



**SOLUTIONS BUILT WITH TRUST**

**WE DO THAT ... & MORE**

## **Strong, stable solutions for your projects**

Michels specializes in the design and construction of safe, technically sound, and value-engineered foundation, earth retention, ground improvement, industrial, infrastructure, marine and groundwater solutions. Our crews work collaboratively throughout the United States, accessing and sharing learned experiences about regional ground conditions, preferential techniques, and project delivery methods. Our multidisciplinary team consists of experienced leaders, licensed engineers, dedicated field crews, and an unmatched fleet of equipment.





## DEEP FOUNDATIONS

Michels Construction drills shafts and drives piles to create load-bearing structures in competent soil or rock to allow safe, solid development on the surface or far above it. Our design-build capabilities ensure value-engineered solutions for even the most complex deep foundations and earth retention projects.

### Our techniques include:

- Auger cast piles
- Drilled shafts (belled shafts and rock shafts)
- Driven piles
- Micropiles
- Mini-caissons
- Oscillated drilled shafts (temporary cased and permanent cased)

## GROUND IMPROVEMENT

In certain soil conditions, Michels Construction's ground improvement experts design a plan and use various methods to increase load-bearing capabilities and reduce settlement to allowable tolerances.

### Our techniques include:

- Aggregate piers/stone column
- Chemical grouting
- Compaction grouting
- Dynamic compaction
- Rigid inclusions
- Vibro compaction



## EARTH RETENTION SYSTEMS

Michels Construction plans, designs, and builds cost-effective, temporary and permanent geotechnical structures to support deep excavations. Our impressive collection of earth retention services is designed to provide you with custom solutions for your project needs.

### Our techniques include:

- Ground anchors and tiebacks
- Drop shafts
- Secant & tangent pile walls
- Sheet piles (vibrated and hydraulic pressed)
- Slope stabilization
- Soil nails and shotcrete
- Soldier piles & lagging
- Underpinning





## INDUSTRIAL CONSTRUCTION

Michels Construction supports mission-critical operations with building erection, equipment installation, and the careful application of amendments and material to stabilize and solidify our solutions.

### Our techniques include:

- Cast-in-place concrete
- Epoxy & structural grout
- Equipment alignments and installations
- Steel erection
- Structural concrete
- Structural steel fabrication

## MARINE CONSTRUCTION

Michels Construction is the go-to contractor for work on, in, and around water. Our crews develop and deliver individual solutions to build and maintain the specialty mechanical, structural and nature components of marine projects and environment.

### Our techniques include:

- Dredging
- Diving
- Surveying
- Environmental remediation & capping
- Intakes & outfalls
- Lock & dam repair
- Breakwaters & dock walls
- Inspections & maintenance
- Intakes & outfalls
- Island building
- Gate installation & repair
- Revetments
- Offshore wind

## INFRASTRUCTURE

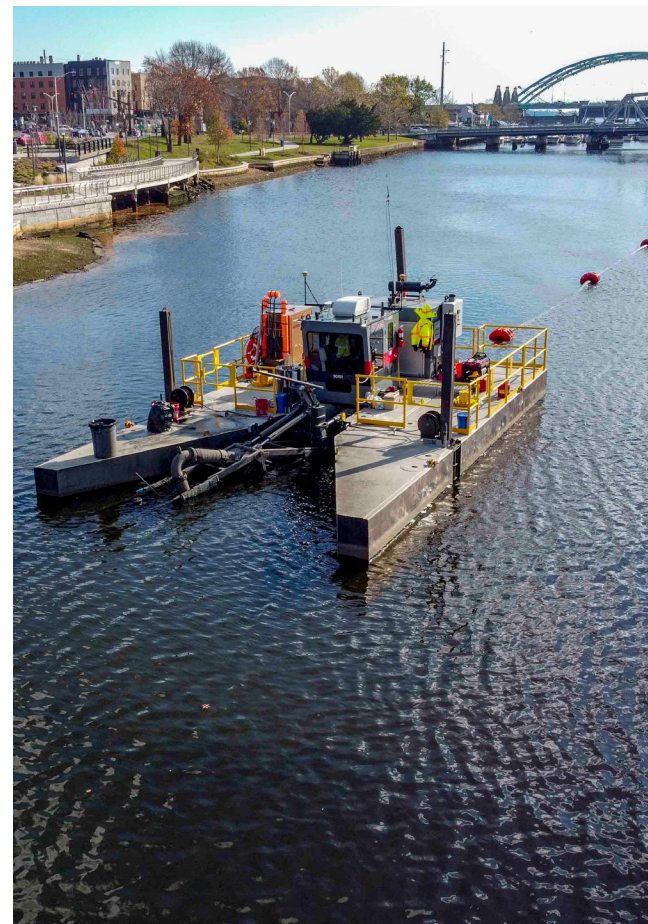
Our infrastructure group focuses on large public and private projects with the ability to improve safety, quality of life and economic opportunities.

### Our techniques include:

- Bridges, interchanges & roadways
- Ramps & runways
- Mass concrete
- Pump stations
- Floodwalls
- One & around levees
- Rail cut-&-cover tunnels
- Spillways
- Mass excavation
- Civil sitework

## CREATIVE SOLUTIONS

Michels Construction combines experience, best practices and creative problem-solving to develop efficient, technically sound, and cost effective ways to address challenging projects. Our solutions include alternative delivery methods, value engineering, and a unique ability to self-perform many aspects of complex projects by engaging the Michels Family of Companies and its shared values and commitments.





## We Do That

Deep Foundations  
Design-Build  
Earth Retention Systems  
Ground Improvement  
Industrial Construction  
Marine Construction  
Infrastructure

## ... & More

Underground Line & Cable  
Substations  
Facilities  
Renewable Energy  
Trenchless Construction  
Transmission &  
Distribution Lines  
Offshore Energy



WE DO THAT ... & MORE

### Federal Projects

Did you know the Michels Family of Companies has been supporting the infrastructure construction needs of federal and governmental agencies for decades? Our services, experience, programs and values are the foundation of successful partnerships.



#### Cle Elum Dam

Ronald, WA  
2019

- Earth retention system for 20-foot-wide fish passage structure
- 35-foot to 95-foot deep soldier piles
- 222 tiebacks with average depth of 70 feet
- 31,000 square feet of shotcrete lagging
- Located in a lake bed

#### Private Energy Facilities

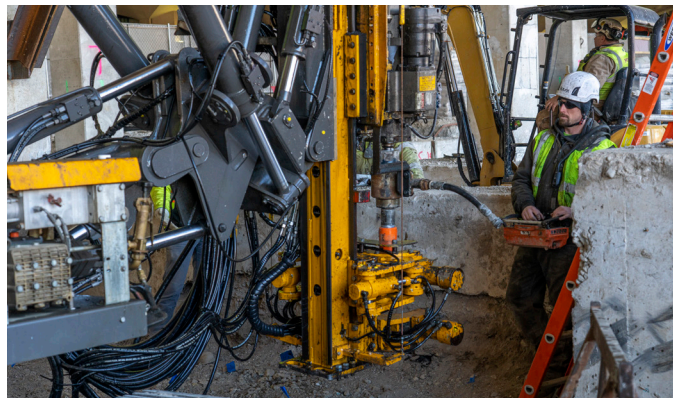
Montana, South Dakota,  
Oklahoma, Texas  
2020-2021

- 7,810 cubic yards of structural concrete
- 1,040 driven steel piles
- 543 drilled shafts
- 144,000 HP of electrical-driven rotating equipment installed with millwrighting and epoxy grouting
- 770 tons of structural steel (fabricated and erected)

#### Schuylkill River

Philadelphia, PA  
2022

- Hydraulic dredging to return historic rowing site to national prominence
- Removal of debris from silt, mud, sand & coal
- Transported 8 miles down river to confined disposal facility



#### Wisconsin Center Expansion

Milwaukee, WI  
2021-2022

- Design and construction of deep foundation system for expansion and seismic retrofit of existing building
- 2,700 cast-in-place driving pipe piles
- 600 micropiles
- 2,000 linear feet of earth retention and underpinning
- Simultaneous pile driving, micropiling, and earth retention operations

#### Private Revetment

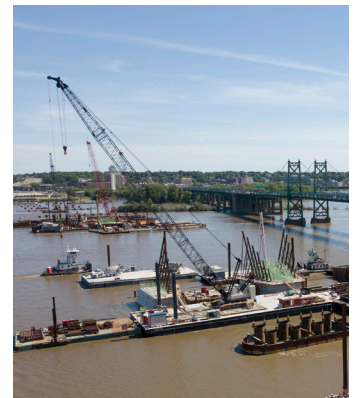
Bayside, WI  
2021

- Lake Michigan shoreline work done by barge
- 10,200 tons of 4- to 6-ton red granite armor stone
- 5,500 tons of 800 to 1,500-pound quartzite filter stone
- 3,200 tons of 4- to 10-inch quartzite bedding stone
- New revetment wall spanning 600 lineal feet
- 75-foot groin structure

#### I-74 Mississippi River Bridge

Moline, IL  
2017-2018

- 242 drilled shafts (233 drilled in river)
- 7-foot and 10-foot permanent steel casing
- Up to 4 drill rigs working simultaneously from barges



**MICHEL'S**<sup>®</sup>  
CONSTRUCTION, INC.

[www.Michels.us](http://www.Michels.us)

An overview of the collective strength of the **MICHEL'S** Family of Companies



7,000+ people  
strong



18,000 pieces  
of equipment

**1959**

founded in



50+ locations  
globally



ENR's Top 400  
Contractors List

Visit our website to learn more about our marine solutions.

817 Main Street, Brownsville, WI 53006 | 920.583.3132 | [michels.us](http://michels.us)