



The leading geotechnical specialty contractor

- Deep foundations
- Ground improvement
- Groundwater control
- Instrumentation & monitoring
- Liquefaction mitigation
- Releveling structures
- Slope stabilization
- Support of excavation
- Underpinning



Global strength and local focus



5
continents



40+
countries



9k
people



6k
projects/year



The leading geotechnical specialty contractor

Every day, people around the world live, work, and play on ground prepared by Keller.

Leveraging our full range of techniques, we provide solutions to geotechnical challenges across the entire construction spectrum.

We have the expertise, experience, and product range to respond quickly with the optimum solution, execute it safely, and see it through to a successful conclusion, no matter the size of the project.

Global strength and local focus

The strongest local construction projects are built on a foundation of connected global experience. Our in-depth knowledge of local markets and ground conditions enables us to understand and respond to specific project challenges.

We harness the power of our global network and knowledge base to safely deliver the optimum solution, no matter the size or location.





OUR PURPOSE

Building the foundations for a sustainable future.

Every day we help create projects that range from prominent structures to routine roads, bridges, and buildings—everything society needs.

OUR VISION

To be the leading provider of specialty geotechnical solutions.

We strive to lead in quality, product range, safety, and customer service. We are the world leader today, and to maintain our leadership we always endeavor to improve—to get even better.

OUR VALUES



Integrity

We always behave with integrity towards our customers, colleagues, and the communities in which we work.



Collaboration

Our teams collaborate across borders and disciplines to bring our customers the best of Keller and build a stronger business for the future.



Excellence

In all that we do, we target excellence. Whether it's safety, engineering, project management, or people development, we strive to deliver to the highest standards.



75+
LOCAL OFFICES
IN NORTH AMERICA



EXPERTISE TO GET THE JOB DONE

At Keller, we have the experience to get the job done and the track record to prove it.

Whether large or small, complex or simple, we take the time to understand every subsurface problem and provide the optimal, tailor-made solution. The size of the project is irrelevant to us—what drives us is sharing in our client's satisfaction of a job well done.

If you want faster and more effective results, ask us to work on your specific problem—we've likely solved a similar one before.



UNIVERSITY OF PORTLAND

Ground improvement, liquefaction mitigation

At the riverfront expansion for the University of Portland, Keller used single axis deep soil mixing and cutter soil mixing to create ground improvement buttresses that supported various structures and limited lateral spreading deformations to within code requirements.

OWNER: University of Portland

MAIN CONTRACTOR: Keller, main trade partner direct to owner



THE WHARF

Support of excavation, ground improvement, groundwater control

Keller provided a full foundation package to facilitate excavation of up to three levels of underground parking for five high-rise buildings constructed along the Potomac River waterfront in Washington D.C. Support of excavation included sheet piles, soldier piles, displacement piles, tiebacks, internal bracing, and jet grouting. Rigid inclusions provided ground improvement beneath a portion of one garage. Keller also performed dewatering/water treatment for the project.

OWNER: Wharf District Master Developer LLC (dba Hoffman-Madison Waterfront)

MAIN CONTRACTOR: Balfour Beatty Construction

ASTON MARTIN RESIDENCES

Deep foundations, groundwater control, support of excavation

Keller used multiple techniques to create a basement and provide deep foundations for the luxury high-rise building on the Miami River. Techniques included: permeation grouting, soil mixing, secant pile walls, tremie seals, jet grouting, and tangent bearing elements, a technique developed by Keller.

OWNER: G and G Business Developments LLC

MAIN CONTRACTOR: Coastal Construction



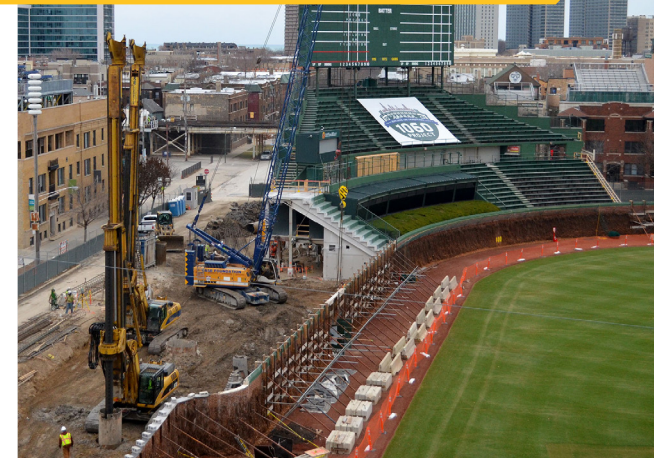
WRIGLEY FIELD

Support of excavation, deep foundations, underpinning, instrumentation & monitoring

Keller provided a unique, schedule-saving, top-down construction proposal which included multi-technique support of excavation, deep foundations, stadium underpinning, and real-time structural monitoring for an expansion and upgrade to the stadium and facilities.

OWNER: Chicago Cubs

MAIN CONTRACTOR: Pepper Construction Company



SHERIDAN LANDSLIDE

Slope stabilization

To stabilize an 80-foot slope beginning to fail and threatening to cause widespread local flooding, Keller devised a multi-technique solution. This included a soil nail wall, an anchored soldier pile wall, and a gabion retaining wall, all with sculpted shotcrete facing to create a natural-looking finish.

OWNER: City of Sheridan

MAIN CONTRACTOR: Keller



EGLINTON STATION

Support of excavation, underpinning

To construct a new station underneath an existing one in a densely populated area of Toronto, Keller used multiple techniques for complex support of excavation and underpinning. Keller's shoring system included secant piles, supplemented with jet grouting where utilities could not be relocated, and soil nailing underneath the existing station. Micropiles, drilled caissons, and large needle beams underpinned the existing station to facilitate excavation below.

OWNER: Metrolinx

MAIN CONTRACTOR: Crosslinx



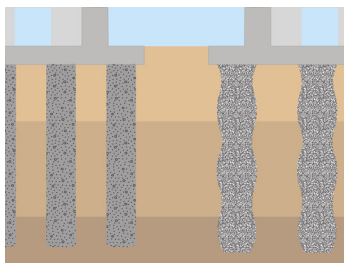


SOLUTIONS

Keller provides the optimal solution, leveraging our experience and expertise with our comprehensive suite of techniques to get the job done right the first time.



Ground improvement

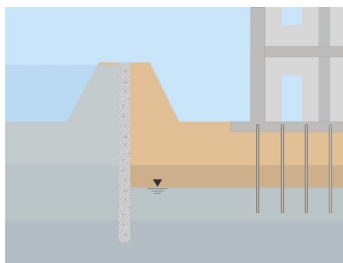


Ground improvement involves modifying soil properties or reinforcing the soil to achieve a designed performance.

Common uses

- Increase bearing capacity
- Reduce settlement
- Mitigate liquefaction
- Collapse/fill voids
- Stabilize mines/karst
- Compress soils before construction
- Treat expansive or collapsible soils
- Stabilize soft ground

Groundwater control

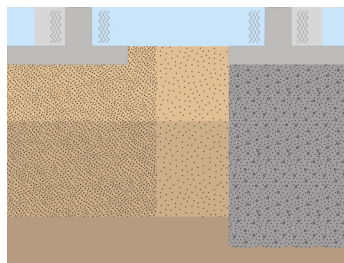


Groundwater control involves the construction of barriers in soil and rock, sealing below-grade structures to restrict the movement of water, dewatering for excavations, or water treatment.

Common uses

- Provide seepage cutoff below dams and levees
- Prevent migration of contaminants
- Seal concrete joints or cracks in below-grade structures
- Restrict groundwater flow into excavations
- Dewater for excavations
- Water treatment

Liquefaction mitigation

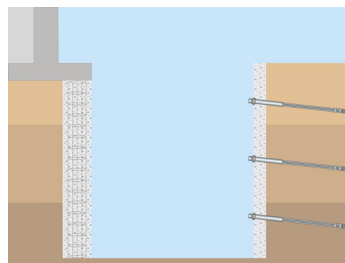


Liquefaction mitigation is achieved by densifying loose granular soils or constructing subsurface reinforcements to resist seismic forces.

Common uses

- Prevent liquefaction-induced bearing capacity failure
- Control seismic settlement
- Prevent lateral spreading
- Reduce scope of deep foundation elements

Support of excavation

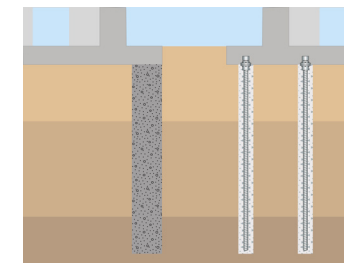


Support of excavation involves retaining soil whose stability is impacted by a man-made excavation or fill. Existing adjacent structures may also require support.

Common uses

- Support of excavation
- Shore existing adjacent structures
- Laterally support placed fills
- Bulkhead/wharf support and remediation

Underpinning

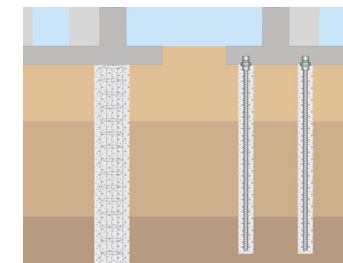


Underpinning provides additional support to existing foundations that are unable to safely support existing or additional planned loads or that experience reduced support.

Common uses

- Improve weak underlying soils
- Underpin with deep foundation elements

Deep foundations

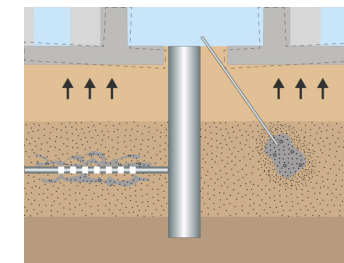


Deep foundations are structural elements that transfer loads through soils with insufficient strength and/or stiffness to underlying competent soils or rock.

Common uses

- Support new or existing structures
- Support static and seismic loads

Releveling structures

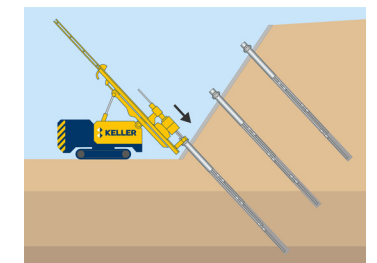


Releveling structures is achieved by either lifting through a direct connection to the structure or by injecting grout at depth to raise both the overlying soil and the structure it supports.

Common uses

- Reverse settlement experienced by a structure

Slope stabilization



Slope stabilization involves the strengthening, reinforcing, or supporting of soil slopes to produce a sufficient stability factor of safety.

Common uses

- Stabilize man-made slopes
- Stabilize natural slopes adversely affected by natural or man-made influences

DESIGN-BUILD

Our decades of research and development have supported design methods in line with fundamental geotechnical engineering theory. Our experience and knowledge lead to the optimal solution for each loading configuration, subsurface condition, and project objective.



WHY CHOOSE KELLER?

You can be assured you have a strong partner with Keller.

Excellence in performance

We have a strong reputation for leading safety culture and operational excellence. Keller is dedicated to fostering a healthy, safe work environment. The goal of our global Keller Think Safe program is zero incidents. Management and employee commitment to this health and safety framework has rewarded us with many safety awards from our clients and industry organizations. Our industry-leading focus on training and development enables our employees to achieve their full potential and achieve operational excellence.

Product leadership

Our global product teams comprise industry experts focused on advancing the safety, quality, and productivity of the work Keller performs. These teams are resources for each of our customers' projects.

Value engineering

Keller employs about 1500 engineers worldwide, with over 200 focused purely on design. With this in-house capability, half of our projects are design-build, enabling our value engineering to reduce cost and schedule.

Innovation

Keller has a culture of creativity and innovation. Our research and development programs are fueled by ideas submitted by our employees and product teams. Examples include our in-house developed KDAQ and InSite systems.

KDAQ is a data acquisition system that collects performance data from our equipment and provides real-time, actionable feedback to our field and office staff to monitor and control quality, efficiency, material usage, and productivity.

InSite is an app our field personnel use on handheld and mobile devices to access the most up-to-date project data and efficiently complete required daily documentation related to employees, materials, equipment, and safety.



Whether with one or a combination of techniques, Keller provides the optimal solution tailored to each project's specific circumstances and requirements.

CHALLENGES	TECHNIQUES	GROUTING							GROUND IMPROVEMENT											EARTH RETENTION								DEEP FOUNDATIONS								ADDITIONAL TECHNIQUES										
		Fracture grouting / compensation grouting	High mobility (rock/fissure) grouting	Injection systems	Jet grouting	Low mobility (compaction) grouting	Permeation grouting	Polyurethane grouting	Cutter soil mixing	Dry soil mixing	Dynamic compaction	Earthquake drains	Rapid impact compaction	Rigid inclusions	TRD - soil mix walls	Vibro compaction	Vibro concrete columns	Vibro piers®	Vibro stone columns	Wet soil mixing	Wick drains	Anchors	Anchor block slope stabilization	Gabions	Micropile slide stabilization system (MS ³)	Sculpted shotcrete	Secant or tangent piles	Sheet piles	Slurry wall – structural or cutoff	Soil nails	Soldier piles & lagging	CFA piles (auger cast)	Displacement CFA piles	Drilled shafts	Driven piles	Franki piles	Helical piles	Jacked piers	Macropiles®	Micropiles	Dewatering	Ground freezing	Pit underpinning	Slab jacking		
Ground improvement		●	●	●	●	●	●		●	●			●		●	●	●	●	●	●											●	●	●	●	●	●	●	●								
Containment				●	●			●	●					●					●									●	●												●	●				
Support of excavation					●		●	●						●					●		●		●		●	●	●	●	●	●												●	●			
Heave control/ expansive soil treatment				●					●										●																											
Deep foundations																												●			●	●	●	●	●	●	●	●	●							
Marine structures support				●									●		●		●	●	●	●	●					●	●					●	●	●	●	●	●	●	●	●						
Mine stabilization/ void filling			●		●		●																																							
Railroad subgrade stabilization			●		●																																									
Releveling structures	●				●		●																														●	●		●				●		
Groundwater control		●		●		●	●	●						●						●	●					●	●	●														●	●			
Seismic/liquefaction mitigation				●	●	●		●	●	●	●	●			●		●	●	●																											
Sinkhole/karst remediation		●			●					●					●			●																												
Slope stabilization				●				●	●								●	●	●	●	●	●	●	●		●	●		●	●					●							●	●			
Tunneling stabilization	●	●		●	●	●													●																							●	●			
Underpinning				●		●																															●	●		●		●	●			

This chart represents techniques that could apply to the listed geotechnical challenges. Consult with your local Keller representative to discuss specific site conditions and appropriate Keller geotechnical construction solutions. The actual applicability of a particular technique depends upon the soil character (soft, loose, stiff, dense, organic, collapsible, etc.) and its composition (clay, silt, sand, cobbles, boulders, etc.). Occasionally, multiple techniques used simultaneously could provide a more economical solution. Other considerations include accessibility, availability of materials, presence of utilities or other underground obstructions, and many other internal and external influences.

INSTRUMENTATION & MONITORING

In combination with these techniques, we also provide automated instrumentation for monitoring all aspects of construction, including the safety and stability of buildings, excavations, bridges, railways, roads, tunnels, dams, embankments, and slopes.

The solution to any geotechnical challenge

The grid displays 42 different applications of KELLER construction technology, organized into six rows and seven columns. The techniques shown include:

- Soil Nailing and Ground Anchors:** Various methods of installing nails and anchors into the ground for slope stabilization and foundation support.
- Micropiles:** Drilling and grouting of small-diameter piles for foundation reinforcement.
- Pile Driving:** Using different types of hammers and rigs to install large-diameter piles.
- Drilling and Grouting:** Creating specialized foundations through drilling and filling with grout.
- Specialized Foundations:** Techniques for installing foundations in specific soil conditions or for particular building requirements.

Each illustration is a cross-sectional view showing the KELLER equipment (yellow) and the resulting foundation element (grey or white) within the ground (brown). The background shows a blue sky and a grey building.



Keller's team of engineers, project managers, and construction experts are available to provide the optimal solution to your geotechnical challenge.

Contact us today
US: 800-456-6548
Canada: 888-846-7858
keller-na.com

Global strength and local focus