



KLAHANIE PARK

Master Plan | December 6, 2022

Sammamish
Parks and Recreation

CITY OF SAMMAMISH | PARKS, RECREATION & FACILITIES



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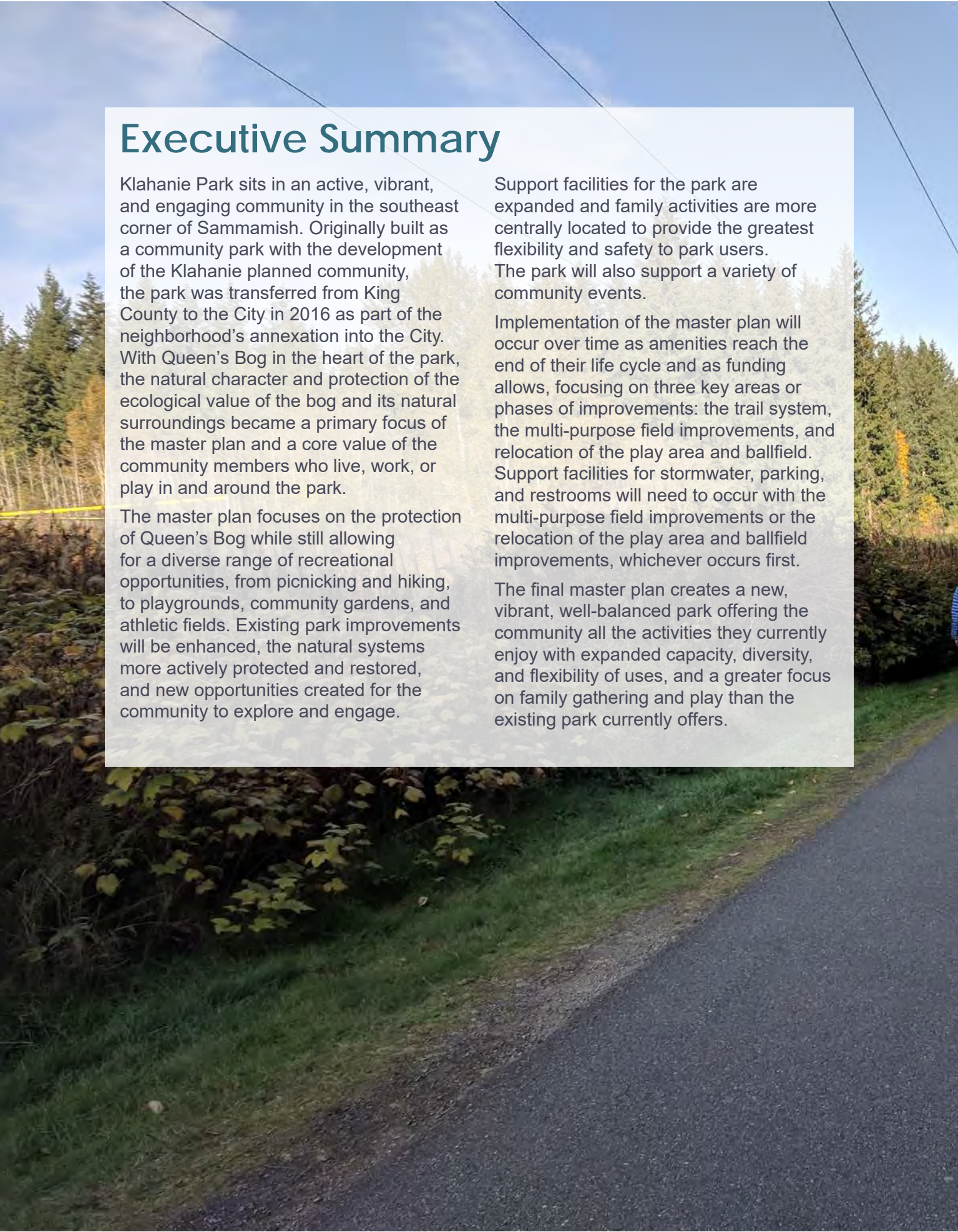
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Executive Summary

Klahanie Park sits in an active, vibrant, and engaging community in the southeast corner of Sammamish. Originally built as a community park with the development of the Klahanie planned community, the park was transferred from King County to the City in 2016 as part of the neighborhood’s annexation into the City. With Queen’s Bog in the heart of the park, the natural character and protection of the ecological value of the bog and its natural surroundings became a primary focus of the master plan and a core value of the community members who live, work, or play in and around the park.

The master plan focuses on the protection of Queen’s Bog while still allowing for a diverse range of recreational opportunities, from picnicking and hiking, to playgrounds, community gardens, and athletic fields. Existing park improvements will be enhanced, the natural systems more actively protected and restored, and new opportunities created for the community to explore and engage.

Support facilities for the park are expanded and family activities are more centrally located to provide the greatest flexibility and safety to park users. The park will also support a variety of community events.

Implementation of the master plan will occur over time as amenities reach the end of their life cycle and as funding allows, focusing on three key areas or phases of improvements: the trail system, the multi-purpose field improvements, and relocation of the play area and ballfield. Support facilities for stormwater, parking, and restrooms will need to occur with the multi-purpose field improvements or the relocation of the play area and ballfield improvements, whichever occurs first.

The final master plan creates a new, vibrant, well-balanced park offering the community all the activities they currently enjoy with expanded capacity, diversity, and flexibility of uses, and a greater focus on family gathering and play than the existing park currently offers.



Contents

Acknowledgments	3
Executive Summary	4
Project Background	6
Introduction	7
Site History	8
Site Context	9
The Planning Process	10
Planning Overview.....	11
Site Inventory & Analysis	12
Public Outreach Overview	22
Hopes, Dreams, and Concerns	23
Master Plan Alternatives	28
Preferred Master Plan	36
Athletic Field Study.....	40
Final Master Plan	42
Process Overview	43
Final Master Plan	44
Plan Elements	46
Site Sections	50
Implementation	52
Phasing Plan	53
Cost Estimates	54
Permitting	55
Grant Funding	56
Appendices	58
A. Wetland Study Reports	
B. Environmental Analysis	
C. SEPA Checklist	
D. Master Plan Alternatives	
E. Permitting Comments from Dept. of Community Development	
F. Cost Estimate	
G. Presentation Meeting Agendas	
H. Resolution Adopting the Klahanie Park Master Plan	

PROJECT BACKGROUND

Introduction

Site History

Site Context

Introduction

A total of \$250,000 was allocated in the Parks Capital Improvement Plan (Parks CIP) for the Klahanie Park Master Plan. In 2018, a Request for Proposals (RFP) was published for consultant services to complete the master plan for Klahanie Park. A total of four firms responded. City staff evaluated the statements of qualifications received based on criteria outlined in the RFP and invited two firms to interview. HBB Landscape Architecture was selected for the project.

Project Goals

The Klahanie Park Master Plan is the result of a multi-step process led by the Consultant team and City staff. With input and direction from the public, the City Council and the Parks & Recreation Commission, the goals of this master plan were developed and are as follows:

1. **Protect Queen’s Bog** and the rest of the natural environment, educate the community about the unique nature of the bog, and partner with the adjacent schools to enhance the park as a learning environment.
2. **Gather and Celebrate** to come together as a community, celebrate our diverse backgrounds and cultures, build memories with our families and each other.
3. **Balance passive and active activities** recognizing the park serves a larger community need but should still retain its scale and character.

2018 Parks, Recreation & Open Space (PRO) Plan

The 2018 Park, Recreation & Open Space Plan is a long-term planning document used to guide the development of the overall park system city-wide, including Klahanie Park. The Klahanie Park master planning process builds on this previous planning effort and furthers the vision and goals outlined in this document.

The overall vision for the City of Sammamish Park & Recreation system sees parks as an integral part of the City’s healthy and sustainable community by connecting people to nature, play, and culture. The goals set forth in the PROS Plan include:

- *Conservation of natural resources.*
- *Opportunities to improve health and wellness.*
- *Create social equity in access to parks and recreation for all residents.*

The Klahanie Park Master Plan meets these goals with the conservation of Queen’s Bog, wetlands, and forested areas of the park; the active recreation opportunities and programming proposed for the park; and the gathering places where residents can come together as a community.

¹ Source: www.wikipedia.org/wiki/Klahanie,_Washington

Site History

The original park was built by the Klahanie Homeowner’s Association as part of the planned community development in 1990. Ownership of the park was transferred to King County in 1994 following construction. In January 2016, Klahanie Park was transferred to the City as part of the Klahanie annexation.

Following annexation, minor improvements were made to the park which included drainage modifications to the baseball field, installation of the city’s first cricket pitch, turf aeration of the two multi-purpose sports fields, and minor renovations to the restrooms. Having been in use for nearly 25 years with only minor improvements, park features were nearing the end of their life cycle or needing repair. Prior to commencing extensive development or improvement on parkland, the City needed to consider how a previous County park would best incorporate into Sammamish’s overall park system by completing a master plan and following the City adopted master plan process.

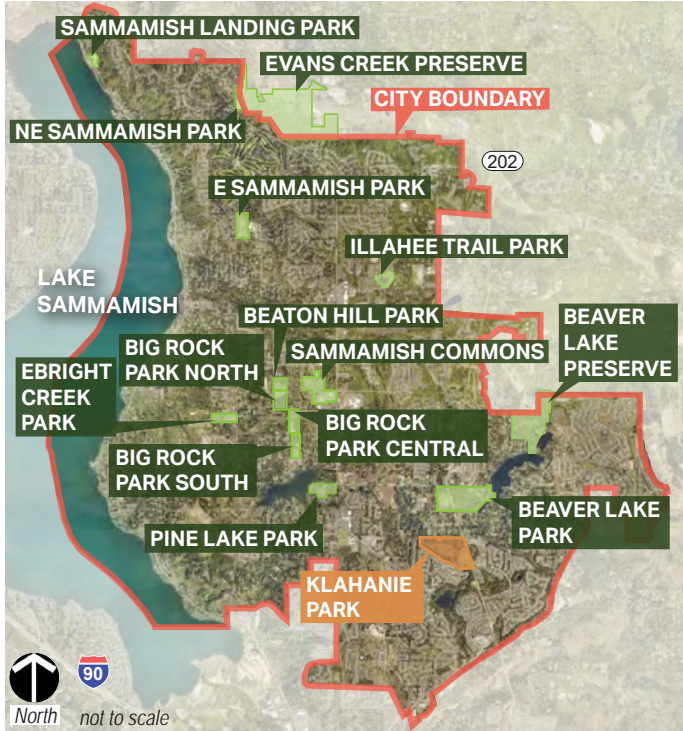


1990 Original park construction.



2016 Ownership transferred to the City.

Site Context



Vicinity Map - City of Sammamish



Context Map - Klahanie Community

Klahanie Park is a 64-acre park located in the heart of the Klahanie Neighborhood in the southeast section of Sammamish. The majority of the park is a natural area centered around Queen’s Bog with other wetlands and trails around the edges of the Bog. Recreation amenities are located in the southeast corner of the park. The park is surrounded by residences and open space to the north, west, and south, and to the east is Challenger Elementary School and Beaver Lake Middle School.

THE PLANNING PROCESS

Planning Overview

Site Inventory & Analysis

- Critical Areas
- Athletic Programming
- Easements
- Stormwater
- Trails

Public Outreach Overview

Investigation & Analysis

- Focus Group Meeting & Survey
- Community Survey #1

Park Program

- Community Survey #2
- Community Feedback

Master Plan Development

- Preferred Implementation Phases
- Community Feedback

Athletic Field Study

Planning Overview

The park master planning process began with a detailed analysis of existing site conditions. This stage included an assessment of existing park amenities and a review of the following: current maintenance practices, overall site drainage, critical areas, vegetation, utility infrastructure, and topography. Existing easements and other known site encumbrances were documented to the extent available. Park users and organizations that regularly utilize the existing park facilities were invited to participate in a Focus Group to better understand the current challenges and opportunities associated with the current use of the park.

A Wetland Study Report was developed to document the existing environmental features within the site and its immediate adjacencies (see Appendix A). An Environmental Analysis (see Appendix B) was also developed to reflect proposed park improvements and potential mitigation and/or enhancement of critical areas on the site.

An extensive public outreach process was implemented to ensure the park master plan represented community interests. The outreach process is described in greater detail in the next section of this report, and included meetings or events for each major stage in the park master planning process:

PHASE 1 | Investigation & Analysis (February - May 2019)

This phase began with a detailed analysis of existing site conditions, park programming and establishing overall project goals for the park to determine the hopes, dreams, and concerns of the community related to the park.

PHASE 2 | Park Program (May - August 2019)

Master plan alternatives for the park were developed based on the results of Phase 1 and presented back to the community, the Parks and Recreation Commission, and City Council to voice their preferences, likes and dislikes for each alternative presented.

PHASE 3 | Master Plan Development (August - December 2019)

Comments from Phase 2 were reviewed and a preferred master plan developed, keeping what people liked most about the concepts presented, and changing what they didn't like to create a single preferred master plan concept. A separate Athletic Field Study was developed in 2020 to help the City determine the overall inventory and needs for athletic fields and programming in the City. This study was used to help inform the final Master Plan proposed for Klahanie Park.

PHASE 4 | SEPA Review & Adoption (January 2021 - December 2022)

The final phase of the project incorporated feedback received on the preferred master plan from the community, the Parks and Recreation Commission, and City Council. Comments received during the SEPA process and all other comments received on the park master plan were also reviewed. The final master plan and a summary of the planning process was documented in this report and presented for final adoption by City Council.

Site Inventory & Analysis



Both paved and unpaved trails surround Queen's Bog and connect the adjacent neighborhoods to the park. There are a variety of natural grass sports fields: two multi-purpose fields with soccer and lacrosse overlay, a cricket pitch that is located in between the two multi-purpose fields, and a baseball field. Poor drainage on the site has impacted overall use of the fields during inclement weather. The playground area primarily serves children ages 2 - 5 and is not fully accessible from the adjacent sidewalk or parking area. It is also relatively close to SE Klahanie Boulevard with little to no existing buffer. A parking lot is located within the site, and on-street parking along SE Klahanie Boulevard is readily available. The restroom is in reasonable condition, though showing signs of age and is not centrally located.



1 Queen's Bog



2 Trails



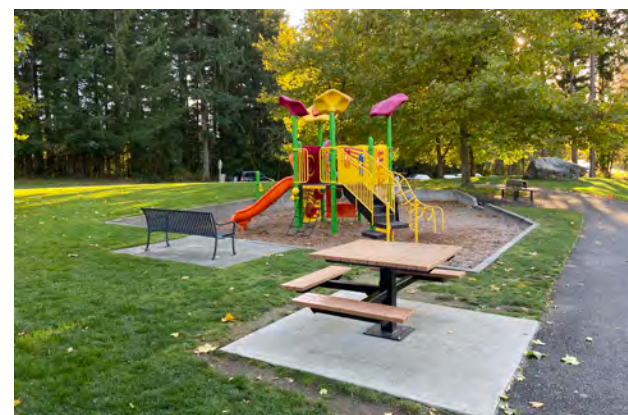
3 Stormwater Ponds



5 Ballfield



7 Parking



9 Play Area, Picnic and Seating



4 East Plateau Trail



6 Multi-Purpose Fields

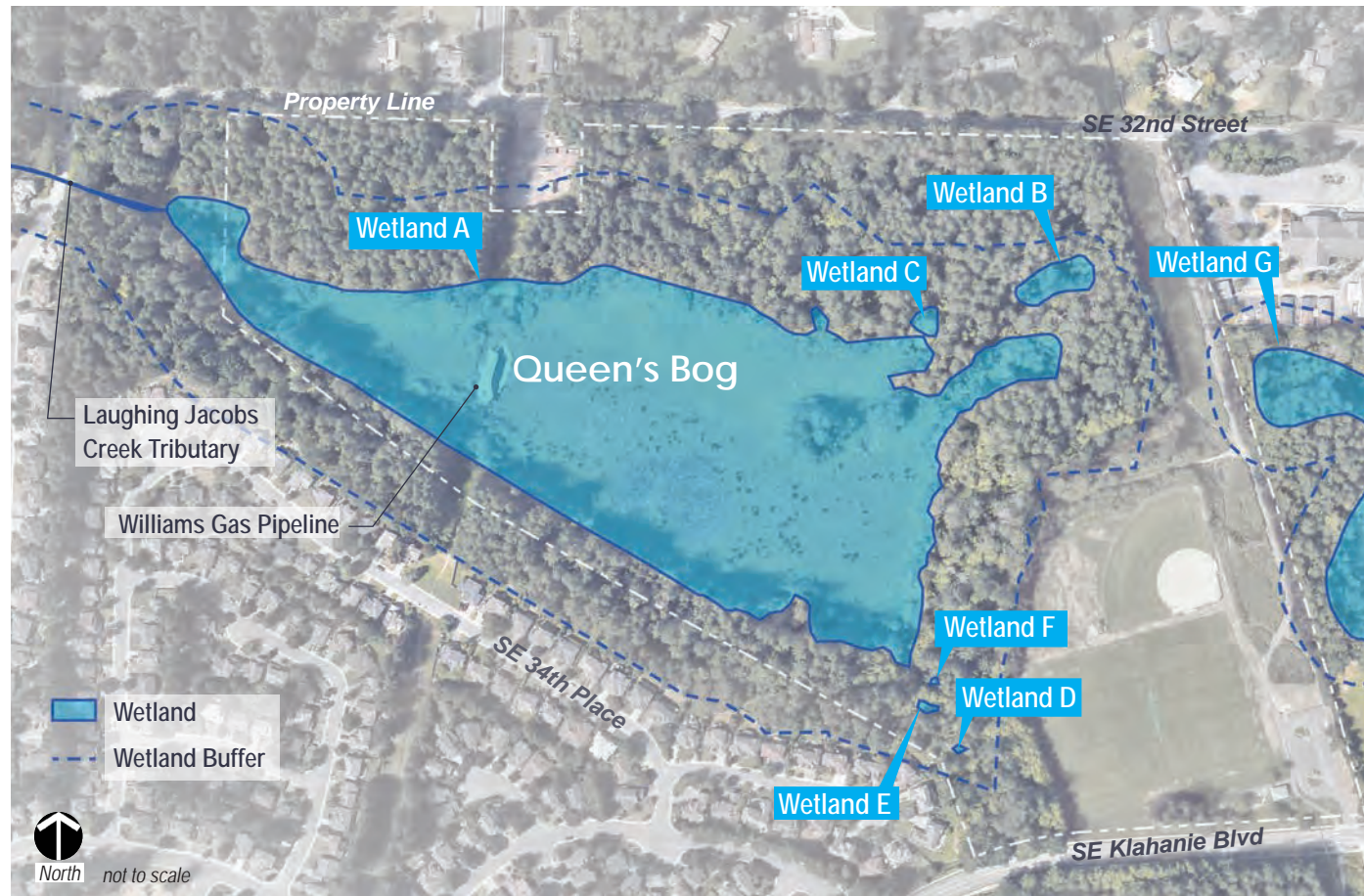


8 Restrooms



10 Tree Grove and Boulder

Critical Areas



Wetlands

Klahanie Park lies within the Laughing Jacobs Basin. Queen's Bog (Wetland A) is a 19-acre palustrine scrub-shrub and palustrine forested depressional wetland. The Williams Gas pipeline bisects the western portion of the wetland. Queen's Bog is one of Sammamish's most valued Sphagnum Bogs. It is an example of a unique habitat type rarely found in the region. Bogs are rare, peat-dominated wetlands that are considered difficult to replace, sensitive to disturbance, and require the largest protective measures. According to the Laughing Jacobs Basin Plan, adopted by the City in May 2022, vegetation encroachment and open water regions of Queen's Bog indicate that degradation of the bog habitat may be occurring. Urbanization of the surrounding area has resulted in greater runoff and altered water chemistry impacting the Bog. The Basin Plan also includes goals, objectives, and recommendations for reducing the impact of urbanization effecting Queen's Bog.

Five additional wetlands (Wetlands B – F) occur on the park property. These smaller wetlands are approximately 0.1 – 0.3-acres and are considered depressional, palustrine scrub-shrub wetlands.

Wetland G is located on the adjacent School District property. A wetland reconnaissance was completed for this off-site wetland. The reconnaissance conducted indicates it is a palustrine scrub-shrub and palustrine forested depressional wetland.

Further information on the wetlands identified in the study area is included in Appendix A of this document.

Wetland Buffers

There is a 215-foot buffer around Wetland A and 50-foot buffers around Wetlands B - F which are encompassed by the Wetland A buffer. These buffers are limited to the forested area and do not extend into the developed portion of the park. Wetland G has a 100-foot buffer, which extends into the park and overlaps the East Plateau Trail and BPA easement.

Streams

Queen's Bog is drained by the East Tributary to Laughing Jacobs Creek in the northwest corner of the park. This tributary is mapped as an intermittent stream. The East Tributary flows east and south, before joining Laughing Jacobs Creek and eventually discharging into Laughing Jacobs Lake. A standpipe with a debris rack controls the flow of water from Queen's Bog west into the upper reaches of Laughing Jacobs Creek. Per the Laughing Jacobs Basin Plan, completed by the City in 2022, the barrier status of this crossing has not been assessed by the Washington Department of Fish and Wildlife (WDFW), but the structure is a fish barrier due to the standpipe. The Basin Plan applied a uniform buffer distance of 150 feet to each side of the tributary.

Upland Areas

Outside of the developed portion of the park, upland areas are primarily mature forest. Forested areas surrounding Queen's Bog are dominated by Douglas Fir. Understory vegetation consists primarily of native plants including Sword Fern and Salal. Invasive vegetation, including Himalayan Blackberry and Scotch Broom, is limited to areas disturbed by trails and other site improvements.



Queen's Bog (Wetland A)



Forested Area

Athletic Programming

The natural grass athletic fields at Klahanie Park include one Baseball/ Softball field, two multi-purpose fields with soccer and lacrosse overlay, and a cricket pitch that is located in between the two multi-purpose fields. There is also a cricket practice pitch to the west of the multi-purpose fields. The athletic fields are available to rent from March through October and are utilized primarily for community sports practices and games, with a small percentage of reservations for summer youth camps and city events. The multi-purpose fields at Klahanie Park are the highest used natural grass fields in the City, with hours rented nearly at capacity for natural grass fields. Of these hours rented, cricket accounts for approximately half; Klahanie Park is the only city park with a cricket pitch.



Condition & Orientation

A city-wide athletic field study was completed in 2020. As part of this study, an assessment of the existing field inventory was completed to identify deficiencies and provide recommendations for improvements to remedy deficiencies and add capacity while emphasizing cost saving measures. In reviewing the service life of the three fields, the baseball field was observed to be declining in performance, specifically the infield, with observable corrective maintenance and/or repairs required. The two multipurpose fields are nearing the end of their service life; they require continual attention, have consistently substandard performance largely due to the natural accumulation of organic material over time and excessive maturation of the grass, resulting in poor drainage that affects the ability to use the fields.

The Baseball / Softball field is oriented northwest which is a typical orientation, but east-northeast is preferred. The bleachers, storage facilities, backstop, and access paths are visibly aging, and are not fully accessible. The Cricket / Soccer fields are oriented north-south which is the ideal orientation. The size of this multipurpose field accommodates two U12 level full size soccer fields, however, they are undersized for an official cricket field.

Support Facilities

There are 2 small storage sheds to support the fields, one for the City staff and one is shared by the Little League and cricket user groups. There are 2 sets of bleachers for spectator seating at the Baseball / Softball field. The Cricket / Soccer fields do not have designated player or spectator seating. The sloped lawn on the southern edge of the field often serves as informal seating. The seating is not accessible from the parking lot and there are no gathering areas, benches, picnic tables or other amenities near the fields. The nearest picnic table and bench are at the playground in the south end of the site.

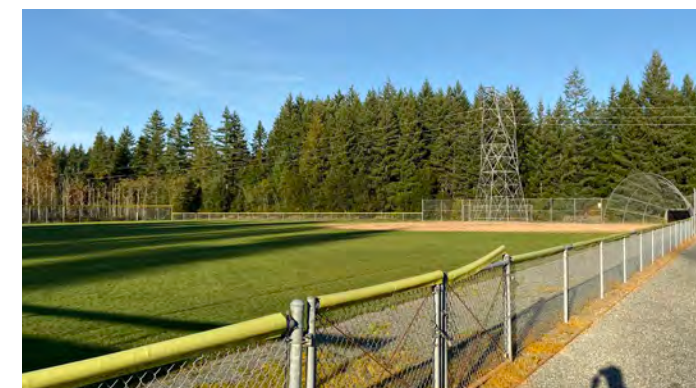


Cricket Grounds

- Natural grass infield and outfield.
- 12' x 110' synthetic turf pitch (longer than typical); indoor/outdoor carpet over concrete.
- Irregular / non-standard outfield dimensions; exact stumps / wicket layout is unknown.
- Standard outfield size cannot be accommodated due to ballfield and southern slope.
- Batting in only one direction (south) due to paths and adjacent softball field.
- Games require occupying both soccer fields.
- Automatic irrigation.
- Aging underdrainage system.

Soccer Fields

- Natural grass surface, generally worn, very high organic content to 8" depth over heavy soils.
- Automatic irrigation.
- Aging underdrainage system .
- 180' x 300' nominal field markings support play for ages 13-14 and is minimum size for adult recreational play.
- Multiple youth field layouts can be accommodated.
- No fixed improvements, surface size can support larger field dimensions.



Baseball / Softball Field

- 2017 Drainage Improvements: underdrainage renovated, irrigation modifications, installation of new sod and crushed rock warning track.
- Natural grass outfield with skinned (sand / silt) infield with crushed rock warning track.
- Automatic irrigation.
- 250' outfield fence and 60' base path supports U12 Little League and 13+ fast-pitch softball.



Cricket Practice Pitch

- Installed in 2019.
- 11' x 110' synthetic turf pitch; indoor/outdoor carpet over concrete.
- Portable frame and netting.

Easements

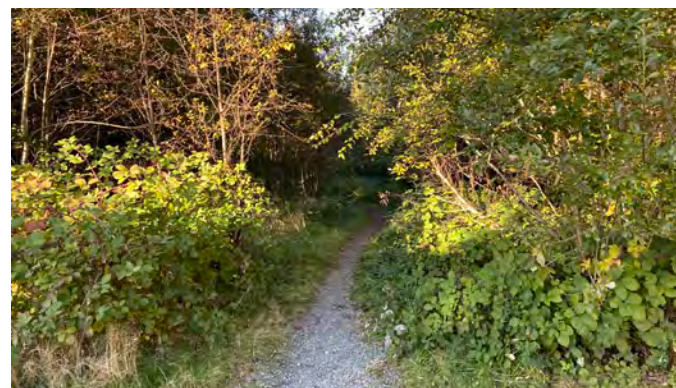


Williams Gas Line

The gas line runs north-south under Queen's Bog. Any permanent improvements would need to be approved by Williams Gas Line.

Puget Sound Energy (PSE)

The PSE easement runs parallel to SE Klahanie Boulevard to accommodate underground utilities. Typical offsets for trees and structures and access to underground utilities apply.



Williams Gas Line Easement

Bonneville Power Administration (BPA)

The BPA easement runs north-south along the east property line. Active recreation use within this easement is limited to transitory, short-term use. Athletic fields and support facilities are not allowed. No permanent structures are allowed. Access to the towers and transmission lines must be maintained with a 50' clear zone required around the transmission towers.



BPA Easement

Stormwater



Stormwater Facilities

There is one stormwater facility that serves as filtration and detention located at the north end of the park improvement area, just north of the Baseball / Softball field. This facility receives stormwater from surface flow across the fields and direct discharge from the parking lot. The pond also appears to serve as an overflow to the wetland system on the adjacent Issaquah School District property with a mapped pipe connecting the two facilities (Storm Bandit, 2019).

Based on the Laughing Jacobs Basin Plan, two stormwater outfalls on the south side of the bog convey stormwater from the residential development into the bog. Two additional drainage easements are mapped on the southwest side of the bog. However, no pipes or flow are mapped. An additional stormwater detention area is east of the bog within Klahanie Park (Storm Bandit, 2019). During site visits as part of the Basin Plan and the park plan, no connection between this pond and the bog was observed, which is supported by existing as-built plans from the City. There are also four additional stormwater outfalls from the surrounding subdivisions and surface streets that discharge into Queen's Bog (Storm Bandit, 2019).

Site Drainage

Surface water generally flows across the improved portion of the park site from south to north towards the stormwater pond. Surface drainage from the trails around the rest of the park site flow into the adjacent forested areas and infiltrate into the ground plane. Surface flow from the larger drainage basin is generally directed toward Queen's Bog. The eastern half of the park is a mapped critical aquifer recharge area and approximate extents will need to be verified (Sammamish Property Tool, 2022).

Trails



The park includes both paved and unpaved trails. A multi-use trail, the East Plateau Trail, runs along the BPA powerline from SE 32nd Street to SE Issaquah-Fall City Road and provides the main north-south trail connection through the park and to the Klahanie community beyond. The only other paved trail runs parallel to SE 32nd Street along the north property boundary, meandering through the forested area and connecting directly to the street right-of-way at 244th and 247th Avenue SE, and to the Klahanie HOA Open Space Tract at the western park edge. There is an existing sidewalk on both sides of SE Klahanie Boulevard connecting into existing trails in the park.

Informal, unpaved trails meander through and cross over the East Plateau Trail within the BPA easement area and a series of informal trails connect the parking lot to other recreation amenities within the developed area of the park. There are also a series of informal, mulch or dirt trails that meander through the forested area of the park, some looping back into the main paved trail and others creating a dead-end where the brush gets too dense or the surroundings too wet to continue.

Accessibility

Accessible walking trails are limited to the multi-use path for the East Plateau Trail, the sidewalk along SE Klahanie Boulevard, and a portion of the paved trail that runs parallel to SE 32nd St. There is also a limited amount of paved paths within the park to access the restroom and a picnic table. Access to the fields is not currently fully accessible. Access to the restroom and play area is accessible, but fully accessible play components within the play area is currently limited.



Park Pathway



Paved Forest Trail



Informal Forest Trail



East Plateau Trail

OPPORTUNITIES & CONSTRAINTS

Following the site inventory and analysis phase of the master plan, several opportunities and constraints were identified and are noted below. These items were further explored with stakeholders and the community during the visioning phase.

Opportunities

- Redirect stormwater through raingardens, biofiltration swales, and infiltration areas so it is treated before it reaches Queen's Bog.
- Reduce impact on Queen's Bog by keeping proposed improvements out of wetlands and minimizing impact to wetland buffers to the greatest extent feasible.
- Improve buffers with understory vegetation, support natural tree succession.
- Educate about the importance of the bog and the habitat / ecosystems they support.

- Improve connectivity through the site and community.
- Balance active and passive recreation.

Constraints

- Limited space for recreation.
- Active and passive recreation compete for space in the park.
- Space dedicated to easements and the restrictions on how the spaces can be used.

Public Outreach Overview

An extensive public outreach process was implemented to ensure the park master plan represented community interests, and included opportunities for public comment and feedback in every phase of the project. The results of the outreach process is described in greater detail in the next section of this report.

The public outreach process included the following meetings or events for each phase of work:

PHASE 1 | Investigation & Analysis (February - April 2019)

- Parks & Recreation Commission Meeting #1: March 6, 2019
- City Council Meeting #1: March 12, 2019
- Focus Group Meeting: March 14, 2019
- Focus Group Survey: March 12 - March 20, 2019
- Community Survey #1: March 13 - April 21, 2019
- Public Meeting #1: March 21, 2019

PHASE 2 | Park Program (April - August 2019)

- Public Meeting #2: May 23, 2019
- Community Survey #2: June 3 - June 23, 2019
- Joint City Council/Parks & Recreation Commission Meeting #2: June 11, 2019

PHASE 3 | Master Plan Development (August - December 2019)

- Public Meeting #3: October 10, 2019
- Parks & Recreation Commission Meeting #3: November 6, 2019
- City Council Meeting #3: December 3, 2019

PHASE 4 | SEPA Review & Adoption (January 2021 - December 2022)

- Parks & Recreation Commission Meeting #4: October 6, 2021
- City Council Meeting #4: January 11, 2022
- City Council Meeting #5: January 18, 2022 (SEPA Authorization)
- Non-Project SEPA Application Submitted: March 22, 2022
- Non-Project SEPA Determination of Non-Significance Issued: May 27, 2022
- City Council Meeting #6: December 6, 2022 (Final Master Plan Adoption)

Investigation & Analysis

The first phase of the master planning process establishes the overall vision for the park, focusing on the hopes, dreams and concerns of the community as they consider the existing or proposed improvements for Klahanie Park. This process included a Focus Group, where park users, key stakeholders, and organizations that currently have programs at the park come together to discuss the current and future use of the park.

The Focus Group was followed up with a community survey and public meeting. The public meeting was held at the adjacent school so participants could walk the site with city representatives and talk about their hopes, dreams and concerns in the context of the existing park. A more interactive working session followed at the adjacent school to support the discussion in the park and accommodate anyone who wasn't able to or interested in participating in the site walk.

The results of this first phase of the park master planning process were used to establish the overall park goals and guide the development of different concept alternatives for park improvements.



Site walk-n-talk with community members led by the park consultant team and City staff during Public Meeting #1.



Community members review concepts and ideas for the park during Public Meeting #2.

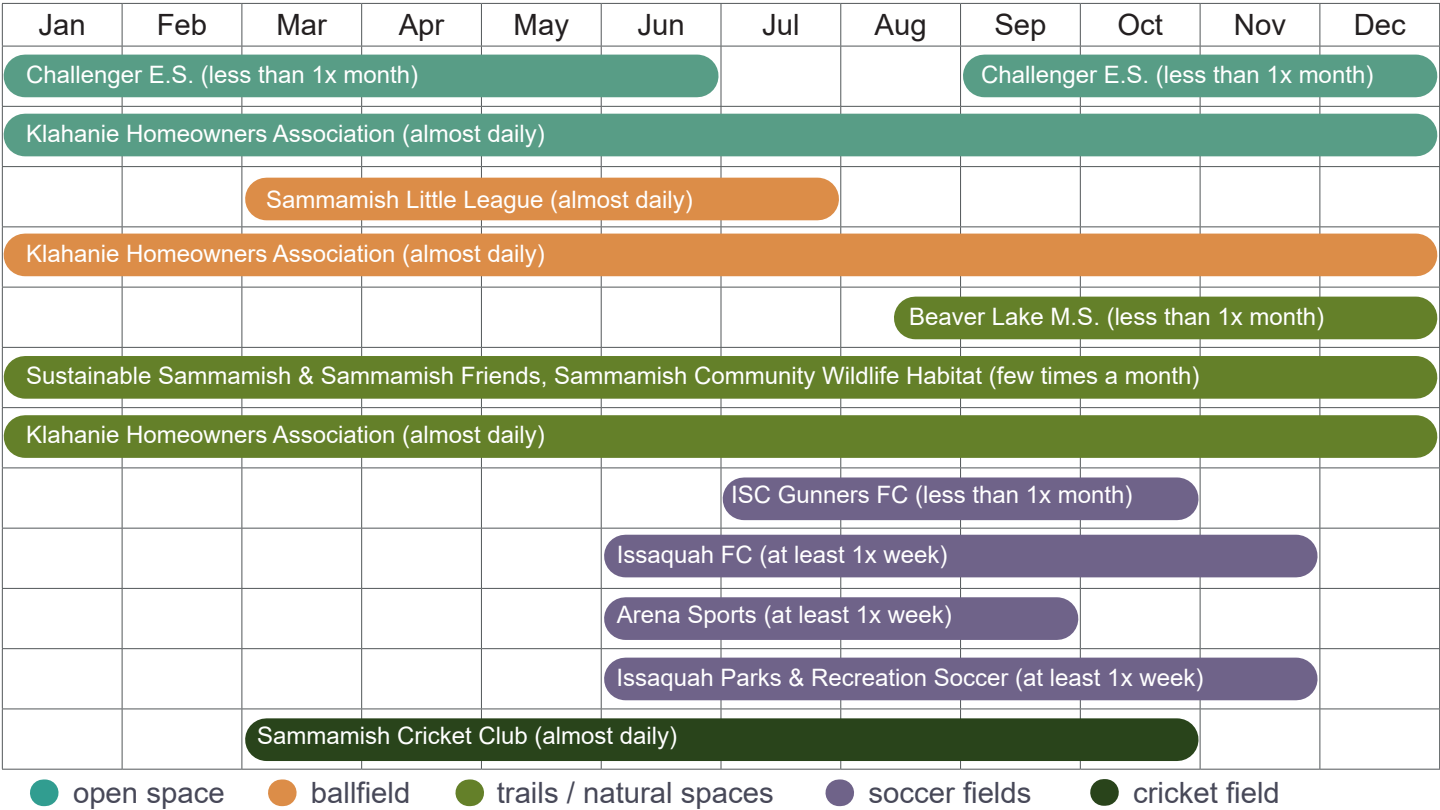
Focus Group Meeting & Survey

The design process included a focus group meeting and on-line survey. The focus group included stakeholders using the park for active and passive recreation, Issaquah School District, the Klahanie Homeowner’s Association, and three utility companies that have easements through the park. The survey was conducted from 03/12/2019 through 03/20/2019 and the focus group meeting was held on 03/14/2019. 18 participants took the survey, 26 people were invited to the meeting and 11 people attended. The feedback received in both the survey and meeting was essential in creating an initial menu of programming options for review by the larger community in Public Workshop #1. All three utility companies provided feedback and guidance for ensuring the final master plan remains compatible with their access and maintenance requirements. However, they are excluded from the data shown here because they have no recreation demands or requests. This was not a statistically valid survey.

The focus group participants included:

- Sammamish Little League
 - Challenger Elementary School
 - Beaver Lake Middle School
 - Klahanie Homeowners Association
 - Sustainable Sammamish
 - Sammamish Friends
 - Sammamish Community Wildlife Habitat
 - ISC Gunners FC
- Issaquah FC
 - Arena Sports
 - Issaquah Parks & Recreation Soccer
 - Sammamish Cricket Club
 - Williams Gas Company
 - Bonneville Power Administration
 - Puget Sound Energy

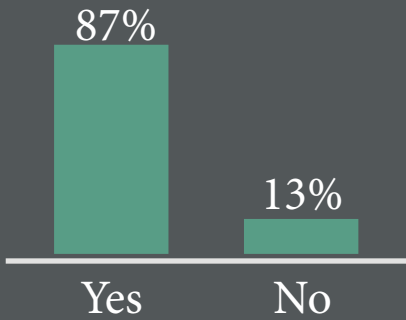
Of the groups and individuals who currently use the park for active recreation, the following chart shows who uses the various areas of the park throughout the year and how frequently the areas are currently being used.



Estimated size of the groups using the park and their average annual growth...

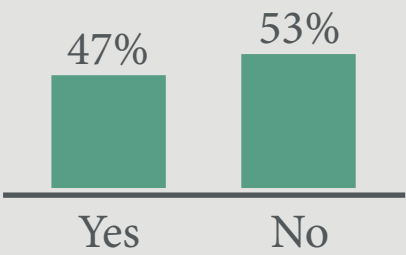
Sammamish Little League 800 - 900 / ~5% annual growth	Sustainable Sammamish 10 - 15 / growth unknown	Arena Sports 150 / ~5%- 10% annual growth
Challenger Elementary School 570 / 3% - 4% annual growth	Sammamish Friends 10 - 15 / growth unknown	ISC Gunners FC 2000 / ~5% annual growth
Beaver Lake Middle School 1,000 / ~less than 1% growth	Sammamish Community Wildlife Habitat 15 -20 / ~5% annual growth	Sammamish Cricket Club 300 / ~30% annual growth
Klahanie Homeowners Association 12,000 / ~1% annual growth	Issaquah P&R Soccer 3000+ / ~5% annual growth	Issaquah FC 700 / ~5%-7% annual growth

Is the park sufficient for your current use?



The “No” responses are related to the ballfield and soccer fields.

Is the park sufficient for your desired / future use?



The “No” responses are related to all park areas (see right).

Wish List...

From the groups or individuals whose recreation needs are not met in the park, the following wish list of improvements was requested in order to meet their desired or future use:

Ballfield:

- Artificial turf
- Field lighting
- Picnic shelter / bbq pits
- Playground
- Covered dugouts
- Improved fencing / backstop
- Spectator seating
- Accessible, shorter path from parking to field
- 1 additional ballfield
- Serve all ages

Overall:

- Improved drainage in open space and fields
- Increase parking
- Improve safety near the roadways
- Synthetic turf & light pollution are a concern

Open Space:

- Outdoor classroom
- Accessible play area
- Zipline
- Access to restrooms
- Community kiosk
- Gathering space
- Covered picnic shelter
- Family friendly activities

Soccer Fields:

- Preserve 2 soccer fields
- Artificial turf
- Field lighting
- Adequate parking
- Playground

Cricket Field:

- All natural grass, mowed short
- 2 practice wickets
- Seating
- Maintain or expand field size
- Lighting

Trails / Natural Spaces:

- X-Country course
- Boardwalks
- Preserve nature & bog
- User-friendly paths
- Connect the loop trail
- Don't add trails
- Interpretive signage
- Bog viewing area
- Emergency access
- Clear noxious weeds
- Native plant & pollinator garden
- Celebrate & educate about the bog and natural spaces without negative impacts
- Stewardship opportunities

Community Survey #1 - Hopes, Dreams, and Concerns

The vision and programming survey was available on-line and open to the public from 03/13/2019 through 04/19/2019 and worked in tandem with the feedback from Public Workshop #1 to kick-off the design process. This was not a statistically valid survey.

The survey asked how people felt about the current park. In general, the community enjoys the park's location and its small-scale park character, the flexible open space, and current activities including the sports fields, the natural spaces, and trails. The survey results also showed that the community didn't like that the existing fields are often too wet to play on or are so heavily programmed that there isn't space for informal activities to occur. Some respondents felt the current playground structure was limited in its age and interest, and the restroom felt unsafe. While many people responded in the survey that they liked the trails, there were also a number of responses that indicated a concern there were too few trails or that the trails felt unsafe. Additional written comments received included:

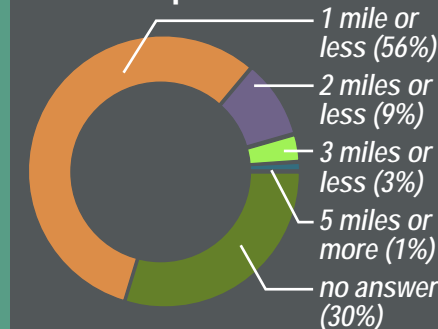
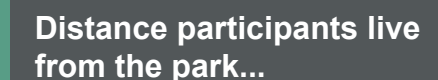
- Increased traffic and safety concerns.
- Impact on the environment.
- Concern with adding field lighting.
- Concern with using artificial turf.
- Keep the big boulder by the playground.
- Concern with the park becoming crowded with large groups / leagues.
- Desire to keep the park as-is.

The survey also asked what one word or phrase could be used to describe the ***vision for the future*** of Klahanie Park. A word cloud was prepared to highlight the responses. The larger the word, the more often it was mentioned in survey responses.



677

Survey Participants



The majority of survey participants live a short distance from the park and visit weekly or more.

Average age of participants ...

2% under 25 years

41% 26 - 45 years

46% 46 - 65 years

11% over 65 years

Vision & Mission

Conservation of
natural resources:

agreed or strongly agreed

Vision & Mission

Opportunities to improve health and wellness:

70%

agreed or strongly agreed

Vision & Mission
Create social equity in
access to parks and
recreation:

agreed or strongly agreed

Above is the % of survey participants who agreed that Klahanie Park should support the City's mission to create a legacy of diverse and quality parks, exceptional recreation programs, and protected natural resources.

Top Perfect Fit Features...



#1 Restrooms

#2 Natural surface trails

#3 Playgrounds /natural play elements

Other perfect fit features included boardwalks, flexible space, picnic areas, and multi-purpose fields.

- #1. Skate park / skate features
- #2. Frisbee golf course
- #3. Amphitheater / stage
- #4. Art murals & sculptures
- #5. Single purpose sport fields

Other less desired features: zipline, climbing walls, parkour, sports courts, off-leash area, spray park.

Top Guiding Principles...



#1 Sustainable design

#2 Ecological restoration / enhancement

#3 Efficiency / ease of maintenance

Other guiding principles for the park design included connections to trails, schools, and residences.

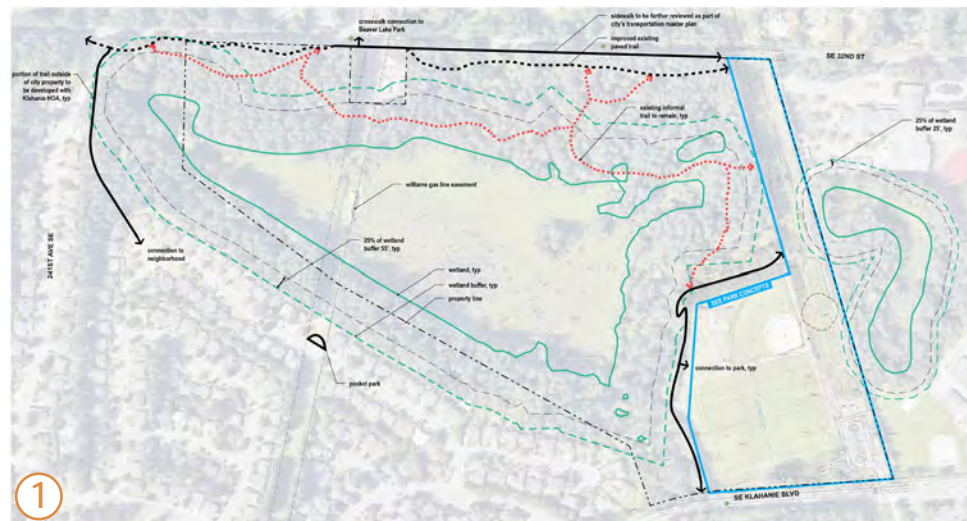
Park Program

Three master plan alternatives were developed for trails and park improvements based on the site analysis, environmental documentation, and the results of the Hopes, Dreams, and Concerns phase of the planning process. The alternatives developed during this phase of the design are shown below and included in Appendix D.

The master plan alternatives are based on the following overall project goals for park improvements.

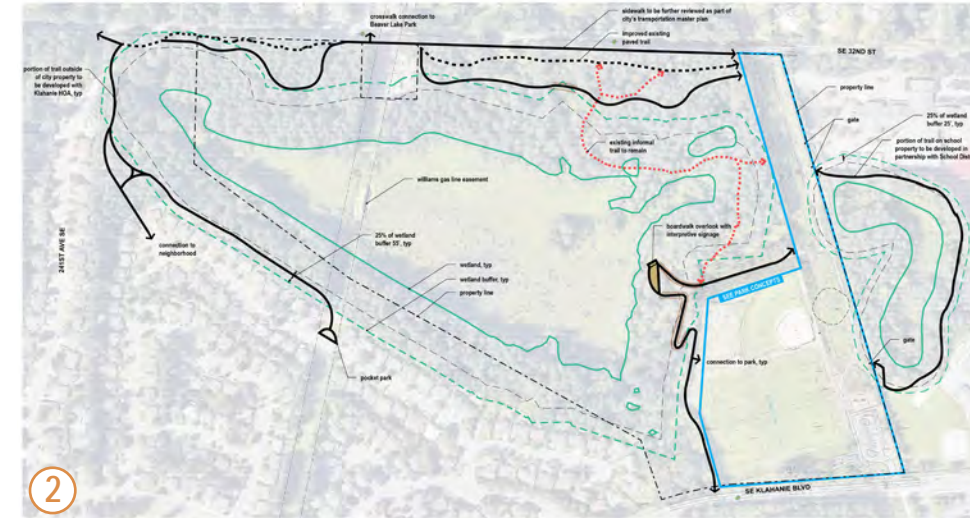
1. **Protect Queen's Bog** and the rest of the natural environment, educate the community about the unique nature of the bog, and partner with the adjacent schools to enhance the park as a learning environment.
2. **Gather and Celebrate** to come together as a community, celebrate our diverse backgrounds and cultures, build memories with our families and each other.
3. **Balance passive and active activities** recognizing the park serves a larger community need but should still retain its neighborhood scale and character.

Trails Concept 1



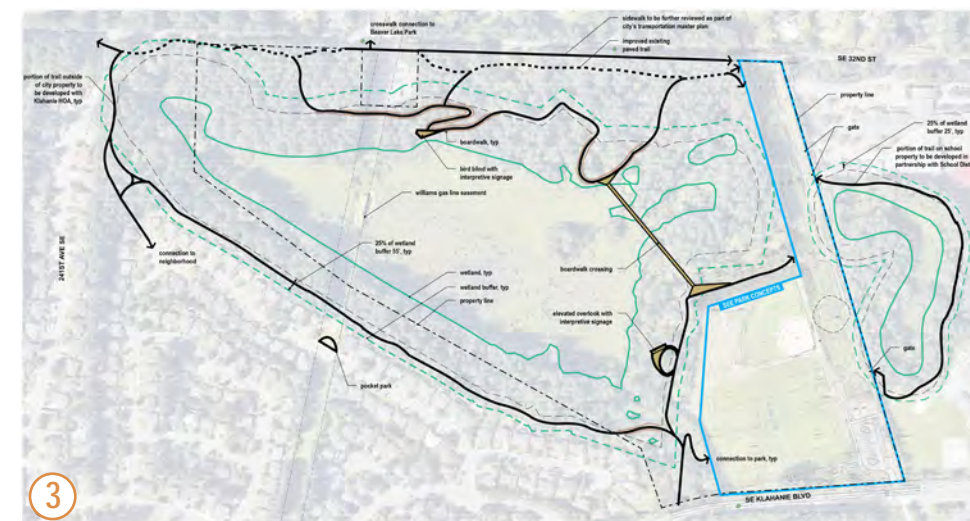
Provides improvements to the existing paved trail and allows the existing unpaved trails to remain in place. The existing trails would also connect to the loop trail around the park open space. The western trail is relocated to be in the outer 25% of the wetland buffer and this would require partnership with the Klahanie Homeowner's Association since this trail is located within their Native Growth Protection Area. The existing open space at the south end of the gas line adjacent to SE 34th Place would be improved as a pocket park with picnic and seating areas.

Trails Concept 2



Same as Concept 1 with additional connections to the surrounding neighborhood, schools, and park open space. Includes a boardwalk in the forested area to overlook Queen's Bog and may include interpretive or educational signage or other features. New trails are located in the outer 25% of the wetland buffers to comply with code requirements. Any new trails over steep slopes will be designed as boardwalks to minimize disturbance and impact on the existing vegetation. Trail relocation outside the park property would require partnership with the Klahanie Homeowner's Association since this trail is located within their Native Growth Protection Area.

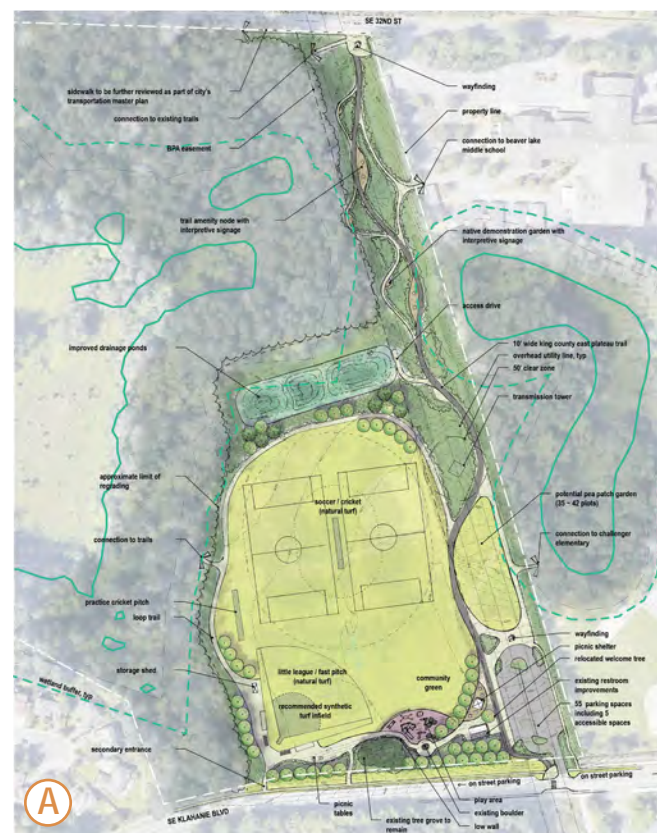
Trails Concept 3



Same as Concept 2 with additional trails through the forested areas, overlooks, and connections to the Klahanie community. This concept includes a variety of boardwalk features in the forested area which can overlook Queen's Bog and may include bird blinds, interpretive or educational signage, and seating. Additionally, this concept adds a direct boardwalk/bridge connection across a portion of the bog and incorporates a complete loop around the forested areas. Any new trails located in areas outside of the park property would require a partnership with the Klahanie Homeowner's Association since this trail is located within their Native Growth Protection Area.

Open Space Concept A

Relocates the existing soccer and cricket fields to the north, moving the existing ballfield to the southwest corner of the site. This configuration would allow the slope by the existing restroom to be smoothed out and would open up the central area of the park for more unstructured, flexible open space. It would also allow the playground and picnic areas to be expanded, and create more terraced seating to better support community events. This concept creates a full adult size cricket pitch and outfield by utilizing the space more efficiently. The parking lot is reconfigured to increase capacity within a similar footprint as the existing parking lot and would add a drop-off area. The existing grove of trees west of the restroom would also remain.



Open Space Concept B

Generally keeps the existing soccer and cricket fields in their current location but moves the existing ballfield and expands the area around the cricket pitch so that a full-size adult and youth cricket match can be accommodated. Moving the existing ballfield allows the play area to be relocated away from the road and parking, and expands it to include multiple ages and play features. This configuration creates a central open space that can accommodate more unstructured activities, picnic areas, and a series of event spaces, large and small. The restroom is relocated to the central area of the park as well.

A loop trail would surround the open space and connect into the larger trail system throughout the park. The parking lot is expanded to the north to increase capacity (nearly doubled in size) and a drop-off area is added. The existing grove of trees west of the restroom would be impacted with this concept, and a stormwater vault would be needed under the north edge of the cricket field.



Open Space Concept C




Combines the existing ballfield and soccer fields into one large multi-purpose area with synthetic turf with an opportunity for field lighting. This allows for a separate full-size cricket pitch and outfield that could accommodate adult and youth matches, while providing a community open green when cricket is not in play. To accomplish this, the existing stormwater pond area would need to be converted into field space. The new cricket field would be at a lower elevation to work with site topography. The slope between the cricket field and the ballfield/soccer fields would be used to support community gathering and offer semi-structured seating for larger events. The play area is moved away from the road but is still near the parking lot and expanded to include multiple ages and play features. A series of new picnic areas would be located near the playground and as a central gathering area between the fields.




A loop trail would surround the open space and connect into the larger trail system throughout the park. The parking lot is expanded to the north to increase capacity (nearly doubled in size) and a drop-off area is added. The existing grove of trees west of the restroom would be impacted with this concept, and a stormwater vault would be needed under the north edge of the cricket field.



Community Survey #2 - Master Plan Alternatives

The second Community Survey was used to evaluate and provide feedback on the master plan alternatives. It was available on-line and open to the public from June 3, 2019 through June 23, 2019 with the second Public Meeting occurring while the survey was active. This was not a statistically valid survey. The following tables include the feedback received for each Open Space and Trails alternative shown. 354 people participated in the survey.

	Likes	Dislikes / Concerns	Desired Changes
Open Space A			
	<ul style="list-style-type: none"> unprogrammed open space community gardens big rock and trees remain loop trail meandering trail with amenities natural grass 	<ul style="list-style-type: none"> fencing along SE Klahanie Blvd is less welcoming entrance 	<ul style="list-style-type: none"> move fields away from SE Klahanie Blvd larger playground switch the location of the cricket/soccer fields and the ballfield more picnic/seating natural infield add fencing at cricket field extents
Open Space B (preferred)			
	<ul style="list-style-type: none"> similar efficiency of fields to the existing natural grass natural stormwater treatment central play area and restroom ballfield fences are out of the way 	<ul style="list-style-type: none"> community open space is too small distance of the play area to parking 	<ul style="list-style-type: none"> keep the existing trees along SE Klahanie Blvd add pea patch instead of sensory garden add more picnic areas remove outdoor classroom add lawn
Open Space C			
	<ul style="list-style-type: none"> artificial turf field lighting full adult softball field cricket field separation 	<ul style="list-style-type: none"> artificial turf & field lighting loss of neighborhood character and nature too much impact stormwater redesign expanded parking fencing along SE Klahanie Blvd is less welcoming entrance 	<ul style="list-style-type: none"> Add unstructured community space larger playground more seating and shade around the fields

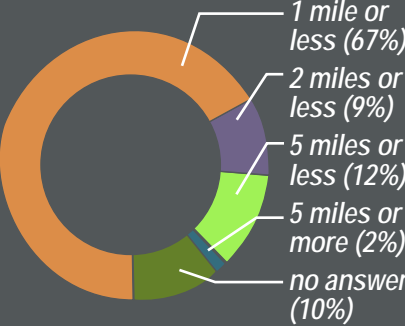
	Likes	Dislikes / Concerns	Desired Changes
Trails 1 (preferred)			
	<ul style="list-style-type: none"> removal of trails behind homes minimum impact to the bog and natural space improves existing trail along SE 32nd Street 	<ul style="list-style-type: none"> proximity of trail to SE 32nd Street non-loop trail and very minimal improvement or new trails added 	<ul style="list-style-type: none"> add unique or interpretive features add trails, or a looped trail remove trails add trail connection to pocket park
Trails 2			
	<ul style="list-style-type: none"> overlook, but it needs to consider safety/security and impact on the environment school wetland trail 	<ul style="list-style-type: none"> trail behind homes bog / wetland viewing platforms encroachment into natural areas 	<ul style="list-style-type: none"> remove new trails and focus on improving existing trails add trails or a looped trail
Trails 3			
	<ul style="list-style-type: none"> seating trail connections and the looped system overlooks and other trail amenity areas 	<ul style="list-style-type: none"> trail behind homes full loop trail has too much impact on bog bridge over bog is too invasive too much access to the bog 	<ul style="list-style-type: none"> eliminate improvements within the wetland buffers balance soft surface with paved trails to minimize impact

345

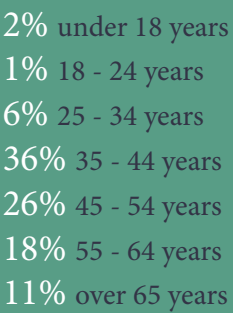
Survey Participants

58% of respondents visit the park at least weekly on average.

Distance participants live from the park...



Average age of participants...



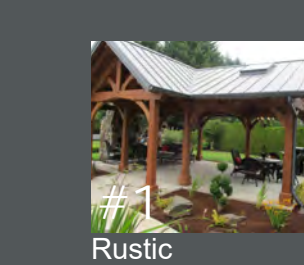
Top Play Area Preferences



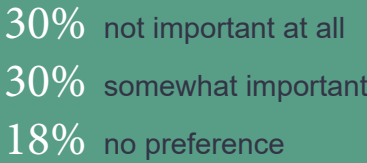
Top Garden Preferences



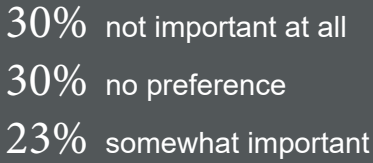
Top Shelter Preferences



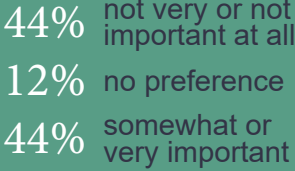
How important is it to provide an overlook to Queen's Bog?



How important is it to provide an overlook to the wetlands?



How important is it to provide trails/boardwalks in the wetland buffers?



Community Feedback

Following Public Workshop #2 and the Community Survey, the Master Plan Alternatives were presented during a joint meeting with City Council and the Parks & Recreation Commission on June 11, 2019. Comments continued to be received through June and July of 2019 and focused on keeping the neighborhood feel of the park, balancing active and passive recreation, and ensuring minimal impact to the natural spaces. Some representative comments are included here:

"We have severe **shortage of athletic fields** in this city. Hopefully this will help a lot to cater most of the needs. The **best part of this park is cricket field**. It's the only park in this region which helps lot of kids in this sport."

"All three plans have strengths and weaknesses and look good. I see the value of providing fields, but I would also like to **ensure that there is natural space maintained**."

"It's important that any enhancements to this park take into **consideration the impact on existing native areas, wildlife habitats, and surrounding neighborhoods**... Klahanie has always been an appealing place to live because of all the natural beauty and the vision of the original developers to create a lot of natural space for resident's enjoyment. Klahanie Park should continue to reflect this vision."

"The most important thing to have is open, natural (no artificial turf) **unstructured place to play**."

"I am against Option C for the park and trails. Homes back onto the park and trails, **artificial light and the increase in traffic is not wanted at night** for the Klahanie community. Please consider Option A or B, and remove Option C from consideration."

"Klahanie Park is one of the best parts of our community. It's a gathering place on weekends and after school for everyone in Klahanie -- and some of the surrounding Sammamish communities. **I'm not in favor of large-scale change to the existing site**. If pressed, I think Park Plan B makes the most sense (because it would get cricket balls away from Klahanie Drive). I think Trail Plan 1 would be my favored alternative."

"Please support a configuration that **allows for artificial turf and lighting**. This would increase usage substantially. The field should include lacrosse markings."

"I want to see the park **improved and maintained without destroying the natural beauty** and simplicity of the park."

"This park is really awesome just as it is. The only option that I would consider is option B. The baseball diamond needs to stay in the back. **Keep as much green space as possible for free play and family activities**. Do not increase parking and do keep our lovely trees intact. A huge parking lot does not make a park more appealing. In fact, it is offensive."

"As an almost 30-year resident of Klahanie, I am writing to strongly voice my opinion that we **leave Klahanie Park as close to what it is as possible**. Please do not use artificial turf and big lights. We spent years driving to soccer fields and understand the push there, but there are plenty of alternatives that worked great and will continue to. There are few places that offer natural open spaces."

"I am hoping that the **play area is inclusive of kids of all ages**, not just the tots."

Master Plan Development

A preferred master plan was developed based on the feedback received during the public outreach process, including comments received from the Parks & Recreation Commission and City Council. The preferred master plan direction included:

- Keeping the multi-purpose field for cricket and soccer in its current location, and adjusting the topography and other site improvements to get as close to full-size fields as possible.
- Shift the baseball/softball field to the west to allow for a more centralized playground and gathering space that is in close proximity to the parking lot.
- Keep the trails around the perimeter of the site - do not extend trails further into the critical area buffers and keep any overlooks or boardwalks within the outer 25% of the buffer limits, to the greatest extent feasible.
- Keep the pocket park adjacent to SE 34th Place, recognizing this would need to be developed in partnership with the Klahanie Homeowner's Association (HOA).
- Consider alternate educational opportunities regarding the bog, such as signage, live cams, and other material available virtually. Develop a partnership with schools and the community to continually highlight the critical nature of the bog.
- Explore options for synthetic and natural field materials to ensure a decision will be based on the best available information and the entire life-cycle of the materials being considered. This includes the long-term maintenance, with a specific focus on maintaining the overall health and function of the adjacent Queen's Bog.
- Keep some informal, unprogrammed open lawn for flexible activities and to still have a place for families to gather and play when the fields are programmed by other uses.
- Include a variety of picnic and seating areas.
- Include a community garden.
- Expand the parking lot to the extent feasible and locate the restroom close to the parking for ease of maintenance.
- Keep all improvements, except trail connections, outside of the existing forested buffer areas. Improve the buffer where needed for added protection to the environmentally sensitive areas.
- Continue to allow the school easy access to the park to support their classroom programming and educational activities.
- Provide the ability to hold high school cross-country practices and meets in the park as part of the final design of the trail system.
- Show the full extent of a future trail system circumnavigating the park, but clearly indicate the park limits versus those portions of the trail that will need to be developed as part of a future partnership with the Klahanie HOA. The trail system should connect to the SE 34th Place right-of-way, it should not extend into the buffer area between the existing residences and the Bog.
- Design to not preclude a future opportunity for lighting the athletic fields if continued community growth, interest, and need results in a greater demand for use than currently anticipated, and as technology improves to ensure no adverse impact to the adjacent Queen's Bog.

Preferred Master Plan



- | | | | |
|---|----------------------------------|-------------------|----------------------|
| 1 Entrance & Parking | 4 Softball / Little League Field | 7 Restroom | 10 Stormwater System |
| 2 Community Garden | 5 Play Area | 8 Paved Trail | 11 Regional Trail |
| 3 Multipurpose Field (cricket / soccer) | 6 Community Green | 9 Boardwalk Trail | 12 Pocket Park |

The preferred master plan, along with supporting graphics, sections and potential phasing was presented during Public Meeting #3 on October 10, 2019.

The plan was also presented to The Parks & Recreation Commission on November 6, 2019 and to City Council on December 3, 2019.

Preferred Implementation Phases



TRAILS PHASE

- Removal / replanting of informal trails for buffer mitigation.
- Relocate asphalt / gravel trail near SE 32nd Street to the neighborhood west of the site.
- Improve existing asphalt trail near SE 32nd Street.
- BPA easement trails and East Plateau Trail improvements.
- Boardwalk trail near the bioretention / stormwater area.

CRICKET / SOCCER FIELDS PHASE

- Natural grass cricket and soccer fields.
- Synthetic turf cricket pitch and practice pitch.
- Accessible loop trail.
- Picnic and seating areas around the loop trail.

Community Feedback

- **Concerns:** community garden location under the BPA utility lines. Concerns that more parking is not needed.
- **Requests:** several comments requested to keep the existing trails, especially those that are used for cross-country. Likewise, there were also comments that said no new trails, protect the bog, and leave the park as-is.

Public Meeting: There was overall support for the preferred plan and the overall layout of the various spaces expressed during the Public Meeting #3 on October 10, 2019. Participants were pleased that the preferred master plan responded to their desire to keep the natural feel and included a variety of community spaces.

Parks and Recreation Commission: Feedback during the regular meeting on November 6, 2019 included a preference for the Cricket and Soccer Fields phase being constructed first. There is an identified need for community gardens and the location under the power lines makes the best use of the space available. There is no known negative effects of gardens and food production within proximity to power lines. The Commission also supported a larger parking lot as shown in the preferred plan, recognizing that on-street parking directly adjacent to the park is limited and many visitors need to cross SE Klahanie Blvd. to visit the park.

City Council: comments received during the December 3, 2019 regular meeting generally aligned with the Parks & Recreation Commission, with concerns for timing and overall cost of the proposed improvements. As part of this meeting, City Council paused the master plan project to complete a city-wide Athletic Field Study to look at the city fields comprehensively and ensure the preferred alternative for the fields was meeting the needs of the community. The results of that study are summarized in the following section.

PLAY AREA PHASE

- Play area, community green, overlook, community garden, restroom, picnic shelters, pedestrian entrance improvements.
- Relocate little league / softball field; natural grass outfield with synthetic infield including seating and storage.

SUPPORT FACILITIES

- Bioretention / stormwater area to the north of the open space.
- Parking lot and main entrance improvements to the southwest of the site.
- Support facilities would be included in either the Cricket / Soccer Fields Phase or the Play Area and Ballfield Phase; whichever is constructed first.

Athletic Field Study

A separate Athletic Field Study was conducted separate but concurrent with the Klahanie Park Master Plan process. The findings of this study were reviewed and integrated into the park plan where applicable. A summary of the study findings is shown below.

Existing Conditions

In reviewing the service life of the 3 fields, the baseball field was observed to be declining in performance, specifically the infield, with observable corrective maintenance and/or repairs required.

The two multipurpose fields are nearing the end of their service life; they require continual attention, have consistently substandard performance largely due to the natural accumulation of organic material over time and excessive maturation of the grass, resulting in poor drainage that affects the ability to use the fields.

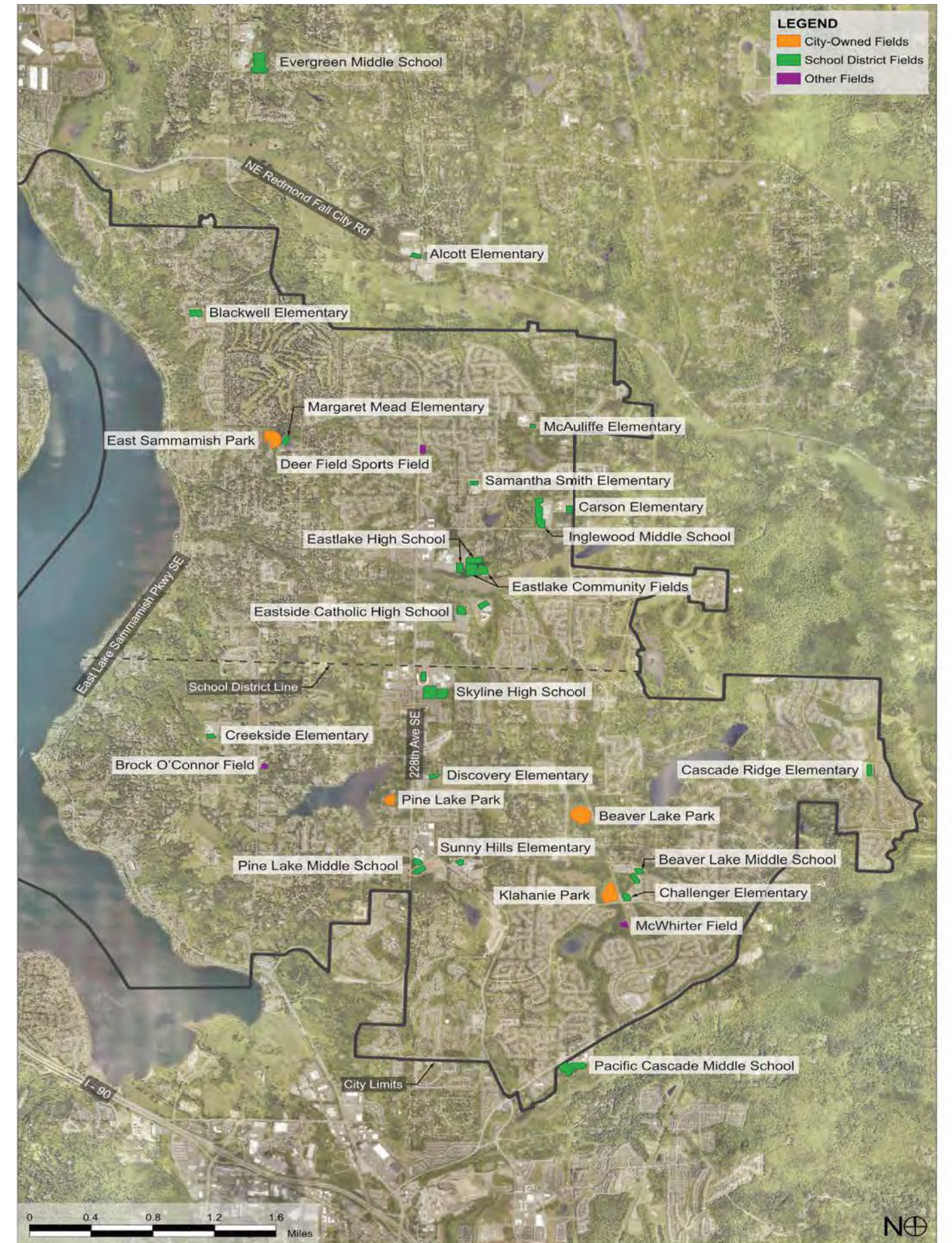
In regards to usage, the multi-purpose fields at Klahanie Park are the highest used fields after the synthetic turf at Eastlake High School, with hours rented nearly at capacity for natural grass fields. Of these hours rented, cricket accounts for approximately half; Klahanie Park is the only city park with a cricket pitch.

Recommendation

Upgrading these existing natural grass fields per the Preferred Plan would not likely increase capacity in terms of scheduled hours rented, but it would improve the overall quality, performance, and more importantly the reliability of the fields. A complete renovation would also better equip the fields to tolerate heavy use while reducing the frequency of maintenance and repairs. Options were explored to convert the multipurpose fields to synthetic turf with lights, which would increase capacity in terms of usable hours. This option is preferred by the soccer leagues but is not preferred by the cricket league, who represent the biggest user group. Furthermore, converting these fields to synthetic turf with lights was widely opposed by the community during the outreach process of the master plan. Therefore, the consultant recommended proceeding with the preferred plan as fields reach the end of their life.



Multi-Purpose Fields



Athletic Field Study Field Map

FINAL MASTER PLAN

Process Overview

Final Master Plan

Plan Elements

Site Sections

Process Overview

The final Master Plan was developed based on feedback received during the public outreach process. The estimated cost of construction was refined, and the implementation plan updated to reflect the final Master Plan. A draft of the Master Plan, with implementation phases and cost estimates, was presented to the Parks & Recreation Commission on October 6, 2021. A number of questions were raised around the need for athletic fields, the current maintenance practices, and the effect of those practices on the long-term health of Queen’s Bog and other adjacent wetland systems. The opportunities and constraints of different field materials options was also discussed. The opportunity to light the fields, potential grading limits, and stormwater implications of the proposed improvements was also discussed at length.

Comments from the Parks & Recreation Commission were integrated into the plan, additional information on the field maintenance and surfacing was provided, and the final Master Plan was recommended for action to the City Council. The Commission recommended the plan be approved to proceed through the State Environmental Protection Act (SEPA) with the preparation of a Non-Project SEPA Checklist. On January 11, 2022, the City Council approved the Master Plan to proceed through the SEPA process.

A SEPA Checklist was developed based on the master plan elements proposed for the park. Upon careful review and an open public comment period, a determination of non-significance was issued by the City of Sammamish on May 27, 2022 (see Appendix C).



Final Master Plan



Plan Elements

- 1

Entrance & Parking. The main entrance into the park remains in its current location, and the parking lot is expanded to increase capacity and to include a formal drop-off area
- 2

Community Garden. A new community garden is proposed to include 35-45 garden plots, including ADA accessible plots, within close proximity to the parking and drop-off area. A tool and storage shed is located within the community garden area. A picnic and seating space is also provided to facilitate gathering, social events and work parties in support of the community garden.
- 3

Multipurpose Fields. The final master plan generally keeps the multi-purpose field for cricket and soccer in their current location while expanding the cricket field limits. The cricket and soccer fields are unlit and are comprised of natural grass surfacing, with synthetic surfacing at the cricket pitches only. The southern edge of the cricket outfield will stop at the bottom of the sloped lawn. This configuration does not accommodate a full, adult-size outfield, but it does preserve the existing grove of trees and allows park visitors to use the sloped lawn for seating. The field extents are delineated with a split rail fence along the loop trail. A second practice pitch is also provided.
- 4

Softball / Little League Field. The little league / softball field is relocated to the west, opening up a centrally-located community green space, picnic plaza, and play area. The little league / softball field is also unlit and includes a natural grass outfield with a synthetic infield, spectator seating, covered dugouts, and other field amenities.
- 5

Play Area. The large play area is centrally located, close enough to the parking and restroom for easy access, but far enough away to provide a safe, welcoming play space for all ages and abilities. The play area includes a formal play space with accessible and inclusive play equipment designed for ages 2-5 and 5-12; a sloped play area with slides that will also be accessible through a small path looping around the slide; and a natural play space with climbing rocks, boulders, and other play elements inspired by nature.
- 6

Community Green. The community green is a flexible open space that can be utilized for unstructured recreation, picnic areas, and events.
- 7

Restroom. The restroom is relocated near the community green for easy access from all the park activities and spaces.

- 8

Paved Trails. An accessible paved loop trail meanders around the athletic fields, connecting to the play area, community green, restroom, community garden, and parking area. A small overlook near the north side of the open space serves as a trailhead to the boardwalk and trails along the utility corridor. Several amenity nodes are provided along these trails for native plant demonstration gardens, seating, wayfinding, and interpretive education.

The forested area includes improvements to the existing paved trail near SE 32nd Street and the western trail is relocated to be in the outer 25% of the wetland buffer. The western trail is outside of the park boundary but within Klahanie’s Native Growth Protection Area (NGPA); development of this portion of the trail would require partnership with Klahanie HOA. Connections to all other existing trails in the forested area and wetland buffers will be planted with native wetland species for mitigation.
- 9

Boardwalk Trails. A boardwalk trail is proposed through the stormwater system to facilitate educational programming and interpretive signage about natural drainage practices utilized at the park, and the relationship of stormwater systems to the overall health of the wetlands and bog that the systems drain into. Boardwalks are also provided along steeper slopes in the buffer areas to help reduce the overall impact of trails and provide easier access in these areas.
- 10

Picnic Areas. The main picnic shelter and picnic area is centrally located between the fields, play area, loop trail, and community green. The loop trail around the fields also includes picnic nodes with small shelters, picnic tables, and other amenities.
- 11

Stormwater System. The existing stormwater ponds will be redeveloped to include a more natural approach with cascading bioretention cells which will be planted with native species and small ornamental trees. These bioretention cells will capture site stormwater and allow it to infiltrate and any overflow will utilize the existing or improved catch basin and stormwater system. Stormwater from pollution-generating surfaces such as the parking lot, the athletic fields, and vehicular paving will drain to the bioretention cells, constructed wetland cells, and/or other similar systems.
- 12

Regional Trail. The regional trail along the powerline remains as a paved shared-use path. A series of secondary, more informal and soft surface trails weave around and connecting into the regional path. These secondary trails provide a more natural alternative to the regional trail with opportunities to experience the more natural vegetation and views into the park.
- 13

Pocket Park. The pocket park provides a small passive recreation area within the existing open space along the Williams Gas easement for seating, picnicking, and a small grass lawn. The development of this pocket park would require partnership with Klahanie HOA and Williams Gas Line.



Enlarged Final Master Plan

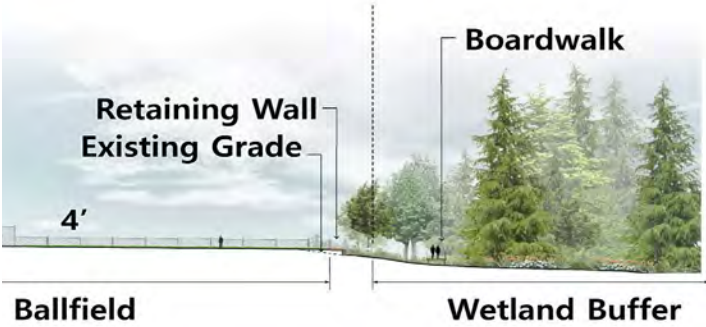


- | | | | |
|---|----------------------------------|-------------------|----------------------|
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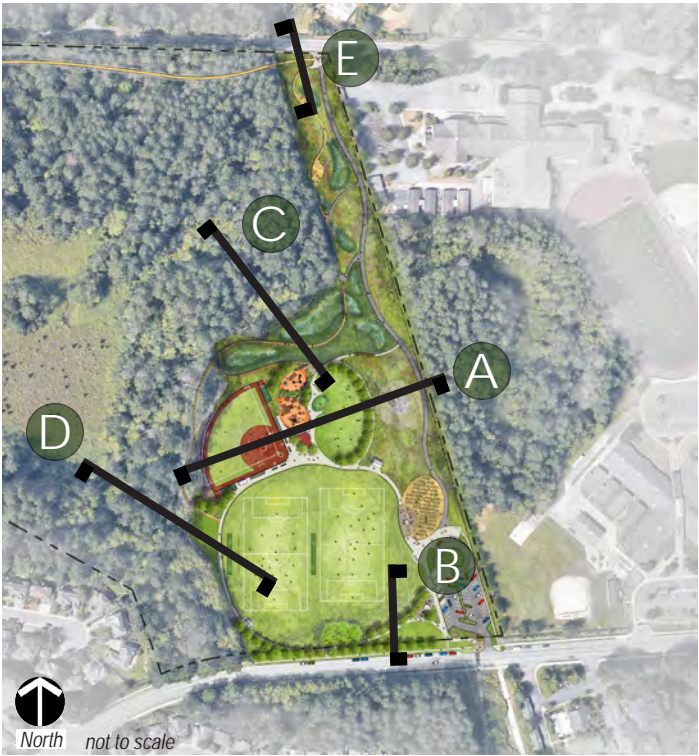
Site Sections



Section A



Section A continued



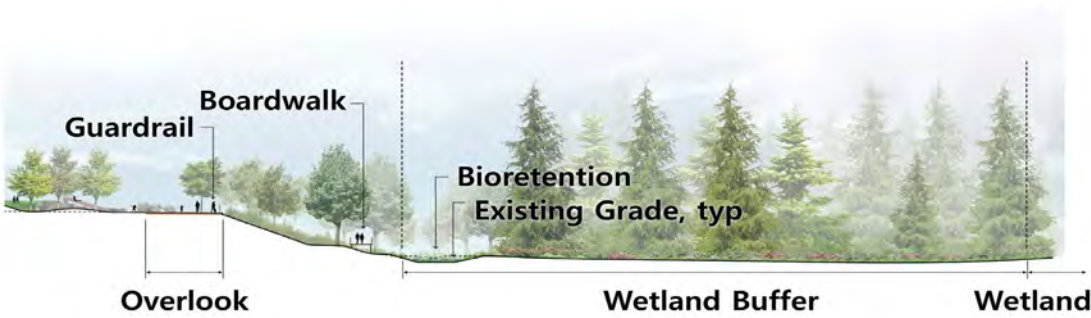
Section Key Map



Section B



Section D



Section C



Section E

IMPLEMENTATION

Phasing Plan

Cost Estimates

Estimated Cost of Construction
Athletic Field Operations & Maintenance Costs

Permitting

Grant Funding

Phasing Plan

This diagram shows the overall phased development plan with three different phases of construction. The cost estimate for each phase of construction is included in the following pages.



-  TRAILS PHASE
-  CRICKET / SOCCER FIELDS PHASE
-  PLAY AREA PHASE
-  SUPPORT FACILITIES

While the trails, cricket / soccer field, and play area / ballfield relocation phases are relatively distinct phases of work that can be developed in any order, the support facilities will need to be developed with either the cricket / soccer field phase or the play area / ballfield relocation phase.

The trails phase includes the pocket park off SE 34th Street and assumes a partnership with the Klahanie HOA for trails outside of the park boundary.

The cricket / soccer field phase includes the loop trail around the fields connecting into the parking area.

The play area and ballfield relocation phase includes the relocation of the softball / little league field and play area, and development of the community green, restroom, picnic area, and community garden.

Cost Estimates

Estimated Cost of Construction

The estimated cost of construction is shown below. The first table shown below represents the total project construction cost if the entire Final Master Plan were developed as a single phase. The second table breaks down the estimated cost of construction into the potential phases previously described (shown in no particular order). The Total Project Costs shown below do not include any field lighting.

Overall / Single Phase	
ITEM	TOTAL
Demolition & Site Preparation	\$ 290,700
Earthwork	\$ 602,600
Site Utilities & Drainage	\$ 300,000
Paving & Walls	\$ 1,470,200
Parking & Street Frontage	\$ 86,400
Site Improvements	\$ 1,509,300
Buildings	\$ 581,000
Planting	\$ 2,407,900
Ballfield Improvements	\$ 3,383,700
Escalation 2019 - 2023	\$ 2,800,000
Construction Total with Sales Tax, Contingency, and Contractor Mark-ups	\$ 18,500,000
Total Project Cost with Design and Permitting	\$ 23,200,000

Phased Implementation	
ITEM	TOTAL
Trails Phase Construction Total	\$ 4,800,000
Cricket / Soccer Fields Phase Construction Total	\$ 5,500,000
Play Area Phase Construction Total	\$ 9,850,000
Support Facilities Phase Construction Total	\$ 3,000,000
Escalation 2019 - 2023	\$ 2,800,000
Total Project Cost with Design and Permitting*	\$ 25,950,000
*Totals for each segment are inclusive of escalation, soft costs, contingency, and contractor mark-ups	

Athletic Field Operations & Maintenance Costs

The estimated full time equivalent (FTE) hours shown below are based on similar types of parks and facilities. This cost covers maintenance for the improved athletic fields, play area and trails.

	FTE Hours Per Year (2,031 total hours/year)
Existing Maintenance	831 hours (0.4 FTE)
Proposed Maintenance	1,200 hours (0.5 FTE)
Other staff during games / tournaments	volunteers

Maintenance for Synthetic Infield

The specific maintenance recommendations will vary depending on the synthetic turf manufacturer and the specific type of infill used. Below is a general list of maintenance practices for synthetic field surfacing:

- Field Inspection: This will ensure the infield is in a safe, playable condition and also determine if and when maintenance is needed. Done on a weekly basis or before/after each game.
- Surface Brushing and Raking: levels the infill, refreshes the synthetic turf blades, and removes static from the surface. Done monthly when the field is in use.
- Aerating: loosen the infill to prevent it from becoming compacted. Done 2-3 times per year.
- Sweeping: keeps the field clean and debris-free. Done on an as-needed basis.
- Infill Topdressing: Adding infill to maintain the recommended depth, especially in high traffic areas such as the bases. Done on an as-needed basis.

Maintenance for Grass Fields

Below is a brief outline of typical maintenance practices for grass athletic fields:

- Field Inspection: This will ensure the infield is in a safe, playable condition and also determine if and when maintenance is needed. Done on a weekly basis or before/after each game.
- Routine Mowing: Done weekly during the grass growing season.
- Aerating: loosen the infill to prevent it from becoming compacted. Done 2-3 times per year.
- Litter / Debris Pickup: keeps the field clean and debris-free. Done on an as-needed basis.
- Irrigation: Irrigated daily from March through November.
- Fertilizer/Pesticides/Herbicides: Done on an as-needed basis.
- Overseeding: Done on an as-needed basis.
- Resting / Establishment Periods: Done on an as-needed basis.

Life-Cycle Costs of Synthetic Infield

A typical synthetic turf infield will need to be replaced every 8 to 10 years. This costs approximately \$10.00 per square foot and based on 2022 dollars. This includes:

- Contractor mobilization and installation.
- Removal and disposal of synthetic turf and infill.
- Remediation of the base course.
- Replacement of the synthetic turf and infill.

Permitting

The following matrix summarizes potential permits needed for project development including permitting agencies, requirements, and triggers for the master plan including state, federal and local permitting requirements.

Permitting Matrix	
Potential Permit	Improvement
Critical Areas Study	Trails or boardwalks within the outer 25% of the wetland buffers
Site Development Permit - Department of Community Development	Cricket / soccer fields phase, play area phase, potentially trails phase
Building Permit - Department of Community Development	Guardrails, boardwalks, timber stairs, handrails, and retaining wall
Building Permit - Department of Community Development	Shelters, storage sheds, restroom building
Plumbing / Mechanical Permit - Department of Community Development	Restroom building (if not pre-fabricated)
Electrical Permit - Department of Community Development	Restroom
Sign Permit - Department of Community Development	Park standard monument sign at entrance
Demolition Permit - Department of Community Development	Existing restroom
SEPA Review Process	Any new development
Utility Permits / Approvals - PSE, BPA and Williams Gas	Obtained through each utility company, including approval process for any work within utility easements

The final Master Plan was reviewed with the utility and easement agencies with no concerns raised and general agreement with the improvements shown in the master plan. This review included BPA, King County, Williams Gas, and Eastside Fire & Rescue.

Grant Funding

Below is a matrix listing a selection of grant opportunities available to this park development. This is not a list of all of the options, as there are many grants for smaller items such as the playground equipment but this shows some of the larger grants that could help fund the major components of the park improvements.

Grant Matrix			
Grant / Agency	Funding	Schedule	Funded Element
Youth Athletic Facilities / Washington State Recreation & Conservation Office	Grant Cap: \$25,000 - \$350,000 Match: 40% (under-served population)	Available in even years / 5-month evaluation process	Develop or renovate athletic facilities
Land & Water Conservation Fund / Washington State Recreation & Conservation Office	Grant Cap: \$ 500,000 (state projects) Match: 50%	Available in even years / 13-month evaluation process	Develop or renovate recreation areas including athletic fields
Local Parks / Washington State Recreation and Conservation Office (WWRP)	Grant Cap: \$ 500,000 (development) Match: 50%	Available in even years / 18-month evaluation process	Develop or renovate recreation areas and support facilities
Community Development Block Grant / Washington State Department of Commerce	Grant Cap: \$ 750,000.00 (development) Match: none required	Available annually	Projects must principally benefit low- and moderate-income persons, or aid in the prevention or elimination of slums or blight
Recreational Trails / Washington State Recreation and Conservation Office (WWRP)	Grant Cap: \$ 500,000.00 (development) Match: 50%	Available in even years / 18-month evaluation process	Develop or renovate trails and support facilities
Land & Water Conservation Fund / Washington State Recreation & Conservation Office / Legacy Program	Grant Cap: \$ 250,000.00 - \$720,000.00 Match: 50%	Available annually / 12-month evaluation process	Develop recreation areas in urban areas with over 50,000 population