PDG was selected by the City of Huron to provide engineering services for new public boating access facilities in the Huron River with access to Lake Erie. The facility was designed for typical Lake Erie private watercraft and includes a four-lane boat launch and associated sheet piling and dock abutments, floating boarding docks and courtesy docks, access drives, 135 car/trailer parking spaces, lighting, make-ready and tie-down areas, and a public restroom facility with water service, grinder pump sanitary sewer and other appurtenances. The site was previously an industrial grain milling facility. The project involved the demolition of existing industrial structures including a three-story administration building, weigh scales, 180-foot high elevated water storage tank and other facilities. The concrete and masonry from the demolished Administration Building was crushed and utilized on-site as granular backfill material and the existing asphalt parking and aggregate base was crushed and used as new pavement base. Stormwater runoff is treated by a linear stormwater quality pond which also minimized the required storm sewers thereby reducing project cost and energy inputs.

<table>
<thead>
<tr>
<th>Location</th>
<th>Huron, Ohio</th>
</tr>
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<tbody>
<tr>
<td>Services Provided</td>
<td>Site and Transportation Engineering, Electrical/Lighting Design, Drainage/Stormwater Design, Survey, Construction Administration</td>
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<tr>
<td>Project Funding</td>
<td>$3.142 Million Grant– ODNR’s Cooperating Public Boating Facility Project program</td>
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<td>Cost</td>
<td>$3.142 million – Engineer’s Estimate</td>
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<td>Schedule</td>
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<td>2009 Construction</td>
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<tr>
<td>Project Team</td>
<td>Richard Hertzfeld, PE, Project Manager/Marine Design</td>
</tr>
<tr>
<td></td>
<td>Julie Thomas, PE, Site Design</td>
</tr>
<tr>
<td></td>
<td>John Brock, PE, Structural</td>
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<tr>
<td></td>
<td>Daniel Knott, PE, Site Power/Lighting</td>
</tr>
<tr>
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<td>Daniel Supinski, Design Technician</td>
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<td></td>
<td>Frank Harris, Construction Observation</td>
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</table>

**Reference**
Mr. Doug Steinwart  
City of Huron  
417 Main Street, Huron, Ohio 44839  
419.433.5000  
dsteinwart@cityofhuron.org
Site lighting is provided by LED area lights which greatly reduce power requirements while minimizing light pollution. The new facilities complement the improvements made by the Huron Parks and Recreation Department, which included the Huron Boat Basin and Amphitheater, and provide the means for the area to become one of Lake Erie’s most attractive waterfront locations.

PDG prepared the City’s application for grant funds, which resulted in an award of $3,142,000 (Engineers’ Estimate) through the Ohio Department of Natural Resource’s Cooperating Public Boating Facility Project program.
Poggeeyer has played an integral role to-date in the conceptualization and development of the Marina District. As part of this extensive project, PDG completed a detailed design of the $5.8 million Marina and Site Improvements. PDG successfully met the accelerated schedule and the City's very aggressive bid date. This project consists of a 96-slip marina with full utilities, sanitary pump-out facilities, marine fueling facilities, access roads, parking, all public utilities including: water, sanitary sewers, storm sewers, power, gas, telephone and cable.

Other major design components include; sheet pile wall and tie-back system in weak soils, a major 96” combined sewer junction chamber with primary screen, guide piles for floating docks, construction methods and sequencing to comply with brownfield clean-up requirements.

The electrical design for the floating docks, future development, street lighting and passenger terminal building included drawings and specifications for the utility service connection, power distribution, grounding, shore power connections, and area and parking lot lighting. This project was complicated by the constrained site, coordination with the Toledo Edison Company of relocation of their main 69KV more...
power feeding the entire downtown business district, connection to the existing 35ft deep sanitary sewer and aggressive design schedule.

**Electrical Elements**

- Underground Manholes
- Hand Holes and Duct Banks for Power Distribution
- Telephone and Cable Television System Cabling
- Calculations of Dock Electrical Loads According to National Electrical Code Requirements
- Calculations for Electrical Fault Analysis
- Photometric Analysis for Lighting Systems
- Construction Cost Estimating
The Ohio Department of Natural Resources (ODNR) selected PDG to provide design services for the Phase 3 statewide watercraft access projects funded by Watercraft Cooperative Boating Facility Grants at State-wide park facilities. The PDG-led team is currently performing or has recently completed all necessary engineering, surveying and related services required to prepare preliminary design reports, final detailed construction documents and cost estimates. Construction administration services are provided on all projects.

**PROJECTS**

**PAINT CREEK STATE PARK, DEER PARK LAUNCH RAMP, HIGHLAND COUNTY**

Improvements to the existing ramp to accommodate two additional floating courtesy docks, removal of fixed concrete abutments and site lighting at Deer Park Launch Ramp. The facilities are ADA-compliant.

**Construction Cost**

- $134,000

**PAINT CREEK STATE PARK, TAYLOR ROAD LAUNCH RAMP, HIGHLAND COUNTY**

Poggemeyer Design Group, Inc. (PDG) provided engineering and architectural design for improvements to the Taylor Road Launch Ramp at Paint Creek State Park including:

- renovation/replacement of existing 2-lane ramp
- new ADA accessible courtesy dock
- expansion of existing parking lot
- site lighting
- repavement and upgrade of existing access road

**LAKE MILTON STATE PARK, MAHONING COUNTY**

New shore side ADA ramp, abutment gangway area lighting and fixed courtesy docks for 16 individual dock slips along the shoreline adjacent to existing outdoor amphitheater.

**Construction Cost**

- $272,000

**GENEVA STATE PARK, ASHTABULA COUNTY**

New ADA-compliant restroom and shower facility and approximately 850 l.f. of transient dockage along the existing marina north sheet pile wall with electric/water hookups and multiple access bridges.

**Construction Cost**

- $1,335,000 (bid price)

**KISER LAKE STATE PARK, CHAMPAIGN COUNTY**

Replacement of one-lane launch ramp with new steel ramp, installation of a boarding dock and courtesy dock abutments and walks, and pavement. All facilities are ADA-compliant.

**GRAND LAKE ST. MARYS STATE PARK, AUGLAIZE COUNTY**

Rehabilitation of the East Bank Marina Ramp to improve ramp traction by overlaying four (4) existing concrete ramps with new steel ramps. Expansion and reconfiguration of the existing parking area to increase the number of parking spaces and improve traffic and parking efficiency.

**Construction Cost**

- Grand Lake St Mary’s & Kiser Lake = $309,700 (combined bid price)

**INDIAN LAKE STATE PARK CHIPPEWA MARINA REHABILITATION, LAKEVIEW**

Poggemeyer Design Group provided engineering and architectural design for improvements to the Chippewa Marina at Indian Lake State Park including:

- Replacement of 2,200 linear feet of existing seawall
- Replacement of 100 existing wood docks with a reduced number of larger dock slips
- ADA dock installations

**2006 National Outstanding Marina and Harbor Award States Organization for Boating Access (SOBA)**

**Project Cost**

- $1.3 million
HARRISON LAKE STATE PARK, FULTON COUNTY
Design and construction are completed for replacement of existing ramp with single-lane concrete ramp with v-grooves, 5-foot wide fixed boarding docks, 8-10 car-trailer parking spaces and improved site lighting.

Construction Cost
$198,000

ALUM CREEK STATE PARK, DELAWARE COUNTY
Design and construction are completed for reconstruction and widening of existing ramp to accommodate four 15-foot wide launch/retrieval lanes. Removal of existing floating docks and abutments and construction of new abutments, guide piles and floating 6’ and 8’ wide docks, rehabilitation of existing 6’ wide floating docks to provide ADA-compliant boarding docks. Expansion of existing parking area to accommodate longer boat trailers and additional parking spaces including upgrades to existing and additional new site lighting at the ramp and parking areas.

Construction Cost
$632,300 – Hollenback Ramp, Ph 1

BUCK CREEK STATE PARK BOATING ACCESS IMPROVEMENTS, SPRINGFIELD
Poggemeyer Design Group, Inc. (PDG) provided engineering and architectural design for boating access improvements at Buck Creek State Park. The $2 million project of the Ohio Department of Natural Resources (ODNR) relocated the existing four-lane launch area 300 feet to the west, added a fifth launch lane and a 240-foot boarding dock. The access road leading to the launch area was reconfigured to relieve congestion on busy summer weekends and the adjoining parking lot was expanded to include 22 car-trailer spaces. Make-ready and tie-down areas were added along the access road to help move traffic more efficiently.

Relocation of the launch lanes and construction of a steel, double-walled breakwater reduced wave action in the launch area, making it safer for both boaters and their watercraft.

Funding for the project came from grants by the ODNR divisions of Watercraft and Wildlife.

Project Cost
$2 million

Project Performance

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<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>Bid Amount</th>
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<td>Alum Creek Phase I</td>
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<td>Huron River Boat Ramp</td>
<td>$2,112,600</td>
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DEFIANCE RESERVOIR BOAT FACILITY
Poggemeyer Design Group assisted the City with a grant application request for funding from the Ohio Department of Natural Resources for a boat facility at the City’s new reservoir. PDG worked with City and ODNR representatives to determine the location and access to the reservoir. PDG Engineers designed the new facility to meet existing conditions and provide handicap accessibility. Associated parking and other support amenities were also designed as part of the project.

Project Cost
$81,000

Reference
Ohio Department of Natural Resources
2045 Morse Road, Building E-3
Columbus, Ohio 43229
614.265.6972