# **RECREATION EXPERTISE**

BRINKLEY SARGENT WIGINTON RECREATION & AQUATIC EXPERIENCE

RELATED EXPERIENCE





# **Brinkley Sargent Wiginton Architects**

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# **EXPERIENCE**

### FIRM HISTORY

BSW is an architectural leader working with public entities to provide quality services and buildings to citizens and stakeholders. We take pride in the services we provide to public clients. We are recognized as industry leaders allowing us to be speakers at conferences, honored with design awards, and seminar organizers and instructors on needs assessments and design information to clients.

We have completed over 450 public projects for clients including municipal, state, county, federal, school districts, and universities. BSW uses a process that has resulted in the design of award-winning facilities in the DFW area and across the nation. Our ongoing work with municipalities offers you extensive expertise and a deep understanding of what is required to design public recreation facilities.

### **LEADERSHIP**

BSW is built on the philosophy of principal-level leadership through every phase of every project. The principals interact personally with clients to ensure a quality product is delivered throughout each project phase – from planning and design to post-construction. Our project architects and designers have broad experience covering all types of public projects. With this experience of working in public architecture, our staff is armed with the experience and knowledge to lead you comprehensively through the study process.

RECREATION EXPERTS

BSW is a recognized leader for creative solutions for recreation-related projects. We have planned and designed over 1,000,000 SF of recreation centers over the past five years. We understand the unique challenges of these building types. We have been innovators in designing the next generation of recreation centers for well over 20 years.

### **AQUATIC DESIGN SPECIALISTS**

BSW has completed over 500,000 SF of aquatic-related facilities in the last 5 years and provides a wealth of experience for the requirements of this project. We believe that all pools benefit from an architecturally-led design process whether indoors or out, and we bring the same level of design enthusiasm and commitment to each. We thoroughly understand the project type and, therefore, have the ability to focus efforts on tailoring each project to its specific site and clientele.

### QUALITY OF WORK

One of the demonstrations of our strong job performance is our number of REPEAT PROJECTS FOR CLIENTS. Quality of work can also be judged by the numerous awards we have received from the design and construction communities and, most importantly, from the Parks and Recreation community. We do not design to get awards, but this recognition from diverse groups speaks to our attention to detail in both feasibility and design. Our client-focused approach, from planning through construction, is the key to our delivery of quality projects.

ABILITY TO PROVIDE SERVICES

While Brinkley Sargent Wiginton approaches every project with a clean slate, the owner is offered our 20+ years of experience in recreation projects. It is important that we understand each community's needs and work within those parameters to create a facility that appeals to a broad base of users, and is operationally efficient to build and maintain. This approach is evident on numerous projects.

Information about some of our exciting projects begin on page 6.

### **RECREATION FACTS**



### **AWARD WINNING AQUATIC AND RECREATION PROJECTS**

### **MCKINNEY APEX CENTRE**

Dream Design Award, 2018 Aquatics International

Facility of the Year Award, 2017 *Texas Recreation and Park Society* 

Award of Merit, 2017
ENR Texas and Louisiana

# CITY OF RICHARDSON HEIGHTS RECREATION CENTER

Top Ten Project, 2014
Topping Out Award

# HEIGHTS RECREATION, FAMILY AQUATICS, GYMNASTICS

Recreation Facility Design Excellence Award, 2014 Texas Recreation and Park Society

### **NORTH RICHLAND HILLS CENTRE**

Innovative Architecture and Design Award, 2013 Recreation Management

### **MARINE PARK POOL**

Aquatics Showcase - 2014 Athletic Business

### THE SUMMIT IN GRAND PRAIRIE

Innovative Architecture and Design Award, 2011 Recreation Management

Design for Aging Facility of Merit Award, 2010

AlA

Industry Innovator Award, 2010
International Council on Active Aging

### **WEST IRVING AQUATIC CENTER**

Dream Design Award - 2011
Aquatics International

# TEXAS TECH UNIVERSITY STUDENT LEISURE POOL

Dream Design Award, 2010 Aquatics International

### **KELLER POINTE CENTER**

Best Public Sector Waterpark, 2009 Aquatics International

Innovative Architecture and Design Award, 2005

Recreation Management

### **KELLER POINTE CENTER**

Recreation Design Excellence Award, 2005 Texas Recreation and Park Society

Award of Excellence, 2004 Texas Construction

### TOM MUEHLENBECK CENTER

Dream Design Award, 2008 Aquatics International

Innovative Architecture and Design Award, 2008

Recreation Management

Best of Design for Public Projects, 2008 Texas Construction

Innovative Architecture and Design Award, 2008

Recreation Management

# BAD KÖNIGSHOFEN FAMILY AQUATIC CENTER

Innovative Architecture and Design Award, 2007

Recreation Management

Dream Design Award, 2007 Aquatics International

### **NRH2O WATERPARK**

Best Public Sector Waterpark, 2005 *Aquatics International* 

Best Public Sector Waterpark, 2004 Aquatics International

### **KELLER ISD NATATORIUM**

Innovative Architecture and Design Award, 2004

Recreation Management

### **COLLIN COUNTY ADVENTURE CAMP**

Award of Excellence, 2004 *Texas ASLA* 

### THE WET ZONE IN ROWLETT

Award Winner for Outstanding Architectural Design, 2003 *Golden Trowel* 

# IRVING MUSTANG PARK RECREATION CENTER

Innovations in Parks Award 2002
Texas Recreation and Park Society Region 3







BSW principals regularly contribute to major recreation publications. Please see several examples beginning on page 33..

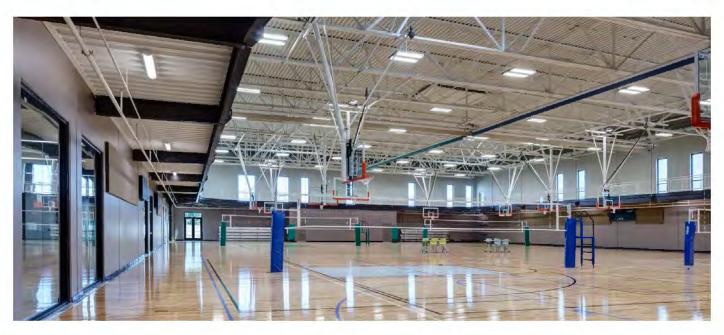


The City of New Braunfels found themselves in a position where their aging facilities needed to be replaced. Our team created a needs assessment and business plan for the new facility.

We hosted public meetings, stakeholder interviews and charette sessions to pin down the features to include. As that process progressed, the School District became a partner in the project. We also developed operational expense and revenue projections for various design solutions to help the stakeholders select their desired option.

### Features include:

- Multi-purpose classroom
- Cardio area
- Two double gymnasiums
- Leisure pool
- Birthday party rooms
- Competition short course pool
- Aerobics room
- Child watch
- Various support areas
- Projected recapture rate of ~85%





### PROJECT INFORMATION Year Completed:

2018 Square Footage: Construction Type: 74,000 New

### SERVICES PROVIDED

Study Business plan Public outreach/meetings Schematic design Design development Interior design Construction documents Construction administration Post construction





### **APEX CENTRE**

McKinney, Texas



McKinney's Parks and Recreation Department hired our team to provide a feasibility study and business plan to guide the development of a new recreation and aquatic center. The planning initiative was a multi-step process with stakeholders from both the City and school district. We gained community input, and a common vocabulary and vision, by evaluating existing area providers, demographics and potential user groups. The study established options for partnerships, multiple sites, building program and amenities, square footages, and budgets for all the desired components along with opinions of operating expense.

After several years of "what if" exercises, the City partnered with the McKinney Economic Development Corporation and selected our team to design the project as the new signature anchor to Gabe Nesbit Park.

Moody Nolan teamed with us for the design phase of this project. Brinkley Sargent Wiginton: Architect of Record, Design Architect for Aquatics, Site, and Interiors

Moody Nolan: Design Architect for Recreation

### Features include:

- Outdoor leisure pool
- Indoor leisure pool
- Indoor competition pool
- Two group exercise areas
- Double gymnasium
- Walking track
- Meeting rooms
- Support spaces

### **Awards**



Dream Design	
Aquatics International	2018
Award of Excellence	
Texas Recreation & Park Society	2017
Award of Merit	
ENR Texas & Louisiana	2017
Honorable Mention	
Golden Trowel Award	2017



### PROJECT INFORMATION

Year Completed: 2017
Square Footage: 81,400
Construction Type: New

### SERVICES PROVIDED

Feasibility study
Business plan
Public outreach/meetings
Schematic design
Design development
Interior design
Construction documents
Construction administration
Post construction



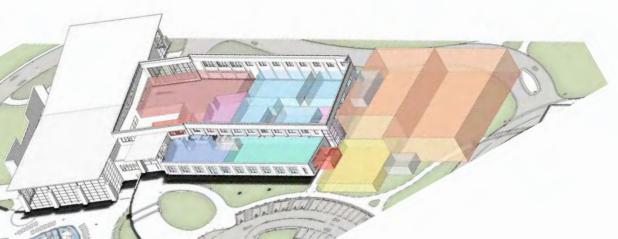






### MCKINNEY APEX CENTRE EXPANSION STUDY

McKinney, Texas



Just 2 years after opening the largest single project in the city's history, McKinney is already looking at how to keep up with incredible demand. Having planned and designed the original project, BSW was engaged to plan its growth, including consideration of outdoor aquatic expansion and the feasibility of a destination waterpark on the site. A destination waterpark has proven a challenge for this site, so it will be contemplated elsewhere in the city. Aquatic improvements are being considered, including an wave pool, in addition to significant building expansion.

### **Project Similarities:**

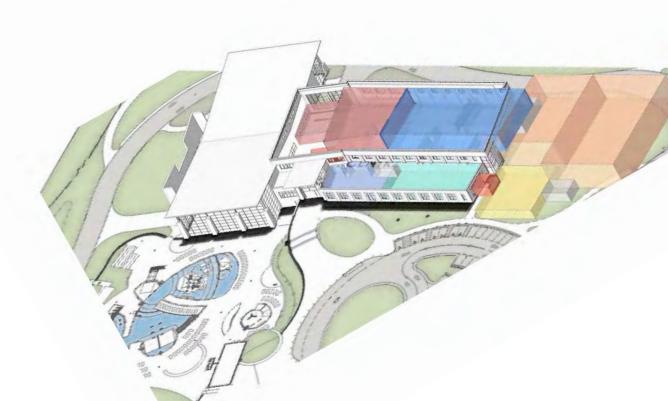
- Waterpark feasibility study
- Aquatic expansion study
- Recreation expansion
   study
- Develop options

### **PROJECT INFORMATION**

Year Completed: Square Footage: Construction Type: Pending Pending Expansion

### **SERVICES PROVIDED**

Evaluating options
Needs assessment
Site planning
Complete design services
Construction administration



Master Planning

### **OAK POINT RECREATION CENTER EXPANSION**

Plano, Texas











After more than a dozen years of operation, Oak Point Center was starting to show some wear and tear. But more importantly, recreation demands had grown and changed since the 80,000+ SF center first opened. The City of Plano engaged BSW to guide the process of expanding and revitalizing the center, with the goals of maximizing the budget and minimizing downtime.

A physical and functional inventory of the facility was conducted. This survey was paired with recreation program needs and goals to create budgets and rank priorities. A scope of work evolved from that process which identified the key issues to be addressed in the project. The expansion added new locker rooms, storage and cardio/fitness spaces. Renovations included creating a group exercise space, rentable party room, improved administrative areas and control, HVAC upgrades, and other miscellaneous remodeling for a fresh new look.

### **PROJECT INFORMATION**

Year Completed: 2017 Square Footage: 54,385 Expansion: 12,130 SF Heavy Renovation: 10,091 SF Light Remodel: 32,164 SF

**Construction Type:** Expansion

**SERVICES PROVIDED** 

Evaluating options
Needs assessment
Programming
Complete design services
Construction administration





### **THE CORE**

Coppell, Texas



Our team was asked to review the decade-old Coppell Aquatic and Recreation Facility for expansion and renovation possibilities to address growing needs of the staff and user groups. The growth and demand for programs by the Parks and Recreation Department prompted the City to return to BSW to conduct a conceptual design study on how best to expand the facility to meet the increased use of the building. BSW reviewed the original master plan we developed for the existing facility and met with staff to prioritize the desired improvements.

A phased approach was developed to allow the facility to remain operational during this extensive renovation and expansion process. The expansion includes 12,000 SF of new cardio/weight area and an aerobics room. Renovations also focused on increased utilization of the indoor pool by adding a "run out" for the slide in lieu of going into the pool. Outside upgrades include a new water slide, new water play structure and new deck coatings.





**PROJECT INFORMATION** 

Year Completed: 2000 Expansion: Square Footage: 2012 49,312

### SERVICES PROVIDED

Feasibility study Public outreach/meetings Schematic design Design development Interior design Construction documents Construction administration Post construction



### **KELLER POINTE AQUATIC & RECREATION CENTER NEW & EXPANSION**

Keller, Texas



We're proud to have led the creation for the *state's first public recreation center that operates as "cost-neutral."* 

To achieve the flagship recreation center we orchestrated an engaging and enlightening planning process which included Town Hall meetings, public and stakeholder surveys, market studies, and cost modeling exercises. We used that information to synthesized design options. Through planning and review of choices, the community selected a plan to serve their needs. It is the envy of the city's neighbors.

The overarching design requirement was to feel open. Large windows and an open floor plan allow views from the front to the

back of the facility. The jogging track is a ribbon that ties all facility services together both visually and experientially. The group exercise room combines the prerequisite privacy and views overlooking the indoor pool. The design reflects an active and dynamic center and maximizes staff visibility and control. Located in an upscale community, the attention to material selection and precise detailing are evident.

The community instantly embraced this facility. The goal was to sell 1,200 annual passes in the first quarter of operation; that goal was achieved before opening day. First quarter revenues exceeded projections by 10%.

### Features include:

- Indoor & outdoor leisure pools
- Double gymnasium
- Cardio areas
- Weight rooms
- Group exercise programs
- Babysitting area
- Elevated jogging track
- Divisible meeting room
- Food service facilities
- Game room
- Rentable party space





### PROJECT INFORMATION

Expansion Complete: 2017
Year Completed: 2004
Square Footage New: 53,500
Square Footage Expansion: 3,500
Construction Type: Expansion/New

### **SERVICES PROVIDED**

Feasibility study
Business plan
Public outreach/meetings
Schematic design
Design development
Interior design
Construction documents
Construction administration
Post construction



### Awards



Best Public Sector Waterpark Aquatics International

2009

Innovative Architecture & Design Winner Recreation Management 2008

Recreation Design Award for Excellence

<u>Texas Recreation and Park Society</u> 2005

Award of Excellence

<u>Texas Construction Magazine</u> 2004



### MITCH PARK YMCA AQUATIC & RECREATION CENTER

Edmond, Oklahoma



The City of Edmond partnered with the YMCA and the Edmond Public School system to develop a broad variety of aquatics programming, including fitness, wellness, rehabilitation, recreation, and high-end competition. Our feasibility study showed that one facility could provide all of these services, so we set out to design a ground-breaking facility for this area.

The new center design had to complement the senior center next door with material and details, yet look different. Maintaining building costs was paramount for this project. We preserved the tight budget with multiple pricing exercises throughout the design and construction process for the project. We also selected extremely durable construction and finish products to extend the facility's useful life and to manage maintenance costs.

BSW served as the design architect and architect of record for interiors. Crafton Tull of OKC served as architect of record.

### Features include:

- Indoor competition pool
- Indoor leisure pool
- Double gymnasium
- Cardio areas
- Weight rooms
- Group exercise programs
- Children's fitness
- Elevated jogging track





PROJECT INFORMATION Year Completed: Square Footage: Construction Type: 2014 105,000 New

### SERVICES PROVIDED

Public outreach/meetings Schematic design Design development Interior design







### **NRH CENTRE**

North Richland Hills, Texas



The NRH Centre markets itself as "the Centre of your world," which is pretty spoton in this community. NRH Centre is a multifunctional and multi-generational facility. It combines facilities that were either missing or scattered about town into one public place. This innovative strategy combines the practical benefits of providing economy of scale and operational efficiencies with the intangible of building community.

The City directed us to "make something for everyone." The project's mission was to provide myriad activities and places for users to embrace as their own and commune with others. We had to give each user group its territory and personality, but make the building logically whole while being "open and inviting." Our workshops with stakeholders allowed us to use contradictory premises to achieve creative solutions.

### Features include:

- Indoor leisure pool
- Fitness aquatics
- Senior center
- Banquet hall
- Kitchen
- Roof top terrace
- Recreation center
- Elevated track
- Outdoor event space
- 92% recapture rate





PROJECT INFORMATION Year Completed: Square Footage: Construction Type:

2012 85,000 New

### SERVICES PROVIDED

Feasibility study
Business plan
Public outreach/meetings
Schematic design
Design development
Interior design
Construction documents
Construction administration
Post construction

### **Awards**



Innovative Architecture & Design Award Recreation Management 2013







### **THE SUMMIT**

Grand Prairie, Texas



The Summit is a nationally recognized senior center that set the bar for usability, convenience, and member satisfaction. This is relevant to San Bruno because of the planning efforts and superior design that dominated this project.

The needs of three distinct user groups with vastly different requirements were met with this facility. We accomplished 33 of 34 amenities listed priorities.

This facility was one part of a \$90M parks development led by BSW.

Planning and design included:

- 16 outreach meetings with three groups
- Multiple conceptual design workshops
- Several steps to refine the project design
- Final design

### Features:

- Natatorium
- Therapy pool
- Gymnasium
- Aerobic & cardio area
- Elevated walking track
- Craft rooms
- Computer room
- Dining room
- Kitchen
- Ballroom
- Movie theater





### PROJECT INFORMATION Year Completed:

2010 Square Footage: Construction Type: 57,000 New

### SERVICES PROVIDED

Public outreach/meetings Schematic design Design development Interior design Construction documents Construction administration Post construction

### **Awards**



2011

Industry Innovator Award Int'l Council on Active Aging 2010

Recreation Facility Design Excellence Texas Recreation and Park Society 2011

Placemaking Facilities Feature Texas Architect Magazine

Dream Design Award

Aquatics International

2011

Architectural Showcase

Athletic Business 2011

Best of Category

IIDA Interior Design Award 2012

Merit Award

AIA Design for Aging Review 2013





### **NORMAN AQUATIC STUDY**

Norman, Oklahoma



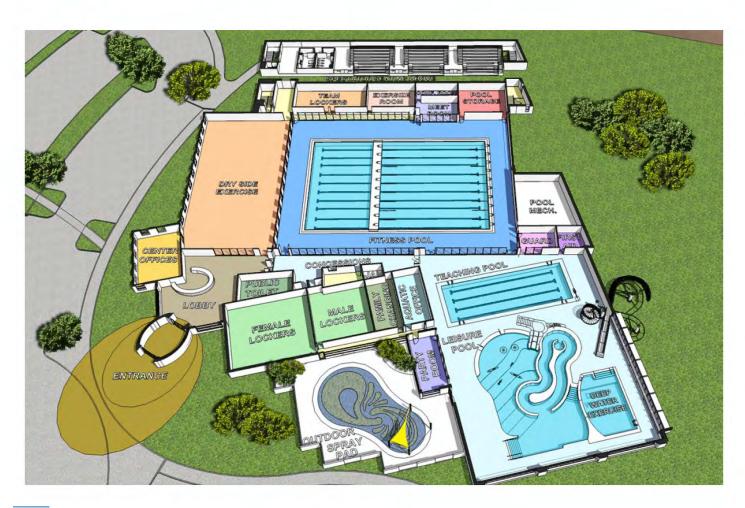
PROJECT INFORMATION
Year Completed:

Year Completed:2018Square Footage:73,000Construction Type:New

### **TYPE OF WORK PERFORMED**

Needs assessment
Programming
Public outreach/meetings
Schematic design

The City of Norman and a special committee of community leaders developed a vision for sports opportunities for the City. Our team was selected to develop a visionary aquatic facility that would be a centerpiece for this Sports Venue. This facility is centered around aquatics including a competitive component, indoor leisure/fitness features, and outdoor splash zone. Other elements include a large exercise area, concessions and support areas. BSW teamed with Integrated Architecture in the development of this great aquatic amenity for Norman citizens. The building's exterior used components developed by the visionary architect, Bruce Goff, a professor at University of Oklahoma.

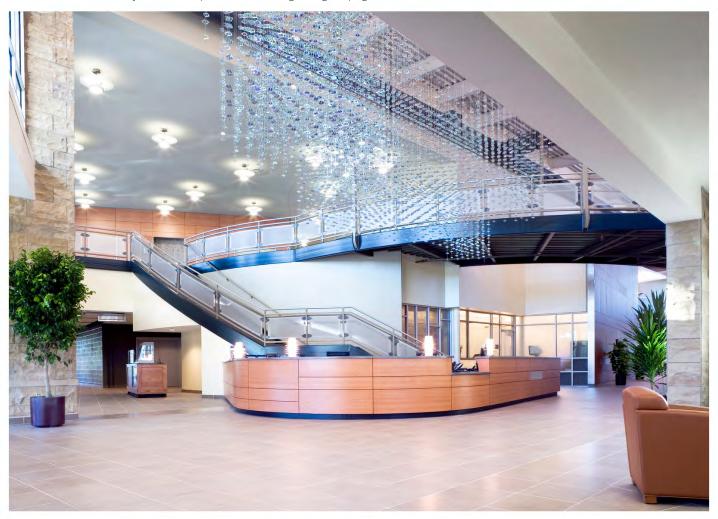


# **RECREATION PRINCIPAL**

### **EVERYTHING YOU NEED**

BSW is built on the philosophy of principal involvement and leadership throughout the project. The level of experience and abilities of our team has been honed and shaped for the last 20+ years on over 45 recreation and aquatic projects. Our leaders are adept at recognizing needs, analyzing data, and developing solutions to help you get the facility your community needs and deserves.

We introduce our key recreation professionals beginning on page 18.



"This nationally recognized designer in recreation facilities, brought a wealth of experience and knowledge to help guide us in thinking outside of "what we knew" to "what could be" thus achieving a highly functional facility. They were supported by an excellent consultant team. Their skill in leading us through the public interaction and feasibility phase allowed us to create a platform for success."

Robin Reeves
Director, Parks & Recreation
City of Plano | NRPA Gold Medal City
Above - Plano's Muehlenbeck Center



### STEPHEN SPRINGS, AIA, LEED® AP

PRINCIPAL-IN-CHARGE / CHIEF ARCHITECT CALIFORNIA LICENSED ARCHITECT NO. C35986

### **HISTORY**

Mr. Springs has over 20 years of state-of-the-art recreation design experience. His comprehensive budgeting expertise provides real project solutions while meeting your project needs.

### **PURPOSE**

His mission is to craft projects that are unique to each client community. Each project must be responsive to specific community needs, values and aspirations.

### **ROLE**

Stephen is BSW's recreation and aquatic design leader. As such, he is intimately involved in all recreation related projects, typically throughout planning and design. As with most of the list to the right, he will manage your project and design team, ultimately serving as the architect of record. He would be Yucca Valley's key point of contact throughout the project and beyond.



Bad Königshofen Family Aquatic Center | Arlington, Texas

### **RELEVANCE**

- San Bruno Recreation Study | San Bruno, California
- Das Rec | New Braunfels, Texas
- Apex Centre | McKinney, Texas
- NRH Centre | North Richland Hills, Texas
- The Summit | Grand Prairie, Texas
- Bedford Boys Ranch Multi-Generational Center Study | Bedford, Texas
- Mitch Park YMCA | Edmond, Oklahoma
- Oak Point Center Expansion | Plano, Texas
- Heights Family Recreation and Aquatic Centers | Richardson, Texas
- Keller Pointe | Keller, Texas
- Keller Senior Center Study | Keller, Texas
- Southern Methodist University Natatorium | Dallas, Texas

### **EXPERTISE**

- Project planning and programming
- Project management
- Recreation and aquatic project design
- Comprehensive budgeting



NRH Centre | North Richland Hills, Texas

### **REGISTRATIONS**

- Registered Architect in California, Texas and 9 other states
- American Institute of Architects (AIA)
- National Council of Architectural Registration Boards Certification (NCARB)
- LEED Accredited Professional, USGBC

### **ACCOMPLISHMENTS**

- Frequent speaker at recreation and aquatic conferences
- Frequent author of aquatic and recreation-related articles for national publications
- Multiple design awards for aquatic and recreation design
- Judge for Athletic Business Facilities of Merit Awards, 2014 & 2018

### **ORGANIZATIONS**

- US Centers for Disease Control Model Aquatic Health Code (MAHC)
- 2018 Ad Hoc Natatorium Air Quality Task Group
- 2013 Facilities Construction Committee
- Facility Design & Construction Technical Committee, 2012-2013
- City of Richardson Plan Commission
- City of Richardson Parks Commission, 2006 2010
- Texas Recreation and Park Society Member
- Parks & Recreation Magazine, Advisory Board

### **ACADEMIC INFORMATION**

- Bachelor of Architecture
   University of Texas at Austin
- Guest lecturer at Texas State University (Recreational Administration Program)



The Summit | Grand Prairie, Texas



Keller Pointe Expansion | Keller, Texas

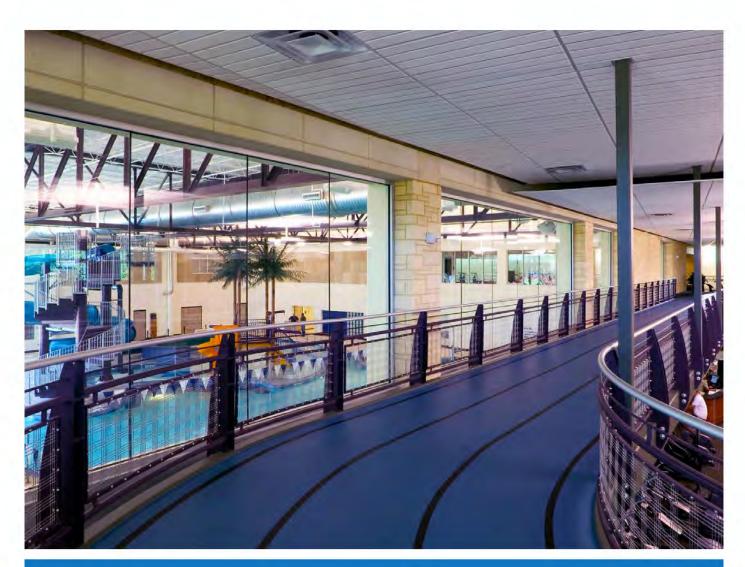


# **INTERESTING STUFF**

### A LITTLE BIT MORE ABOUT US

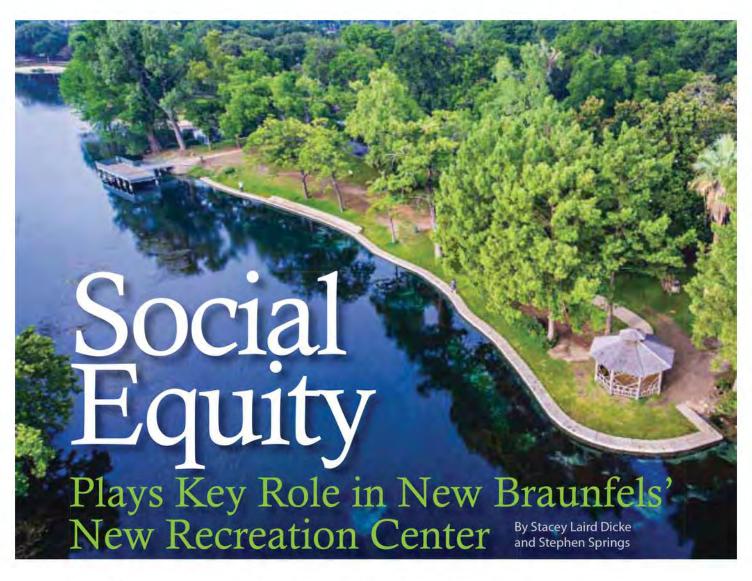
To help you understand how we plan, visualize, program, and design recreation projects, we have included a few published articles and blogs. Our level of experience and knowledge shapes our designs, and each design shapes our experience and knowledge. Which puts us in an improvement and growth loop. You benefit from that loop and the following write-ups should illustrate how.

Examples begin on the next page.



"BSW provided a high level of professional services to complete this project. This included working with three different boards/committees and the City Council. I truly believe that without your support and professional guidance this project may still be in committee discussion."

Dona Roth Kinney, CPRP Previous Director of Parks and Recreation City of Keller, Texas Above - Keller Pointe Expansion



ew Braunfels, established by a German prince and military officer in the 1840s, might not receive the same amount of attention as larger cities in Texas, but there's a reason it's among the top 10 fastest-growing communities in the United States.

This San Antonio suburb of 75,000 residents is home to museums, wineries and other attractions that bring many visitors to the area. But, its decades-long emphasis on quality-of-life issues has also earned New Braunfels status as a leader in local parks and recreation opportunities. In just a few decades, the city has evolved from a small town with both well-known and hidden-gem regional attractions, to a booming and diverse community with residents, ranging from young families to retirees, who have rapidly changing needs. And, the city is focused on meeting the demands of that growing and diverse population. The challenge, as always, is doing so without losing the historic charm and identity that gives New Braunfels its irresistible character.

The city's park and recreation department welcomes people of all ages, skill levels and abilities through a variety of services and programs. As many park and recreation professionals know, an emphasis on such positive activities can result in better academic performance, lower teen-pregnancy rates, reduced juvenile crime and improved mental health.

An example of New Braunfels' efforts to serve a broad user base is the 9,000-square-foot Westside Community Center, which the city acquired and, in 2011, opened in a previously underserved and economically disadvantaged neighborhood. A former church, the facility features a gymnasium, classrooms, a kitchen and a branch of the public library, and it hosts several year-round park and recreation and library programs. Fundraising also is under way for development of an accessible playground in the city, with assistance from the St. Charles, Mis-











souri-based Unlimited Play, a nonprofit leader in all-inclusive play facilities.

Over the years, parks officials have also renovated several older parks, while finding ways to preserve their history and spotlight the city's heritage. One example of this is the annual living history event, Soul Searching, Night Ramblings in the Comal Cemetery. Established in 1868, the Comal Cemetery is the burial ground for some of New Braunfels' founders and notable citizens. The annual sell-out tour is

Architectural renderings (above and center) offer interior and exterior views of the new Westside Community Center. The floor plan, at right, shows its layout.

WWW.PARKSANDRECREATION.ORG | OCTOBER 2017 | Parks & Recreation



a unique, educational event that, through volunteer actor portrayals of these early residents, passes down the city's history.

This focus on New Braunfels' changing population base helped spearhead the successful passage of an \$86 million bond package in 2013 that included \$20 million for parks projects. Administrators viewed passage of the referendum as a vote of confidence in the New Braunfels Parks and Recreation Department. The agency's decades-long efforts to build a level of trust with the community will now result in the largest construction project the city has ever undertaken: a new community recreation center that will shine a spotlight on one of NRPA's three pillars — Social Equity.

Social equity plays a significant and effective role in the way association members can positively impact the communities they serve. And this New Braunfels facility, slated to open in summer 2018, will stand as a shining example of social equity at work. NRPA believes that "universal access to public parks and recreation [is] a right, not just a privilege."

### Serving an Entire City

The \$23.5 million center seeks to impact all constituents in the city — even those previously not fully served by the park and recreation department. To ensure its benefits

reach the entire community, city leaders held public meetings and interviewed representatives from numerous stakeholder groups (including the local YMCA, school district, senior center and other entiries) to help determine what should be included in the new facility.

The goal is to make the 74,000-squarefoot facility a model — in terms of amenities, scale and scope — for other South Texas cities to follow.

The center, designed by Dallas-based Brinkley Sargent Wiginton (BSW) Architects, will provide health and wellness programming, as well as year-round swimming and learn-to-swim opportunities. With two major rivers and a reputation for some of the best tubing in the country, swimming is a vital life skill for residents of this community. In addition, two full-size gymnasiums will provide more youth sports options, another key amenity as more select and elite teams develop in the area.

Unfortunately, not all youths in New Braunfels are skilled enough or can afford to participate on those select and elite teams, which already has created divisions in neighborhoods and schools. For example, more than 150 girls recently tried out for 50 spots ou volleyball teams at one local middle school. Almost every player chosen for those

teams also played club volleyball or was a member of other select teams, which gave them huge advantages over girls who don't participate on such teams.

With the new facility, young athletes who don't make school teams can join the city's recreation leagues and enjoy new opportunities to play. Plans also are in the works to offer scholarships to kids whose families are unable to afford facility membership or program fees. The facility will also boast an 8,000-square-foot fitness area that will serve all ages and allow the city, for the first time, to provide senior-focused fitness programming.

### Make It Bigger!

Following the presentation to the public of the new recreation facility's initial design, city officials found themselves in the unlikely, but enviable, position of figuring out how to make the facility even larger, rather than determining how to scale it back (as so often happens in a hot construction market). Plans originally called for a 50,000- to 60,000-square-foot facility with one indoor recreation pool. But, forward-thinking city council members proposed the addition of a second eight-lane, 25-yard competition pool.

New Braunfels Independent School District officials understood the valuable proposition of adding the second pool, which would provide more space for the high school swim team to practice and compete. As a result, the school district contributed \$2.2 million in return for use of the competition pool for the New Braunfels High School Unicorn swim team for the next 20 years. The high school team will be able to host dual and triple meets on location, as well, with bleacher seating for up to 240 spectators.

The New Braunfels Industrial Development Corporation, an economic development taxing entity that is a huge supporter of local quality-of-life initiatives, also contributed \$5.8 million to the project — helping fund not only the competition pool but also a second

gymnasium, and reinforcing the city's longstanding commitment to community sports, recreation and wellness. The facility broke ground in October 2016 and, along with two gyms and a two-pool natatorium, will boast an elevated walking track, multiple workout spaces and classrooms, two birthday party rooms (one of them another late addition) and several other amenities.

For recreation professionals seeking to provide social equity, one of the biggest challenges in their work is establishing financial self-sufficiency. To that end, the city and BSW engaged St. Louis-based Counsilman-Hunsaker early in the planning and design process to develop a dynamic business model that would provide membership fee/cost recovery options.

The team analyzed community needs, capital costs and operational expenses through a public process involving many stakeholders. Design options, along with their consequential operational models, were subsequently developed and reviewed until a project scope with a clear cost-recovery goal was agreed upon. After significant discussion, the New Braunfels City Council approved a fee schedule that projected a cost recovery of 85 percent. Then, about midway through the design phase, city officials revisited the topic to incorporate the new additions cited above. As the project ultimately grew in scope and funding, the operational model was updated and now boasts a projected cost recovery of 90 percent - higher than most other public recreation facilities of comparable size and programming.

### Social Equity at Work

The new facility will be located on Landa Street, a major thoroughfare in the community, not far from a new city hall building. It will act as a redevelopment catalyst for city-owned land, left mostly vacant for years after a Handy Andy Supermarket and strip mall burned down. The addition of the recreation center is expected to increase traffic in the area, making nearby

commercial property more valuable and attractive to developers.

With assistance from the Alamo Area Metropolitan Planning Organization, new sidewalks have been constructed along Landa Street that connect the Walnut Avenue pedestrian trail to the site of the new recreation facility and to Landa Park and beyond. Landa Park, at 51 acres, is the crown jewel in the city's park system and incorporates the William and Dolores Schumann Arboretum and Panther Canyon Nature Trail.

By converting this section of New Braunfels into a recreation gateway, officials are sending a message to all city residents that everybody not only deserves such opportunities but also needs them to achieve a more balanced lifestyle.

It's tough to argue that New Braunfels didn't need a recreation reboot. Although the city operates a thriving outdoor aquatic complex with an Olympic-size competition pool, spring-fed recreation pool and zero-depth-entry children's pool, the existing recreation center needs some updating to better serve residents. It is housed inside a former warehouse that was built in the late 19th century, and its shortcomings include the lack of a regulation-size gymnasium and no access to the upstairs for people with disabilities — thus limiting not only programming options but also who can participate in those programs.

With this new facility, all of that is about to change and it is expected to spur redevelopment in the area, helping New Braunfels to maintain its position as a fast-evolving, action-oriented and socially responsible community.

Stacey Laird Dicke is the Parks and Recreation Director for the City of New Braunfels (sdicke@nbtexas.org). Stephen Springs, AIA, is a Senior Principal at Brinkley Sargent Wiginton Architects (ssprings@bsw-architects.com).



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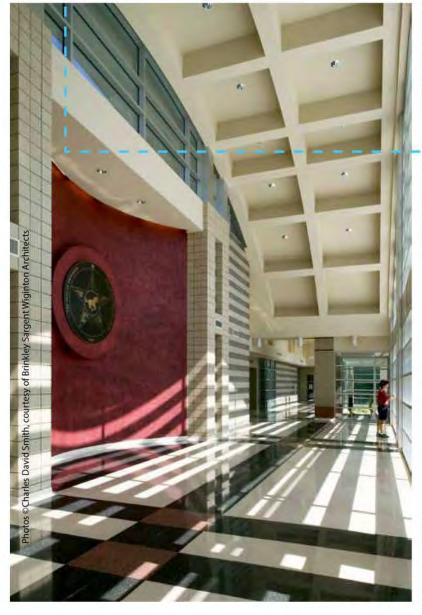
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# The of Rec Centers

Seven key elements that hardly existed 15 years ago are having a profound impact on the planning and design of recreation facilities

By Stephen Springs and Dwayne Brinkley

It was a long, slow march between the field house template and the rise of the community recreation center. Whatever is coming next is coming awfully fast.

We're at a moment when the built environment in secreation seems to be changing — not only quickly, but in many different ways. Recreation centers in some communities are following the collegiate trend toward wellness; in other communities, the recreation center and senior center are moving closer together philosophically and even sharing a site. In others still, such as in Mustang, Oklahoma, and Laredo, Texas, the recreation center and library coexist under one roof. Everywhere, the increased use and sophistication of master planning and city planning, and the greater emphasis on financial accountability, is bringing recreation departments into a more holistic relationship with other city departments.

As planners as well as designers of recreation facilities, we've confronted with the accelerating pace of change every day. We've seen any number of factors that influence the eventual form and function of rec centers — but seven in particular currently have, and should continue to have, enormous influence on the next generation of facilities.

### Holistic Planning

Ten years ago, parks master plans barely addressed facilities, and the standards followed in most cases were extremely rudimentary, involving a certain number of square feet of indoor space per 10,000 residents. While city management as a field took hold a generation ago, citywide needs assessments are a much more recent phenomenon. Increasingly sophisticated recreation departments understand that the object is not simply to respond to current needs, but to understand how future

growth could impact the needs of the community at large.

Working with the city manager, the department will typically issue. a request for proposals (RFP) to firms that specialize in performing needs assessments, or architecture firms like ours with a planning specialty. The primary purpose is to quantify information about the city in question and to benchmark comparable cities, both in terms of current population and expected population growth, and myriad other factors related to the respective recreation departments (current square footage/acreage devoted to indoor and outdoor activities, the size, structure and offerings of the recreation department, and so on).

With the study completed, a city and its recreation department have more than a theoretical understanding of how it can meet the needs of its constituents, as well as information about comparable cities with which it can draw comparisons in terms of current facilities and the likely form that expansion of facilities might take. A planning firm might be able to recommend 75,000 sonare feet of indoor souce within a certain time frame in a particular area. of town, or a certain square footage of water surface budgeted at a certain dollar amount. NRPA had its eyes on this trend when it began developing its PRORAGISTM database with the stated purpose of comparative benchmarking. However, given that PROR-AGIS is as focused on operations as it is on other aspects of recreation, it remains a work in progress on applicability to facility development.

Together, though, this shift to data-driven decision making marks a huge leap forward in recreation. As the process of how cities look at their needs changes, exactly what cities provide their residents, and how, becomes that much more targeted and effective.

### Financial Self-Sufficiency

Previous generations of recreation facility planners at best paid lip service to the idea of net-zero cost of operation, and few facilities actually achieved it. Increasingly, however, stare, county and municipal governments (this year, everyone from the South Corolina Department of Parks, Recreation and Tourism to the Woodridge, Illanois, Park District) have declared that self-sofficiency is a requirement of new facility development, and this can only deepen as a trend in this post-recessionary environment.

Unlike libraries, the operations of which might be protected (for the moment) by the "free libraries" tradition embedded in their DNA, recreation centers are being heavily scrutinized. Providing expensive specialized spaces such as pottery kilns or kitchens, or often unused or inflexible spaces (for example, an 800-square-foot racquet-ball court for two people versus 800

square feet of fitness area), have to be reconsidered in light of their revenue potential. Any pricey program areas that survive this linearial culling must be designed with sensitivity to energy use to help minimize overhead.

Funding new facilities used to involve defining a need for a recreation center, aquatic center or ice arena, and then deciding to meet that need, with (at best) a percentage of the total cost set aside for its ongoing operation. Now, operational costs are a prevalent discussion from the beginning among city managers and recreation directors, as well as members of the public who weigh in on the city's plans.

### Overlapping Programs

The focus on holistic planning and finances has a natural consequence a realization about duplication of services and a rethinking of which "quality of life" services belong in which city-run facilities. The recreation center library is one resulting hybrid, but even in communities where the physical buildings remain separate, there's a trend toward libraries offering programming that was a natural fit in earlier community centers and second-generation recreation centers. Some of this might be driven by libraries seeking to retain their relevance in the Interset age, but there's also evidence that "nonrevenue" activities are being shifted out of leaner, nurer regreation centers Commuter classes are an example of an activity that recreation centers meant have offered as part of their outreach to all classes and age groups within a community, but which are also now offered at libraries and senior centers (seniors being the people who most need the instruction). Other examples include autrition programs and (if they're equipped for it) cooking classes. Down the road we may see more overlapping job titles in shared facilities — one administrator performing the roles of parks and rec director and library director. This is already happening in some communities, where assistant city managers oversee cultural services, incorporating both parks and libraries. Particularly for communities of fewer than 50,000 residents, a shared facility separated into active and passive zones celebrating a community's core values of health, well-ness, social and educational opportunities, is an arrangement that benefits users and administrators.

In anticipation of a potential shifting of programs in and out of facilities. designers have to find ways of making spaces flexible without sacrificing the aspects that make them suitable for specific activities. Multipurpose rooms that can be subdivided remain a staple: of these buildings, but greater care has to be taken in terms of sizing and materials - the subdivided mores must be as programmatically functional as their parent space. In place of subdividable rooms, dedicated rooms can be made flexible while still steering them toward different activities - for example, a more with hard surfaces to accommodate activities such as crafts (requiring a moppable floor) and another outlitted with softer surfaces to accommodate educational programs, meetings or book clubs (requiring a. quieter environment).

### Generational Changes

The recreation industry began warning of the changes that would be wrought by the aging of the baby boomers, the first generation to embrace fitness and wellness, at least a quarter-century ago. Many communities, however, are still wrestling with the best way to meet the needs of this generation even as its youngest members enter their 50s. Fine years ago, it seemed as if any investment in senior fitness could be justified, given the boomers' high disposable in-

comes and ample savings, and their clour at the ballot box. The workfwide recession has perhaps altered the scope of some parks master planning where seniors are concerned, but this is still an enormous growth area and a largely untapped source of revenue for most recreation departments. This revenue comes with corresponding capital expenses—for example, the expectation of this user group is that their facilities should include more well-appointed family changing rooms.

At the same time, though, younger people—who in years past didn't need opportunities or encouragement to be active—are the target of recreation departments on the front lines of the nation's obesity epidemic. This is a critical issue in disadvantaged areas, where obesity rates are highest. Exercation directors as well as facility planners must grapple with how best to serve these different age groups, at the same time that they strongle with financial self-sufficiency—one of the biggest balancing aces of this era in recreation.

### Ethnicity

Communities with very strong or growing ethnic populations know the effect that this can have on programming decisions, something that impacts facility planning as well. The impact goes beyond program spaces - more space devoted to futsal or table tennis, perhaps, in communities with large Asian or Latino constituencies - to all corners of a facility. Witness changes made to natatorium operations and locker room design in facilities with large Muslim populations, for example, where the importance of modesty requires rethinking the trend toward more open locker room areas and lounges. Recreation directors need to know their clientele and their clientele's recreation preferences, and facility planners need to expand their knowledge base to respond accordingly. In the case of a community with strong participation in table tennis, for example, facility planners should know and incorporate excommended clear heights for competitive table tennis in their planning.

### Healthcare

Another topic in recreation circles that goes back a quarter-century or more, healthcare is a natural fit in recreation centers that been't quite become incorporated as people once envisioned, probably because of ongoing uncertainty about the delivery of care. A flurry of construction of lavish hospital- or clinic-based wellness centers also seemed to take away the need for a duplication of services, but it's clear that, as more people have health insurance, the larger the pool will be of community residents seeking preventive care. Recreation centers will have to be designed to anticipate this growing need. which represents both a community-service and a revenue-growth opportunity for recreation departments.

### Technology

The infrastructure that allows recreation directors to meet their constitpents' almost insatiable need for connectivity and entertainment changes exponentially - so quickly that we often design certain technological aspects later in the job, because othcrwise the equipment specifications would be out of date by the time they were ready to be installed. Security systems with scores of cameras and card readers involve one set of planning issues, and treadmills that are outlined with video screens involve another. Recreation centers have become IT hogs - demand for wifi and onboard entertainment has grown so acute that, seemingly overnight, recreation centers have gone from being low-bandwidth buildings to high-bandwidth buildings.

This is an element that must be considered from a demand standpoint, but also from a project budget ing standpoint. As planners, we find that an enormous number of recreation professionals know of the need for accommodating technology, but don't have a handle on the financial costs involved. One of our first questions to administrators is whether the city has a separate budget for integration of tech into their buildings, or whether their stated budget would be burdened by the costs involved. For administrators working with budgets that disallow the immediate purchase of multiple pieces of fitness equipmess, but who wish to plan for future capacity, a key question is whether there's enough bandwidth available to the site to support their plan. The importance, in this day and age, of a realistic IT budget built into the project bodget from day one, and a plan that anticipates the pace of change, can't be overstated.

### Planning Ahead

These factors are all influencing facility design - and facility designers. Architects accustomed to being judged on their design portfolio have found that meny recreation program providers need substantial assistance in financial planning for facility planning. Fortunately, architects with experience in this building type have been changing to meet their clients' needs. too. With regard to the bottom line, you should expect that an architect brought in to help with a study necessarily has the ability to look at the holistic project and not just the construction and design component cost. That is the mark of a good planner.

Sepiten Springs and Dwayne Brinkiey on principals with Brinkiey Sargert Wiginton Architecta in Dallan, lexas (caprings); bowarchitecta.com, drobinkiey@tow-architecta. comi



### THE COMPETITION

The advent of commercial water parks has completely changed consumers' expectations. New community pools simply aren't built anymore without features previously seen only in waterparks. Those that do not have the means to build new have been renovating. Diving boards are being replaced with deck slides, and spraygrounds are being added on. Today, some community pools have progressed so far that their features are indistinguishable from their commercially owned peers.

The relative newcomers on the scene are commercial fitness centers. Some of them are evolving their business models from the stereotypes we are used to - i.e. a place to find a date or only for the serious fitness nut. They are providing a cross-section of services that were previously the realm of the public sector. Family-centric marketing and multi-general programming mean leisure pools are now in their list of amenities. Onestop shopping, so to speak, with a more health-club-like atmosphere at a more reasonable price.

### **ECONOMIC CHALLENGES**

"In large markets, yesterday's pools suffer from paltry attendance because they are no longer destinations."

Yesterday's pools serve neighborhoods instead of the greater public, even in smaller markets where there may be nowhere else to go. This old model has simply worn out. Keeping pace with the increased maintenance and increasingly stringent health code requirements can force communities large or small to struggle to simply keep their pools open. All this is occurring while the current inflationary economy is putting the squeeze on departmental budgets.

Looking beyond the expense side of things, revenue targets for pools are also changing. The days of heavily subsidized municipal pools are waning. More and more, public pools are being tasked with greater financial self-sufficiency; some are even becoming profit centers. A realistic understanding of a community's financial goals is paramount in properly planning projects. The target recapture rate is directly tied to fees, which are directly tied to the market. In order for patrons to spend more money at the gate, they must feel it is worth it.

Pundits may cite all of these challenges as a reason for their city to get out of the pool business. The reality is that cities should be getting out of the outdated pool business. If the pools were fun, they would be full of people. Demand for aquatics is actually growing, as are expectations. As cities compete for quality growth, they must appeal to the demographic of young professionals. This demographic increasingly makes decisions on where to live by the amenities offered in the area, going beyond salary and cost of living. Major corporations are doing the same by locating in high quality-of-life locales to improve recruitment. This group also enters the workforce with different expectations than we grew up with. They grew up enjoying greater amenity in their pools. One only needs to visit one's local university campus for evidence - and witness the new campus pools at UT, A&M and SMU, to name a few. We have had the good fortune to be involved with an innovative student leisure pool at Texas Tech University, incorporating a 650-foot-long lazy river, among other things. It is now under construction.

"The key to a successful leisure pool is broad appeal."

### **MEETING THESE CHALLENGES**

The key to a successful leisure pool is broad appeal. If a city has many pools, it is OK to give each a personality or perhaps pay more attention to a particular demographic from area to area, but the basic "chassis" of a facility must have something for everyone. All age groups should have a place to enjoy. There should be zero-depth water for tots and their caregivers, shallow water and play features for young children and some

more exciting features for older kids. Teens are there to see and be seen as much as anything else, so provide sun and social areas - and a thrill ride if the budget allows.

Sure, they are there to enjoy the water -or, at least, watch their kids enjoy it - but do not underestimate the value of appealing to them directly.

"The most overlooked aspect to broad appeal in aquatic design, however, has little to do with the water. Maybe 50 to 60 percent of those who enter a pool facility will ever get their hair wet, and it is this group of people who are paying the gate fees."

For this group, there is no such thing as too much shade or restrooms that are overly clean. Enjoying their day is as much about enjoying the environment as anything else. More and more money in project budgets is justifiably being focused on improving the quality of the surroundings. Attention to quality landscape, hard-scape and architecture is as important as the water.

Theming is another tool that can help if implemented carefully. Theming does not have to be literal or flamboyant, as it is in many commercial waterparks. It can be a subtle motif that ties all of the elements in a project in a more timeless way - one that does not necessarily "date" a facility. An example of such a project is Bad Königshofen Aquatic Center in Arlington, Texas. In this project, Arlington sought inspiration from its sister city in Germany but did not want a literal approach like Bavarian architecture or steins dumping water. The design solution was to draw upon the German heritage in early Texas. An agrarian theme emerged and drove the design of each element, from the grain bin administration building and "farmhouse" bathhouse/concession to the "pipe farm" play features devoid of the typical bright colors. Careful attention to detail and material selection also respects the design concept throughout, with native plant species, stone and custom-designed shade structures. Themes need to be identifiable to the community to be most successful; avoid the stereotypical waterpark theming.

### **WHAT'S NEXT?**

So what else is on the horizon in aquatic design? For one, the "green" movement completely surrounds us these days, and pool design is responding. Indoors or out, our clients are asking more often about how their projects can be "greener." The behind-the-scenes technologies are getting ever more sophisticated and enabling exciting "green" solutions. For example, salt-based chlorination, popular for some time in the residential market, is now being installed at the commercial level. Hightech sanitation and filtration systems have entered the industry in the last several years and will become standard over time. Outbreaks such as this summer's cryptosporidium problem in the DFW area will only accelerate demand in Texas.

We are also seeing increased public demand for indoor water. Though this comes with a much higher pricetag than outdoor pools, the 12-month swim season is hugely popular where available. January birthdays want swim parties, too! Another component of this increasing demand is the retirement of baby boomers. This group will have a more active retirement lifestyle than past generations. Expect increased demand for year-round therapy water programs to enter the usual mix of leisure and competitive pools.

About the Author

Stephen is a principal at the award-winning, firm of Brinkley Sargent Architects. Brinkley Sargent has been providing solutions to technically challenging projects requiring integrated management and design expertise for more than 30 years. Stephen specializes in recreation and aquatic design, with numerous award-winning projects to his credit.



# THREE UNIQUE PUBLIC RECREATION PROJECTS YOU MIGHT NOT HAVE CONSIDERED

By: Stephen Springs April 2018



As new public recreation facilities in communities from coast to coast continue to open their doors, leaders in some locales might want to consider something a little different for their constituents.

"For example, in Texas - where Dallas-based Brinkley Sargent Wiginton Architects prides itself in taking on out-of-the-ordinary design projects, publicly funded attractions such as an adventure camp, an indoor waterpark and a sister city aquatics center have proven popular among local residents and visitors alike."

If you're looking to distinguish your community from surrounding municipalities when it comes to creating a recreation wonderland, the following three types of facilities just might give you some ideas:

### **INDOOR WATERPARKS**

In January, Epic Waters opened in Grand Prairie, Texas sharing a site with BSW's groundbreaking Summit Active Adult Center. The \$88 million, 80,000-square-foot indoor waterpark with a retractable roof is a component of the "Epic" project designed by HKS Architects and offers plenty of superlatives — including the longest lazy river in Texas (more than 650 feet) and three first-of-their-kind waterslides.

Other elements include the Grand Lawn Amphitheater designed to accommodate from a couple hundred people up to 10,000 people; The Epic, a 128,000-square-foot facility with a gymnasium, fitness center, futsal court, adventure track and CrossFit area; and PlayGrand Adventure, which will be Texas' largest all-inclusive playground when it opens later in 2018, with more than 250,000 visitors expected every year.

"When you would go to a rec center, you'd want to play volleyball or basketball or fitness of some sort, but this is much more," Rick Herold, the city's recreation director, told the Fort Worth Star-Telegram in January. "We'll have a professional recording studio, opportunities for kids who are into dance [and] theater, or if they're into culinary arts, they can learn there. It's an incredible facility." No wonder Herold labeled the complex as "recreation reimagined."

Stephen Springs - Recreation Design & Planning blog for





### **ADVENTURE CAMPS**

Collin County Adventure Camp in Westminster, Texas, was designed to bring outdoor learning experiences to area children, but adults can benefit, too. Residents passed a \$26 million bond, which led to the establishment of this sprawling 400-acre site that includes an extensive trail system anchored to a central education building. When construction was complete in 2006, Collin County partnered with the YMCA of Metropolitan Dallas to manage the camp, which now uses the apt slogan, "Adventure is Our Middle Name."

Built in the Texas blackland prairie region, which is renowned for its rich black soil, Collin County Adventure Camp accommodates children ages 5 to 14, and more than 16,000 students from 121 public, private and home schools attended camps in 2017. The camp also hosts adult groups, organizations and businesses for customized retreats.

Broad-reaching, public adventure camps are becoming more popular. The City of Berkeley, Calif., owns and operates Echo Lake Camp under a special-use permit with the U.S. Forest Service. The camp serves as the gateway to the immense Desolation Wilderness Area, which offers miles of hiking with a backdrop of alpine lakes, streams, peaks and meadows. A variety of programs cater to younger children, teenagers, families and even the 50-and-older crowd.

### SISTER CITY PARKS

According to Sister Cities International - a nonprofit organization founded more than 60 years ago by U.S. President Dwight D. Eisenhower - a sister city relationship is a long-term, cooperative arrangement between two cities in different countries through which cultural, educational, business and technical exchanges take place.

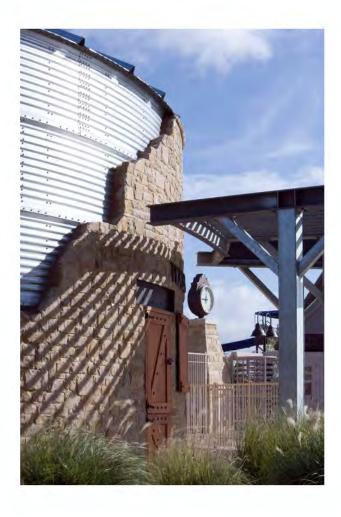
So, when it came time for the City of Arlington, Texas, to build a new aquatic center, officials looked to Bad Königshofen ("King's Bath" in German) for inspiration - a small spa town in Bavaria that has been Arlington's sister city since the early 1950s.

The design response was an agrarian theme, based in early German immigration to Texas. Arlington's Bad Königshofen Family Aquatic Center boasts a shallow-water play pool, a 25-meter four-lane swimming pool, a one-meter diving board, two water slides and a sprayground that doubles as a fountain during the offseason. Park attendance at the facility outpaced that of the city's four other municipal pools combined.

Other communities pay tribute to their sister cities through public recreation facilities, too. Philadelphia's Sister Cities Park is located in the heart of downtown and adds a picturesque swath of green to the arts and cultural district. It celebrates Philly's 11 sister cities in 10 countries (Cameroon, China, France, Germany, Israel, Italy, Japan, Korea, Poland and Russia) by featuring several sustainable design elements and a fountain with geyser-like spouts representing each country. The park is leased from Philadelphia's Department of Parks and Recreation and managed and maintained by the Center City District.

"Not only do each of these facilities reflect the way in which local officials thought well outside of the so-called box, but they also brilliantly fit the needs and character of their specific communities while also generating significant usage by non-residents."

What can you do to make your community stand out?



Bad Königshofen Aquatic Center | Arlington, Texas



### Stephen Springs - Recreation Design & Planning blog for

# **Building a Pool Facility? Read This First**

By: Stephen Springs & Darren Bevard December 2017



What are the keys to successfully partnering with multiple design firms on an aquatics project? I like to use the analogy of an orchestra: Just as a conductor makes sure the brass, woodwinds and percussion all do their parts to make beautiful music together, it is the architect's job to coordinate many disciplines together into a well-orchestrated composition.

One of the most important members of any recreation and sports facility design team is an aquatics engineering firm. To provide facility operators with a better sense of how the relationship between architect and aquatics consultant typically works, I sat down with Darren Bevard, P.E., principal and studio director at Counsilman•Hunsaker, a leading aquatic design company. We got together at the National Recreation and Parks Association's Annual Conference in New Orleans in September to answer some essential questions. Jim Browne, director of recreation business development and planning at Brinkley Sargent Wiginton Architects, served as moderator.

**Question:** What are some of the characteristics of successful partnering between multiple design firms?

Stephen Springs (SS): Specifically to aquatic design; the most important thing is for the firms to have a level of familiarity with each other. There is a tremendous amount of value in that, and together you can spend more time addressing the client's needs than in teaching each other how to work together.

Darren Bevard (DB): Our role as a sub-consultant is to support the design team as a whole, and to assist in coordinating the many critical aspects of a building that will enclose a swimming pool. Such projects are much more streamlined and effective when they involve a team that has a history of working together and knowledge of what it takes to make an aquatic facility successful and sustainable.

### WHAT IS THE OWNER'S ROLE IN ALL OF THIS?

SS: It's the owner's money and the owner's project. Regarding the design team, it's vital that the owner be part of the design team — not just hand off a task and say, "We want XYZ pool."





We really need the owner to articulate the whys behind the project. Often, there's a discovery process involved that can help us maximize the value for the owner once we understand what the programming needs are and how we can leverage a design to go beyond that. We might be able to accommodate opportunities that the owner didn't even know were possible.

DB: It is crucial, especially in the early stages of the project, that the design team engage stakeholder feedback and provide supporting information to ensure that decisions are being made in the best interest of the owner. The design team must not come to the table with a preconceived notion of what the project should be or how it should operate, but rather this direction must be developed based on what the owner intends to achieve and what their definition of success is for the facility.

You guys have worked together on numerous projects: What have you learned over the years regarding best practices in determining who is responsible for what?

DB: When we're enclosing water within a building envelope, the design challenges go beyond operation of the pool itself to encompass how the natatorium environment relates to all of the other associated spaces in the building. In one way or another, all areas of the building are at the mercy of the natatorium, simply because of the humidity levels and corrosive nature of a pool environment. When we think about designing for a sustainable facility, water quality and air quality go hand in hand with regard to how these aspects will influence design decisions.

As we are designing and engineering the aquatic components of the project, a great deal of coordination is involved among each of the various design disciplines. There have to be synergies between what we do and what everybody else does. We coordinate the aquatic scope of work with the mechanical, electrical and plumbing engineers, and provide insight into the many important considerations for topics such as material selections and finishes.

SS: While companies like Darren's provide invaluable advice to architects beyond simply what they are responsible to

design, we as architects are ultimately accountable to the owner for the project and to make sure the entire team is in sync. The entire engineering team is under the architect's umbrella. There are multiple moving pieces to this unique building type. When you bring a pool into your building, you layer all of the usual coordination issues with a whole new set of additional ones. What are some of the first steps that need to be taken in a natatorium project?

DB: It's critical that we establish the appropriate program early in the process, working hand in hand with the project owner and stakeholders to understand what they want to accomplish from a facility standpoint and what type of programs will be offered. And then we determine the appropriate building program and water area program to do that. Planning for all of that with sustainability and operational pro forma in all of that with sustainability and operational pro forma in mind — that's the critical first step in determining a facility's feasibility.

SS: Most owners have goals about the operation, and if they don't, we can help them with that process as a team. From a more nuts-and-bolts, bricks-and-mortar point of view, the first questions are always about water depth and water temperature. They're both enabling or limiting factors, depending on your program needs. In an athletic facility, you also need to consider spectators: How many bleachers? What about coordination of timing systems and scoreboards? In leisure water, there's a lot more flexibility. But warmer water makes different demands on your mechanical systems. Those are the type of things you need to discuss before you even draw anything that resembles a pool on paper.

**DB:** Many of these decisions influence what's required of the other design disciplines. For example, you might have water features that are spraying water into the air, and that puts more demand on the HVAC system. So that has to be considered early on.

### THAT LEADS TO THE IMPORTANCE OF AIR QUALITY.

DB: In thinking about a healthy facility, we have to think about both the health of the users — the people who are going to be in the building — and also the health of the building itself, the longevity of the facility. One of the most critical influences of that is going to be air quality. But as I mentioned earlier, air quality starts with water quality. It's impossible to have appropriate air quality if we don't maintain proper water quality first. That means thinking about the applicable turnover rates for the pool, and the correct sanitation systems for the pool. What are we using for not only secondary disinfection but also to control chloramines? That's where the relationship to air quality really comes into play, with those disinfection byproducts that are going to be off-gassing and contributing to the corrosive environment. Maintaining that in the pool, first and foremost, allows the HVAC system to be designed in such a way that it supports good air quality throughout the building, thus promoting the health of the users and longevity of the building systems.

From AB: Factors Affecting Air Quality in Aquatic Centers (/ aquatic/factors-affecting-air-quality-in-aquatic-centers.html)

SS: A natatorium is an inherently challenging building to maintain, and maintaining air quality is the best tool for making your building components last as long as possible. Beyond that, we try to minimize the use of steel. All metals can corrode, but steel oxidizes quickly by rusting. You can

avoid steel by using aluminum and brass for hardware, nylon switch covers instead of stainless steel ones, etc. When you can't help but use steel, protect it with galvanization and high-quality epoxy coatings. Stainless steel is not always the best choice and requires regular maintenance that tends to wane or be ignored.

As you've alluded to, there is the potential for plenty of pitfalls in this type of project. What are some lessons you've both learned over time?

SS: When you bring hundreds of thousands of gallons of water into your building, it ceases to be a standard building. Your envelope can be completely different than a typical building. For example, in a temperate climate zone, you might have a 50-50 split on heating and cooling degree days, which means your vapor drive isn't dominant in one direction through your envelope. We may use vapor barriers on both sides of our insulation cavity rather than on the typical "warm side." There are many more examples. We track our lessons learned with an evolving checklist of internal best practices to improve our work continuously.

**DB:** When you are enclosing a large hole in the ground with a building, and if you think about the uniqueness of that — the construction, staging and planning for how that facility is going to be built and how different elevations relate to one another — there are a lot of aspects that need to be understood and thought about in the design process so that the design solution is appropriate and can be constructed effectively and efficiently.

Let's talk about long-term sustainability: What is important from a design perspective to help ensure sustainability for the owner?

DB: The building has to be planned to be sustainable from an operations standpoint: What programs is it going to support? How are those programs going to be staffed? And what does it mean in terms of operational cost? These operational considerations must be vetted with the owner as the building program is being developed. At the same time, the sustainable design also translates to the technical side of the building — selecting equipment that's going to operate efficiently and work in conjunction with one another so we don't have competing systems in terms of energy consumption.

SS: You can design a set of amenities in a facility to hit whatever target the owner wants. But are those amenity needs going to be the same in 20 years? Probably not, because the owner's definition of "success" changes. We've been around long enough to be involved in renovations of and additions to projects we did two decades ago. And it can be a challenge when that definition of success evolves and you're repurposing pools that might not have been designed for the current definition of success.

### About the Author:

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