



Basic Boat Launch Design

Bureau of Engineering

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Mission: To protect, conserve, and enhance the Commonwealth's aquatic resources and provide fishing and boating opportunities.

General Recommendations

- **Width:** Canoe/Kayak – 8 ft.; Motorboat – 12 ft.
- **Length:** 25 ft. or longer above water line to provide dry access
- **Slope:** Site dependent; should be between 12% and 15%
- **ADA:** Walkway slopes are not to exceed 8.33% whenever possible. Handrails and/or other structures increase launch accessibility.
- **Location:** Ideally located in areas without erosion, heavy flows, and inconsistent water levels.

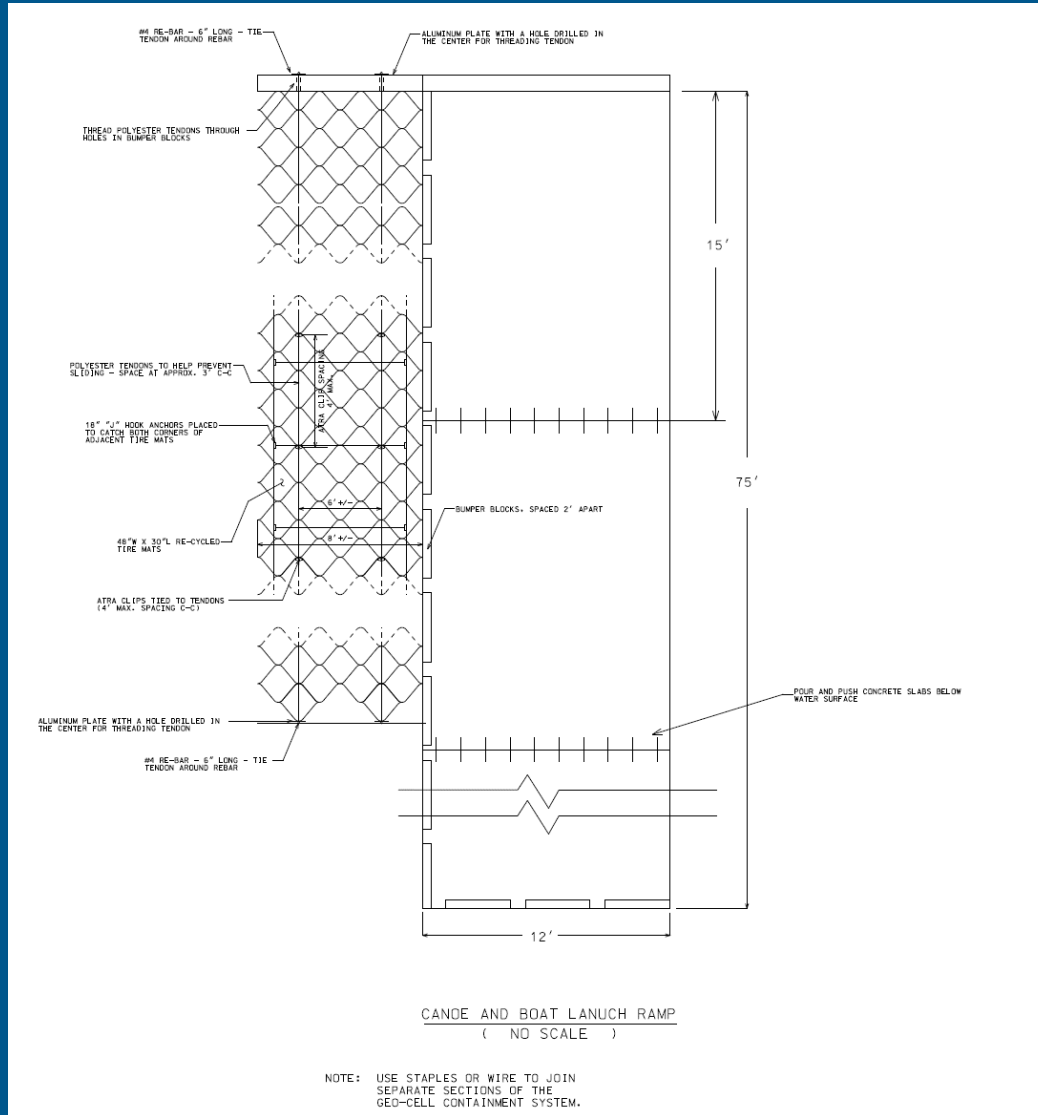


Design and Construction

- Tailor design to utilize natural site features and be consistent with applicable permitting regulations and standards.
- **Motorboat ramps:** Concrete; constructed using the “Pour and Push” method.
- **Canoe/kayak launches:** Anchored geocell filled with clean stone and covered by tire mats/synthetic matting.
- **Parking areas:** 10-15 cars with accessible parking and path to launch site and/or docks.



Example Plan View



Howe Township Access Area

- **Project:** Construct improvements to the existing facility that include a combination motorboat ramp/canoe/kayak launch, ADA accessible courtesy dock, and improved parking.
- **Location:** Perry County along the Juniata River
- **Funding:** Chesapeake Bay Gateways Network Grant
- **Cost:** Approx. \$58,000



A photograph showing a waterfront area. In the foreground, there is a gravel parking lot. A concrete ramp leads from the parking lot down to a dark, sandy beach area. A wooden dock is visible in the water. The background consists of a large body of water and a dense line of green trees under a blue sky. The text "Accessible parking and ramp to access dock" is overlaid in yellow on the image.

**Accessible parking and ramp
to access dock**

**Accessible ramp with
handrail to access
dock**





Concrete “Pour and Push” ramp in combination with canoe/kayak geocell launch covered with rubber tire matting.



Note: In areas with very heavy use, separate motorboat ramp from canoe/kayak launch to alleviate congestion.

Resources

- [Non-Motorized Boat Launch Case Study \(Allegheny National Forest\)](#)
- <https://npgallery.nps.gov/RTCA/GetAsset/86bb0d45-8417-4904-97ae-771c8eba5a42/original>
- <https://codes.iccsafe.org/content/icca117-12009/chapter-11-recreational-facilities>

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