

Geopier Technical Papers

Please contact Jim Wheeler, Design/Build Geotechnical, to request copies of any of the documents listed below. Please specify the appropriate Technical Paper (TB) or Technical Bulletin (TB) Number with your request.
Tel: 978-567-9222 Fax: 978-567-8888 Email: jwheeler@dbgeotech.com

- TP01.** Lawton, E. C., and N. S. Fox. 1994. **“Settlement of Structures Supported on Marginal or Inadequate Soils Stiffened with Short Aggregate Piers.”** Proceedings, Vertical and Horizontal Deformations of Foundations and Embankments. College Station, Texas. June 16 to 18.
- TP02.** Lawton, E. C., N. S. Fox, and R. L. Handy. 1994. **“Control of Settlement and Uplift of Structures Using Short Aggregate Piers.”** Proceedings, IN-SITU Deep Soil Improvements. October 9 to 13.
- TP03.** Wissmann, K. J., and A. G. Minks. 1999. **“Innovative Foundation System Hits a Home Run at Memphis Autozone Park.”** Paper presented at the Memphis Area Engineering Society Conference. May.
- TP04.** Moser, K. R., M. J. Cowell, and K. J. Wissmann. 1999. **“Use of Rammed Aggregate Piers in Place Deep Foundations for Settlement and Uplift Control of Buildings and Retaining Walls.”** Proceedings, Thirtieth Ohio River Valley Soils Seminar. October.
- TP05.** Wissmann, K. J., and N. S. Fox. 2000. **“Design and Analysis of Short Aggregate Piers Used to Reinforce Soils for Foundation Support.”** Proceedings, Darmstadt Technical University Colloquium. Darmstadt, Germany. March.
- TP06.** Wissmann, K. J., and N. S. Fox. 2000. **“Entwurf und Analyse von Aggregat-Pfählen zur Stabilisierung des Baugrunds für Grundungen.”** Proceedings, Darmstadt Technical University Colloquium. Darmstadt, Germany. March. (Same as English Version Above)
- TP07.** Fox, N. S. and T. B. Edil. 2000. **“Case Histories of Rammed Aggregate Pier™ Soil Reinforcement Construction Over Peat and Highly Organic Soils.”** Geopier® Foundation Company, Technical Paper Number 1.
- TP08.** Wissmann, K. J., N. S. Fox, and J. P. Martin. 2000. **“Rammed Aggregate Piers Defeat 75-Foot Long Driven Piles.”** Proceedings, Performance Confirmation of Constructed Geotechnical Facilities. ASCE Special Publication No. 194. April 9 to 12. Amherst, Massachusetts.
- TP09.** Wissmann, K. J., T. Williamson, C. Jean, And R. Ringholz. 2001. **“Use of Geopier® Soil Reinforcing Elements to Support a Large Aboveground Storage Tank Facility in Texas.”** Independent Liquid Terminals Association 2001 Annual Operating Conference. June 11 to 14. Houston, Texas.
- TP10.** Fox, N. S., K. J. Wissmann, J. P. Martin, And L. R. Wepler. 2001. **“Geopier Schotter Verdichtungssäulen – Eine Sichere Alternative zu Rammpfählen.”** Proceedings, Mitteilung des Instituts fuer Grundbau und Bodenmechanik, Technische Universität Braunschweig, Heft No. 65. Braunschweig, Germany. (Same as TP8 in English, Above)
- TP11.** Wissmann, K. J., Moser, K. and M. A. Pando. 2001. **“Reducing Settlement Risks In Residual Piedmont Soils Using Rammed Aggregate Pier Elements.”** Proceedings, ASCE Specialty Conference. Blacksburg, VA. June 9 to 13.
- TP12.** Handy, R. L. 2001 **“Does Lateral Stress Really Influence Settlement?”** Journal of Geotechnical and Geoenvironmental Engineering. July.

- TP13.** Minks, A. G., K. J. Wissmann, J. M. Caskey, and M. A. Pando. 2001. **“Distribution of Stresses and Settlements Below Floor Slabs Supported by Rammed Aggregate Piers.”** Proceedings, 54th Canadian Geotechnical Conference, Calgary, Alberta, Canada. September 16-19.
- TP14.** Fox, N. S., and B. H. Lien. 2001. **“Geopier® Floating Foundations- A Solution for the Mekong Delta Region, Vietnam.”** Proceedings of the International Conference on Management of the Land and Water Resources. October 20-22.
- TP15.** White, D. J., E. C. Lawton, and J. M. Pitt. 2001. **“Lateral Earth Pressure Induced by Rammed Aggregate Piers.”** Proceedings, 53rd Annual Canadian Geotechnical Conference, Montreal, Canada.
- TP16.** Fox, N. S., and B. H. Lien. 2001. **“Geopier® Soil Reinforcement Technology: An Overview.”** Proceedings. Asian Institute of Technology Conference. November.
- TP17.** Lien, B. H., and N. S. Fox. 2001. **“Case Histories of Geopier® Soil Reinforcement for Transportation Applications.”** Proceedings. Asian Institute of Technology Conference. November.
- TP18.** White, D. J., K. J. Wissmann, A. G. Barnes, and A. J. Gaul. 2002. **“Embankment Support: A Comparison of Stone Column and Rammed Aggregate Pier Soil Reinforcement.”** Presented at Transportation Research Board, 81st Annual Meeting, Washington, D.C., January 13-17.
- TP19.** Handy, R. L. 2002. **“Concentric Stress Zones Near Rammed Aggregate Pier Elements.”** Iowa State University. (In Preparation).
- TP20.** Wissmann, K.J., FitzPatrick, B.T., White, B.H., and Lien, B.H., 2002. **“Improving Global Stability and Controlling Settlement with Geopier Soil Reinforcing Elements”**, Proceedings of the 4th International Conference on Ground Improvement Techniques. Kuala Lumpur, Malaysia. March 26-28.
- TP21.** Hall, K., Wissmann, K.J., Caskey, J.M. and FitzPatrick, B.T. 2002. **“Soil Reinforcement Used to Arrest Bearing Capacity Failure at a Steel Mill”**. Proceedings of the 4th International Conference on Ground Improvement Techniques. Kuala Lumpur, Malaysia. March 26-28.
- TP22.** Lien, B.H., Fox, N.S., Morales, E.M., and Kwong, H.K. 2002. **“Case Histories and Design of Floating Foundations With Geopier Rammed Aggregate Pier Elements”**. Proceedings of the 4th International Conference on Ground Improvement Techniques. Kuala Lumpur, Malaysia. March 26-28.
- TP23.** Lien, B.H., Fox, N.S., and Kwong, H.K. 2002. **“Geopier Floating Foundations – A Solution For Roadway Embankments Over soft Soils in Asia”**. Proceedings of the 2nd World Engineering Congress. Sarawak, Malaysia. July 22-25.
- TP24.** Kwong, H.K, Lien, B.H., and Fox, N.S., 2002. **“Stabilizing Landslides Using Rammed Aggregate Piers”**. Proceedings of the 5th Malaysian Road Conference, Kuala Lumpur, Malasia. October 7-9.
- TP25.** Handy, R.L., Fox, N.S., and Wissmann, K.J. 1999. **“Short Aggregate Piers Reinforce Soils Near Tunnels Elements”**. Proceedings of the 2nd ASCE National Conference, Geo-Engineering for Underground Facilities. ASCE Geotechnical Special Publication No. 90: 1039-1047.
- TP26.** Kwong, H.K., Fox, N.S., and Lien, B.H. 2002. **“Innovative and Alternative Foundation System”**. Proceedings of the 2nd INKRAM International Geotechnical Conference (IGEO-2). October.
- TP27.** Srinivasan, S., Smithson, J., and Viswanathan, R. 2002. **“Case Study of Ground Modification to Control Settlement in Uncontrolled Fill”**. Ohio River Valley Soils Seminar XXXIII, Cincinnati, OH. October 18.



- TP28. Allgood, C., Wepler, L., Lien, B.H., and Fox, N.S. 2003 **“Geopier Intermediate Foundation Systems - Case Studies for Building Foundations Over Soft Organic Soils and Peat”**. Nottingham Problematic Soils Conference, July 2003.
- TP29. White, D. and Suleiman, M. 2004. **“Design of Short Aggregate Piers to Support Highway Embankments.”** Transportation Research Board Annual Meeting, January 2004.
- TP30. O’Malley, E., Saunders, S. and Ecker, J. 2004. **“Slope Rehabilitation at the Baltimore-Washington Parkway Using Rammed Aggregate Piers.”** Transportation Research Board Annual Meeting, January 2004.
- TP31. Girsang, C., Gutierrez, M. and Wissman, K. 2004. **“Modeling of the Seismic Response of the Aggregate Pier Foundation System.”** GeoSupport Conference, January 2004.
- TP32. Shields, C., Fitzpatrick, B. and Wissmann, K. 2004. **“Modulus Load Test Results for Rammed Aggregate Piers in Granular Soils.”** GeoSupport Conference, January 2004.
- TP33. Lillis, C., Lutenecker, A. and Adams, M. 2004. **“Compression and Uplift of Rammed Aggregate Piers in Clay.”** GeoSupport Conference, January 2004.
- TP34. Fox, N., Wepler, L. and Scherbeck, R. 2004. **“Geopier Soil Reinforcement System - Case Histories of High Bearing Capacity Footing Support and Floor Slab Support.”** Fifth International Conference on Case Histories in Geotechnical Engineering, April 2004.
- TP35. Majchrzak, M., Lew, M., Sorensen, K., and Farrell, T. 2004. **“Settlement of Shallow Foundations Constructed Over Reinforced Soil: Design Estimates vs. Measurements.”** Fifth International Conference on Case Histories in Geotechnical Engineering, April 2004.
- TP36. Farrell, T. and Taylor, A. 2004. **“Rammed Aggregate Pier Design and Construction in California – Performance, Constructability, and Economics.”** Structural Engineers Association of California 2004 Convention Proceedings. Placerville, CA. 2004. **(NEW!!)**
- TP37. Pham, H.T.V., Suleiman, M.T., and White D.J. 2004. **“Numerical Analysis of Geosynthetic-Rammed Aggregate Pier Supported Embankments.”** Proceedings of Geo-Trans 2004. Los Angeles, CA. July 27-31. **(NEW!!)**
- TP38. Loehr, J.E., Ang, E.C., Parra, J.R., and Bowders, J.J. 2004. **“Design Methodology for Stabilizing Slopes Using Recycled Plastic Reinforcement.”** Proceedings of Geo-Trans 2004. Los Angeles, CA. July 27-31. **(NEW!!)**
- TP39. White, D.J. and Hoevelkamp, K. 2004. **“Settlement Monitoring of Large Box Culvert Supported by Rammed Aggregate Piers – A Case History.”** Proceedings of Geo-Trans 2004. Los Angeles, CA. July 27-31. **(NEW!!)**
- TP40. Wong, D.O., FitzPatrick, B.T. and Wissmann, K.J. 2004. **“Stabilization of Retaining Walls and Embankments Using Rammed Aggregate Piers™.”** Proceedings of Geo-Trans 2004. Los Angeles, CA. July 27-31. **(NEW!!)**
- TP41. White, D, Wissmann K.J., Barnes, A, and Gaul, A. 2002. **“Embankment Support: A Comparison of Stone Column and Rammed Aggregate Pier Soil Reinforcement.”** 55th Canadian Geotechnical and 3rd Joint IAHCNC and CGS Groundwater Specialty Conferences, Niagara Falls, Ontario October, 2002, Edited by D. Stolle, A.R. Piggott and J.J. Crowder. **(NEW!!)**



Geopier Technical Bulletins

- TB 1: “Behavior of Geopier Supported Foundation Systems During Seismic Events”
- TB 2: “Bearing Capacity of Geopier Supported Foundation Systems”
- TB 3: “Geopier Uplift Resistance”
- TB 4: “Geopier Lateral Resistance”
- TB 5: “Geopier Shear Reinforcement for Global Stability and Shear Strength”
- TB 6: “Settlement Control for Embankments and Transportation-Related Structures Using Geopier Soil Reinforcement”
- TB 7: “Seismic Site Classification Improvements Using Geopier Soil Reinforcement” (*Available, Fall 2004*)