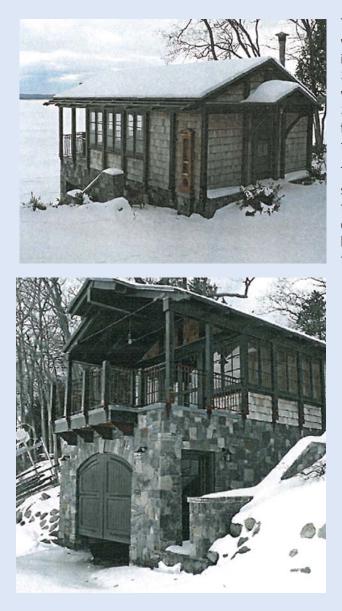


Helical Piers

PROJECT: Boathouse on 32 helical piles LOCATION: Large northern Michigan lake



This boathouse was constructed with 12 inch concrete walls, with stone exterior. Twenty eight helical piers were installed using 1 ³/₄" square shaft material. The loads were 36 kips working per point. With 2:1 safety factor they were installed to 72 kips. Depths for the piers ranged from 36 to 54 feet. The soils were decent, but still had N values from 812 in the first 15-20 feet and rose steadily from that point.

The boathouse needed approximately three feet of water so the boat could be pulled in and out. To accomplish this, a silt containment fence was placed in the lake and a berm was excavated to hold back the water. The building's footings are five feet below the water table, but throughout the project an eight inch pump ran continuously to keep the water level under two feet in depth to allow the work to be completed.

We take pride in the reputation we have earned over the years for customer service, honesty, quick response time, innovative, economical solutions, and expertise in the fields in which we work. We appreciate each job and every customer, and seek to build long lasting relationships with our clients.



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