**TECHNICAL PAPER REFERENCE LIST**

**Dynamic Compaction**

Berry, A., Visser, A.T., and Rust, E. (2000). “State of the Art Review of the Prediction of Ground Improvement Using Impact Compaction Equipment.” Proceedings from the South African Transport Conference, South Africa, July 17-20.

Chien, S.T. and Chien, C.H., (1983). “On Dynamic Consolidation”. In proceedings for the *Eighth European Conference on Soil Mechanics and Foundation Engineering*, Helsinki, Finland, Vol. 1, pp. 353-356

Chow, Y.K., Yong, D.M, Yong, K.Y., and Lee, S.L. (1992). “Dynamic Compaction Analysis”. Journal of Geotechnical Engineering, ASCE, Vol. 118, pp. 1141-1157.

Chow, Y.K., Yong, D.M., Yong K.Y., and Lee, S.L. (1992). "Dynamic Compaction of Loose Sand Deposits," Soils and Foundations, 32(4), p 93-106.

Chow, Y.K., Yong, D.M., Yong, K.Y., and Lee, S.L. (1994). “Dynamic Compaction of Loose Granular Soils: Effect of Print Spacing.” Journal of Geotechnical Engineering, ASCE, Vol. 120, pp. 1115-1133.

Dobson, T., and Slocombe, B., (1982). “Deep Densification of Granular Fills”. In proceedings for the *Second Geotechnical Conference and Exhibit on Design and Construction*, Las Vegas, Nevada, April 26-28, 1982.

Drumheller, J.C., and Shaffer, R.A., (1997). “Dynamic Compaction”. In proceedings for the Conference on *Ground Improvement, Ground Reinforcement, and Ground Treatment*, (Geotechnical Special Publication No. 69), ASCE, Logan, Utah, July 17-19, 1997.

Drumheller, J.C., and Shaffer, R.A., (1997). “Dynamic Compaction to Remediate Coal Spoil”. In proceedings for the *Conference on Ground Improvement, Ground Reinforcement, and Ground Treatment*, (Geotechnical Special Publication No. 69), ASCE, Logan, Utah, July 17-19, 1997.

Du, J., Wu, S., Zhang, Y., Hou, S., (2019). “Dynamic response study of buried pipe subjected to dynamic compaction”. IOP Conference Series: Earth and Environmental Science 300, 022055. <https://doi.org/10.1088/1755-1315/300/2/022055>

Franke, K.W., Nguyen, T., Shao, L., Bender, C., Wolfe, D., Hedengren, J.D., and Reimschiissel, B. (2017). “The Use of Unmanned Aerial Vehicles and Structures from Motion to Measure the Volume Change at a Deep Dynamic Compaction Site.” In Proceedings for GeoFrontiers 2017, Geotechnical Special Publication No. 278, ASCE, pp. 520-527.

Gunaratne, M., Mullins, G., Stinnette, P., and Thilakasiri, S., (1997). “Stabilization of Florida Organic Material by Dynamic Replacement.” Florida Department of Transportation, State Project No. 99700-3541-119, April.

Hamidi, B., Nikraz, H., Varaksin, S., (2010). “Correlations between CPT and PMT at a Dynamic Compaction Project.” In proceedings for the *2nd International Symposium on Cone Penetration Testing (CPT’10)*. International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE).

Hamidi, B., Nikraz, H., and Varaksin, S. (2011). “Dynamic Compaction Vibration Monitoring in a Saturated Site.” In proceedings for *International Conference on Advances in Geotechnical Engineering*, Perth, Australia, Nov. 7-9.

Han, J. (1998). “Ground modification by a combination of dynamic compaction, consolidation, and replacement.” Proceedings, Fourth International Conference on Case Histories in Geotechnical Engineering, St. Louis, Missouri, 341-346.

He, L., Wang, X., Liu, Z., Teng, C., 2021. Study on the application of excess pore water pressure in analyzing the effect of dynamic compaction for the subgrades filled with aeolian sand and gravel soil underwater. IOP Conf Ser Earth Environ Sci 768, 012086. <https://doi.org/10.1088/1755-1315/768/1/012086>

Lee, F.H, and Gu, Q. (2004). “Method for Estimating Dynamic Compaction Effect on Sand.” Journal of Geotechnical and Geoenvironmental Engineering, ASCE, Vol. 130, pp. 139-152.

Leonards, G.A., Cutter, W.A., and Holtz, R.D. (1980). “Dynamic Compaction of Granular Soils”. Journal of the Geotechnical Engineering Division, ASCE, Vol. GT1, pp. 35-44.

Lewis, P.J. and Langer, J.A. (1994). "Dynamic compaction of landfill beneath embankment." Vertical and Horizontal Deformations of Foundations and Embankments, Geotechnical Special Publication No. 40, ASCE, Vol. 1, pp. 451-461.

Lu, X., Filz, G., and Han, J. (2009). “Dynamic Compaction of Fill in a Mountainous Area”. *2009 US-China Workshop on Ground Improvement Technologies*, ASCE, pp. 281-289.

Lukas, R.G., (1980). “Densification of Loose Deposits by Pounding”. Journal of the Geotechnical Engineering Division, ASCE, Vol. GT4, pp. 435-446.

Lukas, R.G., (1986). *Dynamic Compaction for Highway Construction, Volume 1: Design & Construction Guidelines*, FHA Report FHWA/RD-86/133, July.

Lukas, R.G., (1995). *Geotechnical Circular No. 1 – DYNAMIC COMPACTION*, Federal Highway Administration Report FHWA-SA-95-037, March.

Lukas, R.G., and Seiler, N.H., (1994). “Settlement of Dynamically Compacted Deposits.” *Vertical and Horizontal Deformations of Foundations and Embankments*, ASCE Geotechnical Special Publication No. 40.

Lukas, R.G., (1996). “Post-Densification Improvement of Soil Properties with Time”. *Personal Communication to Joe C. Drumheller*, 21 February.

Lukas, R.G., (1997). “Delayed Soil Improvement after Dynamic Compaction”. In proceedings for the *Conference on Ground Improvement, Ground Reinforcement, and Ground Treatment*, (Geotechnical Special Publication No. 69), ASCE, Logan, Utah, July 17-19, 1997.

Lutnegger, A.J., (1986). “Dynamic Compaction in Friable Loess”. Journal of Geotechnical Engineering, ASCE, Vol. 112, pp. 663-667.

Majdi, A., Soltani, A.S., and Litkouhi, S. (2007). “Mitigation of Liquefaction Hazard by Dynamic Compaction.” Ground Improvement, 11(3), 137-143.

Mayne, P.W., and Jones, J.S. (1993). “Impact Stresses During Dynamic Compaction”. Journal of Geotechnical Engineering, ASCE, Vol. 109, pp. 1342-1346.

Mayne, P.W., Jones, J.S., and Dumas, J.C. (1984). “Ground Response to Dynamic Compaction.” Journal of Geotechnical Engineering, ASCE, Vol. 110, pp. 757-774.

Mayne, P.W., (1988). “Ground Improvement by Dynamic Compaction”. *Civil Engineering Practice: Geotechnical and Ocean Engineering, Chapter 32.*

Menard, L., (1975). “Theoretical and Practical Aspects of Dynamic Consolidation.” *Geotechnique*, Vol. 25, No. 1, pp. 3-17.

Meyer, M.E., Tan, C.K., and Drumheller, J.C., (2001). “Liquefaction Mitigation at JFK Airport Using Dynamic Compaction.” In proceedings for *2001: A Geo-Odyssey*, (Geotechnical Special Publication No. 113), ASCE, Virginia Tech, Blacksburg, VA, June 9-13.

Michalowski, R.L, and Nadukuru, S.S., (2012). “Static Fatigue, Time Effects, and Delayed Increase in Penetration Resistance after Dynamic Compaction of Sands.” Journal of Geotechnical and Geoenvironmental Engineering, ASCE, Vol. 138, pp. 564-574.

Michalowski, R.L., and Nadukuru, S.S. (2015). “Contact Fatigue: A Key Mechanism in Time-Dependent Behavior of Sand After Dynamic Compaction.” In proceedings for IFCEE 2015, San Antonio, Texas, March 17-21.

Miller, H., Stetson, H., and Benoit, J. (2004). “DMT testing for site characterization and QA/QC on a deep dynamic compaction project.” Geotechnical Special Publication No. 126, ASCE, p. 1805-1812.

Mitchell, J.K., (1981). “Soil Improvement – State of the Art”. In proceedings for the *Tenth International Conference on Soil Mechanics and Foundation Engineering*, Stockholm, Sweden, Vol. 4, pp. 509-565.

Mitchell, J.K., Cooke, H.G., and Schaeffer, J.A., (1998). “Design Considerations in Ground Improvement for Seismic Risk Mitigation”. In proceedings for Geotechnical *Earthquake Engineering and Soil Dynamics III*, (Geotechnical Special Publication No. 75), ASCE, Seattle, Washington, August 3-6, 1998, Vol. 1, pp. 580-609.

Mullins, G., Gunaratne, M., Stinnette, P., and Thilakasiri, S. (2000). "Prediction of Dynamic Compaction Pounder Penetration." Soils and Foundations, 40(5), p.91-97.

Naesgaard, E., and Beaton, N. ( ). “Dynamic Compaction Densification for Liquefaction Mitigation and Improved Foundation Support in the Fraser Delta”.

Oweis, I.S., Malak, J.T., and Martin, T., (2015). “Old Technology Enhanced by Dynamic Replacement”. In proceedings for *IFCEE 2015*, San Antonio, Texas, March 17-21.

Ramaswamy, S.D., Aziz, M.A., Subrahamanyam, R. V., Abdul Khader, M.H., and Lee, S.L. (1979). “Treatment of Peaty Clay by High Energy Impact”. Journal of the Geotechnical Engineering Division, ASCE, Vol. GT8, pp. 957-967.

Rollins, K.M., and Kim, J.H., (1994). “U.S. Experience with Dynamic Compaction of Collapsible Soils.” *In-Situ Deep Soil Improvement*, ASCE Geotechnical Special Publication No. 45, pp. 26-43.

Rollins, K.M., Jorgensen, S.J., and Ross, T.E., (1998). “Optimum Moisture Content for Dynamic Compaction of Collapsible Soils.” Journal of Geotechnical and Geoenvironmental Engineering, ASCE, Vol. 124, pp. 699-708.

Rollins, K.M., and Kim, J.H. (2010). “Dynamic Compaction of Collapsible Soils Based on U.S. Case Histories.” Journal of Geotechnical and Geoenvironmental Engineering, ASCE, Vol. 136, No. 9, pp. 1178-1186.

Schaefer, V.R., Berg, R.R., Collin, J.G., Christopher, B.R., DiMaggio, J.A., Filz, G.M., Bruce, D.A., and Ayala, D. (2016). “Ground Modification Methods”- Volume I. Federal Highway Administration Publication No. NHI-16-027.

Sin, C.C., Meng, T.S., and Yee, K. (2003). “Experience of Using Dynamic Compaction in Landfill Areas”. In Proceedings of the *2nd International Conference on Advances in Soft Soil Engineering and Technology*, Putrajaya, Malaysia, July 2-4.

Tan, Y., et al, (2012). “Isolation of DDC Impact to Sheet Pile Walls by Open Trenches.” *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, Vol. 138, No. 1, pp. 110-114.

Tarawneh, B., al Bodour, W., Shatnawi, A., al Ajmi, K. (2019). “Field evaluation and behavior of the soil improved using dynamic replacement.” *Case Studies in Construction Materials 10*, e00214. <https://doi.org/10.1016/j.cscm.2018.e00214>

Welsh, J.P., (1983). “Dynamic Deep Compaction of Sanitary Landfill to Support Superhighway.” In Proceedings of the *8th Eur. Conf. Soil Mech. Found. Engng*, Helsinki, Sweden, pp. 319-321.

Woods, C.B., (2016). “How Ground Improvement Contributes to the Green Building Movement.” In Proceedings for *Geo-Chicago 2016*, Chicago, Illinois, August 14-18.

Woods, C. B. (2017). “Ground Improvement: A 2017 Discussion on Dynamic Compaction”, 4th International Conference on Deep Foundations, Mexico City, Mexico, November 15-16.

Woods, C.B., Drumheller, J.C., and Huber, K.A. (2013). “Building the Devil’s Playground: How a Ground Improvement Program Eliminated the Need for Pile Foundations.” In proceedings for the *38th Annual Conference on Deep Foundations*, Phoenix, Arizona, September 25-28.

Woods, C.B., Drumheller, S.J., and Drumheller, J.C. (2015). “Ground Improvement on Strip-Mined Sites: Using Dynamic Compaction to Remediate Mine Spoil Sites.” In proceedings for *GeoStructures 2016*, Phoenix, Arizona, February 14-17.

Woods, C.B., Shaffer, R.A., and Drumheller, S.J. (2023). “Dynamic Compaction: A Proven Ground Improvement Alternative Method for Landfill Sites.” In proceedings for GeoCongress 2023, Los Angeles, California, March 26-29.

Xu, Y., Hu, P. (2017). “Dynamic compaction studied by in-situ soil test in Zhengzhou airfield”. *In AIP Conference Proceedings*. AIP Publishing LLC, p. 040022.

Zekkos, D., and Flanagan, M., (2011). “Case Histories-Based Evaluation of the Deep Dynamic Compaction Technique on Municipal Solid Waste Sites.” In proceedings for GeoFrontiers 2011, *Advances in Geotechnical Engineering*, (Geotechnical Special Publication No. 211), ASCE, Dallas, Texas, March 13-16, 2011.

Zekkos, D., Kabalan, M., and Flanagan, M. (2012). “Lessons Learned from Case Histories of Dynamic Compaction at Municipal Solid Waste Sites.” Journal of Geotechnical and Geoenvironmental Engineering, August 2012.

Zhou, C., Yang, C., Qi, H., Yao, K., Yao, Z., Wang, K., Ji, P., Li, H. (2021). “Evaluation on Improvement Zone of Foundation after Dynamic Compaction”. Applied Sciences 11, 2156. <https://doi.org/10.3390/app11052156>

**Mine Spoils**

Cheeks, J.R., (1996). “Settlement of Shallow Foundations on Uncontrolled Mine Spoil Fill.” Journal of Performance of Constructed Facilities, ASCE, Vol. 10, pp. 143-151.

Gray, R.E. et al, (1996). “Subsidence Misconceptions and Myths”. In proceedings for *15th International Conference on Ground Control in Mining*, Colorado School of Mines, Golden, CO.

Gray, R.E., and Bruhn, R.W., (1984). “Coal Mine Subsidence – Eastern United States.” In *Man-Induced Land Subsidence*, ed. By T. Holzer. (Reviews in Engineering Geology VT) Colorado, Geological Society of America, pp. 123-149.

**Vibrations and Concrete**

Al-Hussaini, T.M. and Ahmad, S. (1991). “Design of Wave Barriers for Reduction of Horizontal Ground Vibration.” *Journal of Geotechnical Engineering*, ASCE, Vol. 117, pp. 616-636.

Camp, W.M., et al, (2010). “Construction-Induced Vibrations and Green Concrete: Literature Review and Case History.” In *Proceedings of the 35th Annual Conference on Deep Foundations*, DFI, Hollywood, California, October.

Comina, C. and Foti, S. (2007). “Surface Wave Tests for Vibration Mitigation Studies.” *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, Vol. 133, pp. 1320-1324.

Hamidi, B., Nikraz, H., and Varaksin, S, (Undated). “Dynamic Compaction Vibration Monitoring in a Saturated Site”.

Konon, W., and Schuring, J.R., (1985). “Vibration Criteria for Historic Buildings.” *Journal of Construction Engineering and Management*, ASCE, Vol. 111, No. 3, September.

Mayne, P.W., (1985). “Ground Vibrations During Dynamic Compaction.”, In proceedings of *Vibration Problems in Geotechnical Engineering*, a Symposium sponsored by the Geotechnical Engineering Division in conjunction with the ASCE, Detroit, Michigan, October, pp. 247-265.

Wiss, J.F., (1974). “Vibrations During Construction Operations.” Journal of the Construction Division, ASCE, Vol. 100, No. CO3, September.

Wiss, J.F., (1981). “Construction Vibrations: State-of-the-Art.” Journal of the Geotechnical Engineering Division, ASCE, Vol. 107, No. GT2, February.

**Testing**

Marchetti, S. (1980). “In Situ Tests by Flat Dilatometer.” Journal of the Geotechnical Engineering Division, ASCE, Vol. 106, No. GT3, pp. 299-321.

Schmertmann, J.H. (1982). “A Method for Determining the Friction Angle in Sands from the Marchetti Dilatometer Test (DMT).” In Proceedings of the *2nd European Symposium on Penetration Testing*, Amsterdam, Netherlands, May 24-27.

\*Current as of 30 April 2023.