

**DAN A. BROWN, P.E., Ph.D.**  
Dan Brown and Associates, PC

**EDUCATION**

- PhD, 1985 Civil Engineering, University of Texas
- BS, MS 1976, 1977, Civil Engineering, Georgia Inst. of Technology

**EXPERIENCE AND EMPLOYMENT RECORD**

- 2004-present: Principal, Dan Brown and Assoc., Sequatchie, TN
- 1987-2009: Civil Engineering Faculty, Auburn University, Auburn, AL
- 1977-86: Project and Chief Engineer, Soil Testing Engineers, Baton Rouge, LA

**PROFESSIONAL**

- Diplomate, Geo-Institute of American Society of Civil Engineers (Past Chair, Deep Fnds Comm.)
- International Society of Soil Mechanics and Foundation Engineering
- Transp. Research Board Comm. AFS30, Comm. on Foundations of Bridges & Other Structures
- Honorary Technical Affiliate, ADSC, The International Association of Foundation Drilling
- Trustee, Deep Foundations Institute
- Pile Driving Contractor's Assoc., Technical Committee & honorary member
- Registered Professional Engineer: Hawaii Reg. #13342 and 25 other states

**HONORS AND AWARDS**

- 2009 ASCE Martin Kapp Foundation Engineering Award
- 2009 Instructor of Excellence Award, National Highway Institute
- 2007 Mike O'Neill Lecture at Univ. of Houston
- 2005 Converse-Ware Lecture at New Jersey Institute of Technology
- 1998 recipient of the Auburn University Gottlieb Professorship
- 1995 ASCE Walter L. Huber Research Prize for: "deep foundations for bridges."
- 1994 Outstanding Service Award, ADSC: The International Assoc. of Foundation Drilling

**PROFESSIONAL INTERESTS AND SUMMARY**

Dr. Dan Brown has a distinguished career of practice, research, and instruction in the field of deep foundations. He is particularly known for his expertise in design, load testing, and construction of deep foundations. He is an instructor and co-developer of the National Highway Institute course in drilled shaft design and construction as well as driven pile inspection. He has recently completed the FHWA manuals on the design and construction of drilled shafts, and on construction and design of continuous flight auger piles. He is an active consultant on many large projects involving deep foundations, and known for his research work in pile group behavior and in construction and testing of deep foundations.

**RECENT REPRESENTATIVE PUBLICATIONS**

- Brown, D., Turner, J., and Castelli, R. 2010. "Drilled Shafts: Construction Procedures and LRFD Design Methods," FHWA/NHI Publication 10-016, Reference Manual and Participants Guide for National Highway Inst. Course 132014, 972p.
- Brown, D., Faust, P., and Santos, J. 2010. "Construction of the Drilled Shaft Foundations for the Huey P. Long Mississippi River Bridge, New Orleans," Proceedings of the Deep Foundation Inst. 35<sup>th</sup> Annual Meeting, Hollywood, CA, 8p.
- Brown, D., 2010. "Design/Build and Accelerated Construction of Deep Foundations For Urban Transportation Projects." Proc, DFI/EFFC Conf, London, 8p.

- Brown, D., 2010. "Constructability Considerations in the Selection and Design of Drilled Shafts for Bridges." Proc, 7th Int'l Bridge Conf, Transportation Research Board, San Antonio, TX, 8p.
- Brown, D. 2009. "Management of Risk in Deep Foundations with Design-Build." Invited keynote lecture, Int'l Foundations Congress, Orlando and GSP 185, ASCE, p 1-11.
- Brown, D., and Thompson, R. 2009. "Drilled Shaft Performance in Cemented Calcareous Formations in the Southeast U.S.," GSP 185, ASCE, p 119-126.
- Brown, D. 2007. "Construction of Large Drilled Shafts," The 2<sup>nd</sup> Annual Mike O'Neill Honorary Lecture, Journal of the Deep Foundations Institute, 15p.
- Brown, D. and Schindler, A. 2007. "High Performance Concrete and Drilled Shaft Construction" GSP 158, Contemporary Issues in Deep Foundations, ASCE, 12p.
- Brown, D., Dapp, S., Thompson, R. and Lazarte, C. 2007. "Design and Construction of Continuous Flight Auger Piles," Geotechnical Engineering Circular No. 8, Federal Highway Administration Office of Technology Application, Office of Engineering/Bridge Division, 294p
- Brown, D.A. and R. Thompson, 2006. "Report of the Evaluation of Foundation Response to Storm Surge Loading, U.S. 90 Biloxi Bay Bridge" Coastal Res. Inst., Univ. of S Alabama.
- Brown, D.A., 2004. "Zen and the Art of Drilled Shaft Construction: The Pursuit of Quality" Invited keynote lecture and paper, GSP No. 124, ASCE, pp. 19-33.
- Brown, D. A. and Camp, W.M., 2002. "Lateral Load Testing Program for the Cooper River Bridge, Charleston, SC" Geotechnical Special Publication No. 116, ASCE, pp. 95-109.
- Brown, D. A., 2002. "The Effect of Construction on Axial Capacity of Drilled Foundations in Piedmont Soils," *J. of Geotechnical and Geoenvironmental Engineering*, 128(12), pp 967-73.

## SELECTED RECENT CONSULTING PROJECTS

- **Hastings Mississippi River Bridge, Hastings, MN.** Foundation design for new arch bridge river crossing including driven pipe piles, drilled shafts, and pile supported embankment.
- **New Mississippi River Bridge, St. Louis, MO.** Foundation design via alternate technical concept (ATC) and load testing for a new cable-stayed bridge founded on large diameter drilled shafts socketed into Limestone bedrock.
- **Foothills Parkway Bridge, TN.** Foundation design for a micropile-supported bridge in remote mountainous terrain, constructed to minimize environmental impact for Nat'l Park.
- **Light Rail Elevated Guideway Structure, Honolulu, HI.** Foundation consultant on drilled shaft foundations for 6 mile long elevated structure in a congested urban environment.
- **Lafayette Bridge, St. Paul, MN.** Foundation design for a new Mississippi River Bridge crossing, founded on driven steel pipe piles.
- **I-15 Beck St. Bridge, Salt Lake City, UT.** Lead geotechnical designer for bridge crossing, with large diameter drilled shaft foundations in liquefaction-prone area.
- **Bond Memorial Bridge, Kansas City, MO.** Lead geotechnical designer for cable-stayed Missouri River crossing, with drilled shaft foundations socketed into rock.
- **John James Audubon Bridge, LA;** Lead geotechnical designer for cable-stayed Mississippi River crossing, with 200ft deep drilled shaft foundations in sand, improved by base grouting.
- **I-35W Bridge Replacement, Minneapolis;** Consultant to MNDOT on the replacement of the collapsed structure over the Mississippi River, with drilled shafts socketed into rock.
- **Cumberland River Pedestrian Suspension Bridge, Nashville;** Designed a micropile foundation as a value-engineered alternate in order to overcome site restrictions and to address slope stability concerns on a steep riverbank.
- **Biloxi Bay Bridge, Biloxi, MS;** Foundation consultant on replacement of U.S. 90 bridge destroyed by hurricane Katrina, recently completed with driven prestressed pile foundations.
- **Ravelle Bridge, Charleston, SC;** cable-stayed bridge over Cooper River, consultant on preliminary design and design-phase load testing program. Testing included full scale lateral loading of drilled shaft foundations in soils subjected to blast-induced liquefaction.