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GEO-INSTITUTE CHICAGO – APRIL DINNER MEETING
LANDSLIDE MITIGATION USING ANCHORED SHEAR PILES

PLACE:	Pazzo's at 311 311 S Wacker Dr., Chicago, IL 60606 ((312) 913-1600) (Parking is located South of the 311 building - $13.00 after 5:00 pm)
DATE:	**Tuesday, April 10, 2018** Cocktails 5:15 pm, Dinner 6:15 pm, Presentation follow dinner
SPEAKER:	Tom Westover PE, Landslide Technology
COST:	$45 General (Contractor, Consultant with reservation) $35 Education/Government Employees (with reservation) $25 Students (with reservation) $50 At the door OR After RSVP date (Make checks payable to "ASCE IL Geo-Institute")
RSVP:	Monday, April 9, 2018 at 12:00 pm (CST) Online: https://www.123signup.com/register?id=hbktn Email: asceilgeotech@gmail.com Phone: Brandon Hughes 773.721.9797 x332 Fran Miller 630.665.8585 Alex Barlan 847.253.3845 x206

Program Summary

Structural mitigation of landslides is increasingly necessary where existing geologic hazards intersect with displacement-sensitive infrastructure. Anchored shear piles (ASP) can be used to develop full-depth restraint of large landslide masses with limited post-construction deformation. This presentation highlights a case study for landslide mitigation through the use of high-capacity ground anchors integral with cast-in-place concrete shear piles. Multnomah County, Oregon has replaced the Sellwood Bridge within its existing footprint. The original bridge was built in 1925 at the site of an ancient landslide located along the west bank of the Willamette River. The landslide, approximately 800 feet long, 500 feet wide, and 50 feet deep, had moved in excess of three feet toward the river channel during the old bridge's 90-year history, which caused severe buckling and cracking of the bridge deck and abutment piers. The landslide movement was mitigated using an anchored shear pile (ASP) system to facilitate construction of a 3-span arch bridge. An ASP system can provide full-depth resisting force to a landslide, without the risk and right-of-way impacts of large open-cut excavations and buttressing. An innovative "re-stressing" program, tailored to the instrumented performance of the system during the 4-year construction period, was implemented that saved costs and schedule by utilizing existing elements to add load into the system to meet design and seismic deformation criteria.

Tom Westover as an Associate Engineer for Landslide Technology, a division of Cornforth Consultants, since 2007. He holds a Master's degree in Geotechnical Engineering from the University of Minnesota, an MBA from Willamette University, and is a registered Professional Engineer in Oregon, Washington, Alaska, and Idaho. His areas of professional expertise includes design and testing of high-capacity ground anchors, soil-structure interactions, anchored shear pile design, geotechnical engineering for transportation applications, landslide evaluations, rockfall mitigation, 3D modeling, and data visualization.