

LIFEGUARD STATION

DESIGN CRITERIA

FOR PRESQUE ISLE STATE PARK ERIE, PA

PURPOSE

The Presque Isle Partnership is working with the Presque Isle State Park, Presque Isle Lifeguard Association (PILA) and Ignite Erie to enhance the safety of visitors at the beaches of the Presque Isle State Park.

New lifeguard towers would be a great addition to the beaches and replace the outdated structures that have been serving the lifeguard staff on Presque Isle State Park for the last 20+ years. The improvements to which these new towers will provide include:

- A central location for the lifeguard staff and the public
- Accessibility and storage for vital equipment
- Higher elevation to provide better scanning techniques and visibility.

These lifeguard towers would also accomplish the goal in providing better sun protection for our lifeguard employees who face the elements to provide safety and protection to the annual beach visitors each summer. Towers like these would be an investment in our community, our employees, and the future of Presque Isle State Park.

ENVIRONMENT

The environment at Presque State Park is defined by the following.

Temperature range: -17° F to 99° F

Maximum winds: 0 – 78 mph

Maximum sun exposure and glare off the lake through the afternoon until sundown (how do you define??)

Lightning (How to Define??)

Sandy

LIFEGUARD TOWER ATTRIBUTES

Foundations:

- The lifeguard tower will be set in sand. There is no plan to pour concrete slabs to act as foundations.
- The lifeguard tower should be moveable in a sandy environment
- The lifeguard tower should be collapsible enough to be able to be hauled by park truck and trailer.
- The lifeguard tower will remain in winter months and may be used for winter emergency actions.

Visibility: The lifeguard station must provide maximum visibility for the guards in 360 degrees.

- **Capacity:** The lifeguard station will hold up to two guards and their safety equipment to include:
 - Backboard
 - First Aid Kit
 - Radio with Charger
 - PA System
 - Rescue Can

Safety: The lifeguard station should provide shelter against the sun, rain and, most importantly must act as a faraday cage in lightning storms.

Equipment: All emergency response items stored in the tower must be easily reached.

Accessibility: The lifeguard tower must be open to the front to provide the quickest exist to the shoreline/waterfront as possible using a ramp.

Power: Electrical power is required for the radio charger, pa system, fans, and lights that can be stationed on end posts.

Other: The Pennsylvania Bureau of State Parks and the Presque Isle Partnership believe in conservation and environmental stewardship. This should be considered while choosing materials, power systems and manufacturing process. The use of recycled and sustainable materials is higher recommended. LEED certification guidelines should be considered.

EXTERIOR REQUIREMENTS

Please include the following in the design:

Exterior Materials: There is no preference for exterior materials, but the station should be light in color.

Windows:

- Provide ability to shade and eliminate glare from the sun.
- Provide ability to close / shutter windows completely in order to secure the interior.
- Windows must be able to open/close to control internal temperatures. Getting proper airflow through the inside of the tower is of utmost importance.

Platform:

- The platform in the front of the structure should be large enough to hold two captain's chairs.
- Platform height: The distance from the ground to eye level for an average person (5'8") standing on the platform should be between 8-10 ft.

Ramp: The lifeguard tower platform should be easily accessible by ramp. The ramp should be able to be removed by lifeguards in the case of high water waves.

Information Display: Display board/white board for water conditions and updated rules & regulations.

Weight Kit: The lifeguard tower must have a removable weight kit, so it can be easily moved, but withstand the upward range of winds without moving.

Mobility: Will need to be able to move easily after the summer season is over. Something like 2 hooks on the back so park staff can pick them up with heavy equipment for storage.

INTERIOR REQUIREMENTS

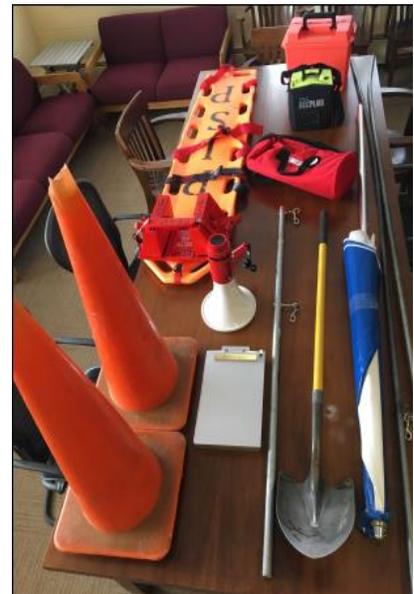
Please include the following for the designs

- Adjustable seating for two people, can be bench or other
- Cubbies for maps, information, and documents
- Writing Surface
- Fan for temperature control
- Lights
- Space for Radio and PA System

STORAGE REQUIREMENTS

The following equipment must be stored on the tower and be easily accessible:

- 1) Backboard (12"H x 72"L x 18"W)
- 2) Med Kit (14"H x 20"L x 12"W)
- 3) Cones (40"H x 17"W)
- 4) (2) End Flag Poles (120"L x 2"W)
- 5) Megaphone (18"H x 17"L x 14"W)
- 6) Field Report Box (16"L x 10"W)
- 7) Binoculars
- 8) Shovel (60"L x 12"W)
- 9) (6) Umbrellas (92"L x 10"W)
- 10) Tower Flag Pole (60"L x 2"W)
- 11) O2 Bag (10"H x 24"L x 10"W)



We would also like the option of storing the rescue jet-ski on a bubble trailer at one of towers. This would give us quick launching options from the waterfront and be able to be stored overnight at that tower location.

MEP REQUIREMENTS

There is no need for heating, air conditioning or plumbing.

Ideally the unit would be self-sustaining, using solar panels or other means (no gas powered generators) to provide electricity.

COST PER UNIT

The Presque Isle Partnership would like to keep the cost of the manufactured unit to under \$15K

ADDITIONAL OPTIONS

Adjustable height (considering sandy environment)

Space for weather stations

Solar Panels