

Appendix A

Civil Existing Site Conditions and Proposed Site Development Approach Report

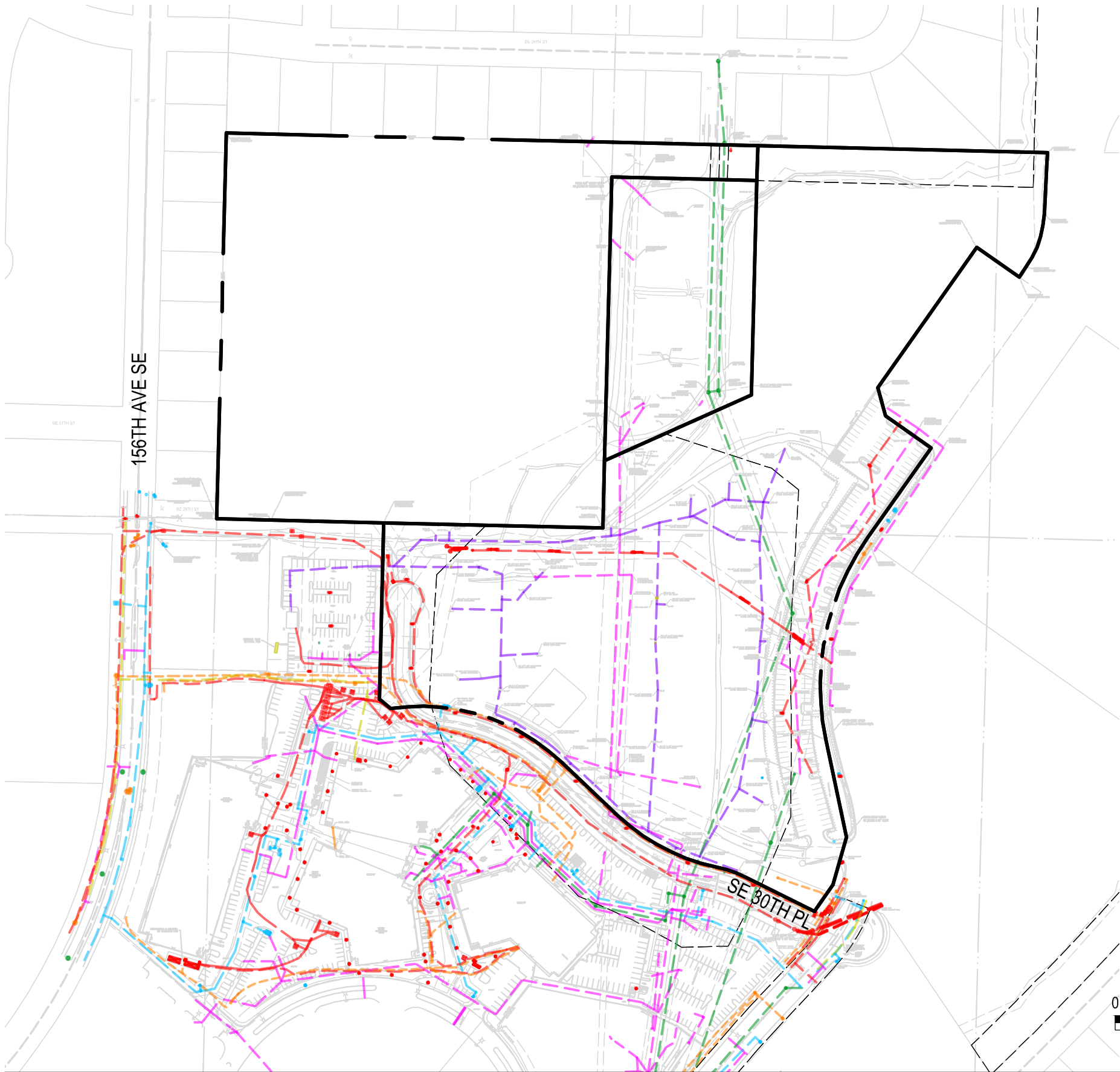
Bellevue Aquatic Center – Master Plan

- Existing Site Conditions
 - Site Context
 - Utilities/Stormwater
 - The project site has utilities located around and within the property.
 - An 8" City water main is located south of SE 30th Place.
 - 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 beneath the site 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.
 - Existing electrical duct banks run beneath SE 30th Place and serve the development south of the site. An existing high voltage line is located on site.
 - Existing telecom duct banks run beneath SE 30th Place and serve the development south of the site.
 - An existing natural gas service off the main located in 156th Ave SE serves the development south of the site.
 - A methane gas collection system is located on site within the landfill to collect the gas generated by the landfill.
- Preferred Programming and Site Development
 - Preferred Approach
 - Site
 - Utilities
 - The building water service may be provided from the existing 8" City water main south of SE 30th Place. The water services will enter the south side of the building. It is anticipated that at least two additional fire hydrants will be needed to provide fire coverage for the new building.
 - The building side sewer 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 building 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.
- The existing methane gas collection system will likely need to be modified to accommodate the new building and site programming.

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LEGEND

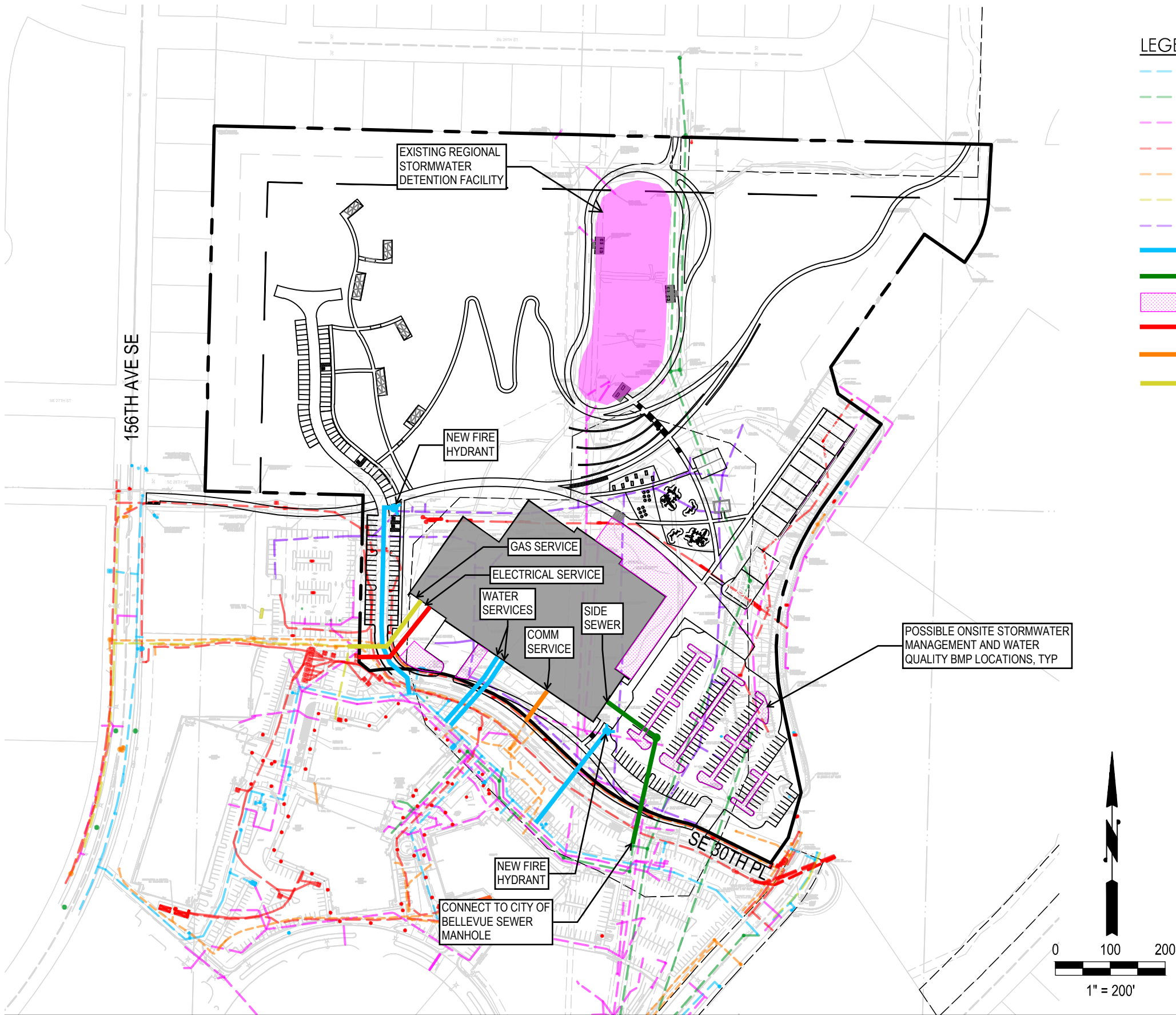
- EXISTING WATER
- EXISTING SANITARY SEWER
- EXISTING STORM DRAIN
- EXISTING ELECTRICAL
- EXISTING TELECOMMUNICATIONS
- EXISTING NATURAL GAS
- EXISTING METHANE GAS COLLECTION

BELLEVUE AQUATIC CENTER: EXISTING UTILITIES

NOVEMBER 15, 2023

- NOT FOR -
CONSTRUCTION

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Appendix B

Architecture Programming and Building Development Report

building program

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



Background Information

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. It is time to take the next steps for the City of Bellevue to broaden aquatics accessibility, equity, and opportunity within the community.

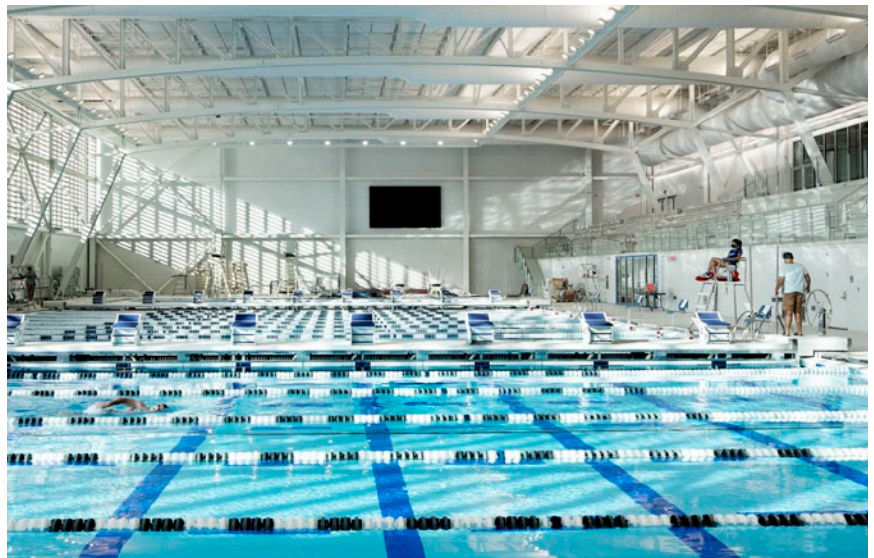
A comprehensive state of the art aquatic center including aquatic, fitness, and function spaces would be a safe year-round place for our diverse community, who would cross paths and foster community connection. The new aquatic center would offer essential water safety skills, a range of multi-generational and intergenerational aquatic programming unique to our 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 our diverse community together and attract new people and business to the City furthering the City as “the place you want to be”.

The proposed concept plan will serve the community for years to come. The center should offer experiences for all ages and abilities and serve a wide variety of programs and users— including recreational, fitness, safety, competitive, therapeutic, and leisure aquatic needs.

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



Building Program Elements - as determined by the 2021 report

PROGRAM ORIGINS

The program which has been test-fitted to the site in this study is derived directly from the program determined during 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

- 50m 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 13m separate pool
- 2 x 1meter 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



Site Plan Notes

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. The best suited 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.

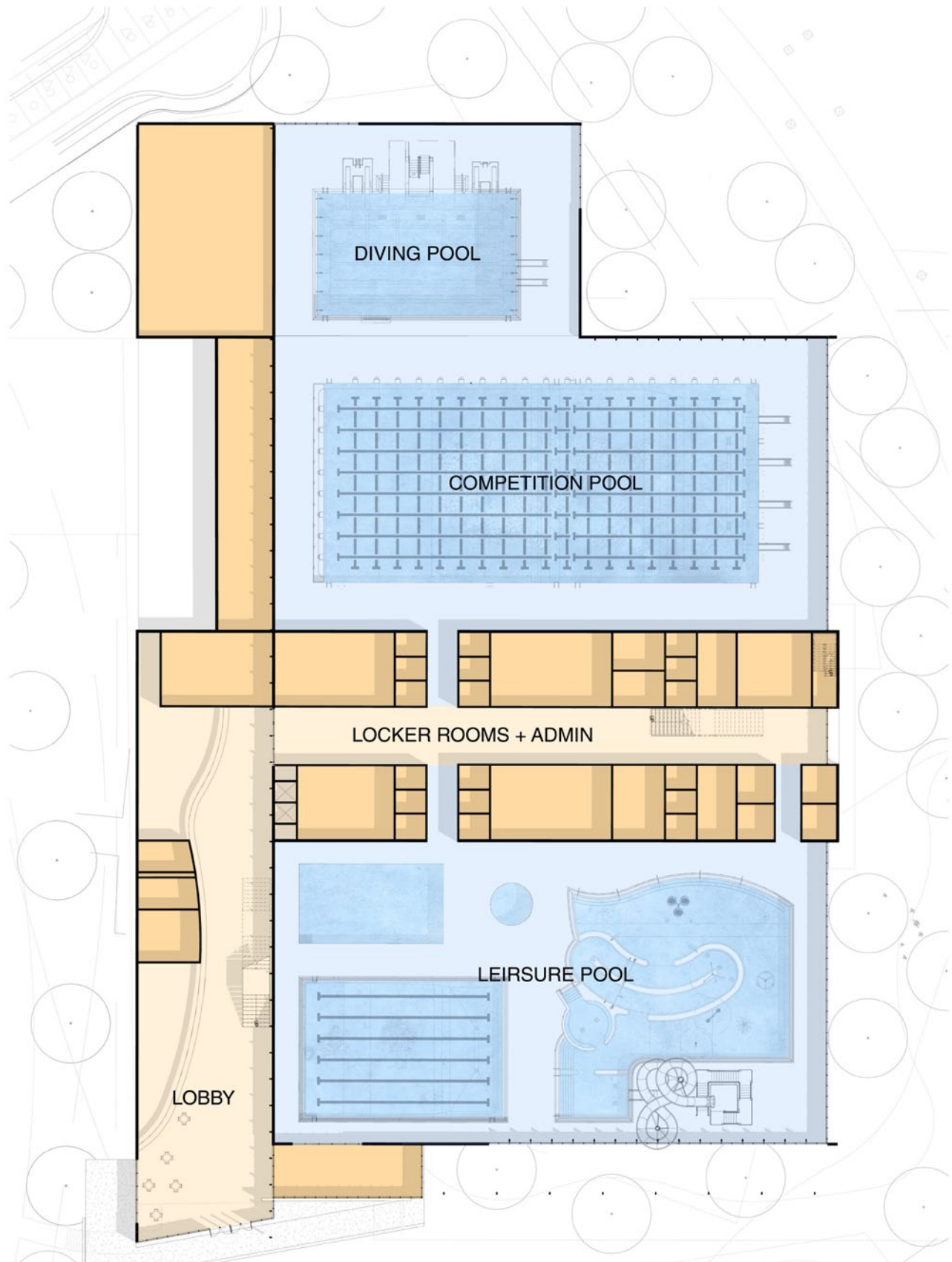




1st floor plan

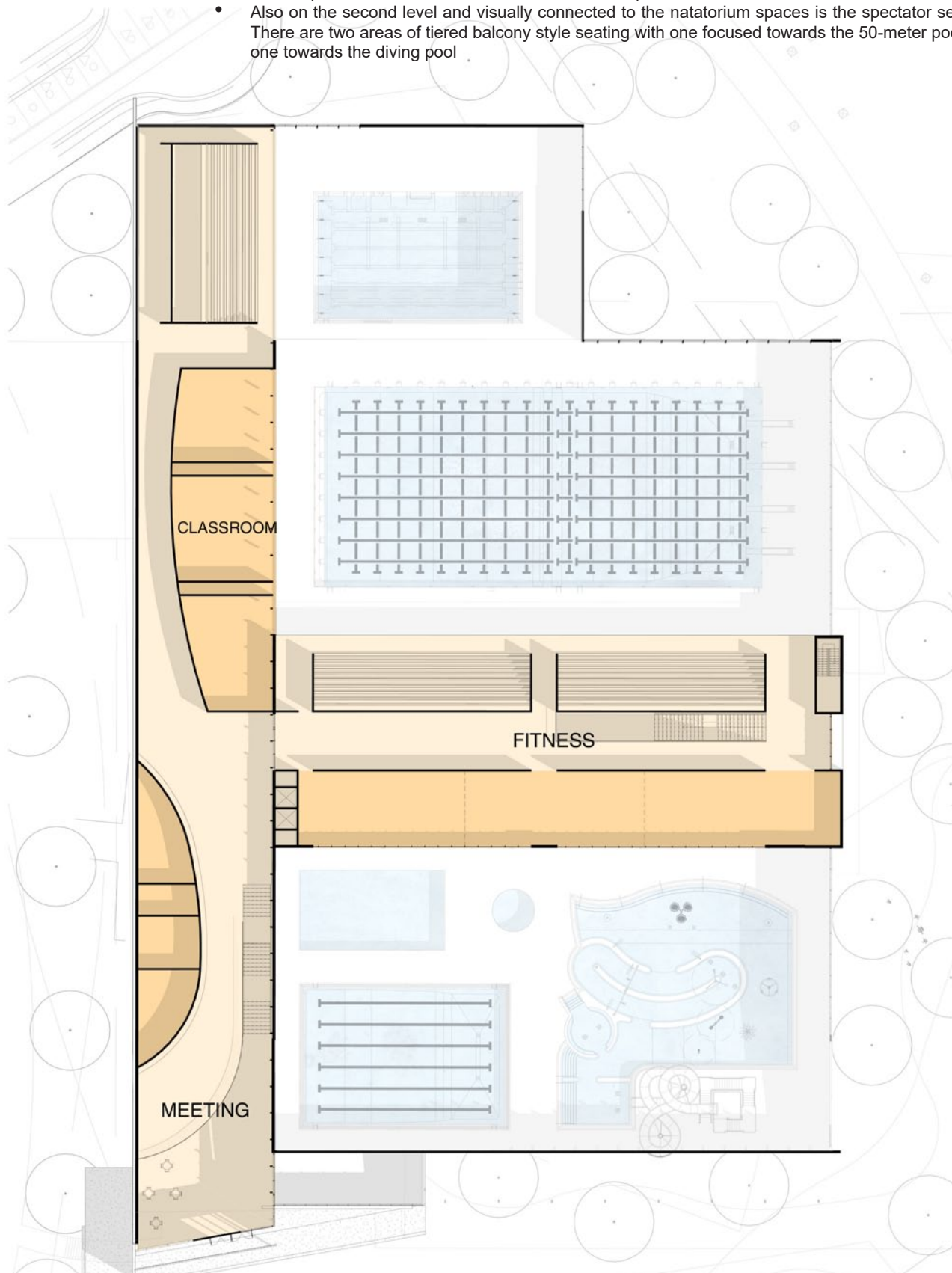
The first floor plan is clearly divided into three programmatically separate 'wings' of the building:

- The main building entry, administration, and back of house support areas are organized linearly, backing up, and providing a visual buffer from, SE 30th PL
- 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



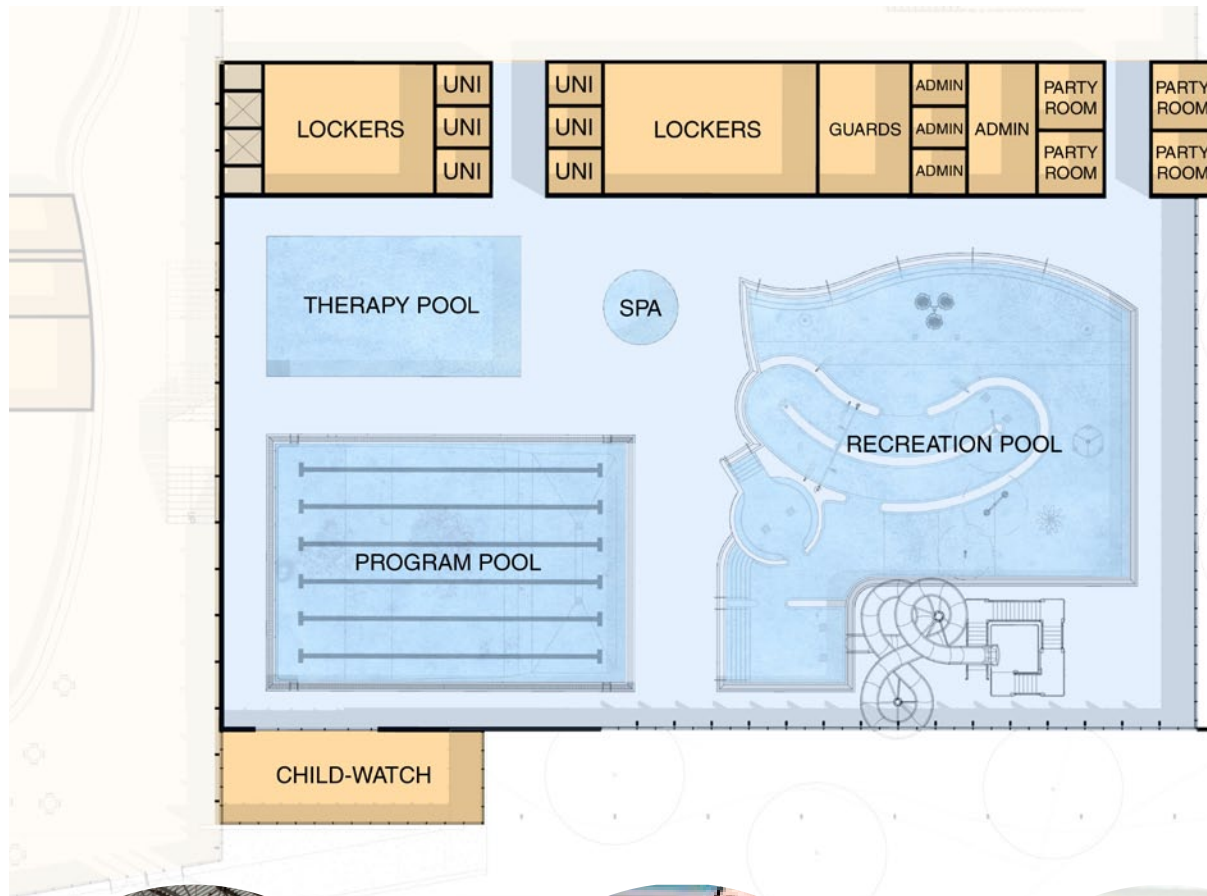
Aquatic Center Objective:

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

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 be well designed with clear lines of sight across the natatorium, as well as providing downtime space for the guards.



Aquatic Center Objective:
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

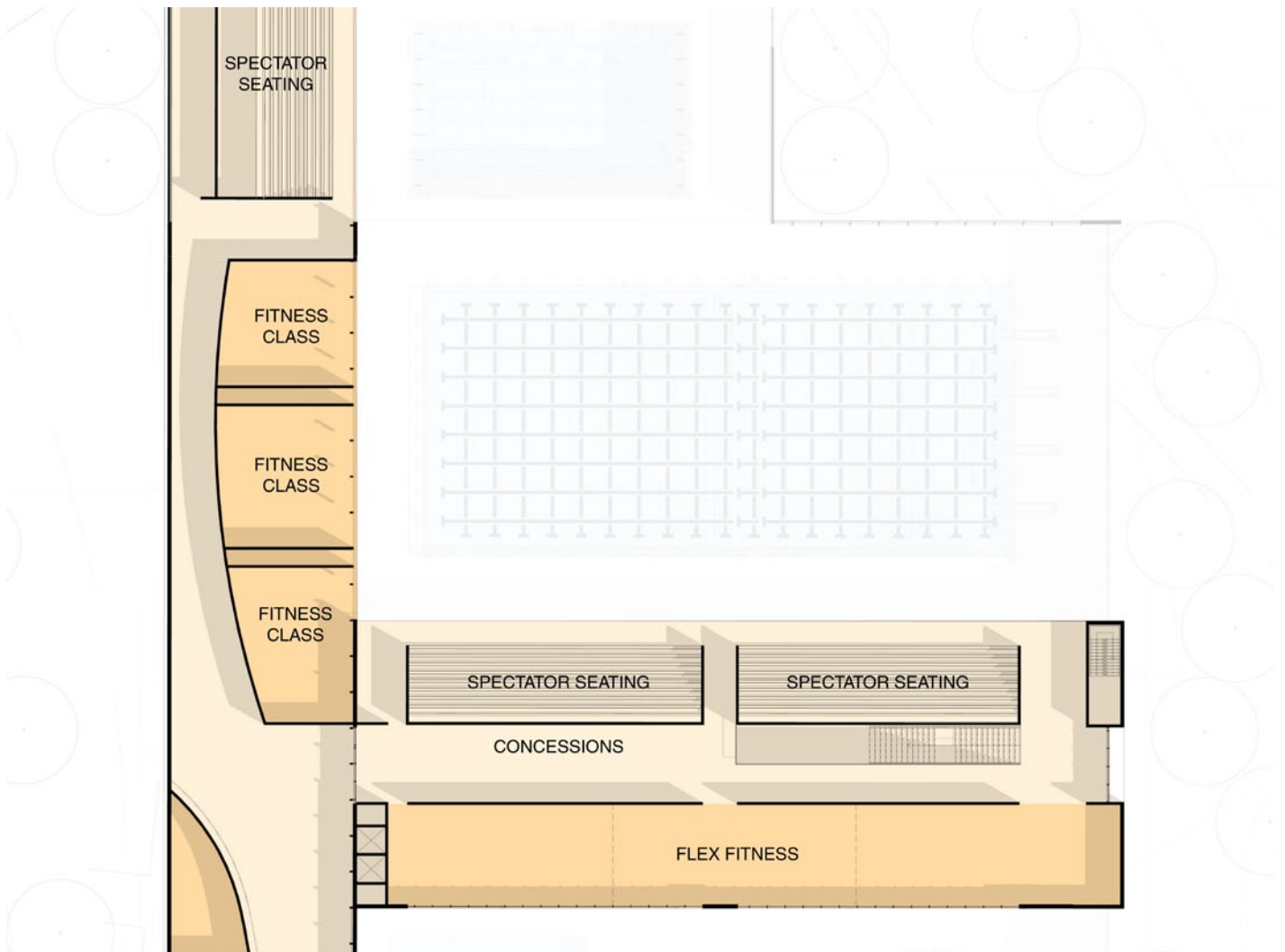
The competition Natatorium features the large 50M competition pool and deep water tank. The 50M x 25YD pool would include 2 moveable bulkheads to allow flexibility of pool length and number of lanes. This pool would support the high school Conference / District Level competition in swimming, diving, 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.



Aquatic Center Objective:

Dry-side fitness and workout facilities to complement, expand, and enhance existing City facilities and integrate with new aquatic programming

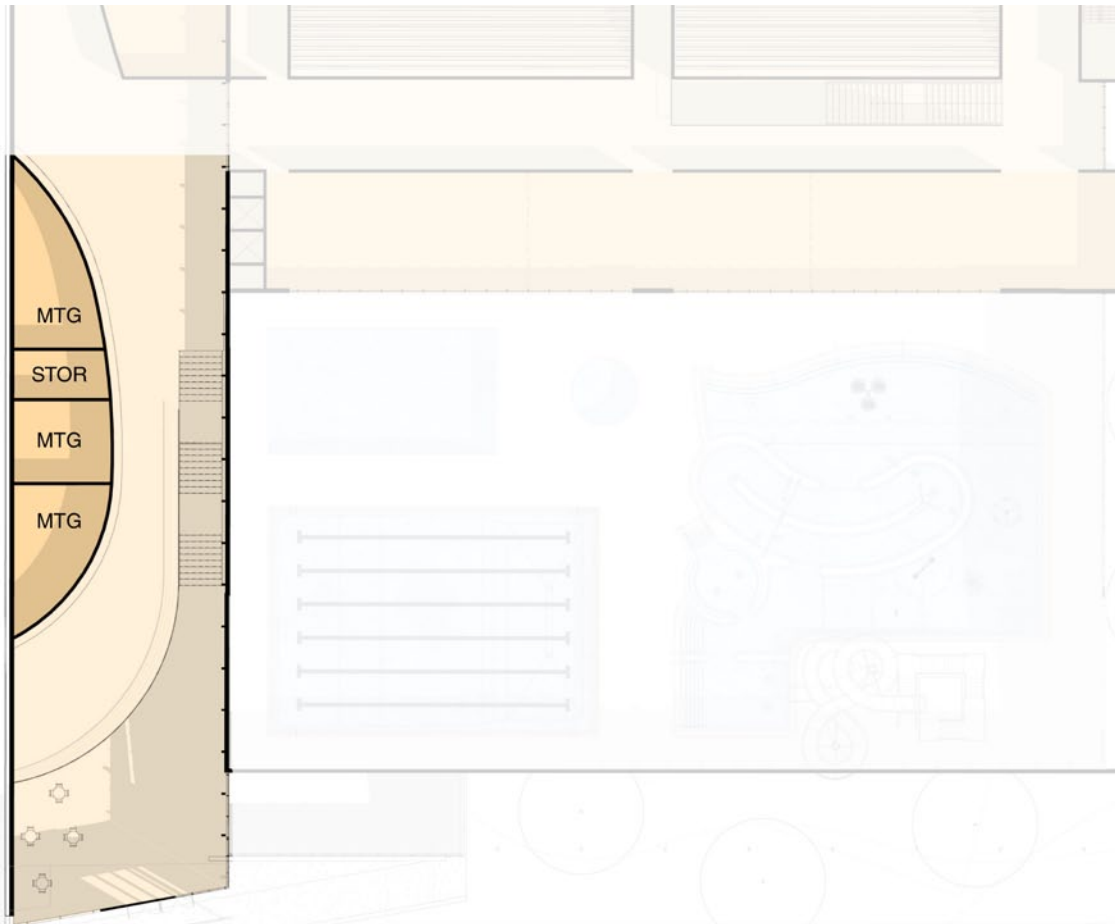
The 2nd floor features fitness and workout spaces, in addition to the spectator seating for the competition pool and deep water tank. The fitness classes can have views into the pools and be divided by storage. Restrooms and other support spaces could be located under the spectator seating areas. The large flex fitness space has views of the recreation pools and could include some private offices and storage spaces.



Aquatic Center Objective:

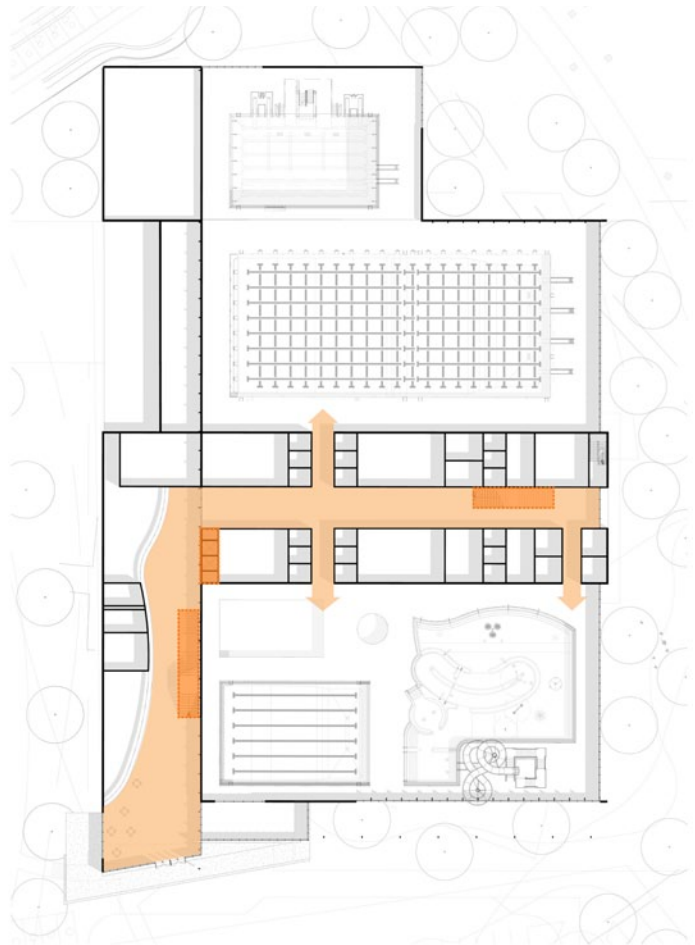
Flexible public or organizational accessible meeting and function space to support aquatic and other community needs and activities including cross cultural programming

The 2nd floor features meeting rooms that would be available to the public for a variety of functions, from team meetings, youth groups, classes, and training sessions. The location is ideally located off the main lobby, acoustically separated from the louder natatorium spaces. Casual meet-up spaces would be designed into the lobby space, overlooking the entry and main stairs.



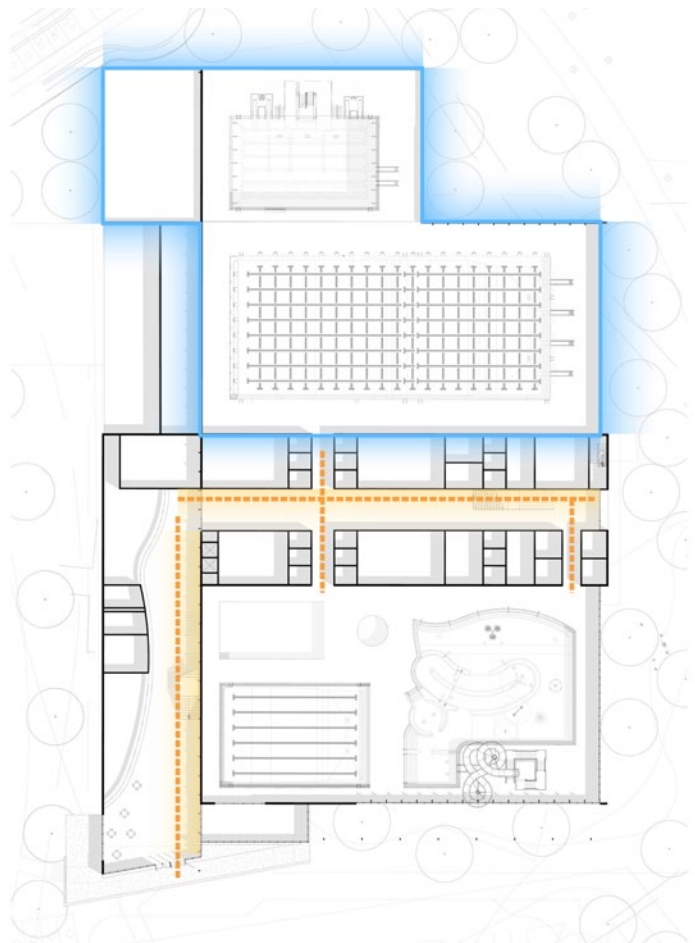
Aquatic Center Objective:
Broad based community access and equity

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.



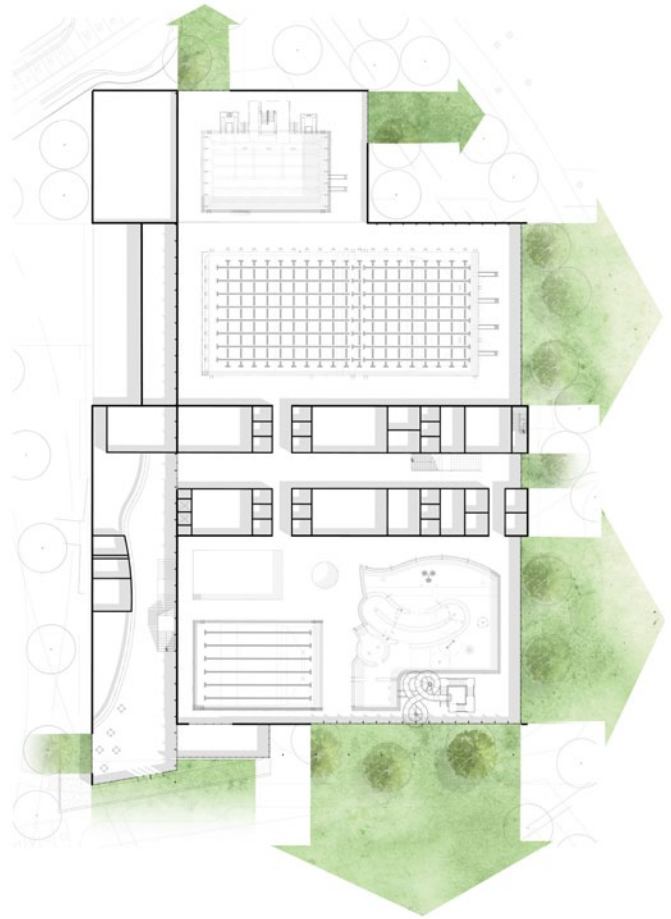
Aquatic Center Objective:
Scope to provide concurrent programming in all areas, even when hosting training and competitive events

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.



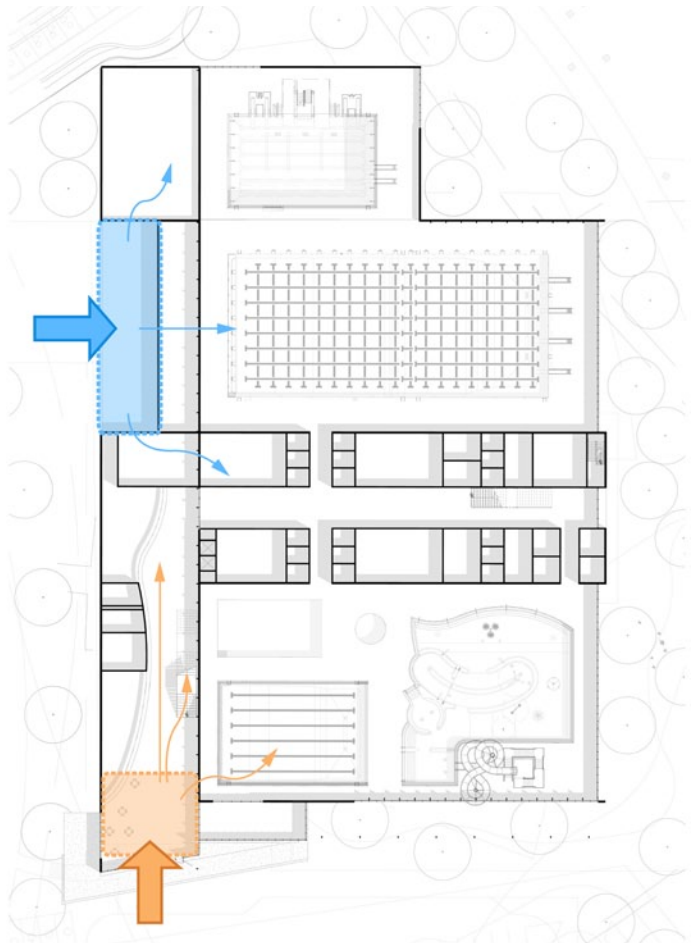
Site Relationship Concepts: Views and Site Connections

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.



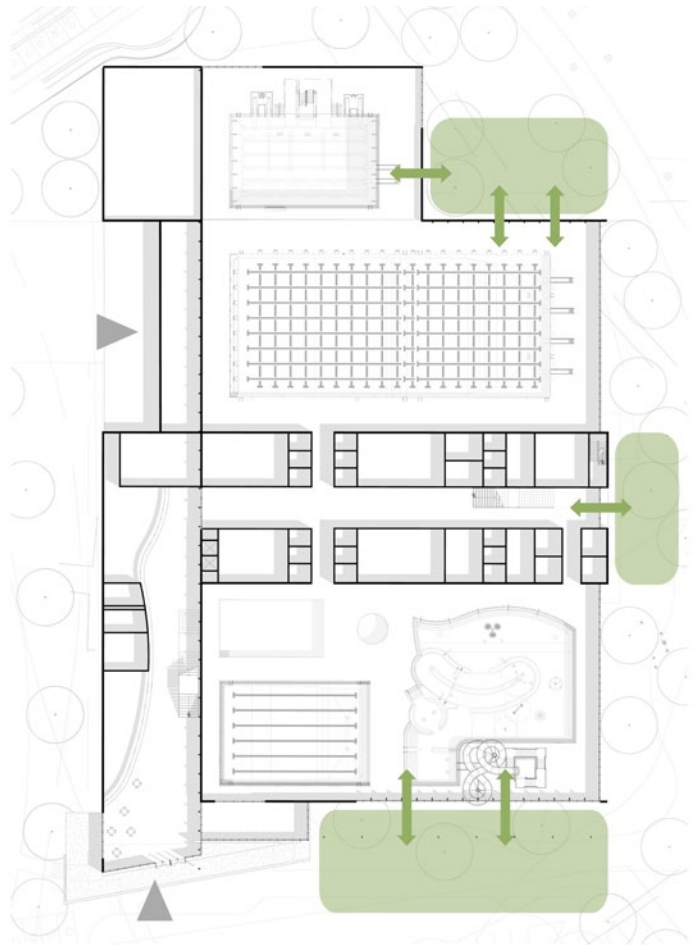
Site Relationship Concepts: Front-of-House/Back-of-House

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.



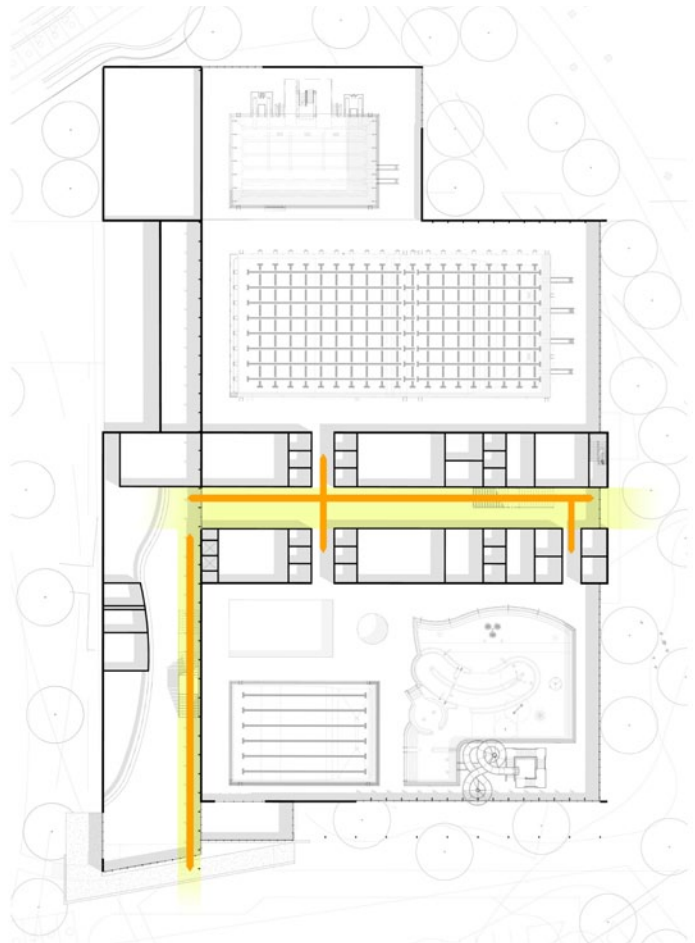
Building Design Concepts: Site Connections

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.



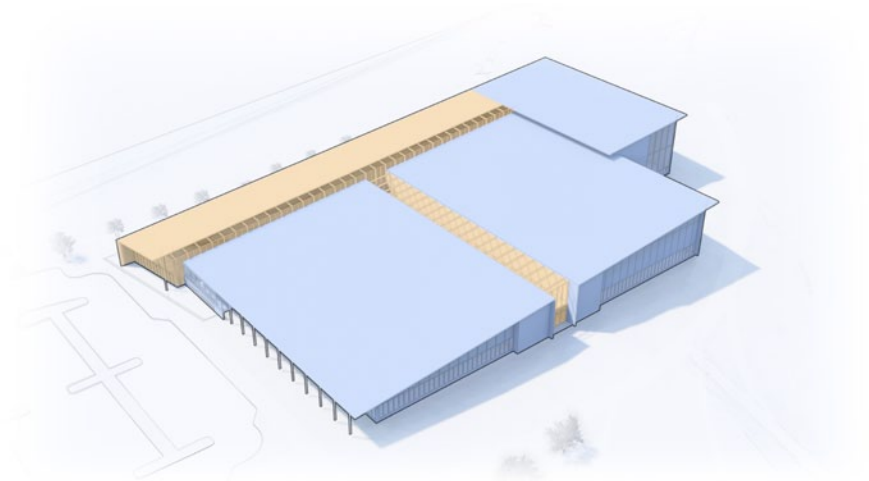
Building Design Concepts: Daylighting as Wayfinding

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.



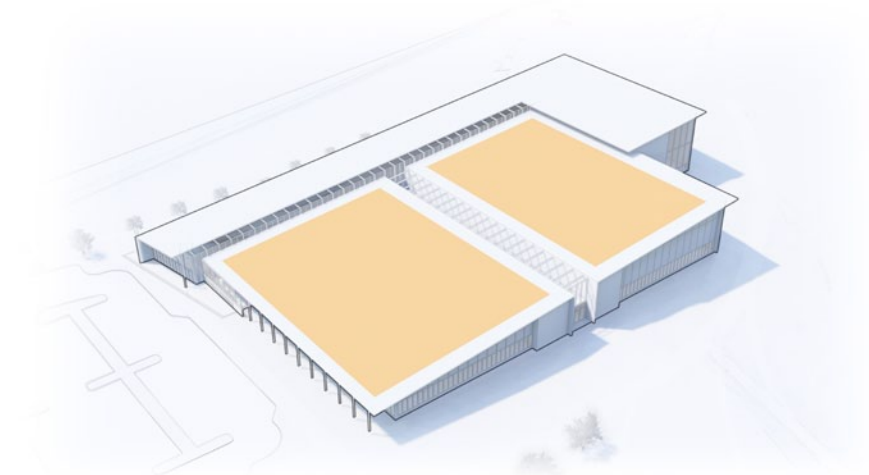
Building Design Concepts: Building Massing

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.



update program - format to

building program

The building will set into the large park and connect to the natural surroundings, with views and access .

Attachment A

RCP COMPONENT SUMMARY

Pools	Scale	Notes
Seating		
Spectators	900	Accommodates High School conference/district Meets, invitational meets, and club meets and tournaments
Competitors	720 on deck	Supports all planned events and provides ample space for daily programming and training.
Competition Pool		
Dimensions	50m x 25yd (9) lane x (23) lane	Includes 2 x 6' wide moveable bulkheads for flexible training, competition, and community configurations.
Pool Area	13,200 sf	
Deck Area	9,000 sf	Deck seating included in deck area
Deep Water Tank		
Dimensions	13m x 25yd	(6) 25yd lanes
Pool Area	3,400 sf	
Deck Area	4,500 sf	
Diving Boards	2 x 1m 2 x 3 m	
Program Pool		
Dimensions	25 yd 8-10 lane	
Pool Area	5,100 to 6,300 sf	Accommodates 5' wide ramp and stairs.
Deck Space	3,000 sf	
Leisure Pool		
Pool Area	8,000 sf	
Wellness/Therapy Pool		
Pool Area	2,000 to 2,500 sf	Includes ramp and stairs
Deck Area	2,700 sf	Accommodates wheelchairs, therapists, and caregivers plus lift
Whirlpool/Spa	300 sf	Located adjacent to Leisure or Program pools based on final design

fit on 2 pages

Attachment A

Aquatic Support Areas	Scale	Notes
Aquatic Lobby	1000 sf	
Lifeguard Offices	500 sf	2 offices
Aquatic & Program Offices	575 - 850 sf	Aquatic Director and aquatic staff
User Group office/workspaces	500 -700 sf	Open workstations
Meet Management Suite	250 - 500 sf	
Pool/Aquatic Storage (total combined)	5,000 – 6,000 sf	
Spectator Concourse	2,000 sf	
Spectator Restrooms	1,800 - 2,000 sf	

Fitness Component	Scale	Notes
Cardio/Fitness	8,000 - 10,000 sf	
Flexible Workout Spaces	5,000 – 6,000 sf	
Fitness Total Storage Area	1,700 – 2,500 sf	
Fitness Offices & Workspaces	300 – 600 sf	

Therapy Component	Scale	Notes
Therapy Treatment & Workspace	1,000 – 1,200 sf	
Therapy Provider(s) Office/Workstations	300 - 500 sf	
Therapy Storage	750 – 1,000 sf	

Locker and Changing Rooms	Scale	Notes
Main Locker Rooms	8,000 – 8,500 sf	4 Locker Rooms
Specialty Changing Rooms	1,900 – 2,000 sf	Includes Family and Handicap changing rooms, gender neutral, staff changing rooms, and universal spaces.

Public Common Spaces	Scale	Notes
Overall Building Lobby	1,000 – 1,200 sf	Includes front desk and access control
Concessions	800 sf	
Concession Storage	700 - 800 sf	
First Aid Office	300 sf	
Restrooms	1,800 – 2,000 sf	

concept design



REITERATE PROJECT GOALS

The conceptual images shown here are to give one potential idea of the character the spaces could have and to emphasize some of the design goals discussed previously. If this project were to move into design phases, we recommend the community be engaged to determine character, form and materiality direction. As well, additional design team members would be added at that time, each of which would have requirements associated with their areas of specialty which are likely to influence the calculus of design decision making.

Appendix C

Geotechnical Engineering Report

Structural Assessment

Peter Woodley

From: Aaron Maples
Sent: Wednesday, November 15, 2023 5:07 PM
To: Peter Woodley
Subject: FW: Bellevue Airfield Park - Project Report Schedule + Outline

Follow Up Flag: Follow up
Flag Status: Flagged

FYI.

AARON MAPLES
ASSOCIATE, LANDSCAPE DESIGNER

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From: Sean Gertz <SGertz@landauinc.com>
Sent: Wednesday, November 15, 2023 5:00 PM
To: Aaron Maples <amaples@WalkerMacy.com>
Cc: Saul Cortez <SCortez@landauinc.com>; Steve Wright <swright@landauinc.com>; '1548004.020@landauinc.tonicdm.com' <1548004.020@landauinc.tonicdm.com>
Subject: RE: Bellevue Airfield Park - Project Report Schedule + Outline

Hello Aaron,

I hope your week is going well so far. Please see below for our preliminary recommendations for the proposed site features.

As discussed in Landau’s 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.

Paved Areas (Parking Area, Bike Parking, Basketball Court, Facility Service, Site Walkways)

To mitigate the large anticipated settlements beneath areas of hardscaping within the footprint of the landfill, Landau recommends a preload be placed in these areas prior to paving. To construct preloads within these areas, the site should be brought up to finished grades using structural fill, and then additional fill should be placed above finished grades. Preliminarily, Landau anticipates preloads for paved areas to extend above finished grades by 2 ft, or a height equal to 30 percent of the fill necessary to bring the site up to grade (whichever is greater). For example, if 10 ft of fill is required to bring the site up to grade, then a total of 13 ft of fill would be required, inclusive of the preload. If 2 ft of fill is necessary to bring the site up to grade, then a total of 4 ft of fill would be required, inclusive of the preload. Settlement of the preload should be monitored beginning at the start of fill placement until settlement is substantially complete. Upon completion of the preload period, the site can be cut back down to grade, and paving may occur. Preliminarily, Landau anticipates preload durations of 9 to 20 months. If the anticipated preload duration does not meet the schedule needs of the project, increasing the height of the preload might help reduce the preload duration. The design team should anticipate the need to abandon and replace any existing utilities beneath areas to be preloaded.

Playgrounds and Splash Pad

The proposed playgrounds and splash pads will be located 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. Similar to paved areas, the preload should extend above finished grades by a height equal to 30 percent of the fill necessary to bring the site up to grade. Settlement of the preload should be monitored beginning at the start of fill placement until settlement is complete. Upon completion of the preload period, the site can be cut back down to grade, and the playgrounds may be constructed.

Picnic Area

Picnic areas proposed in the northwest portion of the site are not within the landfill extents and need no special consideration with regard to mitigation of settlement. The picnic area proposed in the center 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. After the picnic area has been excavated to finished grade, the picnic area should be preloaded with a soil stockpile that is similar in weight to the proposed picnic area features. The height of the preload should be equal to 1 foot for every 110 psf of foundation loading. Settlement of the preload should be monitored beginning at the start of fill placement until settlement is complete. Upon completion of the preload period, the site can be cut back down to grade, and the picnic area may be constructed. 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-ft retaining walls and fills over 10 ft in thickness 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. Settlement of the fill should be monitored, and once settlement is substantially complete, the retaining walls may be constructed. Retaining walls should be designed to be relatively flexible, and feasible retaining wall types include gabion baskets or mechanically stabilized earth 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. After the restroom area has been excavated to finished grade, the area should be preloaded with a soil stockpile that is similar in weight to the proposed restroom building. The height of the preload should be equal to 1 foot for every 110 psf of foundation loading.

Settlement of the preload should be monitored beginning at the start of fill placement until settlement is substantially complete. Upon completion of the preload period, the site can be cut back down to grade, and the restroom may be constructed. 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. The use of drilled foundation elements should anticipate additional construction requirements and challenges (e.g., drilled foundations will generate spoils that will include MSW, which will need to be properly handled and disposed) compared to driven foundation elements. If drilled foundation elements are selected, Landau should be requested to provide additional recommendations.

Utilities

To mitigate utility trench settlement, trenches within preload areas should be constructed following completion of the preload period. For utility trenches located outside of preload areas, the trench backfill will likely be heavier than the soil excavated to create the trench, thereby increasing stresses on the soil beneath the trench and causing settlement of the trench. Design of trenches located outside of preload areas should include flexible connections in order to accommodate potential trench settlements.

Please let me know if you have any questions about these recommendations.

Thank you,

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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

- Deep Foundations
- Overexcavate for Footings
- Preload
- MSE Walls or Gabion Walls

0 30 60 120ft



Appendix D

Structural Engineering Report

Structural Assessment

PROJECT DESCRIPTION

The following narrative outlines the general foundation conditions for assessing environmental implications of the construction of a new Aquatics Center at the Airfield Park Site in East Bellevue. The proposed Aquatic Center is as generally defined in the Bellevue Aquatic Center Feasibility Study Update dated June 2020 and as further refined by Walker Macy and ARC Architecture Concept #2 plan being the basis for development of preliminary structural foundation systems.

The Aquatic Center Concept #2 is comprised of an approximately 160,000 square foot mostly single story structure with multiple competition / diving / recreation pools, associated recreational spaces, and operational program spaces.

The proposed location for the Aquatic Center at the Airfield Park site has the balance of the new building placed on top of an existing municipal landfill. The landfill is of variable depth, plan geometry, and elevation. The landfill is presumed to contain contaminated soils, organic materials, variable types of debris, and decomposing materials. The landfill has been “capped” to contain and cover the existing landfill.

AQUATIC CENTER STRUCTURAL FRAME CONCEPT

In general the new building for the Aquatics Complex 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.

AQUATIC CENTER STRUCTURAL LANDFILL CONSIDERATIONS

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

Structural Gravity Load Resistance – The existing landfill materials are not suitable to support building loads (structural frame loads from roof, floors, pools, and slab.) The nature of aquatic pools require stringent limitations to settlement and the existing landfill soils are not capable of supporting the weight of slabs on grade and pool structures within the required limitations. Deep foundations consisting of steel piles will most likely be required to support gravity loads.

Increased Seismic Lateral Forces – The nature of the landfill materials results in greater seismic forces that the building structural systems will need to resist. These forces will result in greater demands on foundations both from a vertical and lateral foundation resistance standpoint.

Need for Methane Mitigation – As landfill materials continue to decompose, methane and potentially other vapors can escape the soils and will need to be captured, diverted, and disposed of through an appropriate mitigation system.

Structural Foundation Preliminary Concepts – SEPA

Special Construction Considerations – The new construction may result in excavation of portions of the existing landfill cap and even excavation into the landfill materials. This may require special handling and disposal of the materials and a repair of the existing cap.

AQUATIC CENTER STRUCTURAL FOUNDATION CONCEPTS

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 slab on grade and pool shell structures are envisioned to be formed of concrete and will be comprised of variable thickness concrete slabs, walls, and grade beams that will span to concrete pile caps that engage the top of the steel pile foundations. It is assumed that this concrete work will be placed atop a suitable vapor barrier and under-slab methane / vapor mitigation system.

In some instances, the new construction will be placed on structural fill that is above the current landfill cap elevation. In other instances, the new construction will require that the existing cap and landfill materials be removed, disposed of, and the cap repaired in kind.

GENERAL STRUCTURAL FOUNDATION ENVIRONMENTAL CONSIDERATIONS

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.

Considerations may include the ongoing methane and vapor release from the landfill.

During construction, there will be noise associated with construction equipment and likely more significant noise during the driving of steel pile foundations. There will also be dust / debris during construction. There may be a need for construction mitigation measures to better address these conditions.

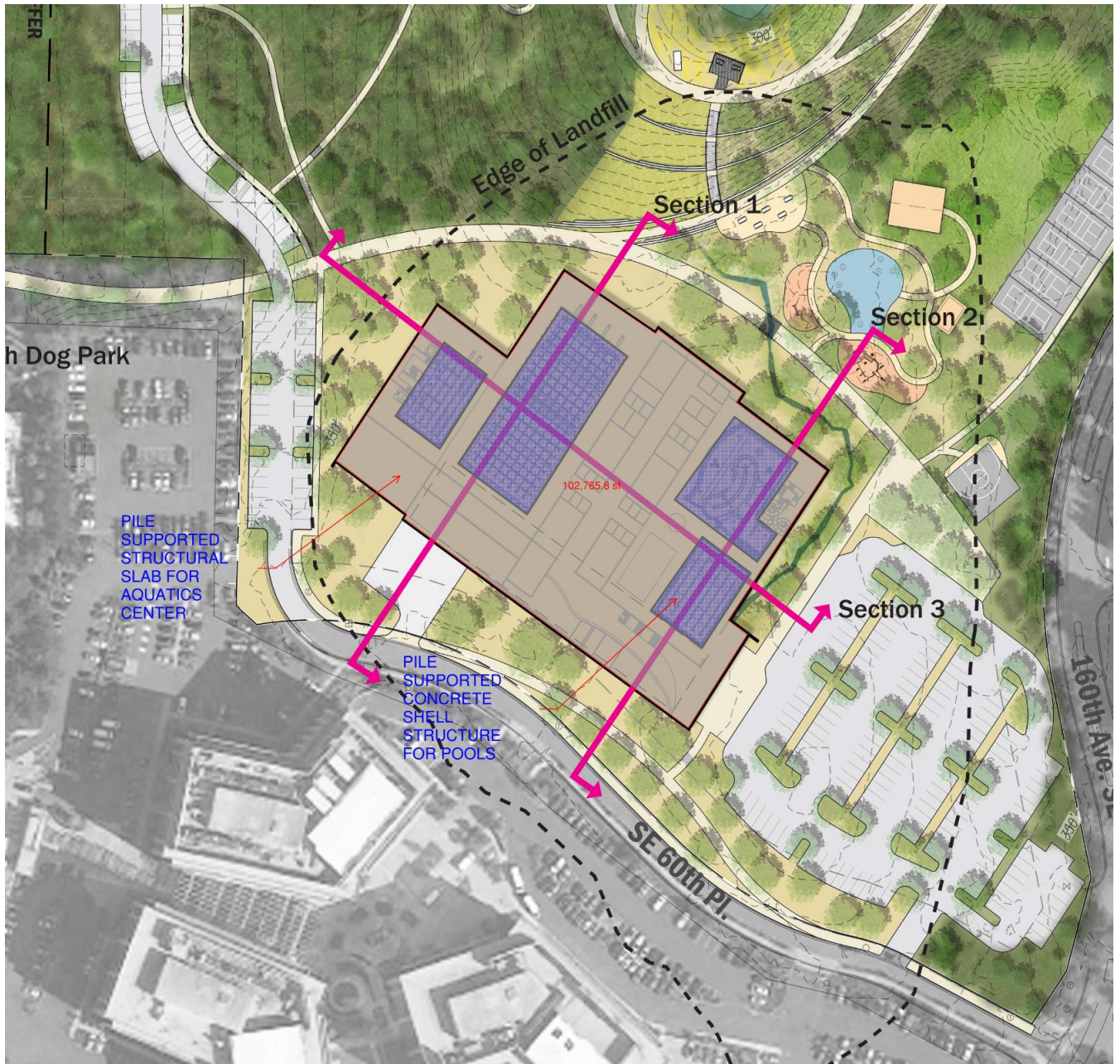


EXHIBIT 1 – AQUATIC CENTER OVERALL PLAN – CONCEPT #2

Structural Foundation Preliminary Concepts – SEPA

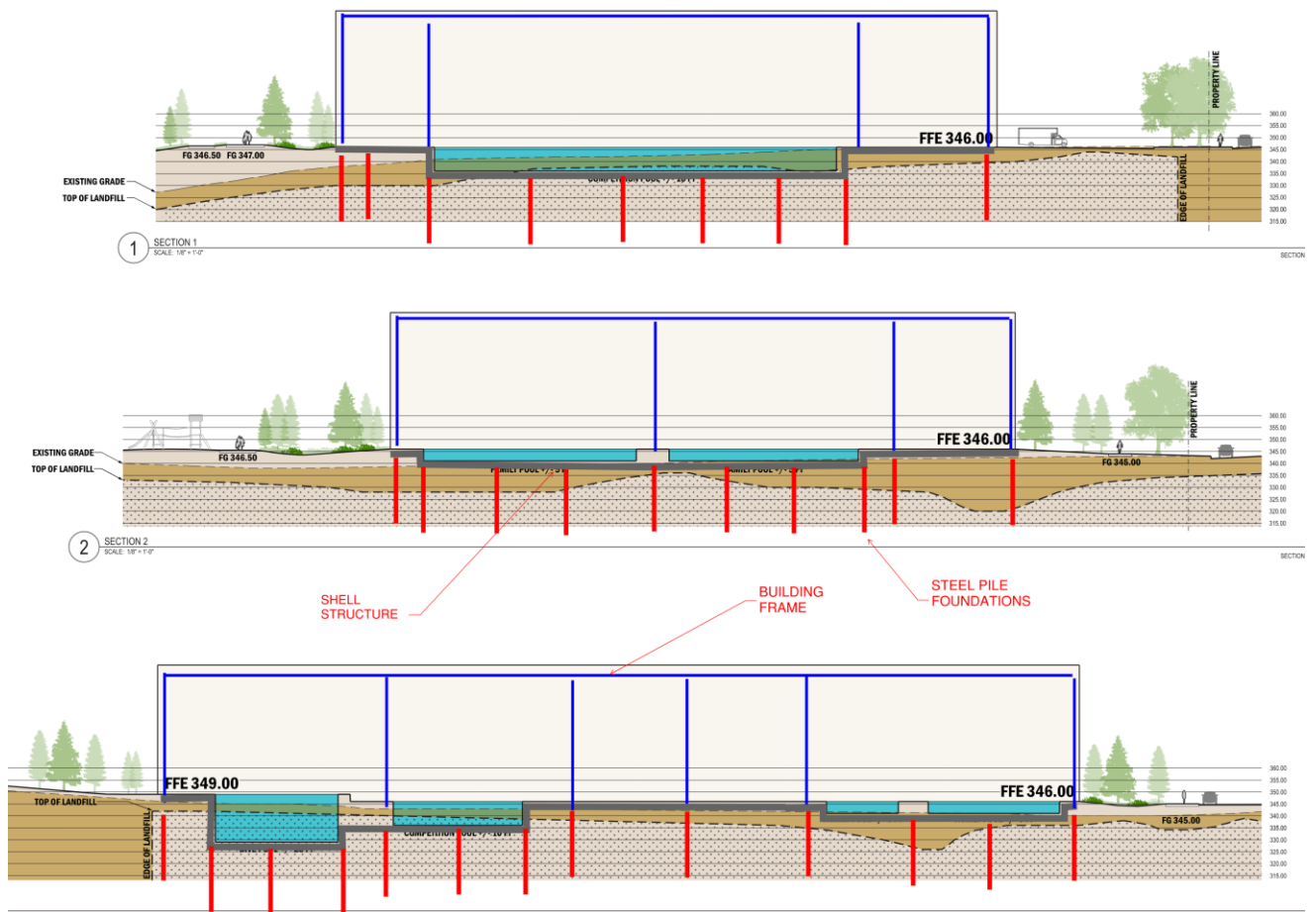


EXHIBIT 2 – AQUATIC CENTER GENERAL SECTIONS

Appendix E

Landfill Gas Control System Assessment

This section presents SCS Engineers' (SCS') assessment of the existing landfill gas (LFG) control system at the former Eastgate Landfill located within the proposed Bellevue Airfield Park in Bellevue, Washington.

1.0 PROJECT BACKGROUND

The Bellevue Airfield Park is a 27 acre site with historical uses as both an airfield and a landfill. The City of Bellevue (City) plans to redevelop the site based on a previously completed master plan. The master plan includes aquatic center, playgrounds, basketball court, pickleball court, restroom facility, picnic area, pedestrian trails, parking, splash pad, landscaping, and upgrades to the existing drainage ponds. X shows the existing park and Y shows the proposed master plan.

A portion of the project will include development over an old closed landfill referred to as the Eastgate Landfill. The Eastgate Landfill 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 environmental monitoring networks for groundwater, stormwater, and subsurface LFG. Development will also need to include modifications, upgrades, and/or replacement of the environmental control systems for LFG and stormwater management.

The LFG control system was originally installed in 1986 in response to subsurface LFG migration into soils adjacent to the landfill. 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 as since been replaced 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. When left uncontrolled, the LFG can migrate laterally out of the waste into surrounding soils. 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.

2.0 DESCRIPTION OF EXISTING SITE CONDITIONS, LANDFILL GAS CONTROL SYSTEM

The existing LFG control system is designed to extract LFG from the refuse mass to prevent/minimize subsurface migration into the soils surrounding the landfill and to minimize emissions to the atmosphere.

The LFG system consists of collection points (wells) located throughout the landfill. The gas extraction wells are installed in the refuse mass and connected to the conveyance pipe system, which are connected to the blowers. The blowers induce a vacuum on the pipeline, which pulls LFG from the extraction wells through the pipeline to the blowers. The blowers push the LFG through the activated carbon vessels for treatment before discharging the LFG to the atmosphere. The activated carbon vessels absorb (remove) harmful trace compounds from the LFG. The existing LFG collection system is shown in Figure 1 and consists of the following:

- A blower station with two (2) blowers (vacuum pumps), associated piping, controls, electrical service, and two (2) activated carbon vessels (for treatment of LFG prior to discharge to atmosphere)
- Approximately 4,300 feet of buried gas conveyance pipe (8", 6", and 4" diameter high density polyethylene [HDPE] pipe)
- 20 gas extraction wells with an average depth of 35 feet (EW-2 through EW-21)
- 14 condensate drain traps (CT-1 through CT-14)
- Eight (8) dual cleanout access ports with isolation valves (CO-1 through CO-8)
- Two (2) single cleanout access ports (CO-9 and CO-10)
- Two (2) isolation valves (IV-9 and IV-10)
- 14 subsurface gas detection wells or "gas probes" (MW-2 through MW-6, MW-8 through MW-10, and MW- 12 through MW-17)

Subsequent surveys conducted in 2002 and 2009 have been used to update the LFG system site plan as shown in Figure 1.

2.1 GENERAL LFG CONTROL SYSTEM OPERATIONS

Operation of the LFG extraction plant, LFG disposal equipment, conveyance system, extraction network, and condensate disposal system consist of monitoring and maintaining the equipment on a routine basis to provide reliable and consistent extraction, conveyance, and treatment/disposal of LFG and condensate.

Objectives for the LFG extraction network are as follows:

- Prevent and/or minimize subsurface migration into native soils surrounding the landfill.
- Prevent and/or minimize emissions of LFG to the atmosphere.
- Maintain an anaerobic (i.e., methane producing) environment within each extraction zone (as indicated by low residual nitrogen with well temperatures generally less than 55 degrees Celsius [°C] or 131 degrees Fahrenheit [°F]).
- Maintain methane concentrations below 5 percent by volume at the perimeter gas probes.

Operation of the gas probes requires vigilant monitoring to assess the performance of the extraction network in order to meet the control objectives and be compliant with applicable regulations.

Achieving the objectives described above is accomplished by carefully monitoring and controlling the flow and/or vacuum from each extraction well. Ideally, for the LFG extraction, the wells would be operated by extracting LFG at the same rate of production. However, there are many factors that do not allow this ideal condition to develop. Operation of the LFG extraction wells is very dynamic and the effectiveness of each LFG extraction well is influenced by many factors. These factors make the LFG extraction wells at the landfill sensitive to

operations. This makes it is necessary to continually adjust the system on a routine basis to match gas production levels and control objectives.

2.2 CURRENT OPERATING CONDITIONS

The following presents the teams's findings based on review of the monitoring results, LFG System Design, and historical operations of the LFG system.

Findings from review of the system monitoring results from January 2023 through October 2023 are as follows:

- Gas probes show the presence of LFG (i.e., methane) at gas probes MW-2, MW-3 and MW-4.
- The methane content at these gas probe locations is below the regulatory threshold limit of 5 percent by volume.

Findings from review of the LFG system design and historical operations are as follows:

- The design of the original 1986 well head control assemblies provides no device for measuring flow. This inhibits the ability to adequately assess the extraction performance of an individual well.
- The location/orientation of the flow meters at the blower station does not allow for accurate flow measurement due to the lack of sufficient straight run of pipe to develop a velocity profile through the measurement device. This makes it difficult to assess the overall performance of the system.
- The original 1986 condensate drain traps are prone to damage and malfunction due to the type of pipe connections.
- The condensate drain traps are prone to flooding during the wet season due to seasonal high water levels. This can cause partial or complete blockage of the gas pipes (and gas extraction) during the wet season.

Note that the gas extraction well monitoring results showed vacuum being applied to all gas extraction wells during 2023. This is a result of repair work in 2018 that consisted of replacing a segment of the gas conveyance pipe (with a steeper slope) and installing a condensate pump station to allow for removal of condensate.

Historically, the vacuum has been disrupted at some of the gas wells. This was due to flooding of the condensate drain traps. During the winter months, when the groundwater elevation are greater the operations of the system as seen the West side of the system under system vacuum, while the East and North-East side of the system has experienced vacuum loss at some gas wells. Continued operations of the LFG system should focus on correcting this issue to increase the consistency of operations.

The condition of the gas conveyance pipe is not known at this time. It should be noted that differential settlement has occurred over a long period of time at the landfill. This has caused problems as subsidence of the gas pipe caused condensate to accumulate at low points or

“bellies” in the conveyance pipe. This had lead to partial or complete blockage of the gas pipes and prevented gas extraction.

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.

FIGURE 1

This section presents SCS Engineers' (SCS') approach to landfill gas (LFG) control and mitigation for the proposed aquatic center located on the former Eastgate Landfill located within the proposed Bellevue Airfield Park in Bellevue, Washington.

1.0 APPROACH TO LANDFILL GAS CONTROL AND MITIGATION

This section presents the objectives and rationale for the development of the selected landfill gas control and mitigation at the Eastgate Landfill in Bellevue, Washington. It presents a description of several types of gas control and mitigation systems and the effectiveness of each type. It also presents options for accomplishing the landfill gas mitigation objectives and identifies the types of gas control and mitigation systems recommended for this property.

The following design objectives and recommended approach are presented with consideration of the following conditions.

- Soils and waste underlying the proposed onsite buildings contain landfill gas.
- Landfill gas will continue to be produced under the buildings and parking areas creating pressure to move the gas laterally offsite and potentially intrude into onsite buildings and below grade structures.
- Buildings will require structural support (pilings) to prevent settlement of buildings.
- The subgrade underneath the buildings is anticipated to settle thereby causing separation of the contact surface between the concrete floor slab and underlying material.

1.1 GAS CONTROL OBJECTIVES

The site characteristics, assessment of landfill gas conditions, and proposed development dictate the need for perimeter gas control and building mitigation of methane. Landfill gas control and mitigation measures should be implemented at the Eastgate Landfill to achieve the following objectives:

- Prevent offsite migration of landfill gas to adjacent properties with a goal of methane concentrations no greater than 5 percent in soil at the property boundary.
- Prevent intrusion of landfill gas into the proposed onsite buildings with a goal of no greater than 100 parts per million (ppm) in onsite buildings.
- Provide for monitoring the performance of the offsite (perimeter) control system.
- Provide for monitoring the performance of the building methane mitigation systems.
- Provide for warning systems in onsite buildings. Provide programmatic controls for work in/near confined spaces to protect maintenance personnel.

- Provide programmatic controls for modifications or improvements to protect gas control and mitigation systems.

The above objectives have been chosen based on site conditions, landfill gas assessment, relevant regulations and proposed site development.

1.2 PERIMETER GAS CONTROL

The most effective approach to controlling perimeter subsurface migration of landfill gas is to install an active gas control system with vertical gas extraction wells. This is necessary due to the continued (but very low) generation of LFG, depth of waste, lack of a bottom liner system, surrounding soil conditions, adjacent building, and impacts associated with the proposed development. Horizontal gas extraction wells will not provide sufficient migration control due to the depth of waste and lack of ability to extract from deeper waste regions.

1.3 BUILDING METHANE MITIGATION

A combined approach to building mitigation is recommended for the Bellevue Airfield Park development based on the site-specific conditions. As noted previously, 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 as discussed below.

For this project, due to the settlement of waste and the pile-supported buildings, we expect the subgrade (surface on which the slab rests) will settle/drop away from the slab over time. For this condition, we have contemplated two 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. This approach offers some additional advantages as presented below.

Scenario 1: Membrane Directly Below Slab

Primary mitigation – Exterior gas extraction wells

Secondary mitigation – Vent layer

Tertiary mitigation – Barrier layer

Advantages	Disadvantages
<ol style="list-style-type: none">1. Barrier layer between slab and vent pipes.2. Direct contact with membrane allows for hanging membrane from slab.3. Allows for easier construction of utilities prior to installing geomembrane.4. Accommodates differential settlement around pile caps and grade beam connections.	<ol style="list-style-type: none">1. Does not provide separation layer between concrete and membrane for curing.2. No working surface for installation of steel reinforcing.3. Pipe hangers must penetrate membrane.4. Potential air intrusion source leads to aerobic waste condition and accelerates settlement and/or fire.5. Susceptible to damage during installation of concrete.6. No vent layer between membrane and slab.7. Potential for elevated concentration of methane in vent layer requiring active extraction of the vent pipe.

Scenario 2: Venting Layer Between Membrane and Slab

Primary mitigation – Exterior gas extraction wells

Secondary mitigation – Barrier layer

Tertiary mitigation – Vent layer

Advantages	Disadvantages
<ol style="list-style-type: none">1. Collects/vents gas that may escape past leaks/defects in membrane.2. Provides separation layer between concrete and membrane for curing.3. Provides a working surface for installation of rebar.	<ol style="list-style-type: none">1. No barrier layer between vent layer and slab.2. Does not allow for hanging of membrane from slab.3. More difficult to construct; utilities must penetrate membrane.

<ul style="list-style-type: none"> 4. Less pipe hanger/penetration required. 5. Eliminates potential air intrusion pathways. 6. Less susceptible to damage during concrete installation. 7. Less potential for elevated concentration in the vent layer and less likelihood of the need for active extraction of vent pipe. 	<ul style="list-style-type: none"> 4. More difficult to accommodate differential settlement around pile caps and grade beam connections.
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From the above analysis Scenario 2 would serve as the best method for providing secondary and tertiary building methane mitigation.

2.0 DESCRIPTION OF PROPOSED GAS CONTROL SYSTEM

The following presents a description of the proposed gas control system. The gas control system serves as the perimeter subsurface gas control system and the primary building mitigation system. The gas control system is designed to extract landfill gas from the refuse mass and transmit the gas to the landfill gas disposal facility. The system at the site will consist of the following components:

- Existing landfill gas disposal facility located offsite (existing blowers, filtration system, and vent stack) with interconnecting pipe, electrical service and controls.
- Conveyance system consisting of branch pipes, lateral pipes, header pipe, and main pipe to convey the collected landfill gas from the extraction network to the disposal facility.
- Condensate disposal system consisting of condensate pump stations at select locations along the gas conveyance pipe, air supply pipe for pneumatic condensate pumps, condensate discharge pipe, and an air compressor.
- Extraction network consisting of vertical extraction wells.
- Existing perimeter subsurface gas monitoring network consisted gas probes.

A plan view of the gas control system is shown on Figure 2. Section views of the proposed building in relation to the landfill are shown on Figure 3.

2.1 EXISTING BLOWER STATION

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

The blowers will provide the driving mechanism (vacuum) to the gas conveyance system to extract gas from the waste mass. There will be two centrifugal blowers with one operating on a continuous basis at full capacity. The other blower will be used for backup. The blowers will each have a variable frequency drive motor to provide added range in operating flow conditions (higher turn down ratio) and operations at a specific vacuum set point. The blowers will have sufficient vacuum to provide a vacuum of at least 20 inches of water column at the furthest well.

The blower/flare station will be controlled by a programmable logic controller (PLC) to provide automated startup, operations, and shutdown of the equipment. The blower station will be designed to operate on a continuous basis or on timed intervals.

2.2 CONVEYANCE SYSTEM

The gas collection/conveyance pipe (conveyance system) allows vacuum supplied by the blowers to be delivered to the extraction network and allows the gas to be carried from the extraction network to the blower station.

The conveyance system consists of “header” pipes, “lateral” pipes, and “branch” pipes. The conveyance system also allows for removal of condensate without disrupting gas flow. All of the gas conveyance pipes will be sloped to drain the condensate to designated low points in the conveyance system. Sloped pipes are necessary to prevent pipe blockage due to condensate, which is continuously generated from the cooling of warm gas saturated with water vapor. Pipe slopes are greater than typical civil drainage construction to account for long-term differential settlement and provide sufficient condensate drainage over the life of the gas system.

The gas conveyance pipe will be made of high density polyethylene HDPE. This material was chosen primarily for the durability and flexibility of the pipe as well as joint strength/integrity. HDPE pipe has been proven to withstand the stresses of differential settlement associated with landfills.

Isolation valves, sampling ports, and cleanout access ports are located at specific locations along the lateral pipes and the header pipe. The isolation valves allow the pipe to be isolated from the rest of the system for inspection, maintenance, repair, diagnostics events or changes in flow direction if needed. The sampling ports serve to identify segments of pipe for air leaks and condensate blockage by measuring oxygen and pressure. The cleanout access ports allow for cleaning and video inspection of the pipe.

2.3 CONDENSATE DISPOSAL SYSTEM

The condensate disposal system allows condensate to be removed from the gas conveyance system without allowing air to enter or gas to escape the conveyance pipe. Condensate collected and removed from the gas conveyance.

The condensate disposal system will consist of multiple condensate pump stations and condensate discharge pipes. Condensate from the pump stations will be discharged to the nearby sewer manhole.

The condensate generated from the conveyance system will be drained by gravity into the condensate pump stations. The pipe and sump are configured to allow for a specified level of standing water in the sump. Above this level, the water is pumped out through the condensate discharge pipe. The standing water in the pump station sump serves as an air/gas trap to prevent air from entering the gas pipe when the system is in operation, and prevents gas from escaping when the system is not operating.

2.4 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 porous rock allows for more surface area of refuse to be exposed to vacuum. Fundamentally, the gas extraction potential is maximized by increasing the number of wells per area of landfill surface and increasing the area of porous rock exposed to refuse per well (i.e., increasing the boring diameter for vertical wells).

Vertical gas extraction wells were chosen due to the wet landfill conditions, elevated seasonal groundwater conditions, limited depth available for the installation of horizontal gas extraction wells, and the ability to install leachate pumps in vertical gas wells if deemed necessary for enhancing gas extraction.

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). From experience, 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.

2.5 EXISTING SUBSURFACE GAS MONITORING NETWORK

The subsurface gas monitoring network consists of the existing 14 subsurface gas monitoring wells or “gas probes” installed at strategic locations around the perimeter of the landfill and adjacent properties to the east and south. The subsurface gas monitoring network is designed to allow measurement of gas concentrations in subsurface strata. The information will be used to assess subsurface LFG migration conditions in the soils around the landfill and to assess the performance of the extraction wells.

Gas probes are similar to groundwater wells in construction except they are drilled only in the unsaturated (vadose) zone. The gas probes have two pipes to monitor discrete vertical segments within a single gas probe boring. Gas probes with dual monitoring zones are designated with an “S” for the shallow zone, and a “D” for the deep zone. The existing gas probes located on adjacent property to the south are completed at the surface with a flush mounted steel casing cast in concrete. Inside the casing is a gas sampling port for each of the monitoring zones/pipes. The existing gas probes located on the property will need to be reconfigured similarly to be less visible and more secure with the proposed development.

3.0 DESCRIPTION OF PROPOSED BUILDING METHANE MITIGATION SYSTEM

The following presents a description of the proposed building methane mitigation system. The building methane mitigation system is designed to prevent landfill gas from entering onsite buildings. The system at the site will consist of the following components:

- Barrier layer consisting of a geomembrane made of HDPE or spray applied RPMAE
- Ventilation layer
- Ventilation pipe
- Seals for utility trenches, floor penetrations and conduits
- Subslab monitoring probes
- Interior building gas sensors

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

3.1 BARRIER LAYER

The barrier layer will consist of one of the following: geomembrane (HDPE or other thermoplastic material) or a reinforced polymer modified asphaltic emulsion (RPMAE) which is sprayed onto a geotextile in the field. The barrier layer functions to prevent movement of subsurface gas into the overlying layers and floor slab. The membrane will be installed below the concrete slab and ventilation layer. In anticipation of subgrade settlement (thereby separating soil from the base of the concrete floor slab), the geomembrane will be designed to move with the settling subgrade. Connection of the geomembrane to the pile caps and grade beams will be designed to reduce stresses induced by differential settlement. A geotextile will be installed directly below and above the geomembrane to protect it from damage during installation and placement of overlying materials.

3.2 VENTILATION LAYER

The ventilation layer will consist of a layer of porous gravel. The ventilation layer functions to transmit the gas to the perforated vent pipe in the event that landfill gas may pass the barrier layer. A geotextile will be directly above the ventilation layer to protect it from contamination that may occur from intrusion of concrete during installation.

3.3 VENTILATION PIPE

The vent pipes function to collect landfill gas from the ventilation layer and convey it to the building rooftops to allow venting to the atmosphere. The vent pipes will consist of a network of perforated or slotted pipe spaced in a specific configuration throughout the ventilation layer. The perforated vent pipe will be connected to solid vent pipes along the perimeter of the building. The perforated vent pipes will be made of HDPE to withstand the stress of differential

settlement. The solid vent pipes will be made of PVC. The vent pipes will generally be 2 to 4 inches in diameter to provide uniform pressure distribution across the length of the perforated pipe with minimal head loss.

The perforated pipes will be configured in a parallel arrangement spaced generally between 25 to 40 feet on center. The perforated pipe will have a gas monitoring/cleanout access port on one end and a solid vent “riser” pipe on the opposite end that will convey the gas to the rooftop. Adjacent pipes will have alternating ports and vents. This configuration allows for more uniform distribution of air movement through the ventilation layer. If active ventilation is required in the future, the system will serve to allow air to enter one pipe and exit the adjacent vent pipe thereby flushing air through the ventilation layer. The advantage of this pipe configuration and “air flushing” technique is it allows for efficient active ventilation without pulling additional gas into the ventilation layer through potential leaks or defects in the barrier layer.

3.4 SEALS FOR UTILITY TRENCHES, FLOOR PENETRATIONS AND CONDUITS

The seals for utility trenches, conduits, and slab/wall penetrations function to prevent movement of gas into the buildings. Seals for utility trenches will consist of bentonite/soil mixture in the pipe trench to replace a designated segment of backfill material to impede movement of gas through the generally porous backfill material. Seals for drains will consist of traps typically used for plumbing fixtures in sink, toilet and floor drains. The traps will be installed with automatic trap primers to prevent traps from drying out and allowing gas to enter. Seals for conduits consist of fittings with special sealant to prevent gas movement through the conduits. Seals for pipe and conduit penetrations through floor slabs and subsurface walls will consist of specially designed penetrations that provide for a mechanism to seal the annular space between the pipe and floor penetration.

3.5 SUBSLAB GAS MONITORING PROBES

The subslab monitoring probes function to measure concentrations of landfill gas in discrete areas of the ventilation layer (below the concrete floor slab). This allows for detection of methane that may potentially enter the ventilation layer through leaks or defects. Detection of methane in the ventilation layer will allow for assessment and decisions on corrective action which may include active ventilation of the ventilation layer if necessary.

The subslab monitoring probes will consist of a perforated or slotted PVC pipe strategically placed at select locations in the ventilation layer to allow for sampling of gas from the ventilation layer. The subslab monitoring probes will have sampling ports in flush grade vaults located outside of the buildings adjacent to the grade beam walls. The gas probes will be monitored by personnel using a portable gas analyzer.

3.6 BUILDING INTERIOR GAS SENSORS

The building monitoring network will consist of stationary gas analyzers (sensors) placed at strategic locations that continuously monitor for the presence of combustible gas (methane). In general, the sensors will be placed at locations with the greatest potential for intrusion of gas

such as where underground utilities enter the building (e.g. electrical or fire control rooms). Additional locations will be established during final design.

The intent of installing combustible gas detectors is to provide warning to personnel of the presence of methane and that immediate action is necessary to assess the situation and provide safe working conditions.

Industrial grade combustible gas detectors are recommended for the onsite building at Bellevue Airfield Park. These types of sensors are resistant to poisoning chemicals (such as cleaning compounds), less susceptible to false alarms, and can be field-calibrated and connected to a central controller. The combustible gas detectors should provide an audible and visual alarm. The combustible gas detectors should operate with battery power when the normal power supply is disrupted.

4.0 PROGRAMMATIC CONTROLS

Programmatic controls include programs and policies to implement that inform tenants and contractors of site conditions and environmental controls, protect the gas control system and building mitigation system from damage, and establish safety procedures for personnel working below grade or near potential conduits for gas movement.

4.1 SITE NOTIFICATION

A program should be developed for routine notification of tenants, maintenance personnel and contractors. The notifications should inform the above parties of the subsurface conditions relevant to landfill gas and the gas control and mitigation system. The program should be thorough to ensure that all parties are notified and know what to do in the event of an alarm. The program should establish a central point of contact for distribution of information and receipt of responses from tenants, maintenance personnel and contractors. The program should also provide routine updates of information to personnel working at The Bellevue Airfield Park to ensure all parties are informed at all times.

4.2 PROTECTION OF GAS CONTROL AND MITIGATION SYSTEM

A program should be developed to protect the gas control and mitigation system from damage. Damage may occur with changes in tenants, ownership, and building modifications. These changes can result in inadvertently authorizing personnel and contractors to make changes to building components. Also, utility contractors perform repairs to the utilities inside and outside of the buildings. These changes can impact the performance of the building mitigation system and/or gas control system. Programmatic controls which establish procedures to follow to avoid damage to the building mitigation and/or gas control systems should be implemented.

4.3 SUBSURFACE WORK

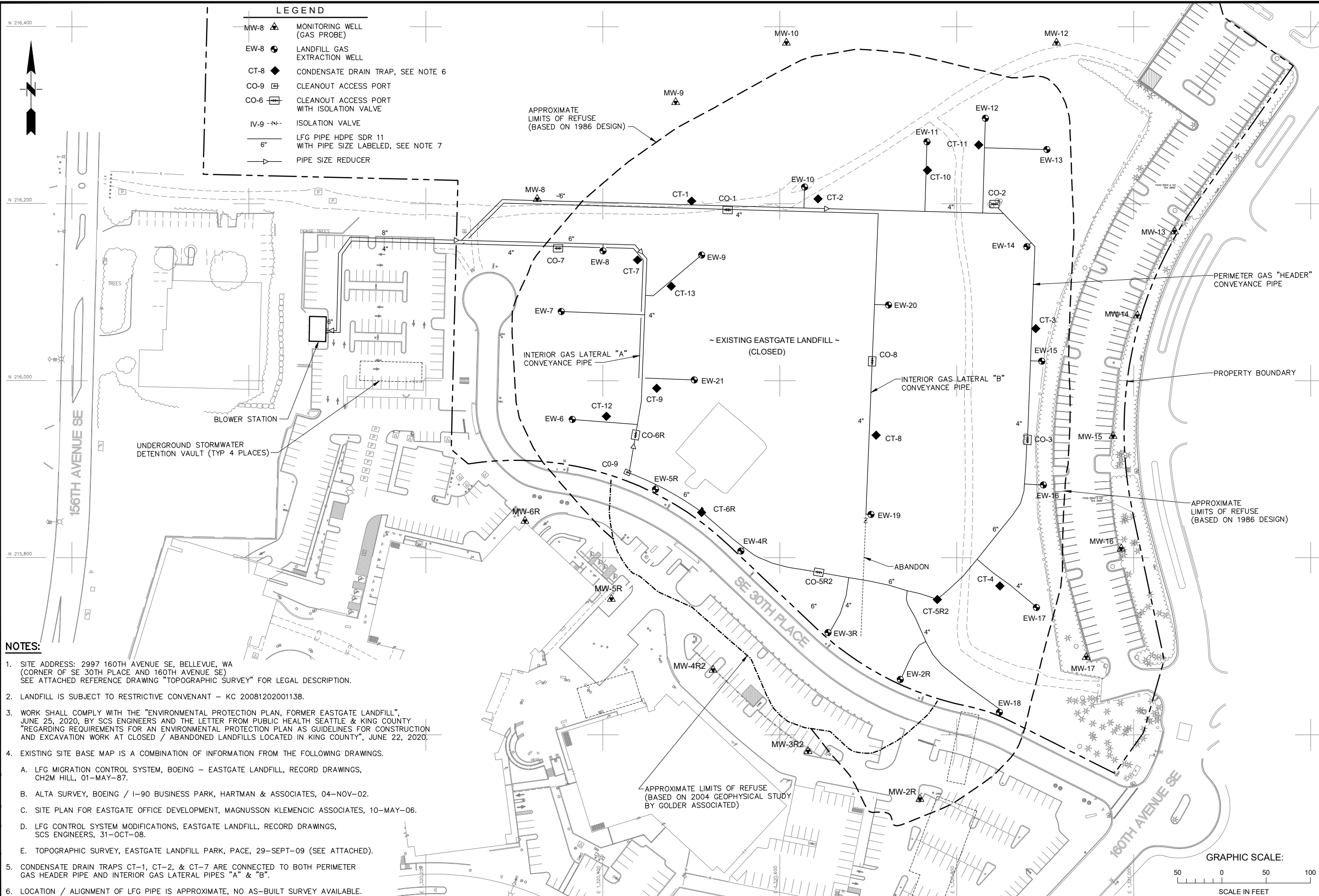
Subsurface work, such as utility trenching or confined space entry into underground vaults and manholes, can expose personnel to oxygen deficient or explosive conditions. Programs and safety procedures should be implemented to identify hazards, provide air monitoring, provide personnel protective equipment, and provide engineered controls as necessary to provide safe working conditions.

FIGURE 2

FIGURE 3


FIGURE 4

FIGURE 5



LEGEND	
MW-8	MONITORING WELL (GAS PROBE)
EW-8	LANDFILL GAS EXTRACTION WELL
CT-8	CONDENSATE DRAIN TRAP, SEE NOTE 6
CO-9	CLEANOUT ACCESS PORT
CO-6	CLEANOUT ACCESS PORT WITH ISOLATION VALVE
IV-9	ISOLATION VALVE
6"	LFG PIPE HDPE SDR 11 WITH PIPE SIZE LABELED, SEE NOTE 7
→	PIPE SIZE REDUCER

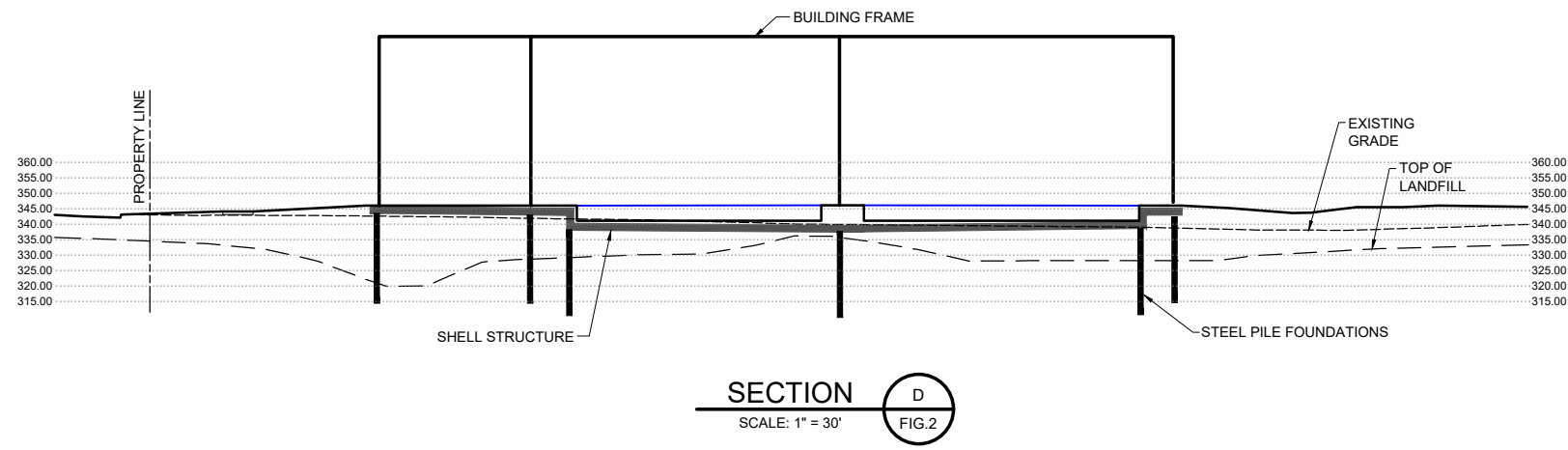
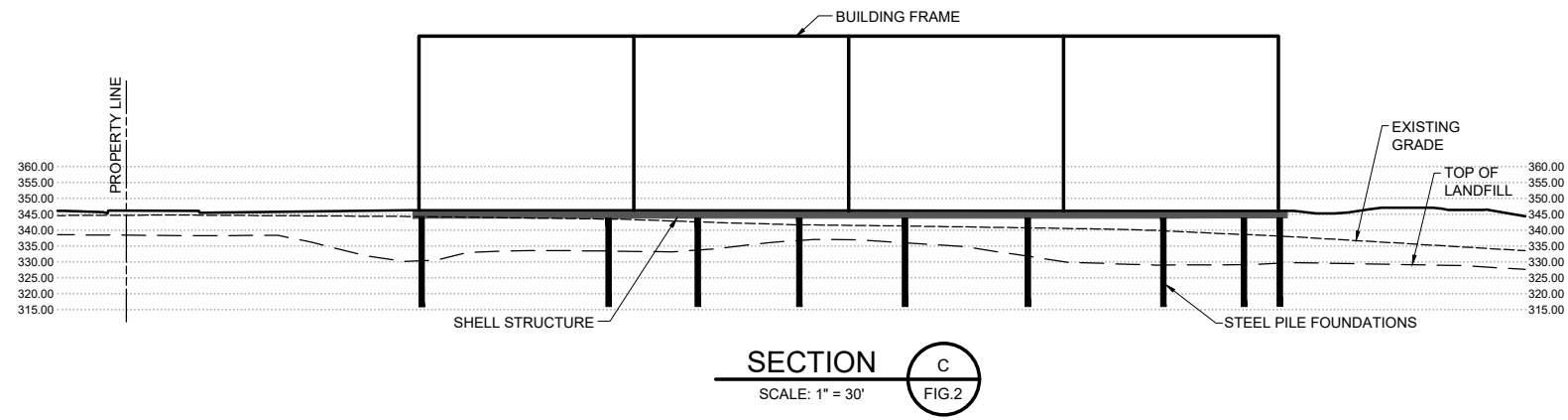
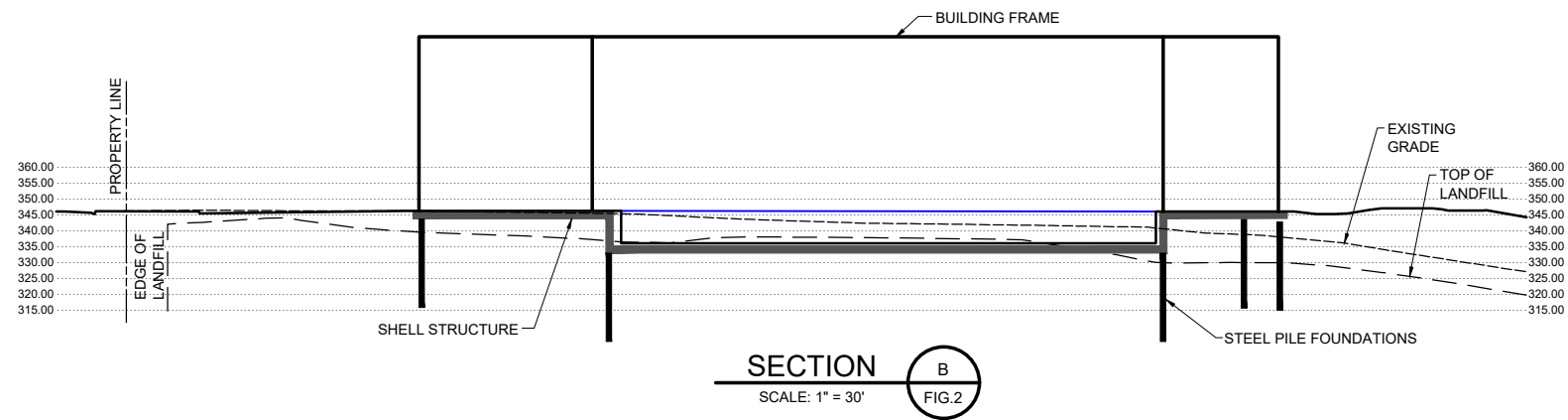
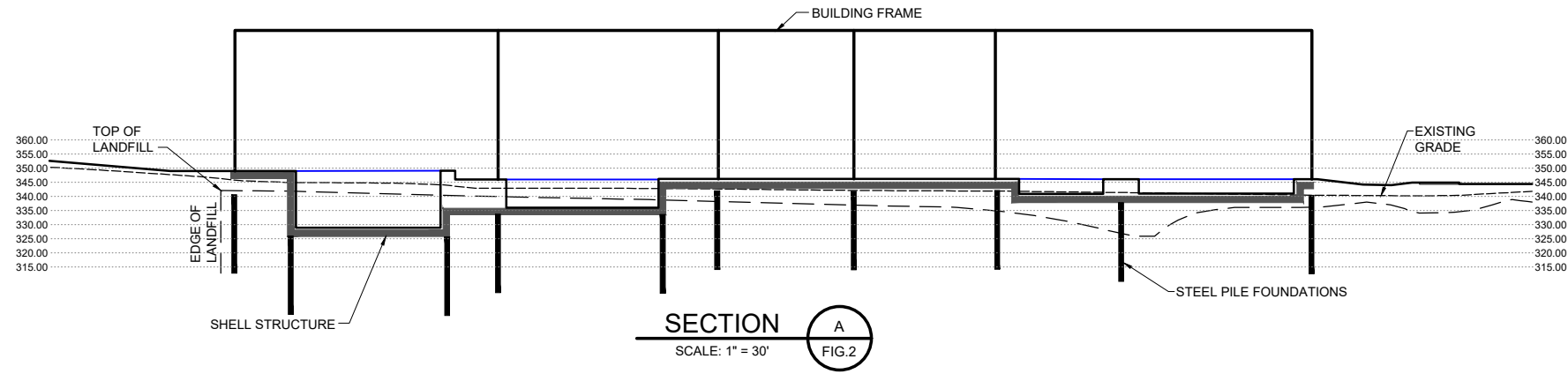
- NOTES:**
- SITE ADDRESS: 2997 160TH AVENUE SE, BELLEVUE, WA (CORNER OF SE 30TH PLACE AND 160TH AVENUE SE) SEE ATTACHED REFERENCE DRAWING "TOPOGRAPHIC SURVEY" FOR LEGAL DESCRIPTION.
 - LANDFILL IS SUBJECT TO RESTRICTIVE CONVEYANCE - KC 20081202001138.
 - WORK SHALL COMPLY WITH THE "ENVIRONMENTAL PROTECTION PLAN, FORMER EASTGATE LANDFILL", JUNE 25, 2020, BY SCS ENGINEERS AND THE LETTER FROM PUBLIC HEALTH SEATTLE & KING COUNTY "REGARDING REQUIREMENTS FOR AN ENVIRONMENTAL PROTECTION PLAN AS GUIDELINES FOR CONSTRUCTION AND EXCAVATION WORK AT CLOSED / ABANDONED LANDFILLS LOCATED IN KING COUNTY", JUNE 22, 2020.
 - EXISTING SITE BASE MAP IS A COMBINATION OF INFORMATION FROM THE FOLLOWING DRAWINGS.
 - LFG MIGRATION CONTROL SYSTEM, BOEING - EASTGATE LANDFILL, RECORD DRAWINGS, CH2M HILL, 01-MAY-87.
 - ALTA SURVEY, BOEING / I-90 BUSINESS PARK, HARTMAN & ASSOCIATES, 04-NOV-02.
 - SITE PLAN FOR EASTGATE OFFICE DEVELOPMENT, MAGNUSSON KLEMENCIC ASSOCIATES, 10-MAY-06.
 - LFG CONTROL SYSTEM MODIFICATIONS, EASTGATE LANDFILL, RECORD DRAWINGS, SCS ENGINEERS, 31-OCT-08.
 - TOPOGRAPHIC SURVEY, EASTGATE LANDFILL PARK, PACE, 29-SEPT-09 (SEE ATTACHED).
 - CONDENSATE DRAIN TRAPS CT-1, CT-2, & CT-7 ARE CONNECTED TO BOTH PERIMETER GAS HEADER PIPE AND INTERIOR GAS LATERAL PIPES "A" & "B".
 - LOCATION / ALIGNMENT OF LFG PIPE IS APPROXIMATE, NO AS-BUILT SURVEY AVAILABLE.

DATE JANUARY 2024		FIGURE 1	
EXISTING LFG CONTROL SYSTEM "BELLEVUE AIRFIELD PARK" MASTER PARK REPORT			
PROJECT NO. 04215047.01	DESIGN BY TAM	SCALE NTS	CHK BY KS
		CAD FILE FIGURE 1	APP BY JMR
WALKER MACY 111 SW OAK STREET, SUITE 200 PORTLAND, OR 97204 503-228-3123			
 City of Bellevue WASHINGTON			
SCS ENGINEERS Environmental Consultants and Contractors 2405 140th Avenue NE, Suite 107 Bellevue, Washington 98005 (425) 746-4600 FAX: (425) 746-6747			

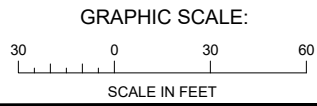


SOURCES:

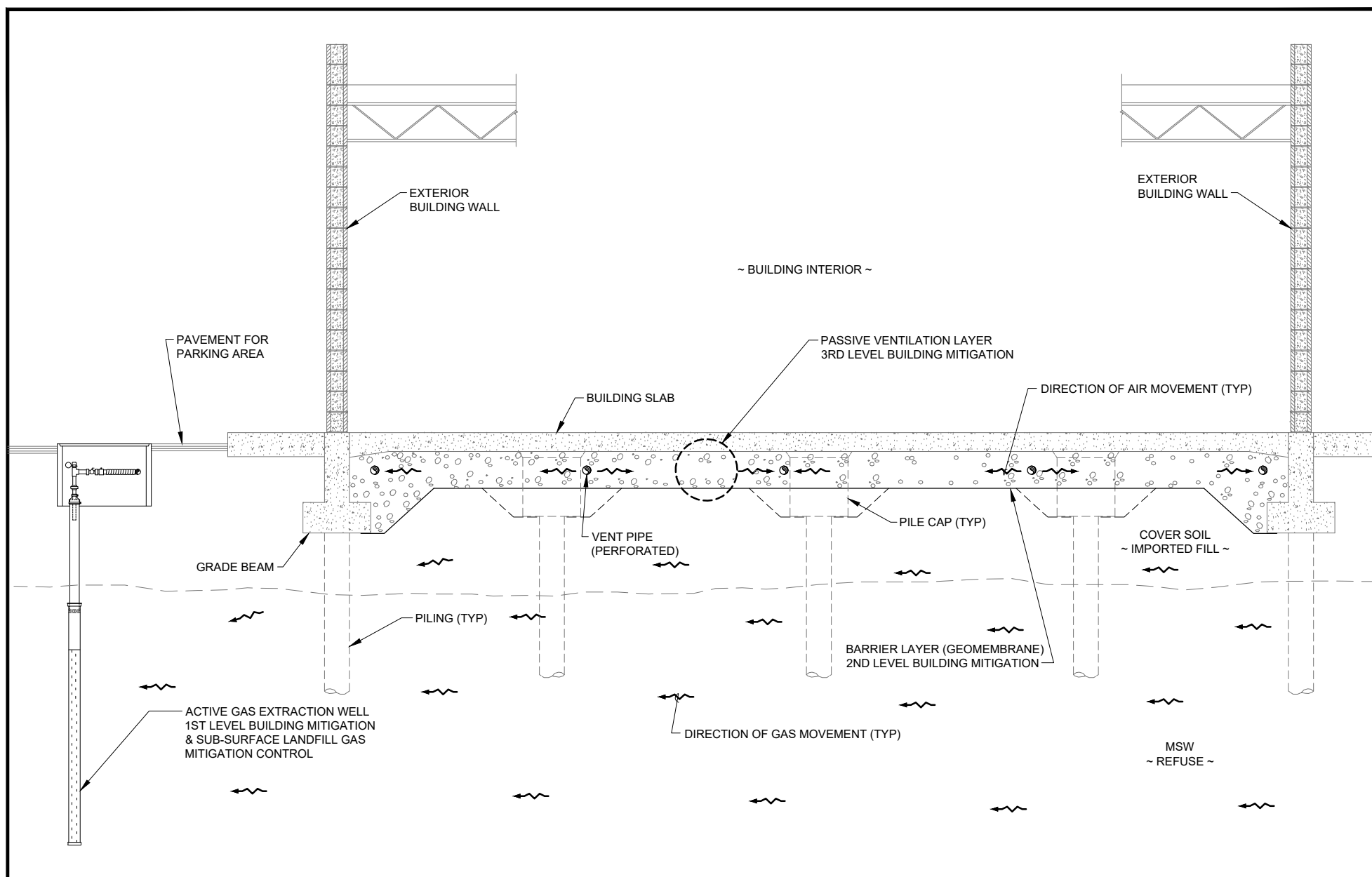
1. SITE PLAN FOR EASTGATE OFFICE DEVELOPMENT, MAGNUSSON KLEMENCIC ASSOCIATES, 10-MAY-06.
2. TOPOGRAPHIC SURVEY, EASTGATE LANDFILL PARK, PACE, 29-SEPT-09.
3. BELLEVUE AIRFIELD PARK SCHEMATIC DESIGN, WALKER MACY, 16-MAR-16.



SOURCES:
1. BELLEVUE AIRFIELD PARK SCHEMATIC DESIGN, WALKER MACY, 16-MAR-16.



WALKER MACY 	PROJECT NO. 04215047.01	DES BY TAM	DATE JANUARY 2024
	SCALE NTS	CHK BY KS	FIGURE 3
CAD FILE FIGURE 2		APP BY JMR	GENERAL SECTIONS " BELLEVUE AIRFIELD PARK "
SCS ENGINEERS Environmental Consultants and Contractors 2405 140th Avenue NE, Suite 107 Bellevue, Washington 98005 (425) 746-4600 FAX: (425) 746-6747			



SCS ENGINEERS

Environmental Consultants and Contractors

2405 140th Avenue NE, Suite 107
Bellevue, Washington 98005
(425) 746-4600 FAX: (425) 746-6747



WALKER MACY

111 SW OAK, SUITE 300
PORTLAND, OR 97204
503-228-3122

PROJECT NO.
04215047.01
SCALE
NTS
CAD FILE
FIGURE 4

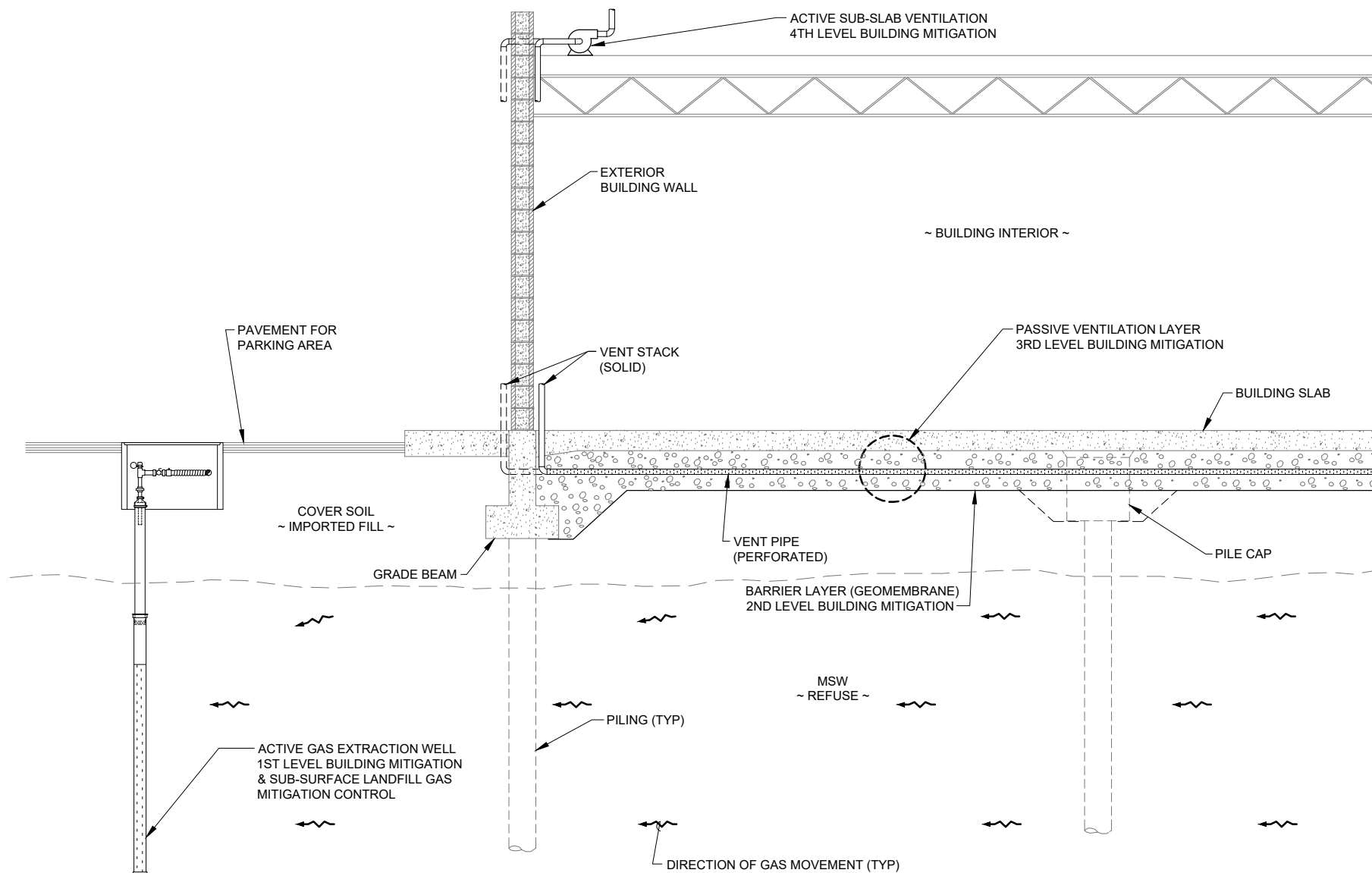
DES BY
TAM
CHK BY
KS
APP BY
JMR

CROSS SECTION VIEW OF
BUILDING METHANE MITIGATION SYSTEM
" BELLEVUE AIRFIELD PARK "
MASTER PARK REPORT

DATE
JANUARY 2024

FIGURE

4



SCS ENGINEERS

Environmental Consultants and Contractors

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Bellevue, Washington 98005
(425) 746-4600 FAX: (425) 746-6747



WALKER MACY

111 SW OAK, SUITE 200
PORTLAND, OR 97204
503-228-3122

PROJECT NO. 04215047.01	DES BY TAM
SCALE NTS	CHK BY KS
CAD FILE FIGURE 5	APP BY JMR

CROSS SECTION VIEW OF
BUILDING METHANE MITIGATION SYSTEM
" BELLEVUE AIRFIELD PARK"
MASTER PARK REPORT

DATE
JANUARY 2024

FIGURE

5

Appendix F

Level 1 Transportation Analysis Report

MEMORANDUM

Date:	January 4, 2024	TG:	1.22058.00
To:	Aaron Maples, Walker Macy		
From:	Dan McKinney Jr. and Brandon Alvarado, PTP – Transpo Group		
Subject:	Bellevue Airfield Park – Aquatics Center Level 1 Traffic Analysis		

This memorandum summarizes the Level 1 traffic analysis completed for the proposed Bellevue Airfield Park – Aquatics Center development. This memorandum includes a project description and a review of the street network, non-motorized facilities, transit service, and trip generation consistent with the City of Bellevue Level 1 Traffic Report requirements. In addition to the Level 1 requirements an evaluation of parking was also completed. In order to conduct a Level 2 traffic report where transportation impacts to off-site intersections are evaluated, coordination will need to occur with the City of Bellevue staff that would include submitting for concurrency and having a concurrency model run completed.

Project Description

The project is located at the Bellevue Airfield Park on the northwest corner of 160th Avenue SE and SE 30th Place in Bellevue. The project includes the development of an aquatics center, pickleball courts, basketball courts, and a picnic area. The detailed land use summary for the overall project is provided below. The project would replace a portion of the parking lot on the west side of 160th Avenue SE.

<u>Land Use</u>	<u>Project Total</u>
Public Park (includes picnic area and basketball courts)	15.76 acres
Pickleball Courts	8 courts
Aquatics Center	1 facility

The project would 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. The site plan and land use quantities are shown in Figure 1.

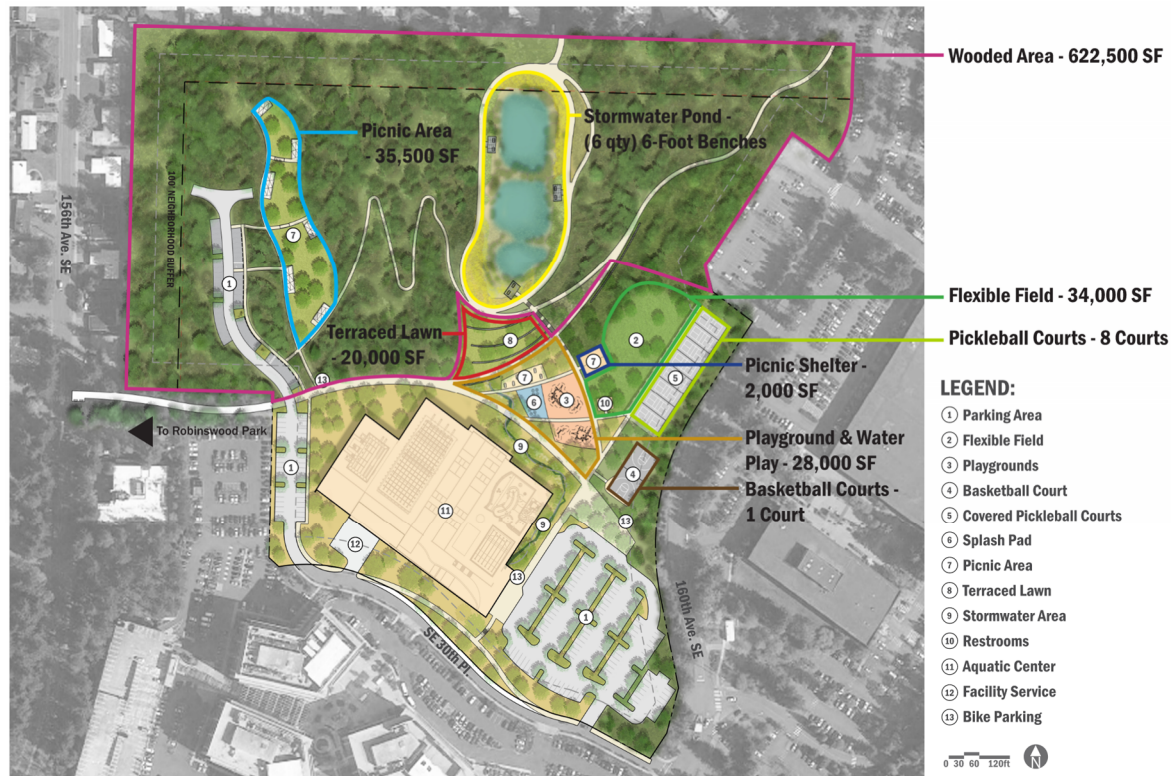


Figure 1: Site Plan

Street Network

The following describes the existing street network within the vicinity of the proposed project and anticipated changes resulting from planned improvements.

Existing Inventory

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.

161st Avenue SE is a 2-lane unclassified roadway in the vicinity of the project site with a posted speed limit of 25 mph. Sidewalks and bicycle shared-lane pavement markings are provided on the east side of the street. Parking is not permitted along the roadway adjacent to the project site.

SE 30th Place is a two-lane unclassified roadway in the vicinity of the project with no posted speed limit. 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.

SE Eastgate Way is a 3-4 lane Minor Arterial roadway in the vicinity of the project with a posted speed limit of 30 mph. Sidewalks are provided on the north side of the street, and bike lanes are provided on both sides of the street. Parking is not permitted along the roadway adjacent to the project site.

Planned Improvements

Based on a review of the City of Bellevue 2024 – 2029 *Transportation Improvement Program* (TIP), the following improvements are planned near the project site:

2029 TIP Reference 72: Downtown – Eastgate Transit Connection. “Evaluate, design, and implement transit speed and reliability improvements along Frequent Transit Network corridors connecting the Downtown and Eastgate activity centers. Consistent with the Transit Master Plan, the Downtown Transportation Plan and King County Metro Connects long range plan. Examples of potential project locations include Main Street from 108th to 116th Avenue and intersections along 116th Avenue SE, Lake Hills Boulevard, 145th Place SE and the Metro K-Line.”

2029 TIP Reference 77: Eastgate – Overlake Transit Connection. “Evaluate, design, and implement transit speed and reliability improvements along Frequent Transit Network corridors connecting the Downtown and Crossroads activity centers. Consistent with the Transit Master Plan, the Downtown Transportation Plan and King County Metro Connects long range plan. Examples of potential project locations include 148th Avenue NE from Bel-Red Road to NE 24th Street.”

Non-Motorized Facilities

As described above, sidewalks are provided on both sides of 160th Avenue SE and SE 30th Place adjacent to the project site and crosswalks are provided at all signalized study intersections. Bike lanes are also provided along both sides of SE Eastgate Way in the project vicinity.

Transit Service

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.

Trip Generation

Trip generation for the non-aquatics center uses was estimated using rates obtained from the Institute of Transportation Engineers' (ITE) Trip Generation Manual (11th Edition, 2021). Public Park (LU #411) and Tennis Courts (LU #490) were utilized to estimate the trip generation for the park area facilities and the pickleball courts respectively. These are unspecified uses in the City of Bellevue trip rate schedule effective January 2023.

The program information provided by the developer contained estimates for the number of people at the aquatic center throughout the day on non-summer weekdays during the school year, non-summer weekends during the school year, weekdays during the summer, and weekends during the summer. Categories provided include team sports (swimming, diving, and water polo), leisure pool, swim lessons, deep water fitness, therapy, and special needs. To calculate the number of trips in and out of the facility during the peak hours, it was assumed that people will stay at the facility for 1 hour and that 60% of them are dropped off. The remaining 40% were assumed to stay at the facility and park their vehicle. Assumptions and calculations for the aquatic center trip generation are attached for reference.

Based on review of the trip generation for the 4 scenarios, summer weekdays are anticipated to generate the most trips to and from the aquatics center. As such, trip generation for the project has been estimated using aquatics center program information for summer weekdays along with

weekday trip generation rates for the park and pickleball court uses. Trip generation for non-summer weekdays has also been estimated to provide a comparison of weekdays throughout the year.

The AM peak hour trip generation rates for the park and pickleball courts are nominal, and the AM peak hour trip generation for the aquatics center is significantly lower than the PM peak hour trip generation. As such, Table 1 and Table 2 summarize the summer and non-summer weekday PM peak hour trip generation for the proposed project, respectively.

Table 1. Trip Generation Summary – Weekday Summer PM Peak Hour

Land Uses ¹	Size	Trip Rate ¹	New Trips		
			In	Out	Total
<u>Proposed</u>					
Aquatics Center (Weekday Summer)	1 facility	-	379	379	758
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			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.
2. Trip generation for pickleball courts was estimated using ITE land use number 490 (Tennis Courts).

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

Land Uses ¹	Size	Trip Rate ¹	New Trips		
			In	Out	Total
<u>Proposed</u>					
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).

As shown in Table 1, the development would generate approximately 794 trips to the area during the summer weekday PM peak hour. As shown in Table 2, the development would generate approximately 257 trips to the area during the non-summer weekday PM peak hour. The summer weekday trip generation represents the maximum trip generation and non-summer weekdays represent the minimum trip generation.

On non-summer weekends, the aquatics center is anticipated to generate 740 trips during the PM peak hour. This amounts to 18 fewer trips than the summer weekday trip generation. On summer weekends, the aquatics center is anticipated to generate 663 trips during the PM peak hour. This amounts to 95 fewer trips than the summer weekday trip generation. Detailed aquatics center program information and a comparison of trip generation for the 4 scenarios, including weekends, is attached for reference.

Parking Analysis

The parking analysis includes a review of the parking supply as compared to the estimated parking demand.

Supply

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 during specific times and days. The parking lot easement agreement schedule is provided in Table 2, and a map of the parking lot areas available for use are shown in Figure 2.

Table 3. Parking Lot Easement Agreement Schedule

Time Period of City Park Patron Easement Area Usage	Maximum City Stall Usage	Stall Location
Between Midnight and 2:30 PM Weekdays	0 Stalls	Not Applicable
Between 2:30 PM and 5:00 PM Weekdays	50 Stalls	Signed stalls located in Lot A
Between 5:00 PM and 6:00 PM Weekdays	114 Stalls	Signed stalls located in Lot A and Lot B
Between 6:00 PM and Midnight Weekdays	200 Stalls	Signed stalls located in Lot A and Lot B
Weekends & Holidays Between 7:00 AM and Midnight	400 Stalls	Signed stalls located in Lot A, Lot B, Lot C

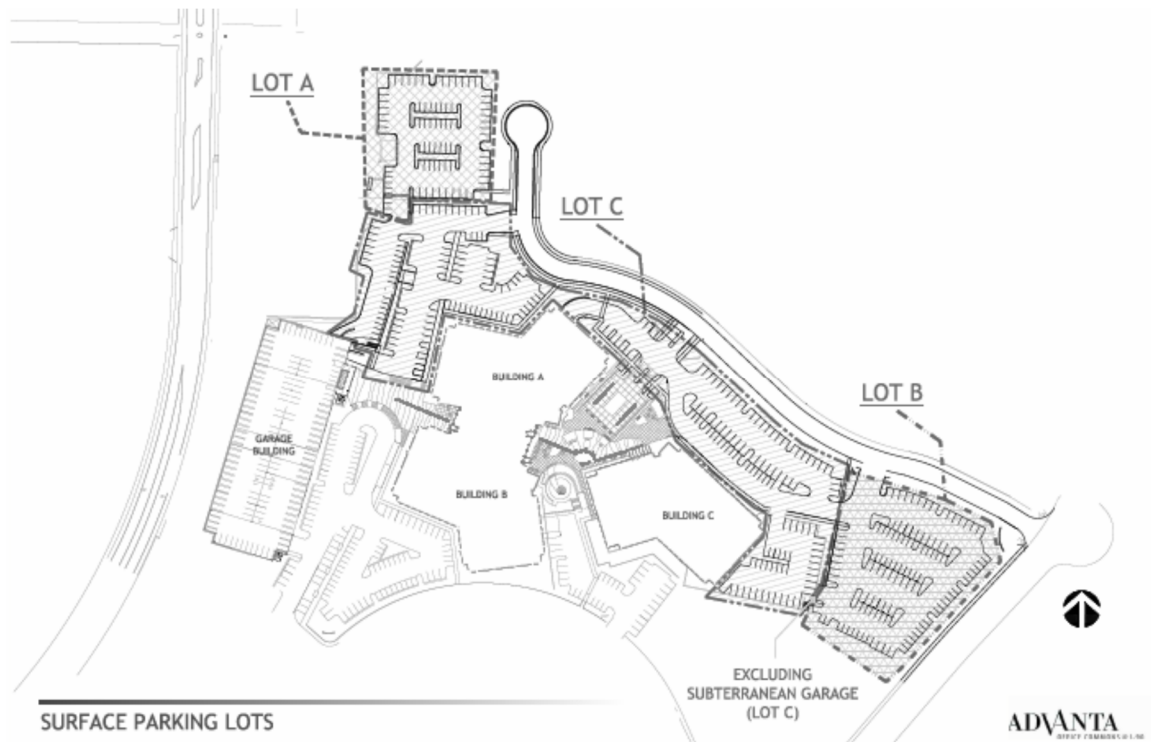


Figure 2: Depiction of Easement Area

Demand

Parking demand was calculated for the three main uses on site, which includes the aquatic center, the park, and the pickleball courts.

The program information for the aquatic center was provided by the Parks Department and includes estimates for the number of people at the aquatic center for different uses throughout the day for four different time periods. The time periods included weekdays during the school year, weekends during the school year, weekdays during the summer, and weekends during the summer. The different uses and activities included team sports (swimming, diving, and water polo), leisure pool, swim lessons, deep water fitness, therapy, and special needs. To calculate the parking demand, it was assumed that people will stay at the facility for 1 hour and that 60% of them are dropped off. The remaining 40% were assumed to stay at the facility and park their vehicle. Parking calculations and assumptions for the aquatic center are attached for reference.

Based on review of the parking demand for the 4 scenarios, weekends during the summer are anticipated to generate the highest parking demand. Detailed aquatics center program information and a comparison of parking demand for the 4 scenarios is attached for reference.

Parking demand for the park area facilities was estimated using Public Park (LU #411) rates and time-of-day distributions obtained from the ITE Parking Generation Manual (6th Edition, 2023). Because the ITE Parking Generation Manual does not have sufficient data for pickleball courts, a programmatic approach was used to estimate parking demand for the pickleball courts. Pickleball games involve up to 4 players; therefore, peak parking demand for the pickleball courts was estimated using a conservative rate of 4 vehicles per court. Time-of-day distributions for Public Park (LU #411) were applied to the pickleball court parking demand.

Supply vs Demand

Overall the available parking supply is anticipated to meet the demands of the proposed project for three of the four conditions evaluated. Weekday's 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. 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.

The parking deficit is anticipated to occur on summer weekdays between 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. Graphs comparing demand to supply are provided on the next page. Detailed parking demand and parking surplus/deficit worksheets are attached for reference.

In terms of demand, the peak parking demand for the total project site is expected to occur on weekends during the summer with a demand of 433 vehicles. During this time, the full supply of 651 parking spaces is available to the project site throughout the day. Therefore, during peak parking demand, a surplus of approximately 218 parking spaces would be provided.

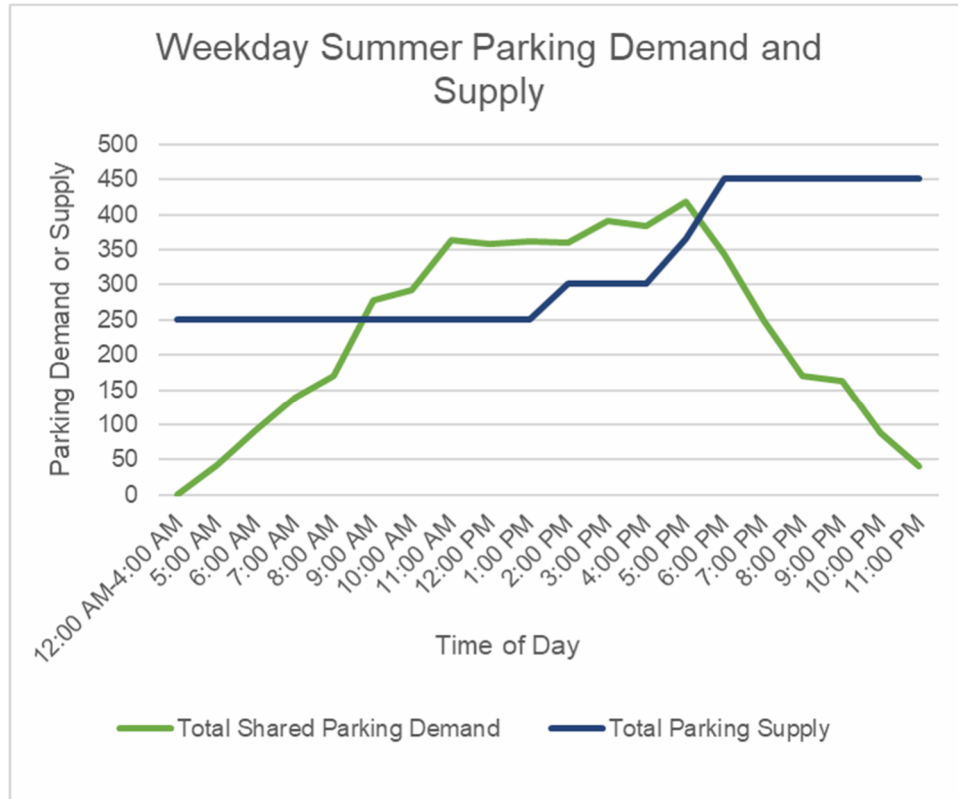


Figure 3: Weekday Summer Parking Demand and Supply

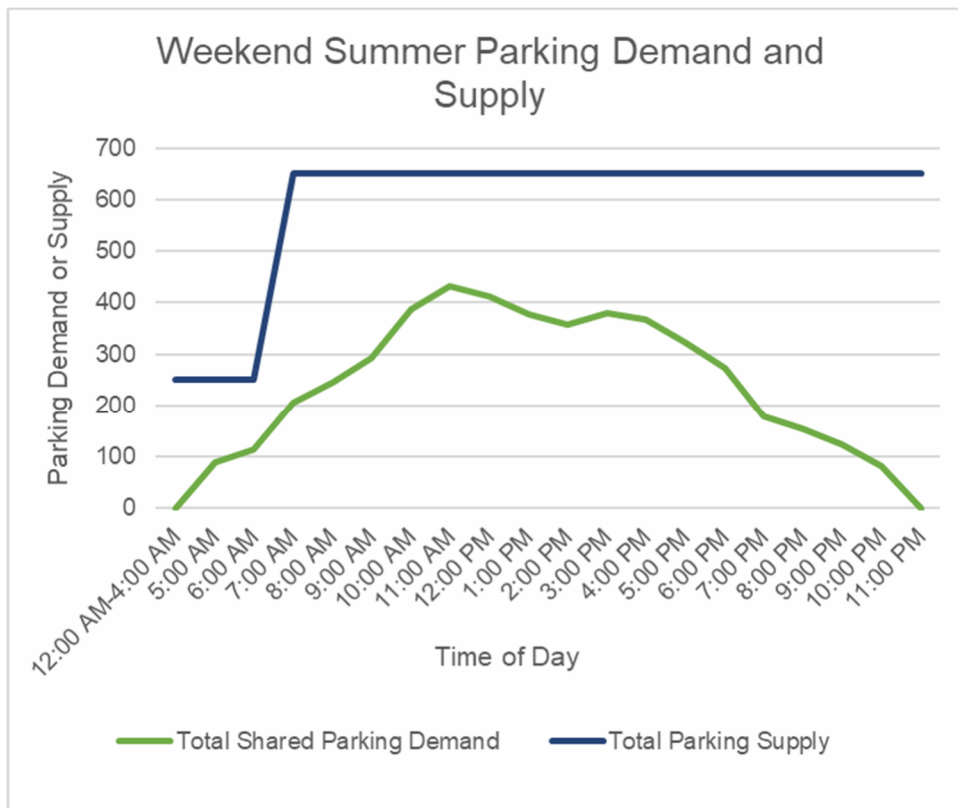


Figure 4: Weekend Summer Parking Demand and Supply

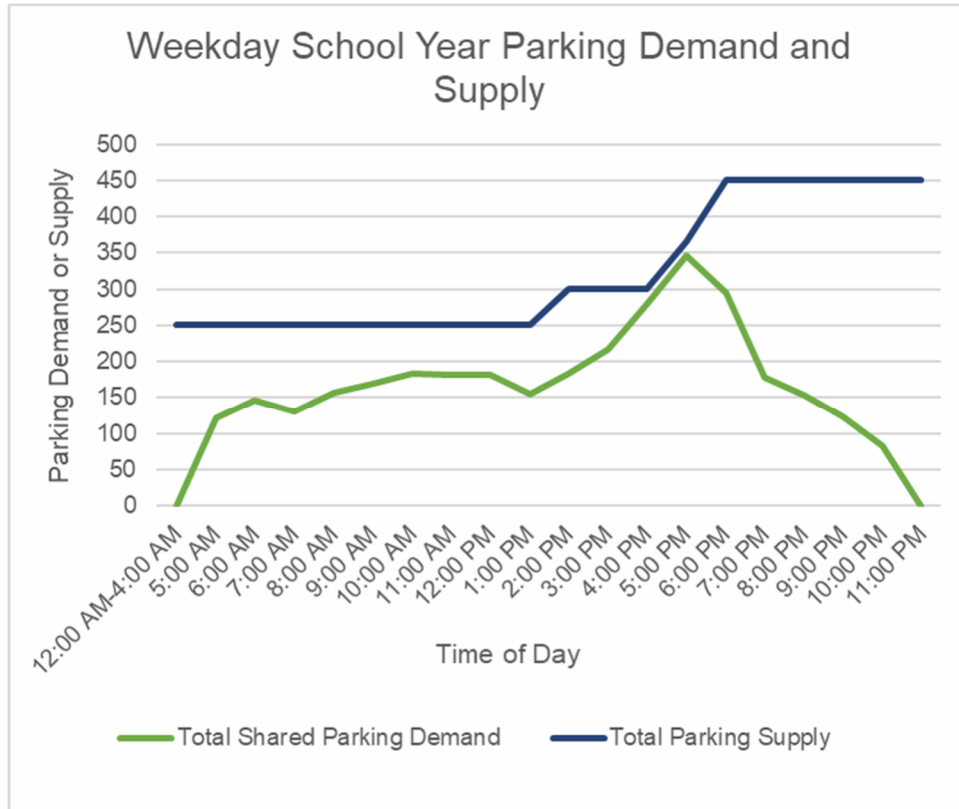


Figure 5: Weekday School Parking Demand and Supply

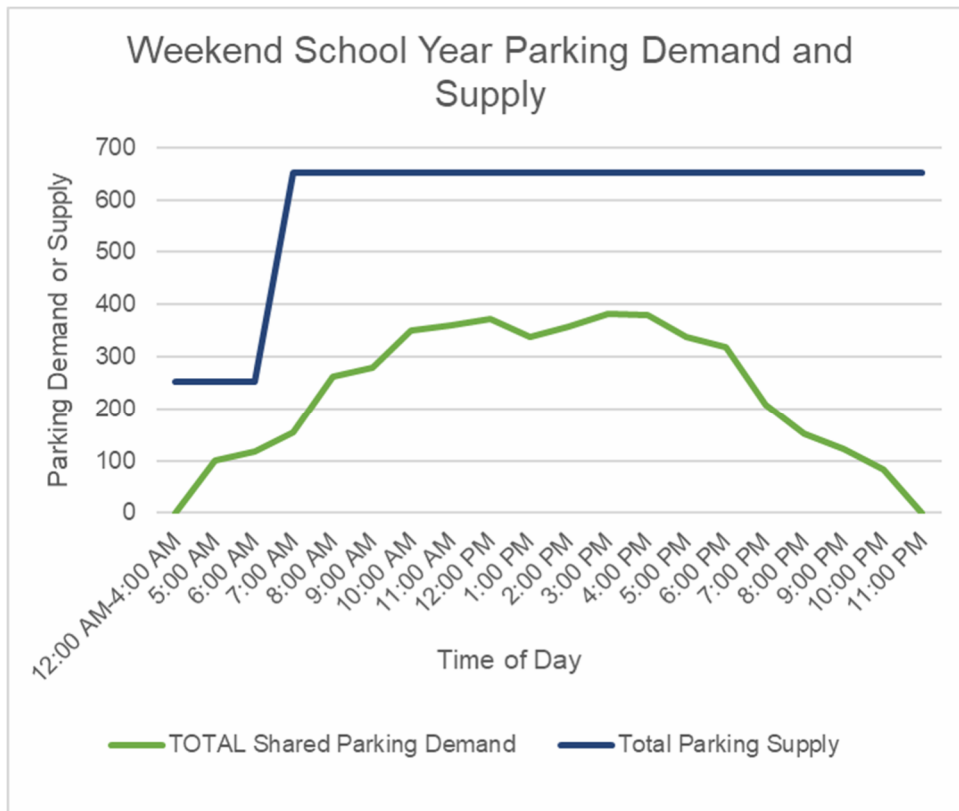


Figure 6: Weekend School Parking Demand and Supply

Summary

The project is located at the Bellevue Airfield Park on the northwest corner of 160th Avenue SE and SE 30th Place in Bellevue. The project includes the development of an aquatics center, pickleball courts, and park amenities. The project would include on-site parking with access off SE 30th Place and at the proposed extension of SE 30th Place west of 160th Avenue SE. In total, approximately 251 parking spaces will be provided on-site with up to an additional 400 spaces available during afternoons and weekends.

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 for three of the four conditions evaluated. Weekday's 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. 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.

Weekdays during the summer are expected to provide a deficit of parking supply 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.

Bellevue Airfield Park - Aquatics Center

<u>Proposed Use</u>											
									Gross Trips		
Land Use	Setting	Size	Units	Model	Equation	Rate	Units	Inbound %	Inbound	Outbound	Subtotal
Public Park (LU 411)		15.76	acres								
Daily	General Urban/Suburban			Equation (lin)	$T=0.64x+88.46$	-	-	50%	50	50	100
AM Peak Hour	General Urban/Suburban			Rate	-	0.02	per acre	59%	0	0	0
PM Peak Hour	General Urban/Suburban			Rate	-	0.11	per acre	55%	1	1	2
Pickleball Courts (LU 490)		8	courts								
Daily	General Urban/Suburban			Rate	-	30.32	per court	50%	121	121	242
AM Peak Hour	General Urban/Suburban			Rate	-	4.21	per court	50%	17	17	34
PM Peak Hour	General Urban/Suburban			Rate	-	4.21	per court	50%	17	17	34
Aquatic Center (Summer Weekday)		1									
Daily					-	-	-		7,012	6,993	14,005
AM Peak Hour					-	-	-		186	101	287
PM Peak Hour					-	-	-		379	379	758
<u>Total</u>											
Daily									7,183	7,164	14,347
AM Peak Hour									203	118	321
PM Peak Hour									397	397	794

Notes:

1. Trip rates based on Institute of Transportation Engineers' (ITE) *Trip Generation* 11th Edition equation and average trip rate as shown above.
2. No AM peak hour trip generation information for LU 490. PM peak hour trip generation rate has been applied to the AM peak hour.
3. Trip generation for the aquatics center based on program information and an estimated stay of 1 hour. 60% of vehicles are estimated to drop-off and leave, while 40% are estimated to stay and park.

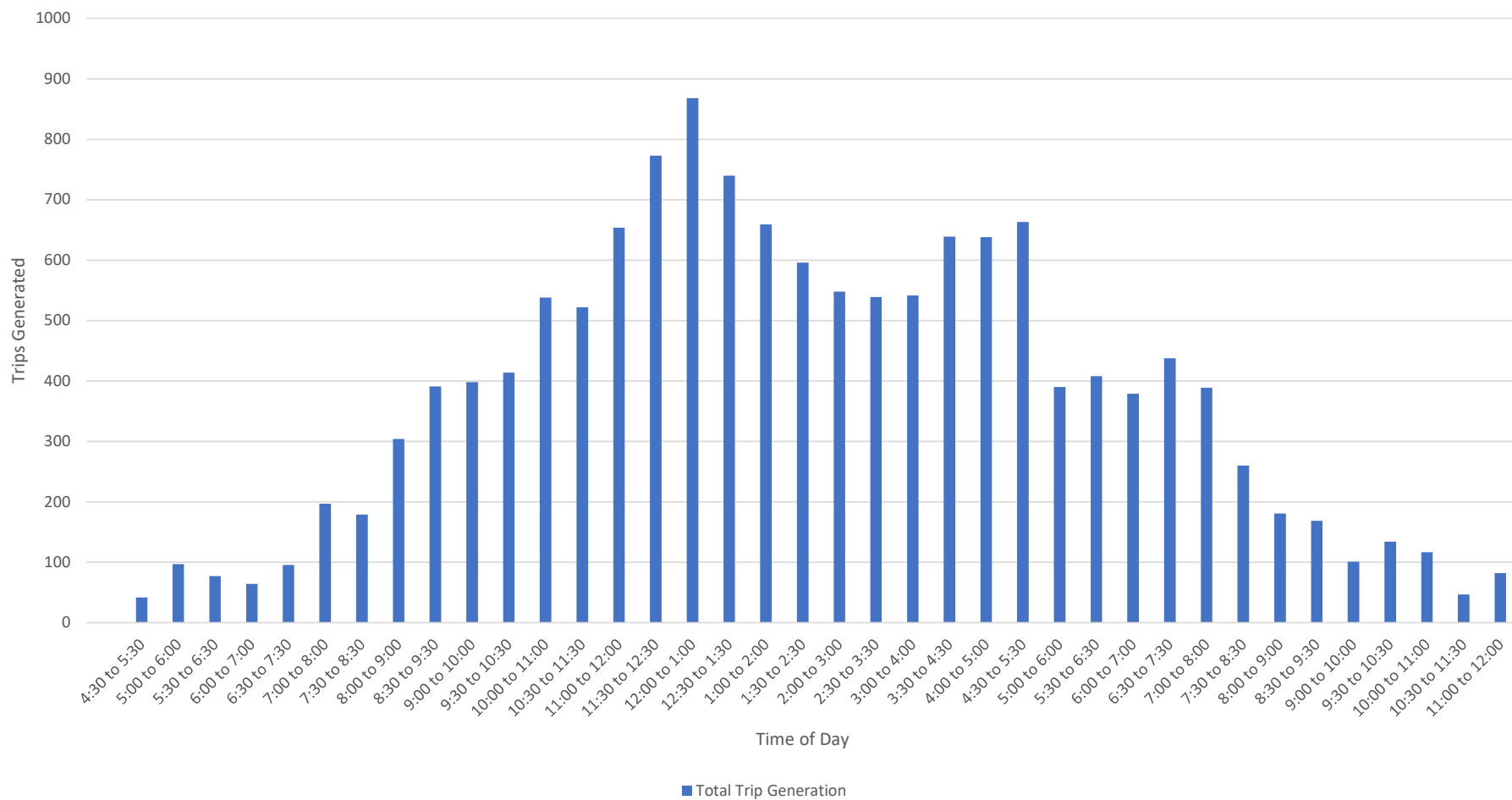
Bellevue Airfield Park - Aquatics Center

<u>Proposed Use</u>											
									Gross Trips		
Land Use	Setting	Size	Units	Model	Equation	Rate	Units	Inbound %	Inbound	Outbound	Subtotal
Public Park (LU 411)		15.76	acres								
Daily	General Urban/Suburban			Equation (lin)	$T=0.64x+88.46$	-	-	50%	50	50	100
AM Peak Hour	General Urban/Suburban			Rate	-	0.02	per acre	59%	0	0	0
PM Peak Hour	General Urban/Suburban			Rate	-	0.11	per acre	55%	1	1	2
Pickleball Courts (LU 490)		8	courts								
Daily	General Urban/Suburban			Rate	-	30.32	per court	50%	121	121	242
AM Peak Hour	General Urban/Suburban			Rate	-	4.21	per court	50%	17	17	34
PM Peak Hour	General Urban/Suburban			Rate	-	4.21	per court	50%	17	17	34
Aquatic Center (Non-Summer Weekday)		1									
Daily					-	-	-		3,411	3,416	6,827
AM Peak Hour					-	-	-		85	118	203
PM Peak Hour					-	-	-		117	104	221
<u>Total</u>											
Daily									3,582	3,587	7,169
AM Peak Hour									102	135	237
PM Peak Hour									135	122	257

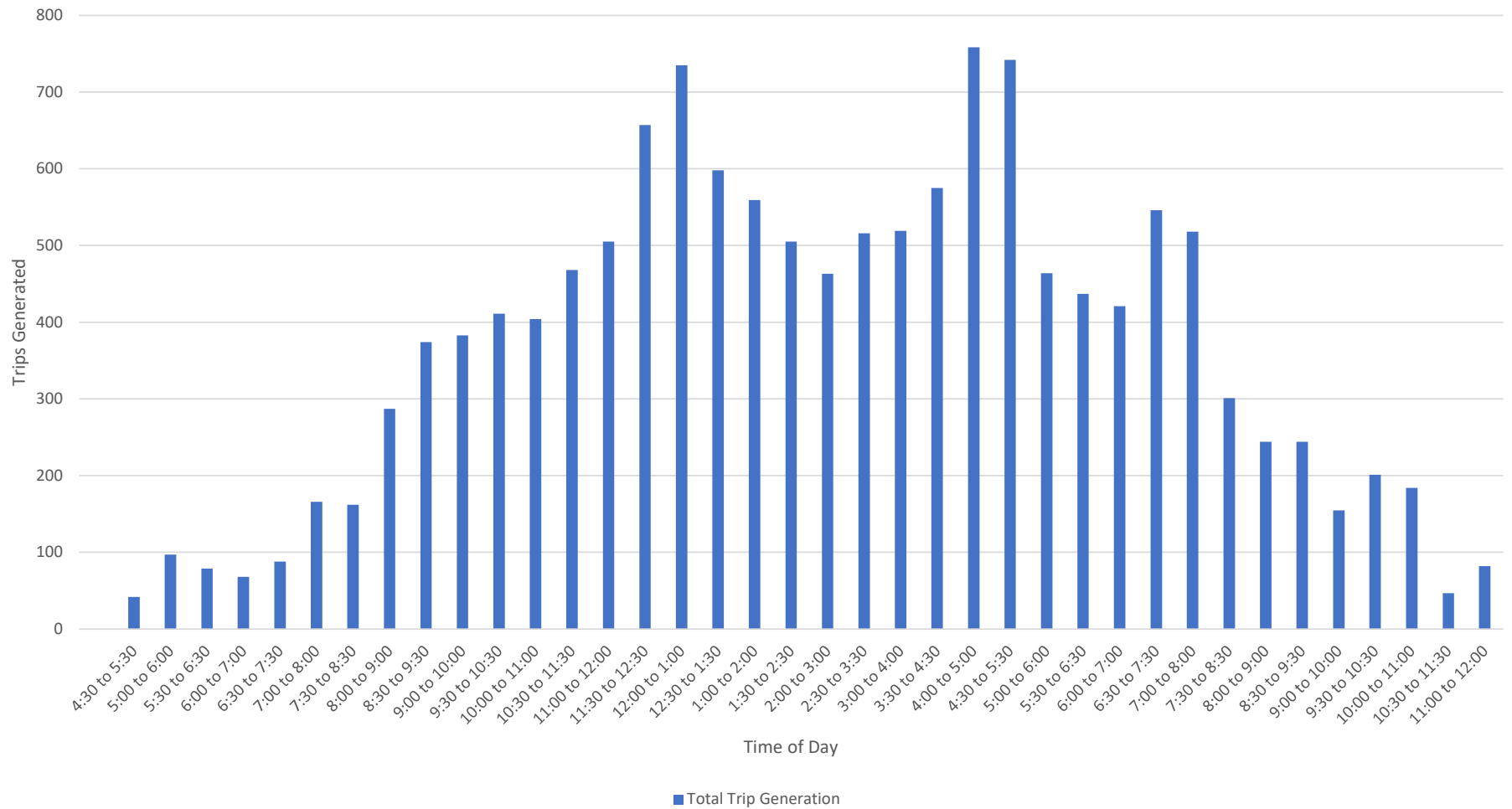
Notes:

1. Trip rates based on Institute of Transportation Engineers' (ITE) *Trip Generation* 11th Edition equation and average trip rate as shown above.
2. No AM peak hour trip generation information for LU 490. PM peak hour trip generation rate has been applied to the AM peak hour.
3. Trip generation for the aquatics center based on program information and an estimated stay of 1 hour. 60% of vehicles are estimated to drop-off and leave, while 40% are estimated to stay and park.

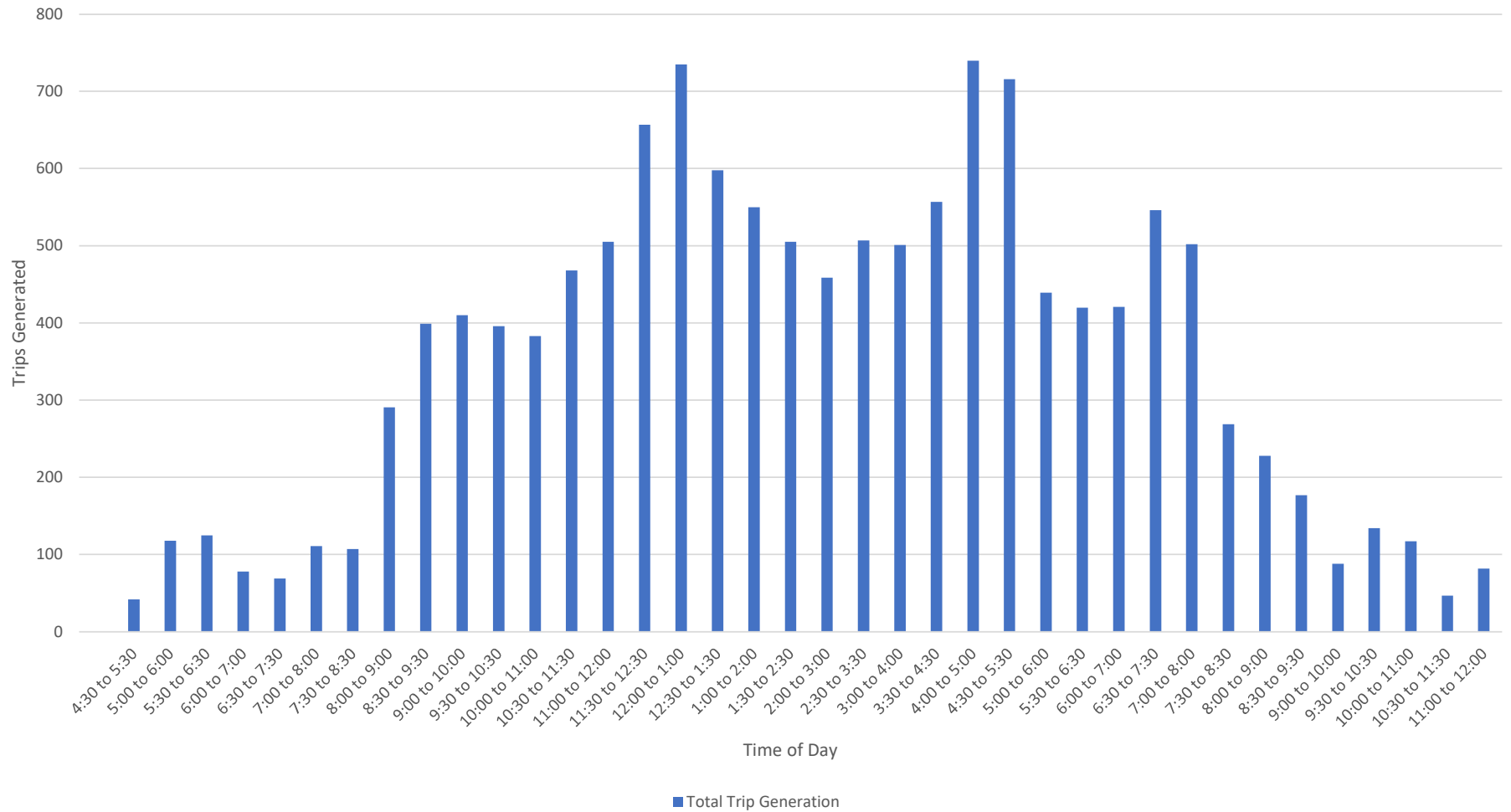
Weekend Summer Aquatic Trip Generation



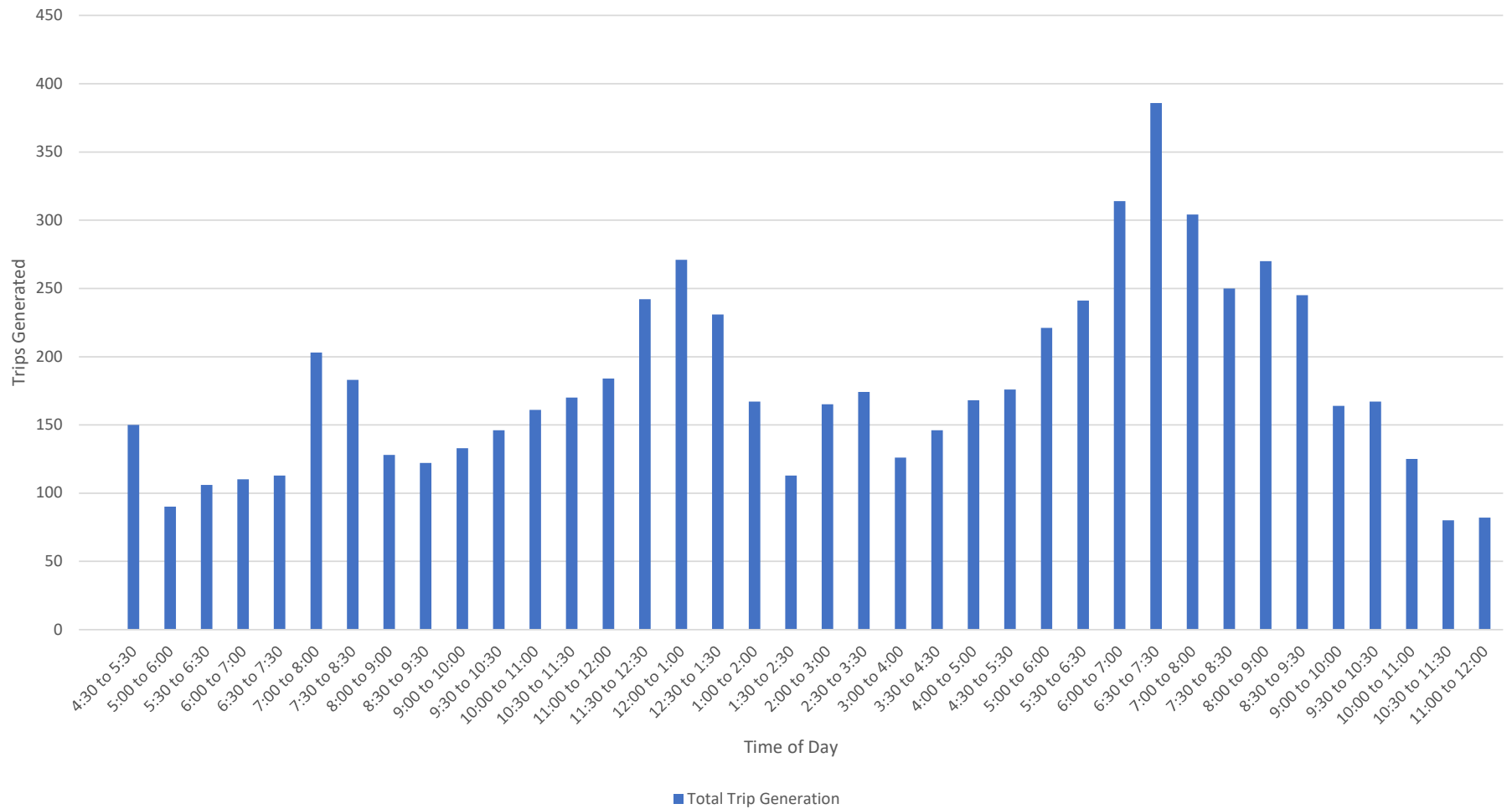
Weekday Summer Aquatic Trip Generation



Weekend School Year Aquatic Trip Generation



Weekday School Year Aquatic Trip Generation



Weekday Summer Aquatic Trip Generation and Assumptions

[illegible]

Weekend Summer Aquatic Trip Generation and Assumptions

			Assume People Stay for appx 1 Hour		Assumed 2 to 3-Hour Practices		60% drop-off		Assumed 2-hour practice		60% drop-off		Assumed 2.5-hour practice		60% drop-off		Assumed 2.5-hour practice		60% drop-off		Assume People Stay for appx 1 Hour		Assume People Stay for appx Half-Hour		Assume People Stay for appx Half-Hour		Assume People Stay for appx 1 Hour		Assume People Stay for appx 1 Hour		Assumes people will stay approximately 1 hour Community Program		Dryside Use			Total Half-Hour Vehicle Trips			Rolling 1-Hour Vehicle Trips					
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	Total	In	Out	Total	Time of Day	In	Out	Total Trip Generation				
Time of Day	Staff		Open Time / Lap Lanes		Club Teams - Swim		Club Teams - Diving		Club Teams - Diving		Artistic Swimming		Leisure Pool		Swim Lessons		Deep Water Fitness		Therapy		Special Needs		In	Out	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total					
4:30 to 5:00	12		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			10	22	0	22																		
5:00 to 5:30			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			20	20	0	20	4:30 to 5:30	42	0	42														
5:30 to 6:00			17	0	25	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0			20	20	62	15	77	5:00 to 6:00	82	15	97													
6:00 to 6:30			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					0	0	0	0	5:30 to 6:30	62	15	77												
6:30 to 7:00			25	17	8	5	0	0	0	0	0	0	0	0	0	9	0	0	0	0					0	42	22	64	6:00 to 7:00	42	22	64												
7:00 to 7:30			0	0	9	5	0	0	0	0	0	0	0	0	0	9	9	0	0	0					0	18	14	32	6:30 to 7:30	60	36	96												
7:30 to 8:00			50	25	0	0	13	8	0	0	0	0	42	0	9	0	9	0	0	0					0	123	42	165	7:00 to 8:00	141	56	197												
8:00 to 8:30			0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0					0	5	9	14	7:30 to 8:30	128	51	179												
8:30 to 9:00			42	50	42	25	0	0	0	0	0	0	42	42	18	9	0	0	0	0			20		0	164	126	290	8:00 to 9:00	169	135	304												
9:00 to 9:30			0	0	15	25	0	0	0	0	0	0	0	0	18	18	0	0	0	0			20	5	0	53	48	101	8:30 to 9:30	217	174	391												
9:30 to 10:00			25	42	0	0	13	8	0	0	0	0	83	42	18	18	0	0	8	0			20	20	0	167	130	297	9:00 to 10:00	220	178	398												
10:00 to 10:30	2		0	0	5	8	8	13	0	0	0	0	0	0	18	18	0	0	0	0			25	20	0	56	61	117	9:30 to 10:30	223	191	414												
10:30 to 11:00			25	25	5	9	0	0	0	0	0	0	167	83	18	18	0	0	8	8	10		25	20	0	258	163	421	10:00 to 11:00	314	224	538												
11:00 to 11:30			0	0	0	0	0	0	0	0	0	0	0	0	18	18	0	0	0	0	10	10	20	25	0	48	53	101	10:30 to 11:30	306	216	522												
11:30 to 12:00			50	25	0	0	0	0	0	0	0	0	208	167	0	18	9	0	8	8	10	10	15	25	0	300	253	553	11:00 to 12:00	348	306	654												
12:00-12:30	15	15	0	0	25	42	8	13	0	0	0	0	0	0	9	0	9	9	0	0	10	10	15	20	10	101	119	220	11:30 to 12:30	401	372	773												
12:30 to 1:00			50	50	0	0	0	0	0	0	0	0	208	208	9	9	9	9	8	8			15	15	20	20	40	319	329	648	12:00 to 1:00	420	448	868										
1:00 to 1:30			0	0	0	0	0	0	0	0	0	0	0	0	9	9	0	9	0	0			10	15	20	20	40	39	53	92	12:30 to 1:30	358	382	740										
1:30 to 2:00			42	50	0	0	0	0	0	0	0	0	208	208	9	9	0	0	8	8			10	15		0	277	290	567	1:00 to 2:00	316	343	659											
2:00 to 2:30			0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0			10	10		0	10	19	29	1:30 to 2:30	287	309	596											
2:30 to 3:00			25	42	0	0	0	0	0	0	0	0	208	208	0	0	0	0	8	8			10	10		0	251	268	519	2:00 to 3:00	261	287	548											
3:00 to 3:30			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			10	10		0	10	10	20	2:30 to 3:30	261	278	539											
3:30 to 4:00	2		25	25	0	0	0	0	0	0	0	0	208	208	18	0	0	0	8	8			10	10		0	271	251	522	3:00 to 4:00	281	261	542											
4:00 to 4:30			0	0	0	0	0	0	0	0	0	0	0	41	18	18	0	0	0	0			10	10	20	20	48	69	117	3:30 to 4:30	319	320	639											
4:30 to 5:00			25	25	42	25	8	5	17	10	21	13	84	167	18	18	0	0	0	8			25	10		0	240	281	521	4:00 to 5:00	288	350	638											
5:00 to 5:30	3		0	17	0	0	0	0	0	0	0	0	41	0	18	18	0	0	0	0	10		25	10		0	97	45	142	4:30 to 5:30	337	326	663											
5:30 to 6:00			8	8	0	0	0	0	0	0	0	0	42	84	18	18	0	0	0	0	10	10	25	25		0	103	145	248	5:00 to 6:00	200	190	390											
6:00 to 6:30			0	0	0	0	5	8	0	0	0	0	0	41	18	18	0	0	0	0	10	10	25	25		0	58	102	160	5:30 to 6:30	161	247	408											
6:30 to 7:00			8	8	25	15	0	0	0	0	0	0	33	42	0	18	0	0	0	0	10	10	25	25		0	101	118	219	6:00 to 7:00	159	220	379											
7:00 to 7:30	8		0	0	25	42	8	5	17	10	21	13	0	0	0	0	0	0	0	0	10	10	25	25		0	114	105	219	6:30 to 7:30	215	223	438											
7:30 to 8:00			8	8	0	0	0	0	10	17	13	21	0	33	0	0	0	0	0	0			10	25	25		0	56	114	170	7:00 to 8:00	170	219	389										
8:00 to 8:30	15	15	0	0	0	0	0	0	0	0	0	0	0	0		0						15	25	10	10	20	40	50	90	7:30 to 8:30	96	164	260											
8:30 to 9:00			8	8	0	0	0	0	0	0	0	0	0	0								10	25	20	20	40	38	53	91	8:00 to 9:00	78	103	181											
9:00 to 9:30			0	0	0	0	5	8	0	0	0	0	0	0	0	0	0	0	0	0			10	15	20	40	35	43	78	8:30 to 9:30	73	96	169											
9:30 to 10:00	5		0	8	0	0	0	0	0	0	0	0	0	0								0	10			0	0	23	23	9:00 to 10:00	35	66	101											
10:00 to 10:30			0	0	15	25	0	0	10	17	13	21	0	0								0	10			0	38	73	111	9:30 to 10:30	38	96	134											
10:30 to 11:00		6	0	0	0	0	0	0	0	0	0	0	0	0								0	0			0	0	6	6	10:00 to 11:00	38	79	117											
11:00 to 11:30		6	0	0	0	0	0	0	0	0	0	0	0	0								0	0			35	35	0	41	41	10:30 to 11:30	0	47	47										
11:30 to 12:00		6	0	0	0	0	0	0	0	0	0	0	0	0								0	0			35	35	0	41	41	11:00 to 12:00	0	82	82										

Weekend School Year Aquatic Trip Generation and Assumptions

			Assume People Stay for appx 1 Hour		Assumes 60% dropped off/40% drive & park		60% drop-off		Assumes 60% dropped off/40% drive & park		60% drop-off		Assumed 2 to 3-Hour Practices		60% drop-off		Assumed 3-hour practice		60% drop-off		Assumed 2.5-hour practice		60% drop-off		Assume People Stay for appx 1 Hour		Assume People Stay for appx Half-Hour		Assume People Stay for appx Half-Hour		Assume People Stay for appx 1 Hour		Assumes people will stay approximately 1 hour		Dryside Use			Total Half-Hour Vehicle Trips			Rolling 1-Hour Vehicle Trips								
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	Total	In	Out	Total	Time of Day	In	Out	Total Trip Generation							
Time of Day	Staff		Open Time / Lap Lanes		School District Teams - Swim		School District Teams - Diving		School District Teams - Water Polo		Club Teams - Swim		Club Teams - Diving		Club Teams - Diving		Artistic Swimming		Leisure Pool		Swim Lessons		Deep Water Fitness		Therapy		Special Needs		Community Program		In		Out		50														
4:30 to 5:00	12		0	0	0		0		0		0		0		0		0		0	0	0	0	0	0	0	0						10		10	22	0	22												
5:00 to 5:30			0	0	0		0		0		0		0		0		0		0	0	0	0	0	0	0	0						20		20	20	0	20	4:30 to 5:30	42	0	42								
5:30 to 6:00			17	0	0		0		0		25		15		13		8		0	0	0	0	0	0	0	0						20		20	75	23	98	5:00 to 6:00	95	23	118								
6:00 to 6:30			0	0	0		0		0		0		0		0		0		0	0	0	0	0	0	0	0						0		0	17	10	27	6:00 to 6:30	92	33	125								
6:30 to 7:00			25	17	0		0		0		0		0		0		0		0	0	0	0	0	9	0	0						0		34	17	51	6:30 to 7:00	51	27	78									
7:00 to 7:30			0	0	0		0		0		0		0		0		0		0	0	0	0	9	9	0	0						0		9	9	18	7:00 to 7:30	43	26	69									
7:30 to 8:00			50	25	0		0		0		0		0		0		0		0	0	0	0	9	9	0	0						0		59	34	93	7:30 to 8:00	68	43	111									
8:00 to 8:30			0	0	0		0		0		0		0		0		0		0	0	0	0	9	0	0	0						5		0	5	9	14	8:00 to 8:30	64	43	107								
8:30 to 9:00			0	0	0		0		0		50		42		25		42		50	42	50	18	0	0	0	0						0		20		83	277	9:00 to 9:00	199	92	291								
9:00 to 9:30			0	0	0		0		0		0		0		0		0		0	0	0	18	18	0	0						0		61	61	122	9:30 to 9:30	255	144	399										
9:30 to 10:00			25	42	0		0		0		0		10		17		0		0	0	0	18	18	0	0	17	17					20		20	132	156	288	9:00 to 10:00	193	217	410								
10:00 to 10:30	2		0	0	0		0		0		0		0		0		0		0	25	0	18	18	0	0	0						25		20	68	40	108	10:00 to 10:30	200	196	396								
10:30 to 11:00			25	25	0		0		0		0		0		0		0		0	58	42	18	18	0	0	17	17	10			25		20	0	153	122	275	10:00 to 11:00	221	162	383								
11:00 to 11:30			0	0	0		0		0		0		0		0		0		0	67	25	18	18	0	0	0	0	10			10		20	25	0	115	78	193	10:30 to 11:30	268	200	468							
11:30 to 12:00			50	25	0		0		0		0		0		0		0		0	58	58	0	18	9	0	0	17	17	10			10		159	153	312	11:00 to 12:00	274	231	505									
12:00 to 12:30	15	15	0	0	0		0		0		25		42		8		13		0	67	67	0	0	9	9	0	10				10		15	20	10	159	186	345	11:30 to 12:30	318	339	657							
12:30 to 1:00			50	50	0		0		0		0		0		0		0		0	100	58	0	0	9	9	17	17	10			10		15	20	211	179	390	12:00 to 1:00	370	365	735								
1:00 to 1:30			0	0	0		0		0		0		0		0		0		0	67	67	0	0	0	9	0					10		15	20	111	208	12:30 to 1:30	308	290	598									
1:30 to 2:00			42	50	0		0		0		0		0		0		0		0	100	100	0	0	0	0	8	17				10		15	20	100	160	182	1:00 to 2:00	257	293	550								
2:00 to 2:30			0	0	0		0		0		0		0		0		0		0	67	67	0	0	0	0	0						10		10	86	77	163	2:00 to 2:30	246	259	505								
2:30 to 3:00			25	42	0		0		0		0		0		0		0		0	100	100	0	0	0	0	0						10		10	0	135	161	296	2:30 to 3:00	221	238	459							
3:00 to 3:30			0	0	0		0		0		0		0		0		0		0	108	67	0	0	0	0	8	8				10		10	0	126	85	211	3:00 to 3:30	261	246	507								
3:30 to 4:00	2		25	25	0		0		0		0		0		0		0		0	100	100	18	0	0	0	0	0					10		10	0	155	135	290	3:00 to 4:00	281	220	501							
4:00 to 4:30			0	0	0		0		0		0		0		0		0		0	67	108	18	18	0	0	8	8				10		10	20	123	144	267	4:00 to 4:30	278	279	557								
4:30 to 5:00			25	25	33		20		8		42		25		0		17		10	58	100	18	18	0	0	0						25		10	247	226	473	4:30 to 5:00	370	370	740								
5:00 to 5:30	3		0	17	0		0		0		0		0		0		0		0	67	67	0	18	0	0	0						0		25	10	123	120	243	5:00 to 5:30	370	346	716							
5:30 to 6:00			8	8	0		0		0		0		0		0		0		0	16	58	18	18	0	0						10		10	25	25	77	119	196	5:30 to 6:00	200	239	439							
6:00 to 6:30			0	0	0		0		0		0		0		0		0		0	51	67	18	18	0	0						10		10	120	224	340	6:00 to 6:30	181	239	420									
6:30 to 7:00			8	8	0		0		0		13		8		0		0		0	16	16	0	18	0	0							10		10	197	100	297	6:00 to 7:00	201	220	421								
7:00 to 7:30	8		0	0	20		33		5		0		25		0		17		10	26	51	0	0	0	0						10		10	157	192	349	7:00 to 7:30	254	292	546									
7:30 to 8:00			8	8	0		0		0		0		0		0		8		0	17	10	18	0	0	0							10		25	153	137	290	7:30 to 8:00	211	289	502								
8:00 to 8:30	15	15	0	0	0		0		0		0		0		0		0		0	0	0	0	0	0	0							10		15	25	10	10	20	40	76	116	8:00 to 8:30	96	173	269				
8:30 to 9:00			8	8	0		0		0		8		13		0		0		0	0	0	0	0	0	0							10		25	20	112	100	200	8:30 to 9:00	86	142	228							
9:00 to 9:30			0	0	0		0		0		0		0		0		0		0	0	0	0	0	0								10		15	20	20	40	30	35	65	9:00 to 9:30	76	101	177					
9:30 to 10:00			5	0	8		0		0		0		0		0		0		0	0	0	0	0	0								0		10	0	23	23	46	9:00 to 10:00	30	58	88							
10:00 to 10:30			0	0	0		0		0		15		25		0		0		0	0	0	10	0	0	13							0		38	73	111	10:00 to 10:30	38	79	117									
10:30 to 11:00			0	0	0		0		0		0		0		0		0		0	0	0	0	0	0								0		6	6	12	10:00 to 11:00	38	79	117									
11:00 to 11:30			6	0	0		0		0		0		0		0		0		0	0	0	0	0	0								0		0	0	0	0	41	41	82	11:00 to 11:30	0	47	47					
11:30 to 12:00			6	0	0		0		0		0		0		0		0		0	0	0	0	0	0								0		0	0	0	41	41	82	11:30 to 12:00	0	82	82						

Weekday School Year Aquatic Trip Generation and Assumptions

[illegible]

Aquatics Center Trip Generation Comparison

	AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total
Weekday School Year	85	118	203	117	104	221
Weekend School Year	199	92	291	370	370	740
Weekday Summer	186	101	287	379	379	758
Weekend Summer	169	135	304	337	326	663

Weekend Summer Aquatic Parking Calculations

Rolling 1-Hour Vehicle Trips				Estimated Parking Demand
Time of Day	In	Out	Total Trip Generation	
4:00 to 5:00	22	0	22	22
4:30 to 5:30	42	0	42	42
5:00 to 6:00	82	15	97	89
5:30 to 6:30	62	15	77	89
6:00 to 7:00	42	22	64	109
6:30 to 7:30	60	36	96	113
7:00 to 8:00	141	56	197	194
7:30 to 8:30	128	51	179	190
8:00 to 9:00	169	135	304	228
8:30 to 9:30	217	174	391	233
9:00 to 10:00	220	178	398	270
9:30 to 10:30	223	191	414	265
10:00 to 11:00	314	224	538	360
10:30 to 11:30	306	216	522	355
11:00 to 12:00	348	306	654	402
11:30 to 12:30	401	372	773	384
12:00 to 1:00	420	448	868	374
12:30 to 1:30	358	382	740	360
1:00 to 2:00	316	343	659	347
1:30 to 2:30	287	309	596	338
2:00 to 3:00	261	287	548	321
2:30 to 3:30	261	278	539	321
3:00 to 4:00	281	261	542	341
3:30 to 4:30	319	320	639	320
4:00 to 5:00	288	350	638	279
4:30 to 5:30	337	326	663	331
5:00 to 6:00	200	190	390	289
5:30 to 6:30	161	247	408	245
6:00 to 7:00	159	220	379	228
6:30 to 7:30	215	223	438	237
7:00 to 8:00	170	219	389	179
7:30 to 8:30	96	164	260	169
8:00 to 9:00	78	103	181	154
8:30 to 9:30	73	96	169	146
9:00 to 10:00	35	66	101	123
9:30 to 10:30	38	96	134	88
10:00 to 11:00	38	79	117	82
10:30 to 11:30	0	47	47	41
11:00 to 12:00	0	82	82	0

Peak parking demand

402

Weekday Summer Aquatic Parking Calculations

Rolling 1-Hour Vehicle Trips				Estimated Parking Demand
Time of Day	In	Out	Total Trip Generation	
4:00 to 5:00	22	0	22	22
4:30 to 5:30	42	0	42	42
5:00 to 6:00	82	15	97	89
5:30 to 6:30	64	15	79	91
6:00 to 7:00	51	17	68	123
6:30 to 7:30	60	28	88	123
7:00 to 8:00	98	68	166	153
7:30 to 8:30	94	68	162	149
8:00 to 9:00	186	101	287	238
8:30 to 9:30	234	140	374	243
9:00 to 10:00	188	195	383	231
9:30 to 10:30	211	200	411	254
10:00 to 11:00	229	175	404	285
10:30 to 11:30	268	200	468	322
11:00 to 12:00	274	231	505	328
11:30 to 12:30	318	339	657	301
12:00 to 1:00	370	365	735	333
12:30 to 1:30	308	290	598	319
1:00 to 2:00	266	293	559	306
1:30 to 2:30	246	259	505	306
2:00 to 3:00	223	240	463	289
2:30 to 3:30	270	246	516	330
3:00 to 4:00	290	229	519	350
3:30 to 4:30	287	288	575	329
4:00 to 5:00	379	379	758	350
4:30 to 5:30	387	355	742	361
5:00 to 6:00	208	256	464	302
5:30 to 6:30	181	256	437	286
6:00 to 7:00	201	220	421	283
6:30 to 7:30	254	292	546	248
7:00 to 8:00	229	289	518	223
7:30 to 8:30	112	189	301	171
8:00 to 9:00	86	158	244	151
8:30 to 9:30	118	126	244	163
9:00 to 10:00	72	83	155	140
9:30 to 10:30	63	138	201	88
10:00 to 11:00	63	121	184	82
10:30 to 11:30	0	47	47	41
11:00 to 12:00	0	82	82	0

Peak parking demand

361

Weekend School Year Aquatic Parking Calculations

Rolling 1-Hour Vehicle Trips				Estimated Parking Demand
Time of Day	In	Out	Total Trip Generation	
4:00 to 5:00	22	0	22	22
4:30 to 5:30	42	0	42	42
5:00 to 6:00	95	23	118	94
5:30 to 6:30	92	33	125	101
6:00 to 7:00	51	27	78	118
6:30 to 7:30	43	26	69	118
7:00 to 8:00	68	43	111	143
7:30 to 8:30	64	43	107	139
8:00 to 9:00	199	92	291	250
8:30 to 9:30	255	144	399	250
9:00 to 10:00	193	217	410	226
9:30 to 10:30	200	196	396	254
10:00 to 11:00	221	162	383	285
10:30 to 11:30	268	200	468	322
11:00 to 12:00	274	231	505	328
11:30 to 12:30	318	339	657	301
12:00 to 1:00	370	365	735	333
12:30 to 1:30	308	290	598	319
1:00 to 2:00	257	293	550	297
1:30 to 2:30	246	259	505	306
2:00 to 3:00	221	238	459	280
2:30 to 3:30	261	246	507	321
3:00 to 4:00	281	220	501	341
3:30 to 4:30	278	279	557	320
4:00 to 5:00	370	370	740	341
4:30 to 5:30	370	346	716	344
5:00 to 6:00	200	239	439	302
5:30 to 6:30	181	239	420	286
6:00 to 7:00	201	220	421	283
6:30 to 7:30	254	292	546	248
7:00 to 8:00	213	289	502	207
7:30 to 8:30	96	173	269	171
8:00 to 9:00	86	142	228	151
8:30 to 9:30	76	101	177	146
9:00 to 10:00	30	58	88	123
9:30 to 10:30	38	96	134	88
10:00 to 11:00	38	79	117	82
10:30 to 11:30	0	47	47	41
11:00 to 12:00	0	82	82	0

Peak parking demand

344

Weekday School Year Aquatic Parking Calculations

Rolling 1-Hour Vehicle Trips				Estimated Parking Demand
Time of Day	In	Out	Total Trip Generation	
4:00 to 5:00	71	25	96	46
4:30 to 5:30	125	25	150	100
5:00 to 6:00	82	8	90	120
5:30 to 6:30	64	42	106	122
6:00 to 7:00	68	42	110	146
6:30 to 7:30	60	53	113	129
7:00 to 8:00	85	118	203	113
7:30 to 8:30	82	101	183	110
8:00 to 9:00	68	60	128	121
8:30 to 9:30	74	48	122	136
9:00 to 10:00	74	59	133	136
9:30 to 10:30	70	76	146	130
10:00 to 11:00	85	76	161	145
10:30 to 11:30	90	80	170	140
11:00 to 12:00	89	95	184	139
11:30 to 12:30	118	124	242	134
12:00 to 1:00	128	143	271	124
12:30 to 1:30	108	123	231	119
1:00 to 2:00	74	93	167	105
1:30 to 2:30	54	59	113	114
2:00 to 3:00	95	70	165	130
2:30 to 3:30	95	79	174	130
3:00 to 4:00	66	60	126	136
3:30 to 4:30	86	60	146	156
4:00 to 5:00	114	54	168	196
4:30 to 5:30	122	54	176	224
5:00 to 6:00	117	104	221	209
5:30 to 6:30	112	129	241	207
6:00 to 7:00	167	147	314	229
6:30 to 7:30	200	186	386	221
7:00 to 8:00	141	163	304	207
7:30 to 8:30	113	137	250	197
8:00 to 9:00	120	150	270	177
8:30 to 9:30	110	135	245	172
9:00 to 10:00	72	92	164	157
9:30 to 10:30	58	109	167	121
10:00 to 11:00	25	100	125	82
10:30 to 11:30	0	80	80	41
11:00 to 12:00	0	82	82	0

Peak parking demand:

229

Bellevue Airfield Park - Aquatics Center 1.22058

Weekend School Year Shared Parking Demand Estimate

Use Size Parking Rate Rate Source Unadjusted Demand ³ Reduction ¹ Adjusted Demand	Aquatics Center		Public Park		Pickleball Courts		TOTAL Shared Parking Demand	On-Site Parking Supply	Shared Parking Spaces (per Agreement)	Total Parking Supply	Parking Surplus/Deficit
	1 Center vehicles/aquatics center		15.76-Acre 0.60 vehicles/acre		8 Courts 4 vehicles/court						
	Programmatic		ITE Parking Generation (6th Ed)		Programmatic						
	344		9		32						
0%		0%		0%							
344		9		32							
Time of Day ²	% Hourly Demand	Hourly Demand	% Hourly Demand	Hourly Demand	% Hourly Demand	Hourly Demand					
12:00 AM-4:00 AM	0%	0	0%	0	0%	0	0	251	0	251	251
5:00 AM	29%	101	0%	0	0%	0	101	251	0	251	150
6:00 AM	34%	118	0%	0	0%	0	118	251	0	251	133
7:00 AM	42%	143	20%	2	28%	9	154	251	400	651	497
8:00 AM	73%	250	25%	2	33%	11	263	251	400	651	388
9:00 AM	74%	254	67%	6	56%	18	278	251	400	651	373
10:00 AM	94%	322	82%	7	61%	20	349	251	400	651	302
11:00 AM	95%	328	98%	9	68%	22	359	251	400	651	292
12:00 PM	97%	333	90%	8	93%	30	371	251	400	651	280
1:00 PM	89%	306	100%	9	70%	22	337	251	400	651	314
2:00 PM	93%	321	97%	9	86%	28	358	251	400	651	293
3:00 PM	99%	341	88%	8	100%	32	381	251	400	651	270
4:00 PM	100%	344	80%	7	91%	29	380	251	400	651	271
5:00 PM	88%	302	61%	5	93%	30	337	251	400	651	314
6:00 PM	82%	283	57%	5	95%	30	318	251	400	651	333
7:00 PM	60%	207	0%	0	0%	0	207	251	400	651	444
8:00 PM	44%	151	0%	0	0%	0	151	251	400	651	500
9:00 PM	36%	123	0%	0	0%	0	123	251	400	651	528
10:00 PM	24%	82	0%	0	0%	0	82	251	400	651	569
11:00 PM	0%	0	0%	0	0%	0	0	251	400	651	651

Bellevue Airfield Park - Aquatics Center1.22058

Weekday School Year Shared Parking Demand Estimate

Use Size Parking Rate Rate Source Unadjusted Demand ³ Reduction ¹ Adjusted Demand	Aquatics Center		Public Park		Pickleball Courts		TOTAL Shared Parking Demand	On-Site Parking Supply	Shared Parking Spaces (per Agreement)	Total Parking Supply	Parking Surplus/Deficit
	1 Center vehicles/aquatics center		15.76-Acre vehicles = 0.62(# of acres)+18.48		8 Courts 4 vehicles/court						
	Programmatic		ITE Parking Generation (6th Ed)		Programmatic						
	289		29		32						
	0%		0%		0%						
	289		29		32						
Time of Day ²	% Hourly Demand	Hourly Demand	% Hourly Demand	Hourly Demand	% Hourly Demand	Hourly Demand					
12:00 AM-4:00 AM	0%	0	0%	0	0%	0	0	251	0	251	251
5:00 AM	42%	122	0%	0	0%	0	122	251	0	251	129
6:00 AM	51%	146	0%	0	0%	0	146	251	0	251	105
7:00 AM	39%	113	28%	8	28%	9	130	251	0	251	121
8:00 AM	47%	136	33%	10	33%	11	157	251	0	251	94
9:00 AM	47%	136	56%	16	56%	18	170	251	0	251	81
10:00 AM	50%	145	61%	18	61%	20	183	251	0	251	68
11:00 AM	48%	139	68%	20	68%	22	181	251	0	251	70
12:00 PM	43%	124	93%	27	93%	30	181	251	0	251	70
1:00 PM	39%	114	70%	20	70%	22	156	251	0	251	95
2:00 PM	45%	130	86%	25	86%	28	183	251	50	301	118
3:00 PM	54%	156	100%	29	100%	32	217	251	50	301	84
4:00 PM	78%	224	91%	26	91%	29	279	251	50	301	22
5:00 PM	100%	289	93%	27	93%	30	346	251	114	365	19
6:00 PM	82%	237	95%	28	95%	30	295	251	200	451	156
7:00 PM	62%	179	0%	0	0%	0	179	251	200	451	272
8:00 PM	53%	154	0%	0	0%	0	154	251	200	451	297
9:00 PM	43%	123	0%	0	0%	0	123	251	200	451	328
10:00 PM	28%	82	0%	0	0%	0	82	251	200	451	369
11:00 PM	0%	0	0%	0	0%	0	0	251	200	451	451

Bellevue Airfield Park - Aquatics Center1.22058

Weekend Summer Shared Parking Demand Estimate

Use Size Parking Rate Rate Source Unadjusted Demand ³ Reductio ¹ Adjusted Demand	Aquatics Center		Public Park		Pickleball Courts		TOTAL Shared Parking Demand	On-Site Parking Supply	Shared Parking Spaces (per Agreement)	Total Parking Supply	Parking Surplus/Deficit
	1 Center vehicles/aquatics center		15.76-Acre 0.60 vehicles/acre		8 Courts 4 vehicles/court						
	Programmatic		ITE Parking Generation (6th Ed)		Programmatic						
	402		9		32						
0%		0%		0%							
402		9		32							
Time of Day ²	% Hourly Demand	Hourly Demand	% Hourly Demand	Hourly Demand	% Hourly Demand	Hourly Demand					
12:00 AM-4:00 AM	0%	0	0%	0	0%	0	0	251	0	251	251
5:00 AM	22%	89	0%	0	0%	0	89	251	0	251	162
6:00 AM	28%	113	0%	0	0%	0	113	251	0	251	138
7:00 AM	48%	194	20%	2	28%	9	205	251	400	651	446
8:00 AM	58%	233	25%	2	33%	11	246	251	400	651	405
9:00 AM	67%	270	67%	6	56%	18	294	251	400	651	357
10:00 AM	90%	360	82%	7	61%	20	387	251	400	651	264
11:00 AM	100%	402	98%	9	68%	22	433	251	400	651	218
12:00 PM	93%	374	90%	8	93%	30	412	251	400	651	239
1:00 PM	86%	347	100%	9	70%	22	378	251	400	651	273
2:00 PM	80%	321	97%	9	86%	28	358	251	400	651	293
3:00 PM	85%	341	88%	8	100%	32	381	251	400	651	270
4:00 PM	82%	331	80%	7	91%	29	367	251	400	651	284
5:00 PM	72%	289	61%	5	93%	30	324	251	400	651	327
6:00 PM	59%	237	57%	5	95%	30	272	251	400	651	379
7:00 PM	45%	179	0%	0	0%	0	179	251	400	651	472
8:00 PM	38%	154	0%	0	0%	0	154	251	400	651	497
9:00 PM	31%	123	0%	0	0%	0	123	251	400	651	528
10:00 PM	20%	82	0%	0	0%	0	82	251	400	651	569
11:00 PM	0%	0	0%	0	0%	0	0	251	400	651	651

Bellevue Airfield Park - Aquatics Center 1.22058

Weekday Summer Shared Parking Demand Estimate

Use Size Parking Rate Rate Source Unadjusted Demand ³ Reduction ¹ Adjusted Demand	Aquatics Center		Public Park		Pickleball Courts		TOTAL Shared Parking Demand	On-Site Parking Supply	Shared Parking Spaces (per Agreement)	Total Parking Supply	Parking Surplus/Deficit	
	1 Center vehicles/aquatics center		15.76-Acre vehicles = 0.62(# of acres)+18.48		8 Courts 4 vehicles/court							
	Programmatic		ITE Parking Generation (6th Ed)		Programmatic							
	361		29		32							
0%		0%		0%								
361		29		32								
Time of Day ²		% Hourly Demand	Hourly Demand	% Hourly Demand	Hourly Demand	% Hourly Demand	Hourly Demand					
12:00 AM-4:00 AM		0%	0	0%	0	0%	0	0	251	0	251	251
5:00 AM		12%	42	0%	0	0%	0	42	251	0	251	209
6:00 AM		25%	91	0%	0	0%	0	91	251	0	251	160
7:00 AM		34%	123	28%	8	28%	9	140	251	0	251	111
8:00 AM		41%	149	33%	10	33%	11	170	251	0	251	81
9:00 AM		67%	243	56%	16	56%	18	277	251	0	251	-26
10:00 AM		70%	254	61%	18	61%	20	292	251	0	251	-41
11:00 AM		89%	322	68%	20	68%	22	364	251	0	251	-113
12:00 PM		83%	301	93%	27	93%	30	358	251	0	251	-107
1:00 PM		88%	319	70%	20	70%	22	361	251	0	251	-110
2:00 PM		85%	306	86%	25	86%	28	359	251	50	301	-58
3:00 PM		91%	330	100%	29	100%	32	391	251	50	301	-90
4:00 PM		91%	329	91%	26	91%	29	384	251	50	301	-83
5:00 PM		100%	361	93%	27	93%	30	418	251	114	365	-53
6:00 PM		79%	286	95%	28	95%	30	344	251	200	451	107
7:00 PM		69%	248	0%	0	0%	0	248	251	200	451	203
8:00 PM		47%	171	0%	0	0%	0	171	251	200	451	280
9:00 PM		45%	163	0%	0	0%	0	163	251	200	451	288
10:00 PM		24%	88	0%	0	0%	0	88	251	200	451	363
11:00 PM		11%	41	0%	0	0%	0	41	251	200	451	410

Appendix G

Pre-Design Cost Estimate Report

PROJECT INFORMATION

Bellevue Airfield Park Master Plan

December 20, 2023

EXECUTIVE SUMMARY

<u>Owner:</u>	City of Bellevue	<u>Estimate Date:</u>	December 20, 2023
<u>Name:</u>	Bellevue Airfield Park Master Plan	<u>Building Area:</u>	130,000
<u>Location:</u>	Bellevue, WA	<u>Site Area:</u>	1,200,000
<u>Seattle Office:</u>	Roen Associates 500 Union Street, Suite 927 Seattle, WA 98101	<u>Contact Name:</u>	Dan Deymonaz Jovelyn Limbag
		<u>Telephone:</u>	(206) 343-1003
		<u>E-mail:</u>	dan@roenassociates.com jovelyn@roenassociates.com
<u>Spokane Office:</u>	Roen Associates 121 South Wall Spokane, WA 99201	<u>Contact Name:</u>	John Libenow
		<u>Telephone:</u>	(509) 838-8688
		<u>E-mail:</u>	john@roenassociates.com
<u>Project Type:</u>	Parks & Community Services		
<u>Estimate Level:</u>	PreDesign Estimate		
<u>Project Start:</u>	Q2, 2026	<u>Project Duration:</u>	24 months

DOCUMENTS REVIEWED

	<u>Document</u>	<u>A / E / C Firm</u>	<u>Date</u>
<u>Drawings:</u>	SEPA Plan	Walker Macy	11/21/2023
	Site Plan - Buckets	Walker Macy	11/21/2023
<u>Reports:</u>			

Construction Cost Summary

Owner: City of Bellevue

Project: Bellevue Airfield Park Master Plan

ESTIMATED COSTS SUMMARY

December 20, 2023

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

Construction Cost Summary

COMMENTS:

Design, Bid, Build delivery method is assumed

Assumes Aquatic Center Q2, 2026 start and a 24 month schedule

Escalation is predicted to be 4% in 2024.

Estimate excludes soft costs such as design fees, permits, testing / inspections, construction change order contingencies, loose fixtures / furnishings and sales tax.

Project Owner: City of Bellevue
Project Name: Bellevue Airfield Park Master Plan
Project Location: Bellevue, WA
Project Start Date: Q2, 2026
Estimate Date: December 20, 2023

Architect: Walker Macy
Project Duration: 24 MO
Building GSF: 130,000
Site GSF: 170,000

ESTIMATE SUMMARY - AQUATIC CENTER (Allowances & Target Value)		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
A10	Foundations	130,000	BGSF	\$ 48.11	\$ 6,254,370
A20	Basement Construction	130,000	BGSF	\$ -	\$ -
B10	Superstructure	130,000	BGSF	\$ 80.12	\$ 10,415,300
B20	Exterior Enclosure	130,000	BGSF	\$ 53.31	\$ 6,929,900
B30	Roofing	130,000	BGSF	\$ 29.19	\$ 3,794,160
C10	Interior Construction	130,000	BGSF	\$ 11.33	\$ 1,472,260
C20	Stairs	130,000	BGSF	\$ 1.42	\$ 185,000
C30	Interior Finishes	130,000	BGSF	\$ 58.15	\$ 7,559,812
D10	Conveying Systems	130,000	BGSF	\$ 1.00	\$ 130,000
D20	Plumbing	130,000	BGSF	\$ 35.87	\$ 4,663,111
D30	HVAC	130,000	BGSF	\$ 94.86	\$ 12,331,653
D40	Fire Protection	130,000	BGSF	\$ 7.03	\$ 913,900
D50	Electrical	130,000	BGSF	\$ 46.10	\$ 5,993,300
E10	Equipment	130,000	BGSF	\$ 6.93	\$ 901,000
E20	Casework & Furnishings	130,000	BGSF	\$ 5.13	\$ 667,260
F10	Special Construction	130,000	BGSF	\$ -	\$ -
F20	Selective Demolition	130,000	BGSF	\$ -	\$ -
BUILDING CONSTRUCTION SUBTOTAL					\$ 62,211,026
Design Contingency				20.00%	\$ 12,442,205
Subtotal					\$ 74,653,231
Contractor Mark Up (Overhead, Profit, Insurance, Bond, B&O Tax)				7.00%	\$ 5,225,726
Subtotal					\$ 79,878,957
Escalation to Mid-Point (See Summary)					\$ -
BUILDING GRAND TOTAL		130,000	BGSF	\$ 614.45	\$ 79,878,957

Estimate excludes soft costs such as design fees, permits, testing / inspections, construction change order contingencies, loose fixtures / furnishings and sales tax.

ESTIMATE SUMMARY		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
A10 FOUNDATIONS					
Foundation Earthwork					
	Footing Excavation and Backfill (Native Soil)	20,881	cy	\$ 45.00	\$ 939,627
	Footing Drains with Gravel	1,400	lf	\$ 30.00	\$ 42,000
Foundations					
	Spread Footings (includes reinforcing)	1,800	cy	\$ 1,200.00	\$ 2,160,000
	Continuous Footings (includes reinforcing)	311	cy	\$ 900.00	\$ 280,000
	Perimeter Stem Wall (includes reinforcing)	52	cy	\$ 2,200.00	\$ 114,644
	Perimeter Pool Walls (includes reinforcing)	447	cy	\$ 2,200.00	\$ 983,074
Slab-on-Grade					
	Slab on Grade Incl. Pool Bases (includes reinforcing, base course and vapor barrier)	100,000	sf	\$ 12.00	\$ 1,200,000
Platform Concrete					
	Poured in Place (Steps and Ramps in Pools)	1	ls	\$ 20,000.00	\$ 20,000
	Pool Detail Nosing	1	ls	\$ 3,500.00	\$ 3,500
Misc. Concrete					
	Housekeeping Pads	1,500	sf	\$ 25.00	\$ 37,500
	Locker Room Bases	2,500	sf	\$ 20.00	\$ 50,000
	Elevator Pits (includes ladder, hoist beam, sump & waterproofing)	1	ea	\$ 30,000.00	\$ 30,000
	Set Column Anchor Bolts	56	set	\$ 350.00	\$ 19,600
	Grout Baseplates	56	ea	\$ 50.00	\$ 2,800
Perimeter Insulation / Waterproofing					
	2" Rigid Polystyrene	5,600	sf	\$ 4.00	\$ 22,400
	Stem Wall Dampproofing	5,600	sf	\$ 8.50	\$ 47,600
	Water Proofing @ Pool Walls	12,065	sf	\$ 25.00	\$ 301,625
SUBTOTAL FOUNDATIONS		130,000	BGSF	\$ 48.11	\$ 6,254,370
A20 BASEMENT CONSTRUCTION					
Basement Excavation					
	Basement Excavation and Export (Check against Site Section G10)				Incl.
	Imported Fill - Allowance				Incl.
Basement Walls					
	Perimeter 8" Pool Walls (Included Above in Foundations)				Incl.
Waterproofing					
	Below Grade Assembly (Rigid Insulation, Membrane, Drain Mat, Protection Board @ Pool Walls) - Included Above in Foundations				Incl.
SUBTOTAL BASEMENT CONSTRUCTION		130,000	BGSF	\$ -	\$ -
B10 SUPERSTRUCTURE					
Structural CMU and Masonry					
	8" CMU Walls w Rebar @ Locker Rooms	10,600	sf	\$ 38.00	\$ 402,800

ESTIMATE SUMMARY		Quantity	Unit of	Unit	Total Estimated
No.	Description		Measure	Cost	Cost
Structural Steel					
	Floor & Roof Structure, Beams & Columns (includes 15% for connections)				
	Structural Framing (15 psf Allowance for Floor)	450,000	lbs	\$ 4.00	\$ 1,800,000
	Structural Roof Framing (12 psf Allowance for Floor)	1,200,000	lbs	\$ 4.00	\$ 4,800,000
	HSS Tube Steel Beams & Columns	1	ls	\$ 50,000.00	\$ 50,000
	Moment and Brace Frames (includes 25% for connections)				
	BRB's (average price per each)	24	ea	\$ 10,000.00	\$ 240,000
	Metal Decking				
	Floor Decking - Acoustical	30,000	sf	\$ 13.00	\$ 390,000
	Roofing Decking - 1.5"	100,000	sf	\$ 9.00	\$ 900,000
	Miscellaneous Metals				
	Allowance	130,000	gsf	\$ 2.50	\$ 325,000
	Plates and Measured Miscellaneous Steel Items		lbs	\$ 6.00	\$ -
	Building Canopies - Allowance	2,500	sf	\$ 30.00	\$ 75,000
	Mechanical Screen - Allowance	2,500	sf	\$ 65.00	\$ 162,500
	Elevator Pit Ladder and Hoist Beam	1	ea	\$ 5,000.00	\$ 5,000
	Structural Concrete				
	4.5" Concrete Filled Decks w Reinforcement	30,000	sf	\$ 7.50	\$ 225,000
	Fireproofing				
	Structural Steel Fireproofing				
	Sprayed Cementitious Fireproofing (Metal Deck Area)	130,000	sf	\$ 8.00	\$ 1,040,000
	Firestopping - See Interior Partitions				
SUBTOTAL SUPERSTRUCTURE		130,000	BGSF	\$ 80.12	\$ 10,415,300

B20 EXTERIOR ENCLOSURE

Exterior Wall Construction					
	Exterior Wall Assembly (GWB - Finish 1 Side, vapor barrier, metal studs 6", R-13 batt insulation, sheathing, 2 1/2" rigid insulation, WRB)	26,880	sf	\$ 40.50	\$ 1,088,640
Exterior Wall Finish					
	Masonry Veneer				
	CMU Veneer (Split Face)	5,600	sf	\$ 34.00	\$ 190,400
	Miscellaneous				
	Galvanized Steel Lintels	1	ls	\$ 25,000.00	\$ 25,000
	Sill Flashing	1,400	lf	\$ 20.00	\$ 28,000
	Metal Panels				
	Composite Metal Panel	26,880	sf	\$ 70.00	\$ 1,881,600
	Green Girt (Composite System)	26,880	sf	\$ 9.00	\$ 241,920
	Phenolic Panel - Allowance	8,064	sf	\$ 60.00	\$ 483,840
Exterior Soffits					
	Finish to Soffits (includes Framing, Sheathing & WRB)	2,800	sf	\$ 25.00	\$ 70,000

ESTIMATE SUMMARY		Quantity	Unit of	Unit	Total Estimated
No.	Description		Measure	Cost	Cost
Exterior Windows					
	Storefront / Windows, Standard Clear Anodized with Flashing	8,960	sf	110.00	\$ 985,600
	Curtain Wall, Standard Clear Anodized with Flashing	8,960	sf	150.00	\$ 1,344,000
	Premium - Spandrel Glazing	1,400	sf	15.00	\$ 21,000
	Translucent Panels (Upper Level of Exterior Walls)	4,200	sf	75.00	\$ 315,000
Louvers					
	Pre-Finished Metal Louver	1	ls	20,000.00	\$ 20,000
Exterior Doors					
	Storefront Entry Doors, Hardware, per leaf	4	ea	7,500.00	\$ 30,000
	Ext. HM Dr, HM Frame, Hardware, per leaf	12	ea	3,500.00	\$ 42,000
	Push Button ADA Auto Operators (per entrance)	2	ea	10,000.00	\$ 20,000
Overhead Doors					
	Coiling Door with Motor Operator (size)	1	ea	20,000.00	\$ 20,000
Exterior Paint & Sealants					
	Paint or Stain to Siding	5,600	sf	3.00	\$ 16,800
	Masonry Water Repellants / Anti-Graffiti Coating	5,600	sf	2.50	\$ 14,000
	Paint to HM Doors and Frames	12	ea	\$ 175.00	\$ 2,100
	Exterior - Control Joints, Caulking and Joint Sealants	130,000	gsf	\$ 0.50	\$ 65,000
Building Graphics					
	Allowance for Building Signage	1	ls	\$ 25,000.00	\$ 25,000
SUBTOTAL EXTERIOR ENCLOSURE		130,000	BGSF	\$ 53.31	\$ 6,929,900

B30 ROOFING					
Roof Coverings					
	Membrane Roofing System w/ Rigid Insulation	120,000	sf	\$ 26.00	\$ 3,120,000
	Membrane Roofing Lapping up Backside of Parapets	4,200	sf	\$ 18.00	\$ 75,600
	Membrane Roofing System at Canopies	2,500	sf	\$ 16.00	\$ 40,000
Insulation					
	Rigid Insulation at Roof				Incl.
Flashing and Sheet Metal					
	Parapet Caps and Copings	1,400	lf	\$ 35.00	\$ 49,000
	Fascia	1,400	lf	\$ 25.00	\$ 35,000
	Miscellaneous Roof Flashing and Rough Carpentry	10%	on	\$ 3,235,600	\$ 323,560
	Downspouts (Internal) - Incl. with Plumbing				Incl.
Roof Accessories					
	Walk Pads	7,500	sf	\$ 12.00	\$ 90,000
	Fall Protection Anchors	1	ls	\$ 45,000.00	\$ 45,000
	Access Ladders	2	ea	\$ 4,500.00	\$ 9,000
	Roof Hatches	2	ea	\$ 3,500.00	\$ 7,000
SUBTOTAL ROOFING		130,000	BGSF	\$ 29.19	\$ 3,794,160

ESTIMATE SUMMARY		Quantity	Unit of	Unit	Total Estimated
No.	Description		Measure	Cost	Cost
C10	INTERIOR CONSTRUCTION				
Partitions					
	GWB Partition (GWB - Finish 2 Sides, metal studs 6", 3 1/2" sound batts)	25,000	sf	\$ 19.00	\$ 475,000
	Fire Caulking at Penetrations	130,000	gsf	\$ 0.35	\$ 45,500
	Interior - Caulking and Joint Sealants	130,000	gsf	\$ 0.30	\$ 39,000
	Miscellaneous Carpentry - Allowance	130,000	gsf	\$ 1.00	\$ 130,000
	Concrete & CMU Walls - See B10 Superstructure Above				
Interior Glazing					
	Interior Storefront with 1/4" tempered glazing	2,500	sf	\$ 65.00	\$ 162,500
	HM Door Lite Glazing	480	sf	\$ 25.00	\$ 12,000
Interior Doors, Frames, Hardware					
	HM / SCW Dr, HM Frame, Hardware, Complete - per leaf	40	ea	\$ 3,600.00	\$ 144,000
	Aluminum Storefront Doors, HW, Complete - per leaf	4	ea	7,500.00	\$ 30,000
	Special Function Doors				
	Acoustical Doors / Premium	20	ea	\$ 750.00	\$ 15,000
	Access Doors and Panels	130,000	gsf	\$ 0.10	\$ 13,000
Interior Railings					
	Balcony Rails, Heavy Architectural	300	lf	\$ 325.00	\$ 97,500
Fittings / Specialties					
	Visual Display Specialties				
	Marker Boards	1	ls	\$ 15,000.00	\$ 15,000
	Signage (Code and Wayfinding)	130,000	gsf	\$ 0.75	\$ 97,500
	Toilet Compartments (Metal) (Stainless Steel) (Solid Polymer) (P-Lam) (Phenolic)				
	ADA Stalls	4	stalls	\$ 1,300.00	\$ 5,200
	Standard Stalls	8	stalls	\$ 1,200.00	\$ 9,600
	Urinal Screens	4	ea	\$ 450.00	\$ 1,800
	Toilet Accessories				
	Baby Changing Station	2	ea	\$ 750.00	\$ 1,500
	Coat Hook	16	ea	\$ 45.00	\$ 720
	Electric Hand Dryer	4	ea	\$ 200.00	\$ 800
	Folding Shower Seat	4	ea	\$ 500.00	\$ 2,000
	Framed Mirror	8	ea	\$ 250.00	\$ 2,000
	Grab Bars - Large ADA Stall (3 Total: 1 - Vertical, 2- Horizontal)	4	set	\$ 400.00	\$ 1,600
	Grab Bars - Shower Stall (3 Total: 1 - Vertical, 2- Horizontal)	2	set	\$ 400.00	\$ 800
	Grab Bars - Small ADA Stall (4 Total: 2 - Vertical, 2- Horizontal)	8	set	\$ 450.00	\$ 3,600
	Mop and Broom Holder	2	ea	\$ 50.00	\$ 100
	Paper Towel Dispenser	8	ea	\$ 175.00	\$ 1,400
	Sanitary Napkin Dispenser	12	ea	\$ 75.00	\$ 900
	Sanitary Napkin Disposal	12	ea	\$ 85.00	\$ 1,020

ESTIMATE SUMMARY		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
	Shower Curtain	8	ea	\$ 100.00	\$ 800
	Shower Curtain Rod	8	ea	\$ 50.00	\$ 400
	Soap Dispenser	8	ea	\$ 85.00	\$ 680
	Toilet Paper Dispenser	12	ea	\$ 60.00	\$ 720
101100	Toilet Seat Cover Dispenser	12	ea	\$ 120.00	\$ 1,440
	Trash Receptacle (Recessed)	4	ea	\$ 375.00	\$ 1,500
	Operable Partitions				
	Folding Panel Partitions - Allowance at Lg. Classrooms	3	ea	\$ 15,000.00	\$ 45,000
	Fire Protection Equipment				
	Fire Extinguishers	32	ea	\$ 65.00	\$ 2,080
	Fire Extinguisher Cabinets	32	ea	\$ 175.00	\$ 5,600
	Knox Box		ea	\$ 800.00	\$ -
	Lockers (Metal) (Phenolic)				
	Double Tier	1	ls	\$ 40,000.00	\$ 40,000
	Misc. Specialties Allowance (FECs, Corner Guards, etc...)	130,000	gsf	\$ 0.50	\$ 65,000
SUBTOTAL INTERIOR CONSTRUCTION		130,000	BGSF	\$ 11.33	\$ 1,472,260

C20 STAIRS

Stair Construction (includes concrete, finishes and guard/hand rails)

	Pre-Engineered Metal Stair, per floor to floor flight w/ landing	1	ea	\$ 35,000.00	\$ 35,000
	Feature Stair	2	ea	\$ 75,000.00	\$ 150,000
SUBTOTAL STAIRS		130,000	BGSF	\$ 1.42	\$ 185,000

C30 INTERIOR FINISHES

Wall Finishes

	Paint to Walls, Doors, Frames and Miscellaneous	130,000	gsf	\$ 5.00	\$ 650,000
	Restroom / Locker Wall Tile	7,920	sf	\$ 30.00	\$ 237,600
	Acoustical Wall Panels - Composite Allowance				
	Composite Covered, 2" Thick Acoustic Panels, Perforated Wood Acoustic Panels, 2' Square Diamond Shaped Diffusers	10752	sf	\$ 30.00	\$ 322,560
	VWC - Vinyl Wallcovering - Allowance	1	ls	\$ 30,000.00	\$ 30,000
	FRP - Fiberglass Reinforced Panel - Allowance	1	ls	\$ 10,000.00	\$ 10,000
	MDF - Medium Density Fiberboard - Allowance	1	ls	\$ 25,000.00	\$ 25,000
	Mirrors - Allowance	2,000	sf	\$ 25.00	\$ 50,000
	Miscellaneous Finish Carpentry Allowance	130,000	gsf	\$ 0.50	\$ 65,000

Bases

	Rubber Base	1,320	lf	\$ 4.00	\$ 5,280
	Tile Base	330	lf	\$ 30.00	\$ 9,900
	Epoxy Coved Base @ Pool Area	980	lf	\$ 18.00	\$ 17,640

ESTIMATE SUMMARY		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
Floor Finishes					
	Carpet - Allowance	10,000	sf	\$ 6.00	\$ 60,000
	Ceramic/Quarry Tile - Allowance	10,000	sf	\$ 30.00	\$ 300,000
	Rubber Athletic Flooring -Allowance	10,000	sf	\$ 18.00	\$ 180,000
	Polished or Honed Concrete - Allowance	18,000	sf	\$ 7.50	\$ 135,000
	Specialty Surface at Pool Areas	90,000	sf	\$ 18.00	\$ 1,620,000
	Pool Leading Edge Stone / Tile Finish Detail	1,532	lf	\$ 150.00	\$ 229,800
	Floor Prep & Protection	139,532	sf	\$ 1.00	\$ 139,532
Ceiling Finishes					
	ACT Ceiling (2x2) - Aluminum	10,000	sf	\$ 27.00	\$ 270,000
	Acoustic Wood / Composite Panels Ceiling	30,000	sf	\$ 45.00	\$ 1,350,000
	Perimeter Trim	1,300	lf	\$ 25.00	\$ 32,500
	Ceiling Diffuser Panels	35,000	sf	\$ 45.00	\$ 1,575,000
	Exposed Ceiling, Painted	70,000	sf	\$ 3.50	\$ 245,000
SUBTOTAL INTERIOR FINISHES		130,000	BGSF	\$ 58.15	\$ 7,559,812
D10 CONVEYING SYSTEMS					
Elevators & Lifts					
	Hydraulic Elevator (2) Stops	2	stop	\$ 65,000.00	\$130,000
SUBTOTAL CONVEYING SYSTEMS		130,000	BGSF	\$ 1.00	\$ 130,000
D20 PLUMBING					
Plumbing					
	General Plumbing System	1	ls	\$ 1,894,100	\$ 1,894,100
	Pool Systems & Equipment Allowance	1	ls	\$ 2,445,801	\$ 2,445,801
	Non-suitable Excavation and Backfill Allowance	1	ls	\$ 131,264	\$ 131,264
	General Conditions	1	ls	\$ 181,806	\$ 181,806
	Trucking and Deliveries	1	ls	\$ 10,140	\$ 10,140
SUBTOTAL PLUMBING		130,000	BGSF	\$ 35.87	\$ 4,663,111
D30 HVAC					
HVAC					
	Hydronic Heating and Cooling Piping	1	ls	\$ 426,864	\$ 426,864
	Hydronic Heating and Cooling Pipe Insulation	1	ls	\$ 30,048	\$ 30,048
	HVAC Equipment - Dry	1	ls	\$ 6,709,144	\$ 6,709,144
	HVAC Ductwork, Grilles and Air Devices	1	ls	\$ 3,539,934	\$ 3,539,934
	Duct Insulation, Sound Lining	1	ls	\$ 180,552	\$ 180,552
	Controls/EMCS	1	ls	\$ 920,982	\$ 920,982
	Air Balancing (TAB)	1	ls	\$ 77,334	\$ 77,334

ESTIMATE SUMMARY		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
	3rd Party Commissioning Assistance	1	ls	\$ 229,840	\$ 229,840
	Duct Pressure Testing	1	ls	\$ 14,872	\$ 14,872
	Seismic	1	ls	\$ 10,137	\$ 10,137
	General Conditions	1	ls	\$ 181,806	\$ 181,806
	Trucking and Deliveries	1	ls	\$ 10,140	\$ 10,140
SUBTOTAL HVAC		130,000	BGSF	\$ 94.86	\$ 12,331,653

D40 FIRE PROTECTION					
Fire Protection					
	Sprinkler System	130,000	gsf	\$ 7.03	\$913,900
SUBTOTAL FIRE PROTECTION		130,000	BGSF	\$ 7.03	\$ 913,900

D50 ELECTRICAL					
Electrical					
	Distribution	130,000	gsf	\$ 5.00	\$ 650,000
	Feeders	130,000	gsf	\$ 3.80	\$ 494,000
	Metering/Power Monitoring System	130,000	gsf	\$ 1.00	\$ 130,000
	Inverter	130,000	gsf	\$ 0.29	\$ 38,000
	Grounding System	130,000	gsf	\$ 0.45	\$ 58,500
	Mechanical Equipment and Branch	130,000	gsf	\$ 5.50	\$ 715,000
	Power Devices and Branch, EMT concealed	130,000	gsf	\$ 2.20	\$ 286,000
	Lighting and Branch, EMT installation	130,000	gsf	\$ 12.00	\$ 1,560,000
	Lighting/Receptacle Control	130,000	gsf	\$ 5.00	\$ 650,000
	Fire Alarm, EMT concealed	130,000	gsf	\$ 4.25	\$ 552,500
	LV System Rough-in (Tele/Data)	130,000	gsf	\$ 0.25	\$ 32,500
	LV System Install	130,000	gsf	\$ 1.80	\$ 234,000
	CCTV System Rough-In	130,000	gsf	\$ 0.19	\$ 24,700
	CCTV System Install	130,000	gsf	\$ 1.20	\$ 156,000
	Access Control Rough-In	130,000	gsf	\$ 0.15	\$ 19,500
	Access Control System	130,000	gsf	\$ 1.00	\$ 130,000
	A/V System	130,000	gsf	\$ 0.22	\$ 28,600
	A/V Rough-in	130,000	gsf	\$ 0.80	\$ 104,000
	DAS	130,000	gsf	\$ 1.00	\$ 130,000
SUBTOTAL ELECTRICAL		130,000	BGSF	\$ 46.10	\$ 5,993,300

E10 EQUIPMENT					
112300	Commercial Laundry Equipment				
	Washer	4	ea	\$ 5,500.00	\$ 22,000
	Dryer	4	ea	\$ 7,500.00	\$ 30,000

ESTIMATE SUMMARY		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
113000	Residential Equipment				
	Refrigerator	2	ea	\$ 1,500.00	\$ 3,000
	Microwave	4	ea	\$ 350.00	\$ 1,400
	Range	2	ea	\$ 1,200.00	\$ 2,400
	Range Hood	2	ea	\$ 600.00	\$ 1,200
	Dishwasher	2	ea	\$ 900.00	\$ 1,800
	Ice Machine	2	ea	\$ 3,500.00	\$ 7,000
115200	Projection Screen Equipment				
	Ceiling Recessed	6	ea	\$ 3,500.00	\$ 21,000
	Surface Mounted	2	ea	\$ 600.00	\$ 1,200
	Athletic Equipment				
	Leader and Result Boards	2	ea	\$ 20,000.00	\$ 40,000
	Pool Lane and Pool Accessories	1	ls	\$ 100,000.00	\$ 100,000
	Leisure Pool Play Equipment	1	ls	\$ 150,000.00	\$ 150,000
	Installation w Trucking and Delivery	1	ls	\$ 25,000.00	\$ 25,000
	Seating Systems				
	Bleacher Seating, per seat	2,200	ea	\$ 225.00	\$ 495,000
	SUBTOTAL EQUIPMENT	130,000	BGSF	\$ 6.93	\$ 901,000
E20	CASEWORK & FURNISHINGS				
	Fixed Casework				
	Wall Mounted, Solid Surface, Restroom Counters, Lower and Upper Casework, Classroom Case Work, Storage Shelving, Display Case & Misc. Casework	40,000	sf	\$ 7.50	\$ 300,000
	Window Treatment				
	Roller Shades - Interior Storefront	2,980	sf	\$ 15.00	\$ 44,700
	Roller Shades - Exterior	17,920	sf	\$ 18.00	\$ 322,560
	Moveable Furnishings				
	EXCLUDED				
	SUBTOTAL FURNISHINGS	130,000	BGSF	\$ 5.13	\$ 667,260
F10	SPECIAL CONSTRUCTION				
	Special Construction				
	SUBTOTAL SPECIAL CONSTRUCTION	130,000	BGSF	\$ -	\$ -
F20	SELECTIVE BUILDING DEMOLITION				
	Building Demolition				
	Whole Building Demolition (Check in Site Section G10)		sf	\$ 10.00	\$ 0
	Hazardous Components Abatement				
	None				
	SUBTOTAL SELECTIVE BUILDING DEMOLITION	130,000	BGSF	\$ -	\$ -

ESTIMATE SUMMARY		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
Z10	GENERAL REQUIREMENTS				
	General Conditions				
	See Summary				
	SUBTOTAL GENERAL REQUIREMENTS	130,000	BGSF	\$ -	\$ -

Project Owner: City of Bellevue
Project Name: Bellevue Airfield Park Master Plan
Project Location: Bellevue, WA
Project Start Date: Q2, 2026
Estimate Date: December 20, 2023

Architect: Walker Macy
Project Duration: 24 MO
Building GSF: 130,000
Site GSF: 170,000

ESTIMATE SUMMARY - SITEWORK <i>(Allowances & Target Value)</i>		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
G10	Site Preparation	170,000	SGA	\$ 45.76	\$ 7,779,585
G20	Site Improvements	170,000	SGA	\$ 2.98	\$ 506,932
G30	Site Civil / Mech Utilities	170,000	SGA	\$ 6.25	\$ 1,062,500
G40	Site Electrical Utilities	170,000	SGA	\$ 0.97	\$ 165,000
G50	Other Site Construction	170,000	SGA	\$ -	\$ -
SITEWORK SUBTOTAL					\$ 9,514,017
Design Contingency				20.00%	\$ 1,902,803
Subtotal					\$ 11,416,820
Contractor Mark Up (Overhead, Profit, Insurance, Bond, B&O Tax)				7.00%	\$ 799,177
Subtotal					\$ 12,215,998
Escalation to Mid-Point (See Summary)					\$ -
SITE GRAND TOTAL		170,000	SGA	\$ 71.86	\$ 12,215,998

Estimate excludes soft costs such as design fees, permits, testing / inspections, construction change order contingencies, loose fixtures / furnishings and sales tax.

ESTIMATE SUMMARY		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
G10	SITE PREPARATION				
	General Sitework Requirements				
	Mobilization	1	ls	\$ 75,000.00	\$ 75,000
	Site Layout & Potholing	1	ls	\$ 15,000.00	\$ 15,000
	Traffic Control (for entire project)	8	weeks	\$ 6,500.00	\$ 52,000
	Site Improvements Demolition & Relocation				
	Demo Paving				
	Remove Misc. Asphalt & Concrete Paving	1	ls	\$ 10,000.00	\$ 10,000
	Saw Cut Asphalt Paving	1	ls	\$ 3,000.00	\$ 3,000
	Demo Landscaping				
	Remove Native Planting Areas	1	ls	\$ 5,000.00	\$ 5,000
	Remove Trees	30	ea	\$ 250.00	\$ 7,500
	Demo Utilities				
	Piping (Water, Manhole, & Catch Basin)	1	ls	\$ 20,000.00	\$ 20,000
	Misc. Site Clearing	170,000	sga	\$ 0.25	\$ 42,500
	Site Earthwork				
	Temporary Construction Fencing	1,620	lf	\$ 15.00	\$ 24,300
	TESC Erosion Control - Filter Fabric Fence, Catch Basin Inlet Protection & Stabilized Construction Entry	1	ls	\$ 20,000.00	\$ 20,000
	Tree Protection Fencing	1	ls	\$ 15,000.00	\$ 15,000
	Contractor Access and Laydown Area	1	ls	\$ 7,500.00	\$ 7,500
	Clear and Grub	170,000	sga	\$ 0.35	\$ 59,500
	Excavation				
	Swimming Pools (5 ea) Export Unsuitable - Allowance	10,866	cy	\$ 65.00	\$ 706,285
	Export Unsuitable - Allowance	6,296	cy	\$ 65.00	\$ 409,259
	Imported Fill - Allowance (Loading Existing Soils)	15,741	cy	\$ 55.00	\$ 865,741
	Shoring (GEO Piers / Piles) @ Aquatic Center Foundations - Allowance	100,000	sf	\$ 50.00	\$ 5,000,000
	Building Pad	100,000	sf	\$ 1.25	\$ 125,000
	LFG - Venting Modification (Separate Monitoring Well)	100,000	sf	\$ 2.50	\$ 250,000
	Basement Excavation and Export (Check against Building A20)				Incl.
	Dewatering - Allowance (Sediment Tanks, Pumps, Pipe & Filter)	1	ls	\$ 46,000.00	\$ 46,000
	Baker Tank and Pump - Rental	6	mo	\$ 3,500.00	\$ 21,000
	Foundation Earthwork				
	Footing Excavation and Backfill	In Building Section A10			
	Footing Drains with Gravel	In Building Section A10			
	Hazardous Waste Remediation				
	None Included				
	SUBTOTAL SITE PREPARATON	170,000	SGA	\$ 45.76	\$ 7,779,585
G20	SITE IMPROVEMENTS				
	Concrete Site Work (Base Courses Included)				
	Curbs - Standard	1,615	lf	\$ 25.00	\$ 40,375

ESTIMATE SUMMARY		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
	Concrete Driveway Entries over 6" crushed rock	1	ea	\$ 4,500.00	\$ 4,500
	Heavy Duty Concrete @ Service and Loading Dock Area	5,216	sf	\$ 15.00	\$ 78,240
	Concrete Walkways	6,000	sf	\$ 9.50	\$ 57,000
	Concrete Stairs on Grade	70	sf	\$ 45.00	\$ 3,150
Site Development					
	Monument Sign - Allowance	1	ls	\$ 15,000.00	\$ 15,000
	Flagpole	1	ls	\$ 3,500.00	\$ 3,500
	Bike Rack	2	ea	\$ 1,250.00	\$ 2,500
	Park Benches				
	Bench - Park Style	2	ea	\$ 1,200.00	\$ 2,400
	Courtyard Table with Chairs	2	ea	\$ 3,500.00	\$ 7,000
Landscaping/Irrigation					
	Irrigation - General Landscaping	40,000	sf	\$ 3.00	\$ 120,000
	Irrigation - Natural Area	40,000	sf	\$ 0.50	\$ 20,000
	Place Topsoil (Import from offsite)	993	cy	\$ 45.00	\$ 44,667
	Planter Shrubs and Ground Cover	16,000	sf	\$ 5.00	\$ 80,000
	Trees	44	ea	\$ 650.00	\$ 28,600
SUBTOTAL SITE IMPROVEMENTS		170,000	SGA	\$ 2.98	\$ 506,932

G30 SITE CIVIL / MECHANICAL UTILITIES

Water Service

Water Service Utilities (Incl. Tie-in to Existing, Water/Fire Line, Water Meter, Irrigation Meter, Valve, Domestic Water, Fire Department Connection & Existing Street Surface Repair/Traffic Control) - Allowance	170,000	sga	\$ 1.75	\$ 297,500
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Sanitary Sewer Systems

Sanitary Sewer Systems (Incl. Tie-in to Existing, Sewer Line, Cleanouts, Manhole, Septic System & Drain Field and Associated System & Existing Street Surface Repair/Traffic Control) - Allowance	170,000	sga	\$ 0.50	\$ 85,000
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Storm Drainage

Storm Drainage (Incl. Tie-in to Existing, Drain Line, Cleanouts, Catch Basin, Bioretention & Existing Street Surface Repair/Traffic Control) - Allowance	170,000	sga	\$ 4.00	\$ 680,000
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SUBTOTAL SITE CIVIL / MECHANICAL UTILITIES	170,000	SGA	\$ 6.25	\$ 1,062,500
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G40 SITE ELECTRICAL UTILITIES

Electrical and Telecom Utilities

Electrical Utility	1	ls	\$ 65,000.00	\$ 65,000
Tele/Data Utility	1	ls	\$ 25,000.00	\$ 25,000
Site Lighting (Excavation Branch and Pole Bases)	1	ls	\$ 75,000.00	\$ 75,000

SUBTOTAL SITE ELECTRICAL UTILITIES	170,000	SGA	\$ 0.97	\$ 165,000
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<i>ESTIMATE SUMMARY</i>		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
G50	OTHER SITE CONSTRUCTION				
	Other Site Construction				
	SUBTOTAL OTHER SITE CONSTRUCTION	170,000	SGA	\$ -	\$ -
Z10	GENERAL REQUIREMENTS				
	General Conditions				
	See Summary				
	SUBTOTAL GENERAL REQUIREMENTS	170,000	SGA	\$ -	\$ -

Project Owner: City of Bellevue
Project Name: Bellevue Airfield Park Master Plan
Project Location: Bellevue, WA
Project Start Date: Q2, 2026
Estimate Date: December 20, 2023

Architect: Walker Macy
Project Duration: 24 MO
Building GSF: N/A
Site GSF: 470,000

ESTIMATE SUMMARY - GAS MITIGATION / LANDFILL (Allowances & Target Value)		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
G10	Site Preparation	470,000	SGA	\$ 8.14	\$ 3,827,300
G20	Site Improvements	470,000	SGA	\$ -	\$ -
G30	Site Civil / Mech Utilities	470,000	SGA	\$ -	\$ -
G40	Site Electrical Utilities	470,000	SGA	\$ 0.69	\$ 325,000
G50	Other Site Construction	470,000	SGA	\$ -	\$ -
SITEWORK SUBTOTAL					\$ 4,152,300
Design Contingency				20.00%	\$ 830,460
Subtotal					\$ 4,982,760
Contractor Mark Up (Overhead, Profit, Insurance, Bond, B&O Tax)				7.00%	\$ 348,793
Subtotal					\$ 5,331,553
Escalation to Mid-Point (See Summary)					\$ -
SITE GRAND TOTAL		470,000	SGA	\$ 11.34	\$ 5,331,553

Estimate excludes soft costs such as design fees, permits, testing / inspections, construction change order contingencies, loose fixtures / furnishings and sales tax.

ESTIMATE SUMMARY		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
G10 SITE PREPARATION					
General Sitework Requirements					
	Mobilization	1	ls	\$ 100,000.00	\$ 100,000
	Site Layout & Existing LFG Line Verification	1	ls	\$ 25,000.00	\$ 25,000
	Traffic Control (for entire project)	8	weeks	\$ 6,500.00	\$ 52,000
Site Improvements Demolition & Relocation					
	Misc. Site Demolition	470,000	sga	\$ 0.25	\$ 117,500
	Misc. Site Clearing	1	ls	\$ 25,000	\$ 25,000
Site Earthwork					
	Temporary Construction Fencing	3,150	lf	\$ 12.00	\$ 37,800
	TESC Erosion Control - Filter Fabric Fence, Catch Basin Inlet Protection & Stabilized Construction Entry	1	ls	\$ 20,000.00	\$ 20,000
	LFG - Mitigation Barrier (Vent Layer)	100,000	sf	\$ 24.00	\$ 2,400,000
	LFG - Mitigation / Re-route Vents @ Aquatic Center Bldg.	1	ls	\$ 1,000,000.00	\$ 1,000,000
	Dewatering - Allowance	1	ls	\$ 50,000.00	\$ 50,000
Foundation Earthwork					
	Footing Excavation and Backfill			In Building Section A10	
	Footing Drains with Gravel			In Building Section A10	
Hazardous Waste Remediation					
	None Included				
SUBTOTAL SITE PREPARATON		470,000	SGA	\$ 8.14	\$ 3,827,300
G20 SITE IMPROVEMENTS					
Site Improvements					
SUBTOTAL SITE IMPROVEMENTS		470,000	SGA	\$ -	\$ -
G30 SITE CIVIL / MECHANICAL UTILITIES					
Site Civil / Mechanical Utilities					
SUBTOTAL SITE CIVIL / MECHANICAL UTILITIES		470,000	SGA	\$ -	\$ -
G40 SITE ELECTRICAL UTILITIES					
Site Electrical Utilities					
	Temporary Site Power	1	ls	\$ 175,000.00	\$ 175,000
	Power Distribution - Monitoring Well Pumps (Allowance)	1	ls	\$ 150,000.00	\$ 150,000
SUBTOTAL SITE ELECTRICAL UTILITIES		470,000	SGA	\$ 0.69	\$ 325,000
G50 OTHER SITE CONSTRUCTION					
Other Site Construction					
SUBTOTAL OTHER SITE CONSTRUCTION		470,000	SGA	\$ -	\$ -

ESTIMATE SUMMARY		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
Z10	GENERAL REQUIREMENTS				
	General Conditions				
	See Summary				
	SUBTOTAL GENERAL REQUIREMENTS	470,000	SGA	\$ -	\$ -

Project Owner: City of Bellevue
Project Name: Bellevue Airfield Park Master Plan
Project Location: Bellevue, WA
Project Start Date: Q2, 2026
Estimate Date: December 20, 2023

Architect: Walker Macy
Project Duration: 24 MO
Building GSF: 640
Site GSF: 135,290

ESTIMATE SUMMARY - RESTROOM <i>(Allowances & Target Value)</i>		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
A10	Foundations	640	BGSF	\$ 70.84	\$ 45,340
A20	Basement Construction	640	BGSF	\$ -	\$ -
B10	Superstructure	640	BGSF	\$ 54.04	\$ 34,588
B20	Exterior Enclosure	640	BGSF	\$ 160.47	\$ 102,703
B30	Roofing	640	BGSF	\$ 43.00	\$ 27,521
C10	Interior Construction	640	BGSF	\$ 49.31	\$ 31,561
C20	Stairs	640	BGSF	\$ -	\$ -
C30	Interior Finishes	640	BGSF	\$ 60.45	\$ 38,690
D10	Conveying Systems	640	BGSF	\$ -	\$ -
D20	Plumbing	640	BGSF	\$ 168.99	\$ 108,151
D30	HVAC	640	BGSF	\$ 27.83	\$ 17,810
D40	Fire Protection	640	BGSF	\$ 8.97	\$ 5,738
D50	Electrical	640	BGSF	\$ 82.81	\$ 53,000
E10	Equipment	640	BGSF	\$ -	\$ -
E20	Casework & Furnishings	640	BGSF	\$ -	\$ -
F10	Special Construction	640	BGSF	\$ -	\$ -
F20	Selective Demolition	640	BGSF	\$ -	\$ -
BUILDING CONSTRUCTION SUBTOTAL					\$ 465,102
Design Contingency				20.00%	\$ 93,020
Subtotal					\$ 558,123
Contractor Mark Up (Overhead, Profit, Insurance, Bond, B&O Tax)				7.00%	\$ 39,069
Subtotal					\$ 597,191
Escalation to Mid-Point (See Summary)					\$ -
BUILDING GRAND TOTAL		640	BGSF	\$ 933.11	\$ 597,191

Estimate excludes soft costs such as design fees, permits, testing / inspections, construction change order contingencies, loose fixtures / furnishings and sales tax.

ESTIMATE SUMMARY		Quantity	Unit of	Unit	Total Estimated
No.	Description		Measure	Cost	Cost
A10	FOUNDATIONS				
	Foundation Earthwork				
	Footing Excavation and Backfill (Native Soil)	96	cy	\$ 45.00	\$ 4,330
	Footing Drains with Gravel	130	lf	\$ 30.00	\$ 3,900
	Foundations				
	Spread Footings (includes reinforcing)	1	cy	\$ 2,120.00	\$ 1,256
	Continuous Footings (includes reinforcing)	5	cy	\$ 1,260.00	\$ 6,825
	Perimeter Stem Wall (includes reinforcing)	6	cy	\$ 3,150.00	\$ 18,958
	Slab-on-Grade				
	Slab on Grade (includes reinforcing, base course and vapor barrier)	640	sf	\$ 10.20	\$ 6,528
	Perimeter Insulation / Waterproofing				
	2" Rigid Polystyrene	520	sf	\$ 4.00	\$ 2,080
	Stem Wall Dampproofing	325	sf	\$ 4.50	\$ 1,463
	SUBTOTAL FOUNDATIONS	640	BGSF	\$ 70.84	\$ 45,340
A20	BASEMENT CONSTRUCTION				
	Basement Excavation				
	SUBTOTAL BASEMENT CONSTRUCTION	640	BGSF	\$ -	\$ -
B10	SUPERSTRUCTURE				
	Structural Wood Framing				
	Roof Structure, Beams & Columns				
	Dimensional Lumber				
	Framing Areas (Soffit/Eaves/Lookouts/Overhangs)	704	sf	30.00	\$ 21,120
	Engineered Lumber				
	Beams & Columns (Glulams, Parallams, LVLs)	704	sf	8.50	\$ 5,984
	Sheathing				
	Plywood Sheathing	704	sf	4.50	\$ 3,168
	Connectors, Rough Hardware and Miscellaneous Blocking				
	Dimensional Lumber (includes sheathing)	10%	on	\$ 24,288.00	\$ 2,429
	Engineered Lumber (includes sheathing)	15%	on	\$ 5,984.00	\$ 898
	Hold Downs - Allowance	9	ea	\$ 110.00	\$ 990
	SUBTOTAL SUPERSTRUCTURE	640	BGSF	\$ 54.04	\$ 34,588
B20	EXTERIOR ENCLOSURE				
	Exterior Wall Construction				
	Exterior GWB Wall Assembly	1,260	sf	\$ 28.50	\$ 35,910
	Loadbearing CMU or Concrete Walls - In B10 Superstructure Above				
	Exterior Wall Finish				
	Masonry Veneer	315	sf	\$ 42.00	\$ 13,230
	Fiber Cement Siding	945	sf	\$ 22.00	\$ 20,790

ESTIMATE SUMMARY		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
Exterior Soffits					
	Fiber Cement Panel Finish to Soffits (includes Framing, Sheathing & WRB) @ Roof	64	sf	\$ 20.00	\$ 1,280
Exterior Windows					
	Storefront / Windows, Standard Clear Anodized with Flashing	126	sf	\$ 110.00	\$ 13,860
	Clerestory, Standard Clear Anodized with Flashing	48	sf	\$ 150.00	\$ 7,200
Exterior Doors					
	Ext. HM Dr, HM Frame, Hardware, per leaf	2	ea	\$ 3,500.00	\$ 7,000
Exterior Paint & Sealants					
	Paint or Stain to Siding	945	sf	\$ 2.50	\$ 2,363
	Exterior - Control Joints, Caulking and Joint Sealants	640	gsf	\$ 0.50	\$ 320
Building Graphics					
	Allowance for Building Signage	1	ls	\$ 750.00	\$ 750
SUBTOTAL EXTERIOR ENCLOSURE		640	BGSF	\$ 160.47	\$ 102,703
B30 ROOFING					
Roof Coverings					
	Standing Seam Metal Panel w/ Rigid Insulation	704	sf	\$ 27.00	\$ 19,008
Flashing and Sheet Metal					
	Perimeter Flashing and Fascia Metals	116	lf	\$ 25.00	\$ 2,888
	Miscellaneous Roof Flashing and Rough Carpentry	10%	on	\$ 19,008	\$ 1,901
	Gutters	105	lf	\$ 25.00	\$ 2,625
	Downspouts	4	ea	\$ 275.00	\$ 1,100
SUBTOTAL ROOFING		640	BGSF	\$ 43.00	\$ 27,521
C10 INTERIOR CONSTRUCTION					
Partitions					
	GWB Interior Wall / Partition	350	sf	\$ 25.00	\$ 8,750
	Fire Caulking at Penetrations	640	gsf	\$ 0.35	\$ 224
	Interior - Caulking and Joint Sealants	640	gsf	\$ 0.30	\$ 192
	Miscellaneous Carpentry - Allowance	640	gsf	\$ 1.00	\$ 640
Concrete & CMU Walls - See B10 Superstructure Above					
Interior Doors, Frames, Hardware					
	HM / SCW Dr, HM Frame, Hardware, Complete - per leaf	2	ea	\$ 3,600.00	\$ 7,200
Fittings / Specialties					
	Signage (Code and Wayfinding)	640	gsf	\$ 1.75	\$ 1,120
Toilet Compartments (Metal) (Stainless Steel) (Solid Polymer) (P-Lam) (Phenolic)					
	ADA Stalls	2	stalls	\$ 1,300.00	\$ 2,600
	Standard Stalls	3	stalls	\$ 1,100.00	\$ 3,300
	Urinal Screens	1	ea	\$ 350.00	\$ 350

ESTIMATE SUMMARY		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
101400	Toilet Accessories				
102800	Baby Changing Station	1	ea	\$ 750.00	\$ 750
	Coat Hook	5	ea	\$ 45.00	\$ 225
	Framed Mirror	8	ea	\$ 150.00	\$ 1,200
	Grab Bars - Large ADA Stall (3 Total: 1 - Vertical, 2- Horizontal)	2	set	\$ 400.00	\$ 800
	Mop and Broom Holder	2	ea	\$ 50.00	\$ 100
	Paper Towel Dispenser	2	ea	\$ 175.00	\$ 350
	Sanitary Napkin Dispenser	1	ea	\$ 75.00	\$ 75
	Sanitary Napkin Disposal	3	ea	\$ 85.00	\$ 255
	Soap Dispenser	8	ea	\$ 85.00	\$ 680
	Toilet Paper Dispenser	5	ea	\$ 60.00	\$ 300
	Toilet Seat Cover Dispenser	5	ea	\$ 120.00	\$ 600
	Trash Receptacle (Recessed)	2	ea	\$ 325.00	\$ 650
	Fire Protection Equipment				
	Fire Extinguishers	1	ea	\$ 65.00	\$ 65
	Fire Extinguisher Cabinets	1	ea	\$ 175.00	\$ 175
	Misc. Specialties Allowance (FECs, Corner Guards, etc...)	640	gsf	\$ 1.50	\$ 960
SUBTOTAL INTERIOR CONSTRUCTION		640	BGSF	\$ 49.31	\$ 31,561
C20 STAIRS					
Stairs					
SUBTOTAL STAIRS		640	BGSF	\$ -	\$ -
C30 INTERIOR FINISHES					
Wall Finishes					
	Paint to Walls, Doors, Frames and Miscellaneous	640	gsf	\$ 5.00	\$ 3,200
	Restroom Wall Tile	696	sf	\$ 30.00	\$ 20,880
	Miscellaneous Finish Carpentry Allowance	640	gsf	\$ 1.75	\$ 1,120
Bases					
	Tile Base	87	lf	\$ 30.00	\$ 2,610
Floor Finishes					
	Sealed Concrete	640	sf	\$ 3.00	\$ 1,920
	Floor Prep & Protection	640	sf	\$ 2.00	\$ 1,280
Ceiling Finishes					
	GWB Ceiling, Painted	640	sf	\$ 12.00	\$ 7,680
SUBTOTAL INTERIOR FINISHES		640	BGSF	\$ 60.45	\$ 38,690
D10 CONVEYING SYSTEMS					
Conveying Systems					
SUBTOTAL CONVEYING SYSTEMS		640	BGSF	\$ -	\$ -

ESTIMATE SUMMARY		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
D20	PLUMBING				
	Plumbing				
	General Conditions	1	ls	\$ 1,673.00	\$ 1,673
	Non-suitable Excavation and Backfill Allowance	1	ls	\$ 2,701.00	\$ 2,701
	Demo	1	ls	\$ 4,458.00	\$ 4,458
	Sanitary Waste Piping Below Grade	1	ls	\$ 4,329.00	\$ 4,329
	Domestic Water Piping Below Grade	1	ls	\$ 2,453.00	\$ 2,453
	Sanitary Waste Piping Above Grade	1	ls	\$ 8,748.00	\$ 8,748
	Domestic Water Piping Above Grade	1	ls	\$ 12,922.00	\$ 12,922
	Stainless Steel Water Closet ADA	6	ea	\$ 2,897.50	\$ 17,385
	Stainless Steel Water Lavatory ADA	6	ea	\$ 2,052.50	\$ 12,315
	Drinking Fountain	1	ea	\$ 7,134.00	\$ 7,134
	Hose Bib	4	ea	\$ 840.50	\$ 3,362
	Trap Primer	1	ea	\$ 1,038.00	\$ 1,038
	Floor Drains, Trap Seals and Cleanouts	1	ls	\$ 714.00	\$ 714
	Water Closet Carriers	6	ea	\$ 1,055.17	\$ 6,331
	BFP, PRV, Domestic Water Manifold	1	ls	\$ 6,064.00	\$ 6,064
	Domestic Hot Water Equipment	1	ls	\$ 5,859.00	\$ 5,859
	Heat Trace	1	ls	\$ 7,220.00	\$ 7,220
	Plumbing Insulation	1	ls	\$ 2,945.00	\$ 2,945
	Trucking and Deliveries	1	ls	\$ 500.00	\$ 500
	SUBTOTAL PLUMBING	640	BGSF	\$ 168.99	\$ 108,151
D30	HVAC				
	HVAC				
	HVAC: Electrical Wall Heaters, Exhaust System	1	ls	\$ 17,810.00	\$ 17,810
	SUBTOTAL HVAC	640	BGSF	\$ 27.83	\$ 17,810
D40	FIRE PROTECTION				
	Fire Protection				
	Sprinkler System	640	gsf	\$ 8.97	\$ 5,738
	SUBTOTAL FIRE PROTECTION	640	BGSF	\$ 8.97	\$ 5,738
D50	ELECTRICAL				
	Electrical				
	Distribution	1	ls	\$ 16,000.00	\$ 16,000
	Feeders	1	ls	\$ 12,000.00	\$ 12,000
	LV System (Tele/Data)	1	ls	\$ 25,000.00	\$ 25,000
	SUBTOTAL ELECTRICAL	640	BGSF	\$ 82.81	\$ 53,000

ESTIMATE SUMMARY		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
E10	EQUIPMENT				
	Equipment				
	SUBTOTAL EQUIPMENT	640	BGSF	\$ -	\$ -
E20	CASEWORK & FURNISHINGS				
	Casework & Furnishings				
	Moveable Furnishings				
	EXCLUDED				
	SUBTOTAL FURNISHINGS	640	BGSF	\$ -	\$ -
F10	SPECIAL CONSTRUCTION				
	Special Construction				
	SUBTOTAL SPECIAL CONSTRUCTION	640	BGSF	\$ -	\$ -
F20	SELECTIVE BUILDING DEMOLITION				
	Selective Building Demolition				
	Hazardous Components Abatement				
	None				
	SUBTOTAL SELECTIVE BUILDING DEMOLITION	640	BGSF	\$ -	\$ -
Z10	GENERAL REQUIREMENTS				
	General Conditions				
	See Summary				
	SUBTOTAL GENERAL REQUIREMENTS	640	BGSF	\$ -	\$ -

Project Owner: City of Bellevue
Project Name: Bellevue Airfield Park Master Plan
Project Location: Bellevue, WA
Project Start Date: Q2, 2026
Estimate Date: December 20, 2023

Architect: Walker Macy
Project Duration: 24 MO
Building GSF: 640
Site GSF: 135,290

ESTIMATE SUMMARY - MAIN TRAIL / PLAY AREAS (Allowances & Target Value)		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
G10	Site Preparation	135,290	SGA	\$ 9.36	\$ 1,266,492
G20	Site Improvements	135,290	SGA	\$ 29.21	\$ 3,951,425
G30	Site Civil / Mech Utilities	135,290	SGA	\$ 6.25	\$ 845,563
G40	Site Electrical Utilities	135,290	SGA	\$ 1.27	\$ 172,000
G50	Other Site Construction	135,290	SGA	\$ 2.40	\$ 325,000
SITEWORK SUBTOTAL					\$ 6,560,480
Design Contingency				20.00%	\$ 1,312,096
Subtotal					\$ 7,872,576
Contractor Mark Up (Overhead, Profit, Insurance, Bond, B&O Tax)				7.00%	\$ 551,080
Subtotal					\$ 8,423,656
Escalation to Mid-Point (See Summary)					\$ -
SITE GRAND TOTAL		135,290	SGA	\$ 62.26	\$ 8,423,656

Estimate excludes soft costs such as design fees, permits, testing / inspections, construction change order contingencies, loose fixtures / furnishings and sales tax.

ESTIMATE SUMMARY		Quantity	Unit of	Unit	Total Estimated	
No.	Description		Measure	Cost	Cost	
G10	SITE PREPARATION					
General Sitework Requirements						
	Mobilization	1	ls	\$ 50,000.00	\$ 50,000	
	Site Layout & Potholing	1	ls	\$ 15,000.00	\$ 15,000	
	Traffic Control (for entire project)	6	weeks	\$ 6,500.00	\$ 39,000	
Site Improvements Demolition & Relocation						
	Demo Paving					
	Remove Asphalt Paving	42,000	sf	\$ 1.00	\$ 42,000	
	Saw Cut Asphalt Paving	1	ls	\$ 1,500.00	\$ 1,500	
	Remove Concrete Walks	1	ls	\$ 2,000.00	\$ 2,000	
	Remove Curbs - Allowance	1	ls	\$ 6,000	\$ 6,000	
	Demo Site Items					
	Remove Fencing	1	ls	\$ 4,000.00	\$ 4,000	
	Demo Landscaping					
	Remove Trees	1	ls	\$ 10,000.00	\$ 10,000	
	Misc. Site Clearing	135,290	sga	\$ 0.25	\$ 33,823	
Site Earthwork						
	Temporary Construction Fencing - Allowance	1,000	lf	\$ 12.00	\$ 12,000	
	TESC Erosion Control (Incl. Fabric Filter Fencing, Baker Tanks, Pumps & Water Filtration)	1	ls	\$ 25,000.00	\$ 25,000	
	Tree Protection Fencing	1	ls	\$ 10,000.00	\$ 10,000	
	Contractor Access and Laydown Area	2,000	sf	\$ 2.00	\$ 4,000	
	Clear and Grub	135,290	sga	\$ 0.25	\$ 33,823	
	Excavation					
	Export Unsuitable - Allowance	5,011	cy	\$ 65.00	\$ 325,698	
	Imported Fill - Allowance (Loading Existing Soils)	10,021	cy	\$ 55.00	\$ 551,181	
	Finish Grading	135,290	sga	\$ 0.75	\$ 101,468	
	Dewatering - Incl. in TESC Above				Incl.	
Foundation Earthwork						
	Footing Excavation and Backfill	In Building Section A10				
	Footing Drains with Gravel	In Building Section A10				
Hazardous Waste Remediation						
	None Included					
SUBTOTAL SITE PREPARATON		135,290	SGA	\$ 9.36	\$ 1,266,492	

G20 SITE IMPROVEMENTS					
Asphalt Paving (Base Courses Included)					
	Asphalt Paving @ Main Trails - 6" over 6" crushed rock	17,790	sf	\$ 4.75	\$ 84,503

ESTIMATE SUMMARY		Quantity	Unit of	Unit	Total Estimated
No.	Description		Measure	Cost	Cost
Concrete Site Work (Base Courses Included)					
	Curbs (Standard) - Allowance	2,140	lf	\$ 25.00	\$ 53,500
	Concrete Walkway - 4" over 4" crushed rock	7,625	sf	\$ 9.50	\$ 72,438
	Concrete Stairs on Grade	380	sf	\$ 45.00	\$ 17,100
Pavement Markings/Site Signage					
	Site Signage - Allowance	1	ls	\$ 5,000.00	\$ 5,000
Site Development					
	Concrete Retaining Walls				
	CIP Concrete Wall	2,475	sf	\$ 65.00	\$ 160,875
	Continuous Foundation - Allowance	92	cy	\$ 900.00	\$ 82,500
	Concrete Seat Walls	185	lf	\$ 250.00	\$ 46,250
	Bike Rack (Wave Style)	3	ea	\$ 1,000.00	\$ 3,000
	Concrete Stairs Handrail, Painted Metal	60	lf	\$ 275.00	\$ 16,500
	Bollards	2	ea	\$ 1,200.00	\$ 2,400
	Removable Bollards	4	ea	\$ 1,500.00	\$ 6,000
	Park Benches				
	Bench - Park Style	15	ea	\$ 1,200.00	\$ 18,000
Site Development - Picnic Area					
	Picnic Structure (Incl. Footings, Concrete Pad, Canopy, Roof, Columns & Frames, Gutters & Downspouts) - Allowance	1	ls	\$ 220,000.00	\$ 220,000
	Picnic Table - Allowance	8	ea	\$ 2,500.00	\$ 20,000
	Permeable Concrete Pad	2,240	sf	\$ 12.00	\$ 26,880
	Fine Grading	4,240	sf	\$ 0.75	\$ 3,180
Site Development - Playgrounds					
	Chain-Link Fencing and Gates				
	Fencing - 6' (Vinyl Coated)	580	lf	\$ 65.00	\$ 37,700
	Pedestrian Gate	4	ea	\$ 1,250.00	\$ 5,000
	Soft Rubber Solid Surface @ Playgrounds	10,000	sf	\$ 35.00	\$ 350,000
	Playground Equipment				
	Playground Equipment @ Kids Playground	2	ea	\$ 40,000.00	\$ 80,000
	Installation, Trucking & Delivery	2	ea	\$ 25,000.00	\$ 50,000
	Playground Sub-drainage System - Allowance	10,000	sf	\$ 3.50	\$ 35,000
	Fine Grading	10,000	sf	\$ 0.75	\$ 7,500
Site Development - Basketball Court					
	Chain-Link Fencing and Gates				
	Fencing - 6' (Vinyl Coated)	300	lf	\$ 100.00	\$ 30,000
	Pedestrian Gate	2	ea	\$ 1,250.00	\$ 2,500
	Permeable Concrete Pad	5,580	sf	\$ 12.00	\$ 66,960

ESTIMATE SUMMARY		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
	Pavement Markings				
	Basketball Court Half-Court	2	ea	\$ 1,500.00	\$ 3,000
	Play Equipment				
	Outdoor Basketball System (Incl. Backboard & Concrete Footing)	2	ea	\$ 4,500.00	\$ 9,000
	Field Sub-drainage System - Allowance	5,000	sf	\$ 3.50	\$ 17,500
	Fine Grading	5,000	sf	\$ 0.75	\$ 3,750
	Site Development - Covered Pickleball Court				
	Covered Court Canopy				
	Pre-Engineered Metal Structure	14,400	sf	\$ 60.00	\$ 864,000
	Concrete Pad	14,400	sf	\$ 9.50	\$ 136,800
	Gutters and Downspouts - Allowance	600	lf	\$ 25.00	\$ 15,000
	Pickleball Court (Incl. Markings & Striping)	14,400	sf	\$ 24.00	\$ 345,600
	Play Equipment				
	Pickle Ball Posts (Incl. Sleeves, Nets, Equipment & Concrete Footing)	8	ea	\$ 5,000.00	\$ 40,000
	Site Development - Splash Pad				
	Chain-Link Fencing and Gates				
	Fencing - 6' (Vinyl Coated)	215	lf	\$ 75.00	\$ 16,125
	Pedestrian Gate	2	ea	\$ 1,000.00	\$ 2,000
	Concrete Pad	2,600	sf	\$ 10.00	\$ 26,000
	Premium for Colored Decorative Concrete	2,600	sf	\$ 15.00	\$ 39,000
	Landscaping/Irrigation				
	Irrigation - General Landscaping	72,430	sf	\$ 3.50	\$ 253,505
	Irrigation - Natural Area	57,110	sf	\$ 0.50	\$ 28,555
	Planter Shrubs and Ground Cover	72,430	sf	\$ 8.50	\$ 615,655
	Trees - Allowance	51	ea	\$ 650.00	\$ 33,150
	SUBTOTAL SITE IMPROVEMENTS	135,290	SGA	\$ 29.21	\$ 3,951,425

G30 SITE CIVIL / MECHANICAL UTILITIES

Water Service

Water Service Utilities (Incl. Tie-in to Existing, Water/Fire Line, Water Meter, Irrigation Meter, Valve, Domestic Water, Fire Department Connection & Existing Street Surface Repair/Traffic Control) - Allowance	135,290	sga	\$ 1.75	\$ 236,758
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Sanitary Sewer Systems

Sanitary Sewer Systems (Incl. Tie-in to Existing, Sewer Line, Cleanouts, Manhole, Septic System & Drain Field and Associated System & Existing Street Surface Repair/Traffic Control) - Allowance	135,290	sga	\$ 0.50	\$ 67,645
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ESTIMATE SUMMARY		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
Storm Drainage					
	Storm Drainage (Incl. Tie-in to Existing, Drain Line, Cleanouts, Catch Basin, Bioretention & Existing Street Surface Repair/Traffic Control) - Allowance	135,290	sga	\$ 4.00	\$ 541,160
SUBTOTAL SITE CIVIL / MECHANICAL UTILITIES		135,290	SGA	\$ 6.25	\$ 845,563
G40 SITE ELECTRICAL UTILITIES					
Electrical and Telecom Utilities					
	Electrical Utility	1	ls	\$ 22,000.00	\$ 22,000
	Site Lighting	1	ls	\$ 125,000.00	\$ 125,000
	Site Power	1	ls	\$ 25,000.00	\$ 25,000
SUBTOTAL SITE ELECTRICAL UTILITIES		135,290	SGA	\$ 1.27	\$ 172,000
G50 OTHER SITE CONSTRUCTION					
Splash Pad					
	Water Spray Installation / Including Sub-contractor Coordination	1	ls	\$ 150,000.00	\$ 150,000
	Recirculated Water System - Allowance	1	ls	\$ 35,000.00	\$ 35,000
	Secondary UV Filtration - Allowance	1	ls	\$ 25,000.00	\$ 25,000
	Electronic Rain Diversion System - Allowance	1	ls	\$ 15,000.00	\$ 15,000
	Concrete Water Vaults @ Splash Pad	1	ls	\$ 40,000.00	\$ 40,000
	Concrete Mechanical Vault @ Splash Pad	1	ls	\$ 35,000.00	\$ 35,000
	Splash Pad Vault Connections - Electrical	1	ls	\$ 25,000.00	\$ 25,000
SUBTOTAL OTHER SITE CONSTRUCTION		135,290	SGA	\$ 2.40	\$ 325,000
Z10 GENERAL REQUIREMENTS					
General Conditions					
	See Summary				
SUBTOTAL GENERAL REQUIREMENTS		135,290	SGA	\$ -	\$ -

Project Owner: City of Bellevue
Project Name: Bellevue Airfield Park Master Plan
Project Location: Bellevue, WA
Project Start Date: Q2, 2026
Estimate Date: December 20, 2023

Architect: Walker Macy
Project Duration: 24 MO
Building GSF: 130,000
Site GSF: 118,500

<i>ESTIMATE SUMMARY - EAST PARKING LOT</i> <i>(Allowances & Target Value)</i>		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
G10	Site Preparation	118,500	SGA	\$ 10.70	\$ 1,267,925
G20	Site Improvements	118,500	SGA	\$ 8.96	\$ 1,062,340
G30	Site Civil / Mech Utilities	118,500	SGA	\$ 2.48	\$ 293,768
G40	Site Electrical Utilities	118,500	SGA	\$ 1.57	\$ 186,400
G50	Other Site Construction	118,500	SGA	\$ -	\$ -
SITEWORK SUBTOTAL					\$ 2,810,432
Design Contingency				20.00%	\$ 562,086
Subtotal					\$ 3,372,518
Contractor Mark Up (Overhead, Profit, Insurance, Bond, B&O Tax)				7.00%	\$ 236,076
Subtotal					\$ 3,608,595
Escalation to Mid-Point (See Summary)					\$ -
SITE GRAND TOTAL		118,500	SGA	\$ 30.45	\$ 3,608,595

Estimate excludes soft costs such as design fees, permits, testing / inspections, construction change order contingencies, loose fixtures / furnishings and sales tax.

ESTIMATE SUMMARY		Quantity	Unit of	Unit	Total Estimated	
No.	Description		Measure	Cost	Cost	
G10	SITE PREPARATION					
General Sitework Requirements						
	Mobilization	1	ls	\$	50,000.00	\$ 50,000
	Site Layout & Potholing	1	ls	\$	20,000.00	\$ 20,000
	Traffic Control (for entire project)	4	weeks	\$	6,500.00	\$ 26,000
Site Improvements Demolition & Relocation						
	Misc. Site Demolition	118,500	sga	\$	0.25	\$ 29,625
	Misc. Site Clearing	118,500	sga	\$	0.30	\$ 35,550
Site Earthwork						
	Temporary Construction Fencing	2,500	lf	\$	12.00	\$ 30,000
	TESC Erosion Control - Filter Fabric Fence, Catch Basin Inlet Protection & Stabilized Construction Entry	1	ls	\$	15,000.00	\$ 15,000
	Tree Protection Fencing	1	ls	\$	7,500.00	\$ 7,500
	Contractor Access and Laydown Area	2,000	sf	\$	2.50	\$ 5,000
	Clear and Grub	118,500	sga	\$	0.25	\$ 29,625
	Excavation					
	Export Unsuitable - Allowance	4,389	cy	\$	65.00	\$ 285,278
	Imported Fill - Allowance (Loading Existing Soils)	10,972	cy	\$	55.00	\$ 603,472
	Finish Grading	118,500	sga	\$	0.75	\$ 88,875
	Dewatering - Allowance (Sediment Tanks, Pumps, Pipe & Filter System)	1	ls	\$	28,000.00	\$ 28,000
	Baker Tank and Pump - Rental	4	mo	\$	3,500.00	\$ 14,000
Foundation Earthwork						
	Footing Excavation and Backfill	In Building Section A10				
	Footing Drains with Gravel	In Building Section A10				
Hazardous Waste Remediation						
	None Included					
SUBTOTAL SITE PREPARATON		118,500	SGA	\$	10.70	\$ 1,267,925

G20 SITE IMPROVEMENTS					
Asphalt Paving (Base Courses Included)					
	Light Duty (Parking Stalls/Access Road) (4" HMA over 6" Crushed Rock)	28,513	sf	\$ 3.75	\$ 106,924
	Heavy Duty (Street) (6" HMA over 12" Crushed Rock)	38,897	sf	\$ 4.75	\$ 184,761
Concrete Site Work (Base Courses Included)					
	Curbs - Standard	3,483	lf	\$ 25.00	\$ 87,075
	Concrete Driveway Entries over 6" crushed rock	1	ea	\$ 4,500.00	\$ 4,500
Pavement Markings/Site Signage					
	Wheel Stops	158	ea	\$ 150.00	\$ 23,700
	Striping - ADA Stalls with Signage	4	ea	\$ 950.00	\$ 3,800
	Striping - Standard Stalls	158	ea	\$ 75.00	\$ 11,850
	Striping - Arrows	10	ea	\$ 65.00	\$ 650
	Site Signage	10	ea	\$ 800.00	\$ 8,000

ESTIMATE SUMMARY		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
Landscaping/Irrigation					
	Irrigation - General Landscaping	51,090	sf	\$ 3.50	\$ 178,815
	Planter Shrubs and Ground Cover	51,090	sf	\$ 8.50	\$ 434,265
	Trees	36	ea	\$ 500.00	\$ 18,000
SUBTOTAL SITE IMPROVEMENTS		118,500	SGA	\$ 8.96	\$ 1,062,340
G30 SITE CIVIL / MECHANICAL UTILITIES					
Water Service					
	Water Service Utilities (Incl. Tie-in to Existing, Water/Fire Line, Water Meter, Irrigation Meter, Valve, Domestic Water, Fire Department Connection & Existing Street Surface Repair/Traffic Control) - Allowance	51,090	gsf	\$ 1.75	\$ 89,408
Storm Drainage					
	Storm Drainage (Incl. Tie-in to Existing, Drain Line, Cleanouts, Catch Basin, Bioretention & Existing Street Surface Repair/Traffic Control) - Allowance	51,090	gsf	\$ 4.00	\$ 204,360
SUBTOTAL SITE CIVIL / MECHANICAL UTILITIES		118,500	SGA	\$ 2.48	\$ 293,768
G40 SITE ELECTRICAL UTILITIES					
Electrical and Telecom Utilities					
	Electrical Utility	1	ls	\$ 18,000.00	\$ 18,000
	Site Lighting	1	ls	\$ 140,400.00	\$ 140,400
	Distribution	1	ls	\$ 16,000.00	\$ 16,000
	Feeders	1	ls	\$ 12,000.00	\$ 12,000
SUBTOTAL SITE ELECTRICAL UTILITIES		118,500	SGA	\$ 1.57	\$ 186,400
G50 OTHER SITE CONSTRUCTION					
Other Site Construction					
SUBTOTAL OTHER SITE CONSTRUCTION		118,500	SGA	\$ -	\$ -
Z10 GENERAL REQUIREMENTS					
General Conditions					
	See Summary				
SUBTOTAL GENERAL REQUIREMENTS		118,500	SGA	\$ -	\$ -

City of Bellevue

Bellevue Airfield Park - Picnic Zone / West Parking Lot
Pre-Design Estimate



Project Owner: City of Bellevue

Project Name: Bellevue Airfield Park Master Plan

Project Location: Bellevue, WA

Project Start Date: Q2, 2026

Estimate Date: December 20, 2023

Architect: Walker Macy

Project Duration: 24 MO

Building GSF: 130,000

Site GSF: 98,580

<i>ESTIMATE SUMMARY - PICNIC ZONE / WEST PARKING</i> <i>(Allowances & Target Value)</i>		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
G10	Site Preparation	98,580	SGA	\$ 10.32	\$ 1,017,040
G20	Site Improvements	98,580	SGA	\$ 12.73	\$ 1,254,557
G30	Site Civil / Mech Utilities	98,580	SGA	\$ 5.75	\$ 566,835
G40	Site Electrical Utilities	98,580	SGA	\$ 0.96	\$ 94,400
G50	Other Site Construction	98,580	SGA	\$ -	\$ -
SITEWORK SUBTOTAL					\$ 2,932,832
Design Contingency				20.00%	\$ 586,566
Subtotal					\$ 3,519,399
Contractor Mark Up (Overhead, Profit, Insurance, Bond, B&O Tax)				7.00%	\$ 246,358
Subtotal					\$ 3,765,757
Escalation to Mid-Point (See Summary)					\$ -
SITE GRAND TOTAL		98,580	SGA	\$ 38.20	\$ 3,765,757

Estimate excludes soft costs such as design fees, permits, testing / inspections, construction change order contingencies, loose fixtures / furnishings and sales tax.

ESTIMATE SUMMARY		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
G10	SITE PREPARATION				
General Sitework Requirements					
	Mobilization	1	ls	\$ 25,000.00	\$ 25,000
	Site Layout & Potholing	1	ls	\$ 30,000.00	\$ 30,000
	Traffic Control (for entire project)	1	weeks	\$ 6,500.00	\$ 6,500
Site Improvements Demolition & Relocation					
	Demo Landscaping				
	Misc. Landscape Demolition - Allowance	1	ls	\$ 10,000.00	\$ 10,000
	Remove Trees	197	ea	\$ 250.00	\$ 49,289
	Misc. Site Clearing	98,580	sga	\$ 0.25	\$ 24,645
Site Earthwork					
	Temporary Construction Fencing	2,200	lf	\$ 12.00	\$ 26,400
	TESC Erosion Control - Filter Fabric Fence, Catch Basin Inlet Protection & Stabilized Construction Entry	1	ls	\$ 15,000.00	\$ 15,000
	Tree Protection Fencing	1	ls	\$ 7,500.00	\$ 7,500
	Contractor Access and Laydown Area	1	ls	\$ 5,000.00	\$ 5,000
	Clear and Grub	36,233	sga	\$ 0.35	\$ 12,682
	Excavation				
	Export Unsuitable - Allowance	3,651	cy	\$ 65.00	\$ 237,322
	Imported Fill - Allowance (Loading Existing Soils)	9,128	cy	\$ 55.00	\$ 502,028
	Finish Grading	36,233	sga	\$ 0.75	\$ 27,175
	Dewatering - Allowance (Sediment Tanks, Pumps, Pipe & Filter	1	ls	\$ 28,000.00	\$ 28,000
	Baker Tank and Pump - Rental	3	mo	\$ 3,500.00	\$ 10,500
Foundation Earthwork					
	Footing Excavation and Backfill	In Building Section A10			
	Footing Drains with Gravel	In Building Section A10			
Hazardous Waste Remediation					
	None Included				
SUBTOTAL SITE PREPARATON		98,580	SGA	\$ 10.32	\$ 1,017,040

G20 SITE IMPROVEMENTS					
Asphalt Paving (Base Courses Included)					
	Light Duty (Parking Stalls/Access Road) (4" HMA over 6" Crushed Rock)	18,158	sf	\$ 3.75	\$ 68,093
	Heavy Duty (Street) (6" HMA over 12" Crushed Rock)	18,075	sf	\$ 4.75	\$ 85,856
Concrete Site Work (Base Courses Included)					
	Curbs - Standard	2,130	lf	\$ 25.00	\$ 53,250
	Concrete Sidewalk - 4" over 4" crushed rock	7,585	sf	\$ 9.50	\$ 72,058
	Concrete Slab @ Shelters - 4" over 4" crushed rock	4,200	sf	\$ 9.50	\$ 39,900

City of Bellevue

Bellevue Airfield Park - Picnic Zone / West Parking Lot
Pre-Design Estimate



ESTIMATE SUMMARY		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
Pavement Markings/Site Signage					
	Wheel Stops	97	ea	\$ 150.00	\$ 14,550
	Striping - ADA Stalls with Signage	4	ea	\$ 950.00	\$ 3,800
	Striping - Standard Stalls	97	ea	\$ 75.00	\$ 7,275
	Striping - ADA Stalls with Signage / Crosswalks	1	ls	\$ 5,000.00	\$ 5,000
Site Development					
	Masonry Trash Enclosure	1	ls	\$ 18,000.00	\$ 18,000
	Pedestrian Bridge (6' Wide)	50	lf	\$ 750.00	\$ 37,500
	Bollards	6	ea	\$ 1,200.00	\$ 7,200
	Park Benches				
	Bench - Park Style	4	ea	\$ 1,200.00	\$ 4,800
Site Development - School					
	Picnic Structure (Incl. Footings, Concrete Pad, Canopy, Roof, Columns & Frames, Gutters & Downspouts) - Allowance	4,200	sf	\$ 110.00	\$ 462,000
Landscaping/Irrigation					
	Irrigation - General Landscaping	62,347	sf	\$ 3.00	\$ 187,041
	Planter Shrubs and Ground Cover	18,704	sf	\$ 8.50	\$ 158,985
	Trees	45	ea	\$ 650.00	\$ 29,250
SUBTOTAL SITE IMPROVEMENTS		98,580	SGA	\$ 12.73	\$ 1,254,557
G30 SITE CIVIL / MECHANICAL UTILITIES					
Water Service					
	Water Service Utilities (Incl. Tie-in to Existing, Water/Fire Line, Water Meter, Irrigation Meter, Valve, Domestic Water, Fire Department Connection & Existing Street Surface Repair/Traffic Control) - Allowance	98,580	sga	\$ 1.75	\$ 172,515
Storm Drainage					
	Storm Drainage (Incl. Tie-in to Existing, Drain Line, Cleanouts, Catch Basin, Bioretention & Existing Street Surface Repair/Traffic Control) - Allowance	98,580	sga	\$ 4.00	\$ 394,320
SUBTOTAL SITE CIVIL / MECHANICAL UTILITIES		98,580	SGA	\$ 5.75	\$ 566,835
G40 SITE ELECTRICAL UTILITIES					
Electrical and Telecom Utilities					
	Electrical Utility	1	ls	\$ 22,000.00	\$ 22,000
	Site Lighting	1	ls	\$ 62,400.00	\$ 62,400
	Site Power	1	ls	\$ 10,000.00	\$ 10,000
SUBTOTAL SITE ELECTRICAL UTILITIES		98,580	SGA	\$ 0.96	\$ 94,400

ESTIMATE SUMMARY		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
G50	OTHER SITE CONSTRUCTION				
	Other Site Construction				
	SUBTOTAL OTHER SITE CONSTRUCTION	98,580	SGA	\$ -	\$ -
Z10	GENERAL REQUIREMENTS				
	General Conditions				
	See Summary				
	SUBTOTAL GENERAL REQUIREMENTS	98,580	SGA	\$ -	\$ -

City of Bellevue

Bellevue Airfield Park - Lower Trails / Terraced Lawn
Pre-Design Estimate

**Project Owner:** City of Bellevue**Project Name:** Bellevue Airfield Park Master Plan**Project Location:** Bellevue, WA**Project Start Date:** Q2, 2026**Estimate Date:** December 20, 2023**Architect:** Walker Macy**Project Duration:** 24 MO**Building GSF:** N/A**Site GSF:** 106,295

ESTIMATE SUMMARY - LOWER TRAILS/TERRACED LAWN (Allowances & Target Value)		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
G10	Site Preparation	106,295	SGA	\$ 4.87	\$ 517,401
G20	Site Improvements	106,295	SGA	\$ 8.52	\$ 906,006
G30	Site Civil / Mech Utilities	106,295	SGA	\$ 2.24	\$ 238,366
G40	Site Electrical Utilities	106,295	SGA	\$ 1.84	\$ 196,000
G50	Other Site Construction	106,295	SGA	\$ 1.27	\$ 135,000
SITEWORK SUBTOTAL					\$ 1,992,774
Design Contingency				20.00%	\$ 398,555
Subtotal					\$ 2,391,329
Contractor Mark Up (Overhead, Profit, Insurance, Bond, B&O Tax)				7.00%	\$ 167,393
Subtotal					\$ 2,558,721
Escalation to Mid-Point (See Summary)					\$ -
SITE GRAND TOTAL		106,295	SGA	\$ 24.07	\$ 2,558,721

Estimate excludes soft costs such as design fees, permits, testing / inspections, construction change order contingencies, loose fixtures / furnishings and sales tax.

ESTIMATE SUMMARY		Quantity	Unit of	Unit	Total Estimated
No.	Description		Measure	Cost	Cost
G10	SITE PREPARATION				
General Sitework Requirements					
	Mobilization	1	ls	\$ 45,000.00	\$ 45,000
	Site Layout & Potholing	1	ls	\$ 10,000.00	\$ 10,000
	Traffic Control (for entire project)	2	weeks	\$ 6,500.00	\$ 13,000
Site Improvements Demolition & Relocation					
	Demo Landscaping				
	Remove Trees	1	ls	\$ 7,500.00	\$ 7,500
	Misc. Site Clearing	106,295	sga	\$ 0.25	\$ 26,574
Site Earthwork					
	Temporary Construction Fencing - Allowance	1,500	lf	\$ 12.00	\$ 18,000
	TESC Erosion Control (Incl. Fabric Filter Fencing, Baker Tanks, Pumps & Water Filtration)	1	ls	\$ 15,000.00	\$ 15,000
	Tree Protection Fencing	1	ls	\$ 10,000.00	\$ 10,000
	Contractor Access and Laydown Area	1,500	sf	\$ 2.50	\$ 3,750
	Clear and Grub	106,295	sga	\$ 0.25	\$ 26,574
	Excavation				
	Export Unsuitable - Allowance	1,535	cy	\$ 65.00	\$ 99,799
	Imported Fill - Allowance (Loading Existing Soils)	3,838	cy	\$ 55.00	\$ 211,113
	Finish Grading	41,455	sf	\$ 0.75	\$ 31,091
	Dewatering - Incl. in TESC Above				Incl.
Foundation Earthwork					
	Footing Excavation and Backfill	In Building Section A10			
	Footing Drains with Gravel	In Building Section A10			
Hazardous Waste Remediation					
	None Included				
SUBTOTAL SITE PREPARATON		106,295	SGA	\$ 4.87	\$ 517,401
G20	SITE IMPROVEMENTS				
Asphalt Paving (Base Courses Included)					
	Asphalt Paving @ Main Trails - 6" over 6" crushed rock	24,330	sf	\$ 4.75	\$ 115,568
Concrete Site Work (Base Courses Included)					
	Curbs (Standard) - Allowance	165	lf	\$ 25.00	\$ 4,125
	Concrete Stairs on Grade	395	sf	\$ 45.00	\$ 17,775
Pavement Markings/Site Signage					
	Site Signage - Allowance	1	ls	\$ 5,000.00	\$ 5,000
Site Development					
	Clean-up & Rehabilitation of Stormwater Pond	64,840	sf	\$ 2.00	\$ 129,680
	Concrete Retaining Walls				
	CIP Concrete Wall	3,375	sf	\$ 65.00	\$ 219,375
	Continuous Foundation - Allowance	125	cy	\$ 800.00	\$ 100,000

City of Bellevue

Bellevue Airfield Park - Lower Trails / Terraced Lawn
Pre-Design Estimate



ESTIMATE SUMMARY		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
	Bike Rack (Wave Style)	3	ea	\$ 1,000.00	\$ 3,000
	Concrete Stairs Handrail, Painted Metal	60	lf	\$ 275.00	\$ 16,500
	Bollards	6	ea	\$ 1,200.00	\$ 7,200
	Landscaping/Irrigation				
	Irrigation - General Landscaping	17,125	sf	\$ 3.00	\$ 51,375
	Irrigation - Natural Area	337,385	sf	\$ 0.25	\$ 84,346
	Planter Shrubs and Ground Cover	17,125	sf	\$ 8.50	\$ 145,563
	Trees - Allowance	10	ea	\$ 650.00	\$ 6,500
	SUBTOTAL SITE IMPROVEMENTS	106,295	SGA	\$ 8.52	\$ 906,006
G30 SITE CIVIL / MECHANICAL UTILITIES					
	Water Service				
	Water Service Utilities (Incl. Tie-in to Existing, Water/Fire Line, Water Meter, Irrigation Meter, Valve, Domestic Water, Fire Department Connection & Existing Street Surface Repair/Traffic Control) - Allowance	41,455	gsf	\$ 1.75	\$ 72,546
	Storm Drainage				
	Storm Drainage (Incl. Tie-in to Existing, Drain Line, Cleanouts, Catch Basin, Bioretention & Existing Street Surface Repair/Traffic Control) - Allowance	41,455	gsf	\$ 4.00	\$ 165,820
	SUBTOTAL SITE CIVIL / MECHANICAL UTILITIES	106,295	SGA	\$ 2.24	\$ 238,366
G40 SITE ELECTRICAL UTILITIES					
	Electrical and Telecom Utilities				
	Electrical Utility	1	ls	\$ 18,000.00	\$ 18,000
	Site Lighting	1	ls	\$ 150,000.00	\$ 150,000
	Distribution	1	ls	\$ 16,000.00	\$ 16,000
	Feeders	1	ls	\$ 12,000.00	\$ 12,000
	SUBTOTAL SITE ELECTRICAL UTILITIES	106,295	SGA	\$ 1.84	\$ 196,000
G50 OTHER SITE CONSTRUCTION					
	Wet Dock				
	Wet Dock (Incl. Structure, Frame, Support, Built-in Benches & Tables)	3	ea	\$ 45,000.00	\$ 135,000
	SUBTOTAL OTHER SITE CONSTRUCTION	106,295	SGA	\$ 1.27	\$ 135,000
Z10 GENERAL REQUIREMENTS					
	General Conditions				
	See Summary				
	SUBTOTAL GENERAL REQUIREMENTS	106,295	SGA	\$ -	\$ -