

JOHN P. TURNER, P.E., Ph.D.
Dan Brown and Associates, PLLC

EDUCATION

- PhD 1986 Civil Engineering, Cornell University
- MS 1982 Civil Engineering, University of Wyoming
- BS 1981 Civil Engineering, University of Wyoming
- BS 1976 Geology, James Madison University

EXPERIENCE AND EMPLOYMENT RECORD

- 1986-present: Professor of Civil Engineering, University of Wyoming, Laramie, WY
- 1976-1978: Engineering Geologist, Herbert & Associates, Virginia Beach, VA

PROFESSIONAL

- American Society of Civil Engineers
Past Chairman, Committee on Deep Foundations;
Past Member, Editorial Board, *J. of Geotechnical and Geoenvironmental Engineering*
- International Society of Soil Mechanics and Foundation Engineering
- Honorary Technical Affiliate, ADSC: International Association of Foundation Drilling
- International Association of Engineering Geology
- Registered Professional Engineer: WY#6007

HONORS AND AWARDS

- 2003 Erskine Fellowship, University of Canterbury, New Zealand
- 2000 President's Award, ADSC: The International Assoc. of Foundation Drilling
- 1992 Outstanding Service Award, ADSC: The International Assoc. of Foundation Drilling

PROFESSIONAL INTERESTS AND SUMMARY

Dr. Turner is an accomplished practitioner, researcher, and educator in the field of geotechnical engineering. His research interests include drilled shaft foundations, anchored retaining walls, and landslide stabilization. He is the author of 100+ technical papers and reports and has been a principal investigator on over 20 funded research projects. He is currently an instructor and co-developer of the National Highway Institute course on drilled shaft design and construction, and along with Dr. Dan Brown is an author of the recently updated FHWA drilled shaft design manual. He is a frequent speaker at ADSC seminars and workshops and is the author of NCHRP Synthesis 360, "Rock-Socketed Shafts for Highway Structure Foundations". Dr. Turner has been active throughout his career as a consultant on projects involving deep foundations, earth retention, and landslide stabilization.

RECENT REPRESENTATIVE PUBLICATIONS

- Brown, D.A., Turner, J.P., and Castelli, R.J. "Drilled Shafts: Construction Procedures and LRFD Design Methods", *Geotechnical Engineering Circular No. 10*, Federal Highway Administration, Washington, D.C., 970 p.
- Turner, J.P. and Ramey, S.B. "Base Resistance of Drilled Shafts in Fractured Rock", *Geotechnical Special Publication No. 198: The Art of Foundation Engineering Practice*, ASCE, Reston, VA, pp. 687-701.
- Turner, J.P., Buell, R., and Zheng, X. "Load-Settlement Model of Rock Sockets from O-Cell Testing", 60th Highway Geology Symposium, Buffalo, N.Y., Sep 29 – Oct 2, 2009.
- Turner, R., Duffy, J.D., and Turner, J.P. "Post Foundations for Flexible Rockfall Fences", 60th Highway Geology Symposium, Buffalo, N.Y., Sep 29 – Oct 2, 2009.
- Katzenbach, R., Hoffmann, H., Vogler, M., Turner, J.P., and O'Neill, M.W., "Load Transfer and Capacity of Drilled Shafts with Full-Depth Casing", *Proceedings, 32nd Annual Conference on Deep Foundations*, Deep Foundations Institute, Colorado Springs, CO, October 2007, pp. 165-175.
- Turner, J.P., Anderson, S.A., and Siel, B.D. "Slope Stabilization by Ground Anchors", *Landslides and Society: AEG Special Publication No. 22*, Association of Environmental and Engineering Geologists, Editors: A.K. Turner and R.L. Schuster, Denver, CO, June 2007, pp. 297-316. [also Theme Lecture, 1st North American Conference on Landslides].
- Turner, J.P., "Rock Socketed Drilled Shafts for Highway Transportation Structures", *Synthesis of Highway Practice No. 360*, Transportation Research Board, National Academies, Washington, D.C., June 2006, 136 p.
- Turner, J.P., "Lessons Learned from Anchored Slide Stabilization", *Proceedings of GEO³*, International Conference on Quality Assurance and Quality Control in Geo Construction, ADSC: International Association of Foundation Drilling, Dallas, TX, November 2005, pp. 8-25.
- Turner, J.P. and Jensen, W.G., "Landslide Stabilization Using Soil Nail and MSE Walls: A Case Study", *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, Vol. 131, No. 2, February 2005, pp. 141-150.
- Turner, J.P., Steele, J.A., Maher, W.F., Zortman, A.R., and Carpenter, J.R., "Design, Construction, and Performance of an Anchored Tangent Pile Wall for Excavation Support", *Geotechnical Special Publication No. 124*, GeoSupport 2004, ASCE, New York, NY, 2004, pp. 322-333.
- Turner, J.P., Sandberg, E., and Chou, N.S., "Side Resistance of Drilled Shafts in the Denver and Pierre Formations", *Geotechnical Special Publication No.38*, ASCE, New York, NY, 1993, pp. 245-259.
- Turner, J.P. and Kulhawy, F.H., "Drained Uplift Capacity of Drilled Shafts Under Repeated Loading", *Journal of Geotechnical Engineering*, ASCE, Vol. 116, No. 3, March 1990, pp. 470-491.

SELECTED RECENT CONSULTING PROJECTS

- ***I-5 Bridge over Sacramento River at Antler's, CA.*** Design consultant to Caltrans for large-diameter drilled shafts in rock
- ***Bridge at Pitkins Curve, Highway 101, Big Sur, CA.*** Design and construction consultant to Caltrans for drilled shafts in rock on steep slopes.
- ***Excavation Support.*** Consultant on design and analysis of excavation support systems in Washington D.C. area for Steele Foundations, Inc.; over 20 projects completed 2001-2007. Most involved anchored soldier beam walls ranging in depth from 30 to 70 ft.
- ***Expert Witness Services.*** Engineering analysis and preparation of expert opinions. Recent cases involve: excess settlement of drilled shaft foundations; rockfall hazard in open pit mines; structural damage due to retaining wall construction
- ***Wolf Creek Dam.*** Construction issues associated with drilling fluids for excavation of cutoff wall

SELECTED SPONSORED RESEARCH PROJECTS

- "Geotechnical Limit to Scour at Spill-through Abutments", Mountain-Plains Transportation Consortium (current)
- "Improving Foundation Design in Rock: Analysis of Osterberg Cell Load Test at Burma Road Overpass" Wyoming Department of Transportation
- "Foundations for Wind Turbine Support Structures" General Electric Company
- "Rock-Socketed Drilled Shafts for Highway Bridge Structures", National Cooperative Highway Research Program
- "Analysis of Anchor Load Tests, Flying-V Landslide", Wyoming Department of Transportation
- "Use of Micropiles for Remediation of Liquefaction-Prone Sites and Retrofitting of Structures" New Zealand Earthquake Commission, University of Canterbury
- "Monitoring and Performance of Permanent Ground Anchors for Stabilization of the Deer Creek Landslide" Wyoming DOT and Federal Highway Administration
- "Field Performance Evaluation of a Soil Nail Wall for Slide Stabilization" Wyoming DOT, ADSC: International Association of Foundation Drilling, and Hayward-Baker, Inc.
- "Design, Instrumentation, and Monitoring of a Micropile-Reinforced Retaining Structure for Landslide Control, Snake River Canyon, Wyoming" Wyoming DOT
- "Skin Friction for Pile Design" South Dakota DOT