

Henry Foundation Drilling Inc.



Three decades of impressive projects

By Lisa Kopochinski - Piling Canada

Those in the deep foundation construction industry across the country – and particularly Western Canada have undoubtedly heard of Henry Foundation Drilling Inc. (HFDI).

Based in Vancouver, B.C., HFDI has earned its reputation as one of the most sought-after private drilling companies, largely due to its impressive portfolio of projects spanning three decades.

Specializing in deep foundation services – including cast-in drilled hole piles, continuous flight auger piles, soldier piles and lagging, secant pile walls, tangent walls, rock drilling and gas extraction wells at landfills – HFDI president Don Henry said, “We have the largest, most modern drilling fleet in British Columbia, including a

Bauer BG36, Bauer BG28, Bauer BG18, Soilmec SR-80, Soilmec SR-75, Soilmec SR-50 and Soilmec SR-30s. Our specialty is tackling jobs that few other companies can do.”

History

Henry Drilling was formed in 2007 as an offshoot company of D&B Auger Services Inc., which was formed in 1976 by Barry Henry. Barry started out with a single Hugh’s Williams ADH truck-mounted drill and built up a fleet of drills in the 1980s to include Hugh’s Williams BDH and LDH rigs.

In the early 1990s, Barry sold off the larger drills and pursued other parts of his business. In 2006, an old client contacted Barry and asked for some drilling help on a project and - with some strong motivation from Don Henry (Barry’s oldest son and right-hand man) - Barry purchased a Spiradrill 3330 track mounted drill for the project. Don operated the drilling rig for the project and then started finding other projects to work on and created Henry Drilling under the D&B Auger Services Inc. umbrella.

Vancouver was not a prototypical drilled pile market, with pile driving being the big game in town due to the extremely tough local conditions. This left a void in the market for drilling, and Don quickly identified this and started pushing hard to become the first company in Vancouver solely focused on large diameter drilling. In 2008, Don and Barry purchased a Soilmec SR30, followed by a Soilmec SR80 in 2009.

With his new company off to a strong start, Don was over-whelmed with work, so in 2006, his brother Ken joined the fold, allowing Don to focus all of his efforts on Henry Drilling by spreading word about the company to prospective clients, purchasing more drills and bidding projects throughout Western Canada.

As president, Don is very much the heart of the company. His 18 years of experience in the piling foundation industry has brought him a unique level of hands-on experience combined with real-world project and office management skills.

“We have, at times, been brought in as the specialist drilling firm to deal with difficult local conditions that have stalled other deep foundation companies,” he said. “The ability to work as a cohesive unit with the client and their representatives - combined with partnerships with the best local geotechnical talent - has been proven many times in recent years on projects ranging from large-scale transportation routes to smaller designs for private developers.”

He says the main thing that sets HFDI apart from its competitors is the company’s mindset.

"We are nimble in that we are large enough to have all the infrastructure required for a large company, but the leader-ship structure is built around a very small core," he said. "This allows a flexibility and responsiveness to the client's needs that is difficult to emulate by bigger companies."

Well-represented in British Columbia, HFDI also regularly works in Alberta, Saskatchewan and Manitoba. While the operational management is split between Don and Ken, Don is involved in the day-to-day running of the business by ensuring he has an active part in bidding, liaisons with clients and personally stays in touch with crews on the jobsite. His parents are still involved with the company, but do not have the same daily involvement.

From the office in Langley, the company has a small core of staff responsible for bidding and project management.

"The strength of the company is in the depth of operational staff that includes foremen, drill and crane operators and experienced ground men," said Don.

Notable Projects

HFDI has completed numerous projects in the Vancouver area. Don says the difficult local conditions have required all of the facilities and equipment that make his company unique. Among these facilities is HFDI's own in-house fabrication shop.

"This resource allows the company to design custom tools to deal with any situation," he said. "It also allows a rapid refurbishment for the job tool as constant maintenance of drill tools is an inherent requirement for any deep foundation project. Complementing this fabrication shop is our mechanical area that allows us to maintain the equipment, but also respond to any emergency brought on by equipment failure."

The list is long for Henry Drilling's notable projects, but one that stands out is the Ambleside Phase 1 project in West Vancouver. Don says this challenging project consisted of approximately 340 piles, 1,000 mm in diameter and up to 21 metres in length.

"The ground conditions were not favourable as the site was located across the road from the water at an elevation close to sea level, and consistent granite boulders up to four metres in size were encountered throughout the duration of the project," said Don. "HFDI mobilized three drill rigs to the site, including a Bauer BG-40, Bauer BG28H and a Soilmec SR-80 to ensure project completion through these difficult conditions."

Also in the Vancouver area, another successful project was the Surrey City Hall foundation in Surrey, B.C.

In order to construct the new Surrey City Hall building, designers were left with a difficult decision on how to shore the main dig area. Soils were one to two metres of fill overlying one to five metres of peat and soft, sensitive clays overlying stiff glacial tills with a large gravel, cobble and granite boulder component.

“After looking at all options, a secant pile wall with tie backs was chosen for the project,” said Don. “This option met the schedule, budget and design guidelines. The shoring wall included a total of 340 pcs of 750-mm diameter piles on 600-mm centres down to a depth of up to 13.5 metres. We used several Soilmec drills to complete this difficult project.”

Outside B.C., the team tackled an Eastern and Western Alberta transmission line project. This project consists of 300 pcs of 1.8-metre diameter piles drilled to a depth of eight metres at remote sites in central Alberta. Caissons were installed by both open hole and temporary liner method, then filled with 30-mpa concrete, rebar columns and tower bolt clusters. To complete the project on schedule, HFDI used Soilmec SR80, SR65 and SR30 drills equipped with custom twister bar systems as well as Kobelco cranes with vibro equipment to expedite the overall schedule.

Industry Challenges

While HFDI has been successful, its journey over the past decades has not been without its challenges.

Don says the largest challenge the company has had to deal with is its explosive growth from a small company - with a single piece of equipment - to one of the major deep foundations suppliers in Western Canada.

“This has required that the company develop - in a very short space of time - all the infrastructure required by a large company. The demands created by the growth include keeping up with the market, planning ahead, cash flow and financial management, problem solving, implementing right systems, skills and attitudes and welcoming change.”

There has also been a market change that has been the result of a change in the economic fortunes experienced by Canada as a whole.

“This has had the effect of driving companies to compete in areas and markets that they previously did not operate in,” said Don. “We have seen this in the number of new competitors in the local market and have risen to this challenge by upgrading

systems and training. The company has expanded its presence into other geographical areas and has brought new competencies into the fold.”

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