RESOLUTION NO. <u>R-4377</u>

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF KIRKLAND ADOPTING A MASTER PLAN FOR WAVERLY PARK.

WHEREAS, the City of Kirkland is interested in creating a diverse system of parks, recreational facilities, and open spaces that is attractive, safe, functional, and available to all segments of the population; and

WHEREAS, the City of Kirkland 2001 Comprehensive Park, Open Space and Recreation Plan identifies Waverly Park as a community park; and

WHEREAS, the City Council passed Ordinance 3852 on August 6, 2002 which in part provides for the review and approval of park master plans; and

WHEREAS, the Park Board and Department of Parks and Community Services organized and completed an extensive planning process to create a vision for the future of Waverly Park, involving important stakeholders and interested citizens; and

WHEREAS, the Department of Parks and Community Services has completed the Waverly Park Master Plan; and

WHEREAS, pursuant to public notice, the Park Board on December 18, 2002 conducted a public hearing for the purposes of soliciting public comment on the Waverly Park Master Plan; and

WHEREAS, the City Council has received from the Park Board a written report and recommendation on a proposed Waverly Park Master Plan; and

WHEREAS, in regular public meeting the City Council considered the written report and recommendation of the Park Board.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Kirkland adopts the Waverly Park Master Plan recommended by the Park Board and set forth in Exhibit A to this Resolution.

PASSED by majority vote of the Kirkland City Council on the 21st day of January, 2003.

SIGNED in authentication thereof on the 21st day of January, 2003.

ATTEST:

EXHIBIT A

Waverly Park

Master Plan

January 2003

For City Council Approval



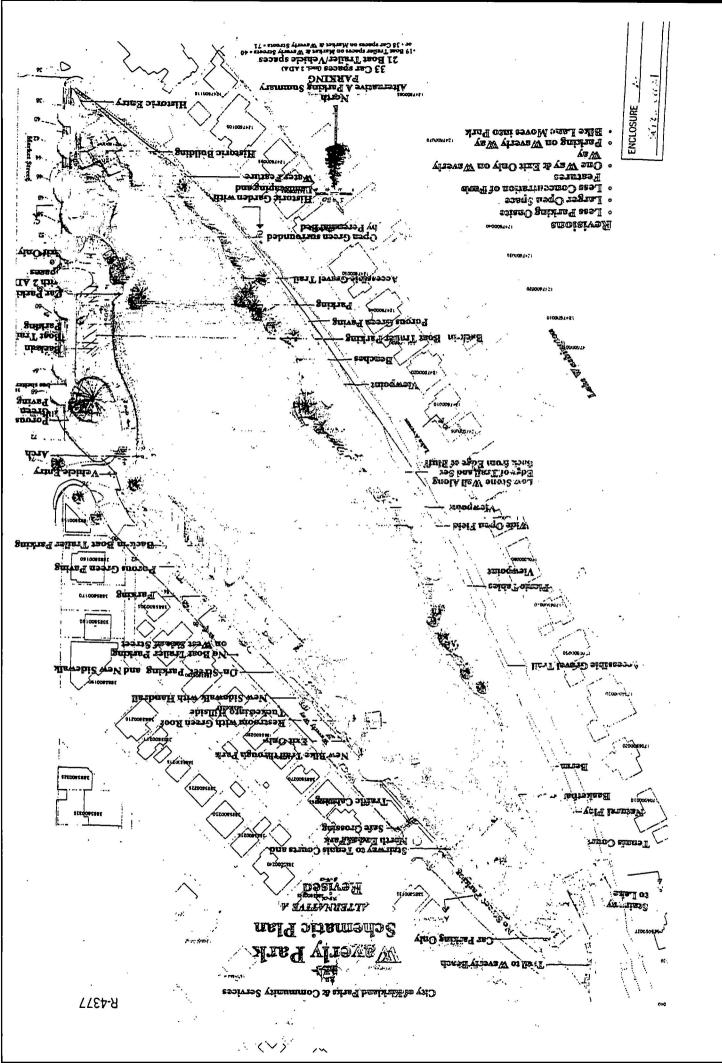
City of Kirkland Department of Parks and Community Services

Barry Russell, Director Michael Cogle, Park Planning Manager Consultant: Barker Landscape Architects R-4377

Waverly Park Master Plan

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and a

Waverly Site Design Program Approved by City Council January 2, 2001

A Wide Open Field

Character:

The existing field should remain green and wide open. It should be left natural and allow for informal, flexible, and unstructured use. Rolling topography may surround the green area which will be smoothed, leveled and irrigated. No buildings or structures shall be placed on site that are inconsistent with the recommended design program.

Criteria:

- Leave open and as large as possible.
- Maintain views and enhance where practical.
- No structures, asphalt field lighting or hardscape shall be included in this area.
- Enhance western edge for wildlife.

Native Northwest Landscaping

Character:

The mature trees along the bluff will be maintained and native plants will help to enhance and reinforce the casual Pacific Northwest 'look'. The site will be softened by the added landscaping.

Criteria:

- Protect existing mature trees.
- Replace blackberries with low growing native plants.
- Keep people away from and maintain slope stability.
- Use native plantings to enhance the native wildlife habitat.
- Reduce the number of hiding places and balance vegetation and safety.

Seating and Viewpoints and Framed Views

Character:

Seating and viewpoints should be positioned to take advantage of the great views. A diversity of seating and viewpoints will be provided. Views will be enhanced by 'opening up key view corridors.. The character of the seating will be in-keeping with a casual Northwest feel and may include logs, boulders and picnic benches. The historic character of the terraces will be preserved as much as possible.

Criteria:

- Protect existing trees.
- Existing views will not be obstructed.
- No hiding places will be created.
- Maintain historic character of terraces as much as possible.
- The seating should not overwhelm or distract from the natural beauty of the park.

Trails

Character:

The trail system will be simple, unobtrusive, and built of natural materials. Trails will link the ends of the park and provide pedestrian connections to Marina and Waverly Beach Park. The trails will create several 'loop' systems in the park and will be located along the edges of the park. A trail along the bluff will provide views of Lake Washington, and stairs down the bluff will provide pedestrian access to the public property on the lake.

Criteria:

- Trails will be located on the edges of the park and have good drainage.
- They will be constructed of soft surface material and look as natural as possible.
- A small wall may be used to separate the trail from the steep bluff edge.
- Minimize privacy issues with residences below Park on Lake Ave. W.
- Research and possibly enhance the historic WPA trail.
- Non-motorized connections will be made to all nearby pedestrian and bike systems.

Gardens

Character:

Native gardens will border the park edges, along trails and be used to screen parking. A historic garden may be located behind the historic building. Gardens may also include wildlife enhancement and perennial gardens. Water may be incorporated in appropriate ways.

Criteria:

- The native gardens will be low and massed.
- · Gardens will not block existing views.
- · Gardens will enhance edges and connections.
- · Gardens will be used to highlight and provide a natural native NW character to the site

Restrooms

Character:

The restrooms will be unobtrusive in architectural style, location, and character. They will be accessible to all users. Restrooms will be enhanced by the addition of a drinking fountain, benches and interpretive signage.

Criteria:

- · Located on the edge of the Park
- · Possibility of more than one if necessary for accessibility.
- The historic building will have restrooms for visitors.
- Small garden size restrooms could serve users when building closed.

Tennis Courts

Character:

Tennis courts are to remain unobtrusive, and fencing will be minimized.

Criteria:

- Maintain two tennis courts.
- Location may move, but limit new paving as much as possible.
- · Possible half-court basketball hoop in an appropriate unobtrusive location.

Car & Boat Trailer Parking

Character:

Car and boat trailer parking will be designed to be screened from view as much as possible. It will not bisect or sever the park or occupy any prime view areas.

Criteria:

- Accommodate 20-25 boat trailer and 30-40 cars if parking is above ground.
- Accommodate 40-50 boat trailer and 100 (or more) cars if parking is below ground.
- The lot will be located as close as reasonable to boat launch and downtown.
- · Porous and green paving should be strongly considered to reduce the impact of surface parking.

Additional information to consider is that boat users want a minimum of 40 surface parking spaces.

• Art

Character:

Art elements should be well integrated into the park. It should be natural in style and in keeping with the northwest character. It may function as a play element or site furnishing such as a bench or trash receptacle. Temporary art installations may be considered.

Criteria:

· Art elements should not dominate the site.

• They may relate to functional elements such as the restroom, drinking fountain, play sculpture, a bench etc.

Natural Play Area

Character:

The play area should be unobtrusive, 'natural' and integrated into the site. It should be constructed of natural materials such as boulders, logs, and native landscaping and possibly artistic elements.

Criteria:

- · No large structures.
- No swinging or catalogue play structures.
- · Activities to be designed for include running, jumping, climbing, and sliding.

Entries & Edges

Character:

The entries and edges of the park should be casual, inviting and distinctly northwest in character. Native trees and plants may be used to mark the entrance and the edges. Sidewalks and native landscaping will be used to buffer the park from cars and traffic.

Criteria:

- · Incorporate the historic school arch into an entrance.
- Edges will be designed to help screen cars and traffic.
- · Entries to provide park access from points north, south, east, and west.
- Entries should provide a sequential approach into the park.

• Historic Building & Grounds

Character:

The Historic building grounds should be developed in a style that is consistent and complimentary to the building. This historic portion of the site should be inviting from the street and serve as the southern entrance to the park.

Criteria:

- The building should house the Kirkland Heritage Society Resource Center.
- It should serve as a Kirkland community meeting hall.
- Restrooms will be available to the public when the building is open.

Waverly Park Master Plan Public Process

The following is a synopsis of the public process used to create the conceptual design for the Waverly Park Site:

DESIGN PROGRAM PHASE (Fall of 2000)

This portion of the process began in the fall of last year with the creation of a City Council-appointed Waverly Advisory Group. Members included representatives from several key stakeholder groups. Individuals on the committee were:

John Hurney, Boating Community	Chuck Bartlett, Market Neighborhood Assoc.
Margaret Carnegie, KAN	Bob Montgomery, Sports organizations
Michael Radcliff, Heritage Society	Garin Wedeking, Youth Council
Reed Walton, Youth Council	Merrily Dicks, Kirkland Arts Center
Karen Lightfelt, KDA	Cindy Zech, Park Board
Dwight Altenburg, Citizen-at-Large	Rick Seim, Lake Avenue West Residents

The Advisory Group met six times (6) over a three-month span. Each of the Advisory Group's working meetings was open to the public. In addition, the Advisory Group hosted two (2) public workshops. Nearly 100 people attended the first workshop, with nearly two-thirds of attendees being residents of the Market Neighborhood. The second workshop was attended by nearly 50 people. Meetings were advertised widely, including via news releases, the City web page, and about a dozen public notice signs placed strategically in parks throughout Kirkland. In addition, a newsletter was distributed to all interested parties (and placed on our web page) which provided regular updates regarding meetings and progress towards the creation of the park's design program.

This process resulted in a unanimous adoption of the design program by both the Park Board and City Council (January 2001)

CONCEPTUAL DESIGN PHASE (2001)

The Park Board, with continual participation of Advisory Group members, oversaw the Conceptual Design Phase. The Park Board hosted two (2) public workshops and one (1) open house, advertised in a manner similar to the earlier meetings. Each of these meetings was attended by 40 – 60 people. In addition, the Park Board held two working meetings with Advisory Group members to work on the design. These meetings were open to, and attended by, the public. The Conceptual Design was approved by the City Council in November of 2001.

All told, the Waverly Park process involved:

Four (4) public workshops;

One (1) open house;

Eight (8) separate working meetings held by the Advisory Group and/or Park Board, each of which were open to (and attended by) citizens interested in the project;

Two (2) separate meetings (once during the Design Program phase, and once during the Conceptual Design phase) with residents living on or near Waverly Way to listen to and respond to their ideas and concerns.

December 2002

Waverly Park Master Plan Summary and Evaluation of Public Comments on Plan

The following is a summary of the four primary issues raised by the public on the Waverly Park plan: parking, loss of green space, relocation of the tennis courts, and the proposed stairway to Lake Avenue West:

Parking

Comments:

Too much parking is being provided on the site. Alternatively, not enough boat trailer parking is being provided on the site.

Evaluation:

What is the existing parking capacity?

Presently parking on the Waverly Park Site is provided for in three distinct areas: 1) the gravel terrace lot, 2) the old school driveway paralleling Waverly Way, and 3) the north gravel lot. Boat trailers are not permitted to use the driveway, and seldom utilize the north lot.

Due to the informality of parking as presently exists on the site, the exact number of spaces that the site can accommodate for cars and boat trailers varies. For example, how and where boat trailers are parked on the gravel terrace lot early in the morning can dictate how many subsequent trailers can be parked for the remainder of the day.

All told, it is estimated that the existing parking capacity for boat trailers is 20-25 spaces, and the existing capacity for cars is 50-60 spaces. Note that boat trailer spaces can be used by cars during the non-boating season.

What are the parking requirements for a community park?

Parking for community parks is determined on a case-by-case basis, depending upon the program elements that are proposed. There are no explicit standards for the number of parking spaces in community parks. Kirkland has three other community parks, with the following parking capacities:

- 1. Peter Kirk Park (shared use of 400+ stall Municipal Parking Garage)
- 2. Everest Park (202 spaces)
- 3. Crestwoods Park (116 spaces)

Waverly Park Master Plan Summary of Public Comments Page 2 of 4

For the Waverly Park Site, parking is needed for general park users as well as for the historic building. Parking is also being proposed on the site to partially serve the parking needs for the downtown boat launch, which is separate from the parking requirements of the park itself.

What is being proposed?

The proposed Plan would accommodate 33 car spaces and 21 boat trailer spaces. In addition, the Park Board has recommended that street parking adjacent to the park on Market Street and Waverly Way be utilized for up to 19 boat trailers or up to 38 car spaces.

Conclusions:

A parking study completed as part of the project's traffic analysis shows that there is adequate parking availability to meet the demand generated by on-site activities.

Usable Green Space

Typical Comments:

The plan provides for insufficient green space on the site.

Evaluation:

What is the net gain or loss of open space in the park with the proposed design?

Currently, parking/traffic circulation areas comprise about 13% of the park property. With the proposed plan, parking/traffic circulation areas would comprise about 15% of the park property. These changes result in a net loss of approximately one-third of an acre in a total usable green space in the park design proposal. The existing parking on the site does not meet code requirements; development of the site will bring parking lots in to code compliance.

Conclusion:

The parking study did not show that an overabundance of parking is being provided on site, and use of Waverly Way and Market Street will allow for more green space in the park. The plan improves and expands the "wide open field" which currently exists.

Waverly Park Master Plan Summary of Public Comments Page 3 of 4

• Tennis Courts

Comments:

The tennis courts on the site should remain in their current location rather than being relocated on the site.

Evaluation:

Why are the tennis courts proposed to be moved?

The tennis courts are proposed to be relocated for two primary reasons. First, the Park Board, staff, and project architect believe that the proposed historic garden is a better fit for the area just north of the historic building, and the overall park design is improved by relocating the tennis courts. Second, relocating the courts to the north end of the park keeps the active uses of the park close together, including the natural play area, basketball area, picnicking, restroom, etc. This has been found to be a common element in community park design, and you will find the clustering of active park elements (playgrounds with sports courts, for example) in Kirkland's other community parks – Peter Kirk, Everest, and Crestwoods. The site elevation will be lowered by up to four feet to minimize view blockage. The tennis courts will not be lighted for evening use.

Will the recently replaced sewer line in Waverly Park prevent the elevation of the proposed tennis courts from being lowered?

The Public Works Department states that the plan to lower the elevation of the tennis courts in the proposed location by three or four feet will not be hindered by the depth of the new sewer line.

Conclusion:

Relocation of the tennis courts is consistent with the design vision for the site and will not have an adverse impact on adjacent residential properties.

Stairway to the Lakefront.

Comments:

Development of a stairway on the slope on the west side of the Waverly Park site will threaten the slope's stability.

Waverly Park Master Plan Summary of Public Comments Page 4 of 4

Evaluation:

A preliminary Geotechnical Engineering Study was completed by HartCrowser and provides recommendations for implementation of the stairway.

Conclusion:

A full geotechnical report meeting the requirements of Chapter 85 of the Zoning Code will be required prior to any work occurring on or atop the west slope. Full compliance with all codes and implementation of the engineering evaluation will result in maintaining the integrity of the slope.

Waverly Park Master Plan

Compliance with 2001 Comprehensive Park, Open Space and Recreation Plan

Goals (Section 1, Page 5)

"Goal 1: Acquire, develop, and renovate a system of parks, recreational facilities, and open spaces that are attractive, safe, functional, an available to all segments of the population."

<u>Conclusion</u>: The goal of the Waverly Park Master Plan is to develop the City-owned property into an attractive, safe, and functional community park available to all Kirkland residents and is in compliance with this goal.

Recommendations for Major Issues and Opportunities (Section 2, Page 17)

"The opportunity for developing other forms of community parks such as the Waverly Park site is important. The eventual development of the Waverly Park site will provide a city-wide park resource, given its prominence and proximity to the downtown and the lake. Features in this park may include formal gardens, picnic shelters, trails, viewpoints, informal recreational open spaces, public meeting space at the historic church building, and unique and creative landscapes."

<u>Conclusion:</u> The Waverly Park Master Plan is consistent with the vision for the site described in the Comprehensive Park Plan.

Recommendations for Major Issues and Opportunities (Section 2, Page 21)

"Street ends are wonderful opportunities to expand the public's access to the waterfront." "The Plan recommends that all waterfront street ends be retained in public ownership for open space purposes."

<u>Conclusion</u>: The Waverly Park Master Plan provides access to the Waverly Tract (off of Lake Avenue West) via development of a stairway down the west slope of the site. The Master Plan is in compliance with this identified opportunity.

Capital Recommendations (Section 2, Page 33)

"Development: Waverly Park Site"

<u>Conclusion:</u> The Waverly Park site is identified as a top priority for development in the Comprehensive Park Plan. Completion of the Master Plan is consistent with achieving this priority.

Market Neighborhood Recommendations (Section 3, Page 90)

"Recommendations: Development of the Waverly Park Site"

<u>Conclusion:</u> Completion of the Waverly Park Master Plan will lead to implementation of this recommendation of the Comprehensive Park Plan.

Kirkland Parks and Community Services

December 2002

Waverly Park Master Plan

Park Lighting Plan

Goal: It is the intent of these standards to insure that lighting in Waverly Park is adequate to ensure public safety while minimizing adverse impacts upon adjacent residential uses. It is also the intent of these standards to minimize light pollution which has a detrimental effect on astronomical observations.

Parking areas:

- <u>Area of lighting</u>: Parking areas along Market Street and Waverly Way, except the northernmost park parking lot, which shall not be lighted. Uniformity ratio no greater than 4:1, average to minimum footcandles over the entire parking lot.
- Hours of illumination: Dusk to 11:00 p.m., except for security lighting.
- <u>Lighting intensity</u>: Not greater than 4.0 horizontal footcandles, average maintained, nor less than 0.2 horizontal footcandles, average maintained.
- <u>Height of light standards</u>: Not greater than 20-feet.
- <u>Industry Standards</u>: Parking lot shall be lighted in accordance with the *Illuminating* Engineering Society of North America (I.E.S.) Lighting Handbook (most recent edition), except as required by Kirkland regulations.

Pathway lighting:

- <u>Area of Lighting</u>: Pathway (bike trail) running parallel to Waverly Way only (pathway along bluff will not be lighted).
- Hours of illumination: Dusk to dawn
- Lighting intensity: Minimum footcandles on Pavement: 0.2 fc, maximum footcandles on Pavement: 4.0 fc; Metal halide lamp
- Height of light standards: Bollard type, maximum 48" in height
- <u>Industry Standards</u>: Pathway shall be lighted in accordance with *the Illuminating Engineering Society of North America (I.E.S.) Lighting Handbook* (most recent edition), except as required by Kirkland regulations.

Other Lighting:

Activity areas of the park will <u>not</u> be lighted, including any tennis court or other sport court amenity.



CITY OF KIRKLAND Planning and Community Development Department 123 Fifth Avenue, Kirkland, WA 98033 425.828.1257 www.ci.kirkland.wa.us

MEMORANDUM

 To:
 Barry Russell, Director of Parks & Community Services

 Michael Cogle, Parks Planning & Development Director

From:

<u>Ataup (lauson</u>, Stacy Clauson, Planner <u>Lin</u> Hanning Director

Date: December 10, 2002

Subject: WAVERLY PARK MASTER PLAN, Analysis of compliance with Comprehensive Plan, Development Regulations, and Environmental Record

The City of Kirkland Department of Parks and Community Services has prepared plans to develop the existing Waverly Park Site, located along the west side of Market Street between Lake Avenue West and Waverly Way (see Attachment 1). The property is located within the Park/Public Use (P) Zone. Development or use of a park in this zone generally requires the preparation of a master plan, which is reviewed through a Community Review Process, as established by the Parks and Community Services Director. In this review process, the Parks Board conducts a public hearing and makes a recommendation to the City Council, which makes a final decision.

The written report that is forwarded from the Parks Board to the City Council should contain at least the following:

- 1. A description of the proposal;
- 2. An analysis of the consistency of the proposal with adopted Comprehensive Plan policies, including the pertinent Park and Recreation Comprehensive Plan policies;
- 3. An analysis of the consistency of the proposal with applicable development regulations, if any;
- 4. A copy of the environmental record, if the proposal is subject to the State Environmental Policy Act;
- 5. A summary and evaluation of issues raised and comments received on the proposed master plan; and
- 6. A recommended action by the City Council.

Below you will find an analysis of the consistency of the proposal with adopted Comprehensive Plan policies (but not including pertinent Park and Recreation Comprehensive Plan policies) (see Section II.E), an analysis of the consistency of the proposal with applicable development regulations (see Section II.D), and a copy of the environmental record (see Section II.B).

Based on Statements of Fact and Conclusions (Sections I and II), and Attachments in this report, the Planning and Community Development Department has determined that the Waverly Park Master Plan is consistent with adopted Comprehensive Plan policies and applicable development regulations. As part of the development of the approved master plan, the Planning and Community Development Department will require the following:

- 1. Development on the property is subject to the applicable requirements contained in the Kirkland Municipal Code, Zoning Code, and Building and Fire Code. It is the responsibility of the applicant to ensure compliance with the various provisions contained in these ordinances. Attachment 3, Development Standards, is provided in this report to familiarize the applicant with some of the additional development regulations. This attachment does not include all of the additional regulations.
- 2. Installation of the required improvements as described in Attachment 3. Prior to installing these improvements, plans must be submitted for approval by the Department of Public Works (see Conclusion II.D.1.f).
- 3. As part of the grading permit to install the proposed parking lots, the Parks Department shall demonstrate that the project is consistent with the maximum allowable grade established in KZC 105.12. (see Conclusion II.D.1.d.iv).
- 4. Prior to issuance of a Certificate of Occupancy, covered bicycle parking shall be provided within 50 feet of the entrance to Heritage Hall (see Conclusion II.D.1.d.x).
- 5. Prior to issuance of a building permit for the restroom facility, the Parks Department shall demonstrate that the facility includes overhead weather protection along any portion of the restroom that adjoins the pedestrian walkway (see Conclusion II.D.1.d.vi).
- 6. Prior to issuance of a grading permit to install the parking lots, the Parks Department shall demonstrate that the parking lot design is consistent with the standards outlined in Attachment 3. Specifically, the parking lot shall be revised so that no more than 8 contiguous spaces are provided in each row of spaces, unless a modification to the parking lot landscaping is granted subject to compliance with the criteria set forth in KZC 105.103.e. Further, the parking lot shall be surfaced with asphalt or superior material. In order for the porous green paving to be used, it must be found consistent with the criteria set forth in KZC 105.103.h. (see Conclusion II.D.1.e)
- 7. Before any work occurs on or atop the west slope (e.g. grading, installation of proposed irrigation system, the proposed low stone wall, an accessible gravel trail along the west edge of the open field, and seating and viewpoint areas along the gravel trail, as well as landscaping on the slope face) a geotechnical report meeting the requirements of Chapter 85 of the Zoning Code shall be completed and submitted for review (see Conclusion II.D.1.g.ii).
- 8. Prior to issuance of any grading or building permits for construction of new structures or expansion of existing structures, the Parks Department shall submit a tree retention plan showing significant trees on the subject property and identifying trees that can be retained with development of the proposed park for review and approval by the Planning Department (see Conclusion II.D.1.h.ii).
- 9. Prior to any land surface modification or development of any areas for passive or active recreational space within the shoreline jurisdiction, the applicant shall obtain approval of a Substantial Development Permit (see Conclusion II.H.2).
- 10. The project shall comply with the mitigation measures outlined in Attachment 4 (see Conclusion II.B).

I. INTRODUCTION

Waverly Park Master Plan Page 3

A. PROPOSAL

Develop the existing Waverly Park Site as follows: a) grading and irrigating the wide open field to be used for informal recreational use; b) installing native landscaping along the bluff and removing blackberries; c) installing a low stone wall to limit access to the bluff; d) installing an accessible gravel trail along the west edge of the open field; e) installing a new bike trail through the park on the east edge of the open field; f) providing seating and viewpoint areas along the gravel trail; g) planting a native garden and installing a water feature north of the existing historic building at the southern corner of the property and completing other plantings throughout the park; h) constructing a restroom; i) creating a community park at the northern portion of the property by relocating the tennis courts and installing a basketball hoop and a natural play area; j) creating parking areas along the Market Street and Waverly Way frontages containing 33 vehicle parking spaces and 21 boat trailer/vehicle spaces; k) constructing a stairway along the northern portion of the site down the west slope to Lake Avenue W; I) relocating the arch; m) and opening Heritage Hall to use with the bottom floor housing the Kirkland Heritage Society Resource Center and the upper floor used as a community meeting hall. (see Attachment 2)

The park is proposed to be developed in phases as funding sources for development and maintenance of the park become available. The first phase would involve opening the Heritage Hall to use. The remainder of the site would be developed sequentially as funding becomes available.

II. FINDINGS OF FACT AND CONCLUSIONS

A. SITE DESCRIPTION

- 1. Site Development and Zoning:
 - a. <u>Facts</u>:
 - (1) <u>Size</u>: According to the King County Assessor Maps, the current size of the site is approximately 449,623 square feet (10.32 acres).
 - (2) <u>Land Use</u>: The site contains Heritage Hall, a 2,260 square foot building. The site is also developed with tennis courts, several gravel parking areas, and a paved parking area at the northern portion of the property. The site currently contains a gravel pathway that runs along the west edge of the open field.

B. STATE ENVIRONMENTAL POLICY ACT (SEPA)

<u>Facts:</u> A Determination of Nonsignificance (DNS) was issued on November 21, 2002. The Environmental Checklist, Determination, and additional environmental information are included as Attachment 4. The appeal period for the determination expired on December 5, 2002 and no appeals were filed.

C. CONCURRENCY

R-4377

<u>Facts</u>: The Public Works Department has reviewed the application for concurrency. A concurrency test was passed for water, sewer and traffic on April 8, 2002.

D. APPLICABLE DEVELOPMENT REGULATIONS

- 1. Zoning Code. The property is located within the Park/Public Use (P) Zone
 - a. Development regulations for Public Parks
 - i. <u>Fact</u>: The fundamental site development standards pertaining to public parks in the P zone are set forth in Section 65.15. A summary of those regulations and the relationship of the proposal to them is contained in Attachment 5.
 - ii. <u>Conclusion</u>: The proposal complies with the regulations for the P zone as set forth in Section 65.15.
 - b. Special Regulations for Parks
 - i. <u>Fact</u>: Zoning Code Section 65.15.010, Special Regulation 1 establishes that any development or use of a park must be consistent with a master plan. A master plan shall be reviewed through a community review process, established by the Parks and Community Services Director, which shall include at a minimum:
 - One formal hearing conducted by the Parks Board, preceded by appropriate public notice.
 - The submittal of a written report on the proposed master plan from the Parks Board to the City Council, containing information described in subsection i) through vi); and
 - City Council review and approval.

The Master Plan shall identify the following information: placement, dimensions, and uses of all structures as well as streets and other areas used for vehicular circulation; location, dimensions, and uses of all active and passive recreation areas; potential users and hours of use; lighting, including location, hours of illumination, lighting intensity, and height of light standards; landscaping; and other features as appropriate due to the character of the neighborhood or characteristics of the subject property.

- ii. <u>Fact</u>: A public hearing before the Parks Board is scheduled for December 18, 2002. Notice for the public hearing was 1) sent to the owners of all property within 300 feet of the property, 2) sent to residents of property located adjacent to or directly across the street from the property, 3) posted on notice boards located on the site, and 4) published in the newspaper.
- iii. <u>Fact</u>: The scaled site plan showing the Master Plan layout (see Attachment 2) shows placement and uses of all structures as well as streets and other areas used for vehicular circulation. The site plan also depicts the location

Waverly Park Master Plan Page 5

and uses of all active and passive recreation areas. The existing Heritage Hall measures 46 feet x 46 feet, with a height of approximately 21 feet. The proposed restroom facility is proposed to have a maximum dimension of 22 feet by 22 feet (484 square feet), with a maximum height of 14 feet at the peak of the roof.

- iv. <u>Fact</u>: The lighting proposed for the park will be security lighting for the restroom and parking areas, and security lighting for the pedestrian walkway/bicycle path located along the east edge of the open field. The Parks Department will be presenting details on the parking lot lighting (including location, hours of illumination, lighting intensity, and height of light standards) in a separate memo. The Parks Department has provided the following details regarding the proposed lighting along the pedestrian walkway:
 - Bollard type, maximum 48" in height-
 - Metal halide lamp
 - Minimum Footcandles on Pavement: 0.2 fc
 - Maximum Footcandles on Pavement: 4.0 fc
 - Standards: Pathway shall be lighted in accordance with the *Illuminating Engineering Society of North America (I.E.S.) Lighting Handbook* (most recent edition), except as required by Kirkland regulations.
- v. <u>Fact</u>: Waverly Park is a community park serving the adjacent neighborhood and downtown Kirkland. It also provides boat-trailer parking for boaters launching their boats at the nearby Marina Park. It is anticipated that the large open field will be used for youth sport teams for practice. The Kirkland Historic & Preservation Society will use the lower floor of Heritage Hall as an archive office and the upper half will be managed by the Parks Department and available as a banquet, meeting, and party facility.

The hours of use are different depending on the activity. The meeting facility in Heritage Hall will be used on a per demand basis but will be most used during the evenings (after 6 PM) and weekends. During peak boating season (May through August), boaters will use the boat-trailer parking areas between 4PM and 7PM. The tennis courts and open field will generally be used on weekends or weekday evenings from approximately 4PM to 7PM. The park is proposed to operate within the typical hours established by KMC 11.80.250, with the park being closed between the hours of 11 p.m. and dawn.

vi. <u>Conclusions</u>: The proposal provides the information required by section 65.15.010, Special Regulation 1. It is consistent with all applicable development regulations (see Sections II.D) and the Comprehensive Plan (see Section II.E). In addition, it is consistent with the public health, safety, and welfare because it permits development of a public park to serve the recreational needs of the community consistent with the established policies and regulations for public parks.

c. Neighboring Development and Zoning:

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i. Facts: The subject property is surrounded by the following zones and uses:

<u>North:</u> Waverly Way. To the north of Waverly Way the property is zoned RS 7.2 and the lots contain single family residences.

<u>South</u>: Lake Avenue W. To the south of Lake Avenue W are properties zoned either WDI or WDII containing single family or multifamily residences.

<u>East</u>: Market Street. To the east of Market Street are properties zoned either CBD 8 or PR 3.6, developed with a mix of office buildings, multifamily residential buildings, and single family residences.

<u>West</u>: To the west of Lake Avenue are properties zoned either WDI or WDII containing single family or multifamily residences.

- ii. <u>Conclusion</u>: The neighborhood development and zoning are not constraining factors in this application.
- d. Parking Requirements.
 - i. <u>Facts</u>: The P zone does not specify a parking space requirement for Public Parks. As a result, pursuant to KZC 105.25, the parking requirement is determined on a case-by-case basis, based on the actual parking demand of existing uses similar to the proposed use. The applicants have completed a parking analysis as part of the traffic report on the site (see Attachment 4, Enclosures 6 and 7). In this parking analysis, the current peak parking demand is identified to occur in the summer on weekdays, from the hours of 4:00 to 7:00 pm. This is based upon a parking count conducted at the Waverly Park site in July, 2002. During this time the park is used by boaters, youth sport teams and various other park users (tennis, informal play, strolling, etc.).

In addition to the existing activities, the master plan proposes use of Waverly Hall as a Heritage Resource Center and community meeting hall. The Heritage Resource Center is expected to have a parking ratio similar to an office use, generating the need for 4 additional parking spaces during the peak parking demand time. The community meeting hall would generally operate outside of the peak parking demand time, on weekends and after 6:00 pm on weekdays. The parking demand for the meeting hall was based on the occupancy of the upper floor of Heritage Hall, which has a maximum occupancy of 73 people. A ratio of 1 stall for every four persons (similar to the ratio used for a church) was used to determine parking demand for the facility, estimated to be 19 stalls.

The future parking demand for park users during the weekday peak hours of use is expected to increase from 21 to 25 stalls, with the four additional stalls being need to serve the Heritage Resource Center. The weekend need for parking would increase in the future from 12 to 32 stalls, with the additional 20 spaces being provided to meet anticipated events within the community meeting hall.

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- ii. <u>Conclusion</u>: Based on the analysis of the parking demand, it appears that there is sufficient parking availability to meet the demand generated by on-site activities.
- iii. <u>Facts</u>: Pursuant to KZC 105.12, the slope of entrance and exit driveways shall not exceed six percent for the first 20 feet from the face of the abutting right-of-way curb. Thereafter, the slope shall not exceed 15 percent. The proposal includes a slope to exit from the parking lot along Waverly Way to Waverly Way.
- iv. <u>Conclusion</u>: As part of the grading permit to install the proposed parking lots, the applicant shall demonstrate that the project is consistent with the maximum allowable grade established in KZC 105.12.
- v. <u>Facts</u>: Pursuant to KZC 105.18, the park is required to provide the following features:
 - 1. Pedestrian walkways designed to minimize walking distances from the building entrance to the right-of-way and adjacent transit facilities.

Staff Analysis: The proposed park design contains an extensive pedestrian walkway system, including walkways from building entrances to the public right-of-way. Sidewalks in the public right-ofway lead pedestrians to the transit stop located along the site frontage on Market Street.

2. Covered bicycle parking within 50 feet of an entrance to a building.

Staff Analysis: Covered bicycle parking should be provided within 50 feet of the entrance to Heritage Hall. No bicycle parking facilities are currently shown on the site plan.

3. Pedestrian walkways between principal entrances to all uses on the subject property.

Staff Analysis: The pedestrian walkway system has two main northsouth connections, connecting Heritage Hall to the parking lots, the restroom facility, and to the active recreation facilities located at the north end of the park. The pedestrian walkway system also has two east-west connections to facilitate better access.

4. Pedestrian walkways connecting to adjacent properties.

Staff Analysis: The proposal includes future development of a stairway to Lake Avenue West along the north portion of the site in order to improve pedestrian connectivity. The proposal also shows the pedestrian walkways connecting to the sidewalk system in the adjoining public rights-of-way.

5. Locate service bays away from pedestrian areas.

Staff analysis: No service bays are proposed.

6. Provide overhead weather protection along any portion of the building which is adjacent to a pedestrian walkway.

Staff analysis: The design plans for the restroom facility shall include overhead weather protection along the portion of the restroom that adjoins the pedestrian walkway.

- vi. <u>Conclusion</u>: The proposal is consistent with the pedestrian, bicycle, and transit facility requirements with the following additions:
 - a. Covered bicycle parking should be provided within 50 feet of the entrance to Heritage Hall.
 - b. The design plans for the restroom facility shall include overhead weather protection along the portion of the restroom that adjoins the pedestrian walkway.
- vii. <u>Fact</u>: KZC 105.50 indicates that parking areas for uses other than detached dwelling units shall be located as far as possible from any adjoining low density zone, or existing low density permitted use.

The site adjoins low density uses and zones along a portion of the Waverly Way and Lake Avenue West frontage.

The applicant has proposed to arrange the parking lots on the perimeter of the site in order to preserve the large open green field for passive recreational space. As a result, the parking lots along Waverly Way would be located within 100 feet of the adjoining low density zone, though separated by Waverly Way, a collector street.

In order to minimize potential impacts to adjoining low-density residential uses, the applicant has designed the parking lot to be vertically separated from the residences, sited at a lower elevation that Waverly Way (see Attachment 6). In this way, views from the adjoining residences would not be interrupted by the parking lot.

- viii. <u>Conclusion</u>: The location of the parking area in proximity to adjoining lowdensity uses is appropriate.
- e. Parking Area Design
 - i. <u>Facts</u>: Pursuant to KZC 105.75 the parking lot shall be arranged so that no more than 8 contiguous spaces are provided in each row of spaces. An island or peninsula of the same dimensions as the adjacent parking spaces must separate adjacent groups of spaces from one another and each row of spaces from any adjacent driveway which runs perpendicular to the row.

In the proposed parking plan, there are some rows that contain more than eight contiguous spaces.

Waverly Park Master Plan Page 9

ii. Pursuant to KZC 105.100, the applicant is required to surface the parking area and driveway with a material comparable or superior to the right-of-way providing direct vehicular access to the parking area. Grass grid pavers may be used for emergency access areas that are not used in required permanent circulation and parking areas.

The applicant has proposed to surface the parking lots with porous green paving. The specifics concerning this porous green paving have not been provided.

iii. The applicant has proposed to phase development of the proposed park, with the development of the parking areas occurring in the second phase, after occupation of Heritage Hall is scheduled to occur and after funding becomes available. Until funding becomes available, the applicant proposes that the users of Heritage Hall park vehicles in the existing gravel parking lots located on the site.

The existing parking lots do not meet several of the parking area design requirements established in KZC Sections 105.60 through 105.102, including parking area landscaping and surface materials.

- iv. KZC 105.103.h allows the surface material requirement for parking areas to be modified if:
 - The surfacing material will not enter into the drainage system, or onto public or private property; and
 - The material will provide a parking surface which is usable on a year-round basis.

The existing parking lots are developed with compacted gravel. The parking lots are currently used year-round and can continue to provide a usable parking surface, provided that appropriate periodic maintenance is completed (e.g. removal of potholes). There is no evidence that the gravel drains into the City's drainage system or onto private property.

- v. <u>Conclusions</u>:
 - 1. The proposed final parking design is consistent with the requirements for parking lots established in Chapter 105 with the following revisions:
 - a. The parking lot should be designed consistent with the standards outlined in Attachment 3.
 - b. The parking lot should be revised so that no more than 8 contiguous spaces are provided in each row of spaces, unless a modification to the parking lot landscaping is granted subject to compliance with the criteria set forth in KZC 105.103.e.

Waverly Park Master Plan Page 10

- c. The parking lot should be surfaced with asphalt or superior material. In order for the porous green paving to be used, it must be found consistent with the criteria set forth in KZC 105.103.h.
- d. The temporary use of the existing gravel parking lots is consistent with the modification criteria established in KZC 105.103.h and should be permitted until such time as funding sources for the development of the remaining portions of the public park become available, provided that appropriate periodic maintenance of the parking lots is completed (e.g. removal of potholes).
- f. Right-of-Way Improvements

Zoning Code Chapter 110 establishes right-of-way improvement requirements. The Public Works Department has outlined the required half-street improvements for the adjoining right-of-ways in Attachment 3.

- g. Geologically Hazardous Areas
 - i. The Kirkland Sensitive Area Maps show the slope on the west side of the site as a High Landslide Hazard Area and Seismic Hazard Area. Therefore, any development must comply with Chapter 85 of the Zoning Code. This Chapter requires a geotechnical evaluation. Depending on the results of the soils report, the City may require buffers, setbacks or other methods for protection of the hazard area.

The applicant has submitted a Geotechnical Engineering Study completed by HartCrowser (see Attachment 4, Enclosure 5) that presents the preliminary results on a geotechnical engineering study completed for the installation of the stairway proposed along the northern portion of the site down the west slope to Lake Avenue W.

- ii. <u>Conclusions</u>: Before any work occurs on or atop the west slope (e.g. grading, installation of proposed irrigation system, the proposed low stone wall, an accessible gravel trail along the west edge of the open field, and seating and viewpoint areas along the gravel trail, as well as landscaping on the slope face) a geotechnical report meeting the requirements of Chapter 85 of the Zoning Code should be completed and submitted for review.
- h. Natural Features Significant Vegetation
 - i. <u>Facts</u>: Zoning Code section 95.15 states that the applicant shall retain significant trees on the subject property to the maximum extent possible. The City may require minor alterations in the arrangement of buildings and other elements of the proposed development in order to achieve maximum retention of significant trees.
 - The site contains several significant trees, both on the forested bluff and in the green open field. Some existing trees in the open field may need to be removed in order to permit proposed grading and infrastructure improvements. A tree retention plan has not been prepared at this time.

- ii. <u>Conclusion</u>: Prior to issuance of any grading or building permits for construction of new structures, the Parks Department should submit a tree retention plan showing significant trees on the subject property and identifying trees that can be retained with development of the proposed park for review and approval by the Planning Department.
- 2. Shoreline Master Program (SMP)
 - a. <u>Facts</u>: A portion of the property is located within the shoreline jurisdiction (200 feet from the ordinary high water mark, which is typically demarked by bulkheads along the lake). That portion is located within the Suburban Residential and Urban Mixed 1 Shoreline Environments.

Section 24.05.110 establishes that public parks and land surface modifications within the Suburban Residential and Urban Mixed 1 Shoreline Environments require approval of a Substantial Development Permit (SDP).

b. <u>Conclusion</u>: Prior to any land surface modification or development of any areas for passive or active recreational space within the shoreline jurisdiction, the applicant shall obtain approval of a Substantial Development Permit.

E. COMPREHENSIVE PLAN

- 1. <u>Fact</u>: The subject property is located within the Market neighborhood. The City of Kirkland Comprehensive Land Use Map on page VI-3 designates the subject property for Park/Open Space (see Attachment 7).
- 2. <u>Conclusion</u>: The proposed development of a public park at the site is consistent with the land use designation of the property.
- 3. <u>Facts</u>: Within the Market Neighborhood, the Neighborhood Plan indicates that the public lands do not adequately meet the park and open space needs of Market area residents (see Attachment 8).
- 4. <u>Conclusion:</u> The Waverly Park site is largely being retained as an open field to help serve park and open space functions. In addition, the proposal includes development of some community park facilities, including tennis courts, a basketball hoop, and a natural play area in order to serve the needs of the Market area residents. These facilities have been located to the north of the site in order to locate in closer proximity to the residential neighborhood.
- 5. <u>Facts</u>: The Neighborhood Plan indicates that redevelopment of the subject site (identified as the Kirkland Junior High School site) must be compatible with nearby low-density residential uses (see Attachment 9).
- 6: <u>Conclusion:</u> As noted in the background discussion contained in Section F, the proposal includes substantial amounts of public open space. The two buildings proposed on-site would have a low-rise configuration to blend with nearby residential uses. The proposal is consistent with this section.
- 7. Fact: Market Neighborhood, Open Space/Parks: Within the Market Neighborhood, the Neighborhood Plan indicates that a pedestrian/bicycle pathway (perhaps with scenic view)

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stations overlooking Lake Washington) should be established along the west side of Waverly Way.

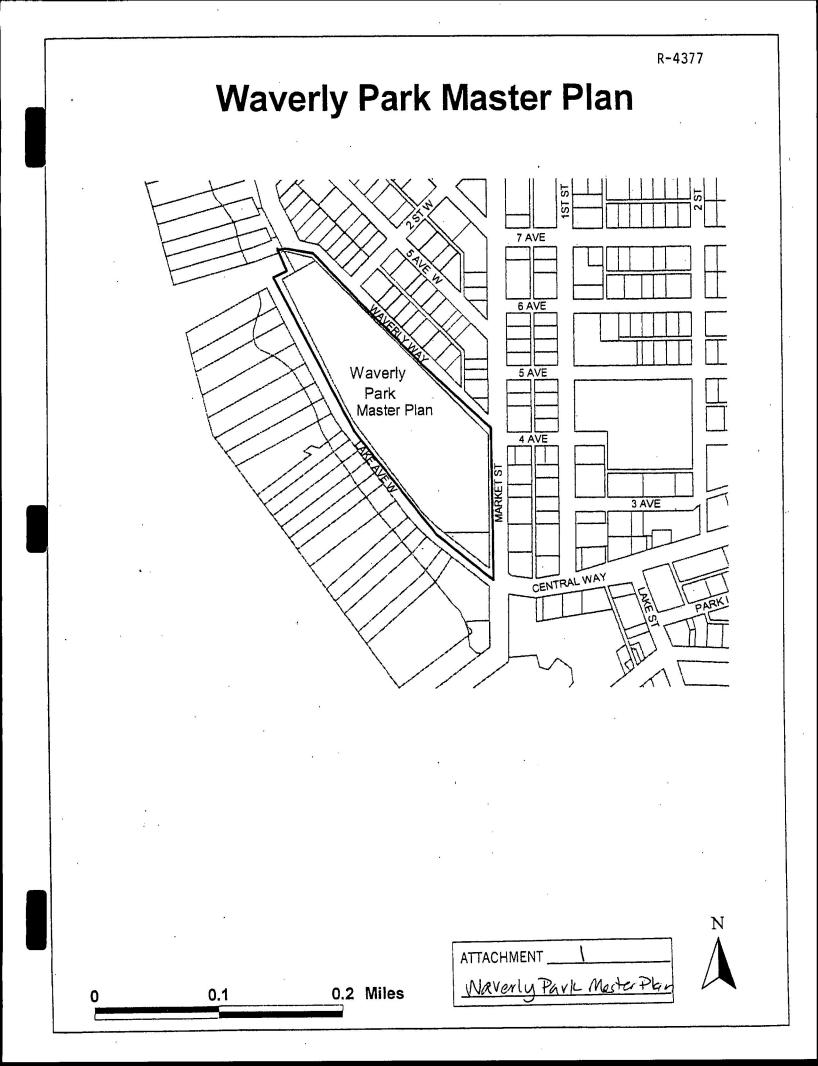
The proposal shows elimination of the existing bike lane along the west side of Waverly Way and replacement with a bike lane trail traveling through the park.

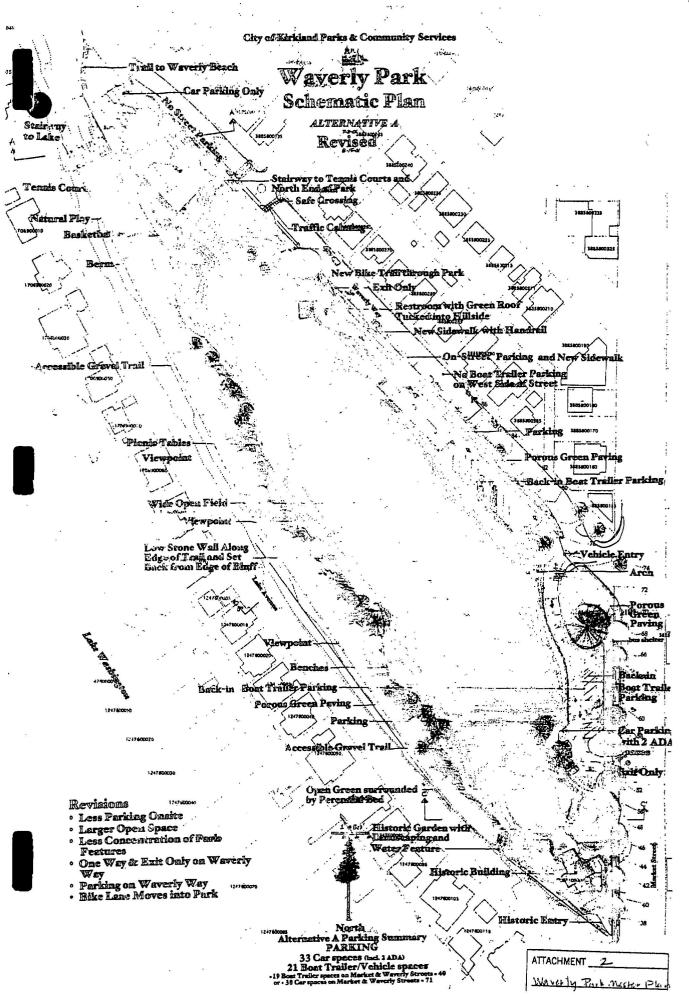
8. Conclusion: The pathway through the park will retain needed pedestrian and bicycle connections and meets the intent of the Comprehensive Plan.

111. **APPENDICES**

Attachments 1 through 9 are attached.

- 1. Vicinity Map
- 2. Waverly Park Schematic Plan
- 3. Development Standards
- 4. SEPA Determination and Attachments
- 5. Use Zone Chart Compliance
- 6. Site Section through Waverly Park
- Comprehensive Plan Land Use Map
 Comprehensive Plan, Section E on page XV.J-11
- 9. Comprehensive Plan, Section F on page XV.J-12





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CITY OF KIRKLAND

Planning and Community Development Department 123 Fifth Avenue, Kirkland, WA 98033 425.828.1257 www.cl.kirkland.wa.us

DEVELOPMENT STANDARDS LIST

File: Waverly Park Master Plan

Shoreline Master Program Standards

WAC173-14-120 <u>Substantial development, conditional use, or variance permits</u>. Construction pursuant to a substantial development, conditional use, or variance permit shall not begin and is not authorized until 30 days from the date of filing, or until all review proceedings initiated within 30 days from the date of filing have been terminated, except as provided in RCW90.58.140(5)(a)(b)(c).

Zoning Code Standards

85.25.1 <u>Geotechnical Report Recommendations</u>. The geotechnical recommendations contained in the report by Hart Crowser dated April 5, 2001 shall be implemented.

85.25.3 <u>Geotechnical Professional On-Site</u>. A qualified geotechnical professional shall be present on site during land surface modification and foundation installation activities.

100.25 Sign Permits. Separate sign permit(s) are required.

105.18 <u>Pedestrian Walkways</u>. All uses, except single family dwelling units and duplex structures, must provide pedestrian walkways designed to minimize walking distances from the building entrance to the right of way and adjacent transit facilities.

105.18 <u>Bicycle Parking</u>. All uses, except single family dwelling units and duplex structures, must provide covered bicycle parking within 50 feet of an entrance to the building.

105.18 <u>Entrance Walkways</u>. All uses, except single family dwellings and duplex structures, must provide pedestrian walkways between the principal entrances to all businesses, uses, and/or buildings on the subject property.

105.18 <u>Service Bay Locations</u>. All uses, except single family dwellings and multifamily structures, must locate service bays away from pedestrian areas.

105.18 <u>Overhead Weather Protection</u>. All uses, except single family dwellings, multifamily, and industrial uses, must provide overhead weather protection along any portion of the building, which is adjacent to a pedestrian walkway.

105.18.2 <u>Walkway Standards</u>. Pedestrian walkways must be at least 5' wide; must be distinguishable from traffic lanes by pavement texture or elevation; must have adequate lighting for security and safety. Lights must be non-glare and mounted no more than 20' above the ground. 105.18.2 <u>Weather Protection Standards</u>. Overhead weather protection may be composed of awnings, marquees, canopies or building overhangs; must cover at least 3' of the width of the adjacent walkway; and must be at least 8 feet above the ground immediately below it.

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ATTACHMENT <u>3</u> Waverby Purle Master Plan 105.65 <u>Compact Parking Stalls</u>. Up to 50% of the number of parking spaces may be designated for compact cars.

105.60.2 <u>Parking Area Driveways</u>. Driveways which are not driving aisles within a parking area shall be a minimum width of 20 feet.

105.60.3 <u>Wheelstops</u>. Parking areas must be constructed so that car wheels are kept at least 2' from pedestrian and landscape areas.

105.60.4 <u>Parking Lot Walkways</u>. All parking lots which contain more than 25 stalls must include pedestrian walkways through the parking lot to the main building entrance or a central location. 105.75 <u>Landscape Islands</u>. Landscape islands must be included in parking areas as provided in this Section.

105.77 <u>Parking Area Curbing</u>. All parking areas and driveways, for uses other than detached dwelling units must be surrounded by a 6" high vertical concrete curb.

105.80 <u>Parking Area Buffers</u>. Applicant shall buffer all parking areas and driveways from the right-of-way and from adjacent property with a 5-foot wide strip as provided in this section. 110.60.8 <u>Street Trees</u>. All trees planted in the right-of-way must be approved as to species by the City. All trees must be two inches in diameter at the time of planting as measured using the standards of the American Association of Nurserymen with a canopy that starts at least six feet above finished grade and does not obstruct any adjoining sidewalks or driving lanes.

115.25 <u>Work Hours</u>. It is a violation of this Code to engage in any development activity or to operate any heavy equipment before 7:00 am. or after 8:00 pm Monday through Friday, or before 9:00 am or after 6:00 pm Saturday. No development activity or use of heavy equipment may occur on Sundays or on the following holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, and Christmas Day. The applicant will be required to comply with these regulations and any violation of this section will result in enforcement action, unless written permission is obtained from the Planning official.

115.75.2 <u>Fill Material</u>. All materials used as fill must be non-dissolving and non-decomposing. Fill material must not contain organic or inorganic material that would be detrimental to the water quality, or existing habitat, or create any other significant adverse impacts to the environment. 115.95 <u>Noise Standards</u>. The City of Kirkland adopts by reference the Maximum Environmental Noise Levels established pursuant to the Noise Control Act of 1974, RCW 70.107. See Chapter 173-60 WAC. Any noise, which injures, endangers the comfort, repose, health or safety of persons, or in any way renders persons insecure in life, or in the use of property is a violation of this Code.

115.115.3.g <u>Rockeries and Retaining Walls</u>. Rockeries and retaining walls are limited to a maximum height of four feet in a required yard unless certain modification criteria in this section are met. The combined height of fences and retaining walls within five feet of each other in a required yard is limited to a maximum height of 6 feet, unless certain modification criteria in this section are met.

115.115.5.c <u>Driveway Setbacks</u>. Parking areas and driveways for uses other than detached dwelling units and attached and stacked dwelling units in residential zones, may be located within required setback yards, but, except for the portion of any driveway which connects with an adjacent street, not closer than 5 feet to any property line.

115.120 <u>Rooftop Appurtenance Screening</u>. Vents, mechanical penthouses, elevator equipment and similar appurtenances that extend above the roofline must be surrounded by a solid sight obscuring screen, unless certain conditions are met. 115.135 <u>Sight Distance at Intersection</u>. Areas around all intersections, including the entrance of driveways onto streets, must be kept clear of sight obstruction as described in this section.

Prior to issuance of a grading or building permit:

85.25.1 <u>Geotechnical Report Recommendations</u>. A written acknowledgment must be added to the face of the plans signed by the architect, engineer, and/or designer that he/she has reviewed the geotechnical recommendations and incorporated these recommendations into the plans.

Prior to occupancy:

85.25.3 <u>Geotechnical Professional On-Site</u>. The geotechnical engineer shall submit a final report certifying substantial compliance with the geotechnical recommendations and geotechnical related permit requirements.

CITY OF KIRKLAND 123 FIFTH AVENUE, KIRKLAND, WASHINGTON 98033-6189 (425) 828-1257

DEVELOPMENT STANDARDS CASE NO.: ZON02-00013 PCD FILE NO.: IIB-02-39

Date: 12/7/2002

PUBLIC WORKS CONDITIONS:

CERTIFICATE OF CONCURRENCY: This project has been reviewed and approved for water, sewer, and traffic concurrency. Any water and sewer mitigating conditions are listed within the conditions below. Any traffic mitigating conditions will be found in an attached memorandum from the Public Works Traffic Engineering Analyst to the Planning Department Project Planner. Upon issuance of this permit, this project shall have a valid Certificate of Concurrency and concurrency vesting until the permit expires. This condition shall constitute issuance of a Certificate of Concurrency pursuant to chapter 25.12 of the Kirkland Municipal Code.

All street improvements and underground utility improvements (storm, sewer, and water) must be designed by a Washington State Licensed Engineer; all drawings shall bear the engineers stamp.

All civil engineering plans which are submitted in conjunction with a building, grading, or right-of-way permit must conform to the Public Works Policy titled ENGINEERING PLAN REQUIREMENTS. This policy is contained in the Public Works Pre-Approved Plans and Policies manual.

All plans submitted in conjunction with a building, grading or right-of-way permit must have elevations which are based on the King County datum only (NAVD 88).

SANITARY SEWER CONDITIONS:

The existing sanitary sewer mains within Lake Ave. W., Market St., and Waverly Way are adequate to this project. The Historic Building has already been connected to the sainitary sewer. The proposed restrooms will need to be connected to the sewer main in Waverly Way using a grinder pump.

WATER SYSTEM CONDITIONS:

A water service has been provided to the Historical Building. A new water service, sized per the UPC, will need to be provided to the new restrooms.

Provide fire hydrants per the Fire Departments requirements.

STORM WATER CONDITIONS:

For all new impervious areas, (parking lots, roofs, tennis courts, etc.) provide temporaray and permanent storm water control and water quality treatment per the 1998 King County Surface Water Design Manual (or the manual adopted by the Public Works Department at the time of Building Permit application).

Provide an erosion control plan with Building or Land Surface Modification Permit application. The plan shall be in accordance with the 1998 King County Surface Water Design Manual (or the manual adopted by the City at the time of permit application).

delvstds, rev: 12/7/2002

Storm detention calculations for the entire site are required.

Provide a plan and profile design for the storm sewer system.

STREET IMPROVEMENT CONDITIONS:

The subject property abuts Market St. (arterial type street), Waverly Way (collector type street), and Lake Ave. West (neighborhood access type street). Zoning Code sections 110.10 and 110.25 require the applicant to make half-street improvements in rights-of-way abutting the subject property. Section 110.30-110.50 establishes that this street must be improved with the following:

Along Lake Ave. W.. this project is responsible for widening the street to 12 ft. from centerline to face of curb and installation of storm drainage, curb and gutter, a 4.5 ft. planter strip with street trees 30 ft. on-center, and a 5 ft. wide sidewalk along entire property frontage. Since the street only has homes on the south side of the street, it may be more beneficial for the City to construct the sidewalk on the south side in lieu of the north side. Also, some of the property owners on the south side of the street have Concomitant Agreements that obligates them to install half-street improvements. Thus, the entire street could possibly be improved with curb and gutter on both sides of the street and sidewalk on the south side only. The street improvements should be installed when the park undertakes it's largest infrastructure improvements, i.e., when the new parking lots are constructed.

Along Waverly Way, remove and replace any broken curb and gutter. A sidewalk and planterstrip with street trees would normally be required behind the curb however, due to the existing topography, it is recommended that a sidewalk, generally parallel to Waverly Way, be constructed inside the park. Street tree planting will be at the discretion of the Parks Department and their Landscape Architect.

The existing street improvements along Market Street are adequate however, any cracked curb and gutter or sidewalk should be replaced.

A barrier free parking stall for the historical building will be allowed temporarily in Market Street until the on-site parking is constructed and then it must be removed from Market Street.

"NO PARKING" signs related to boat trailer parking shall be installed per the traffic analysis.

It shall be the responsibility of the applicant to relocate any above-ground or below-ground utilities which conflict with the project associated street or utility improvements.

Underground all new and "existing" on-site utility lines and overhead transmission lines.

Zoning Code Section 110.60.9 establishes the requirement that existing utility and transmission (power, telephone, etc.) lines on-site and in rights-of-way adjacent to the site must be underground. The Public Works Director may determine if undergrounding transmission lines in the adjacent right-of-way is infeasible. If undergrounding is not feasible, the applicant is required to sign a concomitant agreement to underground the overhead lines at a future date. In this case, the Public Works Director has determined that undergrounding of existing overhead utility lines on Lake Ave. W. and Waverly Way is infeasible at this time and the undergrounding of off-site/frontage transmission lines should be deferred with a concomitant agreement. The applicant shall submit a signed and notarized concomitant agreement, as set forth in Attachment ______, to underground all existing utility lines bordering the subject property to be approved the the Department of Public Works and recorded with the King County Records and Elections Division.

This project is subject to the traffic impact fees per Chapter 27.04 of the Kirkland Municipal Code. The impact fees shall be paid prior to issuance of the Building Permit(s) for the proposed project.

All public improvements associated with this project including street and utility improvements, must meet the City of Kirkland Public Works Pre-Approved Plans and Policies Manual. A Public Works Pre-Approved Plans and Policies manual can be purchased from the Public Works Department, or it may be retrieved from the Public Works Department's page at the City of Kirkland's web site at www.ci.kirkland.wa.us.

R-4377



CITY OF KIRKLAND 123 FIFTH AVENUE, KIRKLAND, WASHINGTON 98033-6189 (425) 828 - 1257

DETERMINATION OF NONSIGNIFICANCE (DNS).

CASE #: SEP02-00021

DATE ISSUED: 11/21/2002

DESCRIPTION OF PROPOSAL

The City of Kirkland Parks and Community Services Department has submitted a proposal for a master plan to guide future park development at Waverly Park.

PROPONENT:

LOCATION OF PROPOSAL

WEST SIDE OF MARKET ST. BETWEEN LAKE AVE. W AND WAVERLY WY.

LEAD AGENCY IS THE CITY OF KIRKLAND

The lead agency for this proposal has determined that it does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21.030 (2) (c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public upon request.

This DNS is issued under 197-11-340 (2); the lead agency will not act on this proposal for 14 days from the date above. Comments must be submitted by 5:00 p.m. 12/5/2002

Responsible official:

19/02

Eric Shields, Director Date Department of Planning and Community Development 425-828-1257

Address:

City of Kirkland 123 Fifth Avenue Kirkland, WA 98033-6189

You may appeal this determination to NANCY COX at Kirkland City Hall, 123 Fifth Avenue, Kirkland, WA 98033 no later than 5:00 p.m., December 05, 2002 by WRITTEN NOTICE OF APPEAL.

You should be prepared to make specific factual objections. Contact Nancy Cox to read or ask about the procedures for SEPA appeals.

Please reference case # SEP02-00021.

Publish in the Eastside Journal (date): Monday, November 25, 2002

Distribute this form with a copy of the checklist to the following ag

ATTACHMENT 4	
Neverly Part Matter Pla	h

	Environmental Review Section, Department of Ecology, P.O. Box 47703, Olympia, WA 98504-7703
<u></u>	Eric Pentico (for streams and wetlands) Department of Fish and Wildlife (with drawings) 16018 Mill Creek Boulevard, Mill Creek, WA 98012
	Rich Johnson (for shorelines and Lake Wa.) Department of Fish and Wildlife (with drawings) PO Box 1100, LaConner, WA 98257
	Seattle District, U.S. Army Corps of Engineers, P.O. Box C-3755, Seattle, WA 98124
	Muckleshoot Tribal Council, Environmental Division, Fisheries Department, 39015 172nd SE, Auburn, WA 98002
	Northshore Utility District, P.O. Box 489, Kenmore, WA 98028
	Shirley Marroquin Environmental Planning Supervisor King County Wastewater Treatment Division 201 South Jackson Street, MS KSC-NR-0505 Seattle, WA 98104-3855 - and -
	Gary Kriedt King County Metro Transit Environmental Planning 201 South Jackson Street, MS KSC-TR-0431 Seattle, WA 98104-3856
	Support Services Center Lake Washington School District No. 414 Attn: Bob Collard P.O. Box 97039, Redmond, WA 98073
	John Sutherland, Developer Services Washington State Department of Transportation 15700 Dayton Ave. N., MS 240 P.O. Box 330310, Seattle, WA 98133-9710
EastLa	ake washington Adubon Society PO Box 3632 Bellevere, w 9800
	9800
Applicant / /	Agent
Applicant / /	Agent

Traffic Impacts

1. Prior to Certificate of Occupancy for Heritage Hall, the Parks Department shall reconfigure the existing east driveway off Waverly Way so that it is located at least 100 feet west of the intersection of Waverly Way/Market Street. When the permanent driveway and parking area improvements are constructed, the east driveway off Waverly Way shall be located at least 100 feet west of the intersection of Waverly Way/Market Street.

2. The Parks Department shall monitor the operation of Waverly Way/Market Street to ensure that the queue does not significantly block the project east driveway and impede westbound traffic flow.

3. Prior to issuance of a permit to complete the new Market Street driveway and parking area improvements, the proposal shall be revised to include removal of four on-street parking spaces north of the proposed project driveway off Market Street.

4. The Parks Department shall evaluate sight distance at the driveway off Market Street after it has been constructed to determine if additional on-street parking spaces between the driveway and Waverly Way will need to be removed to ensure safe sight distance.

Slopes and Soils Impacts

1. The recommendations of the geotechnical evaluation dated April 5, 2001 by Hartcrowser shall be followed.

Existing Vegetation Impacts

1. Prior to issuance of any land surface modification permits:

a. Install a 6- foot high construction-phase chain link fence around the dripline of Bald Eagle perch trees.

b. Install signs on all fencing stating that the tree protection area shall not be disturbed with grading, fill material, storage of equipment or garbage.

d. The Planning Department shall inspect and approve the tree protection fencing.

cc: Case # ZON02-00013

Distributed to agencies along with a copy of the checklist. (see attached).

SEPA_C_A, rev: 11/19/2002

-21-02



CITY OF KIRKLAND

Planning and Community Development Department 123 Fifth Avenue, Kirkland, WA 98033 425.828.1257 www.ci.kirkland.wa.us

MEMORANDUM

To: Eric R. Shields, AICP, SEPA Responsible Official

From: Stacy Clauson, Planner \mathcal{G}

Date: November 19, 2002

File: SEP02-00021

Subject: ENVIRONMENTAL DETERMINATION FOR WAVERLY PARK MASTER PLAN

The City of Kirkland Department of Parks and Community Services has submitted a proposal for a master plan to guide future park development at the Waverly Park site located along the west side of Market Street between Lake Avenue West and Waverly Way (see Enclosure 1).

The site contains Heritage Hall, a 2,260 square foot building. The site is also developed with tennis courts, several gravel parking areas, and a paved parking area at the northern portion of the property. The site currently contains a gravel pathway that runs along the west edge of the open field.

The Parks and Community Services Department is proposing the following modifications to the existing park facility: a) grading and irrigating the wide open field to be used for informal recreational use; b) installing native landscaping along the bluff and removing blackberries; c) installing a low stone wall to limit access to the bluff; d) installing an accessible gravel trail along the west edge of the open field; e) installing a new bike trail through the park on the east edge of the open field; f) providing seating and viewpoint areas along the gravel trail; g) planting a native garden and installing a water feature north of the existing historic building at the southern corner of the property and completing other plantings throughout the park; h) constructing a restroom; i) creating a community park at the northern portion of the property by relocating the tennis courts and installing a basketball hoop and a natural play area; j) creating parking areas along the Market Street and Waverly Way frontages containing 33 vehicle parking spaces and 21 boat trailer/vehicle spaces; k) constructing a stairway along the northern portion of the site down the west slope to Lake Avenue W; l) relocating the arch; m) and opening Heritage Hall to use with the bottom floor housing the Kirkland Heritage Society Resource Center and the upper floor used as a community meeting hall. (see Enclosure 2)

The park is proposed to be developed in phases as funding sources for development and maintenance of the park become available. The first phase would involve opening the Heritage Hall to use. The remainder of the site would be developed sequentially as funding becomes available.

I have had an opportunity to visit the site and review the following documents:

- Environmental checklist (see Enclosure 3);
- July 12, 2002 e-mail from Julie Stofel at the Washington State Department of Fish and Wildlife (see Enclosure 4).
- Geotechnical Engineering Study completed by HartCrowser (see Enclosure 5);
- Traffic Analysis contained in the June 28, 2002 memo from Michael Cogle, Parks Planning Manager (see Enclosure 6)
- Supplemental Traffic Analysis contained in the November 8, 2002 letter from Iris Cabrera (see Enclosure 7); and

• Review letter from Thang Nguyen dated November 7, 2002 (see Enclosure 8).

The major environmental issues associated with this project are protection of Bald Eagles, geological hazards, and traffic, sight distance and parking.

Bald Eagles

The Washington State Department of Fish and Wildlife has identified the presence of perch trees for Bald Eagles on the park site. In order to protect habitat for Bald Eagles, the perch trees along the forested bluff should be protected during construction activities, as recommended by the Department of Fish and Wildlife (see Enclosure 4).

Geological Hazards

The Kirkland Sensitive Area Maps show the slope on the west side of the site as a High Landslide Hazard Area and Seismic Hazard Area. The proposal includes plans to construct a stairway along the northern portion of the site down the west slope to Lake Avenue W. In order to assess the feasibility of the stairway, the Parks Department has submitted a conceptual-level Geotechnical Study completed by Hartcrowser (see Enclosure 5). This conceptual level study provided a preliminary assessment of the slope materials, foundation support for the stairway, recommendations for slope clearing and vegetation removal and recommendations for additional geotechnical services.

Traffic, Sight Distance and Parking

The submitted traffic analysis (see Enclosures 6 and 7) addresses additional traffic resulting from the park enhancements and expanded activities and the impacts the traffic poses to intersections and driveways. It also includes a safety analysis and sight distance evaluation. The study also addresses the parking demand and capacity at Waverly Park and includes an impact assessment on the loss of on-site parking spaces which had historically served non-park users to the on-street parking located in the vicinity of the site.

The traffic analysis was reviewed by the Public Works Department (see Enclosure 8). The Public Works Department concluded the following:

- The proposed project passed traffic concurrency.
- Specific off-site traffic mitigation is not required, but payment of the City's standard road impact fee is required.
- Sight distance at the project driveway off Waverly Way does not meet the City's minimum requirements and the driveway should be relocated at least 100 feet away from the intersection of Waverly Way/Market Street.
- The eastbound queue at Waverly Park/Market Street should be monitored to determine if separate right
 and left-turn lanes would be necessary in order to ensure that the east driveway off Waverly Way is not
 blocked from vehicles queuing at the Waverly Way/Market intersection.
- On-street parking along Market Street should be removed north of the proposed project driveway.
- Sight distance at the driveway off Market Street should be evaluated to determine if additional parking spaces will need to be removed.
- There is sufficient parking on-site to meet the demand caused by the park users.
- There is no significant impact to the on-street parking supply caused by the loss of existing parking spaces.

It will be necessary to further analyze certain aspects of the proposal to determine if the project complies with all the applicable City codes and policies. That analysis is most appropriately addressed within the written report on the proposed master plan from the Parks Board to the City Council. In contrast, State law specifies that this environmental review under the State Environmental Policy Act (SEPA) is to focus only on potential significant Memorandum to Eric Shields November 19, 2002 Page 3

impacts to the environment that could not be adequately mitigated through the Kirkland regulations and Comprehensive Plan.¹

Based on my review of all available information and adopted policies of the City, I am recommending that the proposal be changed or clarified to include the following mitigating measures so that a Determination of Nonsignificance (DNS) can be issued.

Traffic Impacts

- 1. Prior to Certificate of Occupancy for Heritage Hall, the Parks Department shall reconfigure the existing east driveway off Waverly Way so that it is located at least 100 feet west of the intersection of Waverly
- Way/Market Street. When the permanent driveway and parking area improvements are constructed, the east driveway off Waverly Way shall be located at least 100 feet west of the intersection of Waverly Way/Market Street.
- 2. The Parks Department shall monitor the operation of Waverly Way/Market Street to ensure that the queue does not significantly block the project east driveway and impede westbound traffic flow.
- 3. Prior to issuance of a permit to complete the new Market Street driveway and parking area improvements, the proposal shall be revised to include removal of four on-street parking spaces north of the proposed project driveway off Market Street.
- 4. The Parks Department shall evaluate sight distance at the driveway off Market Street after it has been constructed to determine if additional on-street parking spaces between the driveway and Waverly Way will need to be removed to ensure safe sight distance.

Slopes and Soils Impacts

1. The recommendations of the geotechnical evaluation dated April 5, 2001 by Hartcrowser shall be followed.

Existing Vegetation Impacts

- 1. Prior to issuance of any land surface modification permits:
 - a. Install a 6- foot high construction-phase chain link fence around the dripline of Bald Eagle perch trees.
 - b. Install signs on all fencing stating that the tree protection area shall not be disturbed with grading, fill material, storage of equipment or garbage.
 - d. The Planning Department shall inspect and approve the tree protection fencing.

This recommendation is based on adopted policies of the City as found in the City's Comprehensive Plan. Specifically the following elements of the 1995 Comprehensive Plan contain the following policies:

Transportation

Policy T-4.1: Promote efficient use of existing right-of-ways through measures such as:

- Intersection improvements;
- Time-of-day parking restrictions along congested arterials;

¹ESHB 1724, adopted April 23, 1995

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Memorandum to Eric Shields November 19, 2002 Page 4

- Signal timing optimization;
- Added center left-turn lanes; and
- Limiting left turns along congested arterials.

Policy T-6.6: Identify, evaluate and minimize or mitigate the negative environmental impacts of transportation facilities and operational decisions whenever feasible.

Goal CF-4: Ensure that water, sewer and transportation facilities necessary to support new development are available and adequate concurrent with the development, based on the City's adopted level of service standards.

Policy CF-4.1: Evaluate new development to ensure that it will not cause the level of service of water, sewer or transportation facilities to decline below the adopted standards.

Natural Environment

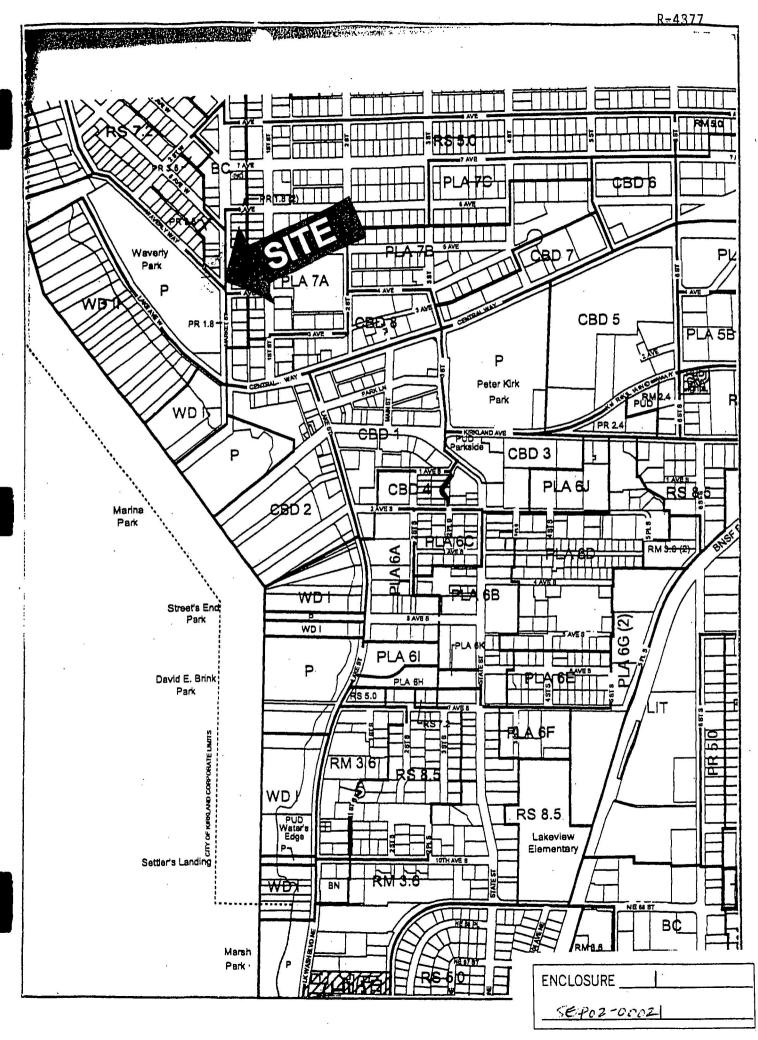
Policy NE-1.2: Manage activities affecting air, vegetation, water, and the land to maintain or improve environmental quality, to preserve fish and wildlife habitat, to prevent degradation or loss of natural features and functions and to minimize risks to life and property.

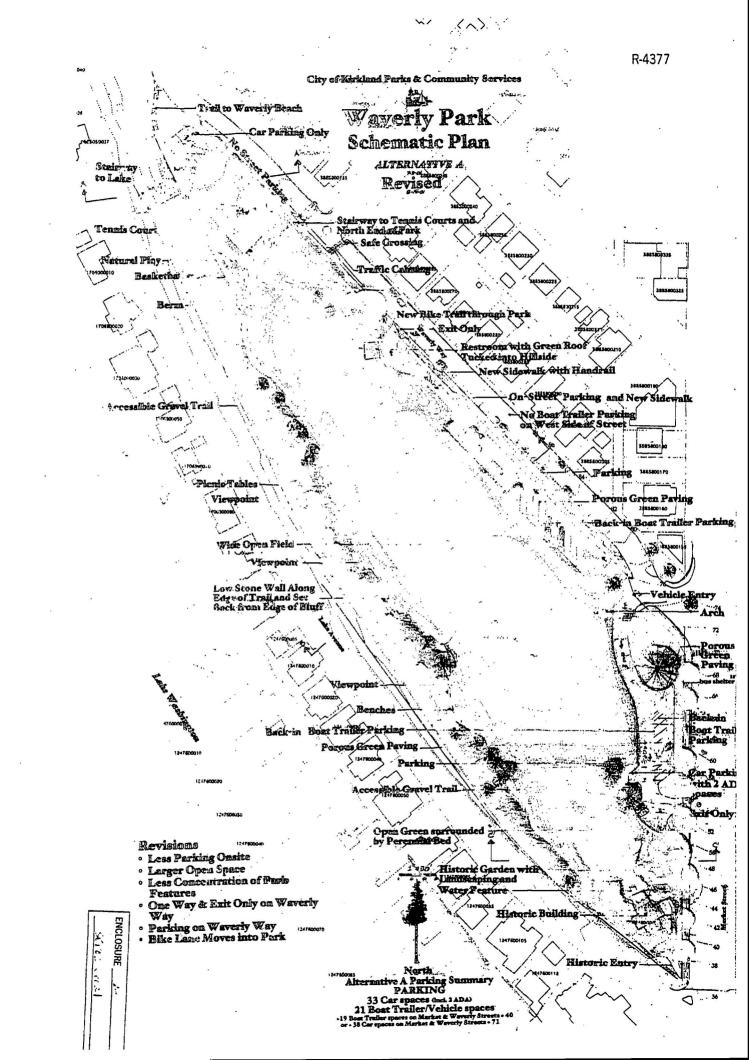
These policies directly support the above mentioned mitigating measures and require these measures in order to fully mitigate the impacts created by the proposal.

SEPA ENCLOSURES

- 1, Vicinity Map
- 2. Site Plan
- 3. Environmental checklist
- 4. July 12, 2002 e-mail from Julie Stofel at the Washington State Department of Fish and Wildlife
- 5. Geotechnical Engineering Study completed by HartCrowser
- 6. Traffic Analysis contained in the June 28, 2002 memo from Michael Cogle, Parks Planning Manager
- 7. Supplemental Traffic Analysis contained in the November 8, 2002 letter from Iris Cabrera
- 8. Review letter from Thang Nguyen dated November 7, 2002

Review	by Responsible Official:
Comm	ents:
	Eric R. Shields, Planning Director Date
cc:	City of Kirkland Parks and Community Services





SCP 12 - 0002

З.	Tax parcel number: 3885 80 - 006 / 3885 80 - 0005 / 3885 80 -0020
4.	Address and phone number of applicant and contact person: ATAL: MicHAEL Cogie 123 Firm Ave Kruum
5.	Date checklist prepared: May 15, 2002
9	Agency requesting checklist: City of Kipuland
7.	ראסאסאם (including phasing, if applicable): 2002 אים גבאסאס
ω.	Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal?
o.	List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal. * Trailhe Amelysis dated (Jze) * A GEOTECHNICAL STUDY PREPARED BY HART CROWSER. * Supplemental Hould (Jevez)
10.	Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain. NO
11	List any government approvals or permits that will be needed for your proposal, if known. Building Permit N/A
12.	Give brief, complete description of your proposal, including the proposed uses, the size and scope of the project and site including dimensions and use of all proposed improvements. 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.
13.	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.
	DOMATOMA KIRLLAND ; INTERSECTION OF MARKET ST. AND MAYSALY WAY

EVALUATION FOR AGENCY USE ONLY REVIEWED BY: Staug éla usan, Panner	Kirkland Sensitive Aver Mapr adjecte west side of site is a thigh handslide Hezard Areand Jeismic	14:1Vinsome places Per a suess ment completed by itertchouver	Hart-Crewer observed two landslide areas internand seth of		Patenhal be eresion A court from exposed sols.	R-4377
<u>o</u> <u>z</u>	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)? 45% 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. ()Aderlying Yashon Trill comprised of deve gravely soil overlain by loose to redium devse sity/gravely soil (ollowium) 	d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe. Nestern slope designated as a "High Londslide Hazard Area" by City Planing Depetment.	e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill. Excertation of apprax المحمد ديايند باصلاء مثل موارك المحمد مديموسميا مثل المحمد المحمد ديايند باصلاء موارك	f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe. <u>Erosion is not articipated generally, exceptional measures will be</u> <u>Necessory in construction of proposed staticum to matrice</u>	

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- 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. Development of stainday and walking parks, and landscaping, within 200 feet of shorther.
- 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.
- Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. None.
- Does the proposal lie within a 100-year floodplain? If so, note location on the site plan. No

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- Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge. N 6
- 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. An

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		For all new impervised areas, Must provide temporary and permenent shum weller quertity tradment per lang	-		R-4377	
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.	 c. Water Runoff (including storm water): 1) Describe the source of runoff (include storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow into other waters? If so, describe. br King areas, roots, and pared partneys. Texis Corts 	 Could waste materials enter ground or surface waters? If so, generally describe. Nn 	 d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any: Initial provide temporary and permanent stam inder control per 1998 King Confry Confry Surface Will pravide stars water be tright-lived to stars water tradinent system and stars water tradinent of the house to be tright-lived to stars drainings system 4. PLANTS 	r circle types of vegetation found or deciduous tree: alder, maple, a evergreen tree: fir, cedar, pine, shrubs grass pasture crop or grain	C:DATAIPCDIENVCKLSTN11-15-99 - 6 -

		=== 01	nothernation				Bald Earlies (perch supers) Sulmon Sociecui a	Late wishington. Partu Normweet flyway	Protection of cereta Protection of ceretarian actimical (Ser recommendation from with state Derty of Mom with state Derty of
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? Development of approximately 300,000 pt aun area Protect (maintain existing meture trees, execpt for a few previously-topped	Reduce heatburies (hyrasives with low-gravity rative plats which preserve slope stability use the lift of the advise plating of endingered species known to be on or near the site.	d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any: وو (ه) مامورد	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:	<u>birds:</u> hawk, heron eagle songbirds, other 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.	J c. Is the site part of a migration route? If so, explain.	d. Proposed measures to preserve or enhance wildlife, if any: Develop formal grevers : introdice rative plant species: maintain graved site chandrat Drudso mangement plan tist eggle nesting area during construction activity.
·				5.					

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			Compliance with Unitiven Greggiode							
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.	b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.	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:	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.	1) Describe special emergency services that might be required. $N \mathbf{A}$	2) Proposed measures to reduce or control environmental health hazards, if any: $\frac{ \mathbf{N} }{\mathbf{N}}$	b. Noise	 What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)? 	CADATAPEDIENVCKLSTV11-15-99 - 8 -
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Templiany noise i merch of unismethon equipment.	Compliance with local	ron the hour bourse						Parle Public Je (P)	suburban pesidenhal 1 Urban mixed 1	Western slopealle classifical as science	R-4377
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.	3) Proposed measures to reduce or control noise impacts, if any: אסאב	LAND AND SHORELINE USE	a. What is the current use of the site and adjacent properties?	Adjacent to residential	b. Has the site been used for agriculture? If so, describe. N_0	c. Describe any structures on the site. المُنْعُمُ المُنْعُمُ المُنْعُمُ اللهُ المُعَامَة عَلَيْهُ اللهُ عَلَيْهُ اللهُ عَلَيْهُ اللهُ عَلَيْهُ اللهُ ع	d. Will any structures be demolished? If so, what?	e. What is the current zoning classification of the site?	f. If applicable, what is the current shoreline master program designation of the site? \dot{N}	g. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify Wester stope classified as a ladslide hozord area	
		8.									

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 h. Approximately how many people would reside or work in the completed project. MA Approximately how many people would the completed project displace? i. Approximately how many people would the completed project displace? i. Proposed measures to avoid or reduce displacement impacts, if any: MA Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans; if any: MA Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing. b. Approximately how many units, if any. would be eliminated? Indicate whether high, middle, or low-income housing. c. Proposed measures to reduce or control housing impacts, if any: AESTHETICS a. What is the fallest height of any proposed structure(s), not including anternas; what is the principal extend to any proposed structure(s), not including anternas; what is the principal extend to any proposed structure(s), not including anternas; when each other high to any proposed structure(s), not including anternas; when each other high to any proposed structure(s), not including anternas; when each other high to any proposed structure(s), not including anternas; when each other high to any proposed structure(s), not including anternas; when each other high to any proposed structure(s), not including anternas; when each other high to any proposed structure(s), not including anternas; when each other high to any proposed structure(s), not including anternas; when each other high to any proposed structure(s), not including anternas; when each other high to any proposed structure(s), not including anternas; when each other ea	ied Archive office dors up to pave a full - time employee			Ind <u>Compliance with</u> lecel zening standards	her				as;	
No. In the second	Approximately how many people would reside or work in the comple project. N/A	Approximately how many people would the completed project displace? \mathbf{N}/\mathbf{A}	Proposed measures to avoid or reduce displacement impacts, if any: $\frac{N}{A}$	Proposed measures to ensure the proposal is compatible with existing a projected land uses and plans, if any:	Approximately how many units would be provided, if any? Indicate whe high, middle, or low-income housing.	Approximately how many units, if any, would be eliminated? Indicate whe high, middle, or low-income housing. \mathbf{N}/\mathbf{A}	Proposed measures to reduce or control housing impacts, if any: \mathbf{v}/\mathbf{A}	STHETICS	What is the tallest height of any proposed structure(s), not including anten what is the principal exterior building material(s) proposed? <u>Retroom will be 12-15 feet high</u>	

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- b. What views in the immediate vicinity would be altered or obstructed?
- Proposed measures to reduce or control aesthetic impacts, if any: NA

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- 11. LIGHT AND GLARE
- What type of light or glare will the proposal produce? What time of day would it mainly occur? Security lighting for restrain and parking arres only a.
- Could light or glare from the finished project be a safety hazard or interfere with 2 No views? ġ.
- c. What existing off-site sources of light or glare may affect your proposal?
- d. Proposed measures to reduce or control light and glare impacts, if any: $\frac{N}{A}$.
- 12. RECREATION
- What designated and informal recreational opportunities are in the immediate Marin lak, wavely Band lak, Lake Washington vicinity? a.

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- Would the proposed project displace any existing recreational uses? If so, QO describe. þ.
- Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any: Project will provide many recreational opportunities for the public. ن

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SIL	HISTORICAL AND CULTURAL PRESERVATION	
а.	Are there any places or objects listed in, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe. Parmer Christian Science Church Buildin, is an the site.	
p.	Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.	
ර	Proposed measures to reduce or control impacts, if any:	
TR/	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. Noverly Way and Market's Streets , Lak Are west	Access me wavedly way "
ė.	ls site currently served by public transit? If not, what is the approximate distance to the nearest transit stop? Yes. Metro Court 255	
Ċ	How many parking spaces would the completed project have? How many would the project eliminate? 33 cer Seces (including 2 Abu) 21 boat failer u/veticle spaces	Project would elmate approximately and 2 boat Kuller spaces
ġ	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). Whether public or private). Lake Ave W - widen to 12 feet, install storn drainage, cub, gutter, sideualk whether Star in a gutter of the strenge of t	R-4377

14.

13.

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- 12 -

 Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe. Wow many vehicular trips per day would be generated by the completed project? If know, indicate when peak volumes would be generated by the completed project? If know, indicate when peak volumes would be generated by the completed project? If know, indicate when peak volumes would be generated by the completed project? If know, indicate when peak volumes would be generated by the completed project? If know, indicate when peak volumes would be generated by the completed project? If know, indicate when peak volumes would be generated by the completed project? If know, indicate when peak volumes are stored to be describe. PUBLIC SERVICES a. Would the project result in an increased need for public services (for example fire project result in an increased need for public services (for example describe. b. Proposed measures to reduce or control direct impacts on public services, if any. AlA b. Proposed measures to reduce or control direct impacts on public services, if any. AlA c. Circle utilities currently available at the site: (electricity tratural gas water entities service and the general construction activities on the site or in the immediate vicinity which might be needed. 	or air	leted 254 acrily hips	Compliance with mitsation measures	may on property man from	mple: erally	es, il		water	g the Properced restructure diate will read by be contracted to the form of the the contracted to the the server main in	Warrent july.
	1 1	1 0.8	Proposed measures to reduce or control transportation impacts, if any: ni/A	ILIC SERVICES	Would the project result in an increased need for public services (for exa fire protection, police protection, health care, schools, other)? If so, gen describe. $\sqrt{10}$	Proposed measures to reduce or control direct impacts on public servic any. N/A	LTTES	ural gag	Describe the utilities that are proposed for the project, the utility providin service, and the general construction activities on the site or in the imme vicinity which might be needed.	

15.

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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.

May 15, 20021 1 h Date Submitted: Signature:

- 14 -

From: Michael Cogle Sent: Wednesday, July 17, 2002 10:32 AM To: Stacy Tucker Subject: FW: Waverly Park Site Eagle Management Plan

Stacy, here are the comments from the representative of the Washington State Department of Fish and Wildlife representative regarding the bald eagle.

Please let me know if you require any further information.

-----Original Message----From: Julie Stofel [mailto:STOFEJLS@dfw.wa.gov] Sent: Friday, July 12, 2002 2:31 PM To: Teresa Sollitto Subject: Re: FW: Eagle Management Plan

Teresa:

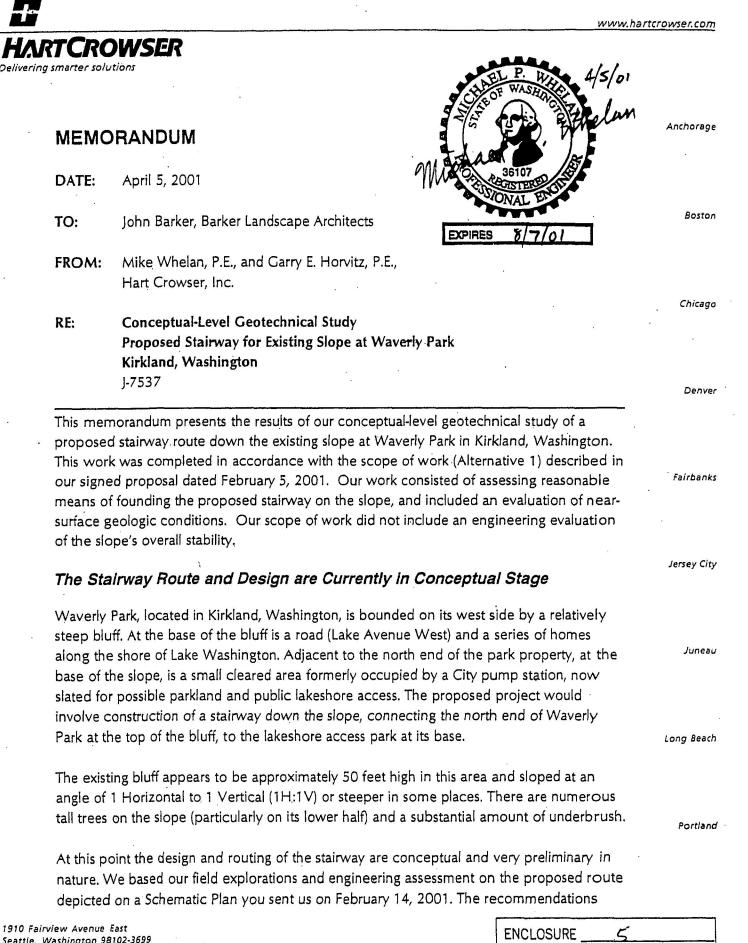
As I understand it, the tree in question is a perch tree, not a nest tree. Ι recently spoke with Steve Negri, who previously held my position and is familiar with the site and the project, and who apparently spoke with John Barker on this subject. Steve also confirmed that he did not know of a nest tree in the area, but that the concern is over the perch tree. Steve confirmed that the nearest nests that he knows about are the ones I mentioned to you in the Hunts Point/Yarrow Point area to the south, and the Denny Park area to the north. As I understand your project, the perch tree will be preserved, but a walking path and possibly a bench/wall will be built near the perch tree. WDFW has an interest in protecting known bald eagle perch trees, under WAC 232-12-292. As long as the perch tree is physically protected during construction, there is no need to curtail construction activties at any time of year. WDFW has curtailed construction activities within 400 ft of a nest in the past, but as of Dec 2001 WDFW no longer requires that restriction. Moreover, the closest nests are > 2.5 miles away. Thank you for your concern.

Julie Stofel Washington State Department of Fish and Wildlife 16018 Mill Creek Blvd Mill Creek, Wa 98012 ph. (425) 379-2301 fax (425) 379-2323

ENCLOSURE	4	
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SE162 - OR: 2



1910 Fairview Avenue East Seattle, Washington 98102-3699 Fax 206.328.5581 Tel 206.324.9530 Barker Landscape Architects April 5, 2001 J-7537 Page 2

presented in this memorandum are applicable to that schematic layout; if the layout is changed substantially, it may be necessary to revise the recommendations presented herein.

Slope Appears to Consist of Glacial Till Overlain by Colluvium Layer

The area of this site as shown on the Geologic Map of the Kirkland Quadrangle (USGS, 1983), indicates that Waverly Park and its adjacent slope are underlain by the glacial Vashon Till. This soil type is typically a mixture of sand, silt, and gravel that was laid down, and overridden by, the continental glaciers that covered the area thousands of years ago. The weight of the glacial ice compressed the material to a very dense consistency and, as a result, the Vashon Till is recognized today as one of the densest soil types in the region and able to hold relatively steep slope angles for substantial lengths of time. It typically has a concrete-like appearance when freshly exposed and is commonly referred to as "hardpan" by those in the earthwork industry. The geologic map of Kirkland indicates that this material is present throughout the slope, from the crest to the base.

On February 15, 2001, a field geologist from Hart Crowser visited the site and performed a geologic reconnaissance of the site and slope in the specific area of the proposed stairway. Our geologist observed soil types exposed at the surface, looked for evidence of seepage or past slope instability, and performed hand-auger explorations at two locations on the slope to supplement the surficial observations.

In general, our geologist's observations support the premise that the slope is underlain by Vashon Till. Furthermore, borings conducted by Golder Associates in 1999 for the Lake Avenue Sewer Line, encountered Glacial Till continuing down to a depth of about 15 feet below the Lake Avenue ground surface. Below this were deposits described by Golder as "Ancient Landslide Debris."

Based on our geologist's reconnaissance of this slope, the Till appears to be overlain by a layer of relatively loose and recently deposited surface sediment (termed Colluvium). In the two hand-auger holes that were advanced on the slope by our geologist, the Colluvium was observed to be a loose to medium dense, moist, brown and gray, silty, gravelly Sand that was 0.5 to 3 feet thick. The underlying Vashon Till was observed to be dense to very dense, moist, gray, silty, gravelly Sand. Based on the topography, it appears likely that the colluvium is somewhat thicker near the crest of the slope and near its base; possibly on the order of 5 feet thick in these areas.

Our geologist looked for evidence of past landslide activity on the slope. He observed two areas in the vicinity of the proposed staircase that appeared to have undergone landsliding in the past. These areas were located to the north and south of the proposed stairway route,

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and appeared to be relatively shallow slides, no more than approximately 3 feet deep. This indicates that the slides occurred in the surficial Colluvium layer, and did not necessarily extend into the underlying Till soil. Both slides were located in the lower half of the slope. The trees on the slope were fairly vertical, although some of the trees in the area of the observed former slides were tilted at various angles.

Our geologist looked for, but did not find, any specific areas of water seepage from the slope.

Support the Stairway on Till, at Grade or on Pile Foundations

The Vashon Till is generally a good soil type for foundation support. It has a high load-bearing capacity and is well-suited to shallow footing foundations or for supporting earthen embankments. The overlying colluvium, however, is substantially looser, and more susceptible to sliding and erosion. Colluvium tends to move downslope either in a slow process of "creep," or in sudden landsliding events, particularly under extreme weather conditions. Therefore, we recommend that the stairway not be supported directly on Colluvium, but rather directly on Till.

This can be accomplished in a few different ways.

Overexcavation of Colluvium. The Colluvium could be overexcavated from the stairway footprint so that the underlying Till is directly exposed. As described previously, we observed the Colluvium to be 0.5 to 3 feet deep in our two holes advanced on the slope, but we expect that it may be up to 5 feet thick (and possibly more) near the base and the crest of the slope.

Another option that would be possible on relatively shallow slopes would be to overexcavate the Colluvium and replace it with compacted select fill so that existing grades are maintained. While compacted fill would be better than Colluvium for supporting the staircase, it would still have the potential of slow creep down the slope, or, under worst-case conditions, landsliding, depending on the steepness of the slope on which the fill is placed. A slope of 2H:1V (or shallower) is generally regarded as stable for permanent slopes made of compacted fill.

Piles Founded in Till. Alternatively, the stairway structure could be founded on a pile foundation that is anchored a suitable depth into the very dense Till soils, so that the Colluvium is left in place but does not play a role in supporting the stairway. This conceptual foundation system may be advantageous where the colluvial thickness makes its overexcavation uneconomical, or where site grades force the staircase to be elevated on

Barker Landscape Architects April 5, 2001

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supports above grade. The piles could take the form of "pin"-piles (drilled holes filled with concrete into which steel elements are inserted); or possibly helical ground anchors (which are "screwed" into the ground by torsion), depending on the ability of these anchors to achieve sufficient penetration into the Till. The selection and design of an acceptable pile system will need to take into account the possible lateral loading inflicted by colluvial soils moving downslope.

Overall, if the staircase is founded on or in the Till as described above, we expect that its presence will have little effect on the overall stability of the slope. It will, however, be subject to the potential for large-scale, "global" stability failure, which is a mode of failure that involves all or much of the slope, and involves movement of the Till itself. Our geologic reconnaissance did not specifically address the potential for this mode of failure; a true engineering assessment of global stability would require relatively deep borings advanced at the top of the slope and at its base.

Recommendations for Slope Clearing and Vegetation Removal

Construction of the proposed stairway will require some degree of temporary clearing so that earthwork can be performed and construction equipment can access the area. In general we recommend keeping disturbance of existing trees to a minimum during this process, since the existing vegetative cover helps to protect the slope from surface erosion and water infiltration. Clearing should be restricted, as much as possible, to groundcover and low brush, which should be cut off at or close to the surface rather than pulled out (except where overexcavation of Colluvium is performed).

It is likely that the existing root masses, particularly those of the larger vegetation and trees, help to "tie" the loose Colluvium layer to the underlying dense Till layer. Without the roots, the Colluvium might have a greater tendency to creep downslope. Clearing can be minimized by utilizing small construction equipment, and even hand labor if possible; and by routing the stairway in such a way as to avoid the most prominent trees.

In a similar vein we recommend against damaging existing trees on the slope by trimming or topping or otherwise adversely impacting their health. Over time this will increase the likelihood of the trees weakening or dying, which will in turn weaken their root mass, and its stabilizing effect on the Colluvium, while simultaneously increasing the likelihood of the tree toppling, which would expose more soil to erosion and load the slope unnecessarily with the weight of the fallen tree and would possibly damage the stairway.

We recommend that all cleared areas be replanted with vegetation that is low-lying and establishes a deep root system, for maximum surficial stability.

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Recommended Additional Geotechnical Services

To proceed with design of this stairway, specific geotechnical engineering input will be needed for such design details as soil bearing pressures, pile capacities, and pile embedment depths. This will require a more thorough set of field explorations so that we can get more complete, quantitative data on the soil types and densities underlying the site. We would use the data obtained from these explorations to formulate recommendations for stairway design and construction, which would allow you to proceed with design of the stairway. We will also use the additional field information to conduct an engineering assessment of near-surface slope stability under existing conditions and following stairway completion.

We anticipate that an appropriate field program for design-level recommendations will consist of three geotechnical borings drilled on the slope to depths that are sufficient to penetrate through loose colluvium, at least 5 feet into underlying *in situ* materials. We estimate that these borings would need to be advanced to depths of 10 to 15 feet each.

Following this field program, we could provide you with parameters related to designing and constructing the proposed stairway. These would include design parameters for founding the stairway directly on grade or, if desired, using pile foundations as support elements. We would provide recommendations for pile embedment depths, capacity, and installation.

We would also provide a more quantitative comparison of the slope's present near-surface stability level (expressed as a factor of safety), compared to its surficial stability after a stairway is constructed and slight regrading is accomplished.

Note that this program would NOT include a quantitative assessment of the slope's overall, large-scale, "global" stability. Such an assessment would require drilling a boring at the top of the slope to a depth that encompasses the entire slope height (as a minimum), plus another boring at the base of the slope, to establish geologic conditions throughout the bluff.

We trust that this memorandum meets your current needs. If you have any questions or want to discuss this project further, please call.

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R-4377

CITY OF KIRKLAND

123 FIFTH AVENUE . KIRKLAND, WASHINGTON 98033-6189 . (425) 828-1217

DEPARTMENT OF PARKS AND COMMUNITY SERVICES MEMORANDUM

To: Stacy Tucker, Planning Department

From: Michael Cogle, Parks Planning Manager

Date: June 28, 2002

Subject: Waverly Park Site Traffic and Parking Information

Project Description

Waverly Park is a community park serving the adjacent neighborhood and downtown Kirkland. It also provides boat-trailer parking for boaters launching their boats at the nearby Marina Park. The overall proposal is to enhance the existing Waverly Park and better accommodate boat-trailer and general parking. In addition, two tennis courts are proposed at the north end of the park and a historic building at the south end of the park.

Trip Generation

Park activities and trip generations at the Waverly Park includes: tennis court, team sports (such as little league soccer, softball and soccerl), general park use such as picnic, boat-trailer parking and activities related to the historic building. Although the proposed project will accommodate boat-trailer parking, the boat-trailer activity is actually a trip generation of Marina Park, where there is a boat launch. Boaters currently launch their boat at Marina Park then park their boat-trailer at Waverly Park and on Waverly Way, Market Street and surrounding neighborhood streets. The proposed project will provide additional boat-trailer parking to consolidate boat-trailers parking to one area to minimize impacts to neighborhood streets.

The proposed projects has four components to the trip generation:

- General Park Use
- Tennis Court
- Youth Sports Practice
- Historical Building
- Boat-trailer parking

A trip generation study was completed for the Houghton and South Juanita Neighborhood parks last summer. The average PM peak hour trip generation rate for the Houghton and South Juanita Neighborhood parks is one (1) trip per acre. These parks are smaller in size and do not have large fields for team sports and do not have tennis courts. Thus, their trip generation rate can only be applied to the general park use component of the Waverly Park.

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Memorandum to Stacy Tucke Waverly Site Traffic and Parking Page 2 of 5

Based on the trip rate of one trip per acre of general park use, Waverly Park generates approximately 11 PM peak hour trips. With a conservative approach, it is estimated that the enhancement of the park will generate 50% more trips. Thus, the proposed park will generate six additional PM peak hour trips.

Two tennis courts will be constructed at the north end of the park. Based on an Institute of Transportation Engineers (ITE) PM peak hour trip rate of 3.88 trips per court, the proposed tennis facility will generate eight (8) trips.

The open field has space for two youth sport teams. It is anticipated that the field may be used for youth sports practice such as soccer, softball and baseball on an occasional basis. A typical youth team has 15 to 20 players and coaches. With four occupancies per vehicle, a team may generate four to six vehicle trips. Practice typically starts at 4 PM and ends before 7 PM. In a worse case scenario, there could be as much as 12 trips when two teams practice at the same time. Waverly Park is currently being used for youth sports practice and will continue after the park enhancement. Since the field will not expand in size, it will not generate additional team sports practice related trips.

The historical building has 3,270 square feet of space. The Kirkland Historic & Preservation Society will use half of the space as an archive office and the other half will be available as a banquet, meeting & party facility. The archive office is used on an irregular basis and does not have any full-time employee. The meeting facility will be used on a per demand basis but will be used most during the evenings (after 6 PM) and weekends. The building will operate similar to a church during the weekday. Most activities will occur in the evenings and weekends.

Thus, on the weekday, the traffic generation will be similar to a church. Based on ITE data, church has a PM peak hour trip generation of 0.66 trip per 1,000 square feet. Therefore, with 3,270 square feet, the building will generate 2 PM peak hour trips.

During peak boating season (May through August), approximately 13 to 24 boat-trailer park at Waverly Park and vicinity between 4 PM and 7 PM. There is one boat launch at the Marina Park. It typically takes 15 minutes to launch a boat. Thus, four boats can be launch within an hour and four trips are generated from Marina Park to Waverly Park to park. Since the number of trips to and from Waverly Park and Marina Park is based on the number of boat ramp and additional boat ramp is not proposed for the Marina Park, there will be no increase in trips.

As shown in Table 1, it is forecasted that the proposed enhancement of Waverly Park will generate 16 net new trips during the weekday PM peak hour. This estimate represents the peak season.

Table 1. Average Trip Generation					
Use	PM Peak H	PM Peak Hour Trips			
	Existing	Future			
General Park Use	11	17			
Tennis Courts	0	8			
Team Sports Practice	12	12			
Historical Building	0	2			
Boat-Trailer Parking	4	4			
Total	27	43			
Net New		16			

Table 1. Average Trip Generation

Memorandum to Stacy Tucke Waverly Site Traffic and Parking Page 3 of 5

PARKING CAPACITY AND DEMAND

What is the existing parking capacity?

Presently parking on the Waverly Park Site is provided for in three distinct areas: 1) the gravel terrace lot, 2) the old school driveway paralleling Waverly Way, and 3) the north gravel lot. Boat trailers are not permitted to use the driveway, and seldom utilize the north lot.

Due to the informality of parking as presently exists on the site, the exact number of spaces that the site can accommodate for cars and boat trailers varies. For example, how and where boat trailers are parked on the gravel terrace lot early in the morning can dictate how many subsequent trailers can be parked for the remainder of the day.

All told, it is estimated that the existing maximum parking capacity for boat trailers is 23 spaces, and the existing capacity for cars is 50-60 spaces. Note that boat trailer spaces can be used by cars during the non-boating season.

What is the current parking utilization?

The following table details the estimated parking during peak season. Peak season is typically from May through August, during the boating season and youth baseball season. Primary use of parking on the Waverly Site is for:

- <u>General Park Use</u>. Includes year-round park users (tennis, informal play, strolling, etc.).
 During April and May, the site is used by youth sports groups for practice space.
- <u>Boat Launch Parking</u>. Most heavily used on weekends (and weeknights during periods of good weather).

Table A.1 Estimate of Existing Parking Use (number of utilized spaces)

	Weekday Peak (4 – 7 p.m.)	Weekday Non-Peak (Day Use)	Weekend Peak	Capacity (Estimated)
General Park Use - Cars	20	7	12	60
Parking for Boat Launch	23	12	23	23

What is being proposed?

For the Waverly Park Site, parking is needed for general park users as well as for the historic building. Parking is also being proposed on the site to partially serve the parking needs for the downtown boat launch, which is separate from the parking requirements of the park itself. Memorandum to Stacy Tucke Waverly Site Traffic and Parking Page 4 of 5

The park design would accommodate 33 car spaces and 21 boat trailer spaces on site. Note that boat trailer spaces can also be utilized for car parking. In addition, up to 11 additional boat trailer spaces (or up to 20 car spaces) would be provided on Waverly Way (between Market Street and the park parking lot exit on Waverly Way). Finally, 8 additional boat trailer spaces are utilized on Market Street (between Lake Ave. W. and Waverly Way).

Table A.2 Estimate of <u>Proposed</u> Parking Use (number of utilized spaces)

	Weekday Peak (4 – 7 p.m.)	Weekday Non-Peak (Day /Evening Use)	Weekend Peak	Proposed Capacity (including on-street)
General Park Use - Cars	30 -	11	18	33
Parking for Boat Launch	23	12	23	Up to 40
Historic Building	4	20	20	Included in general park use total

What is the impact of boat trailer parking on Waverly Way?

The proposal is to provide limited boat trailer parking on Waverly Way on the park side of the street. This would require the existing bike lane to be re-routed through the park. Simultaneously, it is proposed that parking on the residential side of Waverly Way be prohibited and signed accordingly.

Historically the City has permitted on-street boat trailer parking, except in areas specifically prohibited and signed accordingly. Vehicles with attached trailers have for some time utilized Market Street, Waverly Way, and (on rare occasion) other surrounding streets.

Typical vehicle traffic pattern for existing boat trailer parking on Waverly Way is as follows:

- 1. Launch boat at boat launch;
- 2. Travel north on Market Street to Waverly Way;
- Travel west on Waverly Way;
- 4. Park vehicle with trailer on north (residential) side of Waverly Way;

Return to boat launch as follows:

- Travel west on Waverly Way to 2[™] Street West;
- 6. Travel north on 2[™] Street West to 5th Avenue West;
- 7. Travel southeast on 5th Avenue West to Market Street;
- 8. Travel south on Market Street to boat launch to pick up boat.

Memorandum to Stacy Tucke Waverly Site Traffic and Parking Page 5 of 5

By providing parking on the south (park side) of Waverly Way and prohibiting such on the north side, the traffic flow will be revised as follows:

- 1. Launch boat at boat launch;
- 2. Travel north on Market Street to Waverly Way;
- 3. Travel west on Waverly Way and enter park entrance:
- 4. Park vehicle with trailer on north (residential) side of Waverly Way; <u>Travel through park parking lot</u> and (if full) exit – right-hand turn - onto Waverly Way, park on south (park) side of Waverly Way;

Return to boat launch as follows:

- 5. Travel west on Waverly Way to 2 Street West; Travel east on Waverly Way to Market Street;
- 6. Travel north on 2st Street West to 5st Avenue West;
- 7. Travel southeast on 5* Avenue West to Market Street;
- 8. Travel south on Market Street to boat launch to pick up boat.

It is the view of the Parks Dept. that the proposed formalization and revision to parking on Waverly Way will reduce vehicular trips through the neighborhood.

It should be noted that boat trailer parking on Waverly Way is considered overflow parking to that provided within the park, and will be utilized on an occasional basis during the peak season only.



CITY OF KIRKLAND

Department of Public Works 123 Fifth Avenue, Kirkland, WA 98033 425.828.1243 www.ci.kirkland.wa.us

MEMORANDUM

То:	Thang Nguyen, Transportation Engineer					
From:	Iris Cabrera, Transportation Engineer					
Date:	November 8, 2002					
Subject:	Supplemental Traffic Analysis for the Waverly Enhancement Project.					

This memo supplements the Waverly Park Enhancement Project traffic report dated May 8, 2002 and includes the following topics:

Daily trip generation, trip distribution and assignment. Significant Intersection proportionate share calculations. LOS Analysis at significant intersections and driveways. Safety Analysis at significant intersections and driveways. Sight distance evaluation at proposed driveways. On-street parking utilization and impact assessment

Daily Trip Generation

A summary of existing and future trip generation is presented in Table 1 below. The estimates shown are based on ITE Trip Generation 6^a Edition and on information prepared by Parks and Community Services Department. The results of the analysis show that, at present, the combined uses (including general park, boat-trailer parking, tennis court and team sport practice) generate a total of 362 week daily trips. Enhancement to the park and use of the Historical Building will result in the addition of 254 trips for a total daily trip generation of approximately 616 trips. These estimates are conservative and represent peak use during the peak summer time.

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		Tabl Daily Trip (£
Use	Future			Existing	,		Net
	Inbound	Outbound	Total	Inbound	Outbound	Total	Total
General Park Use (a)	165	165	330	110	110	220	110
Tennis Court (b)	31	31	62	31	31	62	0
Historical Building (c)	72	72	144	0	0	0	144
Boat-Trailer Parking (d)	28	28	56	28	28	56	0
Team Sport Practice (e)12	12	24	12	12	24	0
Total	308	308	616	181	181	362	254

Table 1 (notes)

- (a) General Park Use daily trip generation was obtained by applying a ratio of daily to PM trip generation of approximately 19.4. Since the existing and future PM peak trips associated with the general park use are estimated at 11 and 17 trips respectively, the resulting existing and future daily trip generation estimates are 220 and 330. The 19.4 ratio was obtained by averaging the ratios of daily to PM peak trip generation rates for various types of parks uses from ITE Trip Generation 6* Edition.
- (b) Tennis court daily trip generation is based on a rate of 31.04 daily trips per tennis court, Land Use Code 491 from ITE Trip Generation 6• Edition.
- (c) Historical Building daily trip generation is based on information prepared by Parks and Community Services Department consisting of estimates of average week-day attendance to meetings or special events (one daily event, attended by up to maximum of 50 people, two vehicle trips per person), and on the expected number of week-day visitor trips (four to six people per group, four three- hour visits, one person per vehicle) to the archive office.
- (d) Daily trips associated with boat-trailer parking activity during the peak boating season is based upon the capacity of the boat launch area which is limited to four boat launch per hour, 14 hours a day, resulting in a maximum of 56 boat-trailer trips. Boat-trailer parking activity during the off-season is significantly lower.
- (e) Youth team sport practice daily trip generation is based on an estimated daily attendance of two teams, from 4:00 to 7:00 PM, 15 to 20 members on each team, and assumed occupancy of four people per vehicle. The field has capacity for only two teams at a time

Trip Distribution and Assignment

Daily and PM peak distribution of existing, new and net new project trips are shown in Figures 1, 2 and 3, included in Attachment A. Printouts showing turning volumes at significant intersections and driveways for future conditions with and without project new trips are also included. It should be noted that all boat-trailers trips (56 daily and 4 PM peak) are assumed to have origin and destination at Marina Park, but a change in the circulation pattern has been proposed due to the addition of a right-turn-out-only driveway onto Market St, and changes to the existing driveways and internal circulation. The western most driveway will be exit only, whereas the eastern most one will be entrance only. It is expected that all boat-trailer trips will either exit the site onto Waverly Way and proceed east toward Market St or exit onto Market St directly. In other words, no boat trailer trips are expected to go west on Waverly Way as they do presently.

The distribution of the rest of the trips is 30-40% to/from the northeast/northwest area and 60-70% to/from southwest/east areas of the City. These percentages are primarily derived from daily and PM peak volume counts and adjusted slightly to be consistent with the City's BKR Model trip distribution percentages estimated for other projects.

Significant Intersection Proportionate Share Analysis

Per the City's Traffic Impact Analysis Guidelines, intersections impacted with new project trips in excess of 1% of signal warrants volumes (also referred to as proportionate share) are considered significant. Two intersections and the three project driveways have proportionate shares greater than 1%. Table 2 below summarizes the results of the proportionate share analysis. Proportionate share calculation worksheets are included in Attachment B.

Table 2Proportionate Share Analysis Results

Intersection

Proportionate Share

1) Waverly Way at Market St	3.18 %	1
2) Central Way at Lake Street	1.00 %	
3) Waverly Way at Driveway 1	1.32 %	
4) Waverly Way at Driveway 2	2.12 %	
5) Market Street at Driveway 3	1.15 %	l

PM Peak LOS Analysis at Significant Intersections and Driveways

The intersections and driveways listed on Table 2 above are considered significant; therefore, LOS(Level of Service) Analysis using Operational Method in the most recent Highway Capacity Manual is required to determine the PM peak impacts of the project trips on the operation of the intersections. LOS analysis was thus performed for existing, future without project impacts and future with project impacts conditions. The PM peak trip generation proposed in the traffic report dated May 8, 2002 was used in this analysis, but it was revised to account for adjustment to the trip generation associated with the Historical Building. In the original PM peak trip generation analysis, it was assumed that the Historical Building would operate similarly to a church facility during weekdays and thus it would generate four PM peak trips. In this analysis, the total number of PM peak trips associated with the Historical Building was increased from four to six due to the activity connected with the use of the archive section of the building. A summary of the adjusted PM peak trip generation is presented in Table 3 below.

	Ta	able 3	
	PM Peak Trip	Generation	Summary
	Existing	Future	Net
General Park Use	11	17	6
Tennis Court	8	8	0
Team Sport Practice	12	12	0
Historical Building	0	6 .	6
Boat Trailer Parking	4	4	0
Total	35	47	12

Significant Intersections and driveway LOS was estimated using existing and projected PM peak intersection counts and the PM Peak trip distribution shown in Figures 1, 2 and 3. The result of the analysis is summarized in Table 4 below and it shows that the project trips are not expected to impact the operation of the intersection of Central Way at Lake Street since the overall intersection delay will stay about the same (LOS E, 58.6 seconds per vehicle) with and without project trips. The project driveways are expected to operate at LOS A, which means that the average delay will be less than 5 seconds per vehicle. The unsignalized intersection of Waverly Way at Market Street will operate at LOS A, experiencing an overall delay of 2.6 seconds per vehicle, but the eastbound approach will change from Level of Service D to F, or 29.5 to 65.1 seconds of delay per vehicle.

Table 4	
Level of Service	Analysis Results
LOS (Delay in Seco	nds per Vehicle)

Intersection	Existing	Future w/o Project Impacts	Future with Project Impacts
Market St / Waverly Way	A(1.4) [C(19.4)]*	A (1.7) [D (29.5)]*	A (2.6) [F (65.1)]*
Central Way / Lake Street	C (34.1)	E (58.3)	E (58.6)
Driveway 1/ Waverly Way		a" a	A (1.0)
Driveway 2/ Waverly Way			A (1.4)
Driveway 3/ Market Street			A (0) [B (14.3]*

* [] LOS and Delay on Eastbound Approach

Safety Analysis at Significant Intersections and Driveways

A total of four accidents occurred during the period from 1999 to 2001, two parking accidents and one rear accident at the intersection of Market St and Waverly Way, and one parking accident on Waverly Way west of Market St. The yearly average is about one accident per year, which results in an accident rate of 0.10 accidents per million vehicles entering the intersection per year. This rate is significantly lower than the City's average for unsignalized intersections (0.54 accidents per million of vehicle approaching the intersection per year). In conclusion, the project driveways and the intersection of Waverly Way at Market Street are not considered high accident locations and are not expected to become one as a result of the project impacts. It is necessary, though, as a precautionary safety measure, that Driveway #2 (eastern most one) on Waverly Way be located, at least, 75 feet west of Market Street to minimize blocking of this driveway by eastbound vehicles exiting Waverly Way onto Market Street.

Sight Distance Evaluation

Both project driveways on Waverly Way (Driveways #1 and # 2) exceed stopping sight distance requirements for 33 MPH 85th percentile speed. Visibility for vehicles exiting the proposed right-turn-out-only driveway on Market Street may be impeded by cars parked south of Waverly Way; therefore, removal of some parking spaces may be necessary. Sight distance at this driveway should be evaluated after completion of the project to determine the exact length of parking to be removed.

On Street Parking Utilization Analysis and Impact Assessment

The following analysis is based on the parking information contained on the Waverly Park traffic report dated May 8, 2002, the Waverly Park Site parking count conducted on July 2002 and the on-street parking utilization data collected by Public Works Staff during the third week of August, 2002. The main objective of this analysis is to assess the project's potential on-street parking impacts. Summaries of parking capacity and demand for existing and future conditions with project impacts are shown in Tables 5.a and 5.b

				Table 5.a								
	Existing (Capacity		Existing Parking Demand								
			Peak		Off-Peak	-	Weekend	8. 1450)				
			(4 to 7PN	VI) (N			(11 to 1 PM)					
	Boat Trailers	Other Park Uses	Boat Trailers	General Park Uses	Boat Trailers	General Park Use	Boat Trailers	General Park Use				
Waverly Park								-				
On-site	23	60	25 (21	7	12	16	13				
Designated On-street Parking												
Waverly Way	··· .	31	1	9	1	6	1	6				
Market St	8	22	_	Э								
Sub-total	8	53	1	9	1	6	1	6				
Marina Park Other Demand												
At Waverly Park				30								
On Waverly Way				12								
Sub-total				42								
Total	31	113	26	72	8	18	17	19				

The **peak parking demand** occurs in the summer, when boating, youth sport practice and various other parking activities overlap on weekdays, from 4:00 to 7:00 PM. As shown in Table 5.a above, the peak demand consists of 26 boat-trailers and 72 general use parking spaces. During this period, there is enough on-site parking to support the park demand and demand from other users in the vicinity of the project such as Marina Park. Although there are enough parking spaces on site some park users park on street. Special events at the Marina Park and other non-park uses also park in and around Waverly Park. During a special event at the Marina Park, it was observed that the parking utilization in the Waverly Park increased by 51 stalls. These are accommodated by the excess supply of parking spaces within Waverly Park and on-street parking along the frontage of Waverly Park.

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The parking capacity and demand for future conditions with project impacts is summarized in Table 5.b.

		Та	ble 5.b			
	Proposed	l Parking		Future Parking	Demand	
	Capacity		Peak (4:0	0 to 7:00 PM)	Off-Peak	
	Boat	Other Park	Boat	General Use	Boat	General Use
	Trailers	Uses	Trailers	(*)	Trailers	(*)
Waverly Park				. < .		
On-Site	21	33	21	25	7	32)*
Designated						
On-street						
Parking						
Waverly Way	11*	20*	5	9	1	6
Market St	8*	22*				
Sub-total	19*	42*	5	9	1	6
Marina Park					1	
Other						
Demand			· .			
At Waverly Park				30		
On Waverly				12		
Way						
Sub-Total				42		
Total	40	75	26	76	8	38

(*) Includes four parking spaces required for Historical Building

These spaces can accommodate either boat-trailers or general parking stalls.

The proposed enhancement of Waverly Park would reduce the number of parking stalls on-site. There will be 33 general parking spaces and 21 spaces for boat trailers. There will be designated on-street parking along the frontage of Waverly Park (on the south side of Waverly Way) for park users. These spaces can accommodate 11 boat trailers or 20 general parking stalls. Similarly there will be designated parking spaces on Market Street including eight boat-trailer or 22 general parking stalls. Thus there could be 21 to 40 stalls for boat-trailer or 33 to 75 stalls for general use.

The worse case scenario assumes the maximum parking demand for boat trailers on site. This utilizes 21 boat-trailer parking stalls and five designated stalls on-street. Thus the rest of the designated on-street parking would be available for general use, which equates to 22 parking spaces. Thus the overall parking supply (on-site and on-street) for general use is 55 spaces. As shown in Table 5.b the Waverly Park Enhancement project will require four additional general parking spaces during the peak demand period for a total of 25 parking spaces. Future on-site parking supply of 33 spaces can more than accommodate the park's future general use parking demand.

In assessing other parking demand not associated with the Waverly Park such as the Marina Park and other uses in the vicinity of the project site and as discussed above, 51 general parking spaces are needed.

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The proposed Waverly Park can accommodate eight spaces of these and 22 can be accommodated via use of the designated on-street parking. Thus, the remaining 21 stalls needed will have to be found in other parking spaces in the area, most likely on-street parking in the vicinity of the site.

An on-street parking utilization study was conducted to determine the impact of those 21 spaces to near-by residential streets.

Table 6 summarizes the result of the on-street parking utilization analysis. The streets included in the analysis, shown in attached diagram, are Waverly Way, 3rd Street, 2rd Street, 7th Ave West, 5th Ave West and Market St from Lake Ave West to 7th Ave. Two options are considered: Option A assumes that parking on the north side of Waverly Way will be removed, whereas Option B assumes that parking on the north side of Waverly Way will continue to be available as it is now. The analysis consists of the following:

- Estimation of on-street parking capacity, that is, the number of parking spaces available on each street segment, which depends on several factors such as street length, type of parking allowed, number of driveways, presence of bus stops, fire hydrants, crosswalks, etc. On-street parking capacity consists of a total of 267 parking spaces.
- On-street parking count of the number of vehicles parked from 7:00 to 8:00 AM, 12:00 to 1:00 Noon, and 4:30 to 5:30 PM on three mid-week days during the third week of August. These numbers respectively are 53, 72 and 38.
- Estimation of the existing parking utilization ratios by dividing the total number of parked vehicles during each peak period by the total number of available parking spaces. These ratios are 20%, 27% and 14% during the AM, Noon and PM peak periods respectively.
- 4) Estimation of the future overall parking utilization ratios (as impacted by alternative re-designation of on-street parking) by dividing the total number of parked vehicles on each peak period by the future number of available parking spaces for each option considered. Under Option A, on-street parking capacity would be reduced by 12% since 31 parking spaces would be impacted by the project. Under Option B on-street parking capacity would not be reduced.
- 5) Estimation of the unmet peak parking demand. 102 parking spaces are needed, but 81 spaces would be provided via combination of on-site and on-street parking on the south side Waverly Way and on Market Street. Thus 21 parking spaces are needed beyond the perimeter of the park.
- 6) Estimation of the future PM peak on-street parking utilization ratio with additional on-street project parking demand. This is the ratio of future on-street PM peak parking demand (38 existing plus 21 additional parking spaces needed = 59) to future on-street parking supply (236 under Option A and 267 under Option B). These ratios respectively are 25% and 22%.

Existing Number of On- Parking Spaces	Street	Existing On-Street Parking Utilization	Ratio	ng on	arking Utilization Parking on North Side of Waverly		
		Ratio =	Waverly	Nay	Way		
		0 / TA	20年2月2月1日1日1日1日1日	ion:A		on B	
			Existing Demand	Future Demand on	Existing Demand	Future Demand on	
			Future Supply	Future Supply	Future Supply	Future Supply	
Total Available (TA)	267		236		267		
Occupied AM (OAM)	53	20 %	22 %nrt	n/a	20 %	n/a	
Occupied NOON (Onoon)	72	27 %	30 %	n/a	27.%	n/a	
Occupied PM (Opm)	38 (59)*	14 %	16 %	25 %	14%	22 %	

 Table 6

 On-Street Parking Utilization Summary

* Existing PM peak on-street parking demand (38 spaces) plus unmet demand (21 spaces).

The results of the analysis show that currently during peak periods on week days there is sufficient onstreet parking in the vicinity of the Waverly Park site since parking utilization ratios are well under 50%. The project parking impacts, which would be concentrated mainly on Waverly Way and Market Street, would depend on whether or not parking on the north side of Waverly Way (from 2[∞] Street to Market Street) is preserved. Should it not be, (Option A in Table 6 above) the overall on-street parking capacity would be reduced from 267 to 236 parking spaces, or by 12%. Preserving existing parking on the north side of Waverly Way, (Option B in Table 6) would not impact the overall on-street parking capacity. Under both parking options the overall parking utilization ratios are expected to remain under 50%.

Assuming a worse case scenario, there would be a deficit of 21 parking spaces during the PM peak period. This is because 102 parking spaces would be needed, but only 81 spaces would be provided; the combination of existing and future PM peak on-street parking demand results in 59 (38 + 21) spaces. This would result in a parking utilization rate of approximately 25% (59/236). In conclusion, there is sufficient on-site and on-street parking to accommodate the future park parking demand.

Conclusions

Proposed enhancement to the Waverly Park Site would result in the following :

- 254 additional one-way daily trips, 12 of which occur during the PM peak. These trips would mainly impact the segment of Waverly Way between Market Street and the western most driveway.
- Proportionate share of signal warrants greater than 1% at two intersections, Waverly Way at Market Street and Central Way at Kirkland Ave.
- No significant changes in the operation of impacted intersections, namely Waverly Way at Market Street and Central Way at Lake Street. In other words, the overall future LOS at these intersections will stay about the same with and without project impacts.
- The LOS on the eastbound approach on Waverly Way and Market Street, which now operates at LOS C, will deteriorate from D to F, with delay increasing from 29.5 to 65.1 seconds per vehicle.
- Proposed access and internal circulation and the addition of right-turn-only driveway on Market Street are expected to minimize/eliminate boat-trailer traffic through the neighborhood.
- Proposed on-site parking capacity supplemented by on-street parking on Waverly Way and Market Street will sufficiently satisfy the project parking demand during peak periods in summer.
- Proposed on-site parking capacity is sufficient to satisfy off-peak parking demand in the summer and during the rest of the year.
- Should existing parking in the north side of Waverly Way be removed the project's parking impacts would result in an 12% decrease in the overall on-street parking capacity in the vicinity of the site, but even accounting for this impact, the parking utilization ratios during AM, NOON and PM peak will remain under 50%.

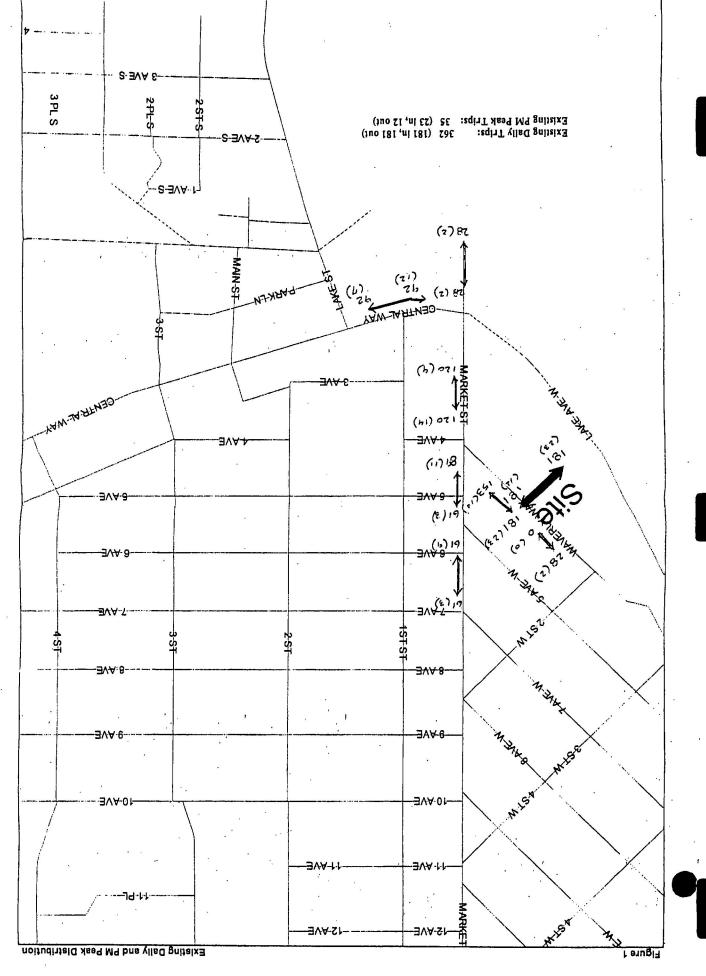
Recommendations

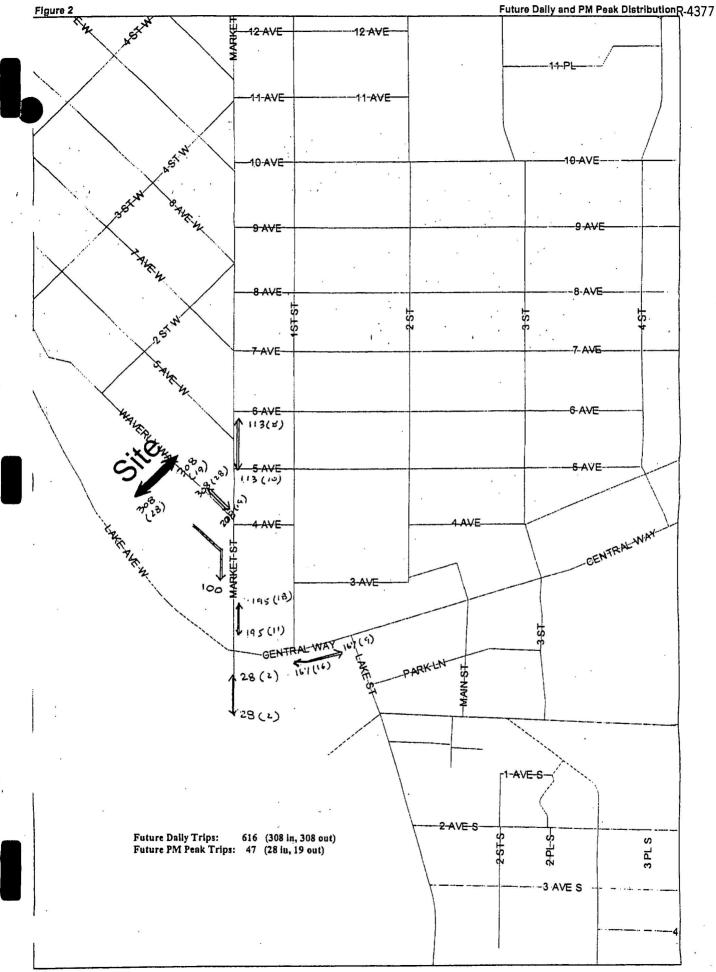
The proposed enhancement to the Waverly Park Site is not expected to result in significant traffic impacts on and/or in the vicinity of the site that would require specific mitigation. Implementation of the following recommendations is necessary, in order to minimize potential operational and safety problems:

- Locate the eastern-most driveway on Waverly Way as far as practically possible from Market Street, no less than 100 ft. This is to minimize blocking of this driveway by eastbound vehicles.
- There may be a possibility that the eastbound queue at Market St / Waverly Way may block the
 eastern most driveway and impede westbound traffic flow onto the site. However, this possibility is
 low. The City will monitor this driveway once the project is completed and traffic stabilized. Should
 the eastbound queue hinder traffic flow on Waverly Way re-stripping the eastbound approach to
 provide a separate left turn bay may remedy the problem.
- Because the possible overlapping of summer activities may cause parking demand to peak during the period from 4-7:00 PM, special events on the Historical Building involving attendance in excess of 20 people should be carefully scheduled to avoid conflict with others scheduled park events.
- Conduct a parking utilization study after project implementation to re-assess project impacts in the summer season, both during PM peak and weekends and to determine appropriate mitigation.

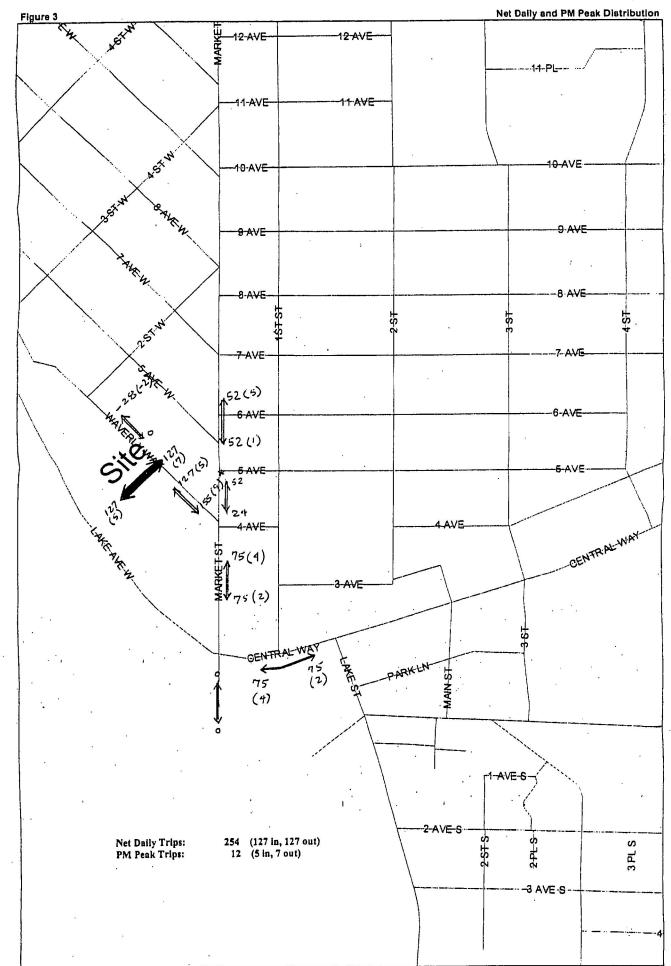
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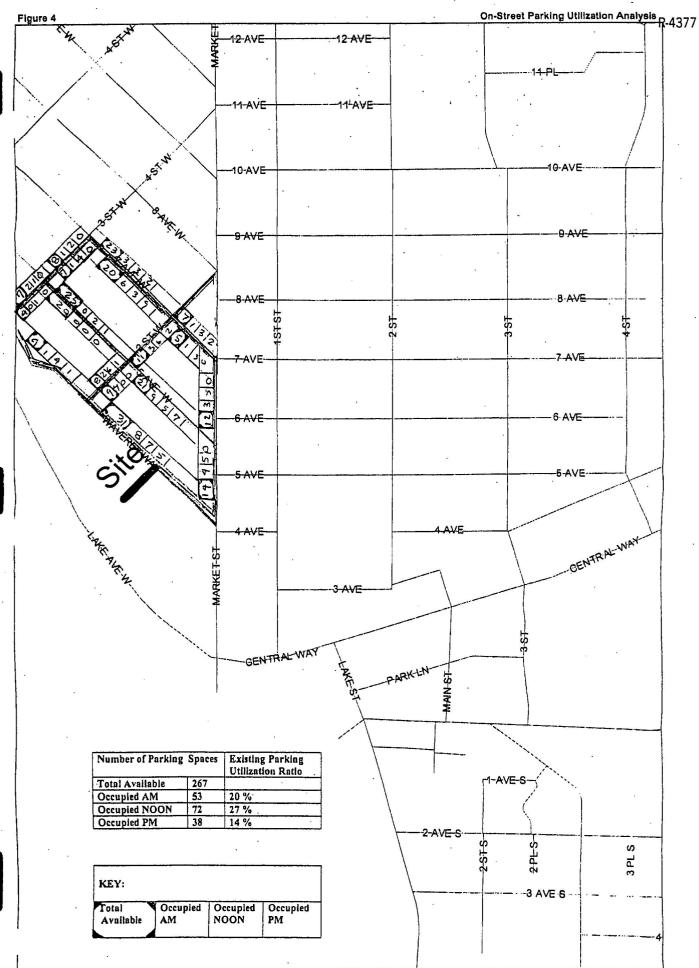
ATTACHMENT A





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HCM Unsignalized Intersec. A Capacity Analysis 2: Waverly Way & Market St

R-4377

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pproach Delay (s) 51.3 0.6 0.2 19.4 pproach LOS tersection Summary, 240, 190, 197, 197, 197, 197, 197, 197, 197, 197		51.3	9.0	0.0	11.1	0.0	19.4					****	
pproach LOS A Second Los Anna Anna Anna Anna Anna Anna Anna Ann			A		B,		⊂ v Ge						
Nersection Summany, a way way in the state of the second state of	pproach Delay (s)	51.3	0.6		0.2		19.4				Contraction of the second state		
verage Delay	pproach EOSt Progent						1944 C al						
verage Delay : tersection Capacity Utilization 84.5% ICU Level of Service D	Neusealloin Summeriy.												
ntersection Capacity Utilization 84.5% ICU Level of Service D	verage Delay L	新教 的		14		此行的出		派杜华的		ar an			
	ntersection Capacity Ut	ilization		84.5%	IC	U Leve	l of Sen	vice		D			

2002 Waverly Enhancement Project 5:00 pm 10/2/2002 2002 PM Peak Existing Condition Analys&ynchro 5 Report IC Page 1

Movemein		HEBR	S WABLE	W/B/F	NB E	MNBR			1.		
Lane Configurations	†	7	ň	<u>†</u> †	ň	. 7				······································	
IdealsFlows(vphpl) and	1900	1900	1800	1800	1700	1800					
Lane Width	12	12	10	11	12	12					4
Total Lost time (s)	3.0	A ROLL IN A LOUGH	3.0	63.0 7	12 3 .0	Sec.310.008					意識
Lane Util. Factor	1.00	1.00	1.00	*0.85	1.00	1.00				a fin the Landace Bir	una curata
Frpb, ped/bikes diale	1.00	0.95	1:00	1.00	24 (+00 ²	0.95%					
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	or 1994 1996-00 01 1985-00				
Fitter	1.00	0.85		341400	1,00	0185					
Fit Protected	1.00	1.00	0.95	1.00	0.95	1.00					a beauti descrivente desc
Satel, Flow (prot)	1583	a 1510	1565	2682	p. 4583	4429			in (Cellar di mari Sectori di mari Sectori di Maria di		
Flt Permitted	1,00	1.00	0.95	1.00	0.95	1.00					
Satos Flow (perm)	en1583]	副15計0者	TO ANY THE REAL PROPERTY OF	2682	and the second state of th	M429					L ERT
Volume (vph)	360	269	213	681	564	138		•			
Reakenoun factor, RHF	0.94	80.94	0.92	÷0.92	0.87	0.87					
Growth Factor (vph)	100%	100%	50%	100%	100%	100%					
Adj Elows(vph)/ file	1283	286	A 1167	740	648	1591					
Lane Group Flow (vph)	383	286	116	740	648	159					SMITH HIS CALLS
Confl. Peds (#/hr)		(F) 44)	i Mickelli			23					
Parking (#/hr)	10	den in the second second		10	THE STATE STORE STORE				No. I Martin Tak		
Липолуреу	A DECT OF A	meove	E BLOU			Perm					
Protected Phases	6	(Enconstant	5	6.2	(Кантината			AN INCLUSION OF			attin da s ur e
Permitted Phases		O A 7									
Actuated Green, G (s)	29.5 30/56	84.7 867/	23.3	40.0 42/0	55.2 56)2	55.2					14272 WASH
Effective:Gleen.g(S) Actuated g/C Ratio	0.25	0.72	0.20	0.35	0.47	-56 2 0.47					
Cleanance Rime (S)			0.20		0.47	0.47					1
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0					
EanerGro Cap/(vph)	5.0 5402		3175	939	741	669.30				INVESTICATION IN	4 -3367.040
v/s Ratio Prot	c0.24	0.12	c0.07	c0.28	c0.41						5HE _21
V/siRatio Perma		10.12 10.07		20.20 就是好可能							1613 (B
v/c Ratio	0.95	0.25	0.37	0.79	0.87	0.24					
Uniform Delay Idit	44 0 4	3575	41.2			2419414940					
Progression Factor	1.00	1.00	1.00	1.00	0.63	0.55					在 场达出出投
Incremental/Delay/d20				44	1.54	01155					
Delay (s)	76.8	5.8	41.9	39.4	19.7	10.6				antikalen i i	ភា <u>ច</u> ្រក់ដេហ៍ដំ
Level of Service Multi-	in Ex		N.C. DIC	ALCO.	B.	BLE					
Approach Delay (s)	46.4			39.8	17.9	n annadit 3 i bernadd i y barlyn fridd y		an an a factor of the second of the			C/ 11 1273
Approach/LOS%/Pare-	D			B.S.D.	B						
Intersection Summary						an a		STANCE STATES			
HCM Average Control E			32 1-		CM	el.of.Servi			2009年中国。 2009年中国	Gentle and the second	供量的数据 的社
HCM Volume to Capaci			0.84						an a managaran si w	NS SAL	
Actuated Cycle Length (120.0	Nin Pic	um of lo	stilline (s)		1. mail 10			in. 1974
Intersection Capacity Ut		est menute	77.1%	the second second second		of Service		C			
con Critical Lane Group											新 月18月
			自己的问题 的	如6至今天7月1日	是新小田和田田	Contract of the second					第一日 日日

2002 Waverly Enhancement Project 5:00 pm 10/2/2002 2002 PM Peak Existing Condition Analys&ynchro 5 Report IC Page 1 KIRKLAWA2-ST51 HCM Unsignalized Intersectic... Capacity Analysis 2: Waverly Way & Market Street

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Mow-lant-left.	SW(BL	WBR 1	WBR21	ANB<u>M</u>A	NNBIR .	NBR	38	SBIE	SER	512022	્યુલા	Ser
Lane Configurations	Y			7	4		7	1			Y	
Sign-Control Sign Control	Slop				Frees			Free			Stop	
Grade	0%				0%		2 11 (0)*##	0%			0%	
Volume (veh/h) strate	51 June 51			The state of the s	1301	3. 1	記名目の指	3701	120			188-42
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (Veh/h)	rei al 5-	s, 0.	5 N 14		1369+	in an Unit		738	1912年	2 1 3 1		44
Pedestrians		1700 yran 1974										
Lane Width (tt)												
Walking Speed (ft/s)			-					· ·				
Rercent/Blockage												
Right turn flare (veh)			12110220000	1999	an a							
the second se	None										Nones	
Median storage veh) VE leonflicting volumes	10000	0200	11:07/1-0		0.2.045255		1407240			2306	10007	250
vC1, stage 1 conf vol	MZ020	2900	SILOWER	RIVOZ A	中国达 为					2000	2250	
VC1, stage 7 contivol												
tC, single (s)	7.1	6.5	6.2	4.1			4.1			7.1	- 6.5	6.2
C 21stage (s)			0.2									WEEKS
tF (s)	3.5	4.0	3.3	2.2	和历史的		2.2			3.5	4.0	3.3
polqueue mee 2012	WW 750	MI00 4	Mand 2	A 197			98			286	3100	89
cM capacity (veh/h)	21	34	179	850			500			23	35	411
									در دارد می اور			
Direction		NE	INB 20	ESE	SBIZE	S						的建筑和中
Volume Total	17	77	1373	11	762	47	044017-CU7894				CN FALLER DISC	THE REAL THREE T
Volume Left	是调整5.6	77			1 10	34						
Volume Right	12	0	3	0	24	44				91120101 JF032		BUTGHAT
CSH HE	545	850		500	1700	194						
Volume to Capacity	0.31	0.09	0.81	0.02	0.45	0.24			-			een and and a
QueueiLength (ft)	99.7	9.7	0.0	12.4	0.0	29.5						的超短
Control Delay (s)	99./ 98080-100	9.7	0.0	12.4		29.5	er availae later					
Eane LOSI States	99.7	0.5		0.2		29.5						
Approach Delay (s)	33.1 1930-1942	U.3		U.2 Karagan		23.0					101101210121	新闻制度
ApproachLOS							WRAND STOR			The American		ELLO LAS
Intersection-Sulminiary &											e and the	
Average Delay Commenter	in in the second se	开关的是 1999	1.7									國語語
Intersection Capacity Uti	lization		95.6%	IC	U Leve	l of Sen	vice		E			
							Mac ng ma					

2004 PM Peak LOS without project trips 5:00 pm 10/2/2002 PM Peak Analysis IC KIRKLAWA2-ST51

Moxement		BEBR	NewBla	SEVVE A	MENBLE	ENERS
Lane Configurations	1	7	ሻ	^^	٦	T COOME
IdeallFlow (vphpl)	COLD CONTROL MAN	1900	THE REPORT OF THE PARTY OF THE	1800	CLUMMENT'S TOTAL DU C.	
Lane Width	12	12	10	11	12	12
Total Lost time (s)	City of the second second second	3.0	CALLED AND AND A DAY OF	3.0	and the second	فالعاد دجر ومشراء شا
Lane Util. Factor	1.00	1.00	1.00	*0.85	1.00	1.00
Fipbyped/bikes		0195	فتراحج الكرياب السيالي الزكام	41:00	The state of the s	0.955
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
	A LOUGH AND AND A LOUGH AND A LOUGH AND AND A LOUGH AND A LOUGH AND AND AND A LOUGH AND AND AND A LOUGH AND AND A LOUGH AND AND AND A LOUGH AND AND AND AND AND AND AND A LOUGH AND	And the Party of the loss	A 61-00.	and the distant sector of the	6.1.00	3
Fit Protected Sate Flow (prot)	1.00	1.00	0.95	1.00	0.95	1.00
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd Flow (perm) 84			0.95		0.95	
	the second second second		and had been an an and the			
Volume (vph)	451	292	201	769	643	120
Reakthour factor, RHE					10187	0.87
Growth Factor (vph)	100%		50%	100%	100%	100%
Adikielowkyphythe	4801	311	**************************************	N 836	and the second second second	138
Lane Group Flow (vph)	480	311	109	836	739	138
Confl/Peds/(#/ht)						
Parking (#/hr)	10	ANT ANT ANT ANT	in the second second	10	The local sectors	1
TURNITYPE THEY MAN	THE REAL PROPERTY OF	CONTRACTOR OF CONTRACTOR	Prot	THE REAL PROPERTY AND A DESCRIPTION OF A		Permu
Protected Phases	6	7	5	62	7 8098786780028	
Pennitted Phases in Va						
Actuated Green, G (s)	30.0	84.9	23.1	40.3	54.9	54.9
Effective:Green; Gr(S)		86.9	and the second se	0.25	0.47	11001912
Actuated g/C Ratio	0.26	0.72	0.20	0.35	0.47	0.47
Clearance Jumer(s)	3.0	3.0	3.0		4.0	ATTUISTICS ASTA
Vehicle Extension (s)		3233 61			3.0	3.0
Lane GrpiCap (Vpn)	409	11130	314	945	13/3	- 666 j.
v/s Ratio Prot	c0.30	0.13	c0.07	c0.31	c0.47	N#
V/siRatio Permit		0,08				0.10.9
v/c Ratio	1.17	0.28	0.35	0.88	1.00	0.21
Uniform Delay of the Min	6.44 D	21/2		836.61	32.0	18:95
Progression Factor	1.00	1.00	1.00	1.00	0.85	0.76
Incremental Delay, d2.			074	9.9	and some name	0.2
Delay (s)	145.6	5.8	41.9	46.5	47.5	14.7
LevelionService			語が相望い			B B B
Approach Delay (s)	90.7		THE REAL PROPERTY OF	45.9	42.3	
ApproachiLOS	的項目			Par Pr	i Di	
Intersection Summary						
HCM Average Control	Delay		58.3	i Muse F	ICM Lev	el of Se
HCM Volume to Capaci		ann 13 1982279 an 126	0.98	and a street with the second		en als de HVF VO BORGE (B
Actuated Cycle Length				S	umiofilo	st time
Intersection Capacity UI			87.4%	**************************************	CU Leve	of Ser
co-Gritical Lane Group				BIOK STATE		
			CALIFORNIA CONTRACTOR	in the second second	HIL MITHUR	an: Alena

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2004 PM Peak LOS without project trips 5:00 pm 10/2/2002 PM Peak Analysis IC KIRKLAWA2-ST51 HCM Signalized Intersection apacity Analysis 107: Central & Lake Street

R-4377 10/3/2002

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Moxement	. IBSII	EBR	LAWABIE:	NWARD T	NB LE	WKBR9				1. 1	ring Ling
Lane Configurations	1	۲	ሻ	† †	7	7					
Ideal Flow (vphpl)	1900	2.12 Martin 11 / 22 12 14 1	A DEPARTMENT	THE DOWNLESS	A						
Lane Width	12										
	Contraction of the second	Challen and an and	Line Subarial	In California, and the	a vistes Betaline me the	والمحلية تشتيعها فيدوينهم ويتجوينه والباركا					
	ALL A TOLEDOATE	The state of the s	ALC: NO. SHALL BRANCH	MERTIN PLANE	A CONTRACTOR OF THE REAL						
										San Continued in the	
	March Street Str	فليعت الالمعال سيريا الملا	and the second	and the state of the second	ALC: NOT DESCRIPTION OF	the second design of the secon					
			100 CT								1997 - Ser - S
	A DECK MARKED IN THE	CONTRACTOR STREAM	SECONDERING PROFESSION	CALIFORNIA COMPANY	A LOUIS DOGLESS TO A LOUIS OF	CONTRACTOR OF A CONTRACT					
	The Property of the Property of the Pro-	a superior of the course	and the lot for least	177A	ALC: NOT THE REAL PROPERTY OF					ALMAN BELIEVE	
And a state of the	CONTRACTOR OF TAXABLE PROPERTY.	The state wanted of the	Advolution in the owner of	and a little state of the second state of the	all second at the second	A REAL PROPERTY AND A REAL PROPERTY.					
			La Manaka La Provinsi a			COLUMN TWO IS NOT THE					
		44		THE PARTY OF		15123					
	10	Binti Kanada		10							illigen av
		ofn+ov+	Piot			Perm					制油
Protected Phases	6	7	5	62	7	Colling grant of this area	and inter Light Conditions of				
Remilied Phases		1. 1 . 6)									
Actuated Green, G (s)	30.0	84.9	23.1	40.3	54.9	54.9		· · · · · · · · · · · · · · · · · · ·			mant's and on I for
Effective Greenvigt (s)		86.9	Manufacture Balai 1 Striftigen	423	559	17 000 cm Line Hours 21 20 24	and and				
Actuated g/C Ratio		0.72		0.35							
	Last and the state of the state	Charles of The state of the	COLUMN TO MAN UP AND		The second s	The second s					
							VANNA NO WOOT CHARTER	6			
Lane Gro Cap (Vph)	ALL PROPERTY AND A SAME	A CALENCE AND A CONTRACT OF A CALENCE AND A	ALL DOCTORY OF THE OWNER OF	The shorts and a	1 State 1 Stat	666					
v/s Ratio Prot	c0.30		c0.07	c0.31	c0.47			State of the second second	TCOTINACIO		Conterior!
	1 1 0	CONTRACTOR OF THE OWNER OF THE OWNER	0.25	0 00	1.00						
											13MS
		Line water a		PU de la	Sand Street, Suble of	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1					
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						LE CAMPERAN ALL TENDERO	建筑和中国的 有4月11日				
Level of Service	HARREN	A	CHED.								
CALL DO NOT THE REAL PROPERTY OF THE REAL PROPERTY	91.2			46.2	42.5						
Approach LOS State	ane Configurations + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + +										
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cst Oritical Panes Group			HIN III					後で変更			
		ens spanad						SE STANTIONS		1世纪在1993年1993	and a

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2004 PM Peak Analysis with project trips 5:00 pm 10/2/2002 PM Peak Analysis IC KIRKLAWA2-ST51

HCM Unsignalized Intersection Capacity Analysis 2: Waverly Way & Market Street R-4377 10/3/2002

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Viewennteining and a		WIB BE	WIEIR22.	NB	NET	NBR	SBL	S	INSER	SEL2-	્લા	SH
_ane Configurations	<u> </u>			٦	7		5	4		17	Y	
SigniControl	Stop				Free			Free			Stop	
Grade	0%		457.745 9917 157.7654		0%	****		0%		Rentered and a second	0%	-
Volume (ven/h))	5	0.0			41304	 Dep has constructed. 	0.0	699	24		0.1.0	17- Z
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.9
lourly flow nates (veh/h) in 1955	建新年10世	011121	11. j. 31 i.	1369	in a Sil	2011年1月	736	25°	8	. 0	観念ら
Pedestrians		****							2047K \$757 # \$46978441			Service to the service state of the service state
ane Wildin (ff)												
Valking Speed (ft/s)			Arrest 100 100 100 100 100 100 100 100						783.517 100 100 100 100 100 100 100 100 100 100			
PercentiBlockage												
Right turn flare (veh)	THE REAL PROPERTY OF	****				CH1924-30700072-78				CONTRACTOR INCOMENTS		1.
Veolantypenter	n None i										None	
Median storage veh)			Marrie		an a	2312230 IL 91234						
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HCM Unsignalized Intersectic. Sapacity Analysis 32: Waverly Way & Driveway 1

R-4377 10/3/2002

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HCM Unsignalized Intersect, Capacity Analysis 21: Waverly Way & Driveway 2

R-4377 10/3/2002

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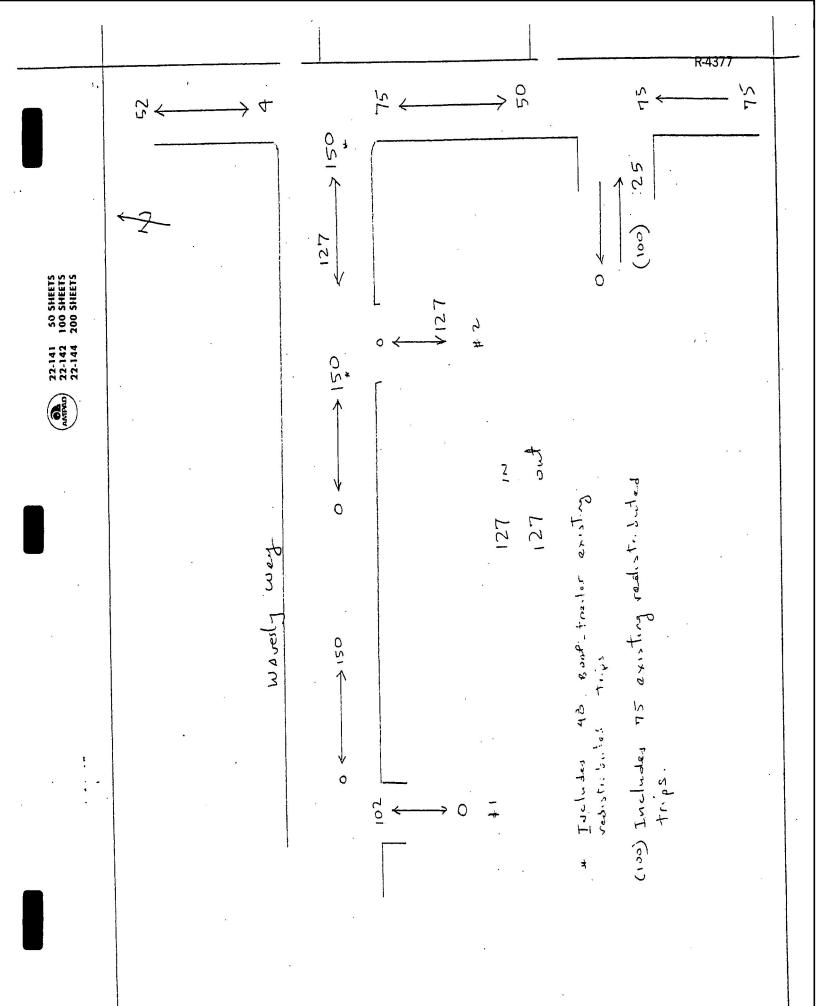
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2004 PM Peak Analysis with project trips 5:00 pm 10/2/2002 PM Peak Analysis IC KIRKLAWA2-ST51



Project Name:	Wayerly Enhancement		Through Lanes ¹
Major Street ¹	WaverlyiWay	# of Lanes*=	
Minor Street ¹	Driveway #1	# of Lanes*=	김 귀에 그렇는

¹ See "Intersection Description" worksheet for descriptions

1. May Change without notice, call staff if unsure.

DATE:

		Duny		
. Daily Project Traffic Entering the Intersection		Volumes	Entering Volumes *	
	Major Street Volume V ₁ =	75	150.5 約元 0 4 4	Major
(Total of both approaches divided by two)	Minor Street Volume $V_2 =$	51	····102/11 年回10-14年	Minor
	*Do not leave ce	ll empty fo	or zero volume	

Dally

Determine Geometric Factors

Number of Lanes			Geometric Factors				
Major Street	Minor Street	f ₁	f ₂	f ₃	f4		
2	2	1.000	1.330	1.000	1.330		
2	1	1.000	1.000	1.000	1.000		
· 1	2	0.833	1.330	0.833	1.330		
1	1	0.833	1.000	0.833	1.000		

			and the second	
f.,	f ₂	f ₃	f ₄	
0.833	1	0.833	1	

Calculate Base Percentages

P ₁ =V ₁ /(10,000 x f ₁) =	0.90%
$P_2 = V_2 / (5,000 \times f_2) =$	1.02%
$P_3 = V_1 / (15,000 \times f_3) =$	0.60%
$P_4 = V_2 / (2,500 \times f_4) =$	2.04%

Calculate Proportional Share

$S_1 = (P_1 + P_2)/2 =$	0.96%
S ₂ =(P ₃ +P ₄)/2=	1.32%

Intersection Proportional Share = Maximum of S1 and S2 = 1.32% Significant Intersection? yes

*Number of through lanes. Do not count exclusive turn lanes. Use the smaller number of lanes if the number of lanes is unequal on two legs. For Example, if one minor leg has two lanes and one minor leg has one lane, the number of lanes on the minor leg is one.

Computed By: Ins Cabrera Company: Public Works/City of Kirkland

call

Input cells in green	with appropriate information			¹ See "Intersection Description" worksheet for descriptions
Project Name:	Waverly Enhancement		Through Lanes ¹	1. May Change without notice, staff if unsure.
Major Street ¹ Minor Street ¹		# of Lanes*= # of Lanes*=		

DATE: 时间前上一时10/23/2000

		Daily		
Daily Project Traffic Entering the Intersection		Volumes	Entering Volumes *	
(Total of both approaches divided by two)	Major Street Volume V ₁ =	213.5	11-277 11-150	Major
(Total of both approaches divided by two)	Minor Street Volume $V_2 =$	63.5	9 127 - 127 - 127 - 127 - 127 - 127 - 127 - 127 - 127 - 127 - 127 - 127 - 127 - 127 - 127 - 127 - 127 - 127 - 1	Minor
	*Do not leave ce	ll empty fo	or zero volume	

Determine Geometric Factors

- Number of Lanes		Geometric Factors					
Major Street	Minor Street	f ₁	f ₂	f ₃	f4		
2	2	1.000	1.330	1.000	1.330		
2	1	1.000	1.000	1.000	1.000		
1	2	0.833	1.330	0.833	1.330		
1	1	0.833	1.000	0.833	1.000		

f ₁	f ₂	. f ₃	f ₄
0.833	1	0.833	1

Calculate Base Percentages

P ₁ =V ₁ /(10,000 x f ₁) =	2.56%
$P_2 = V_2 / (5,000 \times f_2) =$	1.27%
$P_3 = V_1 / (15,000 \times f_3) =$	1.71%
$P_4 = V_2 / (2,500 \times f_4) =$	2.54%

Calculate Proportional Share

S ₁ =(P ₁ +P ₂)/2=	1.92%
$S_2 = (P_3 + P_4)/2 =$	2.12%

Intersection Proportional Share = Maximum of S1 and S2 = 2.12% Significant Intersection? yes

*Number of through lanes. Do not count exclusive turn lanes. Use the smaller number of lanes if the number of lanes is unequal on two legs. For Example, if one minor leg has two lanes and one minor leg has one lane, the number of lanes on the minor leg is one.

Computed By: Iris Cabrera Company: Rublic Works City of Kirkland

	Waverly Enhancement	Station of the	Through
Project Name:	Waverly Enhancement		Lanes ¹
Major Street ¹	Market St.	# of Lanes*=	
Minor Street ¹	Driveway #3	# of Lanes*=	

¹ See "Intersection Description" worksheet for descriptions

1. May Change without notice, call staff if unsure.

DATE:

The product second of the second s		Daily		
Daily Project Traffic Entering the Intersection	1	Volumes	Entering Volumes *	
(Total of both approaches divided by two)	Major Street Volume $V_1 =$	150	111501171-1150312	Major
(Total of both approaches divided by two)	Minor Street Volume $V_2 =$	25	语第25日沿台的中部	Minor
	*Do not leave ce	ll empty fo	or zero volume	

Determine Geometric Factors

	Number	of Lanes		Geometric F	actors	
Major Street		Minor Street	f ₁	f ₂	f ₃	f4
2 .		2	1.000	1.330	1.000	1.330
2	·	1	1.000	1.000	1.000	1.000
1		2	0.833	1.330	0.833	1.330
- 1		1	0.833	1.000	0.833	1.000

f ₁	f ₂	f ₃	f4
0.833	1	0.833	1

Calculate Base Percentages

P ₁ =V ₁ /(10,000 x f ₁) =	1.80%
$P_2 = V_2 / (5,000 \times f_2) =$	0.50%
P ₃ =V ₁ /(15,000 x f ₃) =	1.20%
$P_4 = V_2 / (2,500 \times f_4) =$	1.00%

Calculate Proportional Share

S ₁ =(P ₁ +P ₂)/2=	1.15%	
S ₂ =(P ₃ +P ₄)/2=	1.10%	

Intersection Proportional Share = Maximum of S1 and S2 = 1.15% Significant Intersection? yes

*Number of through lanes. Do not count exclusive turn lanes. Use the smaller number of lanes if the number of lanes is unequal on two legs. For Example, if one minor leg has two lanes and one minor leg has one lane, the number of lanes on the minor leg is one.

Computed By:	Insi Cabrera
Company:	Public Works City of Kirkland

		¹ See "Intersection Description" worksheet for descriptions			
ų.		Maria (S. B.). () Shi (S. Sala	Through	1.	May Change without notice, call

Project Name:	Waverly Enhancement	
Major Street ¹	Central Way # of Lanes*= # 1	
Minor Street ¹	Lake States A states and the states	

DATE:

. . . .

		Daily		
Daily Project Traffic Entering the Intersection	1	Volumes		
(Total of both approaches divided by two)	Major Street Volume V ₁ =	125	11-150-1-1-100 J.T	Major
(Total of both approaches divided by two)	Minor Street Volume $V_2 =$	25	14 50 4 2 4 7 0 2 2	Minor
	*Do not leave ce	ll empty fo	r zero volume	

Determine Geometric Factors

Numb	er of Lanes		Geometric F	actors	
Major Street	Minor Street	f ₁	f ₂	f ₃	f4
2	2	1.000	1.330	1.000	1.330
2	1	1.000	1.000	1.000	1.000
1	2	0.833	1.330	0.833	1.330
- 1	1	0.833	1.000	0.833	1.000
f.	f.	fa	f,		

0.833

Calculate Base Percentages

0.833

$P_1 = V_1 / (10,000 \times f_1) =$	1.50%	
$P_2 = V_2 / (5,000 \times f_2) =$	0.50%	
$P_3 = V_1 / (15,000 \times f_3) =$	1.00%	
$P_4 = V_2 / (2,500 \times f_4) =$	1.00%	

1

Calculate Proportional Share

S ₁ =(P ₁ +P ₂)/2=	1.00%
S ₂ =(P ₃ +P ₄)/2=	1.00%

Intersection Proportional Share = Maximum of S1 and S2 = 1.00% Significant Intersection? yes

*Number of through lanes. Do not count exclusive turn lanes. Use the smaller number of lanes if the number of lanes is unequal on two legs. For Example, if one minor leg has two lanes and one minor leg has one lane, the number of lanes on the minor leg is one.

Computed By: Iris Cabrera

	+ LANGER	Through
Waverly Enhancement :	* 464	Lanes ¹
Market Store and the The Car	# of Lanes*=	1 1 1 1 1 1
Waverly Way	# of Lanes*=	ng ration

¹ See "Intersection Description" worksheet for descriptions

1. May Change without notice, call staff If unsure.

......

DATE:

· · · · ·

Project Name:

Major Street¹ Minor Street¹

DailyDailyDaily Project Traffic Entering the IntersectionVolumes Entering Volumes *(Total of both approaches divided by two)Major Street Volume $V_1 = 102$ 102(Total of both approaches divided by two)Minor Street Volume $V_2 = 138.5$ 277.4*Do not leave cell empty for zero volume

Major

Minor

Determine Geometric Factors

Numb	er of Lanes		Geometric F	actors	
Major Street	Minor Street	f ₁ * -	f ₂	f ₃	f4
2	2	1.000	1.330	1.000	1.33
2	· 1	1.000	1.000	1.000	1.00
·1- ·	2	0.833	1.330	0.833	1.33
. 1	1 .	- 0:833	1.000	0.833	1.00

f ₁	f ₂	f ₃	· fa	ľ
0.833	1	0.833	1	· · • ••••

Calculate Base Percentages

$P_1 = V_1 / (10,000 \times f_1) =$	1.22%	
$P_2 = V_2 / (5,000 \times f_2) =$	2.77%	
$P_3 = V_1 / (15,000 \times f_3) =$	0.82%	
$P_4 = V_2/(2,500 \times f_4) =$	5.54%	

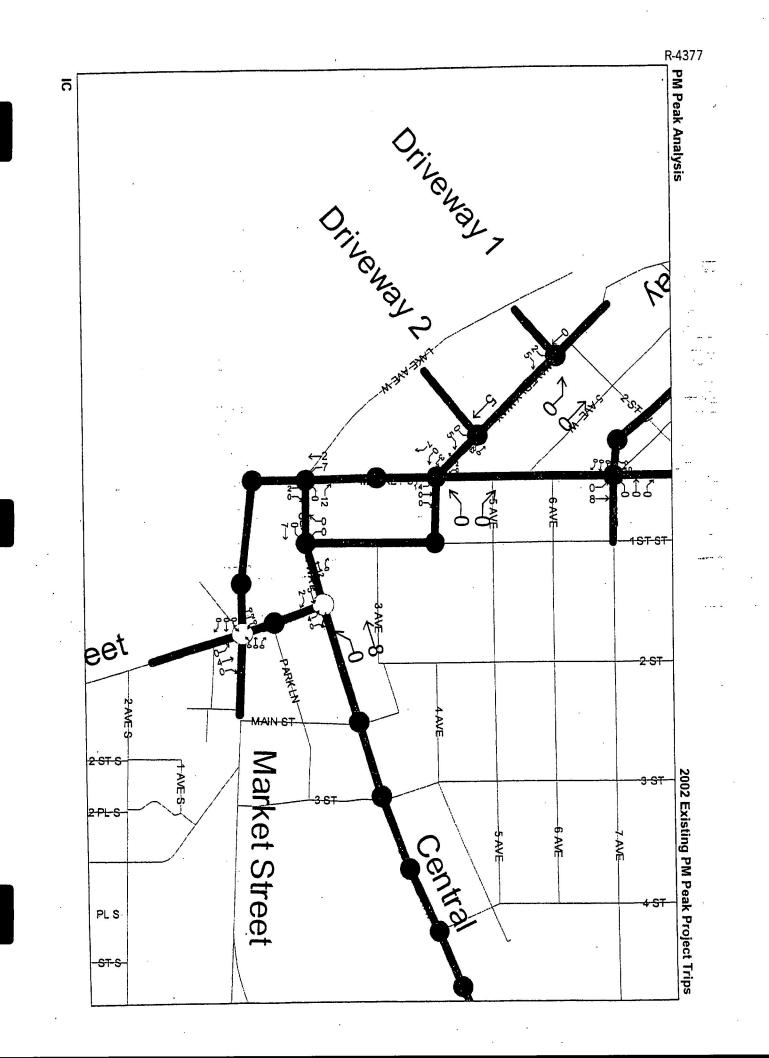
Calculate Proportional Share

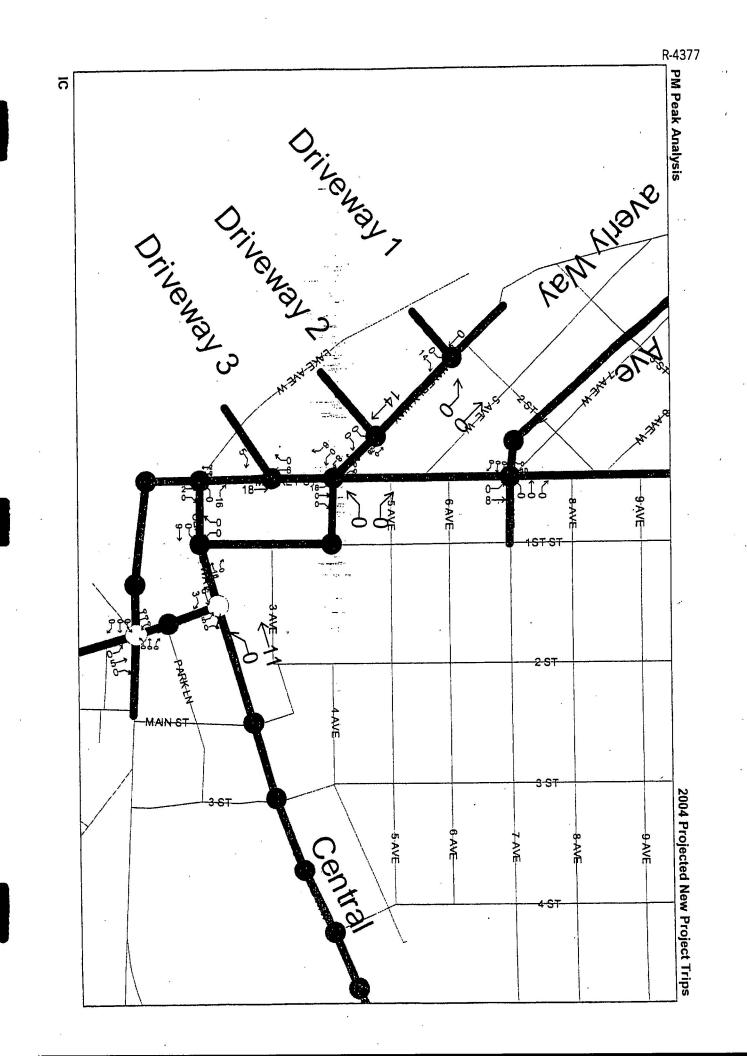
S ₁ ⁼ (P ₁ +P ₂)/2=	2.00%
$S_2 = (P_3 + P_4)/2 =$	3.18%

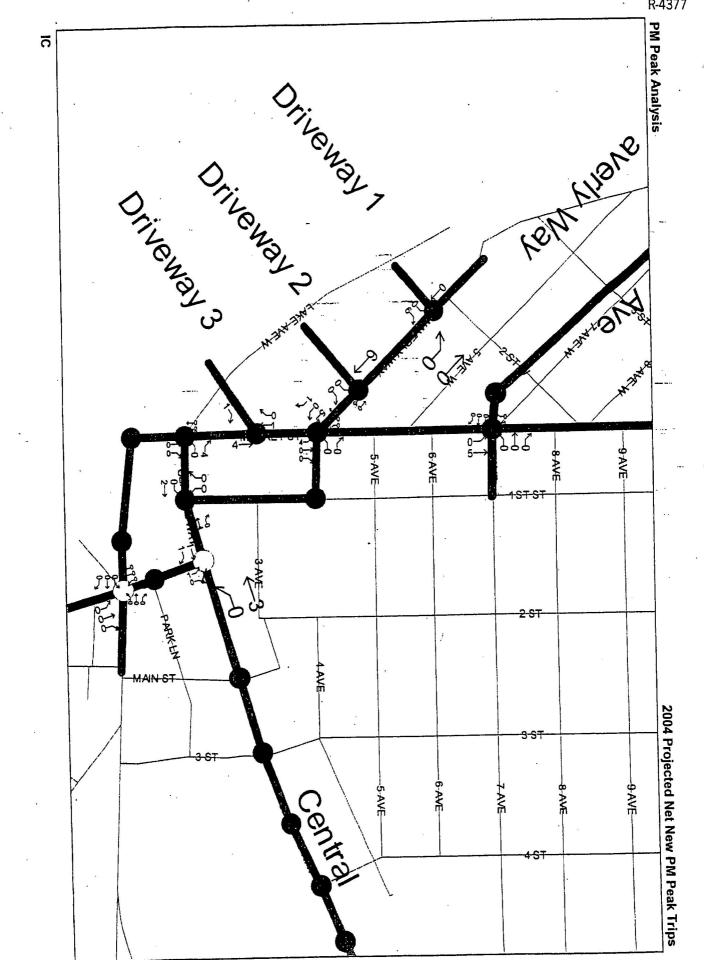
Intersection Proportional Share = Maximum of S1 and S2 = 3.18% Significant Intersection? yes

*Number of through lanes. Do not count exclusive turn lanes. Use the smaller number of lanes if the number of lanes is unequal on two legs. For Example, if one minor leg has two lanes and one minor leg has one lane, the number of lanes on the minor leg is one.

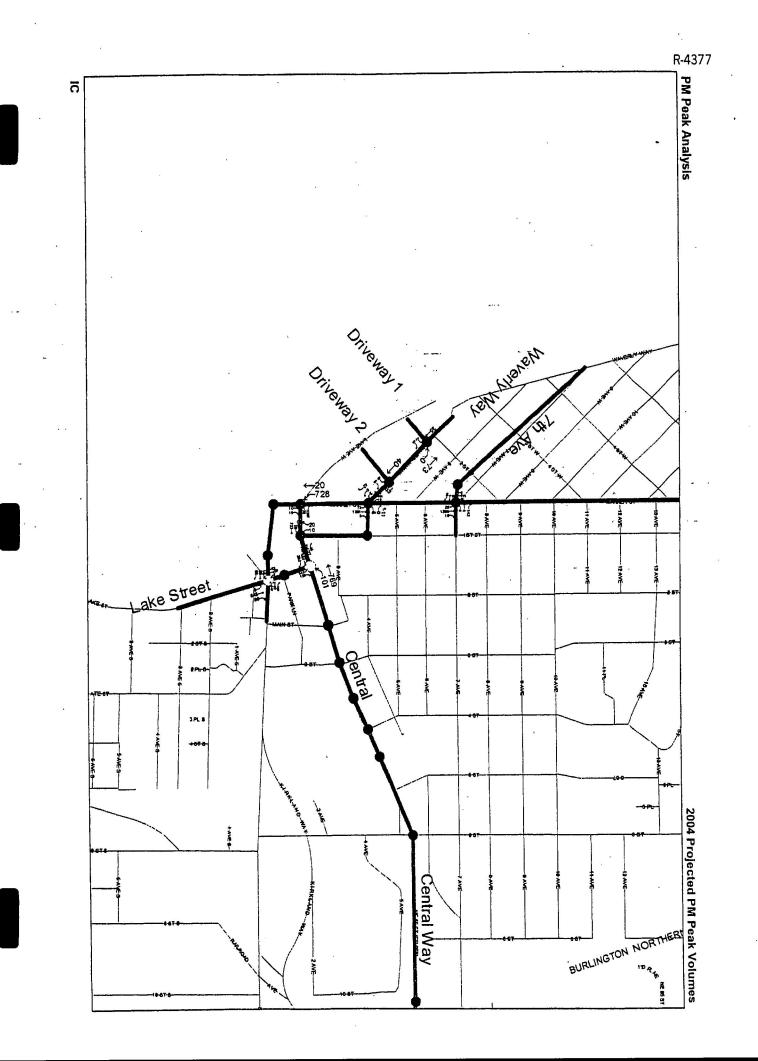
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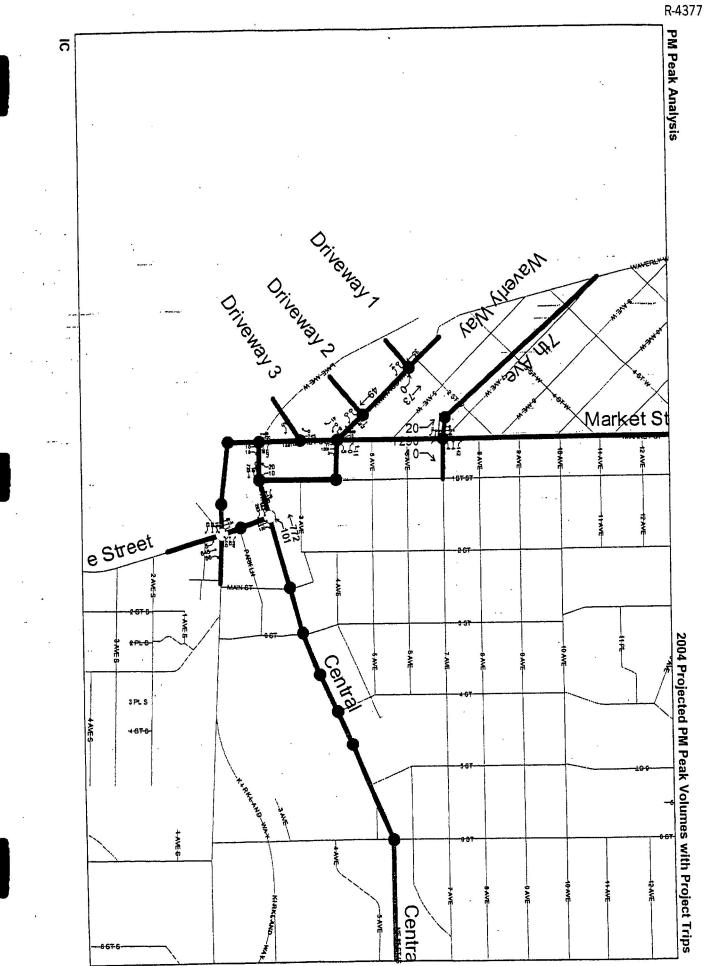






R-4377





CITY OF KIRKLAND

123 FIFTH AVENUE • KIRKLAND, WASHINGTON 98033-6189 • (425) 828-1243

DEPARTMENT OF PUBLIC WORKS MEMORANDUM

To: Stacy Clauson, Planner

From: Thang Nguyen, Transportation Engineer

Date: November 7, 2002

Subject: Waverly Park Enhancement Project

This memo summarizes public works review of the proposed Waverly Park Enhancement project traffic impacts.

Project Description

The enhancement of Waverly Park includes relocating two tennis courts, opening of the Historic Building, and enhancement of the park grounds. The parking lot will be reconfigured to provide access from Waverly Way and Market Street. Additional parking for up to 21 boat-trailers will be provided on-site. The project is anticipated to be complete at the end of 2005.

Traffic Concurrency

The project passed traffic concurrency on May 8, 2002 and its concurrency test notice will expire on May 8, 2003.

Trip Generation

Based on ITE Trip Generation information and information from the Parks Department, the proposed project is forecasted to generate 254 daily trips and 12 PM peak hour trips.

Trip Distribution and Assignment

. The trip distribution and assignment are based on trip allocation from the City BKR traffic model.

Significant Intersection

Per the City's Traffic Impact Analysis Guidelines, intersections impacted with new project trips by 1% or more are considered significant and further analysis are required. Two intersections and the three project driveways meet the requirement. Table 2 below summarizes the results of the proportionate share analysis.

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Memorandum to Stacy Clau 1 November 7, 2002 Page 2 of 4

Table 1 Proportionate Share Analysis Results

Intersection

Proportionate Share

1) Waverly Way at Market St3.18 %2) Central Way at Lake Street1.00 %3) Waverly Way at Driveway 11.32 %4) Waverly Way at Driveway 22.12 %5) Market Street at Driveway 31.15 %

LOS Analysis

Level of service analyses were calculated for the significant intersections. Based on the level of service analyses, the driveways are forecasted to operate at LOS-A. The intersection of Waverly Way/Market Street will operate at LOS-A with the eastbound approach operating at LOS-F. The intersection of Central Way/Lake Street is forecasted to operate at LOS-E with and without the project.

In accordance to the Kirkland Traffic Impact Analysis Guidelines, mitigation is required when a development project traffic impact has a proportional share of 15% and the level of service of the impact intersection is LOS-E or when a development project traffic impact has a proportional share of 5% and the level of service of the impact intersection is LOS-F. The proposed project impacts to the significant intersections are less than 5%. Thus, specific off-site mitigation is not required.

Parking Demand Analysis

A Parking demand analysis was completed for the existing Waverly Park. The results indicate that the peak demand occur during the PM peak hour in the summer. At present, there is sufficient parking on-site to meet the demand.

Based on the traffic report, it appears that there will be sufficient parking on-site to meet the peak demand of Waverly Park. Although there will be designated on-street parking along the Park frontage for park users, the reduction in parking supply on-site will require other non-Waverly Park users to park on-street elsewhere. The traffic report indicates that 21 of those other non-Waverly Park users may impact near-by neighborhood streets.

An on-street parking utilization was conducted to assess the impact of those 21 non-Waverly Park users. The study area is defined as "within walking distance (500 feet) of the project site". Based on the results of the parking utilization study, there are 267 on-street parking stalls in the study area. The peak use of on-street parking in the study area was at noon and the utilization rate is 27% (72 spaces). Thus, 73% of the spaces (195 spaces) are not used.

Memorandum to Stacy Cla n November 7, 2002 Page 3 of 4

The parks department is contemplating on restrict parking on the north side of Waverly Way. If parking is remains on the north side of Waverly Way, then there will be a supply of 267 parking spaces. With the future demand, 27% of those spaces (59spaces) would be utilized and 208 spaces would be availabled. If parking is restricted, then the on-street parking supply in the study area would drop to 236 spaces. With the future demand, 25% of those spaces (59 spaces) would be utilized and 177 spaces would be availabled. In the worse case scenario, the neighborhood on-street parking supply would be impacted by approximately 9% (21 spaces). This impact is not significant.

Traffic Safety & Driveway Operation

Sight distance analyses were conducted for the project driveways. Based on the results, there is sufficient sight distance. All driveways are forecasted to operate at LOS-A. Traffic accident records suggest that the project driveways and analyzed intersections will operate safely.

The City of Kirkland Standard requires that driveways be located at least 75 feet away from intersecting arterial street. The current proposed location of the east driveway off Waverly Way does not meet this requirement. Furthermore, the traffic report suggests that there may be a potential for eastbound traffic queue at Waverly Way/Market Street to block the proposed project east driveway and impede westbound traffic flow. The traffic report suggests that the east driveway be located at least 100 feet away from the intersection of Waverly Way/Market Street. Staff concurs with the recommendation of the traffic report.

Furthermore, staff recommends that the eastbound queue at Waverly Way/Market Street be monitored after the completion of project and traffic has stabilized. If traffic queue blocks the site driveway, then a more detail analysis should be conducted to determine if a separate right and left-turn lanes would be necessary to eliminate the blocking.

The traffic report suggests removing four to six parking spaces on Market Street between Waverly Way and the project driveway off Market Street. Staff concurs with the suggestion and recommends removing four parking spaces north of the driveway. Furthermore, a sight distance analysis should be re-evaluated after the construction of the driveway to determine if removal of additional parking spaces are needed to provide sufficient sight distance.

Road Impact Fees

Per City's Ordinance 3685, Traffic Impact Fees per Impact Fee Schedule in effect June 14, 1999 are required for all developments. Since there is no specific fee rate for City Park, impact fee shall be assessed based on the actual PM peak trip generation. The proposed project is forecasted to generate 12 new trips. The fee rate per trip is \$877. Thus, the assessed impact fee for the proposed project is \$10,524 (12 x & 877). The final traffic fee will be determined at time of building permit issuance.

Memorandum to Stacy Cla 1 November 7, 2002 Page 4 of 4

Staff Recommendations

Staff recommends approval of the project with the following conditions:

- Pay Road Impact Fees.
- Relocate the east driveway off Waverly Way to at least 100 feet west of the intersection of Waverly Way/Market Street.
 - Monitor the operation of Waverly Way/Market Street to ensure that queue does not significantly block the project east driveway and impede westbound traffic flow.
 - Remove four parking spaces north of the proposed project driveway off Market Street.
 - Evaluate sight distance at the driveway off Market Street after it has been constructed to determine if additional parking spaces between the driveway and Waverly Way will need to be removed to ensure safe sight distance.

Cc: Michael Cogle, Parks Planning Manager John Burkhalter, Development Engineer Iris Cabrera, Transportation Engineer

R-4377

CITY OF KIRKLAND

123 FIFTH AVENUE . KIRKLAND, WASHINGTON 98033-6189 . (425) 828-1243

DEPARTMENT OF PUBLIC WORKS MEMORANDUM

To: Stacy Tucker, Planner

From: Thang Nguyen, Transportation Engineer 🕫

Date: April 8, 2002

Subject: Waverly Park Enhancement Project

The purpose of this memo is to inform you that the proposed Waverly Park Enhancement project has passed traffic concurrency. The enhancement of Waverly Park includes adding two tennis courts, the Historic Building, additional parking for up to 19 boat-trailers. The project is anticipated to be complete at the end of 2005.

Attached is the Concurrency Test result. This memo will serve as the concurrency test notice for the proposed project. Per *Section 25.10.020 Procedures* of the KMC, this Concurrency Test Notice will expire in one year (May 8, 2003) unless a development permit and certificate of concurrency are issued or an extension is granted.

EXPIRATION

The concurrency test notice shall expire and a new concurrency test application is required unless:

- 1. A complete SEPA checklist, traffic impact analysis and all required documentation are submitted to the City within 90 calendar days of the concurrency test notice.
- A Certificate of Concurrency is issued or an extension is requested and granted by the Public Works
 Department within one year of issuance of the concurrency test notice. (A Certificate of Concurrency is
 issued at the same time a development permit or building permit is issued if the applicant holds a valid
 concurrency test notice.)
- 3. A Certificate of Concurrency shall expire six years from the date of issuance of the concurrency test notice unless all building permits are issued for buildings approved under the concurrency test notice.

APPEALS

The concurrency test notice may be appealed by the public or agency with jurisdiction. The concurrency test notice is subject to an appeal until the SEPA review process is complete and the appeal deadline has passed. Concurrency appeals are heard before the Hearing Examiner along with any applicable SEPA

Memorandum to Stacy Tucter May 8, 2002 Page 2 of 2

appeal. For more information, refer to the Kirkland Municipal Code, Title 25. If you have any questions, please call me at x2901.

Cc: Michael Cogle, Parks Planning Manager John Burkhalter, Development Engineer 2002 concurrency test template

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Based on Crincal Movement, Planuing Memod TRC #212.
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R-4377

CITY OF KIRKLAND

123 FIFTH AVENUE . KIRKLAND, WASHINGTON 98033-6189 . (425) 828-1257

DEPARTMENT OF PARKS AND COMMUNITY SERVICES MEMORANDUM

To:	Stacy Tucker, Planner
From:	Michael Cogle, Community Services Ma

June 29, 2002

Subject: Waverly Park Site Phasing Plan

Phase I

Date:

Phase I involves occupancy of the historic building on the site. Occupancy would initially occur in the lower level of the building once all required permits, up to and including an occupancy permit, were obtained.

Use of the building's lower level will be as a resource center organized by the Kirkland Heritage Society. The use by the organization's volunteers will be on an irregular basis, and the building will not house any regular or full-time employees.

Additional building renovation will be necessary to ensure occupancy of the building's upper floor, which will happen at a later time. The upper floor will be used as a community facility, primarily for meetings and social events. The maximum occupancy load for the upper floor is 61.

Use of the upper level will be primarily on evenings and weekends, for neighborhood and business association meetings, City-sponsored meetings and related activities, and private rental functions booked by the Parks and Community Services Department.

Parking during phase I will be accommodated in the existing gravel lot in the park. Public Works Dept. has authorized the creation of an ADA parking space on Market Street next to the building.

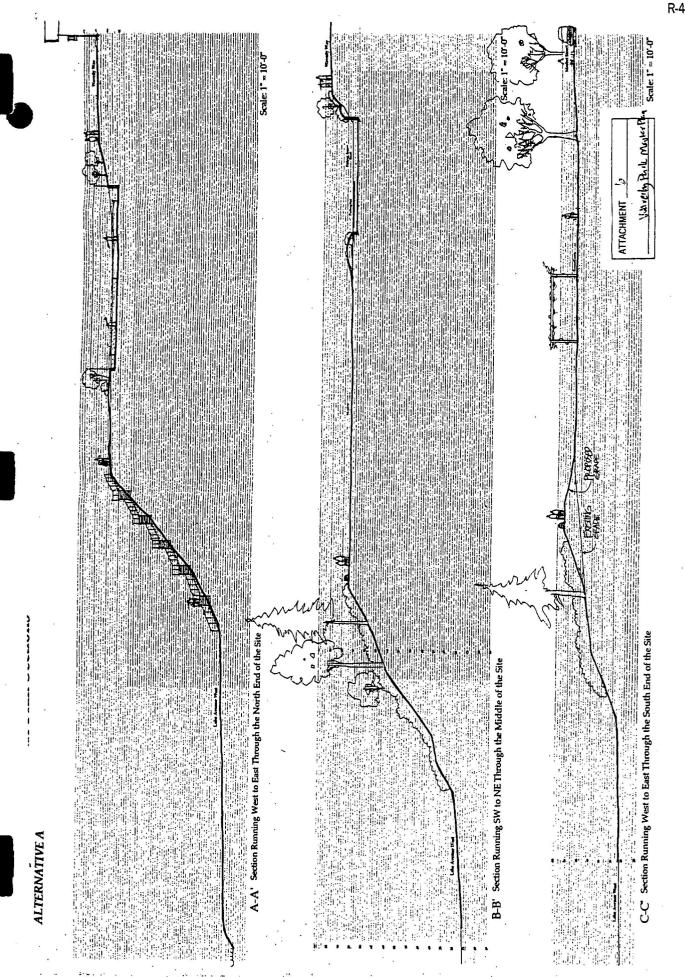
Phase II

The second phase of the project will be development of the park plan itself. Currently, the City does not have funding for the project, so a completion date is unknown at this time. It is possible that park improvements could be completed in phases over the coming years, based on available City and grant funding.

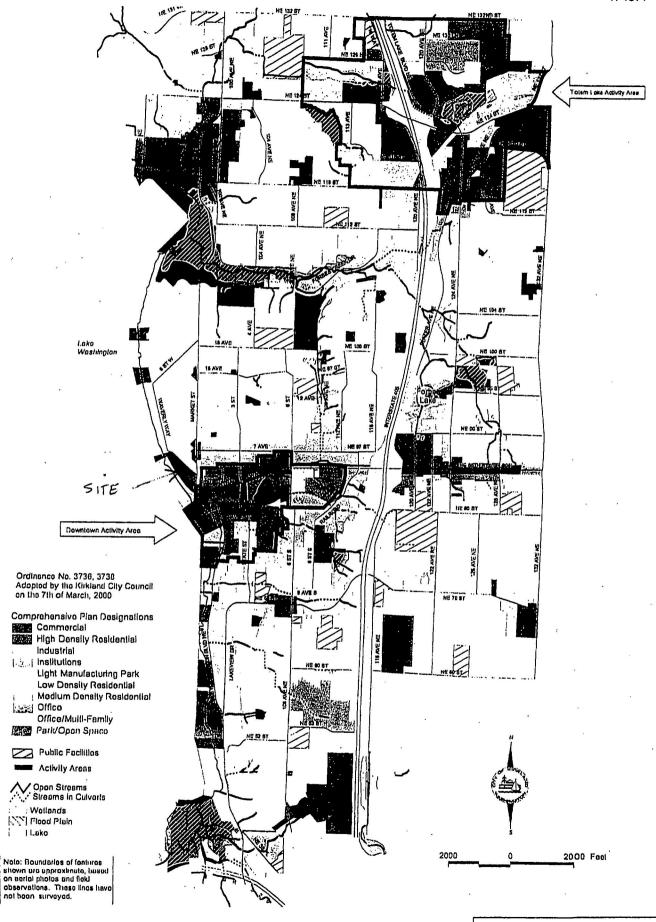
P Standards	Allowed/Required	Proposed	
Use	Public Park	Public Park containing natural, landscaped and developed areas.	
Process	Community review process	Community review process	
Lot Size	None	Approximately 449,623 square feet (10.32 acres).	
Front Yard	Determined on a case-by-case basis	Approximately 40 feet from property line adjoining Waverly Way to restroom.	
	a. B	Approximately 20 feet from property line adjoining Waverly Way to tennis courts.	
		Historic building remains in current location.	
Side Yard	Determined on a case-by-case basis	Not applicable.	
Rear Yard	Determined on a case-by-case basis	Not applicable.	
Lot Coverage	Determined on a case-by-case basis	Less than 15 percent of the site.	
Building Height	Determined on a case-by-case basis	Existing historic building to be tallest structure on-site.	
Landscape Category	N/A	N/A	
Sign Category	N/A	N/A	
Required Parking	The P zone does not specify a parking space requirement for Public Parks. As a result, the parking requirement is determined on a case-by-case basis.	See Section II.D in the staff analysis.	

Use Zone Chart Compliance - Zoning Code Section 60.15.010 (P zone)

ATTACHMENT	
Warerby Park Masteri	Prin



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ATTACHMENT		/
Naverly	Park	marter Plan

XV.J. MARKET/NORKIRK/HIGHLANDS 2. MARKET NEIGHBORHOOD

pathways in the Market area should be established according to the designations in Figure MNH-5. A pedestrian/bicycle pathway (perhaps with scenic view stations overlooking Lake Washington) should be established along the west side of Waverly Way. This element of the trail system would provide uninterrupted pedestrian/bicycle access between Marina Park and Waverly Park.

F. PUBLIC SERVICES/FACILITIES

Public sownership and use of the former Kirkland Junior High School site should be continued Redevelopment must be compatible with nearby low-density residential uses.

The site of the former Kirkland Junior High School is presently owned by the Lake Washington School District. The property is now being used as a center for vocational education. Much of the land is also available for public recreational use. This Comprehensive Plan recommends continued public ownership and public use of the site. Redevelopment could include governmental office space, expanded public recreational opportunities, a community center, or some combination of the above. In any case, substantial amounts of public open space must be maintained, and development along Waverly Way must have a low-rise configuration to blend with nearby residential uses.

Deficiencies in sewer, water, or drainage systems are to be corrected prior to occupancy of new development. Surface runoff is to be minimized.

Sanitary sewer service is considered to be inadequate in older parts of the Market area because the existing sewer lines are old and will have to be replaced within the next 15 to 20 years. Isolated problems may also exist with regard to water service and storm drainage in the Market area. These system deficiencies should not necessarily prohibit additional development in the Market area. However, prior to occupancy of new development, the sewer and water lines must be upgraded and/or extended as necessary to meet the requirements of land uses designated in Figure MNH-2 (see Public Services/Facilities: Water and Sewage Systems Policy 1 and Policy 2). If drainage problems exist, they too- must be corrected prior to occupancy of new development. Methods should be implemented to maintain surface runoff at predevelopment levels (see Public Services/Facilities: Drainage Policy 2).

Undergrounding of utilities is to be actively encouraged.

In order to contribute to a more amenable and safe living environment as well as to enhance views and a sense of community identity, the undergrounding of utilities is to be actively encouraged (see Public Services/Facilities: Quasi-Public Utilities Policy 2, Community Goals and Policies Policy 2, and Open Space/Parks Policy 2).

Existing circulation patterns are to be maintained.

Vehicular circulation patterns are well established in the Market area and reflect the residential character of the neighborhood (see Figure MNH-6).

Through traffic is accommodated by Market Street with virtually no impact on the majority of residences. No major changes are proposed for circulation patterns in the Market area.

Major pedestrian and bicycle pathway system is to be enhanced.

Pedestrian and bicycle pathways are also important elements of the circulation network. Such pathways should be enhanced according to the designations in Figure MNH-5. In addition to these major designations, sidewalks or other small-scale improvements are encouraged to facilitate pedestrian and bicycle travel in the Market area.

XV.J.J.2	City of Kir	ATTACHMENT 9
		Moverly Park Master PE-

R-4377

XV.J. MARKET/NORKIRK/HIGHLANDS 2. MARKET NEIGHBORHOOD

- (a) Structures adjacent to single-family areas may not exceed a height normally associated with single-family houses. The height of structures should be kept as low as possible as measured from Market Street to prevent significant view obstructions.
- (b) Development along Market Street should not significantly alter the exterior appearance of historic buildings. Restoration of such buildings is encouraged.
- (c) Signing and lighting are to be controlled to be compatible with surrounding scale.
- (d) Primary vehicular access must be directly to and from Market Street or side streets.
- (e) Office development is required to provide large, densely landscaped setbacks as a visual buffer between residential and nonresidential uses. Parking would not be allowed in this setback area.
- (f) The dedication of development rights to the City in the required buffer strip around the development facing the low-density residential areas.

E. OPEN SPACE/PARKS

Public lands do not adequately meet the park and open space needs of Market area residents.

There is a need for a neighborhood park in the Market area. At present, the only public lands in the vicinity are two waterfront parks (Waverly and Kiwanis Parks) and the former Kirkland Junior High School site (see Figure MNH-5). The waterfront parks serve a limited function since access is poor and the unattended beaches pose hazards for children. The Junior High School site may continue to serve park and open space functions.

Undeveloped private land may informally meet certain needs. The City should acquire land and develop a neighborhood park near the central portion of the Market area.

At the present time, small parcels of undeveloped private property may informally meet certain recreation and open space needs. However, there is no assurance such private land will continue to be available for such purposes. For all the reasons listed above, the City should acquire land and develop a neighborhood park facility somewhere near the central portion of the area west of Market Street.

Open space value of streets is to be recognized.

One important open space of great community value is often overlooked. The street system provides Kirkland's neighborhoods with a number of excellent local and regional views. Such view corridors lie within the public domain and are valuable for the beauty, sense of orientation, and identity they impart (see Community Goals and Policies Policy 2 and Open Space/Parks Policy 2). Such view corridors are to be identified, preserved, and enhanced. One means to this end may be the undergrounding of utilities (see Public Services/Facilities: Quasi-Public Utilities Policy 2).

Major pedestrian and bicycle system is discussed.

Pedestrian and bicycle pathways are also part of the park and open space system, in addition to providing a transportation function. Major

City of Kirkland Comprehensive Plan	ATTACHMENT 8	XV.J-11
	Warrenty Parle Majer Plan	



City of Kirkland Zoning Code Special Regulations Provisions for the Review of Park Master Plans

- Except as provided for in Special Regulation 2 below, any development or use of a park must occur consistent with a master plan. A master plan shall be reviewed through a community review process, established by the Parks and Community Services Director, which shall include at a minimum:
 - a) One formal public hearing, conducted by the Parks Board, preceded by appropriate public notice. The required public hearing on a master plan within the Houghton Community Municipal Corporation shall be conducted by the Houghton Community Council, which may be a joint hearing with the Parks Board.
 - b) The submittal of a written report on the proposed master plan from the Parks Board to the City Council, containing at least the following:
 - i) A description of the proposal;
 - ii) An analysis of the consistency of the proposal with adopted Comprehensive Plan policies, including the pertinent Park and Recreation Comprehensive Plan policies;
 - iii) An analysis of the consistency of the proposal with applicable development regulations, if any;
 - iv) A copy of the environmental record, if the proposal is subject to the State Environmental Policy Act;
 - v) A summary and evaluation of issues raised and comments received on the proposed master plan; and
 - vi) A recommended action by the City Council.
 - c) City Council review and approval. The City Council shall approve the master plan by resolution only if it finds:
 - i) It is consistent with all applicable development regulations and, to the extent there is no applicable development regulation, the Comprehensive Plan; and
 - ii) It is consistent with the public health, safety and welfare.
 - iii) If the master plan is proposed within the Houghton Community Municipal Corporation, it shall become effective according to the procedure in KMC 2.12.040.

In addition to the features identified in KZC 5.10.505^{co}, the master plan shall identify the following:

- a. Location, dimensions, and uses of all active and passive recreation areas.
- b. Potential users and hours of use.
- c. Lighting, including location, hours of illumination, lighting intensity, and height of light standards.
- d. Landscaping.
- e. Other features as appropriate due to the character of the neighborhood or characteristics of the subject property.
- 2) Development and use of a park does not require a master plan under this Code if it will not involve any of the following:
 - a) Lighting for outdoor nighttime activities.
 - b) The construction of any building of more than 4,000 square feet.
 - c) The construction of more than 20 parking stalls.
 - d) The development of any structured sports or activity areas, other than minor recreational equipment including swingsets, climber toys, slides, single basketball hoops, and similar equipment.

•• KZC 5.10.505 states the definition of a Master Plan: A complete development plan for the subject property, showing placement, dimensions, and uses of all structures as well as streets and other areas used for vehicular circulation.

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Waverly Park Master Plan

Acknowledgements

Kirkland City Council

Larry Springer, Mayor Joan McBride, Deputy Mayor Dave Asher Mary-Alyce Burleigh Sants Contreras Tom Dillon James Lauinger

Dave Ramsay, City Manager

Park Board (December 2002)

Bob Sternoff, Chair Cindy Zeck, Vice Chair Tory Haschak Chuck Bartlett Kevin Hanefeld Colleen Cullen Jeff Trager Liz Pachaud

Waverly Advisory Group

John Hurney, Boating Community Margaret Carnegie, KAN Michael Radcliff, Heritage Society Reed Walton, Youth Council Karen Lightfelt, KDA Dwight Altenburg, Citizen-at-Large Chuck Bartlett, Market Neighborhood Assoc. Bob Montgomery, Sports organizations Garin Wedeking, Youth Council Merrily Dicks, Kirkland Arts Center Cindy Zech, Park Board Rick Seim, Lake Avenue West Residents

Parks and Community Services Department Staff

Barry Russell, Director of Parks and Community Services Michael Cogle, Park Planning Manager Teresa Sollitto, Park Projects Coordinator

Other City Staff

Stacy Clausen, Planning Department Rob Jammerman, Public Works Thang Nguyen, Public Works Iris Cabrera, Public Works

Design Consultant

John Barker, Barker Landscape Architects Paige Crutcher, Barker Landscape Architects