

TETON VALLEY, IDAHO AQUATIC FACILITY Functional and Operational Requirements

10/10/2023



Prepared by Teton Valley Aquatics
And
The City of Driggs

1. Purpose	3
2. Background	3
3. Design Approach	3
4. Preliminary Operating Assumptions	3
4.1 Operating Programs	3
4.2 Operating Parameters	4
5. Facility Requirements	5
5.1 Pool Area	5
5.1.1 Structure	5
5.1.2 Lap Pool	6
5.1.3 Wading Pool	6
5.1.4 Spa	7
5.1.5 Added Features	7
5.1.6 Deck Area	8
5.2 Potential Geothermal Hot Pool Area	8
5.3 Administration Building	9
5.3.1 Architecture Character and Interior Design	9
5.3.2 Size	9
5.3.3 Heating Ventilation and Air Conditioning	10
5.3.4 Lighting	10
5.3.5 Bath House	10
5.3.6 Storage/Support Room(s)	10
5.3.7 Dry Staff Room & Office	11
5.3.8 Wet Staff Room/Office	11
5.3.9 Public Vending Area	11
5.3.10 Waiting/Observation Room	11
5.3.11 Party/Hospitality Room	11
5.3.12 Childcare Room	11
5.3.13 Mechanical Rooms	11
5.4 Access and Parking	12
5.5 Landscaping	12
6. Design Requirements	12
7. Interrelationships with other Processes, Facilities and Support Facilities	12
7.1 Utilities	12

1. Purpose

The purpose of this Functional and Operations Requirements (F&ORs) document is to translate Teton Valley Aquatics (TVA) and City of Driggs program objectives into design product requirements. These F&ORs describe the facility, features, and systems to be included in a year-round aquatic facility for the residents and visitors of Teton Valley, Idaho.

2. Background

The City of Driggs and Teton Valley Aquatics (TVA) have formed a team to make the goal of the Teton Valley community a reality. A survey was conducted as part of the Teton County Recreation and Public Access Master Plan, completed in 2014. The 2014 Teton County, Idaho Recreation Master Plan showed the top priority of survey respondents was for a Community Recreation Center, with 93% of those respondents stating the number one feature to be included in the center should be an indoor swimming facility.

TVA a 501(c)(3) non-profit, was formed in 2016 to, establish and support the operation of an aquatic and recreation center in Teton Valley, Idaho, to enhance the overall health, well-being, safety, educational and recreational opportunities and overall quality of life of Teton Valley, Idaho residents and visitors. In 2019 Driggs and TVA completed *the Aquatic Facility Feasibility Study* (November 2019) that provides conceptual facility layout and operating assumptions. Several sites were evaluated for locating the facility. A location near the southeast corner of 5th Street and Little Avenue in Driggs, Idaho was selected for the facility.

3. Design Approach

Aquatic facilities are typically not operated as cost recovery enterprises. Fundraising for the more exciting capital campaign for construction with tangible benefits is more assured than funding the long-term operating expense for the facility. With this in mind the approach for design and operation should be to make facility design and programming choices to maximize revenue, and to minimize operating cost through design decisions. The facility should be designed assuming a 50-year useful life. The aquatic systems and amenities shall be designed to maximize design life.

Use principles of sustainable construction to minimize energy consumption and waste production during construction and operation. For example, use of solar panels and heat pumps to reduce energy cost should be considered if the life cycle of this equipment is aligned with principles of sustainability.

4. Preliminary Operating Assumptions

4.1 Operating Programs

4.1.1 *Learn to Swim Programs*

Program Concept: Year-round school programs (rotating schools/grades through winter) and summer group and individual lessons. Adult learn to swim/water introduction.

4.1.2 *Fitness Programs*

Program Concept: Year-round 45–90 minutes classes from 6–9:30am for cross training for high level athletes (circuit classes in pool), stand up and be strong/balance classes for the older population.

4.1.3 Therapy Programs

Program Concept: Weekday 10:00am-3:00pm rental of the therapy pool by local physical therapists is expected. Individual discharged patient membership would also be expected. National trend is 2 out of every 3 patients discharged from aquatic therapy seek aquatic centers with a warmer water pool to continue their exercising.

4.1.4 Competitive Swimming

Program Concept: Potential to create a local club given the under 19 yr. old population is 30% of the community and growing and given the strong orientation of the community around sports. The facility would also support high school and middle school swim teams and potentially a Masters Swim Program.

4.1.5 Special Community Uses

- Kayak classes
- Boy Scout Merit badge work
- Possible HS Graduation parties, or seasonal community event/Themed events
- Prior to draining the pool for cleaning, conduct Doggie Olympics.
- Special training requests/College swim teams conducting altitude training.
- Cross training for school and club teams

4.2 Operating Parameters

- The facility shall operate year-round with a one-week maintenance shut down.
- The facility will operate from 6:00am to 8:00pm Monday through Friday
- The facility will operate from 8:00am to 8:00 pm on Saturdays
- The facility will operate from 12:00pm to 7:00pm on Sundays
- Learn to swim classes will be provided as follows;
 - Summer 14 classes per day, 5 days a week for 8 weeks
 - Spring/Fall 4 classes per day, 2 days a week for 20 weeks
 - Winter 2 classes per day, 2 days per week for 10 weeks
- Private lessons 3 classes per week for 14 weeks
- Fitness classes will be provided as follows;
 - Summer 9 classes per week for 14 weeks
 - Spring/Fall 7 classes per week for 26 weeks
 - Winter 7 classes per week for 12 weeks
- Lifeguard Training provided for 4 classes per year week for 3 weeks each
- Birthday parties will use the party room 2 times a week for 50 weeks a year

5. Facility Requirements

5.1 Pool Area

The pool area includes a Lap Pool, Wading Pool, and Outdoor Spa, along with the deck areas required to support each of the pools, toys, equipment, and to support swim meets.

5.1.1 Structure

5.1.1.1 Architecture Character and Interior Design

5.1.1.1.1 Building Exterior

The building exterior should be attractive, economical, durable, and low maintenance, while striving to meet the Driggs Commercial Design Standards and Guidelines. Required egress doors must be equipped with a canopy or recess to ensure that the doors can completely open without obstruction or risk from snow and ice accumulation.

5.1.1.1.2 Building Interior

The interior of the building shall be designed with moisture and corrosion resistant materials. Acoustical control shall be provided. Surface material and furnishings used for acoustical control shall be cleanable and constructed of nonabsorbent, water-resistant material.

5.1.1.2 Size

The facility shall be sized to accommodate all systems pools and rooms as defined in the following sections.

5.1.1.3 Access

Access to the Pool Area shall be controlled. Engineering and/or administration controls shall be provided so that visitor access to the Pool Area is limited to those that have purchased a "Pool" pass.

5.1.1.4 Heating Ventilation and Air Conditioning

The pool area enclosure shall be heated and ventilated as required by the Idaho Administrative Code, Idaho Department of Health and Welfare, Division of Public Health, 16.02.14 (IDAPA 16.02.14), *Construction and Operation of Public Swimming Pools*. Room ventilation shall prevent direct drafts on swimmers and shall minimize condensation damage.

5.1.1.5 Lighting

Artificial lighting shall be provided so that all portions of the pool, including the bottom, may be readily seen without glare. Lights shall be installed so as to provide uniform distribution of illumination. Natural lighting shall be maximized as much as practical.

5.1.1.6 Water Supply

Potable water shall be provided from the City of Driggs water system. Pools should be isolated from each other to minimize facility closure if one pool becomes contaminated.

5.1.1.7 Water Treatment

Treatment system shall be in accordance with IDAPA 16.02.14. The system shall be of sturdy construction and materials which will withstand wear, corrosion or attack by the chemicals to be used, and which are not adversely affected by repeated, regular adjustments or other normal use conditions. The system shall be designed with adequate clearance for ready and safe inspection, maintenance, disassembly and repair

5.1.1.8 Waste Water Disposal

Waste water from the swimming pool shall be discharged in a manner approved by IDEQ.

5.1.2 Lap Pool

5.1.2.1 Size

The Lap Pool should be 25-yards long with eight 7' lanes and buffer lanes on each side. The pool shall meet the requirements to hold USA swimming meets (e.g., course length certification procedure, diving starts and certification of diving starts from starting blocks etc.) The Lap pool minimum depth should be not less than 4 ft. The Lap Pool maximum depth should not be less than 9 ft. Anchors shall be provided for lane lines with buffer lanes of minimum of 8 inches on each side. Starting blocks should be provided for each lane and be fixed in place.

The pool shall be provided with an ADA compliant lift chair and shall have a minimum depth of 4 ft. The selected approach should be based on that which best meets the Design Approach (Section 3.0).

5.1.2.2 Use

The design shall identify the maximum and average swimmer use based on Lap Pool size.

5.1.2.3 Water Temperature

Water temperature should be able to be maintained at a temperature between 79 and 86° F for a range of users such as lap swimming, swim team training, swim meets, water aerobics, recreational swimming, and advanced swim lessons.

5.1.2.4 Recirculation

The Lap Pool shall be provided with a recirculation system which will convey, clarify, chemically balance and disinfect the swimming pool water. The recirculation system shall include pumps, piping, filters, chemical feed equipment, and associated controls and monitoring devices. The system shall be designed to meet the requirements of IDAPA 16.02.14.

5.1.3 Wading Pool

A wading pool shall be provided as a place for small children to play and take beginner swim lessons along with a 5' deep alcove for aquatic therapy.

The pool shall be provided with an ADA compliant chair or platform lift.

5.1.3.1 Size

The Wading pool should be approximately 3,800 ft². The maximum depth of the pool should be between 2 and 4 ft based on the approach that best provides an area for beginner swim lessons and meets the Design Approach (Section 3.0). There should also be a 5' deep alcove for aquatic therapy. A zero-entry ramp and/or stairs should be provided.

5.1.3.2 Use

The design shall identify the maximum and average swimmer use based on the Wading Pool size.

5.1.3.3 Water Temperature

Water temperature should be maintained at approx. 90° F.

5.1.4 Spa

5.1.4.1 Size

The spa should be 200 square feet and a maximum depth of 4 ft. Shape should be designed to optimize seating options.

5.1.4.2 Use

The design shall identify the maximum and average swimmer use based on spa size.

5.1.4.3 Water Temperature

Water temperature should be able to be maintained at a temperature between 102 and 104° F.

5.1.4.4 Recirculation

The Spa shall have a separate recirculation system from the other pools within the facility. The system shall meet the requirements identified in section 5.1.2.3.

5.1.4.5 Location

The spa may be located indoors or outdoors. The selected location should be based on the location which optimizes revenue and users to the spa and decreases operation and construction costs.

5.1.5 Added Features

Cost effective features to increase facility usage/revenue should be evaluated. These include features such as slides, wave riders, lazy rivers, ninja courses etc.

5.1.6 Deck Area

5.1.6.1 Size

An unobstructed deck at least 8 ft wide shall entirely surround the Lap Pool and Wading pool. This area should be adequate for conducting swim meets by providing room for line judges, starting blocks, etc.. The deck shall be of a uniform, easily cleaned, impervious material with a slip-resistant finish. The deck area should be sized to allow 100 spectators seated on bleachers for competitions, and should be 12 ft wide in this area. The spectator area should be effectively separated from the swimmer areas and shall not be located behind the starting blocks.

5.1.6.2 Slope/Drainage

The deck shall be sloped away from the pool, and shall be sloped to provide positive drainage of all deck areas. Deck drains, if used, shall be in accordance with IDAPA 16.02.14

5.1.6.3 Hose Bibs

Hose bibs with appropriate backflow preventers shall be provided to facilitate cleaning the deck areas.

5.2 Potential Geothermal Hot Pool Area

There is the potential for constructing geothermal hot pools in the future. The area noted in Figure 1 shall be designated for this potential future use and not impacted by the design.

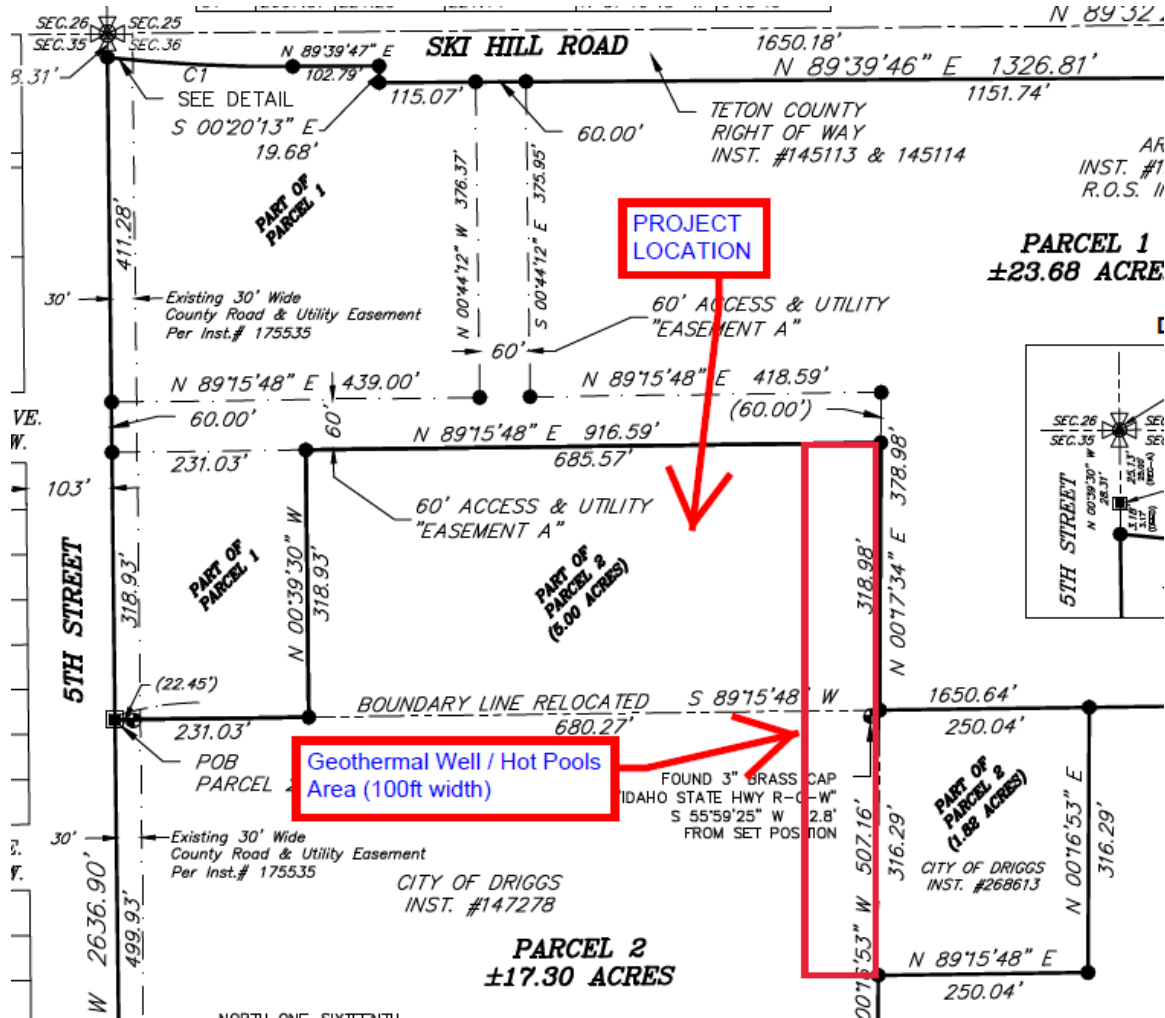


Figure 1. Potential future geothermal use not to be impacted by the design.

5.3 Administration Building

The administrative building includes the structure that houses pool systems and components, locker rooms, showers, lavatories, storage and other required administration activities and staff.

5.3.1 Architecture Character and Interior Design

The building exterior should be attractive, economical, durable, and low maintenance. Required egress doors must be equipped with a canopy or recess to ensure that the doors can completely open without obstruction or risk from snow and ice accumulation.

5.3.2 Size

The facility shall be sized to accommodate all pool support systems and rooms as defined in the following sections.

5.3.3 Heating Ventilation and Air Conditioning

Heating, ventilation, and air conditioning shall be in accordance with national standards to ensure a comfortable environment of standard facility.

5.3.4 Lighting

Artificial lighting shall be provided to provide uniform distribution of illumination. Natural lighting shall be maximized as much as practical.

5.3.5 Bath House

5.3.5.1 Locker Room

Separate changing rooms shall be provided for female, male, and unisex/family. A shared locker room shall also be provided. A separate locker room shall be provided for staff. The locker rooms shall be sized based on pool capacity, industry standards, and follow all SafeSport policies.

5.3.5.2 Shower Room

Separate shower rooms within each locker room shall be provided for female, male, and unisex/family. The shower rooms shall be sized to accommodate the designed use of the pools and based on industry standards.

5.3.5.3 Lavatories

Separate lavatories (toilet/sinks) shall be provided for female, male, and unisex/family inside and outside the locker rooms. A separate lavatory shall be provided for staff. The lavatories rooms within the locker rooms shall accommodate the designed use of the pools and based on industry standards.

5.3.6 Storage/Support Room(s)

5.3.6.1 Janitorial Supply/Maintenance Room

The janitorial supply room should be sized to incorporate the following furnishings and equipment:

- Floor-mounted mop sink with hot and cold water
- Shelving for janitorial supplies
- Hooks for storing cleaning and maintenance equipment
- A water-resistant, easily maintained floor material, sloped to a floor drain.

5.3.6.2 Equipment Storage

The equipment storage room should be sized to incorporate the following furnishings and equipment:

- Lifesaving equipment
- First Aid equipment
- Swim Lesson equipment

- Lap swimming equipment
- Other miscellaneous equipment and consumables

5.3.7 Dry Staff Room & Office

A staff room of approximately 300 ft² and separate office of approximately 120 ft² should be provided.

5.3.8 Wet Staff Room/Office

A staff room/office of approximately 150 ft² should be provided for pool staff.

5.3.9 Public Vending Area

An area for up to 3 vending machines should be provided. (Consider concessions counter)

5.3.10 Waiting/Observation Room

The Waiting/Observation room for observing swimming activities should be designed to accommodate 40 people and allow people to observe activities in the pool area.

5.3.11 Party/Hospitality Room

The Party/Hospitality room should be designed to accommodate 20 people and should be accessible from the pool area.

5.3.12 Childcare Room

A Childcare room should be designed to offer drop-in childcare for children ages 1-4 for short periods of time.

5.3.13 Mechanical Rooms

The mechanical equipment rooms should follow industrial standards and incorporate the following furnishings, characteristics, and equipment:

- Pool Heater
- Air compressor equipment
- Hot water heaters
- Filtration, chemical treatment, and recirculation equipment
- Forced-air heating, ventilation, and air conditioning (HVAC) system
- Electrical panels
- Fire-suppression system control
- Telephone switch and panels
- A lockable door, entered from the outside
- Floor sloped toward a floor drain
- Concrete pad or other vibration-isolation mass for air compressor, if required
- Exterior access

The mechanical rooms shall be sized to accommodate all required equipment and systems. The rooms shall be sized to accommodate regular inspection and maintenance of systems. This shall include sizing the room to accommodate geothermal heat exchangers for heating pool water if a future geothermal source is identified. Storage areas/rooms shall be provided to chemicals, spare parts, and other required equipment.

5.4 Access and Parking

5.4.1.1 Size

The parking area shall be designed to accommodate the designed use of the pools and based on industry standards.

5.4.1.2 Lighting

Outdoor lighting shall be provided as required by the Driggs Land Development Code.

5.5 Landscaping

Landscaping shall take advantage of natural vegetation as much as practical. Removal of existing trees should be avoided.

6. Design Requirements

If a requirement in this document is in conflict with a code or standard, the code or standard will have precedence.

- City of Driggs, Idaho, Land Development Code
- International Building Code as adopted by the State of Idaho and City of Driggs
- Idaho Administrative Code, Idaho Department of Health and Welfare, Division of Public Health, 16.02.14, Construction and Operation of Public Swimming Pools

7. Interrelationships with other Processes, Facilities and Support Facilities

The Aquatic facility will interface with multiple existing and potential facilities and processes. These facilities and processes are the responsibility of others and not within the scope of these F&ORs.

7.1 Utilities

Water, sewer and power will be provided to the edge of the Aquatic Facility site. These utilities will be provided as follows;

- Power
- Water
- Sewer