25/05
08:47:09

SIGNAL2000/TEAPAC[Ver 1.10.10] - HCM Input Worksheet

Intersection # 0 -

Area Location Type: NONCBD

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	SB			WB			NB			EB		
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Heavy veh, %HV	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Pk-hr fact, PHF	.90	.90	.90	.77	.77	.77	.90	.90	.90	.87	.87	.87
Pretimed or Act	A	A	A	A	A	A	A	A	A	A	A	A
Strtup lost, l1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Ext eff grn, e	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Arrival typ, AT	3	3	3	3	3	3	3	3	3	3	3	3
Ped vol, vped		0			0			0			0	
Bike vol, vbic		0			0			0			0	
Parking locatns		NO			NO			NO			NO	
Park mnvrs, Nm		0			0			0			0	
Bus stops, NB		0			0			0			0	
Grade, %G		.0			.0			.0			.0	

Sq 47	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6
/						
.	+	+	^			
/ \	+	+	++++			
	+>	<+	<****			
		v	++++	^		
North	<*	* +>	v	++++		
	*	* +		++++>		
	*	* +		****		
				v		

C=120"	G= 16.4"	G= 60.1"	G= 14.8"	G= 12.7"	G= 0.0"	G= 0.0"
	Y+R= 4.0"	Y+R= 4.0"	Y+R= 4.0"	Y+R= 4.0"	Y+R= 0.0"	Y+R= 0.0"

EAST PARK
SR-303 & SHERIDAN RD
EXISTING PM PEAK HOUR VOLUMES

10/25/05
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SIGNAL2000/TEAPAC[Ver 1.10.10] - HCM Volume Adjust & Satflow Worksheet

Volume Adjustment	SB			WB			NB			EB		
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Volume, V	37	922	135	89	58	196	152	1535	168	104	50	43
Pk-hr fact, PHF	.90	.90	.90	.77	.77	.77	.90	.90	.90	.87	.87	.87
Adj mv flow, vp	41	1024	150	116	75	255	169	1706	187	120	57	49
Lane group, LG	RT+TH		LT	RT	TH+LT	LT	RT	TH	LT	RT	TH	LT
Adj LG flow, v	1065		150	116	169	161	169	1706	187	120	57	49
Prop LT, PLT	.000		1.00	.000	.556	1.00	.000	.000	1.00	.000	.000	1.00
Prop RT, PRT	.038		.000	1.000	.000	.000	1.000	.000	.000	1.000	.000	.000

Saturation Flow Rate	SB			WB			NB			EB		
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Base satflo, so	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Number lanes, N	2	1	1	1	1	1	1	2	1	1	1	1
Lane width, fW	1.000	1.00	1.000	1.000	1.00	1.00	1.000	1.00	1.00	1.000	1.00	1.00
Heavy veh, fHV	.990	.990	.990	.990	.990	.990	.990	.990	.990	.990	.990	.990
Grade, fg	1.000	1.00	1.000	1.000	1.00	1.00	1.000	1.00	1.00	1.000	1.00	1.00
Parking, fp	1.000	1.00	1.000	1.000	1.00	1.00	1.000	1.00	1.00	1.000	1.00	1.00
Bus block, fbb	1.000	1.00	1.000	1.000	1.00	1.00	1.000	1.00	1.00	1.000	1.00	1.00
Area type, fa	1.000	1.00	1.000	1.000	1.00	1.00	1.000	1.00	1.00	1.000	1.00	1.00
Lane util, fLU	.950	1.00	1.000	1.000	1.00	1.00	1.000	.950	1.00	1.000	1.00	1.00
Left-turn, fLT	1.000	.950	1.000	.973	.950	1.000	1.000	1.00	.950	1.000	1.00	.950
Right-turn, fRT	.994	1.00	.850	1.00	1.00	.850	1.000	1.00	1.00	.850	1.00	1.00
PedBike LT, fLpb	1.000	1.00	1.000	1.000	1.00	1.00	1.000	1.00	1.00	1.000	1.00	1.00
PedBike RT, fRpb	1.000	1.00	1.000	1.000	1.00	1.00	1.000	1.00	1.00	1.000	1.00	1.00
Local adjustmnt	1.000	1.00	1.000	1.000	1.00	1.00	1.000	1.00	1.00	1.000	1.00	1.00
Adj satflow, s	3554	1787	1599	1830	1787	1599	3574	1787	1599	1881	1787	1787

SIGNAL2000/TEAPAC[Ver 1.10.10] - HCM Capacity and LOS Worksheet

Capacity Analysis	SB			WB			NB			EB		
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Lane group, LG	RT+TH		LT	RT	TH+LT	LT	RT	TH	LT	RT	TH	LT
Adj Flow, v	1065		150	116	169	161	169	1706	187	120	57	49
Satflow, s	3554		1787	1599	1830	1787	1599	3574	1787	1599	1881	1787
Lost time, tL	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Effect green, g	60.1		16.4	14.8	14.8	14.8	60.1	60.1	16.4	12.7	12.7	12.7
Grn ratio, g/C	.501		.137	.123	.123	.123	.501	.501	.137	.106	.106	.106
LG capacity, c	1780		245	197	226	220	801	1790	245	169	199	189
v/c ratio, X	.598		.612	.589	.748	.732	.211	.953	.763	.710	.286	.259
Flow ratio, v/s	.300		.084	.073	.092	.090	.106	.477	.105	.075	.030	.027
Crit lane group				*			*			*		
Sum crit v/s, Yc	0.749			Total lost, L			16.0					
Crit v/c, Xc	.865											

EAST PARK
 SR-303 & SHERIDAN RD
 EXISTING PM PEAK HOUR VOLUMES

10/25/05
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SIGNAL2000/TEAPAC[Ver 1.10.10] - HCM Capacity and LOS Worksheet

Delay and LOS	SB			WB			NB			EB				
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT		
=====														
Lane group, LG	RT+TH		LT	RT	TH+LT		LT	RT	TH	LT	RT	TH	LT	
Adj Flow, v	1065		150	116	169		161	169	1706		187	120	57	49
LG capacity, c	1780		245	197	226		220	801	1790		245	169	199	189
v/c ratio, X	.598	.612		.589	.748		.732	.211	.953		.763	.710	.286	.259
Grn ratio, g/C	.501	.137		.123	.123		.123	.501	.501		.137	.106	.106	.106
Unif delay, d1	21.3	48.8		49.7	50.8		50.7	16.7	28.6		49.9	51.9	49.5	49.3
Incr calib, k	.19	.20		.18	.30		.29	.11	.46		.32	.27	.11	.11
Incr delay, d2	.6	4.5		4.6	12.9		11.8	.1	12.1		13.3	13.0	.8	.7
Queue Delay, d3	.0	.0		.0	.0		.0	.0	.0		.0	.0	.0	.0
Unif delay, d1*	.0	.0		.0	.0		.0	.0	.0		.0	.0	.0	.0
Prog factor, PF	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00
Contrl delay, d	21.9	53.3		54.3	63.7		62.5	16.9	40.7		63.2	64.9	50.3	50.1
Lane group LOS	C+	D		D	E+		E+	B	D+		E+	E+	D	D
Final Queue,Qbi	0	0		0	0		0	0	0		0	0	0	0

Appr delay, dA	25.8			60.8			40.7			58.0				
Approach LOS	C+			E+			D+			E+				
Appr flow, vA	1215			446			2062			226				

Intersection:	Delay	39.4		LOS	D+									
=====														

EAST PARK
SR-303 & SHERIDAN RD
EXISTING PM PEAK HOUR VOLUMES

10/25/05
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SIGNAL2000/TEAPAC[Ver 1.10.10] - Evaluation of Intersection Performance

Sq 47 **/**	Phase 1	Phase 2	Phase 3	Phase 4
/ \	+	+	^	
	+	+	++++	
	>	<+	<****	
		v	++++	^
North	<*	* +>	v	++++>
	*	* +		****
	*	* +		v

	G/C=0.137	G/C=0.501	G/C=0.123	G/C=0.106
	G= 16.4"	G= 60.1"	G= 14.8"	G= 12.7"
	Y+R= 4.0"	Y+R= 4.0"	Y+R= 4.0"	Y+R= 4.0"
	OFF= 0.0%	OFF=17.0%	OFF=70.4%	OFF=86.1%

C=120 sec G=104.0 sec = 86.7% Y=16.0 sec = 13.3% Ped= 0.0 sec = 0.0%

MVMT TOTALS Param:Units	SB Approach			WB Approach			NB Approach			EB Approach			Int Total
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
AdjVol: vph	41	1024	150	116	169	161	169	1706	187	120	57	49	3949
Wid/Ln:ft/#	0/0	24/2	12/1	12/1	12/1	12/1	12/1	24/2	12/1	12/1	12/1	12/1	
g/C Rqd@C:%	0	39	27	27	28	28	28	52	28	27	25	25	
g/C Used: %	0	50	14	12	12	12	50	50	14	11	11	11	
SV @E: vph	0	1780	217	168	197	191	801	1790	217	140	169	159	5829
Svc Lvl:LOS		C+	D	D	E+	E+	B	D+	E+	E+	D	D	D+
Deg Sat:v/c	0.00	0.60	0.61	0.59	0.75	0.73	0.21	0.95	0.76	0.71	0.29	0.26	0.75
HCM Del:s/v	0.0	21.9	53.3	54.3	63.7	62.5	16.9	40.7	63.2	64.9	50.3	50.1	39.4
Tot Del:min	0	97	33	26	45	42	12	289	49	32	12	10	647
# Stops:veh	0	190	35	27	41	39	24	407	45	29	13	11	861
Queue 1:veh	0	24	9	7	11	10	6	57	12	8	3	3	57
Queue 1: ft	0	595	225	177	269	255	146	1442	296	194	83	71	1442

APPR TOTALS Param:Units	SB Approach			WB Approach			NB Approach			EB Approach			Int Total
AdjVol: vph	1215			446			2062			226			3949
Svc Lvl:LOS	C+			E+			D+			E+			D+
Deg Sat:v/c	0.60			0.70			0.88			0.50			0.75
HCM Del:s/v	25.8			60.8			40.7			58.0			39.4
Tot Del:min	130			113			350			54			647
# Stops:veh	225			107			476			53			861
Queue 1:veh	24			11			57			8			57
Queue 1: ft	595			269			1442			194			1442

EAST PARK
SR-303 & SHERIDAN RD
2010 PM PEAK HOUR VOLUMES WITHOUT PROJECT

10/25/05
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SIGNAL2000/TEAPAC[Ver 1.10.10] - HCM Input Worksheet

Intersection # 0 -

Area Location Type: NONCBD

						Key: VOLUMES -- >		
						WIDTHS		
						v LANES		

						161	12.0	1

						67	12.0	1-

						227	12.0	1+
						=====		
50	12.0	1	/	+	/	227	12.0	1+
						=====		
58	12.0	1	--					

179	12.0	1	\		/			

						195	1779	234
						12.0	24.0	12.0
						1	2	1

						Phasing: SEQUENCE 47		
						PERMSV N N N N		
						OVERLP N N N N		
						LEADLAG LD LD		

	SB			WB			NB			EB		
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Heavy veh, %HV	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Pk-hr fact, PHF	.90	.90	.90	.77	.77	.77	.90	.90	.90	.87	.87	.87
Pretimed or Act	A	A	A	A	A	A	A	A	A	A	A	A
Strtup lost, ll	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Ext eff grn, e	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Arrival typ, AT	3	3	3	3	3	3	3	3	3	3	3	3
Ped vol, vped		0			0			0			0	
Bike vol, vbic		0			0			0			0	
Parking locatns		NO			NO			NO			NO	
Park mnvrs, Nm		0			0			0			0	
Bus stops, NB		0			0			0			0	
Grade, %G		.0			.0			.0			.0	

Sq 47	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6
/						
	+	+	^			
	+	+	++++			
/ \	+>	<+ +	<****			
		v	++++	^		
		^	v	++++		
North	<*	* +>		++++>		
	*	* +		****		
	*	* +		v		

C=120"	G= 14.4"	G= 65.8"	G= 12.7"	G= 11.0"	G= 0.0"	G= 0.0"
	Y+R= 4.0"	Y+R= 4.0"	Y+R= 4.0"	Y+R= 4.0"	Y+R= 0.0"	Y+R= 0.0"

EAST PARK
 SR-303 & SHERIDAN RD
 2010 PM PEAK HOUR VOLUMES WITHOUT PROJECT

10/25/05
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SIGNAL2000/TEAPAC[Ver 1.10.10] - HCM Volume Adjust & Satflow Worksheet

Volume Adjustment	SB			WB			NB			EB		
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Volume, V	43	1069	157	111	67	227	184	1779	195	129	58	50
Pk-hr fact, PHF	.90	.90	.90	.77	.77	.77	.90	.90	.90	.87	.87	.87
Adj mv flow, vp	48	1188	174	144	87	295	204	1977	217	148	67	57
Lane group, LG	RT+TH		LT	RT		TH+LT	RT		TH	RT		TH
Adj LG flow, v	1236		174	144		196	204		1977	148		67
Prop LT, PLT	.000		1.00	.000		.556	.000		.000	.000		1.00
Prop RT, PRT	.039		.000	1.000		.000	1.000		.000	1.000		.000
Saturation Flow Rate	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Base satflo, so	1900		1900	1900		1900	1900		1900	1900		1900
Number lanes, N	2		1	1		1	1		2	1		1
Lane width, fw	1.000		1.00	1.000		1.00	1.000		1.00	1.000		1.00
Heavy veh, fhv	.990		.990	.990		.990	.990		.990	.990		.990
Grade, fg	1.000		1.00	1.000		1.00	1.000		1.00	1.000		1.00
Parking, fp	1.000		1.00	1.000		1.00	1.000		1.00	1.000		1.00
Bus block, fbb	1.000		1.00	1.000		1.00	1.000		1.00	1.000		1.00
Area type, fa	1.000		1.00	1.000		1.00	1.000		1.00	1.000		1.00
Lane util, flU	.950		1.00	1.000		1.00	1.000		.950	1.000		1.00
Left-turn, fLT	1.000		.950	1.000		.973	1.000		.950	1.000		.950
Right-turn, fRT	.994		1.00	.850		1.00	.850		1.00	.850		1.00
PedBike LT, fLpb	1.000		1.00	1.000		1.00	1.000		1.00	1.000		1.00
PedBike RT, fRpb	1.000		1.00	1.000		1.00	1.000		1.00	1.000		1.00
Local adjustmnt	1.000		1.00	1.000		1.00	1.000		1.00	1.000		1.00
Adj satflow, s	3553		1787	1599		1830	1599		3574	1599		1881

SIGNAL2000/TEAPAC[Ver 1.10.10] - HCM Capacity and LOS Worksheet

Capacity Analysis	SB			WB			NB			EB		
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Lane group, LG	RT+TH		LT	RT		TH+LT	RT		TH	RT		TH
Adj Flow, v	1236		174	144		196	204		1977	148		67
Satflow, s	3553		1787	1599		1830	1599		3574	1599		1881
Lost time, tL	4.0		4.0	4.0		4.0	4.0		4.0	4.0		4.0
Effect green, g	65.8		14.4	12.7		12.7	65.8		65.8	11.0		11.0
Grn ratio, g/C	.548		.120	.106		.106	.548		.548	.092		.092
LG capacity, c	1949		215	170		194	877		1960	147		173
v/c ratio, X	.634		.809	.847		1.01	.233		1.01	1.007		.387
Flow ratio, v/s	.348		.097	.090		.107	.128		.553	.093		.036
Crit lane group						*			*			*
Sum crit v/s, Yc	0.874			Total lost, L			16.0					
Crit v/c, Xc	1.009											

EAST PARK
 SR-303 & SHERIDAN RD
 2010 PM PEAK HOUR VOLUMES WITHOUT PROJECT

10/25/05
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SIGNAL2000/TEAPAC[Ver 1.10.10] - HCM Capacity and LOS Worksheet

Delay and LOS	SB			WB			NB			EB		
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Lane group, LG	RT+TH	LT		RT	TH+LT	LT	RT	TH	LT	RT	TH	LT
Adj Flow, v	1236	174		144	196	186	204	1977	217	148	67	57
LG capacity, c	1949	215		170	194	190	877	1960	215	147	173	164
v/c ratio, X	.634	.809		.847	1.01	.979	.233	1.01	1.01	1.007	.387	.348
Grn ratio, g/C	.548	.120		.106	.106	.106	.548	.548	.120	.092	.092	.092
Unif delay, d1	18.8	51.4		52.7	53.6	53.5	14.0	27.1	52.8	54.5	51.3	51.1
Incr calib, k	.21	.35		.38	.50	.48	.11	.50	.50	.50	.11	.11
Incr delay, d2	.7	20.2		30.8	67.3	59.0	.1	22.5	63.8	76.0	1.4	1.3
Queue Delay, d3	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0	.0
Unif delay, d1*	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0	.0
Prog factor, PF	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Contrl delay, d	19.4	71.6		83.5	121	112	14.2	49.6	117	130.5	52.8	52.4
Lane group LOS	B	E		F	F	F	B+	D	F	F	D	D
Final Queue,Qbi	0	0		0	1	0	0	4	1	0	0	0
Appr delay, dA	25.9			107.7			52.6			95.0		
Approach LOS	C+			F			D			F		
Appr flow, vA	1410			526			2398			272		
Intersection:	Delay	53.2		LOS		D						

EAST PARK
SR-303 & SHERIDAN RD
2010 PM PEAK HOUR VOLUMES WITHOUT PROJECT

10/25/05
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SIGNAL2000/TEAPAC[Ver 1.10.10] - Evaluation of Intersection Performance

Sq 47 **/**	Phase 1	Phase 2	Phase 3	Phase 4
	+	+	^	
/ \	+	+	++++	
	+>	<+	<****	
		v	++++	^
North	<*	* +>	v	++++
	*	* +		++++>
	*	* +		****
				v

	G/C=0.120	G/C=0.548	G/C=0.106	G/C=0.092
	G= 14.4"	G= 65.8"	G= 12.7"	G= 11.0"
	Y+R= 4.0"	Y+R= 4.0"	Y+R= 4.0"	Y+R= 4.0"
	OFF= 0.0%	OFF=15.4%	OFF=73.5%	OFF=87.5%

C=120 sec G=104.0 sec = 86.7% Y=16.0 sec = 13.3% Ped= 0.0 sec = 0.0%

MVMT TOTALS Param:Units	SB Approach			WB Approach			NB Approach			EB Approach			Int Total
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
AdjVol: vph	48	1188	174	144	196	186	204	1977	217	148	67	57	4606
Wid/Ln:ft/#	0/0	24/2	12/1	12/1	12/1-12/1	12/1	12/1	24/2	12/1	12/1	12/1	12/1	
g/C Rqd@C:%	0	42	28	28	28	28	29	58	29	28	25	25	
g/C Used: %	0	55	12	11	11	11	55	55	12	9	9	9	
SV @E: vph	0	1949	186	141	164	160	877	1960	186	119	143	134	6019
Svc Lvl:LOS		B	E	F	F	F	B+	D	F	F	D	D	D
Deg Sat:v/c	0.00	0.63	0.81	0.85	1.01	0.98	0.23	1.01	1.01	1.01	0.39	0.35	0.84
HCM Del:s/v	0.0	19.4	71.6	83.5	120.9	112.5	14.2	49.6	116.6	130.5	52.8	52.4	53.2
Tot Del:min	0	100	52	50	99	87	12	408	105	80	15	12	1020
# Stops:veh	0	214	42	35	49	46	26	494	54	37	16	13	1026
Queue 1:veh	0	27	11	10	16	14	6	71	17	12	4	3	71
Queue 1: ft	0	672	288	251	390	359	163	1782	426	304	101	86	1782

APPR TOTALS Param:Units	SB Approach			WB Approach			NB Approach			EB Approach			Int Total
AdjVol: vph	1410			526			2398			272			4606
Svc Lvl:LOS	C+			F			D			F			D
Deg Sat:v/c	0.66			0.95			0.94			0.72			0.84
HCM Del:s/v	25.9			107.7			52.6			95.0			53.2
Tot Del:min	152			236			525			107			1020
# Stops:veh	256			130			574			66			1026
Queue 1:veh	27			16			71			12			71
Queue 1: ft	672			390			1782			304			1782

EAST PARK
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SIGNAL2000/TEAPAC[Ver 1.10.10] - HCM Input Worksheet

Intersection # 0 -

Area Location Type: NONCBD

						Key: VOLUMES -- >		
						WIDTHS		
						v LANES		
	43	1069	220					
	0.0	24.0	12.0					
	0	2	1					
						161	12.0	1
						67	12.0	1-
50	12.0	1	/	+	/	227	12.0	1+
79	12.0	1	--					
179	12.0	1	\		/			
						207	1816	234
						12.0	24.0	12.0
						1	2	1
						Phasing: SEQUENCE 47		
						PERMSV N N N N		
						OVERLP N N N N		
						LEADLAG LD LD		

	SB			WB			NB			EB		
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Heavy veh, %HV	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Pk-hr fact, PHF	.90	.90	.90	.77	.77	.77	.90	.90	.90	.87	.87	.87
Pretimed or Act	A	A	A	A	A	A	A	A	A	A	A	A
Strtup lost, l1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Ext eff grn, e	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Arrival typ, AT	3	3	3	3	3	3	3	3	3	3	3	3
Ped vol, vped		0			0			0			0	
Bike vol, vbic		0			0			0			0	
Parking locatns		NO			NO			NO			NO	
Park mnvrs, Nm		0			0			0			0	
Bus stops, NB		0			0			0			0	
Grade, %G		.0			.0			.0			.0	

Sq 47	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6
/						
	*	+	^			
	*	+	++++			
/ \	*>	<+	<****			
		v	++++	^		
North	<+	* +>	v	++++		
	+	* +		****>		
	+	* +		v		
C=120"	G= 15.8"	G= 65.2"	G= 12.4"	G= 10.7"	G= 0.0"	G= 0.0"
	Y+R= 4.0"	Y+R= 4.0"	Y+R= 4.0"	Y+R= 4.0"	Y+R= 0.0"	Y+R= 0.0"

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SIGNAL2000/TEAPAC[Ver 1.10.10] - HCM Volume Adjust & Satflow Worksheet

Volume Adjustment	SB			WB			NB			EB		
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Volume, V	43	1069	220	111	67	227	184	1816	207	129	79	50
Pk-hr fact, PHF	.90	.90	.90	.77	.77	.77	.90	.90	.90	.87	.87	.87
Adj mv flow, vp	48	1188	244	144	87	295	204	2018	230	148	91	57
Lane group, LG	RT+TH		LT	RT		TH+LT	RT		TH	RT		TH
Adj LG flow, v	1236		244	144		196	204		2018	148		91
Prop LT, PLT	.000		1.00	.000		.556	.000		.000	.000		1.00
Prop RT, PRT	.039		.000	1.000		.000	1.000		.000	1.000		.000
Saturation Flow Rate	SB			WB			NB			EB		
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Base satflo, so	1900			1900			1900			1900		
Number lanes, N	2		1	1		1	1		2	1		1
Lane width, fw	1.000		1.00	1.000		1.00	1.000		1.00	1.000		1.00
Heavy veh, fhv	.990		.990	.990		.990	.990		.990	.990		.990
Grade, fg	1.000		1.00	1.000		1.00	1.000		1.00	1.000		1.00
Parking, fp	1.000		1.00	1.000		1.00	1.000		1.00	1.000		1.00
Bus block, fbb	1.000		1.00	1.000		1.00	1.000		1.00	1.000		1.00
Area type, fa	1.000		1.00	1.000		1.00	1.000		1.00	1.000		1.00
Lane util, flU	.950		1.00	1.000		1.00	1.000		.950	1.000		1.00
Left-turn, fLT	1.000		.950	1.000		.973	1.000		.950	1.000		.950
Right-turn, fRT	.994		1.00	.850		1.00	.850		1.00	.850		1.00
PedBike LT, fLpb	1.000		1.00	1.000		1.00	1.000		1.00	1.000		1.00
PedBike RT, fRpb	1.000		1.00	1.000		1.00	1.000		1.00	1.000		1.00
Local adjustmnt	1.000		1.00	1.000		1.00	1.000		1.00	1.000		1.00
Adj satflow, s	3553		1787	1599		1830	1599		3574	1599		1881

SIGNAL2000/TEAPAC[Ver 1.10.10] - HCM Capacity and LOS Worksheet

Capacity Analysis	SB			WB			NB			EB		
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Lane group, LG	RT+TH		LT	RT		TH+LT	RT		TH	RT		TH
Adj Flow, v	1236		244	144		196	204		2018	148		91
Satflow, s	3553		1787	1599		1830	1599		3574	1599		1881
Lost time, tL	4.0		4.0	4.0		4.0	4.0		4.0	4.0		4.0
Effect green, g	65.2		15.8	12.4		12.4	65.2		65.2	10.7		10.7
Grn ratio, g/C	.543		.131	.103		.103	.543		.543	.089		.089
LG capacity, c	1930		235	165		189	869		1942	142		168
v/c ratio, X	.640		1.04	.873		1.04	.235		1.04	1.042		.542
Flow ratio, v/s	.348		.137	.090		.107	.128		.565	.093		.048
Crit lane group			*			*			*			*
Sum crit v/s, Yc	0.901			Total lost, L			16.0					
Crit v/c, Xc	1.039											

EAST PARK
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SIGNAL2000/TEAPAC[Ver 1.10.10] - HCM Capacity and LOS Worksheet

Delay and LOS	SB			WB			NB			EB				
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT		
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====		
Lane group, LG	RT+TH		LT	RT	TH+LT	LT	RT	TH	LT	RT	TH	LT		
Adj Flow, v	1236	244		144	196	186	204	2018	230	148	91	57		
LG capacity, c	1930	235		165	189	184	869	1942	235	142	168	159		
v/c ratio, X	.640	1.04		.873	1.04	1.01	.235	1.04	.979	1.042	.542	.358		
Grn ratio, g/C	.543	.131		.103	.103	.103	.543	.543	.131	.089	.089	.089		
Unif delay, d1	19.2	52.1		53.0	53.8	53.8	14.3	27.4	52.0	54.7	52.3	51.4		
Incr calib, k	.22	.50		.40	.50	.50	.11	.50	.48	.50	.14	.11		
Incr delay, d2	.7	69.1		36.6	75.5	69.2	.1	31.4	52.5	87.2	3.5	1.4		
Queue Delay, d3	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0	.0		
Unif delay, d1*	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0	.0		
Prog factor, PF	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Contrl delay, d	19.9	121		89.6	129	123	14.5	58.8	104	141.9	55.9	52.8		
Lane group LOS	B		F	F		F	B+	E+	F	F		E+	D	
Final Queue,Qbi	0		2	0		2	1	0	19	0	2		0	0
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Appr delay, dA	36.6			116.2			59.4			98.3				
Approach LOS	D+			F			E+			F				
Appr flow, vA	1480			526			2452			296				
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Intersection:	Delay	61.0		LOS	E+									
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====

EAST PARK
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SIGNAL2000/TEAPAC[Ver 1.10.10] - Evaluation of Intersection Performance

Sq 47 **/**	Phase 1	Phase 2	Phase 3	Phase 4
/ \	*	+ +	^	
	*	+ +	++++	
	*>	<+ +	<****	
		v	++++	^
North	<+	^	v	++++
	+	* +>		++++>
	+	* +		****
		* +		v

	G/C=0.131	G/C=0.543	G/C=0.103	G/C=0.089
	G= 15.8"	G= 65.2"	G= 12.4"	G= 10.7"
	Y+R= 4.0"	Y+R= 4.0"	Y+R= 4.0"	Y+R= 4.0"
	OFF= 0.0%	OFF=16.5%	OFF=74.1%	OFF=87.8%

C=120 sec G=104.0 sec = 86.7% Y=16.0 sec = 13.3% Ped= 0.0 sec = 0.0%

MVMT TOTALS	SB Approach			WB Approach			NB Approach			EB Approach			Int
Param:Units	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
AdjVol: vph	48	1188	244	144	196	186	204	2018	230	148	91	57	4754
Wid/Ln:ft/#	0/0	24/2	12/1	12/1	12/1-12/1	12/1	12/1	24/2	12/1	12/1	12/1	12/1	
g/C Rqd@C:%	0	42	30	28	28	28	29	59	29	28	26	25	
g/C Used: %	0	54	13	10	10	10	54	54	13	9	9	9	
SV @E: vph	0	1930	206	136	159	154	869	1942	206	114	138	130	5984
Svc Lvl:LOS		B	F	F	F	F	B+	E+	F	F	E+	D	E+
Deg Sat:v/c	0.00	0.64	1.04	0.87	1.04	1.01	0.23	1.04	0.98	1.04	0.54	0.36	0.87
HCM Del:s/v	0.0	19.9	121.2	89.6	129.3	123.0	14.5	58.8	104.5	141.9	55.9	52.8	61.0
Tot Del:min	0	103	123	54	106	95	12	495	100	87	21	13	1209
# Stops:veh	0	216	61	35	49	46	27	504	57	37	22	13	1067
Queue 1:veh	0	27	19	10	16	15	7	76	17	13	6	3	76
Queue 1: ft	0	680	488	256	402	373	165	1900	432	316	141	86	1900

APPR TOTALS	SB Approach			WB Approach			NB Approach			EB Approach			Int
Param:Units													Total
AdjVol: vph	1480			526			2452			296			4754
Svc Lvl:LOS	D+			F			E+			F			E+
Deg Sat:v/c	0.71			0.98			0.97			0.76			0.87
HCM Del:s/v	36.6			116.2			59.4			98.3			61.0
Tot Del:min	226			255			607			121			1209
# Stops:veh	277			130			588			72			1067
Queue 1:veh	27			16			76			13			76
Queue 1: ft	680			402			1900			316			1900

SIGNAL WARRANT ANALYSIS, WARRANT 3

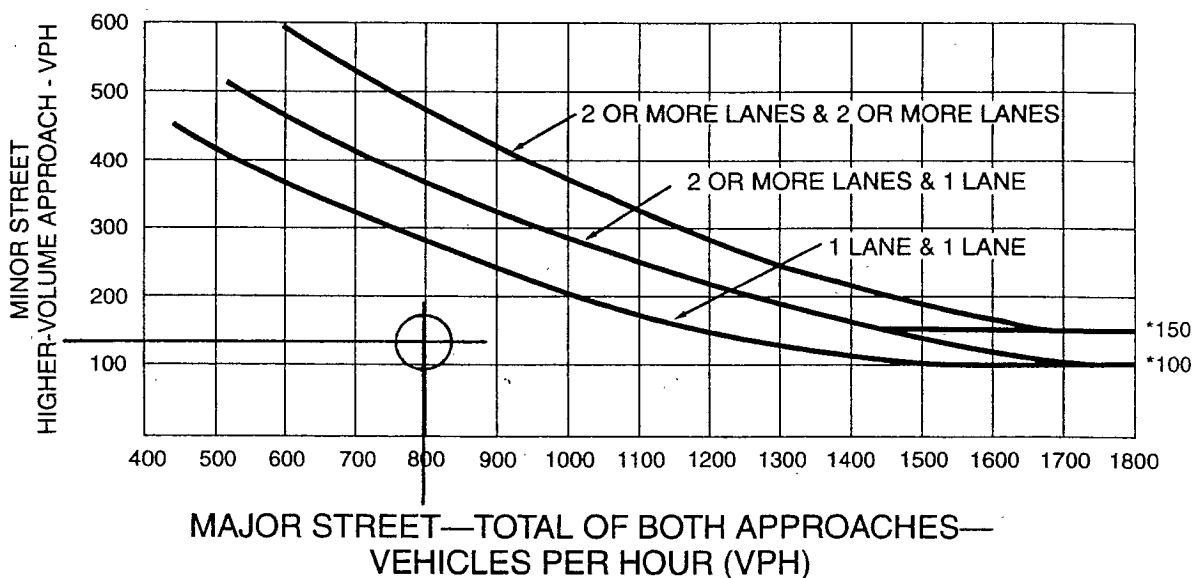
Magnuson/Schley Blvd & Wheaton Way 2010 PM Peak Hour Volumes With Project

Warrant met if criteria in either of the following two categories A and B are met:

- A. If all 3 of the following conditions exist for the same 1 hour of an average day:
1. The total stopped time delay for the minor-street approach equals or exceeds 4 vehicle-hours for a one-lane approach.
SB: $204 \text{ veh} * 54.9 \text{ sec/veh} * 1 \text{ hr}/3600 \text{ sec} = 3.11 \text{ vehicle hours} < 4.00$ NOT MET
 2. The volume on the same minor street approach equals or exceeds 100 vehicles per hour for one moving lane of traffic. $139 > 100$ MET
 3. The total entering volume serviced during the hour equals or exceeds 650 vehicles per hour for intersections with 3 approaches. $936 > 650$ MET
- B. The plotted point in Figure 4C-3 falls above the applicable curve for the existing combination of approach lanes. NOT MET

WARRANT 3 NOT MET
(Based on estimated future volumes)

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

MAJOR STREET : 797 VPH

MINOR STREET : 139 VPH

SIGNAL WARRANT ANALYSIS, WARRANT 3

Olympus Dr & Sheridan Rd 2010 PM Peak Hour Volumes With Project

Warrant met if criteria in either of the following two categories A and B are met:

A. If all 3 of the following conditions exist for the same 1 hour of an average day:

1. The total stopped time delay for the minor-street approach equals or exceeds 4 vehicle-hours for a one-lane approach.

NB: $194 \text{ veh} * 35.6 \text{ sec/veh} * 1 \text{ hr}/3600 \text{ sec} = 1.92 \text{ vehicle hours} < 4.00$ NOT MET

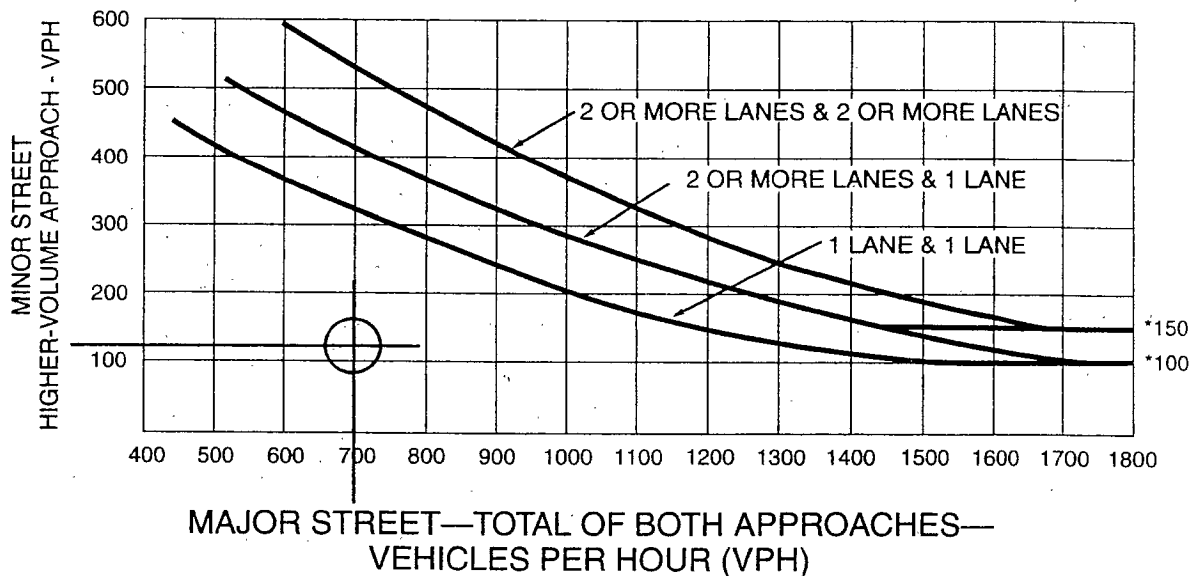
2. The volume on the same minor street approach equals or exceeds 100 vehicles per hour for one moving lane of traffic. $43+42+21 = 106 > 100$ MET

3. The total entering volume serviced during the hour equals or exceeds 800 vehicles per hour for intersections with 4 approaches. $928 > 800$ MET

B. The plotted point in Figure 4C-3 falls above the applicable curve for the existing combination of approach lanes. NOT MET

WARRANT 3 NOT MET
(Based on estimated future volumes)

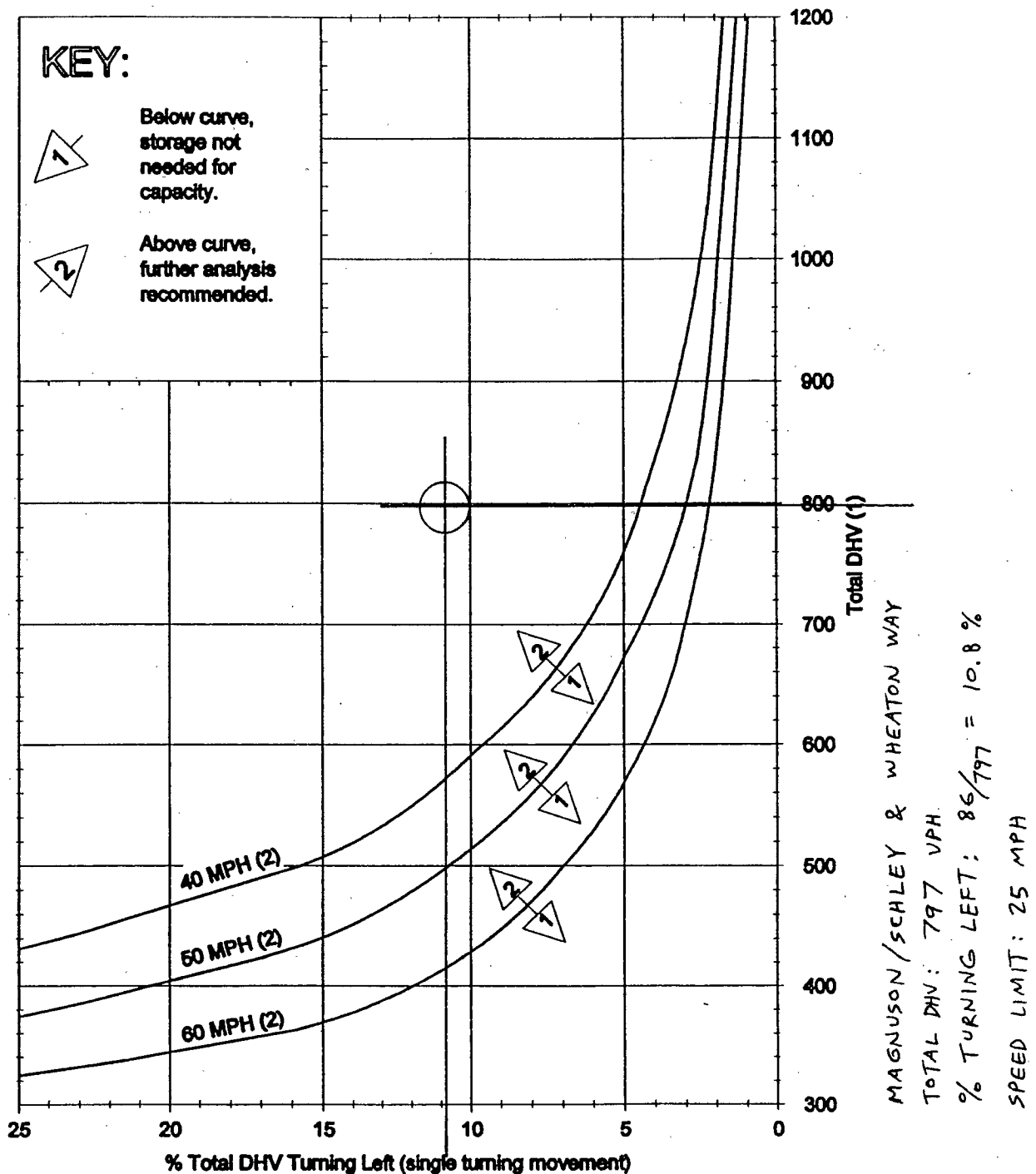
Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

MAJOR STREET : 697 VPH

MINOR STREET : 125 VPH



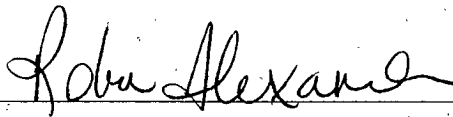
- (1) DHV is total volume from both directions.
- (2) Speeds are posted speeds.

Left-Turn Storage Guidelines (Two-Lane, Unsignalized)
Figure 910-8a

AFFIDAVIT OF PUBLICATION

Account #42742/ Ad #100185323
STATE OF WASHINGTON
COUNTY OF KITSAP

I, Robin Alexander, being first duly sworn on oath, deposes and says: That she is now, and at all times embraced in the publication herein mentioned was the principal clerk of the printers and publishers of KITSAP SUN; that said newspaper has been approved as a legal newspaper by order of the Superior Court of the County of Kitsap, in which County it is published and is now and has been for more than six months prior to the date of the publication hereinafter referred to, published in the English language continually as a daily newspaper in Bremerton, Kitsap County, Washington, a weekly newspaper in Kitsap County, Washington and is now and during all of said time; was printed in an office maintained in the aforesaid place of publication of said newspaper; that the following is a true text of a legal advertisement as it was published in regular issues (and not in supplement form) of said newspaper on the following dates, to wit: January 23, 2006 and that such newspaper was regularly distributed to its subscribers during all of said period. That the full amount of the fee charged for the foregoing publication is the sum of \$33.26 which amount has not been paid in full.

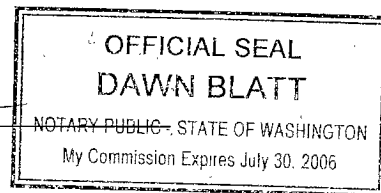


(Signature of Principal Clerk)

Subscribed and sworn to before me this day of February 2, 2006.



Notary Public in and for the State of Washington, Kitsap County.



ORDINANCE NO. 4962

AN ORDINANCE of the City Council of the City of Bremerton, Washington, amending the Comprehensive Plan by adding the East Park Sub Area Plan, and amending the Zoning Code Section 20.80.808(b) to activate the development standards for dwelling unit density, setbacks, and road standards as detailed in this ordinance.

PASSED by the City Council the 18th day of January, 2006

The full text of this ordinance is available from the City Clerk's Office, 345 Sixth Street, Suite 600, Bremerton, WA 98337.
January 23, 2006••#100185323