

RESOLUTION R-5135

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

1 WHEREAS, in 2011 the City of Kirkland assumed ownership from
2 King County of the 26-acre public property known as Edith Moulton
3 Park; and
4

5 WHEREAS, in 2012 citizens of Kirkland voted to approve a
6 Kirkland Parks Levy to provide ongoing funding for park maintenance
7 and park improvements; and
8

9 WHEREAS, a portion of Kirkland Parks Levy funds have been
10 appropriated to develop and implement a Master Plan for Edith Moulton
11 Park; and
12

13 WHEREAS, the Park Board and Department of Parks and
14 Community Services organized and completed an extensive planning
15 process to create a vision for the future of Edith Moulton Park, involving
16 important stakeholders and interested citizens; and
17

18 WHEREAS, the Department of Parks and Community Services
19 has completed the Edith Moulton Park Master Plan; and
20

21 WHEREAS, the City Council has received from the Park Board a
22 written report and recommendation on the proposed Edith Moulton Park
23 Master Plan; and
24

25 WHEREAS, investments in Edith Moulton Park will enhance the
26 level of service of Kirkland's park system to help meet the current and
27 future needs of Kirkland residents; and
28

29 WHEREAS, in regular public meeting the City Council considered
30 the written report and recommendation of the Park Board.
31

32 NOW, THEREFORE, BE IT RESOLVED that the City Council of
33 the City of Kirkland adopts the Edith Moulton Park Master Plan
34 recommended by the Park Board and set forth in Exhibit A to this
35 Resolution.
36

37 Passed by majority vote of the Kirkland City Council in open
38 meeting this 7th day of July, 2015.
39

40 Signed in authentication thereof this 7th day of July, 2015.


Mayor

Attest:

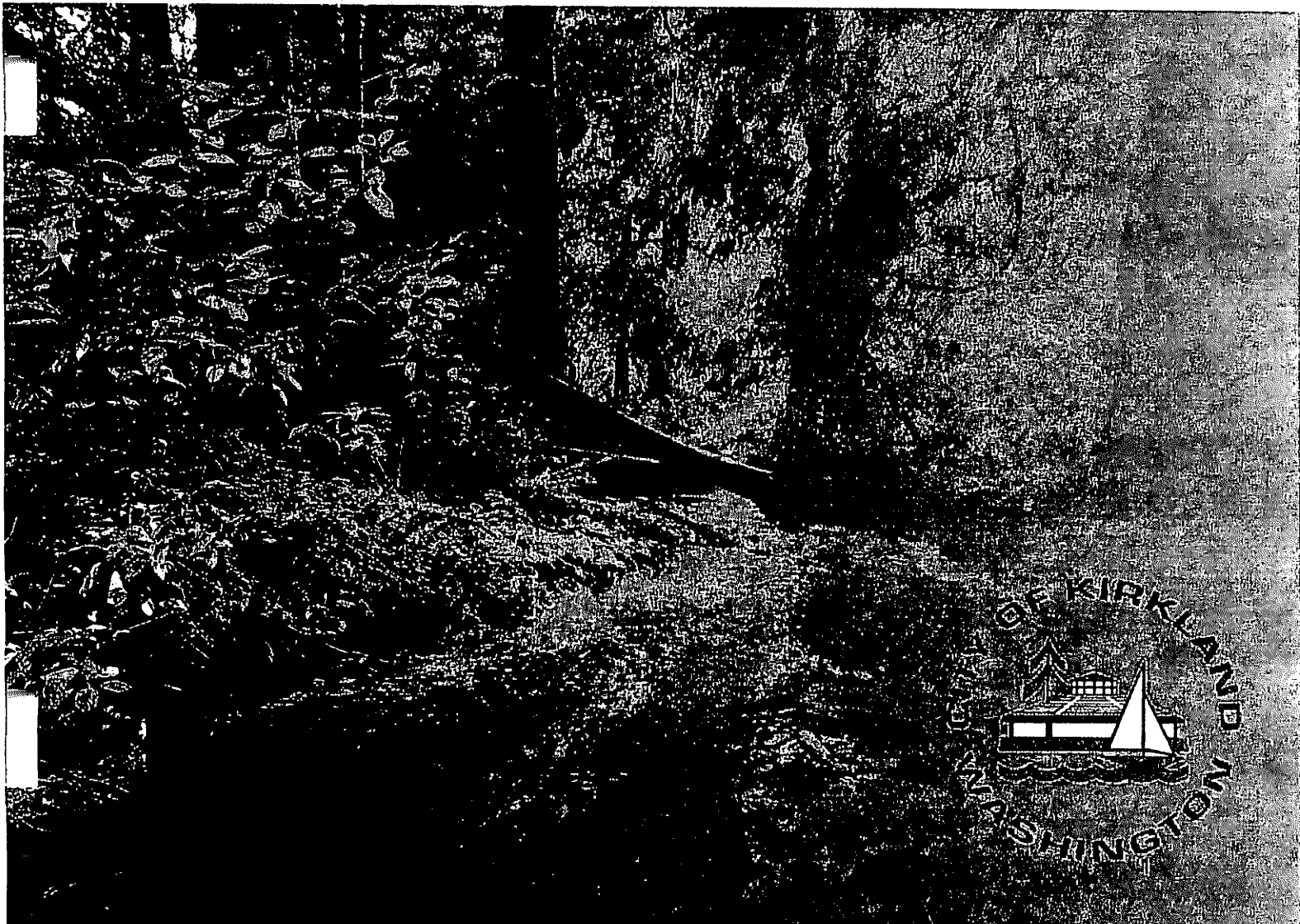
Kevin Anderson
City Clerk



Edith Moulton Park

Schematic Master Plan

FEBRUARY 2015



INTRODUCTION

Project Description

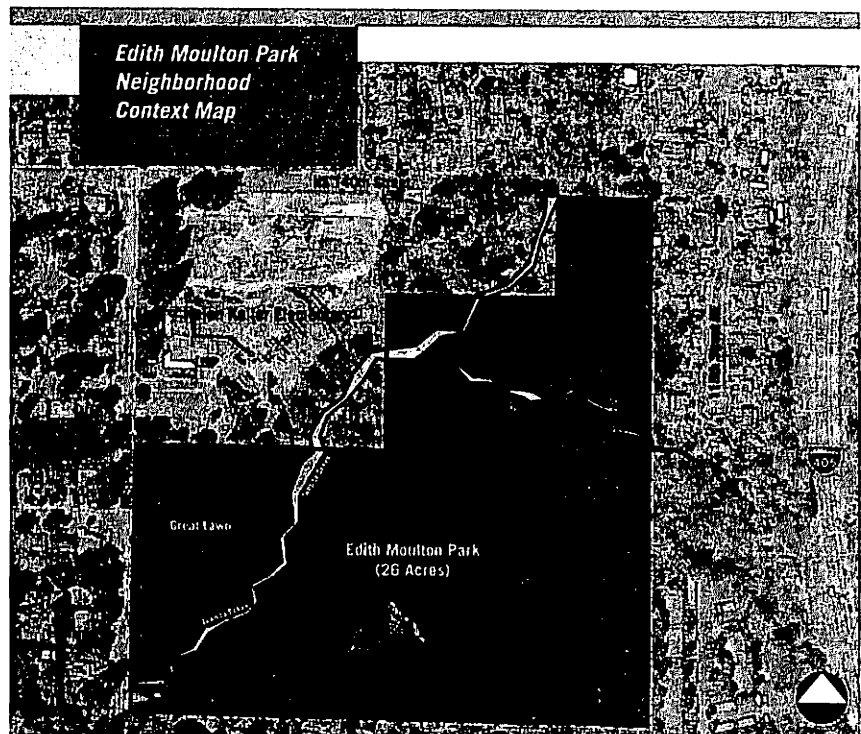
Edith Moulton Park is a 26-acre remnant farm parcel that was initially developed as a park by King County. The park is located at 108th Avenue NE and NE 137th Street in a newly annexed portion of the Juanita Neighborhood of Kirkland. The park contains mature forested areas, wetlands, Juanita Creek and a tributary, a degraded access drive and parking lot, lawn area, and small picnic shelters. The park is crossed by a number of footpaths. The park is in a residential neighborhood adjacent to Helen Keller Elementary School and other schools are located nearby.

Edith Moulton, who grew up on the property and experienced farm life there, donated it to King County in the 1960s with the objective of saving some natural areas as places for children to play.

Funding for the creation and implementation of a new vision for Edith Moulton Park will be by voter-approved park levy funds. The preliminary budget of \$1 million may be distributed as follows:

- \$100,000 for design by December 2013
- \$100,000 for design by December 2014

Project Background



- \$800,000 for construction in 2015

HISTORY OF SITE

Jennie and Jeanie Moulton lived on the Moulton family farm from approximately 1900 until their deaths in 1934 and 1954,

respectively. Historic photographs depicting the Moulton family and farm can be found in Historic Resources Report prepared by Historical Research Associates in January 2014.

In 1920, the Moulton family was briefly honored by an attempt to rename the road in front of their property. The ½ mile section

of what is now 108th Avenue NE, which runs north and south along the border of the Moulton property, was to be renamed Miss J. E. Moulton Road after Edith's aunt Jeanie in 1920. Though it appears from County records that the renaming proposition was ultimately rejected, the road appears as such in an early copy of the Atlas of Seattle.

Assessor's records from 1939 describe the Moulton family residence as a single-family dwelling, 1 ½ stories tall, with four rooms on the first floor and three rooms above (Figure 4.2 and 4.3 in the Historic Resources Report). The house included three modest, single-story porches. Materials were simple—wood

floors, plasterboard walls or bare studs, a stone fireplace, a shingle roof, and exterior walls clad in shiplap. There was no plumbing in the house and associated buildings included an outhouse and storage shed. The house never included electricity or a telephone. Historic photos show a modest Craftsman-style bungalow with wide eaves supported by knee braces, recessed porches, and mature plantings near the entry. The record also refers to 15 fox pens made of construction wire. The foxes shared the property with what the assessor's record refers to as a combination of orchard, cleared pasture, uncleared stump land, and 2nd growth.

Edith Moulton retained her association with the farm throughout her life. Though she was a busy, working woman, she returned to the farm on weekends, and cared for the property after Jennie Moulton passed away in 1934, and Jeannie passed away in 1954. After 1954, the house stayed empty except during the times when Edith stayed there.

Edith Moulton was negotiating the sale of her property to King County for a public park when she was diagnosed with breast cancer in the early 1960s. She realized that her health was worsening and would not have the opportunity to benefit from the sale of the land, wrote Tvrdy. Upon her death on September 20, 1967, at the age of 69, Edith Moulton willed her 20-acre property to King County to be used as a public park.

Today, Edith Moulton Park encompasses 26 acres with expanses of maintained lawns, forested areas, trails, parking lots, and a long gravel path on the former driveway. The park is bordered by residential development and a local elementary school. None of the former buildings associated with the Moulton family property remain. The farmhouse was destroyed during a fire a year after Edith Moulton's death and was later removed. Evidence of the other features associated



Edith Moulton (Left)

with the property may have been modified or removed during renovations by King County in the late 1960s and thereafter. Other modifications include improvements to walking paths/trails and the existing driveway, and installation of rock walls, parking lots, and a picnic area.

PROJECT PURPOSE

The park functions as both a home to a diverse population of flora and fauna and an outdoor refuge to a large community. In order to protect the ecological and social value the park provides, it is important to evaluate what features of the park may be suffering degradation or could be improved. In doing so, it assures that the park may continue to serve as a valued green space within an urban setting.

In an effort to guide design decisions, a theme was developed to remember the purpose of the park that Edith Moulton intended:

**Honor Edith Moulton's
Legacy by Conserving
Wilderness for Children to
Enjoy**

WORK PHASES

Planning and design of Edith Moulton Park includes three distinct phases of work as identified below.

Phase 1

Inventory and Site Assessment,
Development of a Park Design
Program

Phase 2

Schematic Design and
Implementation Program

Phase 3

Design Development, Permitting,
Bidding, and Construction
Support

This document details the work performed on Phase 1 and Phase 2. Phase 3 (future) is described in summary in anticipation of performing this work in 2015.

Edith Moulton Park

PROGRAM ELEMENTS

The proposed improvements to Edith Moulton Park are grouped in this section according to the geographic area in which they would be located. The improvements are grouped into the **Great Lawn Area**, **Moulton Home Site**, and **Forested Interior**. Each of the proposed program elements is explained with background information on the purpose and includes pertinent community input.

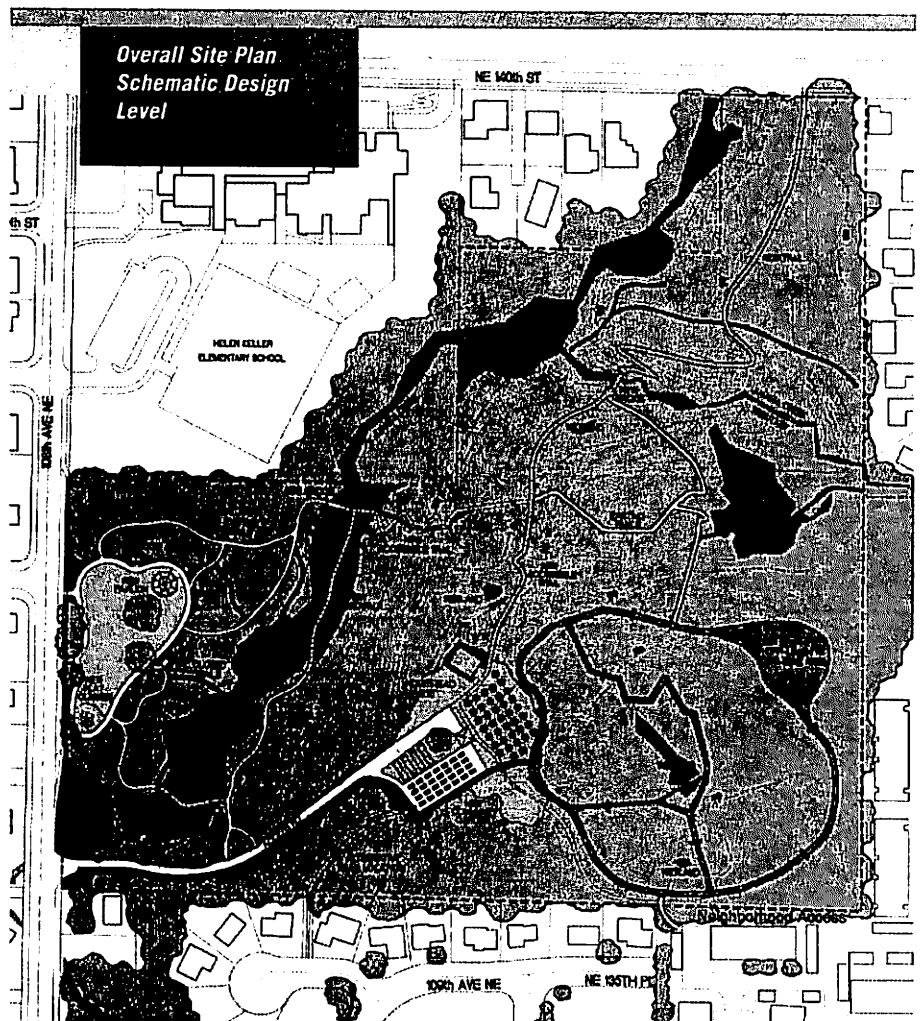
Great Lawn Area

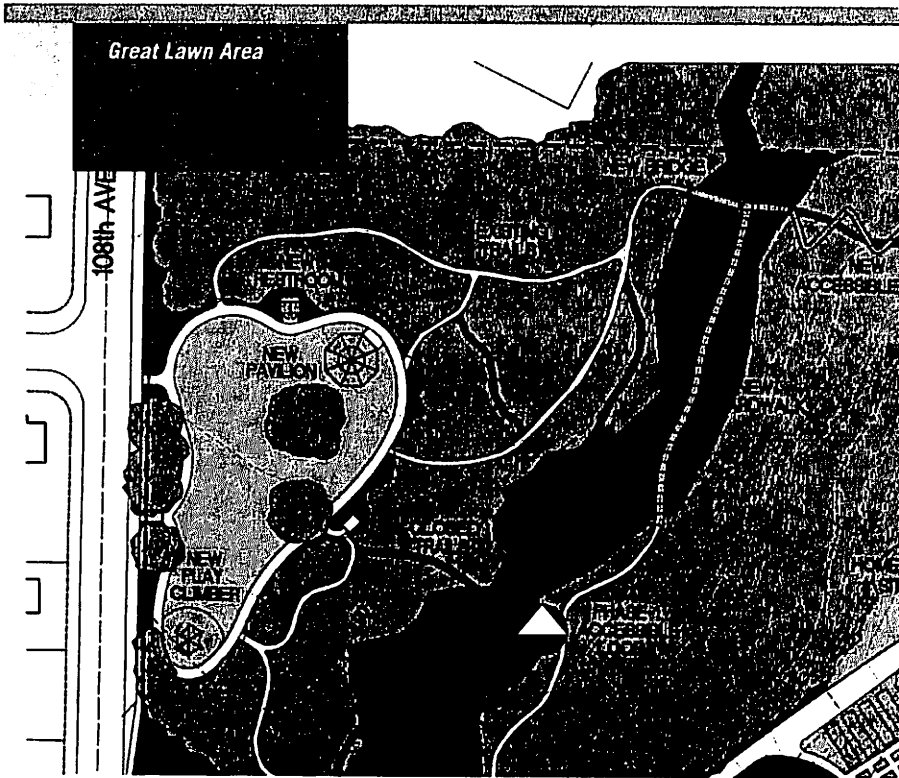
As proposed in the schematic design, the great lawn area along 108th Avenue NE would contain a pavilion, restroom, natural play structure, and roadway frontage improvements along 108th Avenue NE. The great lawn area was selected for these improvements because it is the only non-forested part of the park with easy access to parking and with good surveillance from neighbors, vehicle occupants, and police patrols. These four main elements—parking, pavilion, restroom, and play structure are intentionally grouped together because they are complimentary uses.

Roadway Frontage (parking) Improvements

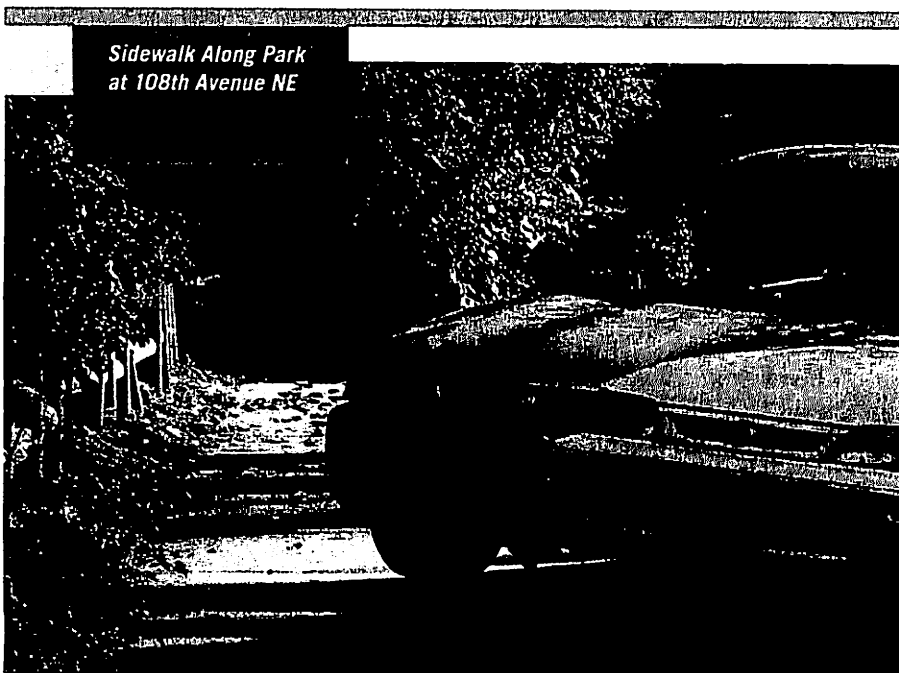
Currently, there is a sloping gravel parking strip along 108th Avenue

Proposed Improvements





NE fronting the park. A concrete sidewalk separates the gravel parking from the great lawn. Compact cars can be parked perpendicular to the roadway; however, larger vehicles only fit on the gravel strip when parked at approximately a 60 degree (or less) angle. Occasionally, drivers will park parallel to the roadway or perpendicular to the roadway, but overhang the sidewalk. The sidewalk is a safe route to Helen Keller Elementary School, adjacent to Edith Moulton Park to the north, and should not be impeded with parked vehicles. Because parking stalls are not delineated and the gravel strip is too narrow, parking is currently haphazard, inefficient, and creates unsafe conditions when vehicles park over the sidewalk or protrude into the northbound travel lane of 108th Avenue NE.



Kirkland Public Works will require frontage improvements as part of a development review and permit process for the park improvements. By code, vehicles may not be parked in a manner that requires backing out onto 108th Avenue NE. In fact, 108th Avenue NE is planned as a green-way street focusing on bike- and pedestrian-friendly connections and minimizing cut-through traffic. The Public Works Department will likely require an eight foot (parallel) parking lane and six foot bike lane on 108th Avenue NE. Although a parallel parking arrangement

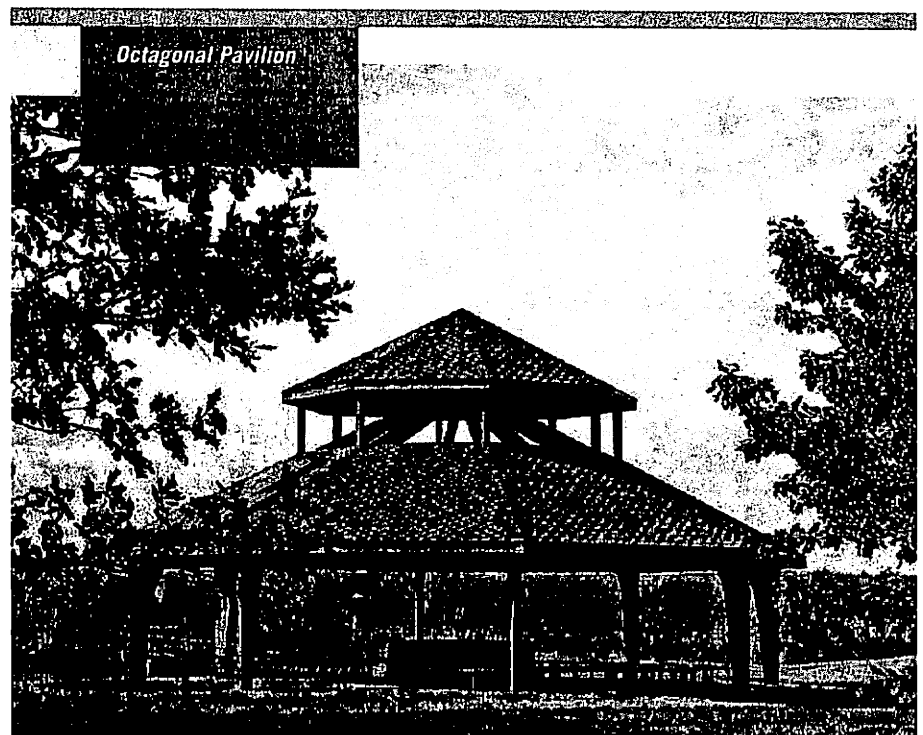
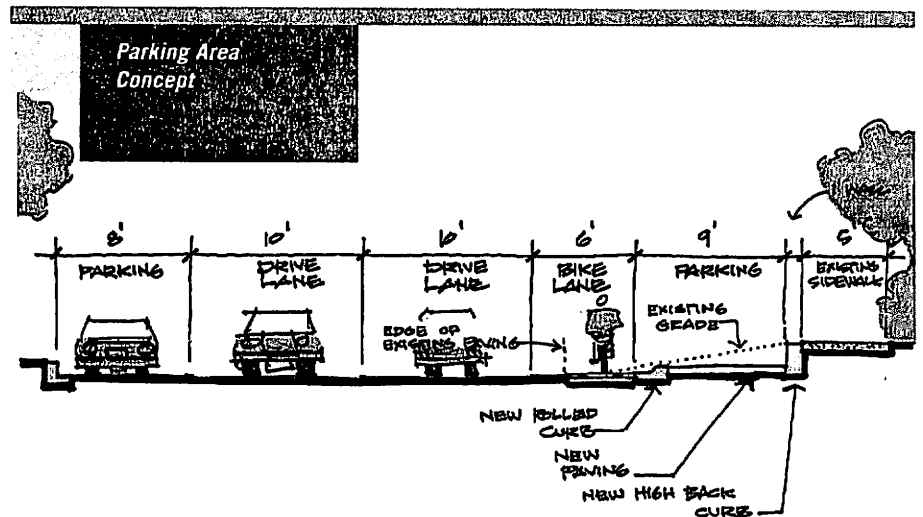
reduces the overall net parking, parallel parking creates a safer sidewalk and will be safer for bikes because vehicles will not be backing out onto the roadway.

In addition to safety improvements, the addition of a bike lane and parallel parking present an opportunity to correct a less-than-desirable cross slope in the parking strip. The addition of a high-back curb (taller than the typical six inch height) next to the sidewalk will decrease the cross slope and protect the sidewalk from encroaching vehicles. A rolled curb and gutter will likely be needed between the added bike lane and parallel parking. In total, the improvements will consist of two concrete curbs, approximately five feet of additional asphalt paving for the bike lane and an eight foot width of paving for the parallel parking. The accessible parking stalls will have a ramped access to the sidewalk and park entries without a curb.

Pavilion

The pavilion was conceived as providing an out of the weather place for gatherings, appropriate for a natural setting. Design criteria for the pavilion include:

- An aesthetic iconic focal point for the great lawn.
- Constructed with natural materials appropriate for the setting.
- Largely transparent so that the forested area behind the pavilion will remain visible when viewed from the lawn and 108th Avenue NE.
- Providing enough space for 40 people (could include movable picnic tables to create a more flexible space for events).





the great lawn and detract from the uncluttered view. Unlike the pavilion and play structure, the restroom cannot be transparent.

The style and appearance of the restroom building needs to be appropriate for a natural wooded setting in a residential neighborhood. The style and materials should also compliment, but not compete with, the pavilion design. The restroom roof should match the pavilion roof and wood siding and trim should be featured. A small building with separate men's and woman's rooms is recommended. A prefabricated and site-assembled building is typically the most effective and cost-efficient option for parks. The fixtures recommended for Edith Moulton Park will be based on facilities in other Kirkland parks. The restroom will require a side sewer service, water line, and power from 108th Avenue NE, which are included in the cost estimate.

Play Structure

With about 24 acres of forest and a couple acres of lawn, there are plenty of natural play opportunities like climbing trees, walking along downed logs, and stepping into the creek. However, including a pavilion in the park creates the need for a closer, more observable and probably cleaner play opportunity. This is especially true for kids that come with adults that may be attending

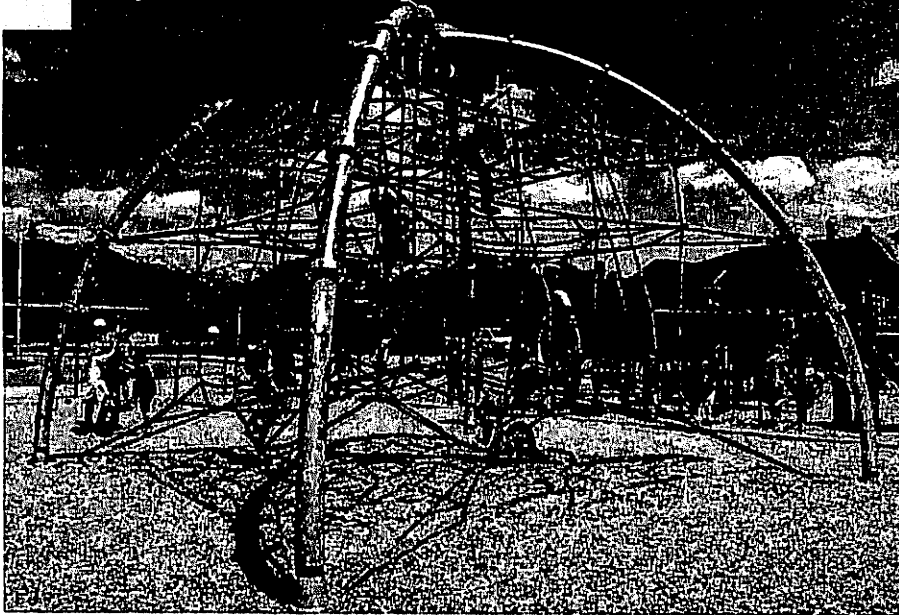
- Approximately 40 foot by 40 foot to accommodate approximately 40 people.
- Two pavilion shapes were examined, a square hip-roofed structure and an octagon form—community feedback was that a simpler, unadorned structure is preferred and that the octagonal structure fit within the existing great lawn loop trail. Overall, the timber-framed examples of pavilions were well received.

Restroom

Community input on the restroom was both in favor of a restroom in the park, but there was also concern about the potential for misbehavior associated with the facility. Some community meeting

attendees said that a restroom was necessary for students to visit, especially from the nearby Helen Keller Elementary School. Constructing a pavilion where community and private events could be scheduled also necessitates providing a nearby restroom. The final design should consider community concerns about non acceptable behavior potentially occurring at the restroom. Accordingly, the restroom is sited between the pavilion and the street so that there is a lot of visibility of the restroom facade from the street. While it is important to have visibility of the restroom doors, the remaining three sides should be slightly tucked back into the wooded edge to avoid having the restroom visually encroach into

Play Structure



a function at the pavilion. The play structure could provide a natural play-like activity close to the pavilion for kids with limited time or not dressed for total outdoor adventure play.

The selection criteria for the play structure include:

- Be highly transparent so that the lawn area or forest can be seen through the structure with minimal impact to the natural scenic quality of the park.
- No brightly-colored parts.
- Accommodate a range of ages and the number of kids that might be expected to attend a function at the pavilion and use the play structure.

For these reasons (transparency, natural play-like activity, and wide

age range for use) a dome-shaped climbing structure is recommended for the great lawn.

The climbing structure should be located close enough to the pavilion so adults can keep an

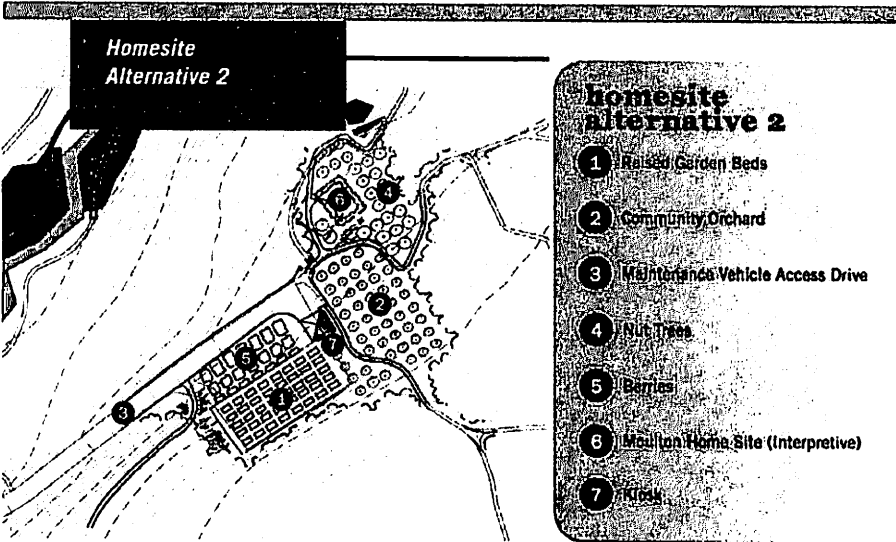
eye on the kids, but far enough away so that the kids feel a sense of independence from the adults and so that the noise from the climbing structure does not affect more quiet events such as neighborhood meetings. Climbing structures require a fall zone around base of the structure and perimeter. A prescribed depth of wood play chips and containment edge for the chips are also needed. Because of apparent high ground water, the wood chip base around the climbing structure should be raised above existing grade. A low modular block wall is recommended as a durable containment edge that will also serve as a low sitting wall.

Other Incidental Improvements

There are other potential improvements that could be made to the great lawn area, including adding an overlay of asphalt

Existing Trail





paving to the existing loop trail around the lawn, adding root barrier along the paved trail near large trees, and refreshing the entry gate and interpretive sign at the main entry. In addition, some of the shrubs along the rail fence, separating the lawn from the street, should be removed to facilitate better surveillance of the lawn area including future pavilion, restroom, and play structure. These optional improvements are also included in the cost estimate.

Moulton Home Site Area

The original location of the Moulton home and out-buildings is within the south half of the park property and accessed via a now degraded asphalt-paved driveway. The driveway intersects with 108th Avenue NE in the southwest corner of the park

and runs northeasterly through a deciduous forest to the old King County constructed parking lot. The actual home site is generally at the east end of the parking lot. Improvements to the Moulton home site area are proposed to be in keeping with the historic use of the property and include a community orchard and P-Patch along with historic interpretation.

A community P-Patch and orchard will require horticultural maintenance tasks be performed on a regular basis to be successful. Accordingly, the City of Kirkland may prefer to delay a complete build-out of the P-Patch and orchard improvements until such time as an organization such as Seattle Tilth is in place and ready to assume responsibility for the ongoing maintenance and operation of the Moulton Home site area.

In the interim, there are site work tasks that could prepare the site for future garden plots and orchard tree planting. The preliminary site work could include:

- Removal of the degraded asphalt paving in the driveway and parking lot.
- Installation of a water line from 108th Avenue NE to the kiosk area.
- P-Patch subbase preparation, including drain tiles.
- Soil amendment and cover crop planting.
- Construction of a kiosk.
- Fencing and trail construction.
- Establishing the Moulton Home site interpretive space.

Historic Photo of
Moulton Farmhouse

MOULTON FARMHOUSE - 1950

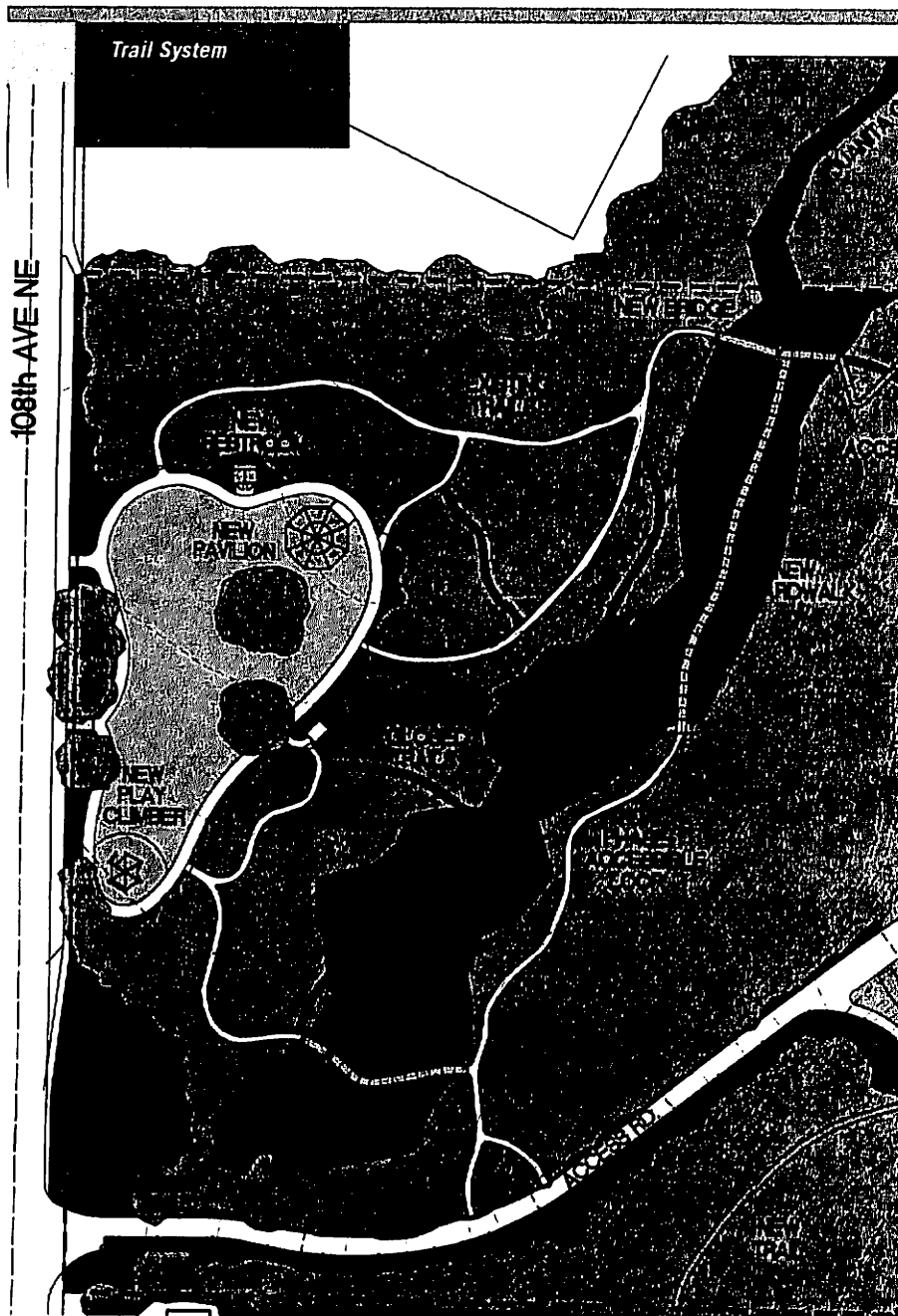
"Edith Moulton Park is a unique cultural asset, the site of an early twentieth century working farm. Although structures such as the Moulton Farmhouse, Sprague cabin, and fox pens are no longer extant, the property still provides excellent opportunities for interpretation."

Historical Research Associates, January 2014

Removing Degraded Asphalt Driveway and Parking

Because the paving is heaved and broken from root intrusion, it should be removed rather than repaired. The existing paved driveway is about 20 feet wide and includes a catch basin and storm drain pipe. The likely outfall for the piped runoff is Jaunita Creek near 108th Avenue NE although that needs to be confirmed during design. The schematic design plan recommends that the piped storm drain system be decommissioned and a more natural drainage approach taken to handle runoff from the orchard/P-patch and driveway. A natural drainage approach also avoids the potential for direct discharge of any pollutants into the creek. This natural drainage approach will likely consist of a series of interceptor biofiltration swales and grass shoulders, which allow dispersed runoff to flow and infiltrate.

The existing 20 foot driveway will be converted to a single-lane gravel maintenance access drive and a six to eight foot wide off-leash dog trail. A gravel top course should replace the degraded asphalt. The regraded driveway should have a cross-slope that conducts runoff to grassed shoulders on the downhill (north) side of the driveway so that runoff does not collect and erode the gravel surface.



Installation of a Water Line from 108th Avenue NE to the Kiosk Area

Water is needed for irrigation and drinking at the orchard/P-patch. This will require a meter, backflow preventer, and drain valve near the intersection of the driveway and 108th Avenue NE. The water line should extend through the P-Patch and orchard and left for future hose bib and irrigation valve installation.

P-Patch Subbase Preparation Including Drain Tiles

The existing parking lot will have the asphalt layer removed and be regraded as necessary. Depending on the porosity of the subsoils, drain tiles could be added to the P-Patch area to make sure excess water is drained away. Otherwise, excess irrigation water and precipitation should be allowed to infiltrate the subbase of the old parking lot.

Soil Amendment and Cover Crop Planting

The orchard and berry planting areas need to be cleared and grubbed of existing vegetation; soil amendments such as compost, lime, and organic fertilizers added as appropriate; and a cover crop planted to minimize erosion and weed infestation.

Fencing and Trail Construction

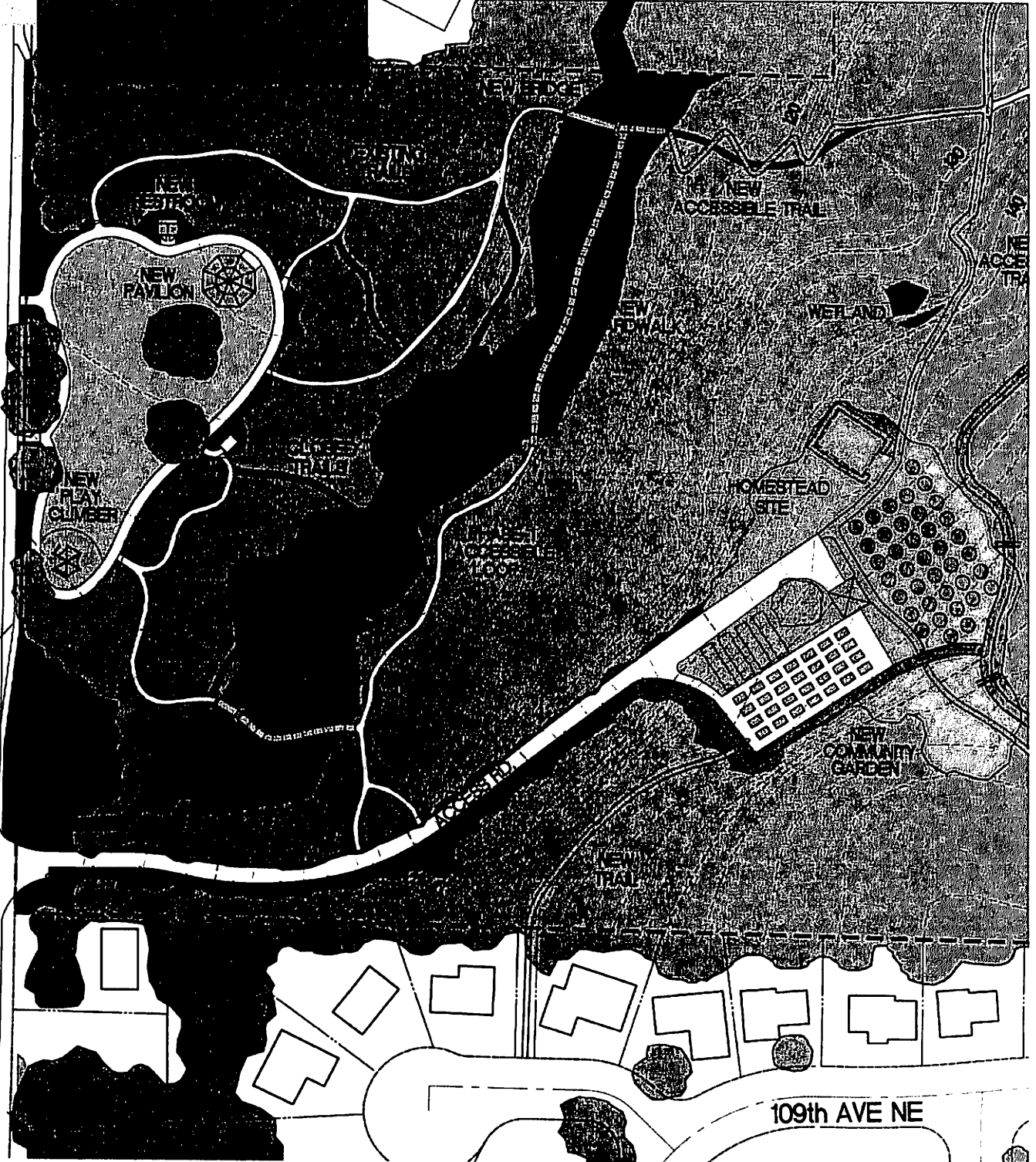
Any fencing needed to enclose the P-Patch or off-leash dog trail

Pedestrians can either use the maintenance access or the off-leash dog trail. In addition to resurfacing, the driveway entry at 108th Avenue NE should be

narrowed and reconfigured with a new vehicle swing gate and off-leash portal.

Access Road and Moulton Home Site

108th AVE NE





Establishing Moulton Home Site Interpretives

Schematic design calls for the original location of the Moulton home to be delineated with walls of espaliered fruit trees where the original house once stood. In addition, a stone header (flush to the ground) or curb could be set where the old building foundation once stood to add a sense of permanence to the espalier walls. Interpretive panels explaining the history of the site and surrounding area could be installed on the walls and a picnic table and benches could be included in the recreated Moulton home.

Construction of a Kiosk

A kiosk is needed as a gathering point, secure tool shed, and a place to post notices for volunteers and P-Patch participants. The kiosk could have a section of overhanging roof for rain protection. The construction will have to be secure, durable, and vandal-resistant.

Forested Interior

The forested interior of the site makes up the majority of the park acreage excluding the great lawn and Moulton home site. As proposed, the forested interior portions will have program elements limited to trail improvements (new trails, trail restoration, trail decommissioning, and habitat restoration).

should be constructed prior to the orchard/P-Patch opening. This work could be part of a

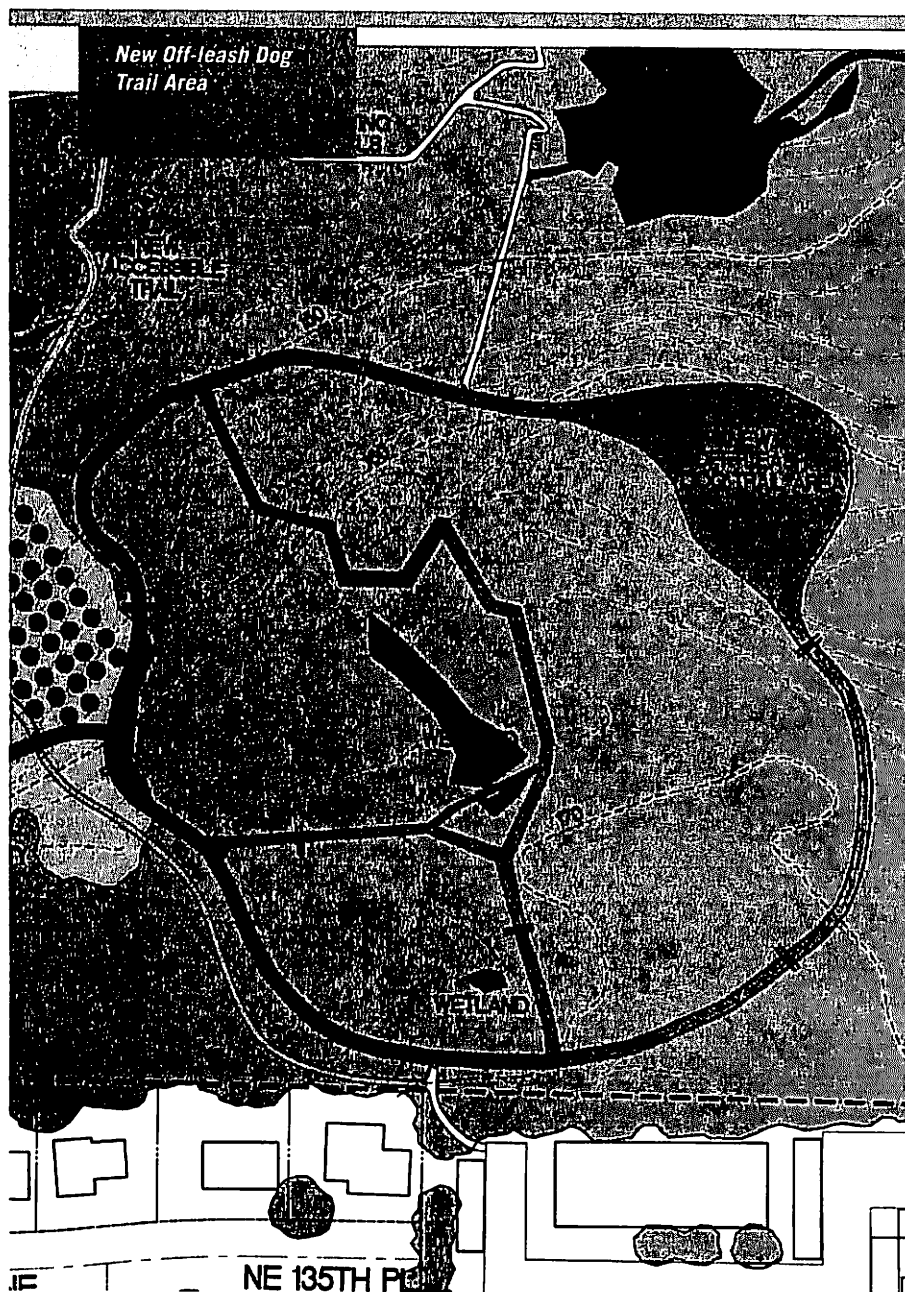
construction contract for the kiosk, driveway, water line, and other listed improvements.

Accessible Loop Trail (Phase 1 and Future Phases)

The existing paved trail in the great lawn is essentially flat and meets American's Disabilities Act (ADA) standards. As proposed, the great lawn loop trail would serve as the starting point for a second accessible loop trail, which includes upgrading an existing trail through the deciduous forest, for people of varying abilities, by improving accessibility of the existing trails along Juanita Creek—the most popular of the park's trails.

Upgrading existing trails in upland areas to ADA standards consist of widening the trail to four feet and placing a fine compacted crushed rock material that provides a suitable surface for all users. Existing trails crossing delineated wetlands associated with Juanita Creek will need to be converted to raised structures, essentially boardwalks, to have minimal impact on sensitive areas and to avoid a lengthy and complex permitting process required when placing fill in a wetland. The existing trails should be decompacted and planted with low native plants. Raised boardwalk structures would be constructed on pin piles—two inch diameter galvanized pipes driven into the ground at depths specified in the geotechnical analysis.

The recommended boardwalk structure should consist of



galvanized steel beams and stringers with galvanized steel grating for the decking. All galvanized surfaces should be treated with a commercially available solution called Natina, which creates a natural brown

patina and provides a more natural appearance to the structure.

Dog Off-Leash Trail

Many dogs visit Edith Moulton Park with their owners. Some

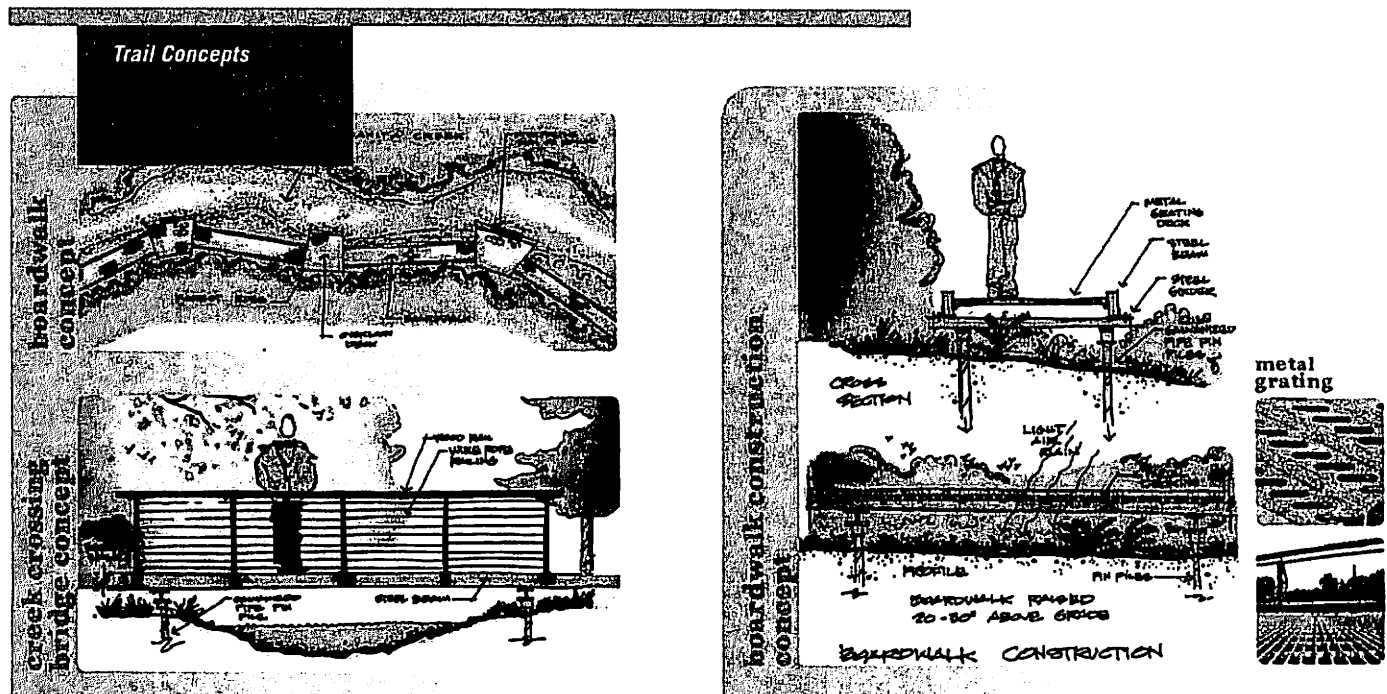
dogs are walked on leads, although a significant number are allowed to walk off-leash. While most off-leash dogs are well-behaved and under the voice control of their handlers, other off-leash dogs may not be appreciated by some visitors using the park trails and great lawn. In addition, off-leash dogs using the creek contribute to the degradation of the stream banks and the addition of potentially harmful bacteria from fecal matter getting into the creek. Off-leash dogs are also more likely to contribute to wildlife displacement and sensitive vegetation damage by trampling.

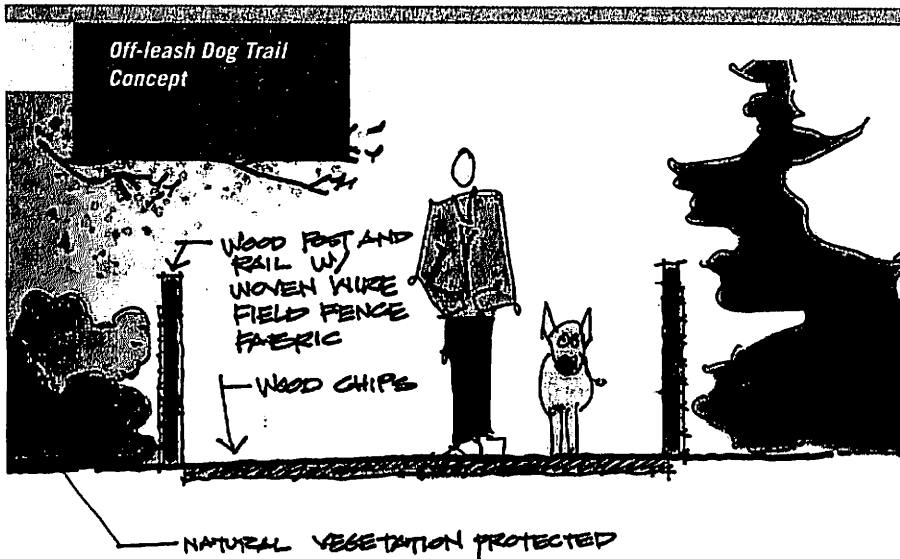
In accordance with City of Kirkland policy, this master planning effort for Edith Moulton

Park examined the feasibility of creating an off-leash area. A 5,000 square foot off-leash area was considered at the south end of the great lawn and a 15,000 square foot area was considered near the Moulton home site as a replacement for the old parking lot and adjacent brushy area. The community response, (especially from dog owners), was that they were too small. Converting a large forested part of the park to an open off-leash area would be contradictory to the basic tenets of the project goals to preserve the forested portions of the park. Likewise, we heard from the community that large portions of the great lawn should not be converted to an off-leash area. An off-leash dog trail however, could fulfill the apparent desire to

have dogs off-leash with minimum potential impact to the creek and upland habitat.

As proposed, a 3,200 linear foot (0.6 mile) off-leash dog trail would be constructed in the southern portion of the park. The intent is that the off-leash trail is a shared trail to be used by both dog walkers and walkers without dogs who don't mind sharing. A trail, versus a large open off-leash area, has the advantage of preserving the forested understory that will surround the trail. In fact, the off-leash dog trail loop section occupies roughly six acres of forest in the southeast corner of the park while the trail itself will enclose only 0.22 acres. The enclosed trail allows for enjoyment of the forested southeast corner





with only minor direct impact considering that about $\frac{1}{2}$ of the dog trail follows existing trails alignment.

The off-leash trail will consist of an access to 108th Avenue NE along the old driveway with a loop through the upland coniferous forest in the southwest corner of the park. Approximately one-third of the off-leash trail (about 800 feet) would be new trail and the remaining two-thirds constructed in the same alignment of existing trails and the existing driveway. The roughly 800 feet of new trail is in an area of the park where construction of a new trail was requested by some community members as a means of patrolling a reportedly under-visited and occasionally misused section of the park.

The off-leash dog trail would consist of a six foot wide trail with post and rail fencing on both sides. The six foot dimension is recommended as the minimum needed to allow two people with dogs to comfortably pass.

Entries would be gated with self-closing gates so that dogs don't inadvertently escape the off-leash trail enclosure. The fencing along the trail is necessary to avoid damaging this area of important upland and wetland habitat. Attendees at the third community meeting voiced a preference for a wood post and field fence rather than and chain link fence. A field fence has large enough openings that mice, squirrels, and other small animals can pass through the fence. The fence height will be 48 inches as is typical with other similar facilities.

The trail should include culvert crossings for animals that don't fit through the fence or that wouldn't typically climb over the fence. In addition to the fenced trail, a small fenced open area could be



included if an area is available that would not require extensive conversion from forest understory to off-leash use. The trail surface will be covered with six inches of arborist mulch to minimize erosion and provide a substrate to absorb and effectively trap dog urine and incidental fecal matter to avoid infiltration into the near surface groundwater or moving off the trail via stormwater surface flow.

Trail Decommissioning

Over the years since King County first opened the Edith Moulton property as a park, a number of trails have been formally and organically built and more naturally worn through repeated use throughout the park. There is evidence that some trails existed on the property before it became a park—particularly a north/south trail from the original home site. As it happens, social trails or unplanned trails develop that often duplicate other trails. Too many trails are not a good thing because trails, through human presence, tend to fragment wildlife habitat. In addition, some of existing trails at Edith Moulton pass through sensitive wetlands and stream buffers. Along Juanita Creek for example, there are trails on both the east and west sides of the creek that provide essentially the same experience for trail users yet have twice the impact. Similarly, a little-used trail in the north half of the site doesn't

make any useful connection and is within a creek tributary buffer. This trail in the north half and one of the creek side trails and is proposed for removal. The overall site plan shows where trails are proposed for decommissioning. Trail decommissioning would be accomplished by stacking and intertwining branches and brush near trail intersections and loosening compacted soil and replanting the trails with native plants.

Habitat Restoration

Habitat restoration will occur in two forms at Edith Moulton Park—the first is restoration as required for compensatory mitigation related to permit approvals and the second is longer-term restoration to

be completed outside of any construction contracts for improvements at the park.

Restoration required as mitigation will be directly tied to construction of the park project elements, such as trail improvements occurring within wetlands, wetland buffers, and stream buffers. Therefore, mitigation work needs to be coincident with the trail or other improvements. Longer-term restoration, not related to permit approvals, can be accomplished by a coordinated non-profit/volunteer effort such as the Green Kirkland Partnership. The Green Kirkland Partnership is an alliance between the City of Kirkland, nonprofit partners, businesses,



and the community. The Partnership's goal is to restore more than 400 acres of natural areas in the City of Kirkland, including portions of Edith Moulton Park. The majority of the restoration efforts are being or will be accomplished by volunteers.

Mitigation-Related Restoration

Proposed trail improvements in Edith Moulton Park could trigger permit requirements for compensatory mitigation—most likely in the form of wetland creation/restoration, wetland enhancement, and stream/wetland buffer enhancement. The extent of mitigation is expected to be minimal; however, the specific amount and location of mitigation will not be known until 60 percent design plans are developed and submitted for the required permits and SEPA review. As proposed, the Phase 1, the accessible loop trail as proposed includes:

- 1,300 linear feet (approximately) of decommissioned and restored trails, including 400 linear feet of existing trail in wetlands that will be restored and converted to an elevated boardwalk structure.
- 1,100 linear feet (approximately) of existing trail that will be widened and resurfaced with crushed rock to ADA standards.

Although the project is theoretically self-mitigating in the sense that there will be more trail closed and restored than is being upgraded, a large portion of the upgraded trails will be located in stream and wetland buffers. That work on trails in buffers could have an adverse impact to the function of the buffers, and may need to be compensated for with buffer enhancement. Buffer enhancement could include:

- Removing invasive species such as Himalayan blackberry.
- Adding habitat structures such as logs or stumps.
- Planting native tree, shrub, and herbaceous species.

Very minor impacts are expected to be associated with the elevated boardwalk structure, as pin pile structures have a small footprint and the decking material (grate) allows light to pass to the ground.