

## Geothermal

You have ambitious decarbonization goals. Our geothermal heating and cooling experts can help you achieve them.

As <u>universities</u>, <u>healthcare campuses</u>, <u>real estate developers</u>, and others commit to reducing greenhouse gas emissions, they often look to <u>ground-source heat exchange</u> (GSHE) systems for a solution. These systems promise a sustainable way to meet energy goals and satisfy constituencies pushing for greener operations.

But geothermal heating and cooling systems can also be expensive and complex to design and install. A feasibility study alone can run hundreds of thousands of dollars, and the noisy, muddy process of drilling deep boreholes in bedrock can disrupt busy campuses and dense urban centers.

At Haley & Aldrich, we provide geothermal consulting services that guide partners to harness the power of geothermal while avoiding the pitfalls. As one of the most experienced geothermal consulting teams currently working, we have been advising owners, architecture firms, and mechanical engineering firms on commercial geothermal heating and cooling systems for more than two decades. Our geothermal engineering experience means we have more systems running in the ground today than many competitors do. And we have decades of data on subsurface and thermal conditions to help define cost and schedule for your project.



We know how to design and install a system that will deliver exceptional results over the long term — which means our expert geothermal consultants also know when the deepest borehole or the largest system footprint isn't the right goal for your project. We prioritize honest communication and evidence-based solutions that will meet your goals.

## Talk to our service experts



John Kastrinos
Senior Associate, Hydrogeology



Katelyn Tripp
Senior Technical Expert, Geotechnical Engineering



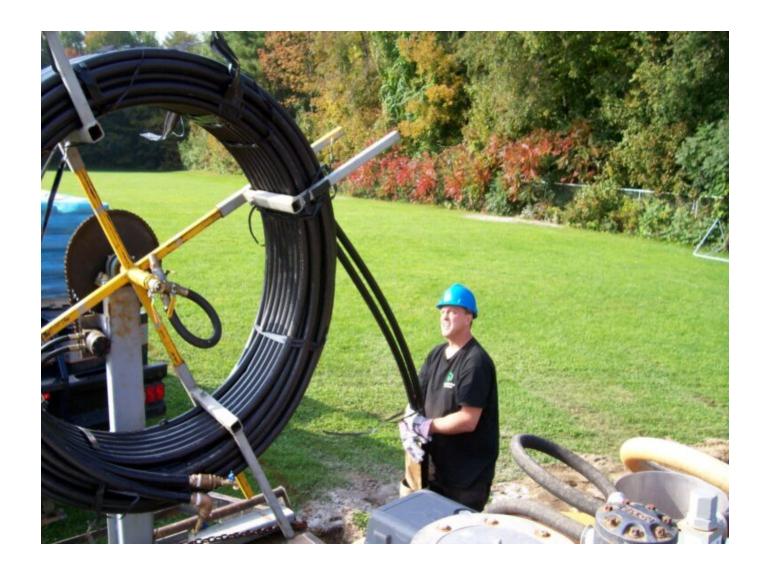
Program Manager, Environmental Engineer

Katherine LaBella-

## Service highlights

- Geothermal due diligence/feasibility studies
- Permitting and planning
- Drilling and testing contractor procurement
- Design development
- Construction administration
- · Borefield commissioning
- Performance monitoring





## Bringing comprehensive knowledge of the underground to geothermal projects

Our geothermal heating and cooling team builds on Haley & Aldrich's heritage as pioneers in geotechnical engineering. We excel at the below-grade aspects of GSHE system design, applying our expertise to unlock aspects of system design that others could miss.

We combine this underground experience with a deep knowledge of fractured rock hydrogeology and other key disciplines — from civil engineering to construction management to computer-assisted design. This comprehensive approach to geothermal services can be a critical game-changer.

Haley & Aldrich's integrated teams provide geothermal and other water-related consulting services for clients in:

- Aerospace
- Education, healthcare, and cultural institutions



- Energy
- Environmental trusts
- Government infrastructure
- Industrial and manufacturing
- Mining
- Real estate developers

Clients get the benefit of our one-team approach: We draw from multidisciplinary experts across the country to tackle any aspect of your project and bring a forward-looking, big-picture approach to your system.

