

Vancouver Geotechnical Society

A Local Section of the Canadian Geotechnical Society

www.v-g-s.ca

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Jason Edgar, AtkinsRealis

NOTICE OF TECHNICAL PRESENTATION Thursday, 25 April 2024

TOPIC: Debris Flow Mitigation with Flexible Barrier Systems

<u>SPEAKERS:</u> Andi Buechi, A.Sc.T., Canada Manager, Western Canada Area Manager Geobrugg North America, LLC

Andi Buechi is a Geotechnical Engineering Technologist with over 25 years of experience performing geotechnical investigations combined with construction experience. Andi has a Diploma in Civil and Structural Engineering from BCIT (1995).

Prior to joining the Geobrugg team Andi worked for Levelton Engineering on various civil and geotechnical projects for both public and private projects. Andi also worked at the Lucerne University of Applied Science for three years as an assistant to professors and students of soil mechanics, rock mechanics, hydrology, and ground construction.

Since representing Geobrugg in Canada starting in 2012, Andi has been responsible for assisting professional engineers and geologists with flexible geohazard mitigation systems for rockfalls, shallow landslides, debris flows and avalanches. In Canada, Andi has overseen the design, supply and installation of hundreds of rockfall barriers, attenuators, debris flow barriers and shallow landslide barriers.

CONTENT:

Debris flow mitigation using flexible nets and barriers that have been installed in Western Canada over the past 20 years. Owners of highways, hydro dams, pipelines, railways and other infrastructure projects have increasingly relied upon and installed flexible mitigation systems to protect their assets. The systems require a very small footprint, both physically and environmentally, while providing a certified, adaptable, and engineered solution that can outperform more rigid engineered structures. There is an increased demand for these adaptable off the shelf systems to be installed after wildfires, due to increased frequency and intensity of rainstorms causing both debris flow and flood events.

Through the talk you will learn about how these mitigation systems were developed, how the systems are tested and certified, as well as the current state-of-the-art in this field of expertise. Case studies of different installations of early debris flow barriers protecting railways, towns, and highways through to more recent examples will also be presented. The case studies will cover recent post wildfire installations in the USA and Canada where the design and installation of the flexible barriers were conducted in environmentally sensitive areas. Slides will be shown of systems outlining some of the key sizing and design information such as the various heights, lengths, impact ratings and ground conditions. Designers, contractors and engineers will find tips and best practices for installing systems in different conditions such as soil, rock and talus.



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DETAILS: Location: Centennial Room, Executive Hotel, 4201 Lougheed Highway, Burnaby, BC V5C 3Y6

Social Hour: 5:30 to 6:30 pm (drinks available at the hotel bar) **Technical Presentation**: 6:30 to 7:30 pm (No need to RSVP)

Dinner: 8:00 pm (\$20 will be charged for dinner). If you would like to stay for dinner, please RSVP to -

Ibrahim Kawasme via email (Ibrahim.Kawasme@kiewit.com) or at the door.