DESIGN CONCEPTS and FEATURES

SPLASH*Forward* ("SF") in partnership with the Isaac Sports Group ("ISG") have worked together to develop a SF Preferred Design Option ("SF Preferred") for a regional scale aquatic center, the Bellevue Health and Aquatic Center that would meet the broad aquatics needs for a full range of fitness, recreation, health, wellness, and competitive aquatics programs for all ages, abilities and backgrounds. This report on the SF Design Concept includes the methodology, assumptions, research, and rationale that led to the elements of the design concept as well as a comparative analysis of the ARC Architects project team's design options submitted to the City of Bellevue as part of the 2019-2020 update of the 2009 Aquatics Feasibility Study. SPLASH*Forward* and ISG understand that the ARC/City designs are preliminary, menu-like in nature and are starting points for overall analysis, but we know that early designs often develop a life of their own as they are embedded in people's minds. We feel it is important to present SPLASH*Forward* and ISG's findings of the optimum program/design marriage and address many of the design detail variances for our constituents and aquatic stakeholders to enable the best decision making moving forward for Bellevue.

Overall this Design Section includes:

- Methodology and Assumptions
- Design and Program Objectives
- SPLASH*Forward* Preferred Design Option: 50m and Deep Water Pool
- SPLASH*Forward* Alternate Design Option: Stretch 50m
- Pros and Cons of Preferred and Alternate Design Options
- Status and Future of Existing Bellevue Aquatic Center at Odle
- Comparative Evaluation of the ARC/City Design Concepts and Options
- SPLASH*Forward* and ARC/City Design Comparative Costing Projections
- SPLASH*Forward* Design Recommendations and Summary
- SPLASH*Forward* Design Next Steps Recommendations

DESIGN METHODOLOGY AND ASSUMPTIONS

The essence of the design development begins with the development of the program model for the Aquatic Center taking into account the various user groups and constituencies within the community and their programming needs. The design is predicated on "Program Precedes Design." The Program Section of the master SF/ISG Report discusses the program development and analysis at length. The development of the design options builds on the full range of program needs and opportunities to define the actual design elements needed to support them. The SF Design Options assume that the existing Bellevue Aquatic Center/Odle Pool ("BAC/Odle") will remain open and potentially updated to best support an integrated overall city wide Bellevue Aquatic Program.

Specifically, the design research includes the following research and stakeholder engagement to develop the design elements to support the Program Model:

- Analysis of current Bellevue public and private aquatic facilities and programs
    - Including the existing Bellevue Aquatic Center/Odle Pool ("BAC/Odle")
- Market analysis of existing regional aquatic facilities and programs

    - Including engagement with area aquatic facility management
- Regular meetings with the City recreation management team to review ARC/City designs, share SPLASH*Forward* design concepts and input, and discuss the Bellevue Parks Staff vision on programming and design
- Input from the SF Board of Directors and the extended SPLASH*Forward* stakeholders and advisors
- Comprehensive listing of user groups and activities
- Interviews with a wide range of program users and providers to identify and prioritize their facility needs
    - Swim instructors
    - Aquatic Fitness participants and instructors
    - Aquatic Therapy providers
    - Special Olympics and special needs programs
    - Community, youth, and senior organizations
- Interviews and engagement with the Bellevue School District
    - Competitive Needs
    - Non-competitive District programming
- Interviews and engagement with potential competitive aquatic user groups
    - Area and Regional USA Swimming club teams
    - Area USA Water Polo club teams
    - Seattle Artistic Swimming Team (formally Synchronized Swimming)
    - Masters Swimming organizations
    - Dive Seattle
- Development and analysis of potential event model and supporting design elements
    - Competitive clubs and user groups
    - School District competitive programs
    - Sport governing bodies: Local, State, Regional, National
- Review of regional and national "Best in Class" facilities
    - Including engagement of facility aquatic management and ownership
- Comparative analysis with the existing ARC/City design option concepts

DESIGN AND PROGRAM OBJECTIVES

The development of the SPLASH*Forward* Preferred Design Option addresses the following objectives:

- An BHAC design that best supports current and long term needs and growth in community aquatic programs; including lessons, fitness, therapy, health and wellness, and more
- A design that provides recreation and leisure features and a schedule to attract a wide range of BHAC members and users across all ages, abilities, and resources
- A design that meets current and future needs and supports growth in Bellevue School District competitive and non-competitive programs for the full K-12 range
- A design that meets the current and future needs and opportunities of competitive aquatic club teams, development programs, and feeder programs
- A design that provides the optimum facility to support the competitive event needs of the School District and local and regional user groups as well as the local, regional and state sport governing bodies

    - Event design should also generate economic impact and revenue for the City of Bellevue through the heads and beds and overall hospitality and business revenue generated by the event facility.
- A design that allows concurrent programming and provides the ability to offer a wide range of programs throughout the day, including peak demand and peak hours
    - Provide community recreation and fitness access, including lap lanes, even during competitive team practices
    - Minimize the impact on regular daily community programming and access during events hosted at the Aquatic Center
- Balance and integrate design elements with existing design features of the existing BAC/Odle and identify potential updates to the BAC/Odle
- Include state of the art and environmentally friendly filtration, water disinfectant, water quality, air quality, construction methods, and control systems to minimize annual and long term operating and maintenance cost while reducing energy, water, and chemical consumption
- Meet current and projected locker and changing room spaces for gender neutrality, child safety, handicap access, and enhanced hygiene
- Include allowances for potential "new normal" requirements based on new code requirements or best practices that emerge from the current COVID-19 Pandemic
- A design that includes dry-side fitness spaces and amenities to complement the BHAC programming and meet existing and future City resident needs in fitness facilities and programs
- A design that allows community programming in partnership with local providers
    - Provide both aquatic and dry-side programming opportunities
- A design that provides community meeting, function, and gathering spaces to create a community hub for a wide range of City residents

To meet these objectives, the design concepts focus on the following elements:

- Pool Design
    - Size
    - Flexible configurations
    - Depth
    - Temperature
    - Features and amenities
    - Equipment: Program, recreation, competitive, event, special needs, cleaning and maintenance
    - Deck space
- Community and Spaces and Amenities
    - Locker Rooms: Wide range of needs
    - Lobby space
    - Meeting and function space
    - Fitness and workout spaces
    - Event Seating: Spectators and competitors
- Support Spaces
    - Offices
    - Storage

- Kitchen/catering facilities
- Mechanical system spaces

- Technology
  - Water quality systems
  - Air quality systems
  - Pool technology
  - Control systems
  - Other as relevant

DESIGN OPTIONS FEATURE COMPARISION

The following comparison table is provided to easily see the design option comparisons between the City/ARC 2020 Study design options and the SPLASH*Forward* Preferred and Alternate Design Options.

Design Option Feature Comparison

Feature	BAC/Odle & SBCC	City/ARC 2020 Option #1	City/ARC 2020 Option #2	City/ARC 2020 Option #3	SF Preferred Design	SF Alternate Design
OVERALL BUILDING						
Gross Sq Ft	BAC/Odle =24,000 sf SBCC =33,000 sf	91,177 sf	125,812 sf	161,496 sf	125,759 sf	123,950 sf
Site Needs	NA	8 acres	10 acres	11 acres	10 acres	10 acres
Parking Spaces		370	485	500	500	
MAIN POOL (81° to 83°)	3,800 sf	13,000 sf	16,500 sf	13,000 sf	13,200 sf	13,200 sf
Description	25 yard	50 m x 25 yd	50m Stretch (66m)	50 m x 25 yd	50 m x 25 yd	50m Stretch (68m)
Deck Space		6,225 sf	7,900 sf	8,220 sf	13,700 sf (incl. deep pool)	12,200 sf
Moveable Bulkhead (width)	NO	2 x 4.5’	2 x 5.5’	2 x 4.5’	2 x 6’	2 x 6’
50 meter lanes	NA	8 lanes x 9’ wide	8 lanes x 9’ wide	8 lanes x 9’ wide	9 lanes x 8.2’ (2m) wide	9 lanes x 8.2’ (2m) wide
25 yard lanes: Competition	NA	16 lanes x 9’ wide	16 lanes x 9’ wide	16 lanes x 9’ wide	18 lanes x 8.2’ wide	18 lanes x 8.2’ wide

Feature	BAC/Odle & SBCC	City/ARC 2020 Option #1	City/ARC 2020 Option #2	City/ARC 2020 Option #3	SF Preferred Design	SF Alternate Design
25 yard lanes: Training	6 x 7' wide	21 lanes x 7.5' wide	21 lanes x 7.5' wide	21 lanes x 7.5' wide	20 lanes x 8' wide	20 lanes x 8' wide
Diving	1 x 1m board	2 x 1m & 2 x 3m boards	2 x 1m & 2 x 3m boards	NA	NA	2 x 1m & 2 x 3m boards
Depth	3' to 12'	TBD to 13.0'	TBD to 13.0'	TBD to 7'+	7' to 13.0' (Option: adjustable depth floor	4.5' to 13.0'
Spectator Seating	150	400	700	600	600	600
Athlete Seating (on deck)	70	150	400	720	720	720
Event Capabilities	None	HS dual meets & very small club meets & games	HS Conf. meets Mid-size Club meets WP & Synchro Champs	Larger Regional Champs and targeted events	Larger Regional Champs and targeted events	Larger Regional Champs and targeted events
DEEP WATER POOL (83° to 84°)	NA	NA	NA	3,400 sf	3,375 sf	NA
Deck Space	NA	NA	NA	3,000 sf	Incl. in Main Pool	NA
Diving	NA	NA	NA	2 x 1m & 2 x 3m boards	2 x 1m & 2 x 3m boards (Option for 5m platform)	NA
Lanes	NA	NA	NA	6 x 25yd	6 x 25yd	NA
Depth	NA	NA	NA	11.0' to 13.0'	11.0' to 13.0'	NA
PROGRAM POOL (86° to 87°)	NA	3,500 sf	5,025 sf	6,727 sf	3,750 sf	3,750 sf
Deck Space	NA	2,900 sf	3,200 sf	3,600 sf	2,900 sf	2,900 sf
Lanes	NA	6 x 25 yd	8 x 25 yd	10 x 25yd	6 x 25 yd	6 x 25 yd

Feature	BAC/Odle & SBCC	City/ARC 2020 Option #1	City/ARC 2020 Option #2	City/ARC 2020 Option #3	SF Preferred Design	SF Alternate Design
Depth	NA	3.5' to 4.5'	3.5' to 4.5'	3.5' to 4.5'	3.5' to 4.5'	3.5' to 4.5'
LEISURE POOL (84° to 85°)	NA	6,000 sf	8,000 sf	8,000 sf	7,000 sf	7,000 sf
Deck Space	NA	4,000 sf	4,300 sf	4,300 sf	4,300 sf	4,300 sf
WELLNESS/THERAPY POOL (92°)	1,750 sf	NA	3,000 sf	2,000 sf	2,000 sf	2,000 sf
Deck Space		NA	1,750 sf	1,500 sf	2,740 sf	2,740 sf
Fitness/Workout Space	3,800 sf (SBCC)	5,000 sf	10,000 sf	13,500 sf	8,000 sf	8,000 sf
Meeting/Function Space	3,900 sf (SBCC)	4,144 sf	3,000 sf	4,700 sf	7,100 sf	4,700 sf
Common Spaces						
Lobby		1,750 sf	2,000 sf	2,700 sf	2,000 sf	2,000 sf
Locker Rooms	3,900 sf (BAC/Od)	8,875 sf	10,175 sf	11,195 sf	10,425 sf	10,425 sf
Operational & Spaces						
Offices		4,100 sf	5,100 sf	5,580 sf	5,225 sf	5,225 sf
Storage		11,250 sf	15,150 sf	16,450 sf	10,500 sf	10,500 sf
Misc. Operation & Maintenance work space		2,400 sf	2,400 sf	2,400 sf	0 sf	0 sf

SPLASH*Forward* PREFERRED DESIGN CONCEPT

SPLASH*Forward* and ISG created the SF Preferred Design Option based on the Program and Event Models and Design Objectives developed from the research and analysis by SPLASH*Forward* and ISG. The Preferred Design Option is developed to achieve the following (see Program Section for more detail):

- Provide the different space, depths, and temperatures to provide a full range of aquatic recreation, programs, classes, and competitive facilities for the entire community.
- Develop recreational elements in the main pool to maximize the recreational and public usage of and access to the 50m Main Pool
- Develop dedicated spaces and elements for uninterrupted community and therapeutic programming
- Create a facility that provides for the competitive needs of the Bellevue School District
    - Accommodate four high school swim and dive boys and girls teams

        - Two teams training in separate lane spaces at one time with separate area for divers
    - Accommodate up to four high school water polo boys and girls teams
        - Two to three teams training in separate areas at one time
    - Host high school dual meets, invitationals, and league championships and water polo tournaments
        - Ability to run two high school dual meets simultaneously
- Provide training space, including 50m lanes for year round swim clubs and deep water pool space for water polo and artistic swimming
- Provide diving boards accessible to use by Club diving teams while competitive swimming, water polo, and synchro teams are training
- Host small, mid-size, and large competitive aquatic events
    - Events not able to find time at the Weyerhaeuser King County Aquatic Center, that are too small for the KCAC, or that cannot afford the high event cost at the KCAC
- Create a design that can separate the community, health and wellness, and recreation spaces and access during competitive events to minimize any impact on daily programming during these events.
- Create a design with space and amenities to attract users from outside Bellevue to help support the operating costs of the Aquatic Center

The first step in the design process is to develop the ***Space Allocation Worksheet*** or Architect's Program (to differentiate from the aquatic program model). ***The Space Allocation Worksheet*** includes line item detail of all the design elements with their square footage. The square footage calculations than feed into the layout and design drawings of the overall facility. At this point in the design development it is most important to determine the dimensions and configurations of the pools and the space needed to meet all the facility goals. It is not necessary to develop a detailed building design to determine exactly where each bathroom or office goes, but to make sure that the space allocated meets the needs.

The SF/ISG Space Allocation Worksheet is included in this report as Attachment #19. The Space Allocation includes the comparative analysis of all City/ARC 2020 Study and the SF Design Options which will be discussed below in the Design Comparison Section of this report. It also includes the costing analysis for each option, which will be discussed below in the Project Costing Section.

Following is the detail of the SF Preferred Design Option. The specific spaces are in net square footage. Gross square footage is calculated as an additional 15% of the spaces, not including the natatorium space (pool and deck areas). This is the same gross-up percentage that ARC uses in the City design options. ISG includes a net to gross ratio for the spectator seating which is not included in the City/ARC design. Drawings of the SF Preferred will follow the specifications on pages 8-11.

<u>Total Building Space:</u>

- Net square footage 116,303 sf
- Gross Square footage 125,759 sf
- Gross Building footprint (main level) 115,582 sf

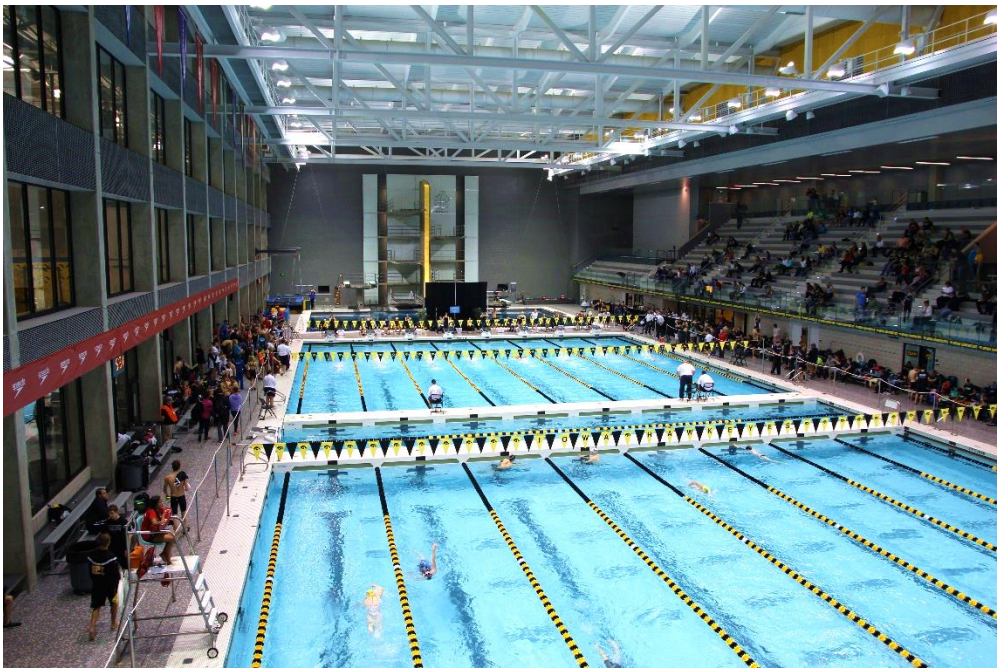
Main Competition/Recreation Pool

- Specifications
  - Pool surface area 13,200 sf
  - Deck space 13,702 sf (includes Deep Water Pool)
- 53.6m x 25 yd (176' x 75')
- 2 x 6' wide moveable bulkheads
- 9 x 50m lanes at 2.5m wide
  - 2.5m width (8.2') meets the FINA and USA Swimming minimum lane width requirements for championship competition
  - Option: 8 x 9' wide lanes
    - Wider than required and reduces the number of lanes available
      - Less rental revenue
      - Longer meets with 8 per heat
  - Option: 10 x 7.5' wide lanes
    - Narrow for training of high school and older swimmers
    - Additional lane for training, but tighter width reduces the functionality for training
    - Below USA Swimming requirements for senior and championship competition
- 18 x 25 yard 2.5m wide lanes in two courses lengthwise
  - Can conduct two course competition as part of a large meet
  - Can conduct two separate high school swimming & diving meets or two water polo games simultaneously
  - Creates two 25 yard lap lanes across the width of the pool between bulkheads
- 20 x 25 yard 8' wide lanes across the pool available for use at any one time
  - NOTE: lane markings and targets for 22 lanes but two of these will always be unusable based on locations of bulkheads
- Depth: 7.0' to 9.0'
  - Creates competitive swimming depths for "fast pools"
  - Meets water polo minimums throughout the pool to allow for optimum training and legal competitive game conditions for high school and club teams
    - *NOTE: Full deep water polo facilities do not currently exist in the immediate Bellevue and surrounding area*
- Temperature: 80-81° F.
  - Ideal for training and competition and preferred by majority of active lap and masters swimmers
- Seating
  - Spectators (on mezzanine level): 900
    - Portion of these seats be retractable (recommend approximately 400) to create additional open flex space for dry-land work, program staging, and other flexible use and programming when not used for the larger events
    - Seating capacity is developed based on input from user groups, sport governing bodies and experience to meet the event goals targeted by user groups. Compares to seating capacity at KCAC of 2,500 spectators
  - Deck seating for 720 competitors for meets and games and 840 for all purposes (see deck space details below)

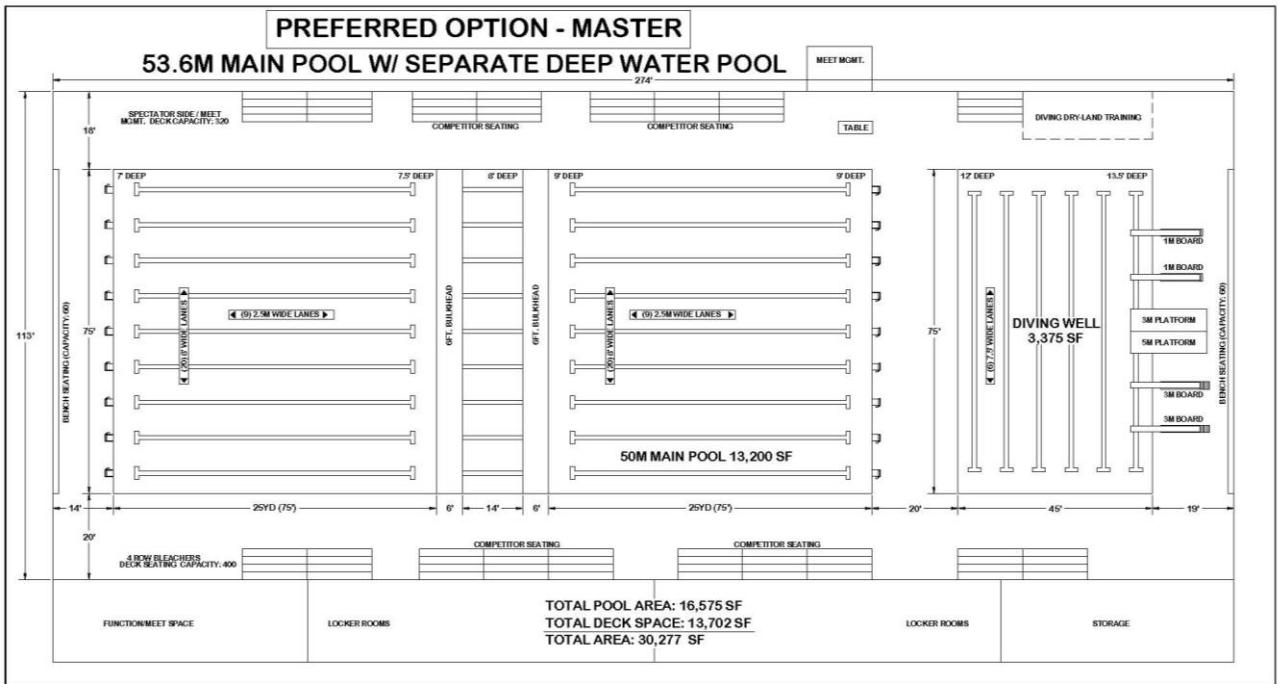
        - Aligns with the meet sizes supported by the spectator seating
        - Tip and roll bleachers
        - The Deck space and seating worksheet is included in this report as Attachment Design-#2
- Scoreboard and Timing System
    - Timing and Scoring System
        - Timing system to accommodate 2 x 9 lane competition courses for swimming
        - Starting block mounted individual lane speakers
        - Pace clocks to provide visibility to all training configurations
        - Water polo software and wireless water polo game controllers to accommodate 2 simultaneous water polo games
        - Software and remote judging terminals for diving and artistic swimming
    - Scoreboard
        - High resolution color video board
            - Data space for 2 competitive courses concurrently
            - Data space for 2 concurrent water polo games
            - Video capabilities
            - Recommend 10mm pixel spacing for resolution (the smaller the pixel spacing the higher the resolution)
- Deck Space
    - Deck space is designed to provide appropriate deck seating and circulation for events as well as ample space for programming and daily use, training, and programming.
    - Starting End: 20’ of deck space
        - this is the space between the main pool and the deep water pool
    - Turning End: 14’
        - Includes a single bench along building wall that accommodates 60
    - Meet Management/Spectator Side: 18’
        - 8 x 15’ 4 row tip & roll bleachers accommodating 320
        - This seating includes the seating on the Deep Water Pool Deck
    - Opposite side of pool: 17.5’
        - 10 x 15’ 4 row tip & roll bleachers accommodating 400
        - This seating includes the seating on the Deep Water Pool Deck
    - NOTE: Deck Space includes the following allocations:
        - Pool gutter: 1.5’
        - Officials Walkway 3.0’
        - Athlete/Coach Circulation 6.0’ to 6.5’
        - Bleacher space 7.0’ for the 4 row bleachers
        - Additional space for blocks and event staging at starting end

Example of Deck Space

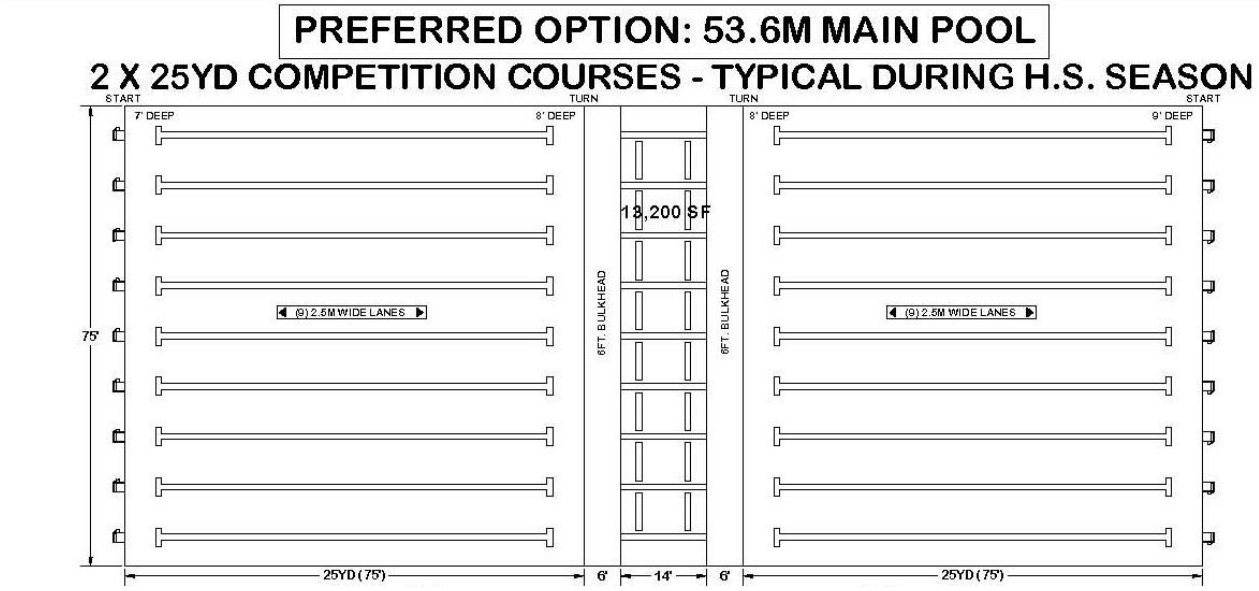
Example of 50m with Two Bulkheads and Separate Deep Pool

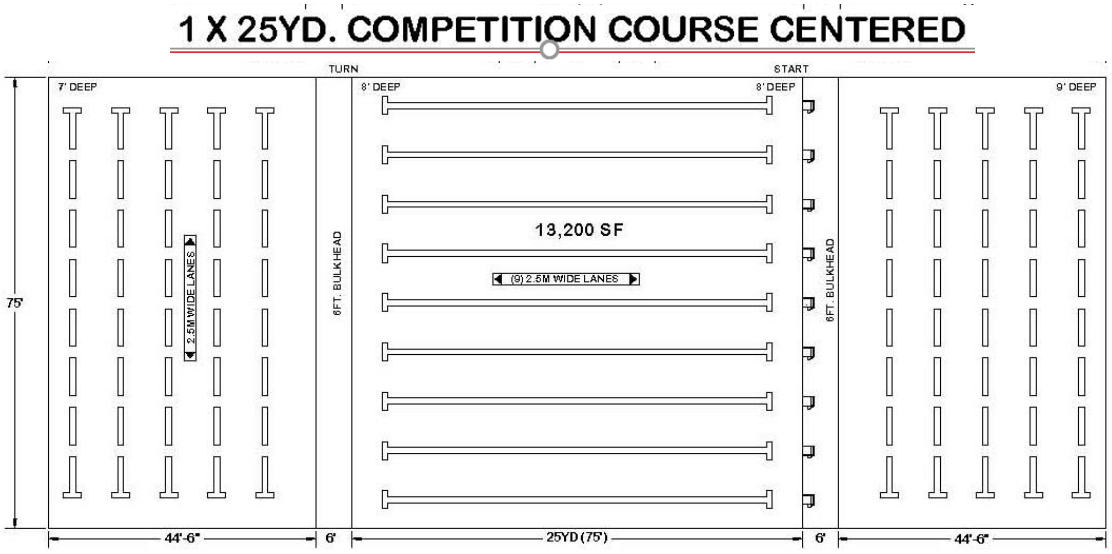


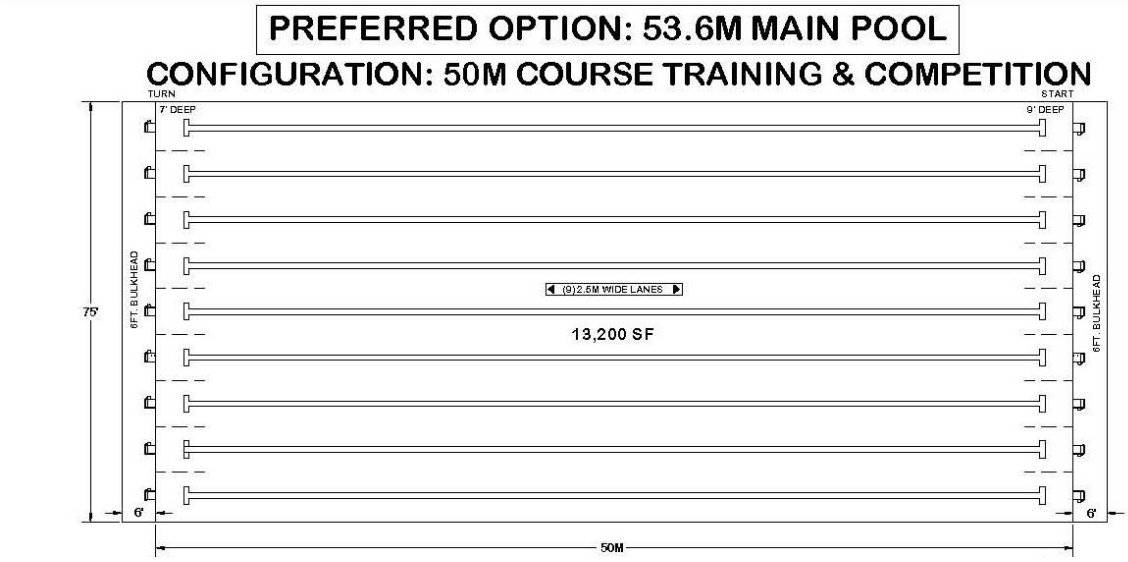
Drawing #1: SF Preferred Design Option

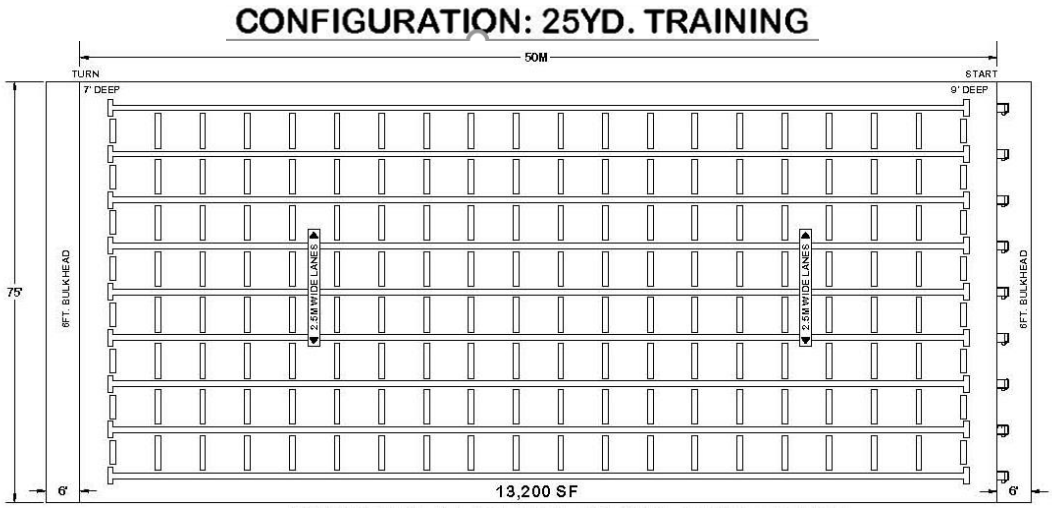


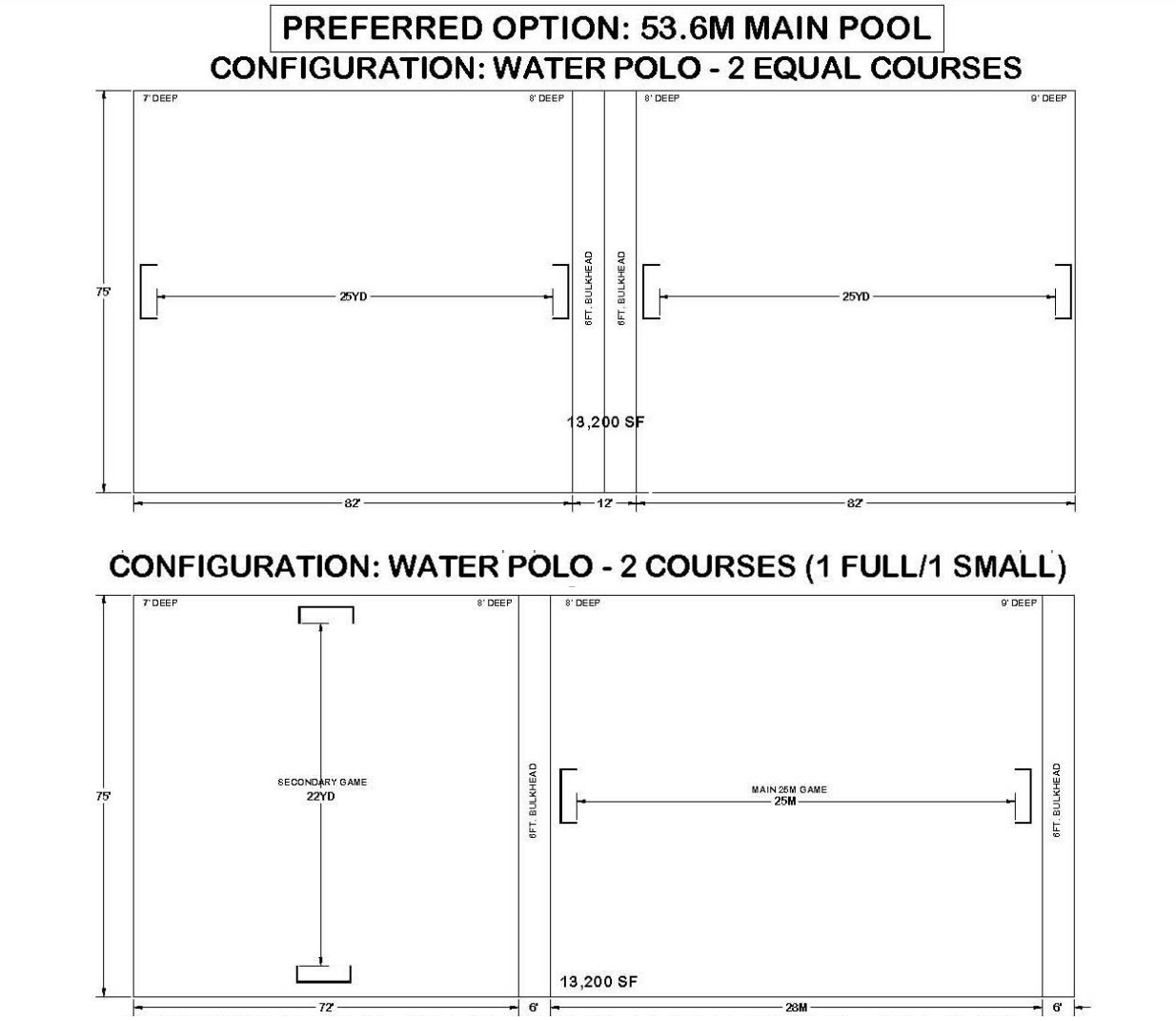
SF Preferred Design Option Main Pool: Common Configuration Options






PREFERRED OPTION: 53.6M MAIN POOL
CONFIGURATION: 50M COURSE TRAINING & COMPETITION
TURN
START
7' DEEP
9' DEEP
6FT. BULKHEAD
6FT. BULKHEAD
75'
(9) 2.5M WIDE LANES
13,200 SF
6'
6'
50M


CONFIGURATION: 25YD. TRAINING
50M
TURN
START
7' DEEP
9' DEEP
6FT. BULKHEAD
6FT. BULKHEAD
75'
2.5M WIDE LANES
2.5M WIDE LANES
13,200 SF
6'
6'



Full Set of Preferred Option Drawings with Additional Pool Configurations are included in Attachment #22.

- Spectator Seating Options
  - There will be many meets and events such as high school dual meets and water polo games that will not require the full seating capacity of the SF/Preferred Option and the City/ARC 2020 Study Options #2 and #3.
  - Depending on the design of the seating, it is possible to make some portion of the seating retractable to free up program space when the full seating capacity is not needed. Uses include:
    - Team dry-land stretching and workouts
    - Pre-practice staging and organization
    - Space for activities during youth camps and special events
    - Flexible function space during smaller events

- Below are photos of an aquatic center with seating for 1,000 where 450 seats are retractable created additional dry-land and function space on the seating level

Retractable Spectator Seating

- Rectangular Recreation
  - Equipment and capabilities for removable recreation equipment to maximize the public recreation element of the Main Pool (see examples of Rectangular Recreation Options in the Program Section of this Report)

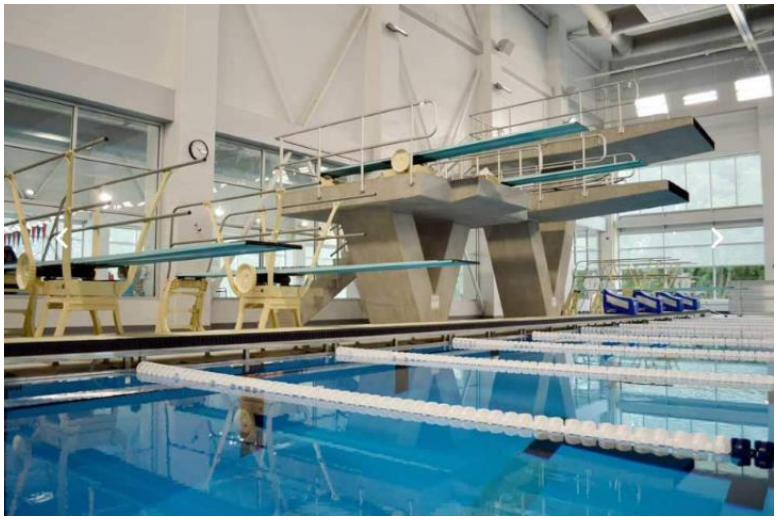
<u>Deep Water Pool (See Drawing #1 above)</u>

- Specifications
  - Pool area: 3,375 sf
  - Deck area: Included in Main Pool deck space
- 25 yd x 45' (75' x 45')
- Diving boards
  - 2 x 1m
  - 2 x 3m
  - Option for 1m, 3m, and 5m tower/platform complex
    - Pending outside funding by the diving or private community
    - *NOTE: Building height requirements are the same for the 1m to 5m platform/tower heights*

- 6 x 25 yard lanes @ 7.5' wide for lap lanes and event warm-up lanes
- Depth: 12.0' to 13.0'
- Temperature: 83-84°
  - Ability to cool down when used for large meet warm-up lanes or water polo tournament
- Configurable for water polo and artistic swimming training
- Deck space
  - Behind diving boards: 19'
    - Includes single bench along wall that can accommodate 60
  - Spectator/Meet management Side: 18'
    - Space for judges
    - Deck space for diving dry land equipment such as trampoline, spotting rig, stretch area, etc.

- Opposite side: 17.5’
  - Tip and roll bleachers for competitors and program staging
- Between Deep Water and Main Pool: 20.0’

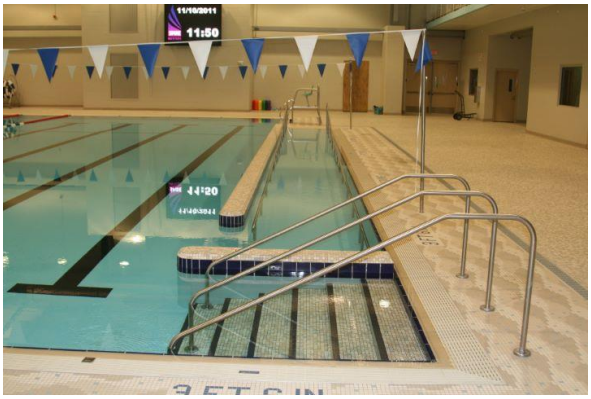
Example of Diving Facility with 1m & 3m Boards and Optional 3m & 5m Platforms



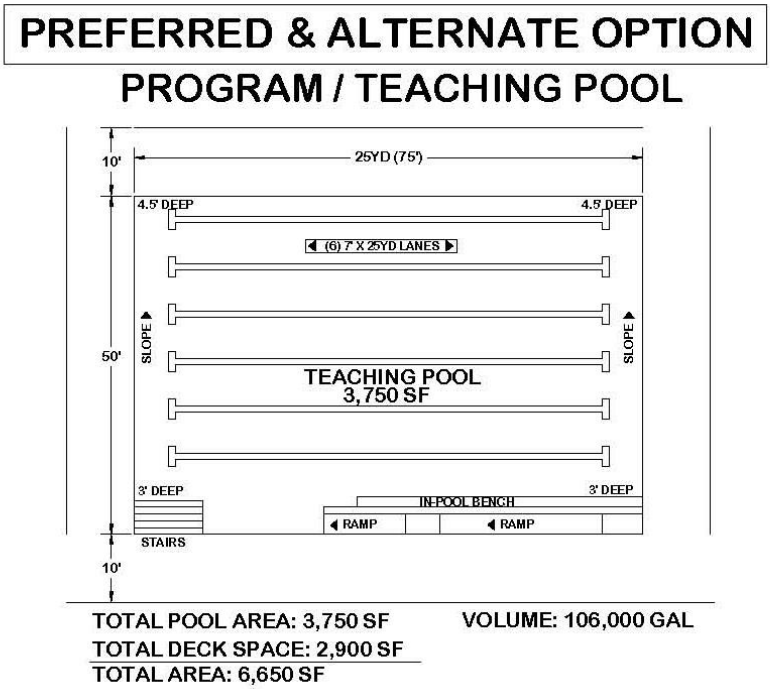
<u>Program/Teaching Pool</u>

- Specifications
  - Pool area: 3,750 sf
  - Deck area: 2,900 sf
  - TOTAL area: 6,650 sf
- 25 yd x 50’ (75’ x 50’)
- 6 x 25 yard lanes @ 7.5’ wide for lap lanes and event warm-up lanes
- Depth: 3.0’ to 4.5’
  - Depth sloping side to side to better accommodate programming and use
- Temperature: 86-87°
- Flush Deck gutter system to facilitate ease of access and instruction and accommodate equipment and accessories
- Wheelchair access ramp
- Stairs
- In water bench for class staging
- Deck space
  - Deck on all sides: 10’
    - Recommend benches along one or two sides for program staging
    - May opt for a couple 2-row tip & roll bleacher units
    - Ample space for classes, instructors, staging, families and special needs access

Example of Program/Teaching Pool



Drawing #2: Program Pool



Leisure Pool

The current Leisure Pool design is a square footage place holder. It is difficult to analyze this square footage without more specific design elements and amenity/feature detail. Most community Leisure Pool spaces include two to three 25 yard lap lanes for programming and classes. In this case these program areas are not needed in the Leisure Pool based on the Program Pool included in the overall BHAC design. For the SF Preferred Option we have used a square footage place holder halfway between the City/ARC Option #1 6,000 sf and Option #2 8,000 sf. We think even 7,000 sf may be oversized, but it will be important to review this again based on more detailed design.

- Specifications
    - Design detail to be determined in next design phase
    - Pool area: 7,000 sf
    - Deck area: 4,300 sf
    - TOTAL area: 11,300 sf
- Suggested Features:
    - Slides
    - Current Channel (lazy river)
    - Zero (Beach) entry area
    - Water play features
    - Other features TBD (detail design of Leisure Pool is part of next phase of project design)
- Depth: 0.0’ to 5.0’
- Temperature: 84°
- Deck space
    - Deck space varies in and around all features
    - Deck space provided for small family friendly lounging area with tables, chairs, lounges

<u>Wellness/Therapy Pool</u>

- Actual design detail to be determined in next phase of design
- Specifications
    - Pool area: 2,000 sf
    - Deck area: 2,736 sf
    - TOTAL area: 4,736 sf
- Depth: 3.5’ to 6.0’
    - Small deep area for vertical therapy
- Flush Deck gutter system to facilitate therapy and instruction and accommodate equipment and accessories
- Temperature: 92°
- Lift or Chair elevator
- Wheelchair access ramp
- Stairs
- Deck space
    - Deck on all sides: 12’
        - Deck space needed for wheel chairs, therapists, companions/helpers, and assistance for users and patients
        - Recommend bench along one or two sides for program staging

Example of Wellness/Therapy Pool

Example of Wellness Pool Adjacent to Program Pool

<u>Whirlpool/Spa</u>

- Pool Space: 300 sf
- Deck space included in Wellness/Therapy Pool deck
- Temperature: 101-103°

Locker Rooms Spaces

The nature of locker room and changing spaces is rapidly evolving in the recreation and aquatic world, adjusting to new norms for gender neutrality, child safety, family access, handicap access, staff, privacy, and hygiene. The COVID-19 Pandemic will generate additional code requirements and best practices in any "new normal" that evolve. Since the actual construction of the Aquatic Center will be several years out in a best case scenario, it is important now to identify the total space needed and the locker/changing room options understanding that new codes and best practices may alter the detail in the final detailed design.

- TOTAL: Locker/Changing Rooms spaces: 10,425 sf
- Overall general locker rooms (4 rooms) 8,000 sf
    - Recommend the 4 rooms so that 2 locker rooms can be separated for use during events to avoid intermingling event participants and public community users during larger events
- Universal changing rooms: 800 sf
    - 8 @ 100 sf each
- Universal ADA compliant changing rooms: 450 sf
    - 3 @ 150sf each to allow for companion or care-giver and wheel chairs
- Staff locker rooms: 500 sf
- Locker areas also include the following
    - 2 x saunas at 200 sf each 400 sf
    - Towel/laundry service: 175 sf
        - Supports staff and program needs with the potential for member towel service
- Option: No separate high school team locker rooms are included in the SF Preferred design or in the ARC/City design options. These can be added based on capital funding from the School District. The School District expressed interest in team locker rooms, but it was not a high priority for the District, especially since they do not have team locker rooms at any of the facilities they currently use. Most public non-school owned facilities do not have separate team locker rooms for high school teams using the facility.

Fitness and Workout Spaces

The fitness spaces in the BHAC are designed to enhance value to users, create opportunities for synergistic fitness and health programming with the aquatic programs, and meet shortages of public workout and fitness facilities in Bellevue. See Programming Section for more detail.

- Cardio and Strength Training: 4,000 sf
    - Compared to 2,345 sf at the South Bellevue Community Center
- Exercise and Workout space total: 4,000 sf
    - This is a total space allocation to support group exercise rooms, flexible workout space, and fitness studio space
    - The breakdown of these spaces can be specifically allocated following additional research on community needs and opportunities and current demand at the South Bellevue Community Center (SBCC)

Examples of Workout and Fitness Spaces

Therapy & Wellness Spaces

The Wellness/Therapy Pool is an important component of the BHAC. Both the SF and the City designs include some "dry" therapy treatment and work space to support the aquatic based therapy, rehab, and special needs programming in the Wellness Pool. The need for this space has been identified by many of the current users of the BAC/Odle Wellness/Therapy Pool.

- Treatment and evaluation space: 1,000 sf
- Therapy office and work stations: 300 sf
    - 3 work stations/offices @ 100 sf each
- *NOTE: Final design decisions and scope of these therapy spaces can be predicated on support or partnerships of area health care or therapy service providers.*

Lobby and Function/Meeting Space

An important goal of SPLASH*Forward* is the development of a community hub with activity and function space to serve and bring the community together in a healthy and safe environment. This goal has become even more important as we all realize the importance of safe community interaction and how we have missed it during the COVID-19 Pandemic.

- Lobby Space
    - Includes vending, area, front desk with access control and info station, lounging area

        - May also have small kiosk managed by front desk staff to provide water, sports drinks, energy bars, and miscellaneous sport equipment such as caps and goggles
    - Overall Community/Building Lobby: 1,000 sf
    - Aquatics Lobby: 1,000 sf
    - NOTE: During regular days these lobby spaces are adjacent and joined functionally as one space. During aquatic competitive events these lobbies can be divided to provide separate access to the event venue (Main Pool and Deep Water Pool) and the community area and users, including the Leisure, Program, and Wellness pools and the fitness areas. This additional level of access control can also be important during future health scenarios such as the COVID-19 Pandemic.
- Viewing area for Program and Leisure pools 50 sf
    - Parents watching swim lessons, etc.
- Concessions 800 sf
    - Supports competitive events
    - Supports leisure pool during peak times
    - Can have some limited concession to support early morning and after school users
        - May have some packaged goods such as water, sport drinks, energy bars at kiosk at front desk.
- Function & Meeting spaces:
    - "Wet" function spaces: 2,000 sf
        - 2 x larger spaces
            - Sub-dividable
            - Ideally these may bridge or connect the different pool decks, but may need to be specific to pools based on final design
            - One Adjacent/accessible to Leisure Pool deck
                - Party spaces for birthday parties
                - Social functions
            - One Adjacent/accessible to Main Pool and Deep pool deck
                - Team rooms
                - Event hospitality and officials meetings
                - Classes such as scuba, lifesaving, etc.
                - Program related meetings
    - "Dry" Meeting, Conference and Function spaces: 2,400 sf
        - Flexible/Sub-dividable spaces
    - Kitchenette or catering/warming kitchen: 300 sf
        - Supports the wet and dry function spaces
    - Additional Options for function space
        - As the need for community meeting, function and programming space the next design phase may want to also consider the following specific community spaces (dedicated for full time or portion of the day use):
            - Senior function space
            - Youth program space

Examples of Lobby Spaces

Examples of Function Spaces

Party Room

Overlooking the Pools

Board Set-Up

Function Set Up/Sub-dividable

Community Spaces

Spaces that support the overall activity and users in the facility.

- Child-watch space 1,200 sf
- First Aid station 300 sf
- Public restrooms-Daily use 1,800 sf
    - Can also support event overflow

Child Watch Room

Event Space

Spaces that support events and competition. SF Preferred Design Option places these spaces on a second level, rising from the aquatic portion of the general first level lobby.

- Second Level total: 8,850 sf
    - Spectator Upper Lobby/Concourse: 3,000 sf
    - Spectator seating: 3,600 sf
        - Approximately 4sf/spectator
        - Portion of seating retractable for flexible daily use
    - Spectator Restrooms: 2,000 sf
        - Will be based on code requirements in final design phase
    - Ticket Booth 150 sf

Examples of Spectator Concourse

Program Office Space

The SF Preferred Design includes office space to support the aquatic and fitness programs as well as work stations for key outside user groups.

- Aquatic Office spaces
  - City Aquatic Director 175 sf
  - Aquatic Program Offices/workstations 400 sf
  - Lifeguard/First Aid office 500 sf
    - Adjacent to pool decks, perhaps connecting main areas
  - High School coaches offices/workstations 400 sf
  - User Group offices/workstations 400 sf
    - Includes outside clubs, teams and organizations that are high volume long term users committed to the Aquatic Center
  - Meet Management Suite 500 sf
    - Adjacent to Main Pool deck near starting end
    - Flexible to be used as workstations when not used for events
- Fitness Office/workstations: 300 sf
  - Instructors and trainers
- Building Offices
  - Building Manager's Office 150 sf
  - Building Administrative Office 300 sf
  - Operations Office 100 sf
- Staff Break-room and office storage: 750 sf

Building Operations

These spaces are included in the ARC/City design at a higher space allocation (see Comparison Section). It is not clear to SF/ISG what functions these spaces include. These spaces need more discussion in the next design phase.

- Workroom with storage 500 sf
- Building Operations 500 sf
- Building Maintenance 500 sf
- Building Mechanical/Elec/IT/Fire 1,200 sf
- Custodial closets/spaces 240 sf

Aquatic Mechanical Systems Spaces

- Pump room and pool mechanical systems 3,600 sf
- Natatorium Mechanical/Elec/IT/HVAC 1,750 SF
    - Can explore exterior HVAC units to conserve space

Mechanical Systems and Technology

The actual mechanical systems and technology are not specified in this Feasibility Design phase, but these elements are important to the overall performance, environmental impact, and operating financial model of the BHAC. SPLASH*Forward* and ISG have identified critical technology that will be important to the success of the BHAC and are important to the aquatic stakeholders. These include:

- Regenerative Media Filters
    - Enhanced water quality
    - Reduced water and chemical use
    - Reduced heating costs with less cold replacement water
    - Reduced chemical costs
- UV System
    - Enhanced water disinfection
    - Improved air quality
    - Reduced chemical use
- Variable Frequency Drives (VFDs)
    - Reduced energy usage
- Source capture air exhaust system at water level to exhaust chloramine laden air at surface level
    - Can reduce amount of replacement air reducing operating costs
    - Lengthen lifespan of Natatorium HVAC system
- State of the art on line chemical/water control systems
- LED lighting
- Review pool construction technology options

Storage

The storage areas are designed to support each functional and program area of the BHAC plus the overall building operations. The storage space is considerably higher in the City/ARC 2020 Study design (see Comparison Section). Storage areas need to be reconciled in the next design phase.

- ***TOTAL: Designated Storage Spaces 10,750 sf***

- **Aquatic/Pool Storage 6,000 sf**
    - Main Pool
        - Team specific secure storage: 1,000 sf
        - Aquatics event staging seating storage: 2,000 sf
            - Based on limited storage needed for deck bleachers this space may be reduced in the next design phase.
            - Includes event chairs, tables, award podium, timing equipment and other event equipment

        - General Aquatic Storage 2,000 sf
            - Includes lanes lines, water polo goals, training equipment, etc.
            - Can be reduced with below deck lane line storage
    - Program Pool Storage 400 sf
    - Leisure Pool Storage 600 sf
- **Fitness Storage 1,900 sf**
    - Cardio/Strength storage 700 sf
    - Fitness space and program storage 1,200 sf
- Therapy Facility Storage 600 sf
- Office Storage (in work room spaces)
- Building Storage 1,000 sf
- Spectator concourse Storage (2nd level) 100 sf
- Miscellaneous Storage

Outdoor/Green Spaces

Multi-purpose aquatic centers can provide wonderful anchors for outdoor fitness and leisure activities adjacent to the facility (see notes in the Programming Section). These can include:

- Sun deck opening out from the Leisure and/or Program Pools
- Jumping off point for trail runs and rides if the BHAC is adjacent or easily accessible to trails
- Outdoor fitness/workout stations around the facility
- Overall green space family area if available
- Links to safe bike access points

Clearly, these opportunities are dependent on the site location and SF/ISG understand that site and land availability is very tight in Bellevue, but these are design elements that should be taken into account when selecting a site and developing the design detail in the next stage in development.

Examples of Potential Outdoor Fitness and Green Spaces

Patio Spaces and Furniture off of Pool Deck

Outdoor Green Space and Amenities

Outdoor Fitness Stations: Can Connect To Trails

SPLASH*Forward* ALTERNATE DESIGN: 50M STRETCH OPTION

SPLASH*Forward* and ISG have developed an SF Alternate Option that is very similar to the SF Preferred Option, only substituting a Stretch 50m Main Pool to include diving and deep water into a single body of water and eliminate the separate deep water pool. This Stretch 50m Main Pool in the SF Alternate Design Option is very similar to the Stretch 50m Main Pool in the City/ARC Option #2. Other than the Main Pool and elimination of the Deep Water Pool the rest of the pools and all the community, support, and fitness spaces are the same as the SF Preferred Design Option.

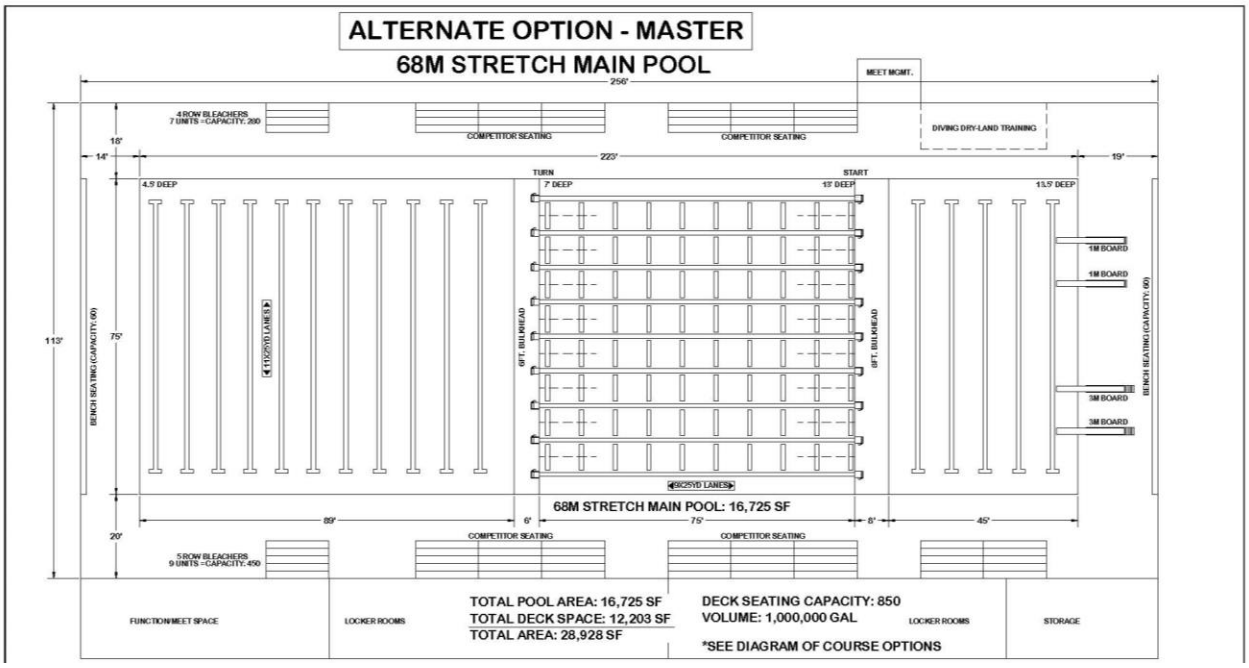
<u>SF Alternate Option Detail (See Drawing #3 below)</u>

- Specifications
  - Total Building Gross Square Footage 123,950 sf
  - Pool surface area 16,725 sf
  - Deck space 12,203 sf
- 68m x 25 yd (223’ x 75’)
- 1 x 6’ wide moveable bulkhead
- 1 x 8’ wide moveable bulkhead (positioned toward the diving/deep end and used for starting in various course configurations
- 9 x 50m lanes at 2.5m wide

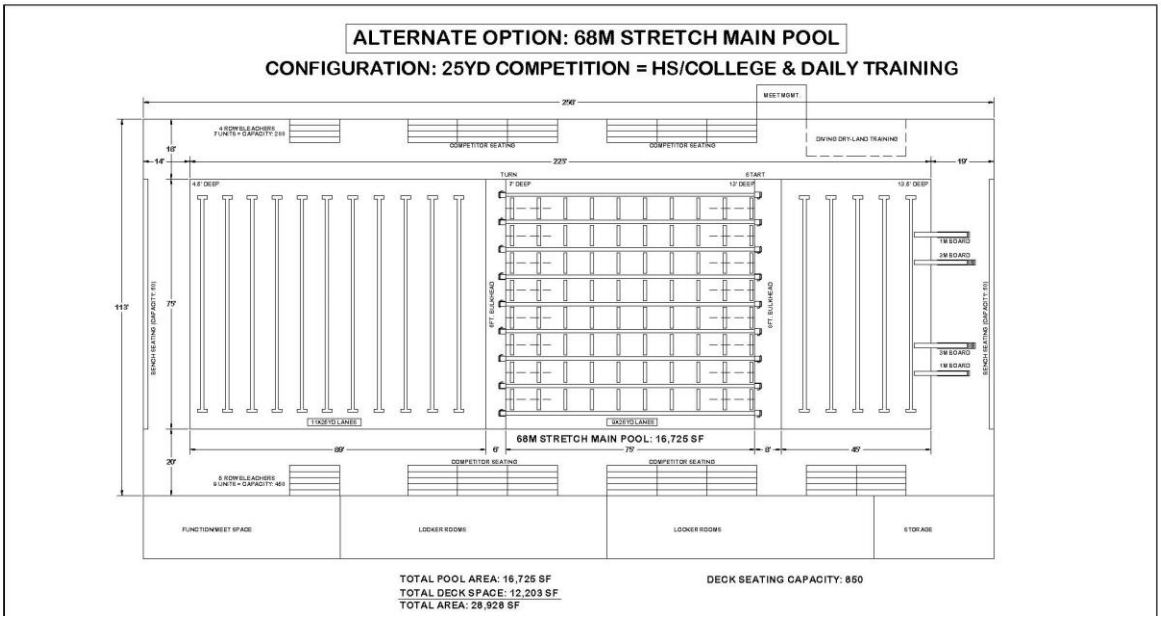
    - 2.5m width (8.2') meets the FINA and USA Swimming minimum lane width requirements for championship competition
- 18 x 25 yard 2.5m wide lanes in two courses lengthwise
    - Can conduct two course competition as part of a large meet
    - Can conduct two separate high school swimming & diving meets or two water polo games simultaneously
    - Creates two 25 yard lap lanes across the width of the pool between bulkheads
- 27 x 25 yard 7.5' wide lanes across the pool available for use at any one time
    - NOTE: lane markings and targets for 29 lanes but two of these will always be unusable based on locations of bulkheads
- Depth: 4.5' to 13.0'
    - Creates deep competitive swimming depths for "fast pools"
    - Meets water polo minimum depth requirements to configure to 2 x 25m water polo game courses.
    - Provides some shallow water for community programming at one end of the Stretch 50m
- Temperature: 80-81° F.
    - Ideal for training and competition and preferred by majority of active lap and masters swimmers
- Seating
    - Spectators (on mezzanine level): 900
        - Portion of these seats be retractable (recommend approximately 400) to create additional open flex space for dry-land work, program staging, and other flexible use and programming when not used for the larger events
        - Seating capacity is developed based on input from user groups, sport governing bodies and experience to meet the event goals targeted by user groups. Compares to seating capacity at KCAC of 2,500 spectators
    - Deck seating for 730 competitors for meets and games and 850 for all purposes (see deck space details below)
        - Aligns with the meet sizes supported by the spectator seating
        - Tip and roll bleachers
        - The Deck space and seating worksheet is included in this report as Attachment Design-#4
- Deck Space
    - Deck space is designed to provide appropriate deck seating and circulation for events as well as ample space for programming and daily use, training, and programming.
    - Deep/Diving End: 19' of deck space
        - Includes a single bench along building wall that accommodates 60
    - Turning End: 14'
        - Includes a single bench along building wall that accommodates 60
    - Meet Management/Spectator Side: 18'
        - 7 x 15' 4 row tip & roll bleachers accommodating 280
    - Opposite side of pool: 20'
        - 9 x 15' 5 row tip & roll bleachers accommodating 450

Example of Stretch 50m Pool

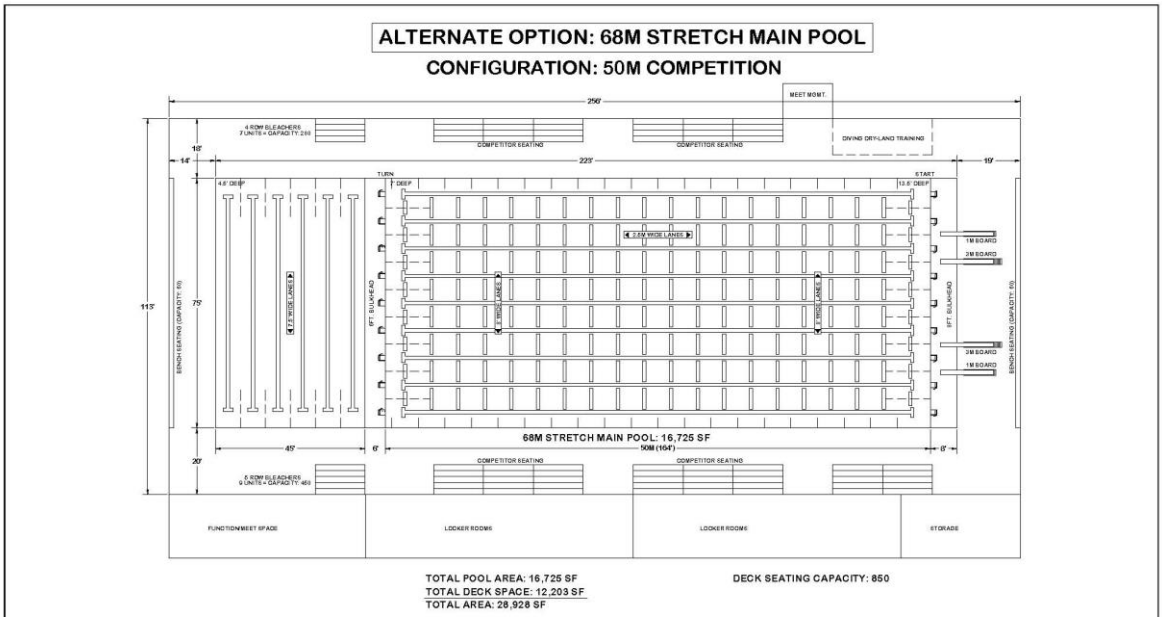
Drawing #3: SF Alternate Option Design Stretch 50m (68m)

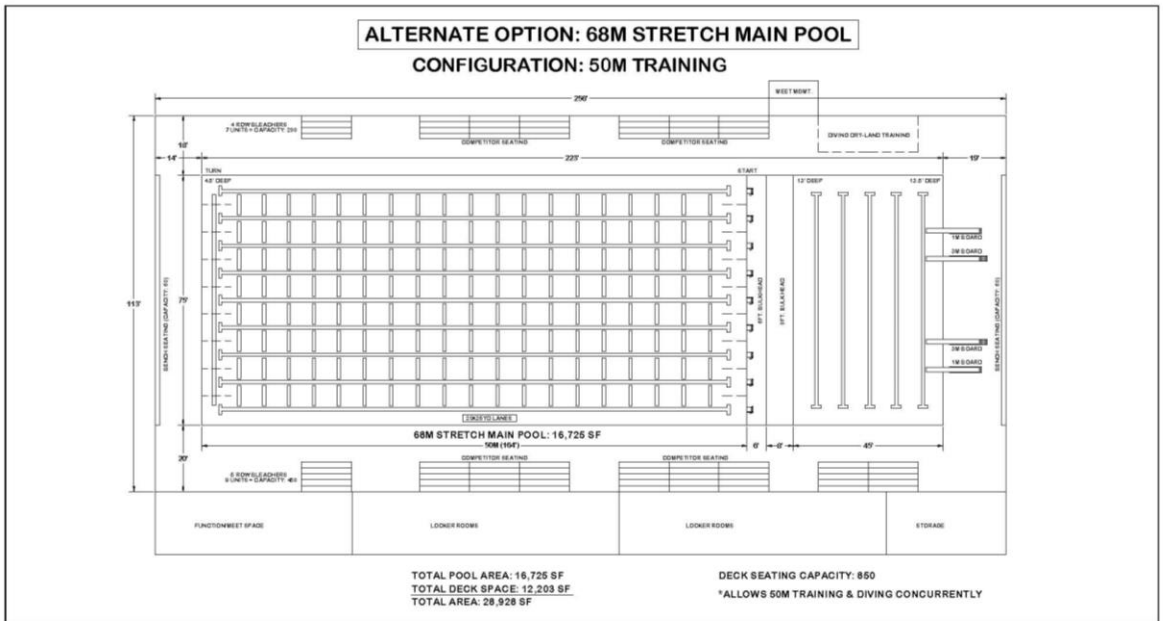


SF Alternative Design Common Configurations



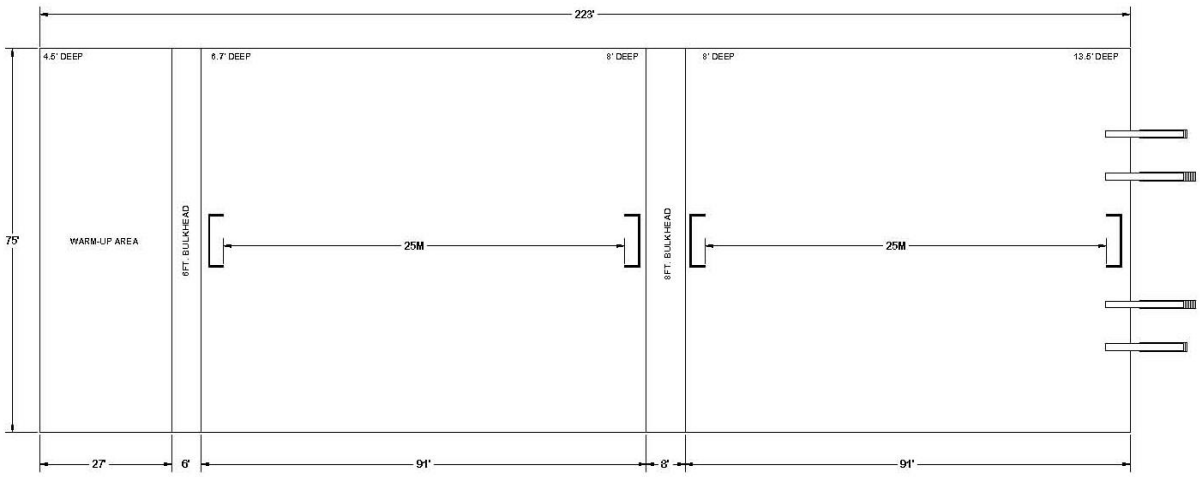
SF Alternative Design Common Configurations Continued





ALTERNATE OPTION: 68M STRETCH MAIN POOL

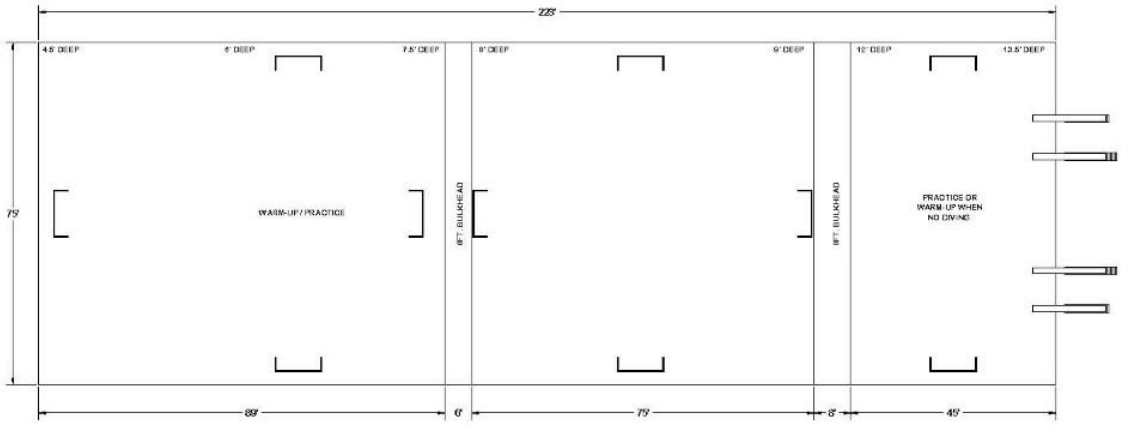
CONFIGURATION: WATER POLO COMPETITION (2) 25M COURSES



68M STRETCH MAIN POOL
16,725 SF

ALTERNATE OPTION: 68M STRETCH MAIN POOL

CONFIGURATION: WATER POLO TRAINING DURING SCHOOL YEAR



68M STRETCH MAIN POOL
16,725 SF

Full Set of Alternate Option Drawings with Additional Pool Configurations are included in Attachment Design #5.

Pros and Cons of Preferred and Alternate Options

- Preferred Option
  - Pros
    - Creates separate diving tank
    - More separation for meets with concurrent diving and swimming such as high school or collegiate championships
    - Separate deep tank can accommodate an optional 3 & 5m Tower complex
    - Water can be warmer than the main pool (83°) which the divers like (optional choice as to what the temperature would be)
    - Some deep water fitness program participants like warmer water
  - Cons
    - Warmer water reduces the effectiveness of the deep water for overflow swimming and water polo team training
    - The two separate pools reduce the flexibility for water polo and eliminate the option to configure the pool for two separate full water polo game courses.
    - Cost is between $1.3M to $1.5M higher
    - Operating Net Costs are approximately $35,000 to $45,000 higher per year
    - With the two pools there is not shallow water in either the Main 50m or the Deep Water Pools

- Alternate Option
  - Pros
    - Stretch 50m pool has some shallow water for community programming but can still configure to full 50m and 2 x 25 yard competitive courses in deep water
    - Cost is $1.3-$1.5M less
    - Annual Operating Net Costs are approximately $35,000 to $45,000 lower per year
    - Can support 2 x 25m (goal line to goal line) water polo courses in minimum legal depth water (2.0m)
    - Cool temperature throughout pool better support lap lanes and swim and water polo training throughout the pool
  - Cons
    - Does not allow warmer water in the deep water diving area
    - Slightly reduces the space available for diving dry land equipment such as trampoline and spotting rigs
    - Likely eliminates option to add 3,5m platform diving
    - Eliminates use of the diving boards during 50m competition or two course 25 yard swimming competition (see course configuration drawings above and in Attachment #Design-3
      - NOTE: The 50m training course utilizes the shallow end so diving can be running concurrently with 50m training and two x 25 yard training courses
      - *NOTE: There are no competitions or organizations that host 50m competition and diving competition concurrently. This is not a scenario for high school competition.*

SF/ISG AND CITY/ARC 2020 STUDY DESIGN COMPARISONS AND EVALUATION

SPLASH*Forward* and ISG have provided design feedback and questions for the City and the ARC team beginning in spring of 2019. We have reviewed the ARC design information we have received from the City in spring, 2019, fall 2019 and again most recently in April, 2020. We have shared with the Bellevue Parks Staff the areas where we differ in design concepts and specific spaces and elements where we have questions about the use, intent, and need of the space or element.

Following is a summary of the significant differences between the SPLASH*Forward* Preferred Option and the City/ARC 2020 Study design concepts. For ease of comparison, we use the City/ARC 2020 Study Option #2 in comparing specific spaces since Option #2 is closest to the SF Preferred Option. They differ in total square footage by less than 75 gross sf. We feel it is important to address many of the design detail variances for our constituents and aquatic stakeholders and as a resource for future design development work by the City and its design team. It is also important to note that the City/ARC Option #2 includes the closing of the existing Bellevue Aquatic Center/Odle facility. While the City/ARC Options are meant to be a menu of design elements, we recognize that it is easy to think of them as complete options which they are not.

We also recognize that the level of user engagement and usage analysis in the SF Preferred and Alternate Design Options is much deeper than the City/ARC 2020 Study design options. We provide this level of analysis to assist the next phase of design study to best reflect the data we have gathered.

The Space Allocation Worksheet (Attachment #21) includes side by side line item detail comparisons for the ARC/City Options and the SF Preferred and Alternate Options. Detailed comments addressing variances are included in the comment column of the worksheet. The comparative comments below also reference the relevant lines *(indicated in parentheses)* in the *Space Allocation Worksheet*.

<u>Aquatic Elements</u>

- Main Pool
    - The SF Preferred Option main pool is similar to the City/ARC Option #3 with a 50m main pool and a separate deep water pool.
    - The SF Alternate option and the ARC Option #2 are comparable, both with a stretch 50m pool. The ARC option is 66m and the SF Alternate is 68m long
    - Deck Space and Seating: The SF Options include more deck space for competitor seating than in the City Option #2 and equal to Option #3. The concern is that once the deck space needed for the deck bleacher seating for competitors, the remaining deck space is very tight in all of the City Design Options. Below is a comparison of the deck circulation space along the sides:

Deck Widths and Spaces

Side Deck Functional Width in feet	SF/ISG Preferred Option	*City/ARC Option #2	*City/ARC Option #3
Pool Gutter	1.5’	1.5’	1.5’
Officials Walkway	3.0’	2.5’	2.5’
Athlete/Coach Circulation	6.0’ to 6.5’	4.3’	3.5’
+Deck Seating	7.0’	3.0’	7.0’
Overall Side Deck Width	17.5’ to 18.0’	11.3’	14.5’

*__NOTE__: City/ARC design deck widths are calculated by ISG based on total deck space and space requirements at starting and turning ends.

+__NOTE__: Deck Seating widths are based on seating space needed for tip and roll bleachers required to meet competitor seating targets in the design options.

SF/ISG find these tight deck spaces to be a limiting element for targeted events and will create significant overcrowding on the deck.

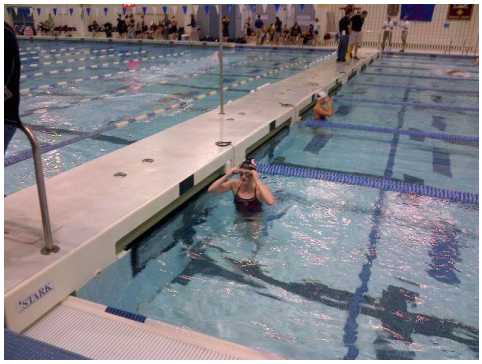
(Deck Spaces are in lines 214-222 in the Space Allocation Option Comparison Worksheet in Attachment #19).

The Deck Seating and Space worksheets for the City/ARC 2020 Options #2 and #3 and the SF Preferred and Alternate Options are included in this report as Attachment #21 as follows.

- ***SF Preferred Option:*** ***Attachment #21A***
- ***SF Alternate Option:*** ***Attachment #21B***
- ***City/ARC Option #2:*** ***Attachment #21C***
- ***City/ARC Option #3:*** ***Attachment #21D***

- Bulkheads: *(Line 23)* The SF Preferred options include two 6’ wide bulkheads which provide the appropriate width to provide the structural integrity and space to confidently use the bulkhead in mid pool for starts and turns, for artistic swimming deck work, and other event and program options.
  - The City/ARC design also includes two bulkheads in all its options, but these are 5.4’ wide in Option #2 and 4.6’ wide in Option #3, which creates a narrower bulkhead and reduces the functional space for program and event use.

Examples of Bulkheads



- Lanes: *(Line #22)*
  - Lengthwise: The SF design includes 9 x 50m lengthwise competitive lanes (18 x 25yd) competitive lanes compared to the 8 x 50m lanes in the City/ARC design. Both lane widths meet competitive standards, but USA Swimming club user groups preferred the 9 lanes to create more training space and shorten the length of meet sessions with more swimmers per heat.
  - Widthwise: The City/ARC Options show widthwise lanes that are only 7' wide, which is quite narrow for training and circle swimming for competitive swimmer and active lap swimmers. The SF Preferred Option has 8' wide widthwise lanes for better training, although this results in 1 to 2 less lanes widthwise.
  - Meet Management Suite: *(Line 187)* The City/ARC Options show twice as much space (1,000 sf to 500 sf) for the meet management suite. Most meets these days are run from a deck table with the back room servers, printers, and scoreboard controllers in the Management Suite. Current thinking in meet management is to limit the number of people in these rooms to key functions. SF/ISG and sport governing bodies feel that the 1,000 sf is too much for the current meet/event management models, even with the inclusion of a restroom and some sensitive equipment storage.

- Program Pool *(Lines 27-34)*
  - The Program pools are fairly similar in features and amenities, but vary in sizes compared to the SF Options.
  - The SF Options have a 25 yd x 50' Program Pool with 6 x 7.5' lanes with depth from 3.0' to 4.5' sloping side to side with a ramp and stairs.
  - The City Option #2 Program Pool is 25 yds by 20m (75' x 65.6') and includes I x 7' wide lanes. This size makes sense since the BAC/Odle pool is would be closing and the additional program space will need to be made up in the new Aquatic Center Program Pool.
  - The City Option #3 further increases the Program Pool to 25 yds x 24m (75' x 78.7') and has 10 x 7.5' wide lanes. In Option #3, the BAC/Odle pool is still in use. SF/ISG feel that this is larger than needed, since these lanes will very rarely be used for warm-up lanes for competition with the warm-up lanes in the separate deep water pool. The 86° temperature of the Program Pool also limits the demand for lap lanes

in the Program Pool. The Option #3 Program Pool can be smaller and still meet the demand for program use in the Aquatic Center.
    - Deck Space: The deck spaces in the SF Options and the City/ARC Options are virtually identical, providing 9.5' to 10' of deck space on all sides.
- Wellness/Therapy Pool *(Lines 53-59)*
    - The Wellness/Therapy Pools are consistent from the SPLASH*Forward* to the City/ARC Options.
        - SF Options and ARC Option #3 have 2,000 sf Wellness Pools
        - ARC Option #2 has 3,000 sf, which is important since the BAC/Odle Wellness/Therapy Pool would be closed in this option:
        - NOTE: The BAC/Odle Wellness Pool is approximately 1,750 sf.
    - The deck space *(Line 237)* surrounding the Wellness pools, however, do vary significantly. Deck space is important in the Wellness/Therapy Pools to provide space for wheel chair maneuverability, therapist work, ease of handicap access and other important programming space for this pool.
    -

	SF	Option #2	Option #3
Deck Space/side	12'/side	7'/side	7.5'/side

We feel it is important to have adequate deck space to optimize the functionality and benefits of the Wellness/Therapy Pools.

Fitness

The fitness facilities are important to the overall success of the BHAC and the benefit to the community (see Programming Section in this Report for discussion of dry-side programming). The scope of the fitness facilities, however, represent a variance between the City/ARC designs and the SPLASH*Forward* designs. The SPLASH*Forward* design also lumps spaces together since it is not clear which spaces are most in demand in Bellevue and at the SBCC. In the next phase of project development SF/ISG believe a more detailed analysis of the need, opportunity, and demand for these fitness spaces and the current capacities and load at the SBCC be included in the process to determine the specific spaces and amenities needed to enhance the current public and private fitness options available in Bellevue. The fitness area in Option #3 was originally designed to support a partnership with Bellevue College and also support student fitness needs therefore, we caution that the scale of these components are somewhat misleading with respect to community needs.

Summary of Fitness/Workout Spaces: (Lines 108-129)
(This Table also appears in the Dry-land Program Section)

Feature	SBCC	SF Options	Option #1	Option #2	Option #3
Cardio/Strength Room	2,345 sf	4,000 sf	2,500 sf	5,000 sf	8,500 sf
Workout/Fitness Rooms		*2,500 sf			
Functional Fitness			750 sf	2,000 sf	2,000 sf
Group Exercise Rooms			1,000 sf	2,000 sf	2,000 sf
Fitness/Exercise Studios	1,462 sf	1,500 sf	750 sf	1,000 sf	1,000 sf
Gym	12,000 sf				9,000 sf
TOTAL (Not including gym)	3,807 sf	8,000 sf	5,000 sf	10,000 sf	13,500 sf
% Increase in Space to SBCC		+110%	+31%	+163%	+255%
% Increase in Space to Opt #1	-24%	+60%		+100%	+170%

***NOTE:** The SF/ISG Exercise spaces and studios are lumped together since we believe that a further analysis of program needs is necessary to determine which specific spaces are needed at the BHAC. See Dry-Side Fitness Section in this Report.

Community and Function Spaces *(Lines 138-157)*
All the SPLASH*Forward* and City/ARC designs recognize the importance of community meeting and function space in the Aquatic Center. The SF Preferred Option and City Option #2 are identical. The SF Preferred Option provides a little more detail of the locations relevant to the pools and the actual use of these spaces. The Comparison Summary of Community and Function Spaces is included earlier in this Report on page #94.

Office Spaces: *(Line items in multiple sections)*
The office spaces in the SF and City/ARC design options are relatively comparable and provide offices for programming and operations.

- Programming offices include aquatic director and program staff, high school coaches, outside user groups, therapists, and fitness trainers, instructors and management.
    - SF Program Office Space = 2,600 sf
    - City/ARC Option #2 Program Office Space = 1,900 sf
- Building Operational Staff offices include the following (not including front desk in lobby space):

Office Space Summary and Comparison

Offices (all in square feet)	SF Options	City/ARC Option #1	City/ARC Option #2	City/ARC Option #3
Program Offices				
Aquatic Director	175 sf	0	0	0
Aquatic Program Office	400 sf	200 sf	300 sf	400 sf
Lifeguard/First Aid Office	500 sf	500 sf	500 sf	500 sf
High School Coaches	400 sf	100 sf	200 sf	400 sf
User Group Work Stations	400 sf	200 sf	400 sf	200 sf
Meet Management Suite	500 sf	1,000 sf	1,000 sf	1,000 sf
Fitness/Trainers Workspace	300 sf	200 sf	300 sf	480 sf
Child-watch Office/storage	250 sf	0	0	0
Therapy Offices	300 sf	0	300 sf	300 sf
SUBTOTAL: Program Offices & Workspaces	3,225 sf	2,200 sf	3,000 sf	3,280 sf
Facility Offices				
Building Manager	150 sf	150 sf	150 sf	150 sf
Building Administration	300 sf	300 sf	400 sf	400 sf
Workroom	500 sf	500 sf	500 sf	700 sf
Operations Office	100 sf	100 sf	100 sf	100 sf
Maintenance Office	200 sf	100 sf	200 sf	200 sf
Staff Breakroom	750 sf	750 sf	750 sf	750 sf
SUBTOTAL: Facility Offices & Workspaces	2,000 sf	1,900 sf	2,100 sf	2,300 sf
TOTAL: Offices & Workspaces	5,225 sf	4,100 sf	5,100 sf	5,580 sf

NOTE: Operational spaces also include line items for custodial closet spaces totaling 540 sf.

Storage *(Line items in multiple sections)*
The storage allocations in the SF and City/ARC designs represent a significant variance. While ISG never sees a pool director who complains about having too much storage, we think the storage in the City/ARC options are excessive and need to be clarified, especially in general facility storage.

Building Storage Summary and Comparison

Storage Spaces (in square feet): (NOTE # in parentheses)	SF Options	City/ARC Option #1	City/ARC Option #2	City/ARC Option #3
Aquatic Storage				
Team Secure Storage	1,000 sf	600 sf	2,000 sf	2,000 sf
Event Equipment/Seating (#1)	2,000 sf	2,000 sf	3,000 sf	4,000 sf
General Aquatic Storage		1,500 sf	2,000 sf	2,000 sf
Main Pool Storage	2,000 sf	400 sf	0	0
Program Pool Storage	400 sf			
Leisure Pool Storage	600 sf			
Wellness/Therapy Pool Storage	In Therapy	In Therapy	In Therapy	In Therapy
Below Deck Lane Line Storage	Potential	Potential	Potential	Potential
SUBTOTAL: Aquatic Storage	6,000 sf	4,500 sf	7,000 sf	8,000 sf
Fitness Storage				
Cardio/Strength (#2)	700 sf	800 sf	1,000 sf	1,000 sf
Fitness General Storage (#2)	1,200 sf	1,650 sf	1,750 sf	1,850 sf
SUBTOTAL: Fitness Storage	1,900	2,450 sf	2,750 sf	2,850 sf
Therapy Storage	600 sf	NA	750 sf	750 sf
Meeting/Function Rooms Storage	400 sf	300 sf	400 sf	600 sf
Concession Storage (#3)	500 sf	500 sf	750 sf	750 sf
Building General Storage (#4)	1,000 sf	3,500 sf	3,500 sf	3,500 sf
2nd Level Concourse Storage	100 sf	0	0	0
SUBTOTAL: Building Storage	2,600 sf	4,300 sf	5,400 sf	5,600 sf
GRAND TOTAL: Storage (#5)	10,500 sf	11,250 sf	15,150 sf	16,450 sf

Here are the major storage concerns (highlighted in yellow). See reference numbers from above.

1. Even including the event equipment in Bleacher Storage, the City/ARC 2020 Study space calculations for bleachers are very high. A 15' 4 row tip and roll bleacher unit when tipped up and stored has a footprint of 36sf. When we include another 15% for movement and the 18 units to support seating for 720 on deck this only totals 745 sf total. There is rarely any time when all the deck bleachers are stored off the deck.
2. The City/ARC 2020 Study fitness storage is also large and can be consolidated as the actual fitness spaces are further refined in the next phase study of the fitness spaces.
3. The City/ARC 2020 Study concession storage is also high for the total concession space (800sf) allocated and the low projected sales/revenue.

4. With all the storage in each particular component of the overall Aquatic Center totaling between 7,000 and 13.000 sf SF/ISG is wondering what additional building storage needs would require an additional 3,500 sf in the City/ARC 2020 Study.
5. The overall storage in City/ARC Options #2 and #3 represent total square footage that is 23% to 34% larger than the footprint of a 50m x 25 yard pool.

Although the SF Option Storage spaces are considerably lower than the City/ARC Storage spaces, SF/ISG feels that even the SF Preferred Option Storage spaces are generous and still may be further reduced in the next stages of design refinement as the storage space uses and needs are justified. ISG has never seen this much storage space in comparable facilities.

SF/ISG has shared this feedback with Bellevue Parks Staff during the Feasibility Study.

Building Operations: (*Lines 159-173)*
Building Operations is another area of discrepancy between the SF Options and the City/ARC 2020 Study Options. The challenge has been in identifying the function and use of these many spaces (including storage above). SF/ISG has shared this feedback with Bellevue Parks Staff and await more in depth dialog and response on refining these spaces during the next steps.

Specific program and operational office spaces in Option #2 total 5,100 sf plus an additional 540 sf for custodial closets and work stations. There are also mechanical system space line items for aquatics and overall building totaling 7,250 sf. In addition to these spaces, Option #2 includes the following building spaces:

- Building Operations: 1,200 sf
- Building Maintenance: 1,200 sf

These are large spaces with the other existing operational and office spaces already in the design. SF/ISG recommends further review of these spaces to clarify the need and use of these large spaces. The SF/ISG Preferred Option has included all of the operational spaces in the Option #2 design but have reduced the spaces, although SF/ISG does not have a clear understanding of these spaces and their uses. Analysis of these spaces will be an important design detail review during the next steps.

SPLASH*Forward* DESIGN RECOMMENDATIONS & SUMMARY

Based on community aquatic stakeholder engagement, review of best in class facilities, interviews and research with aquatic facility directors, market research, and research and guidance from the Isaac Sports Group, SPLASH*Forward* has the following design recommendations for the proposed Bellevue Aquatic Center.

Aquatic Spaces

- Main Pool
  - 53.6m x 25 yards with 2 x 6’ wide bulkheads
  - 9 x 50m 2.5m wide competition lanes and 18 x 25 yd 2.5m wide competition lanes
  - Deck widths ranging from 14’ at turning end, 20’ at starting end and 17.5 to 18’ on sides.
  - Depth: 7’ to 13’
  - Temperature: 80-81°

    - Spectator Seating for 900
    - On deck competitor seating for 720 competitors
- Deep Water Pool
    - 25 yard x 45’
    - 2 x 1m and 2 x 3m boards
    - Option for 1,3,5m platforms subject to outside funding
    - 6 x 7.5’ wide 25 yard lanes
    - Depth: 12’ to 13’
    - Temperature: 83-84°
- Program Pool
    - 25 yard x 50’
    - Deck space = 10’ on all sides
    - Depth 3.0’ to 4.5’ sloping side to side
    - Temperature: 86-87°
    - 6 x 7.5’ wide 25 yard lanes
    - Ramp and stair access
    - In pool bench for class and program staging
- Leisure Pool
    - 7,000 sf
    - Square footage to be fine-tuned as the specific recreation and leisure elements for pool are defined in the next phase of design.
- Wellness/Therapy Pool
    - 2,000 sf
    - Deck space = 12’ on all sides
    - Depth: 3.5’ to 6’
    - Lift or chair elevator access
    - Access Ramp and stairs

<u>Fitness Spaces</u>

- Cardio and strength training space
- Flexible group workout rooms
- Exercise/fitness studios
- Spaces to meet current and future Bellevue needs, enhancing and expanding on facilities at the SBCC

<u>Therapy Space</u>

- Small treatment/exam area and office/storage spaces for therapy and rehab services, ideally in partnership with local health care or therapy services provider

<u>Community Spaces</u>

- Large overall building lobby that can be segmented during events
    - Member/Public lobby
    - Aquatic Lobby that can be used during events
    - Second floor spectator concourse/lobby for events
- Multiple and flexible meeting/function/classroom spaces

    - "Wet" meeting spaces off pool deck for parties, event hospitality, team rooms, and aquatic classes
    - "Dry" meeting/function spaces for meetings, community functions, classes, programs
    - Catering kitchen or kitchenette to support function space
- Child-Watch space and program
- Concession stand for both events and peak use periods of the Leisure pool and overall facility

Office and Support Spaces

Ample offices and work stations for program and building staff as well as user groups:

- Program Staff
    - City Aquatic Director
    - Aquatic program staff
    - Fitness program staff
    - Therapy staff
    - High School coaches
    - High volume long term user groups (club teams)
- Building operations
    - Building Manager
    - Maintenance Office
    - Operations Office
- Storage:
    - Specific storage for each pool
    - Event storage
    - Secure team storage
    - Fitness Storage
    - Therapy storage
    - Office storage
    - Building storage

Outdoor Spaces if Site Allows

- Sundeck
- Trail connections
- Outdoor exercise stations
- Green space

Mechanical Systems, Technology, and Environment

- State of the art technology
    - Air handling
        - Source capture system
    - Water handling
        - UV system
        - Regenerative media filters
        - State of the art on-line control systems
    - Pool building technology

    - Hygiene (application of new best practices following COVID-19 impact)
- Technology and systems that reduce consumption:
    - Electrical use: Efficient filters, VFDs, LED lighting, control systems
    - Natural gas: Lower needs for replacement water and air to be heated and treated
    - Reduced Water and waste water
    - Reduced chemical usage
- Application of LEED guidelines (even if LEED certification is not actually sought)

Future of the Existing Bellevue Aquatic Center/Odle

SF believe that the existing BAC/Odle facility should remain open and be updated to better take advantage of the strengths of the facility and better integrate programs with the new Bellevue Aquatic Center. Design updates include the following:

- Add wheelchair access ramp and stairs to the 25 yard pool to enhance pool access
- Raise the temperature in the 25 yard pool to 85-87°, essentially creating a Program Pool to complement the Program Pool at the Aquatic Center
- Replace water mechanical systems with new state of the art system to reduce costs and create better water and air quality
- Upgrade locker rooms, especially handicap access changing rooms and family/gender neutral spaces

The full SF/ISG discussion of the BAC/Odle and future options is included in the BAC/Odle Section earlier in this Report.

DESIGN NEXT STEPS

SPLASH*Forward* is aware that there are many design elements at this stage of the Feasibility Study process that are relatively undefined, particularly in the dry-side, support, and operational areas. The primary immediate Next Step goal is to develop a preferred design option (the "Recommended Design") to move forward to City Council. SF/ISG has several important concerns that need to be addressed during the immediate Next Steps to move to the Recommended Design. These include:

- Analysis of Dry-side fitness and workout space and amenities needs, opportunities, and demand.
    - Essentially a mini-feasibility study on fitness to better right size the dry-side element of the Aquatic Center
- Clarifications of the building operational space and storage spaces; including use and function
- Further engagement with the School District to explore the non-competitive aquatic opportunities for the district as well as the elements the BSD would want in the Aquatic Center to support their high school teams and programs
    - Important to further develop design and costing and develop the BSD financial commitment to the Aquatic Center
- Refine therapy support and treatment areas based on engagement with local health care and therapy/rehab service providers
- Refine Leisure Pool design with recreation and leisure elements and amenities to better determine the right sized Leisure Pool for the Aquatic Center and more accurately forecast Leisure Pool operating, lifeguarding, and staffing costs and revenue potential.
- Explore new design options such as below deck lane storage and other potentially space or cost savings options
- Update Option #3 by eliminating the specific space elements and increases driven by the potential partnership with Bellevue College. The Bellevue College design elements are distorting the Option #3 aquatic and community based elements and make it difficult to assess the actual impact and benefit of these updates for the community
    - SF/ISG recommends creating a separate add on design component that reflects the specific expanded needs driven by the college that could be added to each option.
- Much of the focus in the aquatic industry now is on how to re-open pools during the COVID-19 Pandemic. That focus is already starting to look at how the Pandemic and future outbreaks of COVID-19 or new health threats may create a new normal for the future. The next design phase will need to look at potential code or best practice changes in the aquatic world that will impact facility design as well as operating costs. We may not have answers right away in the next phase, but it will be important to build in design and financial operating contingencies to prepare of the unknown "New Normal." See further discussion of the COVID Pandemic impact in the COVID Impact Section of this Report.

SPLASH*Forward* is committed to continuing our engagement with the City of Bellevue's Next Steps in determining the Recommended Design, advocating for the needs of the community, stakeholders, and potential partners in all aspects of developing the Recommended Design.