

Bashar Tarawneh, Ph.D., P.E

CONTACT INFORMATION

University of Jordan
P.O. Box 13455
Amman 11942
Jordan
Phone No. +96265355000 - Extension 77245
Cell Phone No. +962-79-754-9696
E-mail: btarawneh@ju.edu.jo

EDUCATION

- Ph.D., Geotechnical Engineering, Ohio University, 2005
- M. S., Geotechnical Engineering, Ohio University, 2002
- B. Sc., Civil Engineering, Mut'ah University, Jordan, 2000

EXPERIENCE

- Professor of Civil Engineering, University of Jordan, August 2019 - Present
- Associate Professor of Civil Engineering, University of Jordan, August 2015 - August 2019
- Assistant Professor of Civil Engineering, University of Jordan, September 2010- August 2015
- Senior Foundation Engineer, Ohio Department of Transportation (ODOT), Office of Structural Engineering October 2008- September 2010
- Project Engineer, HNTB, Inc Columbus, Ohio July 2005- September 2008
- Research Associate, Ohio Research Institute for Transportation and Environment (ORITE), September 2000- June 2005
- Site Engineer, Ministry of Public Work and Housing, Jordan, December 1999- August 2000
- Engineer Trainee, Arab Contractors Company- Cairo, Egypt, May 1999- September 1999

RESEARCH INTERESTS

- Field and analytical aspects of soil-pipe interactions
- Inspection and risk assessment of highway culverts
- Field performance and geotechnical analysis of shallow and deep foundations
- Ground improvement using Rapid Impact Compaction (RIC), and Dynamic Compaction (D.C.)
- Soil reinforcement and improvement
- In-situ testing and site characterization
- Application of artificial intelligence (A.I.) in civil engineering

AFFILIATIONS

- Registered Professional Engineer, State of Ohio, Registration # 71886
- Member of the American Society of Civil Engineers (ASCE)
- Member of the American Society of Highway Engineers (ASHE)
- Member of the Deep Foundation Institute (DFI)
- Member of Jordanian Society of Civil Engineers

ACADEMIC HONORS

- First among a class of 50 (B. Sc.), Civil Engineering, Mut'ah University, Jordan, 2000
- Awarded a full tuition waiver and a research assistant grant from Ohio University, Ohio, 2000-2005

SOFTWARE KNOWLEDGE

- NeuroSolution 6.0 (Neural Network Development Environment)
- Microstation J, Microstation V8, and GEOPAK
- MSEW 1.0, Driven 1.0, and SPW911
- Microsoft Project
- GSTABL7 with STED win Slope Stability Analysis
- ODOT CDSS Design Software, for culvert, storm sewer, and ditches design.
- Peakflow software for flood flow estimation.
- Culvert Analysis and Design Software using finite elements (CANDE).
- Statistical Package for Social Sciences Software (SPSS)
- Microsoft knowledge includes, Microsoft Word, Excel, Power Point, and Word Perfect

SELECTED PUBLICATIONS

- Anis Shatnawi, Wassel AL Bodour, Mu'tasim Abdel-Jaber, and **Bashar Tarawneh** (2019). Empirical Formulas to Predict the Axial Capacity of Driven Piles Using In-Situ Dynamic Load Testing Data. *International Journal of Machine Learning and Computing*, 9(2).
- **Tarawneh B**, AL Bodour W, Shatnawi A, Field Evaluation and Behavior of the Soil Improved using Dynamic Replacement, Case Studies in Construction Materials (2018), <https://doi.org/10.1016/j.cscm.2018.e00214>
- **Tarawneh, B.** (2014),” Correlation of Standard and Cone Penetration Tests for Sandy and Silty Sand to Sandy Silt Soil”, *Electronic Journal of Geotechnical Engineering*, Vol. 19, Bund W, pp. 6717-6727.
- **Tarawneh, B.** and Matraji M. (2014),” Ground improvement using rapid impact compaction: case study in Dubai, UAE, *Journal of the Croatian Association of Civil Engineer*, Vol. 66, No.11, pp.1007-1014.

- **Tarawneh, B.** and Munir Nazzal (2014), “Optimization of Resilient Modulus Prediction from FWD Results using Artificial Neural Network”, *Periodica Polytechnica, Civil Engineering* Vol.58, No.2, pp. 143-154.
- **Tarawneh, B.** and Imam R. (2014), “Regression versus artificial neural networks: Predicting pile setup from empirical data”, *KSCE Journal of Civil Engineering*, Vol. 18, No.4, pp. 1018-1027.
- **Tarawneh, B.** and Siddiqi, J. (2014), “Performance Issues of Mechanically Stabilized Earth Wall Supporting Bridge Abutment”, *8th International Conference on Engineering and Technology Research*, Dubai, UAE.
- **Tarawneh, B.** (2013), “Pipe Pile Setup: Database and Prediction Model using Artificial Neural Network”, *Soils and Foundations*, Vol.53, No.4, pp.607-615.
- Tatari, O., Sargand, S.M., Masada, T. and **Tarawneh, B.** (2013), “Neural Network Approach to Condition Assessment of Highway Culverts: Case Study in Ohio”, *Journal of Infrastructure Systems, ASCE*, Vol. 19, No.4, pp.409-414.
- **Tarawneh, B.**, Masada T., and Sargand, S.M (2013),” Estimated and Measured Settlements of Shallow Foundation Supporting Bridge Substructure”, *Jordan Journal of Civil Engineering*, Vol. 7, No.2, pp. 224-235.
- Imam, R. and **Tarawneh B.** (2012), “Exploring BRT Ridership Drivers: An Empirical Study on European Systems”, *Jordan Journal of Civil Engineering*, Vol. 6, No.2, pp. 234-242
- Shad M. Sargand, Teruhisa Masada, **Bashar Tarawneh**, and Doug Gruver (2008), “ Deeply Buried Thermoplastic Pipe Field Performance for over Five Years”, *Journal of Geotechnical and Geoenvironmental Engineering, American Society of Civil Engineers*, Vol. 134, No. 8, pp. 1181-1191.
- Teruhisa Masada, Shad M. Sargand, **Bashar Tarawneh**, Gayle F. Mitchell, and Doug Gruver (2007), “Inspection and Risk Assessment of Concrete Culverts under Ohio’s Highways”, *Journal of Performance of Constructed Facilities*, Vol.21, No.3, pp 223-233.
- Teruhisa Masada, Shad M. Sargand, **Bashar Tarawneh**, Gayle F. Mitchell, and Doug Gruver (2006), “New Inspection and Risk Assessment Methods for Metal Highway Culverts in Ohio” Transportation Research Record: *Journal of the Transportation Research Board*, No. 1976, pp. 141-148.
- Shad M. Sargand, Teruhisa Masada, **Bashar Tarawneh**, and Doug Gruver (2005), “Field Performance and Analysis of Large-Diameter High-Density Polyethylene Pipe under Deep Soil Fill,” *Journal of Geotechnical and Geoenvironmental Engineering, American Society of Civil Engineers*, Vol. 131, No. 1, pp. 39-51.
- Gayle F. Mitchell, Teruhisa Masada, Shad M. Sargand, and **Bashar Tarawneh** (2005), “Risk Assessment and Updates of Inspection Procedures for Culvert”, Report No. FHWA/OH-2005-002, Ohio Department of Transportation

- Shad M. Sargand, Teruhisa Masada, **Bashar Tarawneh**, and Hanna Yanni (2004), “Use of Soil Stiffness Gauge in Thermoplastic Pipe Installation,” *Journal of Transportation Engineering, American Society of Civil Engineers*, Vol. 130, No.6, pp. 768-776.
- Shad M. Sargand, Teruhisa Masada, Kevin E. White, and **Bashar Al-Tarawneh** (2002), “1,050-mm (42-in) Diameter, Profile-Wall HDPE Pipes under Deep Soil Cover: Comparisons between Field Performance Data and Analytical Predictions,” *Transportation Research Record* No. 1814, pp.186-196.
- Shad M. Sargand, Glenn A. Hazen, Teruhisa Masada, Donald J. Schehl, Alan Moran and **Bashar Al-Tarawneh (2002)**, “Field Verification of Structural Performance of Thermoplastic Pipe under Deep Backfill Conditions,” Report No. FHWA/OH-2002/023, Ohio Department of Transportation.