

## Press release

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Contact:  
Martina Krammer  
BAUER Aktiengesellschaft  
BAUER-Strasse 1  
86529 Schrobenhausen, Germany  
Phone: +49 8252 97-3616  
[public.relations@bauer.de](mailto:public.relations@bauer.de)  
[www.bauer.de/en](http://www.bauer.de/en)

### **For a safe future: Bauer Spezialtiefbau modernizes John Hart Dam in Canada**

- Bauer Spezialtiefbau completes work on John Hart Dam for electric power
- Cold winter conditions and tight spaces handled optimally thanks to modern methods and equipment
- Improvement of downstream public safety and facility reliability with other benefits such as to the environment and domestic water supply

**Campbell River, Canada** – On the picturesque eastern coast of Vancouver Island lies the city of Campbell River, known as the “Salmon Capital of the World” and home to a vibrant ecosystem. Here, the government-owned BC Hydro is currently working on an important project: The seismic upgrading of the John Hart Dam – sustainable, safe and vital in equal measure. This is because the dam passes water to generate power at the John Hart Powerhouse, provides flood risk management operations, and the John Hart Reservoir provides the City of Campbell River with drinking water. BAUER Foundations Canada Inc., a subsidiary of BAUER Spezialtiefbau GmbH, was tasked with executing a new water seepage barrier within the main earthfill section of the dam.

#### **Strong foundations**

The project, which is managed by Aecon/EBC General Partnership (AEGP), includes constructing a low permeability plastic concrete cut-off wall on the Middle Earth-fill Dam to improve the water barriers and seismic performance of the earth-fill section. This work was crucial in order to increase the dam’s seismic resistance and minimize the risk of floods and other damage to the public. In addition to the cut-off wall works, Bauer performed soil improvement on the soft sediments to reinforce the North Earth-fill Dam. Bauer’s construction tasks included installation of the plastic concrete cutoff wall as well as land and marine densification for the new upgraded earth-fill berms. The major challenge: Minimizing the environmental impact to the reservoir, Campbell River and surrounding park during construction, particularly close to the drinking water extraction point for Campbell River. The work began in October 2023 and was successfully completed in July 2024. Another phase of soil improvement will follow in 2025.

#### **Innovation meets precision**

The modernization of the John Hart Dam involved a variety of technical and logistical challenges. “As a result, precise planning and the latest equipment were essential for work on Vancouver Island where variable soils and a hard basalt bedrock layer are present”, reports Project Manager Jeffrey Pattison. Among other equipment, two BAUER MC 96 duty-cycle cranes, one equipped with a DHG V hydraulic grab and one with a BC 48 cutter, three BE desander systems from BAUER MAT Slurry Handling Systems, and one BAUER BG 30 were used for this work. The wintry conditions with frigid cold weather, as well as

the limited working space on both earth-fill dams, made work even more difficult. In order to meet these challenges successfully, the project team relied on innovative technologies and digital tools such as b-tronic and Virtual Site Installer (VSI). As a result, it was possible not only to monitor work in real time, but also to adapt processes accordingly as needed. Thanks to the support of the experienced team on site as well as laboratory tests carried out in Germany, the quality of the plastic concrete used for the cut-off wall was optimized.

#### **A milestone for environment and security**

The seismic upgrade of the John Hart Dam is a milestone from a technical and ecological standpoint. The extensive works will help to safeguard the regional water supply while minimizing the environmental impact at the same time. Jeffrey Pattison emphasizes: "We are proud to have made an important contribution to safety and sustainability in the region." The seismic upgrade of the John Hart Dam will take six years to complete, and the new water seepage barrier within the dam was a key milestone from a technical and ecological standpoint. Jeff Pattison emphasizes: "We are proud to have made an important contribution to safety and sustainability in the region." Thanks to the use of advanced digital tools and innovative construction methods, one thing is certain: Bauer successfully completed a very important and challenging aspect of the dam safety upgrade.

**Images: [pressebilder-press-images-john-hart-dam-canada-bauer-spezialtiefbau...](#)**



(1) Seismic upgrades included the construction of a plastic concrete cut-off wall on the Middle Earth-fill Dam. Bauer utilized two MC 96 machines with a hydraulic grab and cutter to excavate the new primary seepage barrier.



(2) For safeguarding work on the dam, a BAUER BG 30 was used for this soil improvement work along with other equipment.



(3) Harnessing their best team power and precision, the experts from Bauer mastered all the challenges.

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### About BAUER Spezialtiefbau Group

BAUER Spezialtiefbau GmbH, the original parent company of the BAUER Group, has been a major driving force in the development of specialist foundation engineering. It carries out all of the customary processes of foundation engineering, primarily for excavation pits, foundations, cut-off walls and ground improvements on a worldwide basis. In doing so, BAUER Spezialtiefbau GmbH works closely together with their subsidiaries and branches across the globe. Regional networks around the world allow for the quick and flexible application of machines, teams and expertise. Bauer Spezialtiefbau offers their customers individual, creative and economical specialist foundation engineering solutions for demanding construction projects, from planning through to execution. More at <https://geotechnical-solutions.bauer.de/en>.



## About Bauer

The BAUER Group is a leading provider of services, equipment and products dealing with ground and groundwater. The Group can rely on a worldwide network on all continents. The Group's operations are divided into three forward-looking segments with high synergy potential: Geotechnical Solutions, Equipment and Resources. Bauer profits enormously from the collaboration of its three business segments, enabling the Group to position itself as an innovative, highly specialized provider of products and services for demanding projects in specialist foundation engineering and related markets. Bauer therefore offers suitable solutions to the world's greatest challenges, such as urbanization, the growing infrastructure needs, the environment, as well as water. The BAUER Group was founded in 1790 and is based in Schrobenhausen, Bavaria. In 2023, it employed about 12,000 people and achieved total Group revenues of EUR 1.8 billion worldwide. More information can be found at <https://www.bauer.de/en>. Follow us on [Facebook](#), [LinkedIn](#), [Instagram](#) and [YouTube](#)!