DRAFT
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Bellevue Airfield Park

Master Plan Report

January 2024

WALKER | MACY

Acknowledgements

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ARC Architects.....Architecture

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SCS Engineers.....Landfill Gas Engineering

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Transpo Group.....Transportation Engineering

Herrera Environmental Consultants.....Environmental Permitting

Roen Associates.....Cost Estimating

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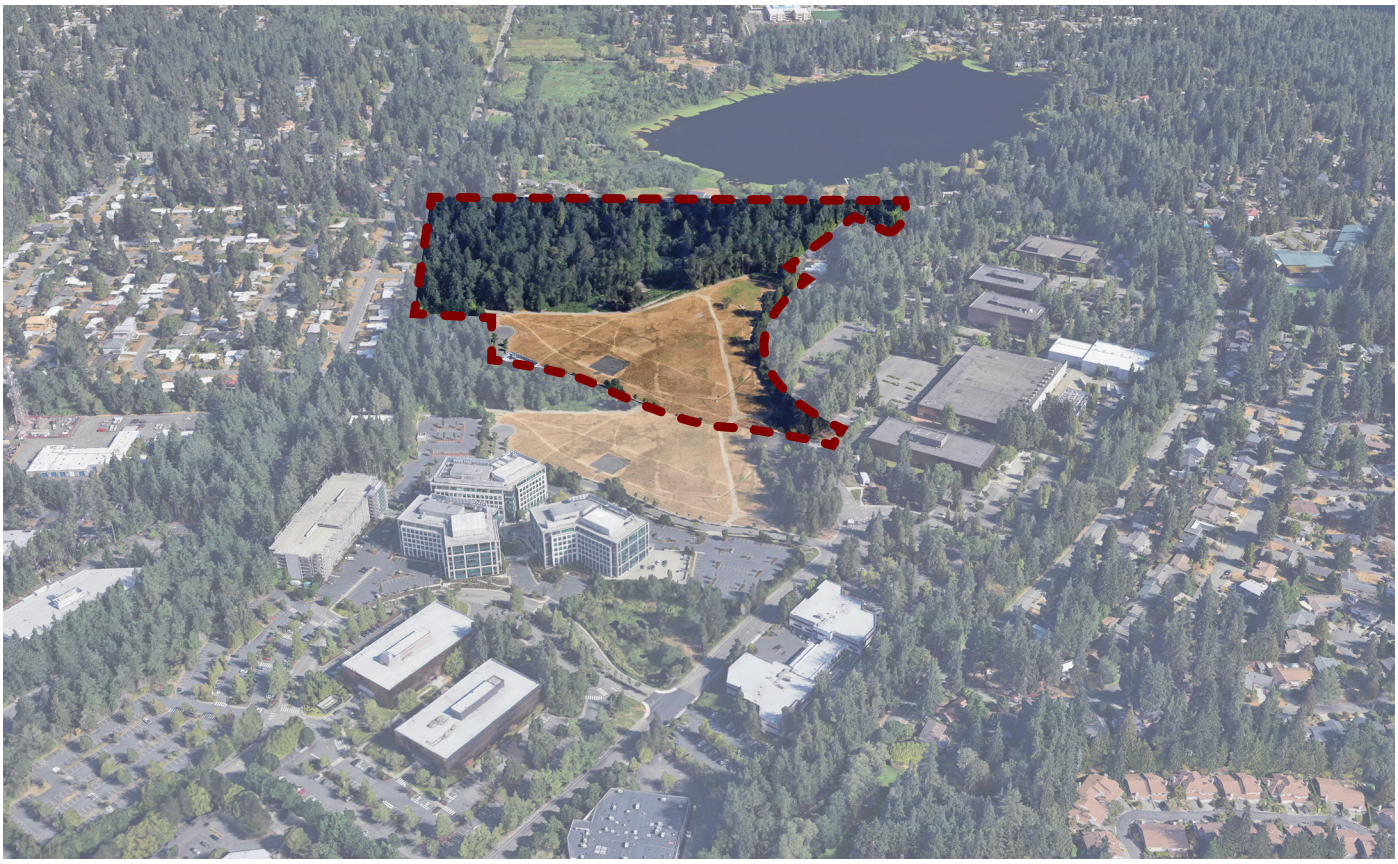
1 Executive Summary



Above: Bird's Eye View of Airfield Park

Bellevue Airfield Park is a vision for a new public recreational facility on approximately 27 acres of undeveloped open space located in the Eastgate area of the City of Bellevue, Washington.

Airfield Park is one of many open space amenities in the area. To the north of the site is Phantom Lake, a natural area that offers visitors opportunities for walking, fishing and bird watching. To the west is Robinswood Community Park, a large park with a wide variety of recreational opportunities including sports fields, play area, picnicking, dog park and walking trails.

The Airfield Park site was once part of a private airfield that included a landfill active during the 1950s and 1960s. Following the landfill's closure, systems for gas and leachate monitoring and collection were added.

Today, the site is marked by soft landscape spaces including a large open meadow, areas of dense evergreen forest, and a series of stormwater ponds. The park is surrounded by quiet uses, including office parks to the south and east, and single family residential to the north and west. These adjacent uses bring people into the park throughout the week, and while the site is not currently developed, visitors enjoy walking on the existing trails, playing basketball on an abandoned helipad, and recreating in the open fields. Future design efforts should include discussions with adjacent land owners to inform them of the development plans and changes in the recreation opportunities to the park.

There are a number of walking trails through the site, including around the pond and through the wooded areas. Development within the wooded portions of the site should limit tree removals, and utilize natural openings, where possible, to integrate park amenities, while improving forest health by thinning dense understory and removing invasive species.

Over the years, the City of Bellevue has performed numerous high level investigations on the development of the Airfield Park site. Different approaches have been studied over time due to shifting community priorities and City needs.

The 2012 Bellevue Airfield Park Master Plan documented a snapshot of community needs and desires. Since then, the city has witnessed changes in population, community assets and trends in recreation. The public outreach process for this project allowed the city and design team to reevaluate community desires surrounding the development of Bellevue Airfield Park and incorporate community feedback and new voices into the development process.

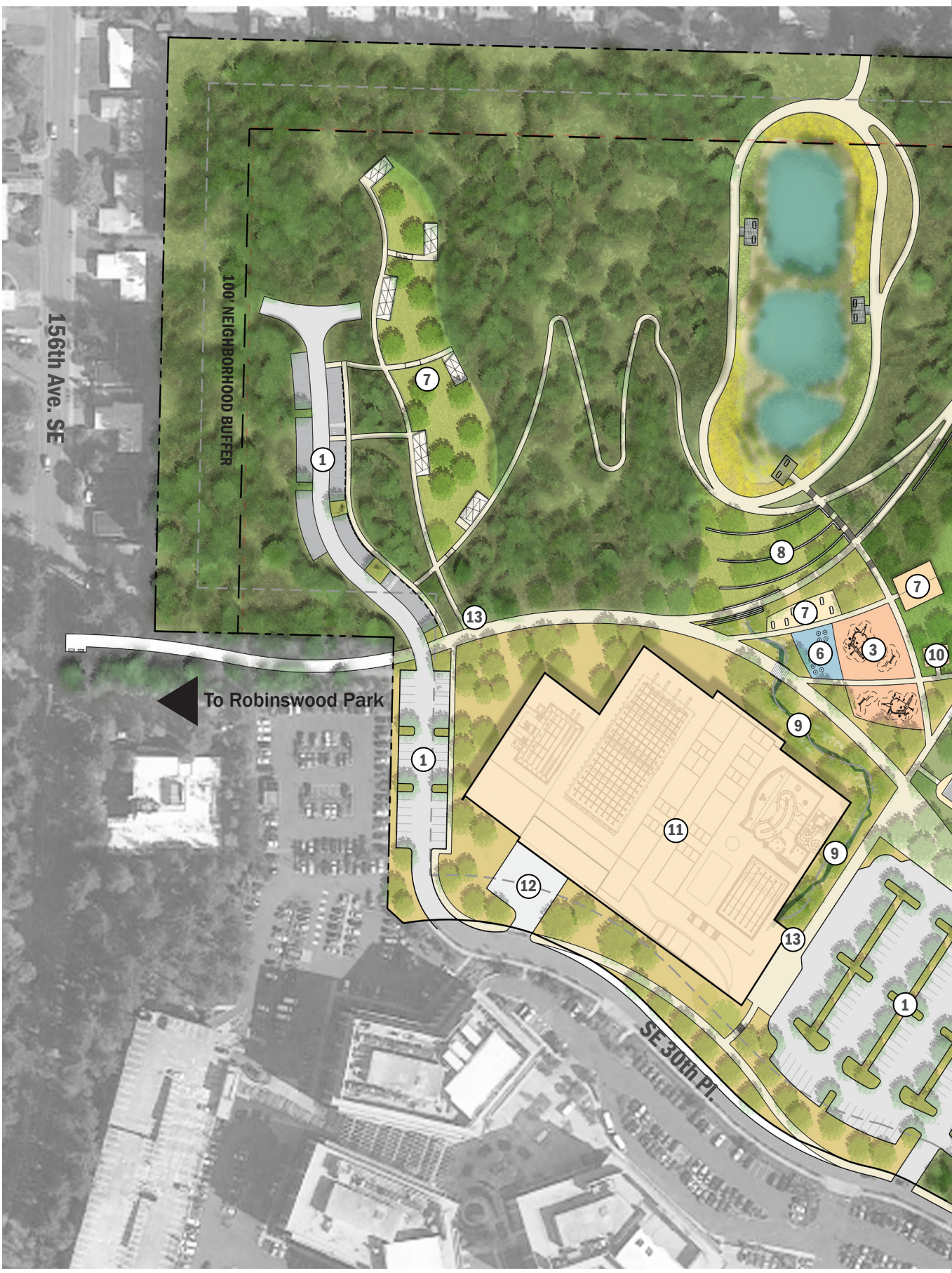
The specific goals of this community outreach process were to gain consensus on site programming, level of program intensity, and preferred development approach. Meetings created the opportunity to incorporate community and city council feedback into the design process and identify a preferred approach for site development. Neighboring residents voiced their appreciation for many of the park's existing assets including the forested trails and open meadow, while a large portion of the broader community would also like to see active park uses within Airfield Park.

Airfield Park will be a regional park for the Bellevue community, and the site elements of the design need to serve a large spectrum of individuals. Given the varied input from the community, a future park will be best represented as hosting a balance of both active and passive programming. This project is an opportunity to for the City of Bellevue to broaden aquatics accessibility, equity, and opportunity within the community.

Above: Helipad Looking north

Above: Walking trails in wooded area

Above: Meadow looking north


156th Ave. SE
100' NEIGHBORHOOD BUFFER
To Robinswood Park
SE 30th Pl.
1
3
6
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8
9
10
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12
13

LEGEND:

1. Parking Area
2. Flexible Field
3. Playgrounds
4. Basketball Court
5. Covered Pickleball Courts
6. Splash Pad
7. Picnic Area
8. Terraced Lawn
9. Stormwater Area
10. Restrooms
11. Aquatic Center
12. Facility Service
13. Bike Parking

0 30 60 120ft

N

Figure 1: Airfield Park Modified Master Plan

Figure 2: Aquatic center front entry

Figure 3: Aquatic center lobby

A comprehensive state of the art aquatic center including fitness and function spaces would be a safe year-round place for the diverse community, who would cross paths and foster community connection. The new aquatic center would offer essential water safety skills, a range of multi-generational and intergenerational aquatic programming unique to the region, creating new opportunities for all and promoting healthy lifestyles. A new aquatic center will improve the quality of life and wellness for all residents, create accessible and equitable opportunities for water safety and programming, bring Bellevue's diverse community together and attract new people and businesses, furthering the City as "the place you want to be".

2 Existing Site Conditions

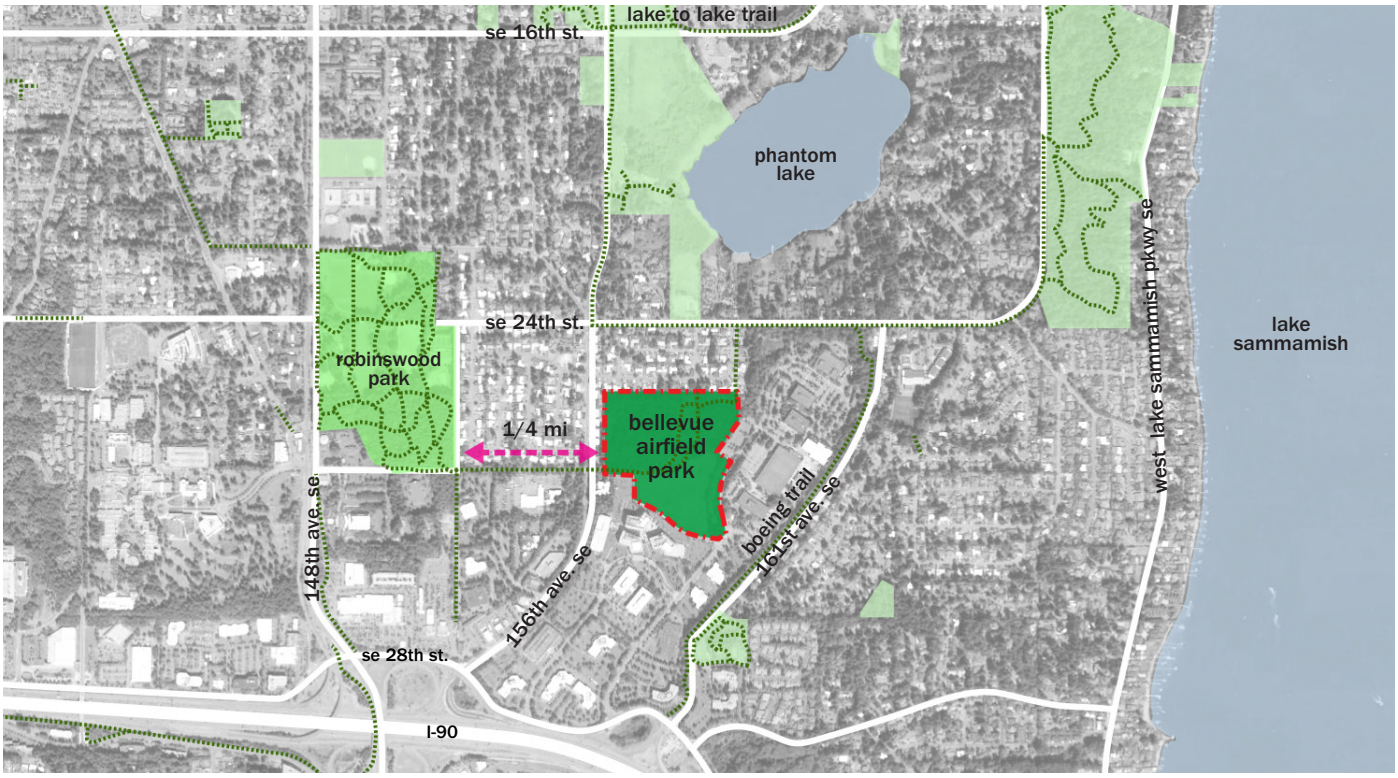


Figure 4: Neighborhood context surrounding Bellevue Airfield Park

SITE HISTORY AND CHARACTER

Bellevue Airfield Park is approximately 27 acres of undeveloped open space located in the Eastgate area of the City of Bellevue, Washington. The site is positioned to the west of Lake Sammamish and north of I-90.

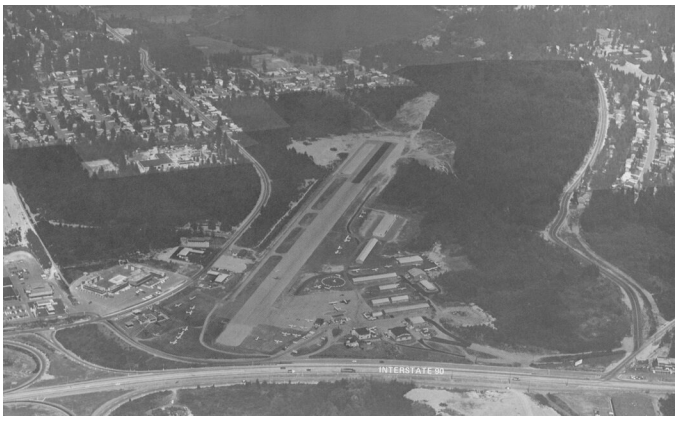
Airfield Park is one of many open space amenities in the area. To the north of the site is Phantom Lake, a natural area that offers visitors opportunities for walking, fishing and bird watching. To the west is Robinswood Community Park, a large park with a wide variety of recreational opportunities including sports fields, play area, picnicking, dog park and walking trails.

The site was once part of a private airfield that included a landfill that was active during the 1950s and 1960s. Following the landfill's closure systems for gas and leachate monitoring and collection were added.

Above: Path to ponds looking South

Today, the site is marked by soft landscape spaces including a large open meadow, areas of dense conifer forest, and a series of stormwater ponds. The park is surrounded by quiet uses, including office parks to the south and east, and single family residential to the north and west. These adjacent uses bring people into the park throughout the week, and while the site is not currently developed, visitors enjoy walking on the existing trails, playing basketball on an abandoned helipad, and recreating in the open fields.

The property consists of three parcels and designated OLB-OS (Office Limited Business - Open Space) zoning. The surrounding parcels to the south and east are designated as OLB zoning and the parcels to the north and west are designated as R-7.5 Single-Family Residental zoning. The property is subject to a 50' building setback and a mutually agreed to 100' setback from residential properties along the north and west edge of the property.



Above: Historic photo of Bellevue Air Field

Above: Meadow path looking South

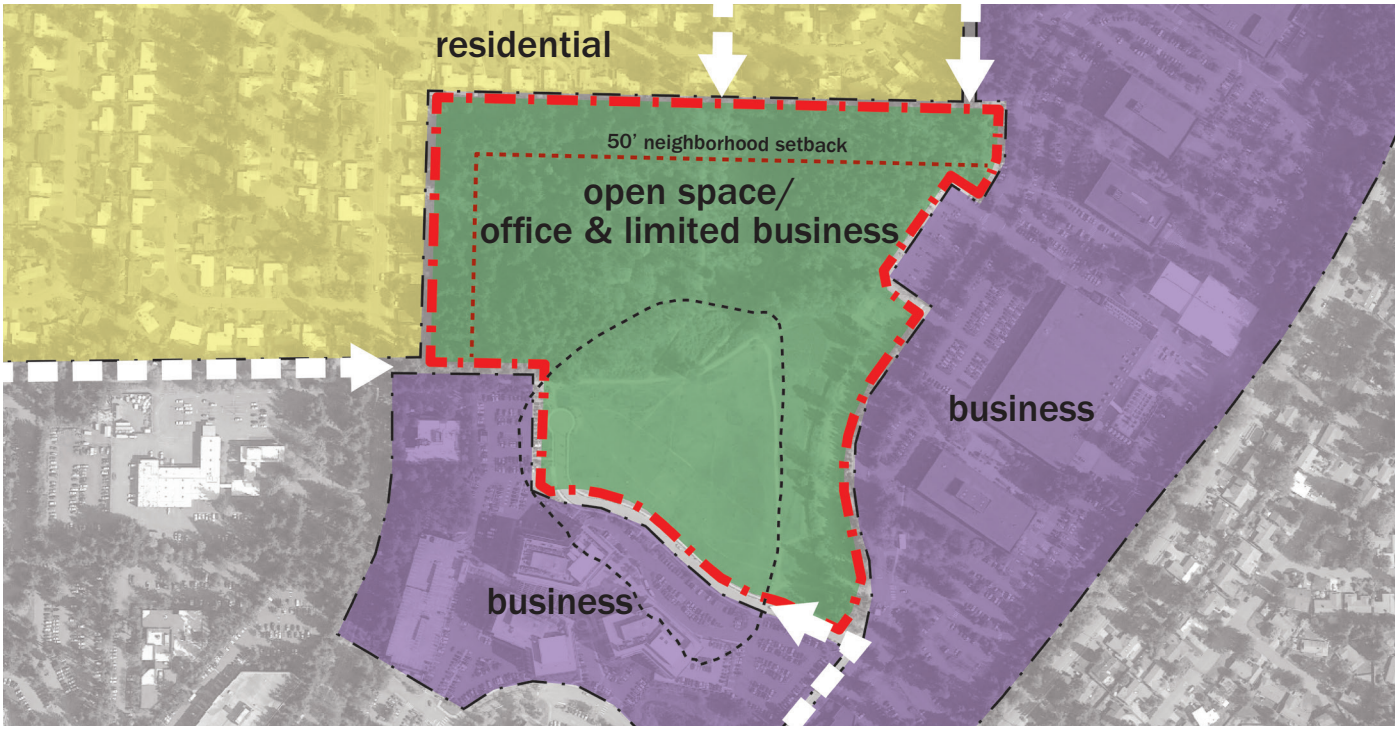


Figure 5: Surrounding land use conditions

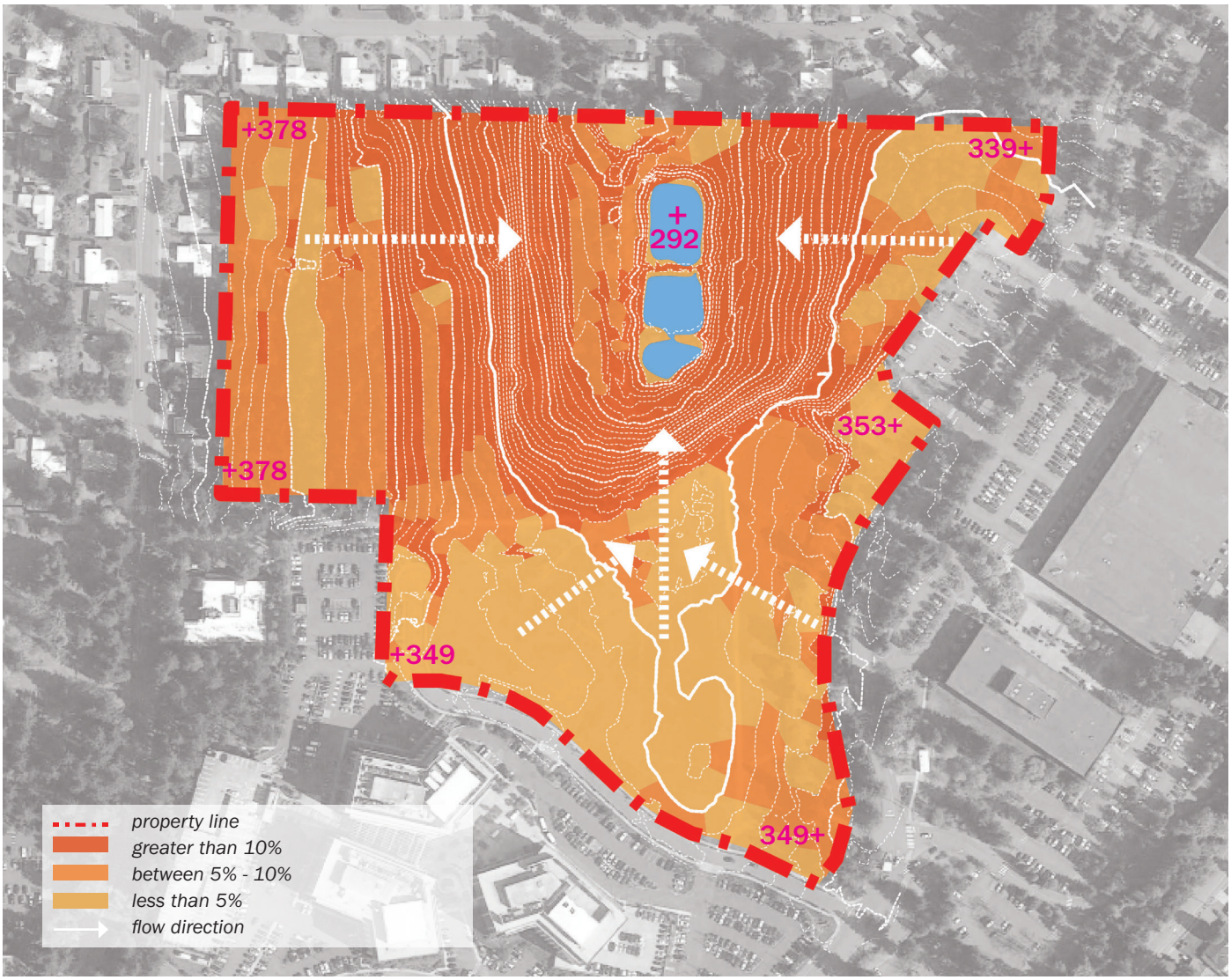


Figure 6: Topographic context.

TOPOGRAPHY

Airfield Park has a significant amount of grade change across the site. These slopes provide visual interest and create opportunities for a variety of activity zones within the park.

The southern portion of the site is the highest part of the park. From this area, the land slopes south toward the Advanta Campus and to the north toward the ponds and wooded sections of the site. From the south to the north, the site slopes 55’ and from west to east, it slopes 25’.

Steep slopes are found between the meadow and pond, and within the wooded areas. These steeper zones will create challenges to providing site access and accessible trail systems. Park design sought to utilize flatter areas and natural terraces within the sloped landscape to incorporate trails and amenities. The larger, flatter areas on the southern portion of the site could be better suited to incorporating larger flat elements such as sport courts and larger buildings.

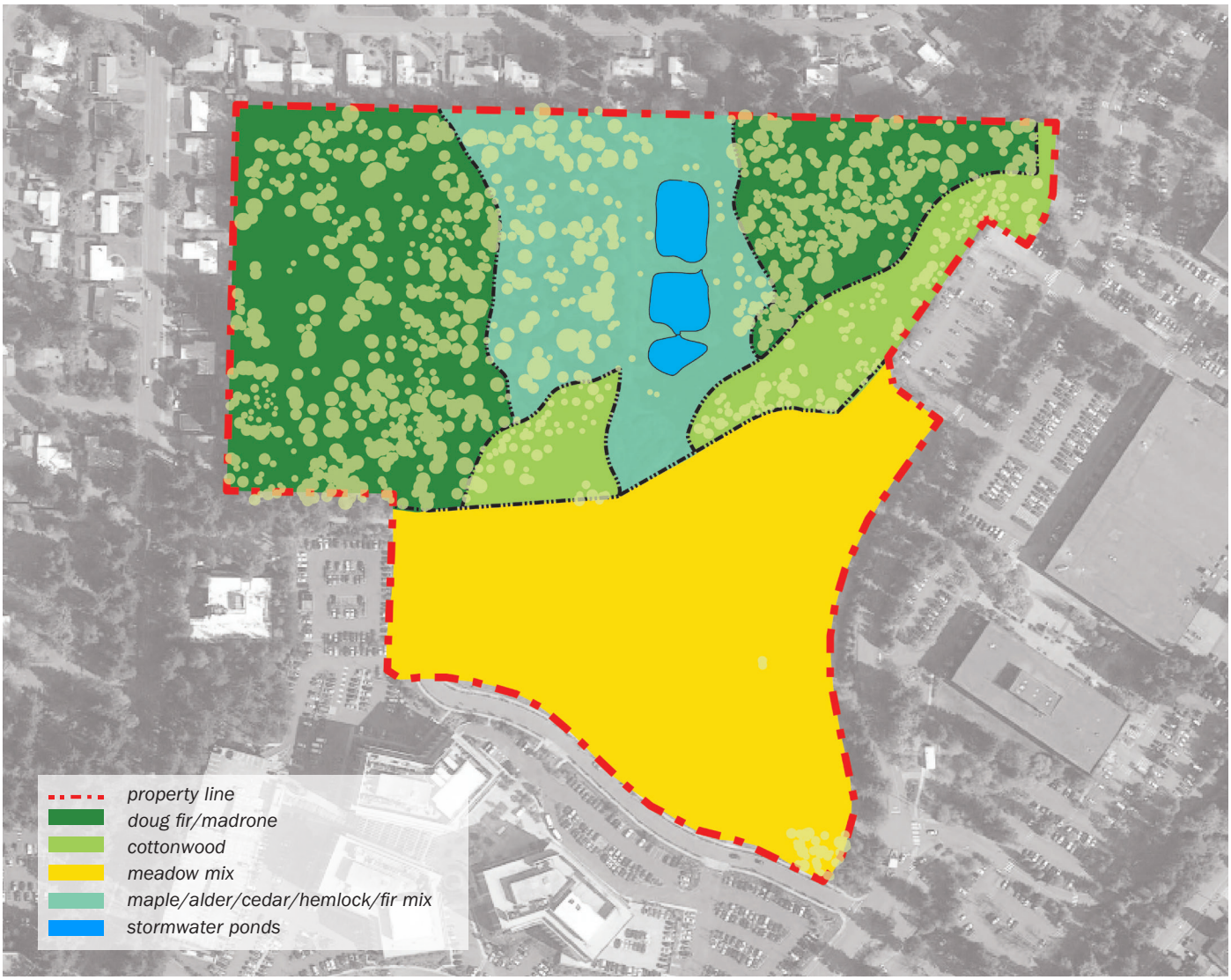


Figure 7: Vegetation and natural context

VEGETATION/NATURAL RESOURCES

The site's vegetation is divided into two distinct areas. The southern portion of the site was once a landfill and the landscape character is dominated by an open, rolling meadow. Trees are only growing at the perimeter of the meadow, leaving the space wide and open, providing views to the north.

The north portion of the site is dominated by large stands of evergreen trees that include Douglas Fir and Western Red Cedars. These forested parts of the site are densely planted and include an understory mix of native and invasive vegetation that limits access. A human-made pond is located in the northern part of the site and is used to collect and clean stormwater, but also serves as an attractor for birds and other wildlife.

There are a number of walking trails through the site, including around the pond and through the forested areas. Development within the wooded portions of the site should limit tree removals, and utilize natural openings where possible, to integrate park amenities. Forest health may also be improved by thinning dense understory and removing invasive species.

Figure 8: Site circulation

CIRCULATION AND ACCESS

Bellevue Airfield Park site has one point of vehicular access at the intersection of 160th Avenue and 30th Place, which will provide access to existing and future parking areas. Due to the scale of the park, it is expected to serve a broad portion of the Bellevue community, so the majority of visitors will arrive by vehicle at the southeast corner of the site. King County Metro Route 271 runs along SE Eastgate Way in the project vicinity. Stops are provided at the intersections of 60th Ave SE/SE Eastgate Way and 158th Ave SE/SE Eastgate Way for both travel directions.

For neighbors and nearby residents, the site also includes pedestrian–only access points. Two connection points are located along the north boundary of the site. One is near the existing stormwater ponds and is an extension of 158th. This point is also currently used for maintenance access to monitor the ponds and park. The second north access point is at the northeast corner of the site and is part of the Boeing Trails that connects to the Lake to Lake trail system and to the nearby neighborhood. There is a pedestrian connection on the west side of the site that extends across 156th Avenue and connects directly to Robinswood Community Park.

Within the site, there are limited gravel and soft trails that provide pedestrian access through the park. These are not built to meet current accessibility standards and may not be suitable for all park users. Future development should consider how to provide pedestrian and vehicular access to and through the site while meeting current requirements for accessibility.

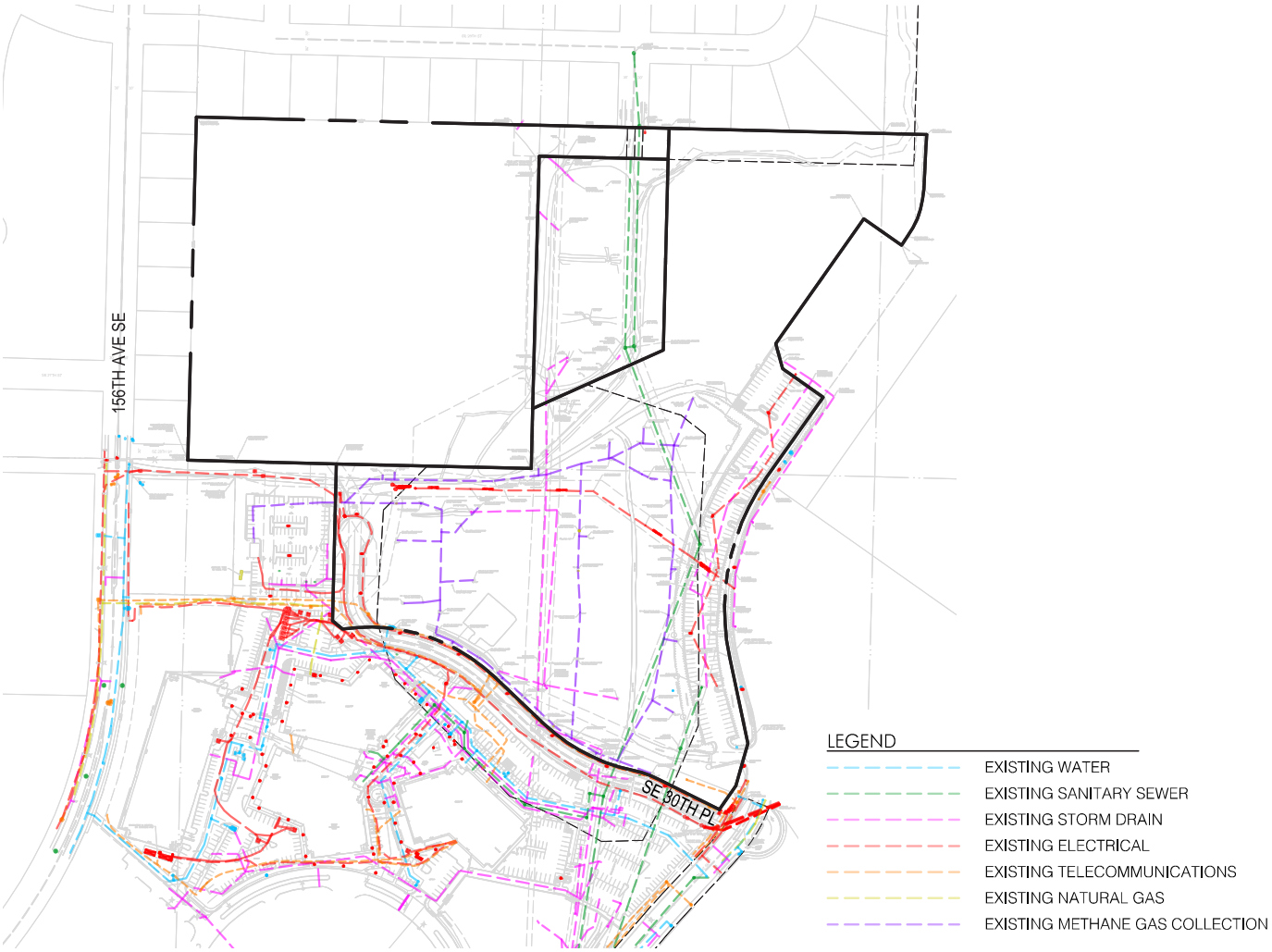


Figure 9: Existing Utilities

UTILITIES/STORMWATER:

The following summarizes existing utilities on the park property and utilities served from adjacent right-of-ways:

- An 8" City water main is located south of SE 30th Pl.
- A private sewer system located south of SE 30th Place connects to an 8" City sewer main near the southeast corner of the site. The City sewer main connects to a deep 24" King County Metro sewer main which runs to the north beneath the site.
- A private storm system located south of SE 30th Place drains to the north in a 12" storm drain which discharges into the regional stormwater detention facility at the northern end of the site. The site has storm drainage infrastructure to collect surface runoff above the landfill and there are opportunities to reuse collected stormwater as well as challenges to stormwater management over a landfill. Steepness of the site makes temporary and permanent stormwater management difficult.
- Existing electrical and telecom duct banks run beneath SE 30th Place and serve the development south of the site. An existing high voltage line is located underground on site.
- An existing natural gas service off the main located in 156th Ave SE serves development south of the site.

Generally, new utility installation should avoid trenching into the landfill. Additional coordination with utility providers will be needed prior to development.

Above: Path above ponds looking East

GEOTECHNICAL

Preliminary geotechnical investigations have been performed on the site to better understand the subsurface conditions and the location, depth and composition of the landfill. Soil fill overlies most of the developed areas of the site and is also present as the soil cap layer over the underlying landfill area. The soil fill generally consists of silty, fine to medium sand with occasional fine gravel. The thickness of the soil fill over the landfill solid waste was typically reported to vary from about 2 to 19 feet across the site. Below the surficial soil fill, a layer of solid waste fill generally consists of a mixture of soil and municipal solid waste including brick, timber, asphalt, wood, paper, metal, plastic, glass and concrete. The solid waste was land filled between 1951 and 1964, so the putrescible portions of the waste would likely be in an advanced state of decay or not present. The solid waste material varies in thickness and was generally encountered to depths of about 2 to 42 feet below ground surface (bgs) across the site. Maximum depth of the bottom of the municipal solid waste was estimated to be approximately 55 ft bgs. Below the soil and landfill, exploratory boring revealed several layers that are unlikely to be disturbed with park development, even with substantial excavation for a future building. The top layer is alluvium and recessional outwash, underlain with advance glacial outwash and lacustrine deposits. A small area of glacial till was found near detention pond A.

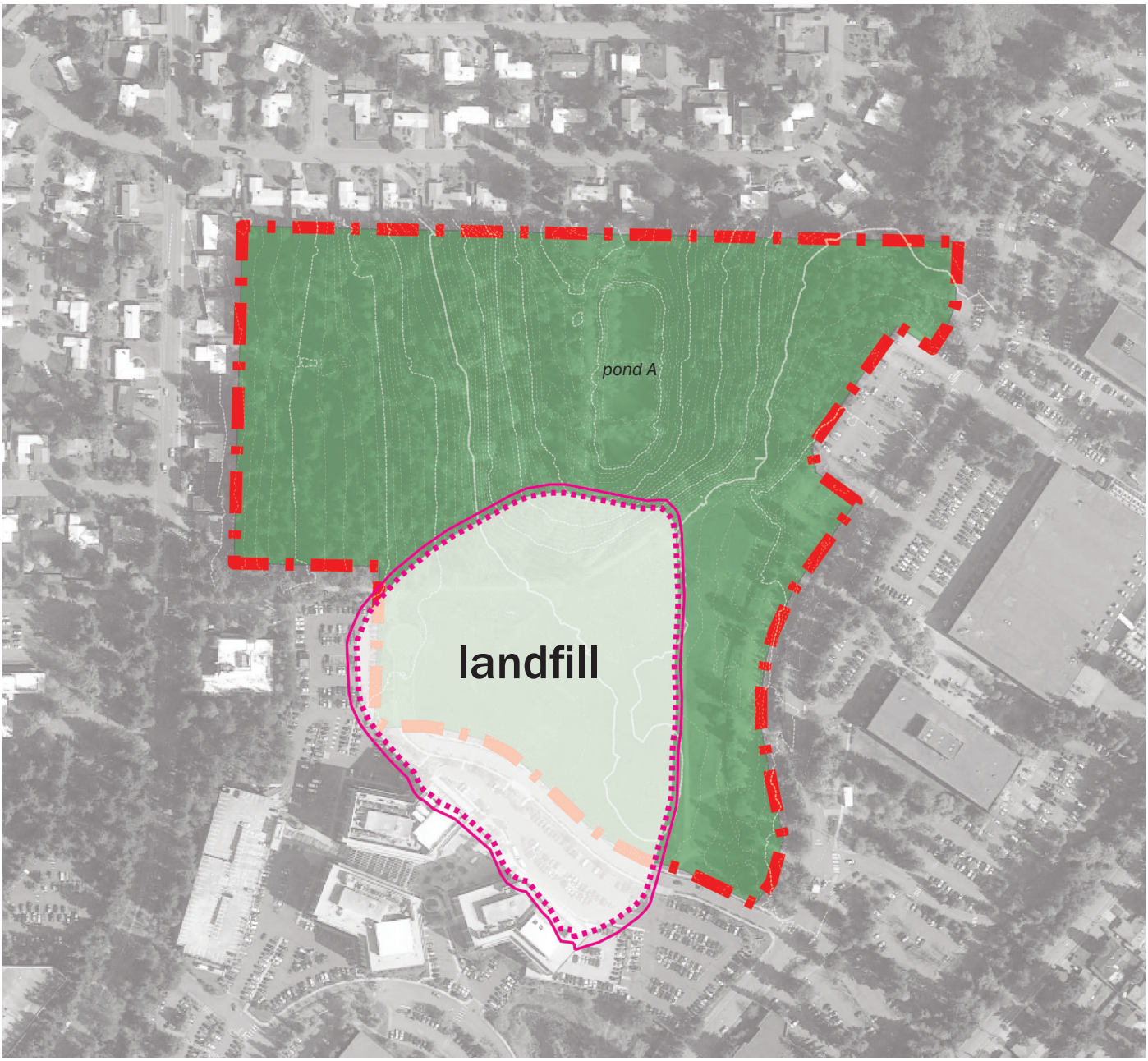


Figure 10: Extents of landfill below grade

LANDFILL

A portion of the project will include development over an old closed landfill referred to as the Eastgate Landfill, which operated from approximately 1951 to 1964. The landfill occupies approximately 9 acres of the 27 acre site. Development of the site will require modifications, upgrades, and/or replacement of the monitoring networks for groundwater, stormwater, and subsurface Land Fill gas (LFG) as well as the environmental control systems for LFG and stormwater management.

The LFG control system was originally installed in 1986 in response to lateral subsurface LFG migration into soils adjacent to the landfill. Uncontrolled migration of subsurface LFG is a concern due to the combustion hazard of methane and the asphyxiation hazard of both carbon dioxide and methane. The LFG control system was designed, constructed, and operated to extract LFG from the waste mass and dispose of it by thermal oxidation (i.e., flaring). The flare has since been replaced

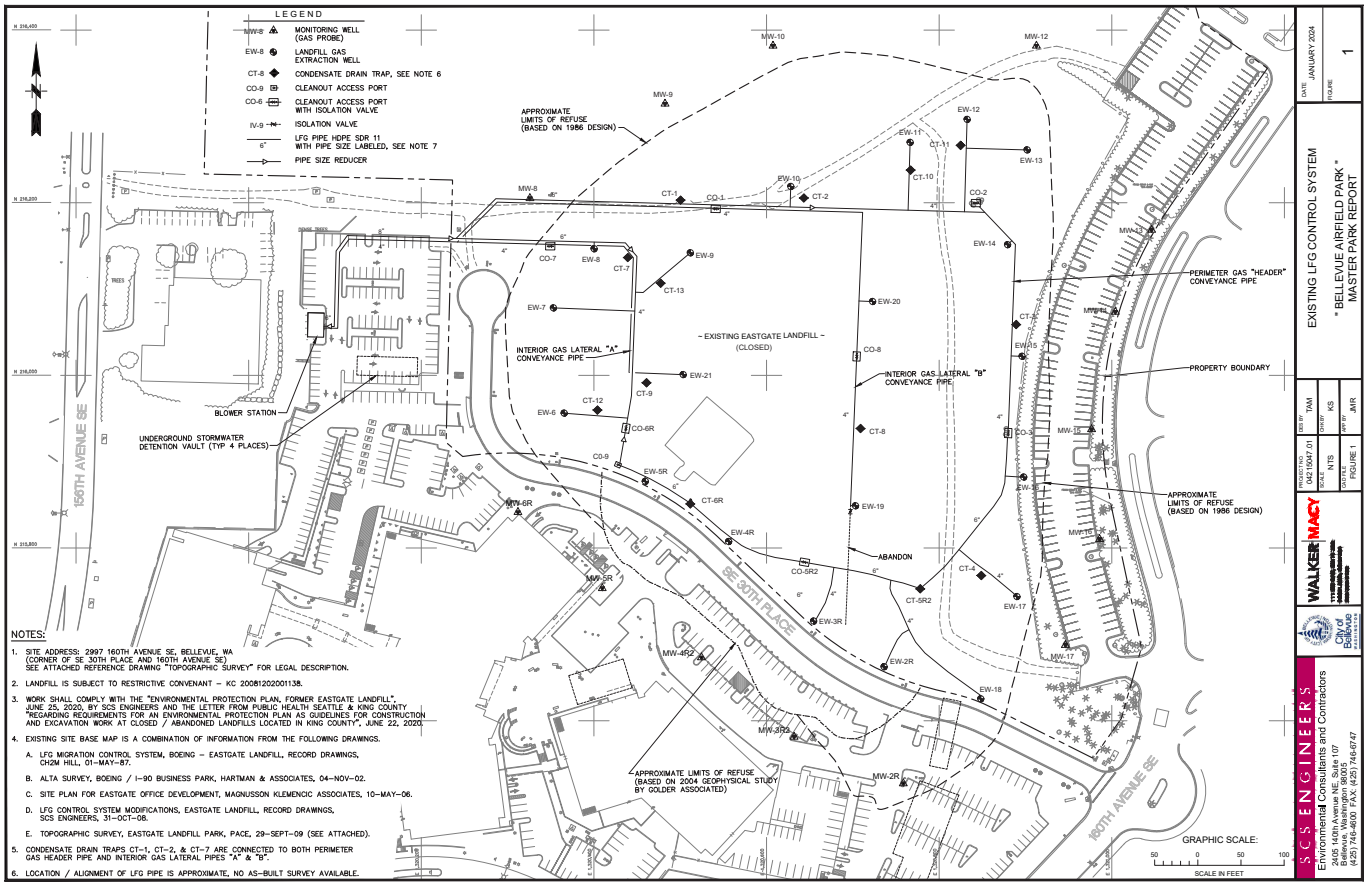


Figure 11: Existing LFG monitoring and control system

with a filtration system. Ongoing, routine, operations and maintenance has controlled and prevented subsurface migration of landfill gas. Like all municipal solid waste landfills, the buried waste (in the absence of oxygen) creates an anaerobic decomposition process that generates LFG, which consists primarily of methane and carbon dioxide. The existing LFG system is shown above in Figure 11.

Given the historical operations issues of disruption in applied well vacuum and blockage of LFG flow, any future development should include replacement of all the system components within the planned area for development. See Appendix X for more detail on current conditions of the LFG system.

3 Previous Studies

Figure 12: 2012 Airfield Park Master Plan by Portico Group

Over the years, the City of Bellevue has performed numerous high level investigations on the development of the Airfield Park site. Different approaches have been studied over time due to shifting community priorities and City needs. The following is a summary of those studies.

2012 MASTER PLAN

Bellevue City Council adopted the current (above) Airfield Park master plan in 2012, prepared by Portico Group (MIG), following extensive community engagement. The master plan included two lighted, synthetic-turf multi-purpose fields, wooded picnic areas, accessible trails, playgrounds, restrooms, parking, and an expansion of the existing off-leash dog area at nearby Robinswood Park. The 2012 Master Plan included programmatic elements that the community continues to embrace including picnic facilities, children's play areas, enhanced trail connections, maintaining residential parking buffers, improvements to park facilities and furnishings, and an environmentally sensitive approach to design and development of the park.

2016 WALKER MACY SCHEMATIC DESIGN

In 2016, Walker Macy was tasked with implementing the adopted master plan from schematic design through construction. The design team further investigated the feasibility and constructability of developing Airfield Park, continued community and stakeholder engagement through public open house meetings, refined the site design based on further site investigation, solicited community feedback through public workshops, and developed rough order of magnitude cost estimates. The team completed and submitted 100% Schematic Design.

2020 ARC AQUATIC CENTER FEASIBILITY STUDY

ARC Architects conducted a feasibility study to analyze the City's economic, technical, and operational considerations to discern the financial investment and risks associated with the City undertaking a new aquatic complex project. The study investigated three different indoor aquatic facilities with varying levels of programmatic capacities and intensive use from small high school meets to large regional competitions. The study also identified four potential sites for a new aquatics center and developed a criteria matrix for site selection which evaluated each site in terms of size, constructability, accessibility, convenience, and aesthetics.

2021 CITY STAFF AND SPLASHFORWARD RECOMMENDED CONCEPT PLAN

City staff along with funding partner SplashForward, collaborated to present a single recommended concept and framework for project development and implementation. This study provided a preferred programmatic approach to the aquatic facility on the Bellevue Airfield Park site. The study also established a preliminary project cost estimate and operational budget, as well as identifying potential funding sources and partnership opportunities.

2021 WALKER MACY SITE ASSESSMENTS

Upon the determination that the Airfield Park site offered the most viable location for a new aquatic facility, Walker Macy conducted a study investigating the suitability of placing a 126,000 SF aquatic facility on the site. The team investigated two building locations on site and created a list of development considerations. Each location was evaluated for how the facility would fit into the site in terms of topography, structural foundations, LFG control system, utilities, vegetation, and geotechnical considerations. This master plan builds upon these site assessment by studying additional locations and identifying a preferred location for the building and site programs.

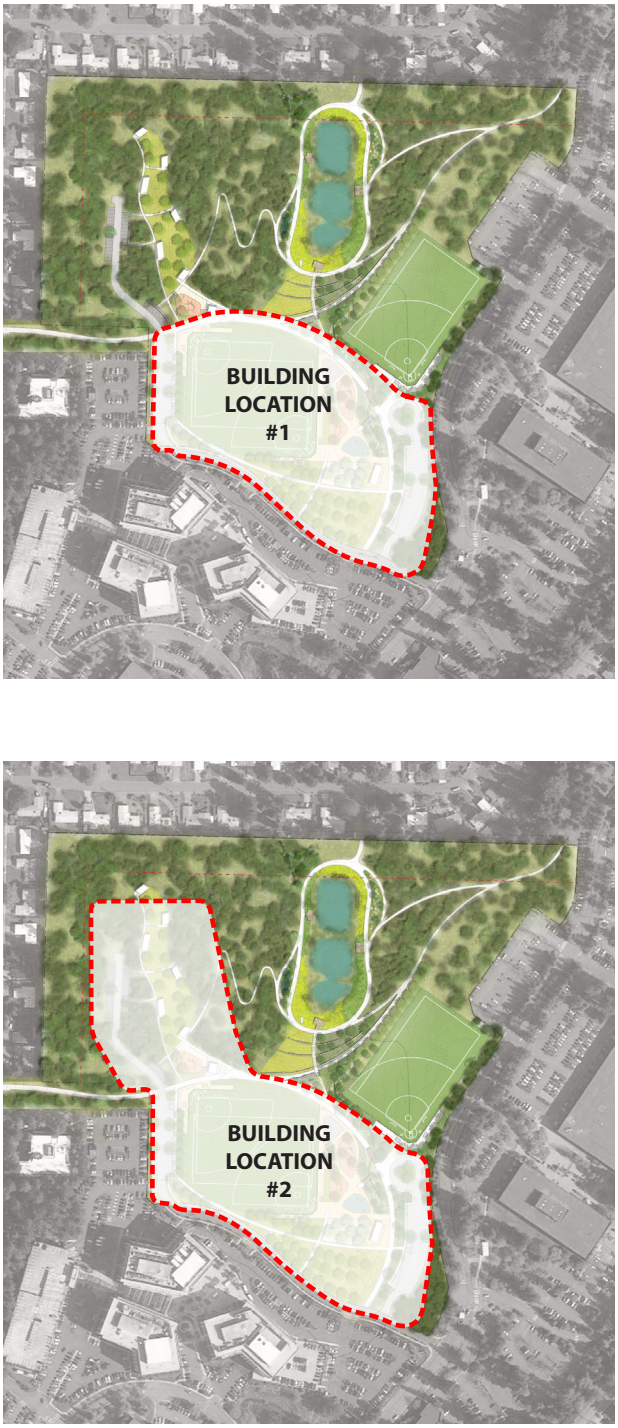


Figure 13: Build location studies as part of 2021 Walker Macy Site Assessment

4 Public Engagement

City Staff discuss concept options at community meeting #2

OVERVIEW OF PUBLIC ENGAGEMENT PROCESS

The 2012 Bellevue Airfield Park Master Plan documented a snapshot of community needs and desires. Since then, the city has experienced changes to the population, community assets and trends in recreation. The public outreach process for this master plan update sought to allow the city and design team to reevaluate community desires surrounding the program for development of Airfield Park and incorporate community feedback and new voices into the development process. Meetings created the opportunity to incorporate community and city council feedback into the design process and identify a preferred approach for site development.

SCHEDULE OF EVENTS AND MEETINGS

Community meetings were held in person and virtually to incentivize participation from a wide breadth of community members. Meetings were organized to share feedback and common themes heard at previous meetings, present development alternatives and tradeoffs associated with each concept, and acquire additional community input from as many voices as possible. Below is the schedule of outreach activities.

- Neighborhood Site Walk: June 23, 2022
- Community Meeting #1: July 26, 2022 (Virtual)
- Community Meeting #2: September 22, 2022
- Parks and Community Services Board Meeting: October 11, 2022
- City Council Meeting: December 5, 2022
- Community Meeting #3: January 19, 2023
- Parks and Community Services Board Meeting: February 14, 2023
- City Council Meeting: April 3, 2023

COMMUNITY MEETING #1

Community Meeting #1 was a virtual meeting that allowed the design team and city staff the opportunity to reintroduce the public to the concept of park development on the site. The team reviewed the currently approved master plan, proposed site programming and existing opportunities and constraints of developing on this site. The public was also introduced to the idea of having an aquatic center located at Bellevue Airfield Park and asked to consider the implications and constraints an aquatic center would have on the site and surrounding area. The design team presented three high-level diagrams showing a 130,000 suare foot building on the site and analyzed the implications a building of that site would have on the site. Public input was solicted through interactive polling, open forum break-out groups and a follow-up survey.

Key Takeaways:

- The community emphasized their interest in some key programmatic uses, including aquatic facility, pickleball courts, play areas and trails.
- There was a strong interest in protecting the natural areas on site.
- The community pointed to issues associated with new activity on site, including safety on trails and noise from active sports

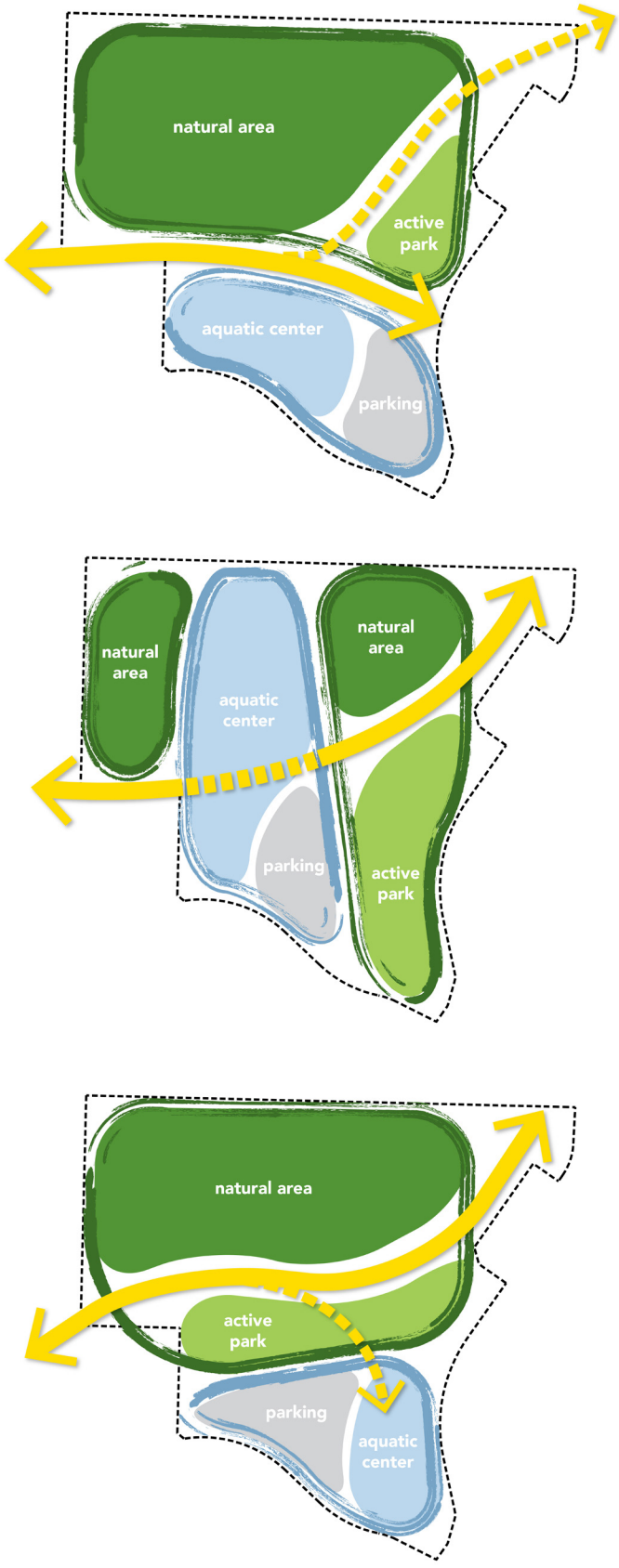


Figure 14: High level concept studies

Figure 15: Airfield Park concept plans

COMMUNITY MEETING #2

Community Meeting #2 was an in-person meeting held at South Bellevue Community Center. During the meeting, the design team provided a summary of community feedback collected during the first community meeting and subsequent survey. The design team presented three different park approaches that incorporated the community feedback. The park approaches consisted of two options with an aquatic center located in different locations within the Airfield Park site, and one option that did not include an aquatic center. The team created a chart to help the public compare the programmatic opportunities and constraints of each development approach. The meeting concluded with an open forum period for the public review the plans in more detail and ask questions to city staff and the design team. A follow-up survey was published following the meeting to allow member of the community not in attendance the opportunity to participate.

Key Takeaways:

- The community emphasized their desire for the park to be inclusive, safe, environmentally responsive and active.
- The forested area should be preserved as much as possible and an aquatic facility should not be sited in this area.
- The community was most interested in pickleball courts, trails, natural areas and an aquatic center as the programming for this site.

COMMUNITY MEETING #3

Following the second community meeting, City of Bellevue Parks & Community Services Board and City Council were asked to provide feedback on the three development approaches from Community Meeting #2. The design team incorporated the feedback into two preferred approaches that located a proposed aquatic center at the southern area of the Airfield Park site, while considering alternative approaches to other site programming. Concept #1 proposed a single competition-level multi-purpose sports field with less opportunity for playgrounds and sport courts, and a light touch picnic area in the northwest woods area. Concept #2 proposed a flexible field with 8 pickleball courts, more opportunity for other sport courts and playgrounds but no picnicking in the northwest woods area. The team also presented an update to the city park system and asked the community to consider compromises in site program since all community desires can not physically fit on site due to existing conditions. Both concepts were shared with the community during the in-person Community Meeting #3 on January 19, 2023.

Key Takeaways:

- The community emphasized their interest in having as many covered pickleball courts as possible with lights for evening play.
- Informal lawn space was preferred over formal sport fields.
- A light approach to development in the northwest wooded area of the site is preferred.

OUTCOMES

City of Bellevue Parks & Community Services Board and City Council provided comment on the two approaches following Community Meeting #3. The board and council asked the design team to incorporate community feedback while developing a single preferred site plan to take through environmental review. The design team incorporated public and park board feedback into a preferred plan which included a flexible field, a light touch in the forested area, maximum covered pickleball courts, full court basketball and a 130,000 SF aquatic center.

Below: Open forum session at community meeting

5 Preferred Programming

Above: Group playing pickleball

Site

Bellevue Airfield Park will be a regional park for the Bellevue community, and the site elements within the design need to serve a large spectrum of individuals. The design team leveraged the community meetings and surveys to better understand what program activities are desired and how to prioritize program elements within the park. Throughout the process, a very engaged community expressed both concern and excitement for a new park, and were forthcoming in their preferences for the future development.

Neighboring residents voiced their appreciation for many of the park's existing assets including the forested trails and open meadow, while a large portion of the broader community would also like to see active park uses within Airfield Park. While not every idea and desire will fit into a future park, there are several program elements that rose to the top during the public outreach process. Given the varied input from the community, a future park should represent a balance of both active and passive programming.

PASSIVE

The site's existing vegetation presents a natural delineation of where the majority passive programming would be most appropriate. The forested area within the northern portion of the site presents a great opportunity to enhance an existing amenity that is already cherished by the community. Today, the Spirit Ridge Loop Trail passes through the site from west to the northeast providing key passive recreation opportunities that may be built upon and enhanced with the future development. These enhancements may include:

Improved and extended trail network:
The existing trails, including the primary east-west route and intermediary connections around the stormwater ponds would be improved for safety and maintenance purposes. New trails would also be integrated into the existing system in order to provide access to new site amenities, address accessibility on site, and provide an expanded connection to the naturalized area of the park.

Public Programming Opportunities

● Sports Fields

● Sports Courts

● Community Garden

● Skate Park

● Amphitheatre

● Dog Park

● Meadow

● Natural Areas

● Playground/Water Play

● Picnic Areas

● Aquatic Center

● Trails

Above: Site programming opportunities

Picnic Facilities:
Picnicking is one of the most common program elements at many parks. In this community, we heard the preference for small and large picnic areas to accommodate various group sizes.

Terraced Lawn:
Near the middle of the site, there is an existing, steep slope that connects the southern areas over the landfill to the northern areas where the stormwater ponds are located. A set of terraced steps with lawn are proposed within this area to help alleviate the topographic challenges while providing flexible space for picnicking, relaxing, reading, and enjoying views.

ACTIVE

The active programming on-site is proposed on the southern portion of the park in the location of the existing open meadow area. Much of this portion of the site is over the landfill, so tree planting will be challenging. This part of the site is relatively flat, lending itself to larger program activities including the aquatic center building and the other active elements. This approach also allows the active uses to be most apparent and easily accessed from the main parking lot. The active program elements proposed on the future park site are proposed to include:

Basketball:
Providing new sports facilities across the parks system has been identified as an area to improve upon. As part of the Airfield Park development a new full-court basketball facility would be included as one of the primary sports attractions. The court would be situated in an area to on the east side of the site, located away from the residential boundaries of the property and easily accessed from all areas of the park.

Playgrounds:
Playground space has been a priority for Parks since the earlier master plan efforts for the Airfield Park site. A centrally located play ground is proposed for the east side of the site and is broken down into different play zones, intending to accommodate a variety of play opportunities that targets a wide range of ages and play types.

Splash Pad:
Furthering the play theme, a centrally located, season splash pad will expand the play in the summer time and be an attractor for families to the park. The community provided consistent feedback that this type of activity would be greatly appreciated by families in the warm months.

Pickleball Courts:
Bellevue has a strong pickleball contingent in the local community. During public outreach events and subsequent surveys, the pickleball community pushed the need for multiple courts at Bellevue Airfield Park. In this master plan, eight (8) courts would be installed with a continuous covered structure built overhead so matches could take place year-around.

Below: Current active park users

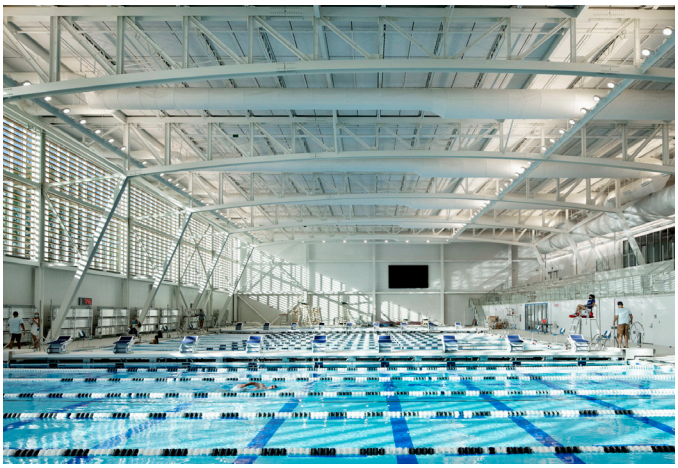
Above: The new Bellevue Aquatic Center will welcome the community and create new recreation, fitness, and gathering spaces for all.

Aquatic Center

For several decades, the aquatic needs of Bellevue and the greater Eastside have been met through public aquatic facilities that are at the end of their useful lifecycles and were not designed to meet the full range of aquatic programming needs of the community. Several facilities have been permanently closed, and no new centers have been added to the current inventory to meet the needs of a growing population and expanding aquatic program use. The existing Bellevue Aquatic Center at Odle only meets a small fraction of the overall aquatic needs of Bellevue residents, falling short in overall capacity as well as types of programming the facility supports. This project is an opportunity to take the next steps for the City of Bellevue to broaden aquatics accessibility, equity, and opportunity within the community.

A comprehensive state of the art aquatic center including fitness and function spaces would be a safe year-round place and would foster community connection. The new aquatic center would offer essential water safety skills, a range of multi-generational and intergenerational aquatic programming unique to the region, creating new opportunities for all and promoting healthy lifestyles.

A new aquatic center will add to the success of the existing Bellevue Park System, improve the quality of life and wellness for all residents, create accessible and equitable opportunities for water safety and programming, bring Bellevue's diverse community together and attract new people and businesses, furthering the City as "the place you want to be".



AQUATIC CENTER OBJECTIVES

- Broad based community access and equity
- Programming for all ages and abilities especially Learn to Swim and a wide range of aquatic fitness programming
- Recreation and Leisure activities: Family friendly and culturally aware options for all ages and abilities
- Competitive and training capabilities meeting the needs of Bellevue School
- District and sport clubs in swimming, water polo, diving, artistic swimming, masters swimming, Special Olympics swimming, and triathlon
- Scope to provide concurrent programming in all areas, even when hosting training and competitive events
- Dry-side fitness and workout facilities to complement, expand, and enhance existing City facilities and integrate with new aquatic programming
- Flexible public or organizational accessible meeting and function space to support aquatic and other community needs and activities including cross cultural programming
- Optimizes the balance of programmable space and design with revenue and use to maximize the annual operational cost recovery and limit operating subsidies
- State of the Art environmentally sustainable technology and optimum safety and health considerations

PROGRAM ORIGINS

The program is derived directly from the 2021 feasibility study process. In a few instances, the 2021 feasibility study program spaces were listed as a range. In such cases, the design team translated these spaces into single square-footage areas based on a number of factors including the capacity of the site to accommodate the areas as well as operational plan considerations.

At a high level, the considerations that began to shape the program into a functioning floor plan fell into the two major categories of building and site relationships. Building relationships considered include: intuitive and equitable public circulation patterns for large groups of visitors, clear grouping of program areas, public and private building access divisions, visual and physical interior to exterior connections, building massing, and daylighting and other environmental factors.

MAIN COMPETITION POOL

- 50 meters x 25 yard
- 2 Moveable bulkheads for program, training, and competition flexibility
- Seating for 900 spectators with 720 competitors on pool deck
- Supports high school Conference/District Level competition in swimming, diving, and water polo,
- Supports aquatic club local, state, and regional training and competition in swimming, diving, water polo, artistic swimming, masters swimming, Special Olympics, and Paralympics
- Space and depth for wide range of recreation; including scuba, kayak, paddle boarding, inflatable obstacle course, and more

DEEP WATER TANK

- 25 yard x 13 meter separate pool
- 2 x 1 meter and 2 x 3 meter diving boards with option to add future diving platform(s)
- Provides additional programmable and recreational space
- Supports high school and club competition in diving and water polo and artistic swimming training
- Provides for an additional 6 x 25 yard lanes for lap swimming and meet warm-up

PROGRAM/TEACHING POOL

- 25 yard x 8-10 lane
- Ramp and Stair Access
- Programming: Swim Lessons, Aquatic Fitness, Water Walking, Special Needs, Lap Lanes, and Senior Programming

WELLNESS/THERAPY POOL

- Approximately 2,500 square feet wellness pool
- Ramp, Stair, Lift Access
- Depth range for all aspects of therapy and rehab
- Programming: Aquatic therapy & rehab, special needs, autistic programs, toddler lessons, small warm-water fitness classes

LEISURE POOL

- 8,000 square feet
- Recreation and Leisure features include: Slides, Lazy River (current channel), Zero Entry, interactive water play features, lounging areas, and more
- Specific features and amenities to be selected in next Concept Design Phase
- Programming: Family fun, all ages, select resistance fitness, parties

AQUATIC SUPPORT SPACES

The Program contains generous spaces to support the effective, efficient, and safe management and operations of the aquatic elements. These spaces include the following:

- Aquatic specific lobby and spectator concourse
- Ample deck space to support all programming, user, and event needs
- Function spaces to support aquatic classes, birthday parties, events
- Lifeguard offices to support all pools.
- Aquatic program offices and meet management needs
- Storage to support all pools and aquatic programs including secure space for user groups

FITNESS ELEMENTS

The Fitness elements include fitness, exercise, wellness, workout spaces, and supporting office and storage, including:

- Cardio/Strength Room
- Flexible multi-function space for group fitness
- Exercise studios
- Trainer / Instructor offices
- Storage

WELLNESS AND THERAPY SPACES

In addition to the Wellness/Therapy pool, the Program includes a multi-function Therapy/Rehab treatment and workspace and support spaces for therapy/rehab outside providers.

These spaces include:

- Therapy/Rehab treatment and workspace
- Therapy/Rehab provider open office/workstations
- Storage

LOCKER AND CHANGING ROOM SPACES

The Program provides a wide range of four general and multiple specialty changing areas to meet the rapidly evolving best practice and design concepts to support healthy and safe spaces for all. Specific spaces include the following:

- Four general locker rooms that can be sub-divided or configured to support youth and adults or create team/event specific locker rooms to separate users as needed
- Family changing rooms (gender neutral)
- Handicap accessible changing rooms with larger spaces than family changing rooms to accommodate wheelchairs, care givers, and companions
- Child friendly learn to swim changing spaces
- Staff locker rooms
- Laundry facility

MEETING AND FUNCTION SPACES

The RCP includes flexible meeting, classroom, and program space, supporting the needs of the Aquatic Center, as well as, creating community accessible meeting and function space. The Spaces include:

- Dividable classroom / meeting / function space
- “Wet classroom” adjacent to pool decks
- Warming / Catering kitchen
- Child Watch Space
- Storage

6 Site Development

Group walking dog through Airfield Park meadow

Bellevue Airfield Park will be a regional park featuring active and passive programs centered around a large aquatic center. The aquatic center is sited to be located at the flattest portion of the park with a large parking lot and building entry welcoming visitors to the park. A wide pedestrian walkway functions as the spine of the park, connecting the aquatic center to the Spirit Ridge Trail system, and allowing park programming to hang off.

Improved and extended trail network

The existing trail system through the site will be improved and expanded to provide access to park amenities, upgrade trail performance and adhere to ADA standards. The trail provides pedestrian access to the stormwater ponds on meandering paths with slopes no greater than 8% and access around the building and play areas on path no greater than 5%.

Picnic Facilities:

In the northwest portion of the site, six (6) small, covered picnic shelters would be provided, and in the east side of the park a larger covered picnic shelter could be located adjacent to a new flexible play field. In addition to covered picnicking, a small cluster of picnic tables would be located near the playground areas for park users.

Terraced Lawn

A set of terraced steps with lawn are proposed within this area to help alleviate the topographic challenges while providing flexible space for picnicking, relaxing, reading, and enjoying views.

Basketball:

The court would be situated in an area to on the east side of the site, located away from the residential boundaries of the property and easily accessed from all areas of the park. The court will be regulation size (100' x 50') and include two basketball goals.

Playgrounds:

A centrally located playground is proposed for the east side of the site and is broken down into different play zones, intending to accommodate a variety of play opportunities that targets a wide range of ages and play types. The play areas will encompass 9,900 sq. ft. of play space and include two small play structures and two larger play structures.

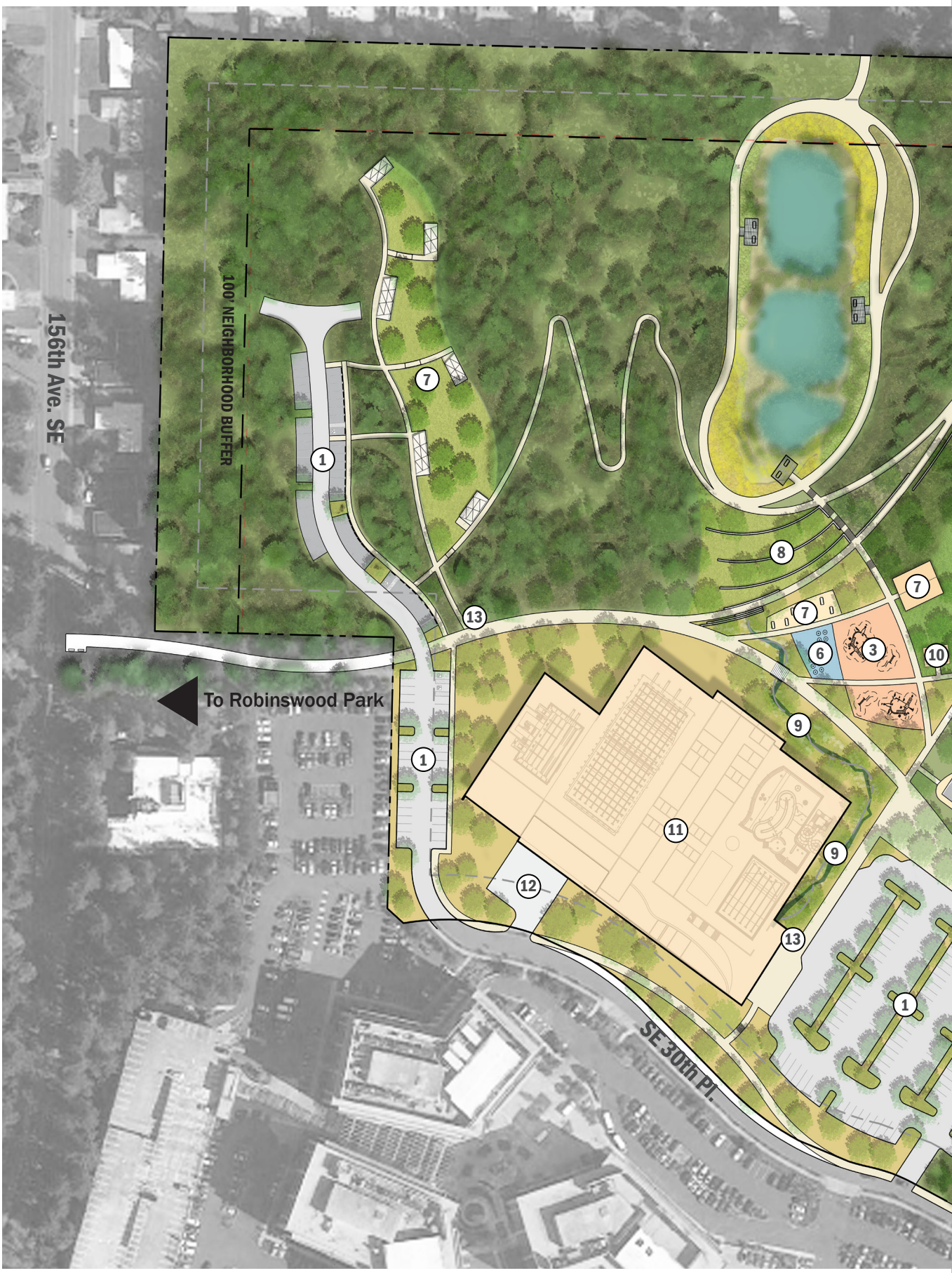
Splash Pad:
A centrally located, seasonal 2,500 sq. ft. splash pad will be located between the cluster of picnic tables and playgrounds. The splash pad provides an opportunity for aquatic play to continue outside the aquatic center.

Pickleball Courts:
Eight (8) full sized 60' x 30' pickleball courts would be installed with a continuous covered structure and lighting built overhead so matches can take place year-around and during evenings. The pickleball courts are clustered into an area for the convenience of regional tournaments and ease of group play.

Parking/Access:
Automobiles access is limited to SE 60th Place via 160th Ave. SE. A large parking lot will be located to the east of the aquatic center for visitor parking and large vehicle drop off. Smaller parking lots are tucked behind the building to provide additional parking and access to the wooded picnic area and other park amenities. A central pedestrian spine connects the main parking lot to the existing trail to Robinswood Park. Park programs and amenities hang off this central path. Passive programs like group picnic shelters and walking trails are concentrated in the northwest woods while the active programs are centralized on the western edge of the park, close to the aquatic center and main parking lot.

Aquatic Center:
Three locations on the Airfield Park site were studied for their suitability to accommodate the building program. Issues of grading, landfill avoidance, broader park circulation and connections, and preservation of contiguous site areas for parking and other site amenities were some of the characteristics considered. It was determined through the community engagement process and through study by the design team and City staff that the preferred location is in the SW corner of the site.

The resulting floor plan places back of house functions and access along SE 30th Place with the primary parking and public entrance to the SE. This approach preserves the northern sides of the building to ‘open’ up to the rest of the park for maximum visual connections while being fairly protected from issues of direct solar heat gain.


156th Ave. SE
100' NEIGHBORHOOD BUFFER
To Robinswood Park
SE 30th Pl.
1
3
6
7
8
9
10
11
12
13

LEGEND:

1. Parking Area
2. Flexible Field
3. Playgrounds
4. Basketball Court
5. Covered Pickleball Courts
6. Splash Pad
7. Picnic Area
8. Terraced Lawn
9. Stormwater Area
10. Restrooms
11. Aquatic Center
12. Facility Service
13. Bike Parking

0 30 60 120ft

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Figure 16: Airfield Park Modified Master Plan

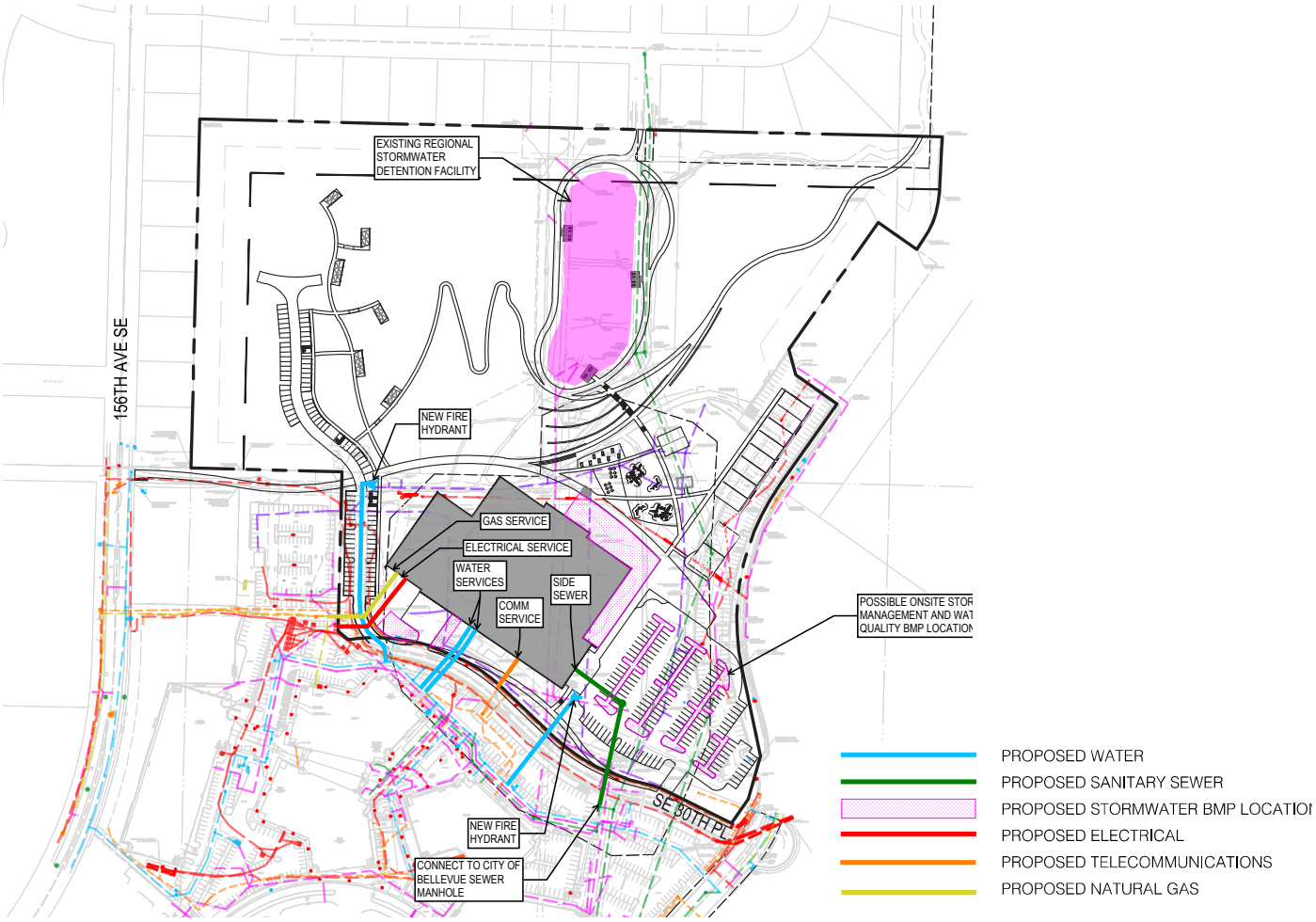


Figure 17: Proposed utilities

UTILITIES

- Water service to the proposed Aquatic Center may be provided from the existing 8" City water main south of SE 30th Place. It is anticipated that at least two additional fire hydrants will be needed to provide fire coverage for the new building.
- The Aquatic Center may connect to the existing City sewer manhole located south of SE 30th Place. A direct connection to the King County Metro sewer main is likely infeasible due to the depth of the sewer and its location beneath the landfill.
- Storm drainage will need to be managed on-site in accordance with the City of Bellevue Storm and Surface Water Engineering Standards. The project will likely trigger the on-site stormwater management and runoff treatment minimum requirements. The project will need to employ non-infiltrating/lined best management practices within the site to manage and treat stormwater without infiltrating into the landfill below. Site stormwater will discharge into the regional stormwater detention facility which will provide flow control for the project.
- The Aquatic Center's electrical service may be provided from the existing electrical infrastructure located in SE 30th Place.
- The building telecom service may be provided from the existing telecom infrastructure located in SE 30th Place.
- The building natural gas service may come from the existing service or main in 156th Ave SE.
- To mitigate utility trench settlement, trenches within preload areas should be constructed following completion of the preload period.

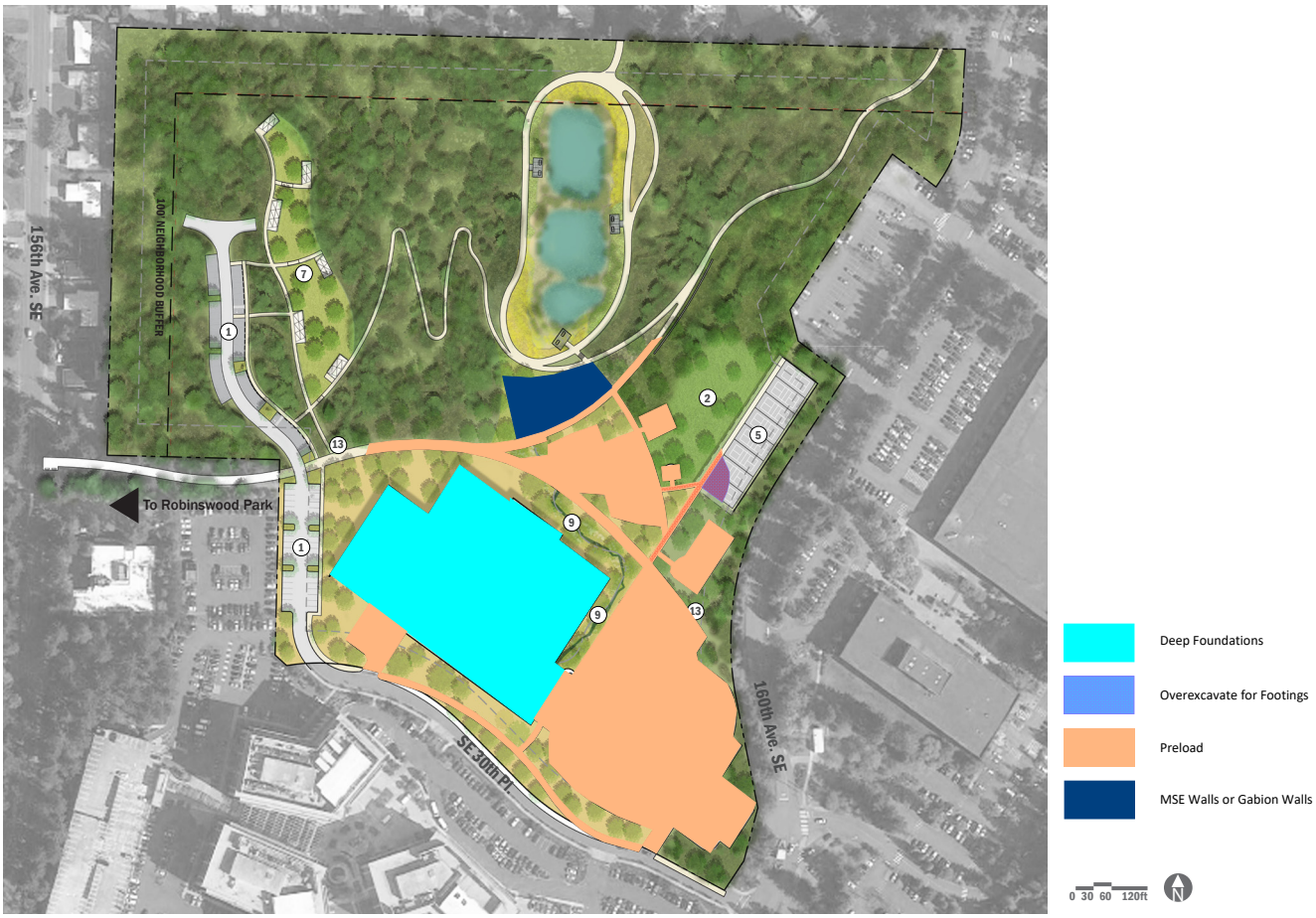


Figure 18: Recommended Settlement Mitigation Approach

GEOTECHNICAL CONSIDERATIONS

According to the 2016 geotechnical engineering report, the municipal solid waste (MSW) beneath the site is anticipated to experience relatively large and highly differential settlements. The project's construction approach will likely require a combination of the use of deep foundations and preloading to mitigate the settlement risk. The following are approaches to specific areas within the preferred concept design for Airfield Park.

Paved Areas (Parking Area, Bike Parking, Basketball Court, Facility Service, Site Walkways):
To mitigate anticipated settlements beneath areas of hardscaping within the footprint of the landfill, preloading is recommended prior to paving. The site should be brought up to finished grades using structural fill, and then additional fill should be placed above finished grades. Upon completion of the preload period, the site can be cut back down to grade, and paving may occur. Preloading should occur for durations of 9 to 20 months. Existing utilities located beneath the preloading area will need to be abandoned and replaced.

Playgrounds and Splash Pad:
Playgrounds and splash pads are planned in areas where the MSW thickness is greatest, extending up to approximately 55 ft bgs. Proposed fills of up to 6 ft are proposed in this area. The additional loading from new fill will result in significant additional settlement, which should be mitigated through the use of a preload. The picnic area proposed in the eastern portion of site is

located in an area where the MSW thickness is near its maximum. Minimal additional fill is proposed in the vicinity of this picnic area, therefore settlement will likely occur only as a result of the new loading from the proposed structure. Overhead picnic area structures should be supported by a structural slab bearing on preloaded soils.

Covered Pickleball Courts:
A majority of the pickleball courts are located outside of the known MSW extents; however, a small area at the southwest corner of the courts may be within the landfill extents. Footings for overhead structures at this location should extend to suitable bearing material below the MSW.

Terraced Lawn:
The proposed terraced lawn includes several 4 to 5-foot retaining walls and fills over 10 feet deep to create several relatively level, grassy benches. MSW thickness is quite large near the top of the terraced lawn, which is also the location where the new fill is the greatest. Settlement will result from placement of the new fill, and should be allowed sufficient time for settlement to occur before construction of any retaining walls.

Restrooms:
Minimal fill is proposed in the vicinity of the restroom building, therefore settlement will likely occur only as a result of the new loading from the proposed structure. The restroom building should be supported by a structural slab bearing on preloaded soils.

Aquatic Center:
The Aquatic Center building is assumed to be unable to tolerate more than 1 inch of settlement, and as a result should be supported on deep foundations that extend beyond the bottom of the MSW. The deep foundations will likely consist of H-piles, however drilled foundations such as augercast piles may also be feasible. If drilled foundation elements are selected, a geotechnical engineer should be engaged to provide additional recommendations.

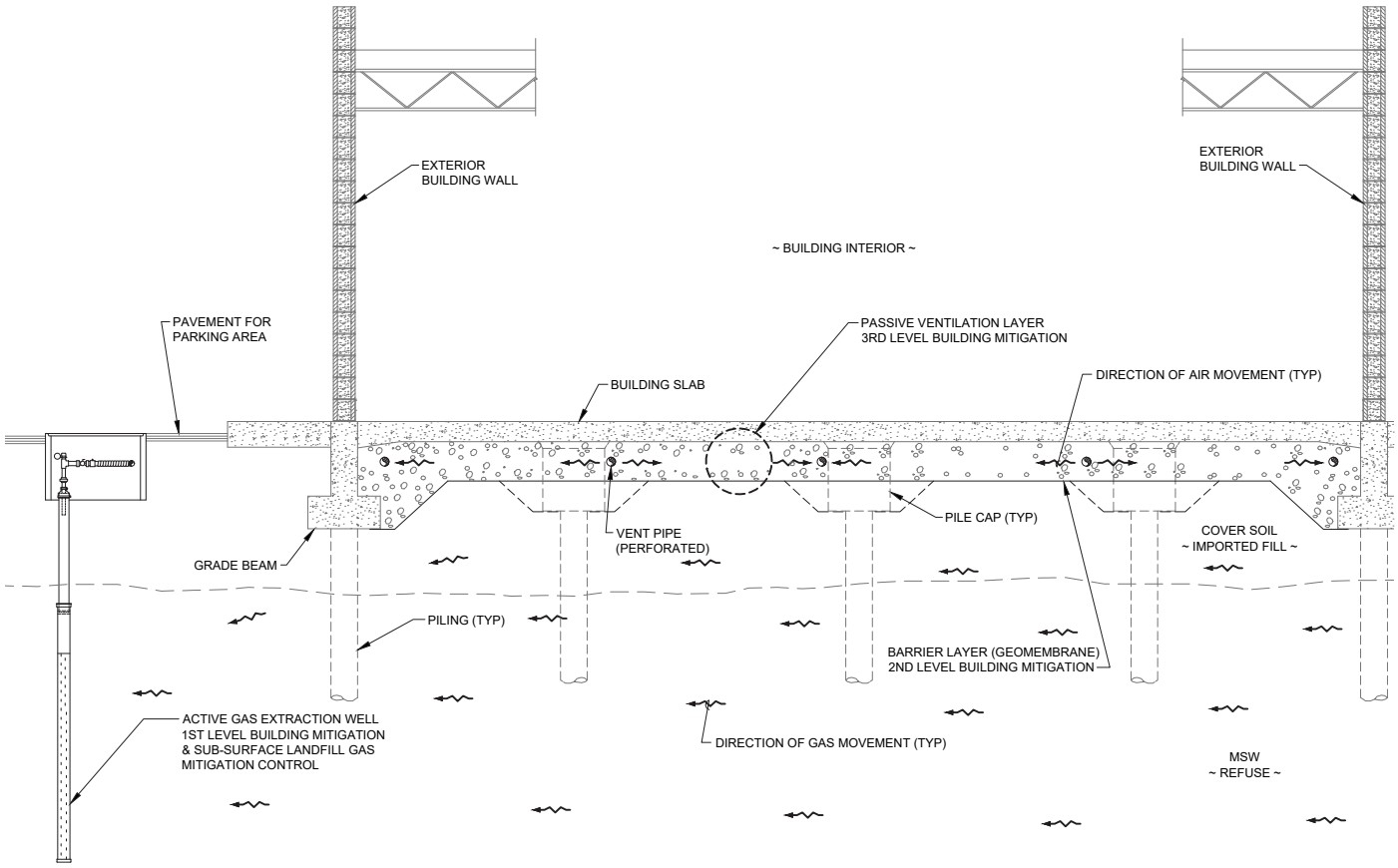


Figure 19: Proposed landfill gas mitigation system section at building

LANDFILL GAS CONSIDERATIONS

Existing Blower Station:
The LFG disposal facility or blower station will provide the mechanisms for pulling the landfill gas from the well field (blowers) and treating the landfill gas (filtration vessels). The landfill gas will be treated by a carbon filtration to remove the trace compounds from the LFG.

Extraction Network:
The gas extraction network consists of vertical wells which allow vacuum, supplied from the blowers and transmitted through the conveyance pipe, to be transmitted to the refuse mass. The vacuum allows the gas to be removed from the refuse mass and pulled into the conveyance pipe where it is carried to the blower/ flare station.

The gas extraction network will consist of an underground network of wells consisting of slotted pipe surrounded by porous rock. The gas extraction network will consist of up to 22 vertical gas extraction wells. The gas extraction wells are spaced around the perimeter of the landfill and adjacent to the onsite buildings at 200 feet on center with slotted pipe beginning at a depth of 20 feet below the surface (also referred to as depth of solid pipe). This uniform well spacing and depth of solid pipe has proven effective in gas collection as demonstrated through operational practice and low surface emissions measurements.

Existing Subsurface Gas Monitoring Network:
The existing 14 subsurface gas monitoring wells or "gas probes" located on the property will need to be reconfigured similarly to be less visible and more secure with the proposed park development.

Building Methane Mitigation:
A combined approach to building mitigation is recommended for the Airfield Park Aquatic Center based on site-specific conditions. It is recommended that vertical gas extraction wells be placed in the waste around the perimeter of the landfill for perimeter migration control. It is also recommended to use vertical gas extraction wells as a component for building methane mitigation. In doing so, the perimeter gas extraction wells can serve as the primary mitigation technique for protecting buildings from intrusion of methane gas. Additional recommended building mitigation measures include using a barrier layer and ventilation layer as a secondary and tertiary level of building methane mitigation.

For this project, due to the settlement of waste and the pile-supported buildings, it is expected that the subgrade surface on which the slab rests will settle/drop away from the slab over time. For this condition, there are two potential scenarios. The first involves hanging the membrane from the slab, thereby functioning as the tertiary method of gas control. Many designs have utilized this method and rely on the sub-slab ventilation layer as their primary means of gas removal (even in the absence of vertical extraction wells). The second involves having the membrane rest on the subgrade surface (with the ventilation layer above), thereby allowing the membrane to settle with the subgrade. This scenario can function without damaging the membrane and will also allow the ventilation layer to operate without introducing air into the waste mass below as a result of operating the vertical gas wells.

A typical schematic section view of a building methane mitigation system is shown on Figure 4 and Figure 5 in Appendix E.

Above: Components of existing LFG system

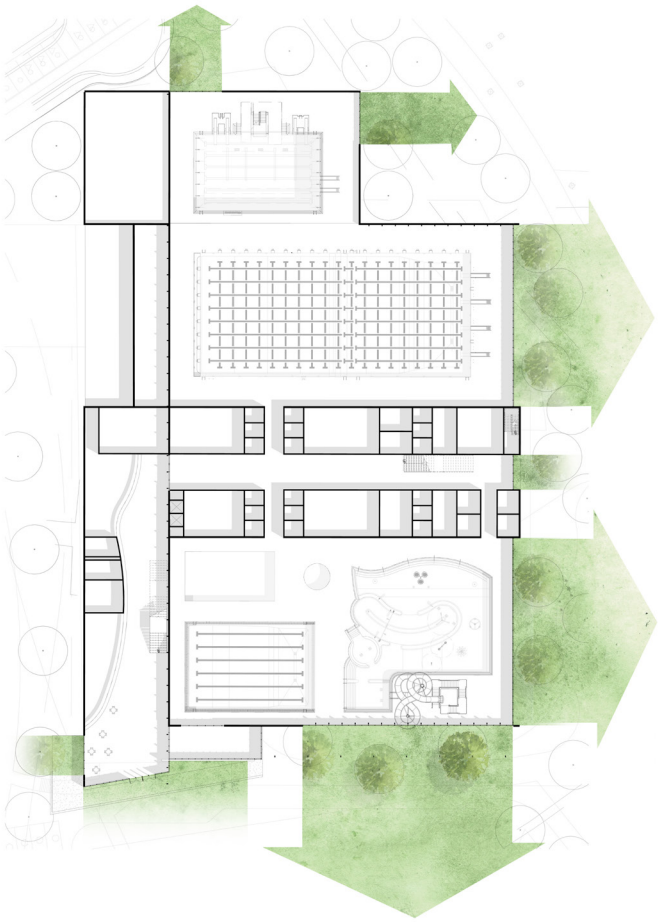
7 Aquatic Center

PREFERRED AQUATIC CENTER CONCEPT

The conceptual images shown here give a potential idea of the character emphasize the design goals. Specifically, the character of the facility should strengthen and reflect the design priorities already identified as well as those which will emerge through future discussions with Parks, stakeholders, user groups, and the public. The images above are conceptual in nature and illustrate the indoor-outdoor connections, clear wayfinding, daylighting strategies, and bright, warm, welcoming public spaces capable of allowing large groups of people to move comfortably through them.

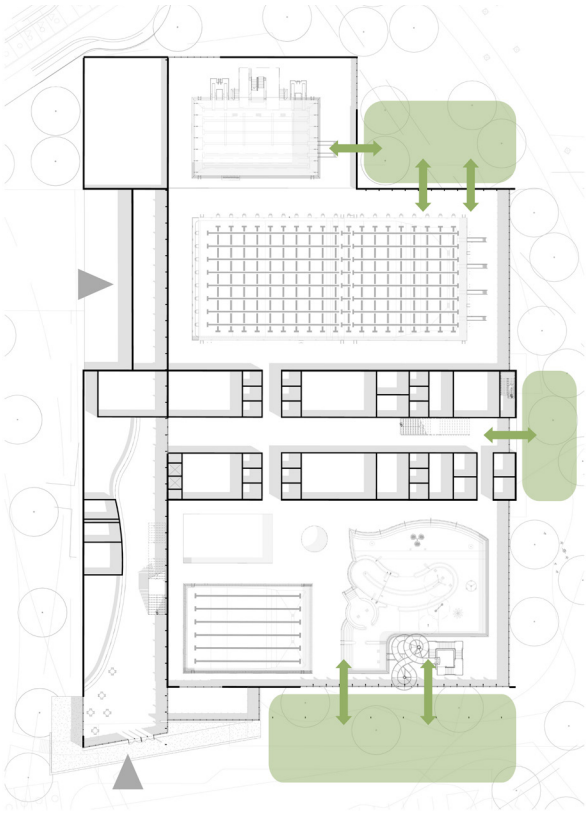
SITE RELATIONSHIP CONCEPTS
Views and Site Connections

One of the primary drivers for the overall layout of the building is the optimization of visual connections to the site and to more distant views beyond. The three largest and most active spaces of the building, the diving, competition, and recreation pool natatoriums; face the park with view opening up to the north and east. The recreation pool also connects to the south providing views of the fun activities from the entry and parking.



BUILDING DESIGN CONCEPTS
Site Connections

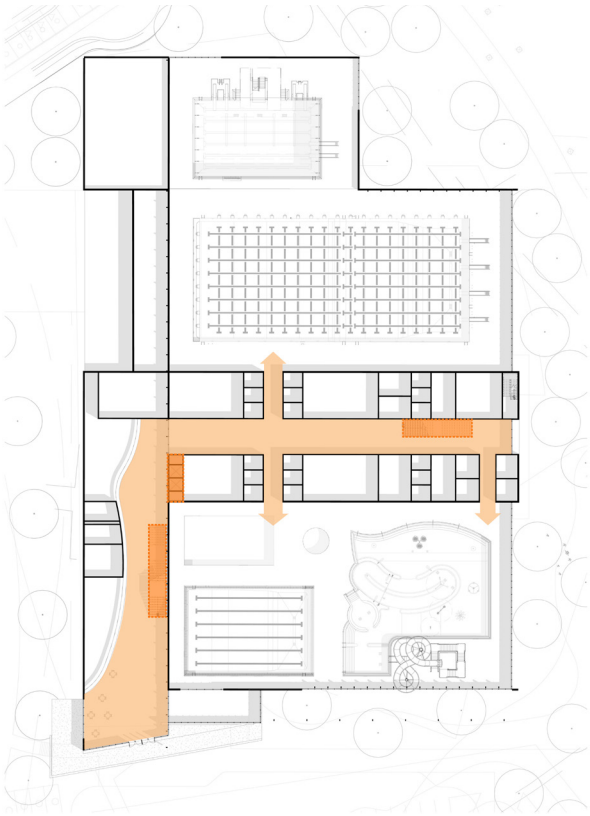
In addition to providing strong visual connections to the site, there are also opportunities to physically connect the natatorium spaces directly to the outdoors so that when weather permits, doors can be opened to allow the activities of the facility to expand outside. These opportunities occur both along the southeast side of the building where the recreation natatorium is connected to a covered outdoor space as well as to the northeast where the competition and diving pool natatoriums could open up. In both cases users, would be able to move directly outdoors and back again. Thoughtful control through fencing and landscaping would be required to make sure that only facility users could enter back into the pool areas.



AQUATIC CENTER OBJECTIVE

Broad Based Community Access and Equity

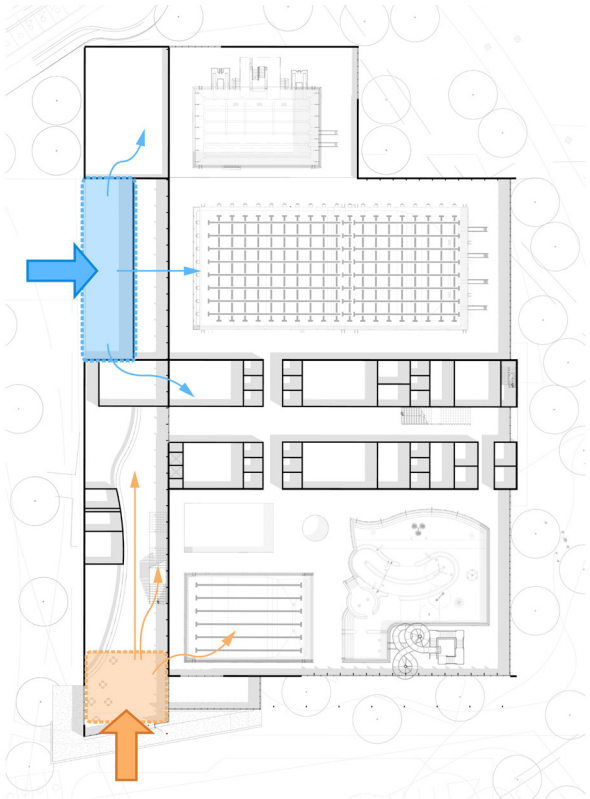
When designing a facility of this size and breadth of offerings, a clear approach to circulation is vital to ensure easy and universal accessibility. The proposed plans address this issue through a large and gracious entry hall which connects you to each of the major 'wings' of the building: competition pool natatorium, recreation pool natatorium, spectator level, fitness areas, and community/meeting spaces. In addition, the idea of a universal changing hall is scaled-up to meet the needs of this facility with a two-story changing hall which serves both the competition and recreation pool natatoriums equally. Within this space, the user experience of visiting the pools will be the same for all.



SITE RELATIONSHIP CONCEPTS

Front-of-House/Back-of-House

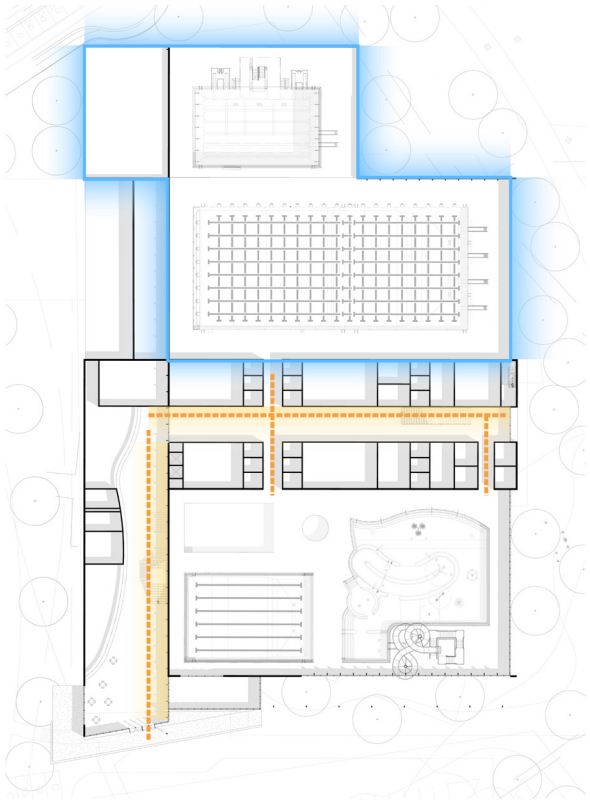
Similar to the level of users who will visit the Center, there will also be a need for a significant number of deliveries, vendors, service providers, materials, and equipment that will be brought to the Center - as well as recycling and trash to be removed. For efficiency of circulation and operation, there is a clear division of front-of-house and back-of-house building uses in the study layout. Goods and services arrive and are distributed from one area at the west side and guests arrive and can circulate to the various areas of the building from another.



AQUATIC CENTER OBJECTIVE

Scope to provide concurrent programming in all areas, even when hosting training and competitive events

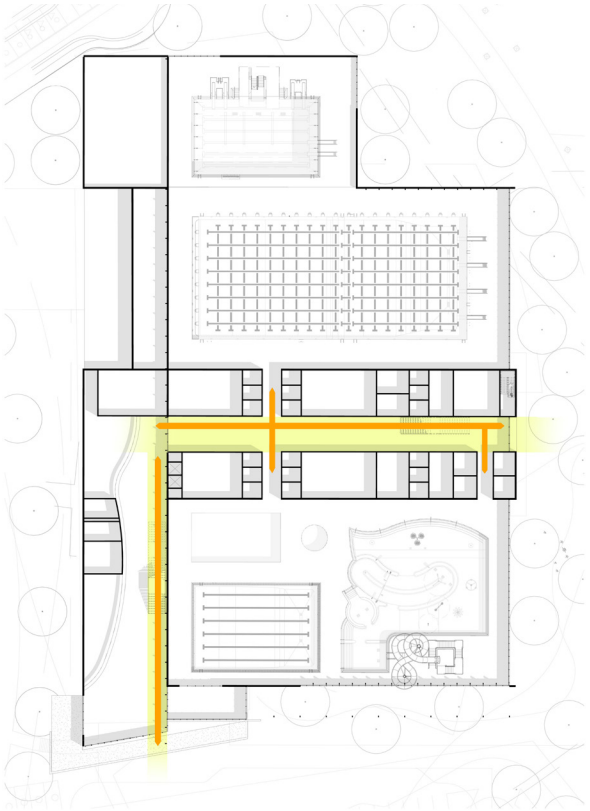
To allow for this design goal described in the 2020 report, the building layout is organized so that both swimming and diving competitions will be held at the rear of the facility. As such, once a competitor or official has crossed the threshold into the competition side of the locker room corridor, their circulation paths would no longer cross with other users of the building. The competition wing would function independently during events, allowing recreation and other users easy access.



BUILDING DESIGN CONCEPTS

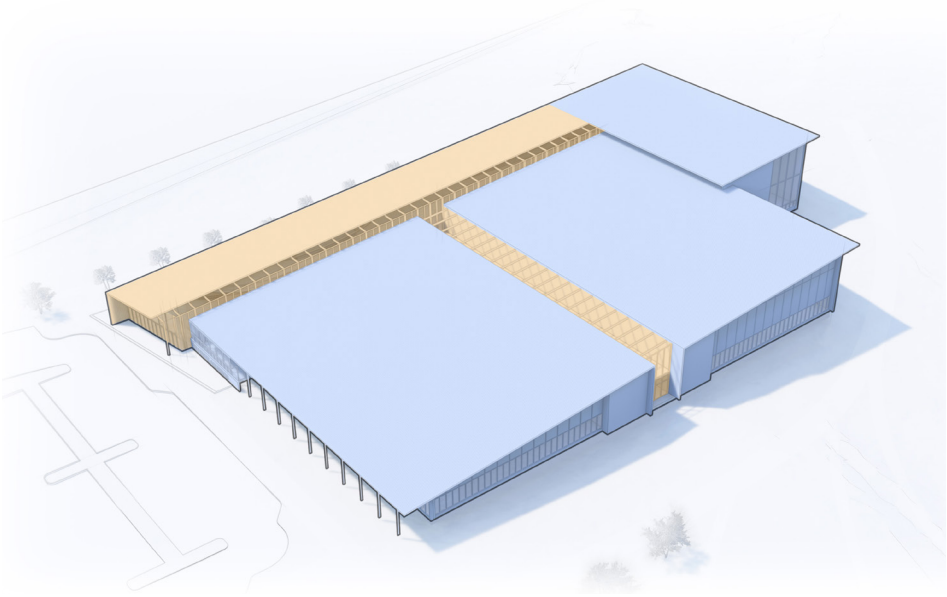
Daylighting as Wayfinding

Due to the overall footprint size of the building, there is potential for the inner-most areas to have limited access to daylight and views. With energy usage and user experience in mind, it is recommended that skylights be employed to bring light into these otherwise dark areas. A strategy is offered here that uses skylights to light the major circulation areas so that daylight also contributes to clarify circulation and wayfinding in the facility.



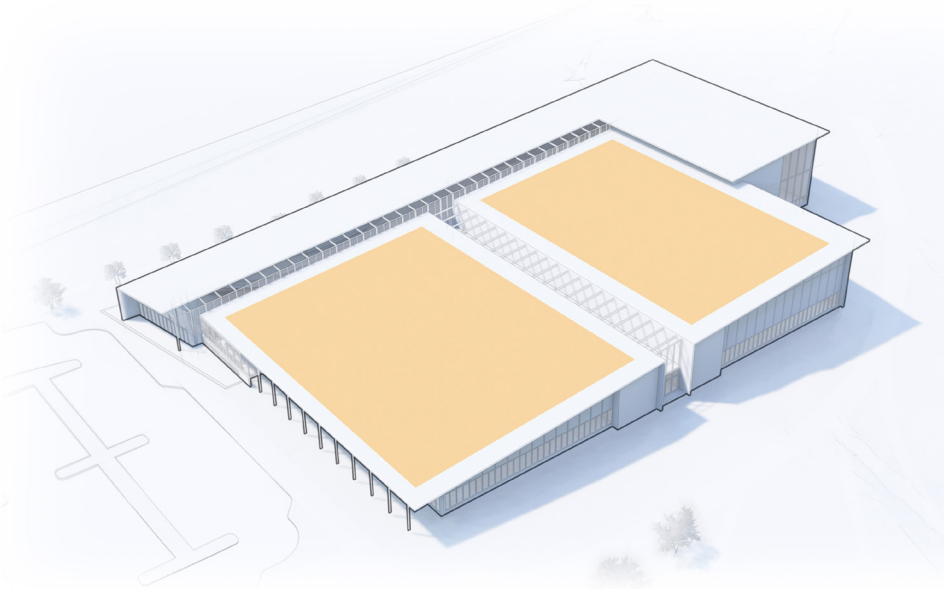
BUILDING DESIGN CONCEPTS
Building Massing

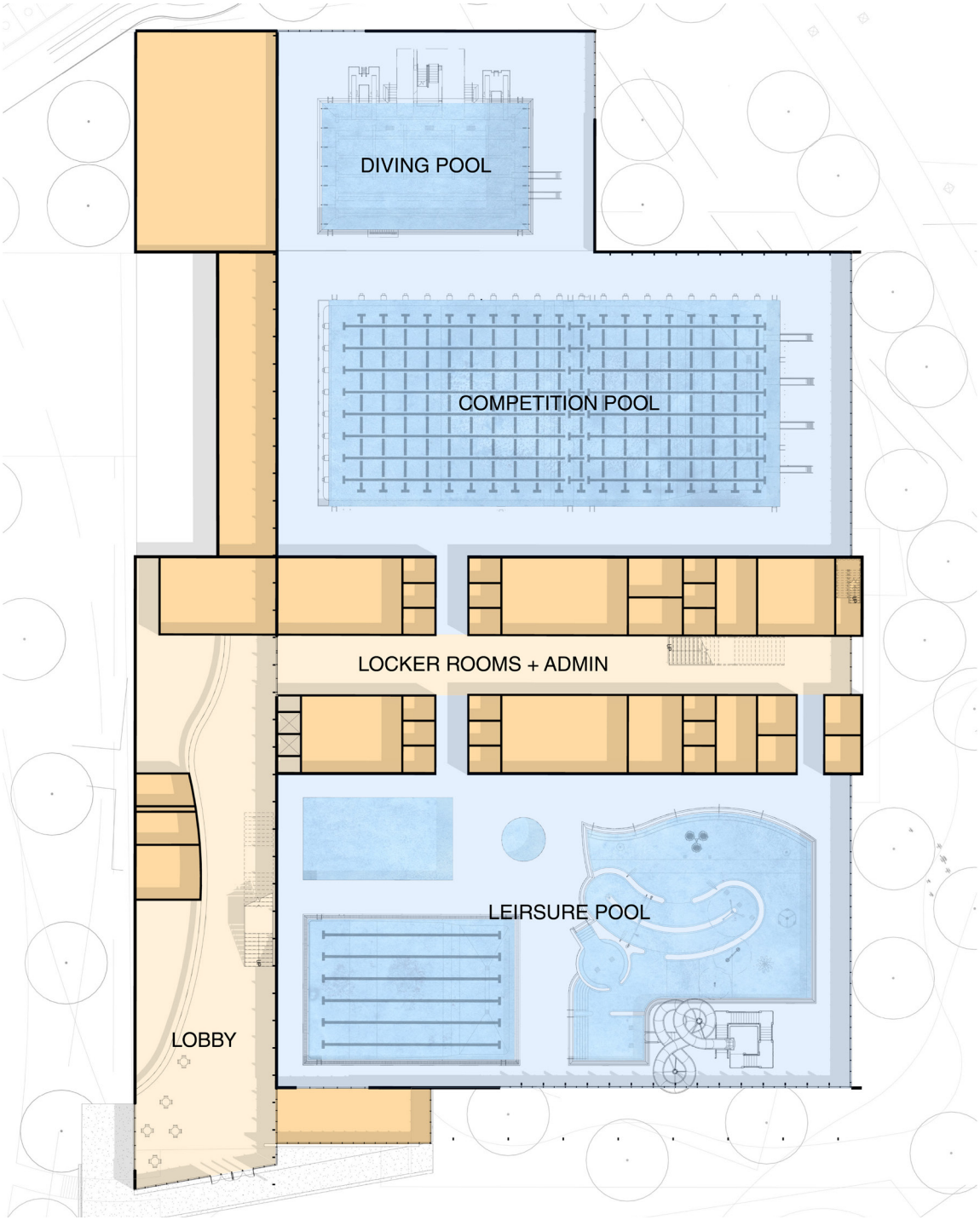
Some areas of the building, such as the diving pool natatorium require very tall clear areas. To keep the guest experience of arriving and entering the building at a pedestrian and approachable scale, the Center's massing puts the shortest building components in the front and the tallest forms in the rear.



BUILDING DESIGN CONCEPTS
Solar Orientation, Glare Mitigation, Heat Gain Control, Daylighting

The sloping roofs, which are born out of the massing approach described above, are also well suited for solar-PV and/or solar-hot water strategies. If extended to the south they can also provide shade onto the façade glazing to minimize pool surface glare as needed for lifeguarding and for control of heat gain to minimize cooling costs. Additional sunshade devices may be added as needed but should be studied at a level of detail suited to a better understood building design.

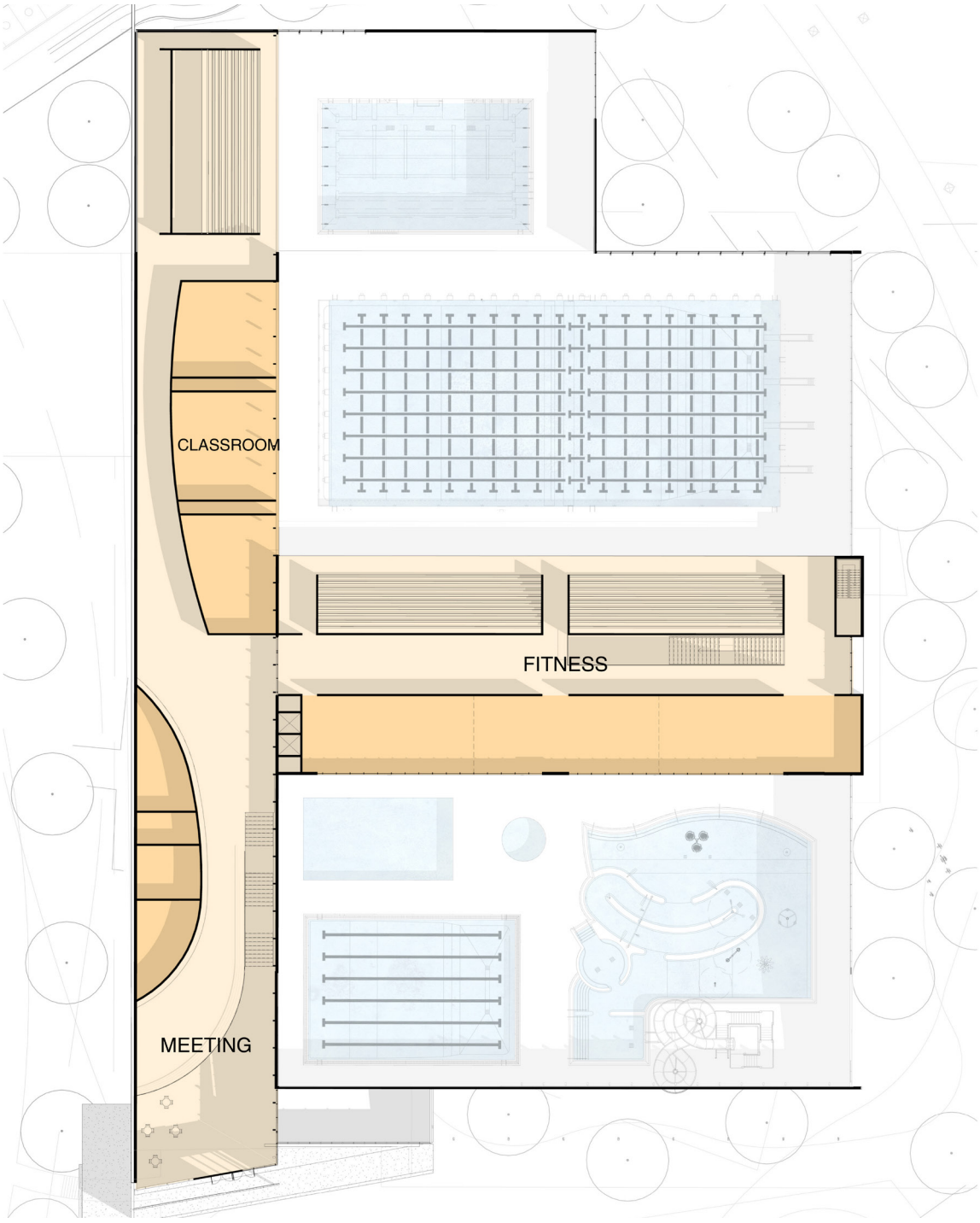




1ST FLOOR PLAN

The first floor plan is clearly divided into three programmatically separate ‘wings’ of the building:

- The main building entry, administration, and back of house support areas are organized linearly, backing up, and providing a visual buffer from, SE 30th Place.
- Visually connected to the front of the building but accessed from a shared and central aquatics hall is the recreation/leisure natatorium
- Also accessed from the aquatics hall, but located deeper into the facility is the competition natatorium



2ND FLOOR PLAN

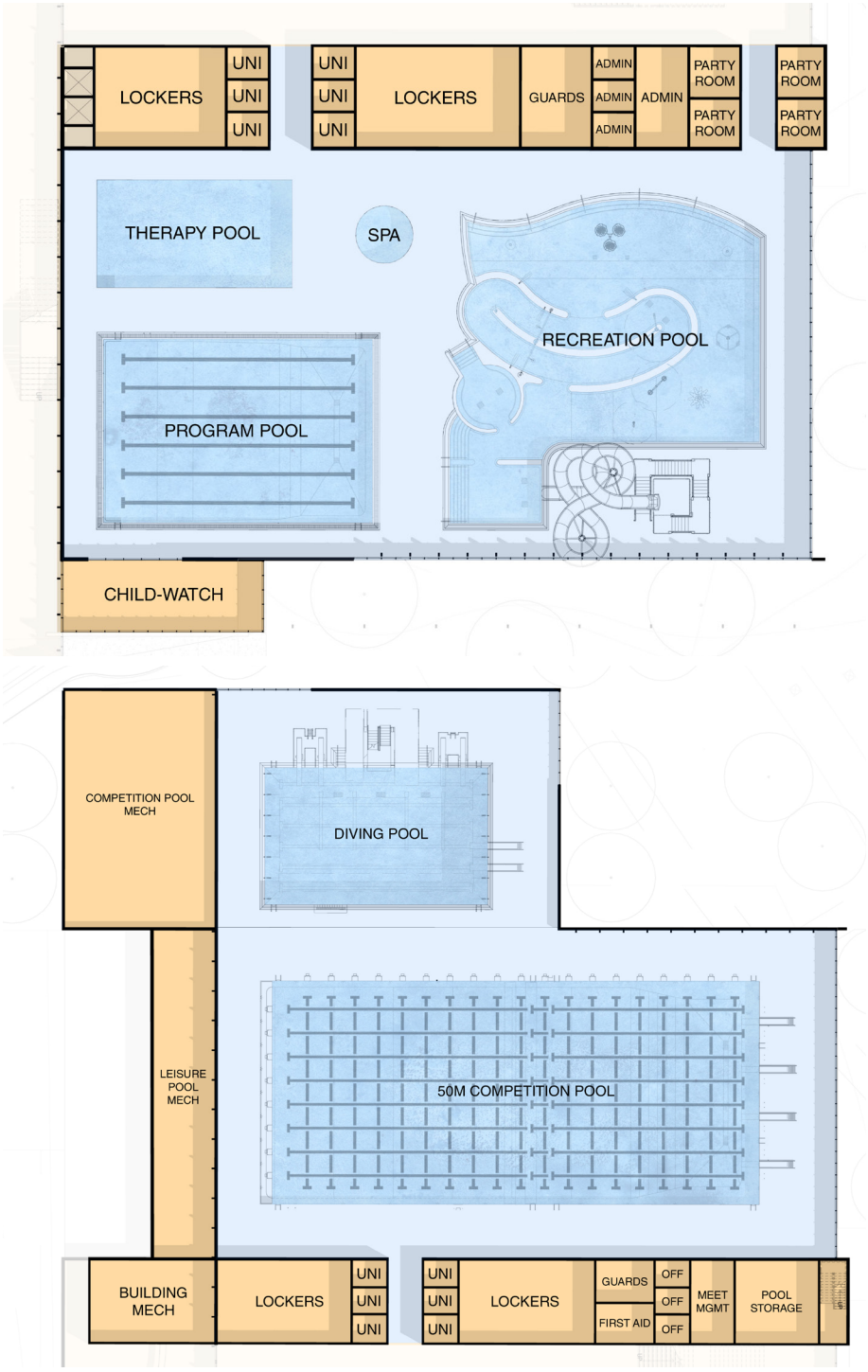
The second floor plan is also clearly divided into three programmatically separate ‘wings’ of the building:

- Located upstairs from the main entry hall and visible from the lobby is a series of publicly accessible meeting spaces which vary in size and degree of enclosure
- Further into the building, are the dry-land fitness functions of the building. These spaces are located with strong visual connections to the natatorium spaces in mind: exercise classrooms look down into the competition natatorium and the flexible fitness space looks down into the recreation natatorium
- Also on the second level and visually connected to the natatorium spaces is the spectator seating. There are two areas of tiered balcony style seating with one focused towards the 50-meter pool and one towards the diving pool

The Recreation Natatorium features a large leisure pool, a program pool, wellness/therapy pool and a spa. Together these spaces provide a wide variety of recreation, fitness, therapy, and training opportunities:

- The program pool is sometimes called a teaching pool and can also be used for warm-ups during a large competition events.
- The leisure pool will have a range of play features including waterslides, lazy river, vortex, and shallow areas for teaching and play. This pool is kept at a warmer temperature at about 88 degrees.
- The wellness/ therapy pool is a warmer water pool that is ideal for therapy as well as swim lessons, toddler programs, and special needs users.
- The spa is typically at 102 degrees and provides the extra hot water for therapy and relaxation.
- The owner team will also consider if a sauna or steam room should be included in the final programming.
- The lifeguards are the most important staff at the pool and their spaces need to well designed with clear lines of sight across the natatorium, as well as providing downtime space for the guards.

The competition Natatorium features the large 50M competition pool and deep water tank. The 50M x 25YD pool would include 2 moveable bulkheads to allow flexibility of pool length and number of lanes. This pool would support the high school Conference / District Level competition in swimming, diving, and water polo, as well as local and regional competitions. The 50 M also provides water for masters swimming, artistic swimming, and recreation activities like scuba, kayak, paddle boarding, and obstacle courses. In addition to diving, the deep water tank is a 6 x 25 YD pool and supports water polo, masters swimming, scuba and other programs.



STRUCTURAL CONSIDERATIONS

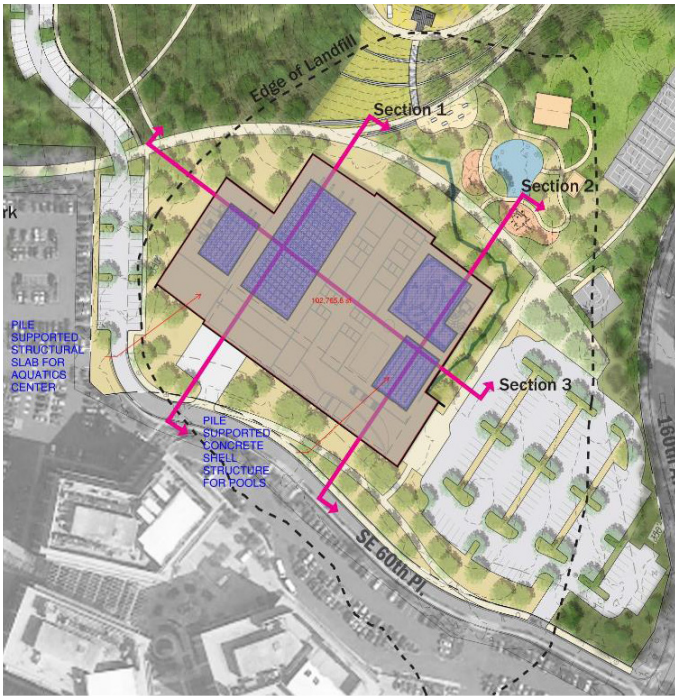
In general the new building for the Aquatic Center will be constructed of traditional structural steel and concrete framing. Conventional structural steel framing is envisioned to support the roof and any elevated floor area. Lateral force resisting systems to address wind and seismic forces will likely include the integration of steel braced frames or concrete shear walls. Given spans over pools, poor soils conditions, and occupancy use, a lighter weight structure and enclosure is intended to be used.

Given the placement of the Aquatics Complex above the existing landfill, the following are special considerations:

- Structural Gravity Load Resistance
- Increased Seismic Lateral Forces
- Need for Methane Mitigation
- Special Construction Considerations

Given the soil conditions of the landfill site, the entire building structure, pools, and slabs at grade will be designed to be supported by steel pile foundations. The building frame (columns and lateral systems) will land directly on deep foundations. The pools will be formed in structured concrete “shells” that are supported by pile foundations. All slabs on grade will also be designed as structural slabs that can span to pile foundations.

The structural environmental considerations associated with the new facility being placed above the existing landfill is primarily the potential disturbance of existing landfill cap or materials during project grading and construction of the pile foundations, pool shell structures, and slabs on grade.



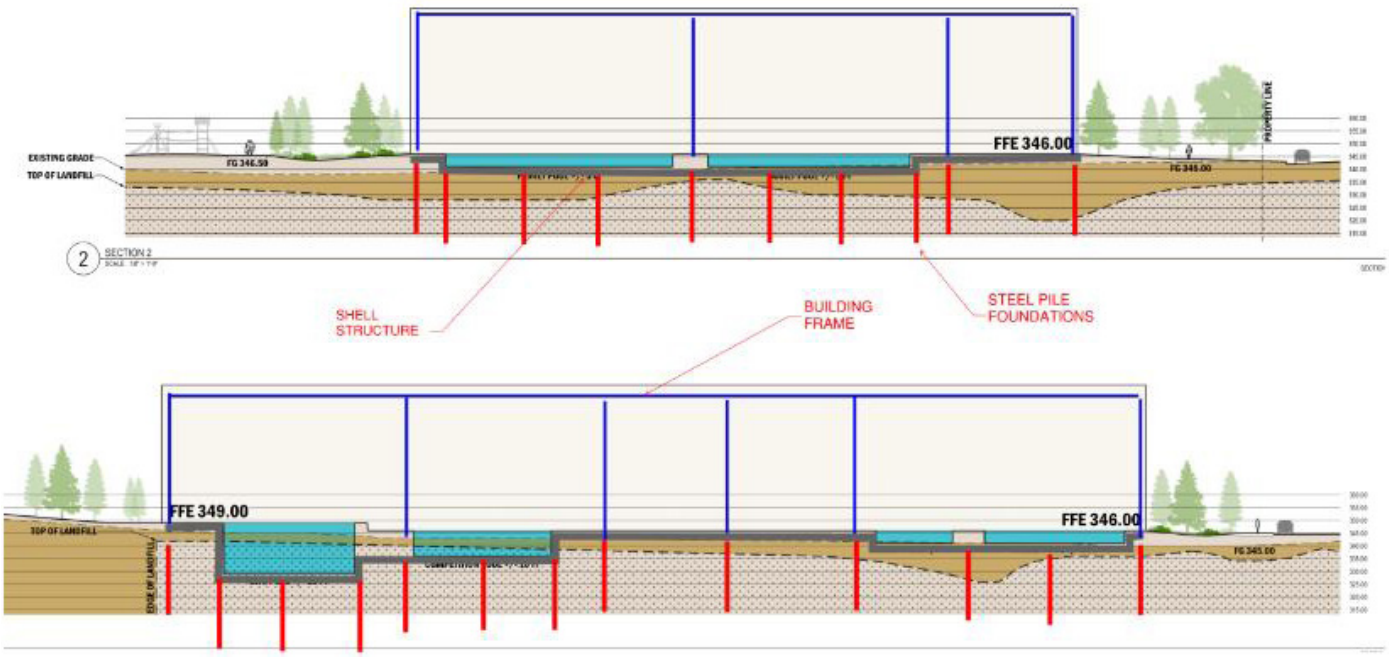


Figure 20: Proposed building structure system

8 Transportation Analysis

Above: SE 30th Place

This project will include on-site parking with access to SE 30th Place and at the proposed extension of SE 30th Place west of 160th Avenue SE. Approximately 251 parking spaces will be provided on site. There is also a parking lot easement agreement between Advanta Office Holdings, LLC and the City of Bellevue that provides access to up to 400 additional spaces for a total of 651 parking spaces.

156th Avenue SE is a 4-lane Collector Arterial in the vicinity of the project site with a posted speed limit of 30 miles per hour (mph). Sidewalks are provided on both sides of the street, but no bicycle facilities exist. Parking is not permitted along the roadway adjacent to the project site.

160th Avenue SE is a two-lane unclassified roadway in the vicinity of the project with a posted speed limit of 30 mph. North of SE 30th Place, 160th Avenue SE has a checkpoint for access to the Boeing facility. Sidewalks are provided on both sides of the street, but no bicycle facilities exist. There is no parking along 160th Avenue SE.

King County Metro Route 271 (Issaquah, Eastgate, Bellevue College, Bellevue Transit Center, Medina, University District) runs along SE Eastgate Way in the project vicinity. Stops are provided at the intersections of 60th Ave SE/SE Eastgate Way and 158th Ave SE/ SE Eastgate Way for both travel directions. Route 271 provides service from 5:38 a.m. to 11:35 p.m. with 15-minute headways.

Table 1. Trip Generation Summary – Weekday PM Peak Hour

Land Uses[1]	Size	Trip Rate[1]	New Trips In	New Trips Out	New Trips Total
Proposed					
Public Park (LU #411)	15.76 AC	0.11 /AC	1	1	2
Tennis Courts (LU #490)	8 courts	4.21 /court	17	17	34
Aquatics Center	1 facility	-	379	379	758
Total			**397**	**397**	**794**

Note: AC = acres
1. Trip generation rate based on ITE Trip Generation, 11th Edition, except for the aquatics center. Program information for the aquatics center is attached for reference.

Table 2. Trip Generation Summary – Weekday Non-Summer PM Peak Hour

Land Uses[1]	Size	Trip Rate[1]	New Trips In	New Trips Out	New Trips Total
Proposed					
Aquatics Center (Weekday Non-Summer)	1 facility	-	117	104	221
Public Park (LU #411)	15.76 AC	0.11 /AC	1	1	2
Pickleball Courts (LU #490)[2]	8 courts	4.21 /court	17	17	34
Total			**135**	**122**	**257**

Note: AC = acres
3. Trip generation rate based on ITE Trip Generation, 11th Edition, except for the aquatics center. Program information for the aquatics center is attached for reference.
4. Trip generation for pickleball courts was estimated using ITE land use number 490 (Tennis Courts).

The development would generate approximately 794 (397 in, 397 out) total trips to the area during the summer weekday PM peak hour and 257 (135 in, 122 out) total trips to the area during the non-summer weekday PM peak hour. These weekday scenarios represent the maximum and minimum trip generation for the development. The aquatics center itself is anticipated to generate 663 (337 in, 326 out) trips during the PM peak hour on summer weekends and 740 (370 in, 370 out) trips during the PM peak hour on non-summer weekends.

Overall, the available parking supply is anticipated to meet the demands of the proposed project. Weekdays during the school year as well as Weekends during both the school year and during the summer will have enough parking to meet the anticipated demands. The only time period that is anticipated to have a deficit in parking would be during summer weekday conditions. This is when daytime activity levels of the aquatic center are anticipated to be higher and when additional shared parking from the adjacent uses is not available. This parking deficit will specifically occur between approximately 9:00 a.m. and 5:00 p.m. The highest deficit is approximately 113 parking spaces, which is expected to occur between 11:00 a.m. and 12:00 p.m. when a demand of 364 vehicles has access to the 251 on-site parking spaces only. Based on the current summer program during the summer weekday condition, implementing parking management strategies to reduce parking demands or exploring adding more parking is recommended.

9 Cost Estimate

The Bellevue Airfield Park Master Plan is a vision to transform undeveloped Bellevue Airfield Park from seldom used open space to a regional park with actively programmed site amenities and a 130,000 sf aquatic center. Proposed investments include upgrades to the landfill's gas mitigation system and other utility infrastructure, an aquatic center building, parking lots, improvements to accessible trails, park amenities and improved stormwater systems.

Due to uncertainty around how the project might be phased, the project is broken into six costing buckets of pieces of the project that might be built during the same phase of work. Project costs are estimate in 2024 dollars as well as escalated to second quarter 2027 dollars to capture cost inflations projected to impact the project by the start of construction.

Assumptions:

- Design, bid, build delivery method.
- Construction start of Aquatic Center is Q2, 2026.
- Excalation is predicted to be 4% in 2024.
- Estimate exludes soft costs such as design fees, permits, testing/inspections, construction change order continegencies, loose fixtures/furnishings and sales tax.

See appendix G for full cost estimate summary.

ESTIMATED COSTS SUMMARY

Item	Description	QTY	UOM	$ / UOM	Cost
1	Gas Mitigation System / Landfill	470,000	SGA	$ 11.34	$ 5,331,553
2	General Conditions & Support Services	9	MO	$ 45,000	$ 405,000
Bucket 1 - Estimated Construction Cost					$ 5,736,553
3	Restroom	640	BGSF	$ 933.11	$ 597,191
4	Main Trails / Play Areas	135,290	SGA	$ 62.26	$ 8,423,656
5	General Conditions & Support Services	9	MO	$ 60,000	$ 540,000
Bucket 2 - Estimated Construction Cost					$ 9,560,847
6	East Parking Lot	118,500	SGA	$ 30.45	$ 3,608,595
7	General Conditions & Support Services	6	MO	$ 45,000	$ 270,000
Bucket 3 - Estimated Construction Cost					$ 3,878,595
8	Picnic Zone / West Parking Lot	98,580	SGA	$ 38.20	$ 3,765,757
9	General Conditions & Support Services	6	MO	$ 45,000	$ 270,000
Bucket 4 - Estimated Construction Cost					$ 4,035,757
10	Lower Trails / Terraced Lawn	106,295	SGA	$ 24.07	$ 2,558,721
11	General Conditions & Support Services	4	MO	$ 45,000	$ 180,000
Bucket 5 - Estimated Construction Cost					$ 2,738,721
Total Estimated Construction Cost (Today's Dollars)					$ 25,950,473
12	Escalation to Midpoint (Q3, 2027)	15.00%	on	$ 25,950,473	$ 3,892,571
Total Construction Cost (Escalated)					$ 29,843,044
13	Aquatic Center	130,000	BGSF	$ 614.45	$ 79,878,957
14	Sitework	170,000	SGA	$ 71.86	$ 12,215,998
15	General Conditions & Support Services	24	MO	$ 95,000.00	$ 2,280,000
Bucket 6 - Estimated Construction Cost					$ 94,374,955
16	Escalation to Midpoint (Q2, 2027)	14.00%	on	$ 94,374,955	$ 13,212,494
Total Construction Cost (Escalated)					$ 107,587,448

Table 1: Rough order of magnitude pre-design cost estimate summary

10 Appendices

Consultant Reports

- Civil Existing Site Conditions and Proposed Site Development Approach Report
- Architecture Programming and Building Development Report
- Geotechnical Engineering Report
- Structural Assessment
- Landfill Gas Control System Assessment
- Level 1 Transportation Analysis Report
- Pre-Design Cost Estimate Report

Appendix A

Civil Existing Site Conditions and Proposed Site Development Approach Report

Appendix B

Architecture Programming and Building Development Report

Appendix C

Geotechnical Engineering Report
Structural Assessment

Appendix D

Structural Engineering Report
Structural Assessment

Appendix E
Landfill Gas Control System Assessment

Appendix F
Level 1 Transportation Analysis Report

Appendix G
Pre-Design Cost Estimate Report